ETSI GS CIM 013 V3.1.1 (2025-07)



Context Information Management (CIM); NGSI-LD Test Purposes Descriptions

The present document has been produced and approved by the cross-cutting Context Information Management (CIM) ETSI Industry Specification Group (ISG) and represents the views of those members who participated in this ISG.It does not necessarily represent the views of the entire ETSI membership.

Reference RGS/CIM-0013v311 Keywords API, IoT, NGSI-LD, testing

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Foreword

This Group Specification (GS) has been produced by ETSI Industry Specification Group (ISG) cross-cutting Context Information Management (CIM).

Modal verbs terminology

In the present document "shall", "shall not", "should", "should not", "may", "need not", "will", "will not", "can" and "cannot" are to be interpreted as described in clause 3.2 of the <u>ETSI Drafting Rules</u> (Verbal forms for the expression of provisions).

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1 Scope

The present document contains the description of each abstract test case using the Test Template [i.2] and using the Test Purposes Description Language identified in ETSI GS CIM 012 [i.3] and ETSI GR CIM 011 [i.1]. The test cases are described in tabular form. All clauses mentioned in tables of clause 4 of the present document are references to the NGSI-LD specification, hence to be found in ETSI GS CIM 009 [1].

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found in the ETSI docbox.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long-term validity.

The following referenced documents are necessary for the application of the present document.

[1] <u>ETSI GS CIM 009 (V1.6.1) (2022-08)</u>: "cross-cutting Context Information Management (CIM); NGSI-LD API".

2.2 Informative references

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The following referenced documents may be useful in implementing an ETSI deliverable or add to the reader's understanding, but are not required for conformance to the present document.

[i.1]	ETSI GR CIM 011 (V1.1.1) (2021-04): "Context Information Management (CIM); NGSI-LD
	Testing Framework: Test Purposes Description Language (TPDL)".

- [i.2] ETSI GS CIM 016 (V1.1.1) (2021-04): "Context Information Management (CIM); NGSI-LD Testing Framework: Test Template".
- [i.3] ETSI GS CIM 012 (V2.1.1) (2024-04): "Context Information Management (CIM); NGSI-LD Test Suite Structure".

3 Definition of terms, symbols and abbreviations

3.1 Terms

For the purposes of the present document, the following terms apply:

NOTE: The letters "NGSI-LD" were added to most terms to confirm that they are distinct from other terms of

similar/same name in use in other organizations, however, in the present document the letters "NGSI-LD"

are generally omitted for brevity.

NGSI-LD Central Broker: NGSI-LD Context Broker that only uses a local storage when serving NGSI-LD requests, without involving any external Context Sources

NGSI-LD Context Broker: architectural component that implements all the NGSI-LD interfaces

NGSI-LD Context Consumer: agent that uses the query and subscription functionality of NGSI-LD to retrieve context information

NGSI-LD Context Producer: agent that uses the NGSI-LD context provision and/or registration functionality to provide or announce the availability of its context information to an NGSI-LD Context Broker

NGSI-LD Context Registry: software functional element where Context Sources register the information that they can provide

NOTE: It is used by Distribution Brokers and Federation Brokers to find the appropriate Context Sources which can provide the information required for serving an NGSI-LD request.

NGSI-LD Context Source: source of context information which implements the NGSI-LD consumption and subscription (and possibly provision) interfaces defined by the present document

NOTE: It is usually registered with an NGSI-LD Registry so that it can announce what kind of information it can provide, when requested, to Context Consumers and Brokers.

NGSI-LD Distribution Broker: NGSI-LD Context Broker that uses both local context information and registration information from an NGSI-LD Context Registry, to access matching context information from a set of distributed Context Sources

NGSI-LD Federation Broker: Distribution Broker that federates information from multiple underlying NGSI-LD Context Brokers and across domains

3.2 Symbols

Void.

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

HTTP HperText Transfer Protocol JSON Java Script Object Notation

MQTT Message Queueing Telemetry Transport

PICS Profile Implementation Conformance Statement

QoS Quality of Service SUT System Under Test TP Test Purpose

URI Unified Resource Identification URL Unified Resource Location

4 Test Purpose Descriptions

4.1 jsonldContext

4.1.1 Provision

4.1.1.1 DeleteContext

TP ld	TP/NGSI-LD/CTX/Prov/051_09		
Test objective	Check that one gets an error when try to delete the core @context		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.5		
Config Id	CF_01		
PICS Selection	PICS_DelOneSpe@coInt		
Initial conditions	with { the SUT containing a core context and it has been deleted with reload so	et to true. }	
	Permutations		
TP Permutation id	TP/NGSI-LD/CTX/Prov/051_09_01		
Name	051_09_01 Delete a core @contexts with reload set to true and check if the context has		
	been download again by the broker		
Parent Release	v1.5.1		
Description	Delete a core @contexts with reload set to true and check downloaded core or	ontext	
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts/{contextId}' method set to 'GET' Serve a	SUT <- Client	
	@context with contextID 'https://uri.etsi.org/ngsi-ld/v1/ngsi-ld-core-context-		
	v1.6.jsonId' and details 'true' }		
	then { the SUT sends a valid Response for the operation: Serve a @context	SUT -> Client	
	with Response Status Code set to 200 }		

TP ld	TP/NGSI-LD/CTX/Prov/051_08	
Test objective	Check that one gets an error when try to delete the core @context	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.5	
Config Id	CF_01	
PICS Selection	PICS_DelOneSpe@coInt	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Prov/051_08_01	
Name	051_08_01 Delete a core @contexts and return an error with no reload	
Parent Release	v1.5.1	
Description	Check that one gets an error when try to delete the core @context	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a	
	@context whose 'URI' set to 'https://uri.etsi.org/ngsi-ld/v1/ngsi-ld-core-	
	context-v1.6.jsonId' }	
	then { the SUT sends a valid Response for the operations: Delete a	SUT -> Client
	@context with Response Status Code set to 400 and Delete a @context	
	with Response reason set to 'Bad Request' and Delete a @context with	
	Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/BadRequestData' and Response Body Title is a string and is not	
	\${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and	
	Response Boty Title is not equal to Response Body Detail }	

TP Permutation id	TP/NGSI-LD/CTX/Prov/051_08_02	
Name	051_08_02 Delete a core @contexts and return an error with reload set to fals	e
Parent Release	v1.5.1	
Description	Check that one gets an error when try to delete the core @context	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to 'https://uri.etsi.org/ngsi-ld/v1/ngsi-ld-core-context-v1.6.jsonld' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 400 and Delete a @context with Response reason set to 'Bad Request' and Delete a @context with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a string and is not \$Response Body Title is not equal to Response Body Detail }	SUT -> Client

TP ld	TP/NGSI-LD/CTX/Prov/051_02		
Test objective	Check that one gets an error when trying to delete an unknown @context iden	tifier	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.5		
Config Id	CF_01		
PICS Selection	PICS_DelOneSpe@coInt		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CTX/Prov/051_02_01		
Name	051_02_01 Delete a @context with unknown @context identifier		
Parent Release	v1.5.1		
Description	Check that an error message is obtained in the response when one tries to de	lete a	
	@context with unknonwn id		
Expected behaviour	Test events	Direction	
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client	
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a		
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to '\${random_url}' }		
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to '\${random_url}' } then { the SUT sends a valid Response for the operations: Delete a		
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to '\${random_url}' } then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 404 and Delete a @context	SUT <- Client	
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to '\${random_url}' } then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 404 and Delete a @context with Response reason set to 'Not Found' and Delete a @context with	SUT <- Client	
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to '\${random_url}' } then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 404 and Delete a @context with Response reason set to 'Not Found' and Delete a @context with Response Body containing the type	SUT <- Client	
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to '\${random_url}' } then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 404 and Delete a @context with Response reason set to 'Not Found' and Delete a @context with Response Body containing the type '\${ERROR_TYPE_RESOURCE_NOT_FOUND}' and Response Body Title is	SUT <- Client	
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to '\${random_url}' } then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 404 and Delete a @context with Response reason set to 'Not Found' and Delete a @context with Response Body containing the type '\${ERROR_TYPE_RESOURCE_NOT_FOUND}' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a string and is	SUT <- Client	
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to '\${random_url}' } then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 404 and Delete a @context with Response reason set to 'Not Found' and Delete a @context with Response Body containing the type '\${ERROR_TYPE_RESOURCE_NOT_FOUND}' and Response Body Title is	SUT <- Client	

TDIJ	TD/NOOL LD/OTY/D/054 04	
TP Id	TP/NGSI-LD/CTX/Prov/051_04	
Test objective	Check that one gets an error when try to delete a @context	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.5	
Config Id	CF_01	
PICS Selection	PICS_DelOneSpe@coInt	
Initial conditions	with { the SUT containing a Hosted @context and the default Cached Core Co	ntext. }
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Prov/051_04_01	
Name	051_04_01 Delete a @contexts with a wrong id and reload set to true	
Parent Release	v1.5.1	
Description	Check that one can delete a hosted @context	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to 'wrong_id_context' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 400 and Delete a @context with Response reason set to 'Bad Request' and Delete a @context with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a string and is not \$Response Body Title is not equal to Response Body Detail }	SUT -> Client

TP Permutation id	TP/NGSI-LD/CTX/Prov/051_04_02	
Name	051_04_02 Delete a @contexts with a wrong id and reload set to false	
Parent Release	v1.5.1	
Description	Check that one can delete a hosted @context	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to 'wrong_id_context' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 404 and Delete a @context with Response reason set to 'Not Found' and Delete a @context with Response Body containing the type '\${ERROR_TYPE_RESOURCE_NOT_FOUND}' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Detail }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CTX/Prov/051_04_03	
Name Parent Release	051_04_03 Delete a @contexts with a wrong id and no reload value	
	V1.5.1	
Description Expected behaviour	Check that one can delete a hosted @context Test events	Direction
Expected benaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to 'wrong_id_context' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 404 and Delete a @context with Response reason set to 'Not Found' and Delete a @context with Response Body containing the type '\${ERROR_TYPE_RESOURCE_NOT_FOUND}' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Detail }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CTX/Prov/051_04_04	
Name	051_04_04 Delete a @contexts with a wrong id and wrong reload value	
Parent Release	v1.5.1	
Description	Check that one can delete a hosted @context	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to 'wrong_id_context' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 400 and Delete a @context with Response reason set to 'Bad Request' and Delete a @context with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Detail }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CTX/Prov/051_04_05	
Name	051_04_05 Delete a Hosted @contexts with a valid id and reload set to true	
Parent Release	V1.5.1	
Description Expected behaviour	Check that one can delete a hosted @context Test events	Direction
Expedied believious	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to '\${uri}' } then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 400 and Delete a @context with Response reason set to 'Bad Request' and Delete a @context with	SUT <- Client SUT -> Client
	Response Body containing the type 'https://uri.etsi.org/ngsi- ld/errors/BadRequestData' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Boty Title is not equal to Response Body Detail }	

TP Id	TP/NGSI-LD/CTX/Prov/051_06		
Test objective	Delete a @context whose kind is ImplicitlyCreated without reload param		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.5		
Config Id	CF_01		
PICS Selection	PICS_DelOneSpe@coInt		
Initial conditions	with { the SUT containing a ImplicitlyCreated @context created from a subscription query. }		
	Permutations		
TP Permutation id	Permutation id TP/NGSI-LD/CTX/Prov/051_06_01		
Name	051_06_01 Delete a @context whose kind is ImplicitlyCreated without reload param		
Parent Release	v1.5.1		
Description	Check that one can delete a ImplicitlyCreated @context		
Expected behaviour	Test events Direction		
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to '\${implicit_id}' }	SUT <- Client	
	then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 204 and Delete a @context with Response reason set to 'No Content' and Delete a @context with Response does not contain a body }	SUT -> Client	

TP Id	TP/NGSI-LD/CTX/Prov/051_01		
Test objective	Check that one can delete a previous created hosted @context without reload param		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.5		
Config Id	CF_01		
PICS Selection	PICS_DelOneSpe@coInt		
Initial conditions	with { the SUT containing a Hosted @context and the default Cached Core Co	ntext. }	
Permutations			
TP Permutation id	TP/NGSI-LD/CTX/Prov/051_01_01		
Name	051_01_01 Delete a @context whose kind is hosted without reload param		
Parent Release	v1.5.1		
Description	Check that one can delete a hosted @context		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a		
	@context whose 'URI' set to '\${uri}' }		
	then { the SUT sends a valid Response for the operations: Delete a	SUT -> Client	
	@context with Response Status Code set to 204 and Delete a @context		
	with Response reason set to 'No Content' and Delete a @context with		
	Response does not contain a body }		

Check that one can delete a previous created cached @context without reload	d param
ETSI GS CIM 009 V1.6.1 [1], clause 5.13.5	
CF_01	
PICS_DelOneSpe@coInt	
with { the SUT containing a Cached @context added from a URL. }	
Permutations	
TP/NGSI-LD/CTX/Prov/051_03_01	
051_03_01 Delete a @context whose kind is cached without reload param	
v1.5.1	
Check that one can delete a cached @context	
Test events	Direction
when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
'/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a	
@context whose 'URI' set to '\${contextId}' }	
then { the SUT sends a valid Response for the operations: Delete a	SUT -> Client
Response does not contain a body }	
	CF_01 PICS_DelOneSpe@coInt with { the SUT containing a Cached @context added from a URL. } Permutations TP/NGSI-LD/CTX/Prov/051_03_01 051_03_01 Delete a @context whose kind is cached without reload param v1.5.1 Check that one can delete a cached @context Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a @context whose 'URI' set to '\${contextId}' } then { the SUT sends a valid Response for the operations: Delete a @context with Response Status Code set to 204 and Delete a @context with Response reason set to 'No Content' and Delete a @context with

TP ld	TP/NGSI-LD/CTX/Prov/051_07	
Test objective	Check that one cannot delete a ImplicitlyCreated @context with reload set to ti	ue
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.5	
Config Id	CF_01	
PICS Selection	PICS_DelOneSpe@coInt	
Initial conditions	with { the SUT containing a ImplicitlyCreated @context created from a subscrip	otion query. }
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Prov/051_07_01	
Name	051_07_01 Delete a ImplicitlyCreated @contexts with a valid id and reload set	to true
Parent Release	v1.5.1	
Description	Check that one cannot delete a ImplicitlyCreated @context with reload set to true	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a	SUT <- Client
	@context whose 'URI' set to '\${implicit_id}' }	
	then { the SUT sends a valid Response for the operations: Delete a	SUT -> Client
	@context with Response Status Code set to 400 and Delete a @context	
	with Response reason set to 'Bad Request' and Delete a @context with	
	Response Body containing the type 'https://uri.etsi.org/ngsi-	
	ld/errors/BadRequestData' and Response Body Title is a string and is not	
	\${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and	
	Response Boty Title is not equal to Response Body Detail }	

TP ld	TP/NGSI-LD/CTX/Prov/051_05	
Test objective	Check that one gets an error if one created an entity with a context (Cached c	ontext) and
	one tries to delete it with reload=true	•
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.5	
Config Id	CF_01	
PICS Selection	PICS_DelOneSpe@coInt	
Initial conditions	with { the SUT containing a Cached @context created from a entity creation the	rough
	downloading from external server. }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Prov/051_05_01	
Name	051_05_01 Delete and Reload a Cached @context with no communication wi	th the Context
	Server	
Parent Release	v1.5.1	
Description	Check that one gets an error if one tries to reload a cached context with no communication	
	with the context server	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'DELETE' Delete a	
	@context whose 'URI' set to '\${uri}' }	
	then { the SUT sends a valid Response for the operations: Delete a	SUT -> Client
	@context with Response Status Code set to 503 and Delete a @context	
	with Response reason set to 'Service Unavailable' and Delete a @context	
	with Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/LdContextNotAvailable' and Response Body Title is a string and is	
	not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY}	
	and Response Boty Title is not equal to Response Body Detail }	

4.1.1.2 AddContext

TP ld	TP/NGSI-LD/CTX/Prov/050_02	
Test objective	Check that one receives a 400 Bad Request creating a @context if the context	nt is incorrect
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.2	
Config Id	CF_01	
PICS Selection	PICS_AddUse@coTheInt	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Prov/050_02_01	
	050_02_01 Checking Incorrect Payload	
Parent Release	v1.5.1	
Description	Check that the payload include "@context"	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts' method set to 'POST' Add a new @context	
	based on the payload defined in the file @context-incorrect.json }	
	then { the SUT sends a valid Response for the operations: Add a new	SUT -> Client
	@context with Response Status Code set to 400 and Add a new @context	
	with Response reason set to Bad Request and Add a new @context with	
	Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/InvalidRequest' and Response Body Title is a string and is not	
	\${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and	
TP Permutation id	Response Boty Title is not equal to Response Body Detail } TP/NGSI-LD/CTX/Prov/050_02_02	
Parent Release	050_02_02 Checking Wrong JSON v1.5.1	
Description	Check that the payload include "@context"	
Expected behaviour	Test events	Direction
Expected beliavious	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	/ngsi-Id/v1/jsonIdContexts' method set to 'POST' Add a new @context	SOT <= Client
	based on the payload defined in the file @context-wrong-json.json }	
	then { the SUT sends a valid Response for the operations: Add a new	SUT -> Client
	@context with Response Status Code set to 400 and Add a new @context	00.
	with Response reason set to 'Bad Request' and Add a new @context with	
	Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/InvalidRequest' and Response Body Title is a string and is not	
	\${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and	
	Response Boty Title is not equal to Response Body Detail }	

TP Id	TP/NGSI-LD/CTX/Prov/050 04	
Test objective	Check that one can add a hosted @context with list of URIs and each of them	are eached
rest objective		are cacried
	@coxtexts	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.2	
Config Id	CF_01	
PICS Selection	PICS_AddUse@coTheInt	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Prov/050_04_01	
Name	050_04_01 Add a valid hosted @context with URIs and check that the URIs a	re Cached
	@contexts	
Parent Release	v1.5.1	
Description	Check that one can add a @context	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts' method set to 'POST' Add a new @context	
	based on the payload defined in the file @context-cached-valid.json }	
	then { the SUT sends a valid Response for the operations: Add a new	SUT -> Client
	@context with Response Status Code set to 201 and Add a new @context with Response does not contain a body and Add a new @context with Response reason set to 'Created' and Serve a @context with Check that the Kind of the @context is set to 'Hosted' and Notification with Check that for each @context in the response body, they are of the type 'Cached' }	oo i y onem

TP ld	TP/NGSI-LD/CTX/Prov/050_01	
Test objective	Check that one can add a hosted @context	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.2	
Config Id	CF_01	
PICS Selection	PICS_AddUse@coTheInt	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Prov/050_01_01	
Name	050_01_01 Add a valid hosted @context from key=value	
Parent Release	v1.5.1	
Description	Check that one can add a @context	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts' method set to 'POST' Add a new @context	
	based on the payload defined in the file @context-minimal-valid.json }	
	then { the SUT sends a valid Response for the operations: Add a new	SUT -> Client
	@context with Response Status Code set to 201 and Add a new @context	
	with Response does not contain a body and Add a new @context with	
	Response reason set to 'Created' and Serve a @context with Check that the	
TD Dames tallandal	Kind of the @context is set to 'Hosted' }	
TP Permutation id	TP/NGSI-LD/CTX/Prov/050_01_02	
Name	050_01_02 Add a valid cached @context from URI	
Parent Release	V1.5.1	
Description	Check that one can add a @context	Direction
Expected behaviour	Test events	SUT <- Client
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts' method set to 'POST' Add a new @context based on the payload defined in the file @context-cached-valid.json }	
	then { the SUT sends a valid Response for the operations: Add a new	SUT -> Client
	@context with Response Status Code set to 201 and Add a new @context	301 -> Client
	with Response does not contain a body and Add a new @context with	
	Response reason set to 'Created' and Serve a @context with Check that the	
	Kind of the @context is set to 'Hosted' }	
	Think of the Coefficient to dot to Trooted)	1

TP ld	TP/NGSI-LD/CTX/Prov/050_03	
Test objective	Check that one can create a implicitlycreated @context through creating a sub	scription
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.2	
Config Id	CF_01	
PICS Selection	PICS_AddUse@coTheInt	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Prov/050_03_01	
Name	050_03_01 Check the creation of ImplicitelyCreted @context	
Parent Release	v1.5.1	
Description	Check that one can create a subscription	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'true' and Query Parameter: kind set to 'ImplicitlyCreated' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Create Subscription with Response Status Code set to 200 and Notification with Check that the Kind of the @context is set to 'ImplicitlyCreated' }	SUT -> Client

4.1.2 Consumption

4.1.2.1 ServeContext

TP Id	TP/NGSI-LD/CTX/Cons/053_06	
Test objective	Check that the numberOfHits is increased after using a Cached context	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.4	
Config Id	CF_01	
PICS Selection	PICS_SerOneSpeUse@co	
Initial conditions	with { the SUT containing a Cached @context created from a entity creation th	rough
	downloading from external server. }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Cons/053_06_01	
Name	053_06_01 Check that the numberOfHits is increased after using a Cached context	
Parent Release	v1.5.1	
Description	Check that the numberOfHits is increased after using a Cached context	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts/{contextId}' method set to 'GET' Serve a @context with contextID '\${uri}' and details 'true' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Serve a @context with Response Status Code set to 200 and Serve a @context with Check that the numberOfHits in the response body is set to '3' }	SUT -> Client

TP ld	TP/NGSI-LD/CTX/Cons/053_04	
Test objective	Check that one can get an increase numberOfHits after creation of a Hosted @	context and
	using it	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.4	
Config Id	CF_01	
PICS Selection	PICS_SerOneSpeUse@co	
Initial conditions	with { the SUT containing a Cached @context created from a entity creation th downloading from external server. }	rough
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Cons/053_04_01	
Name	053_04_01 Check that the numberOfHits is increased after using a Hosted col	ntext
Parent Release	v1.5.1	
Description	Check that the numberOfHits is increased after using a Hosted context	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'GET' Serve a	
	@context with contextID '\${uri}' and details 'true' }	
	then { the SUT sends a valid Response for the operations: Serve a	SUT -> Client
	@context with Response Status Code set to 200 and Serve a @context with	
	Check that the numberOfHits in the response body is set to '1' }	

TP Id	TP/NGSI-LD/CTX/Cons/053_02
Test objective	Check that one can serve a previous created @context with details equal to True
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.4
Config Id	CF_01
PICS Selection	PICS_SerOneSpeUse@co
Initial conditions	with { the SUT containing a Hosted @context and the default Cached Core Context. }
	Permutations
TP Permutation id	TP/NGSI-LD/CTX/Cons/053_02_01
Name	053_02_01 Serve a @context with details set to True
Parent Release	v1.5.1
Description	Check that one can serve a @context with details

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'GET' Serve a	
	@context with contextID '\${uri}' and details 'true' }	
	then { the SUT sends a valid Response for the operations: Serve a	SUT -> Client
	@context with Response Status Code set to 200 and Serve a @context with	
	Response reason set to 'OK' and Serve a @context with Response Header:	
	Content-Type set to application/json and Serve a @context with Check the	
	Body of the response should contain a @context with 'URL' key not Empty	
	and 'string' type, with 'localld' key not Empty and 'string' type, with 'kind' key	
	not Empty, 'string' type, and value set to 'Hosted', and 'timestamp and	
	'DateTime' format and Serve a @context with The Response Body	
	`\${response.json()}' might contain the key 'lastUsage' and Serve a @context	
	with The Response Body `\${response.json()}' might contain the key	
	'numberOfHits' and Serve a @context with The Response Body	
	`\${response.json()}' might contain the key 'extraInfo' and Serve a @context	
	with Check that the only allowed keys in the response body of a @context	
	are 'URL', 'localld', 'kind', 'timestamp', 'lastUsage', 'numberOfHits', 'extraInfo'	
]}	

TP Id	TP/NGSI-LD/CTX/Cons/053_05	
Test objective	Check that the context served by a context server is still in the broker after a	
	ERROR_TYPE_LD_CONTEXT_NOT_AVAILABLE with details=true	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.4	
Config Id	CF_01	
PICS Selection	PICS_SerOneSpeUse@co	
Initial conditions	with { the SUT containing a Cached @context created from a entity creation th	rough
	downloading from external server. }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Cons/053_05_01	
Name	053_05_01 Check that the context served by a context server is still in the brol	ker after a
	ERROR_TYPE_LD_CONTEXT_NOT_AVAILABLE with details=true	
Parent Release	v1.5.1	
Description	Check that the context served by a context server is still in the broker after a	
	ERROR_TYPE_LD_CONTEXT_NOT_AVAILABLE with details=true	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'GET' Serve a	
	@context with contextID '\${uri}' and details 'true' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and List @contexts with Response Header: Content-Type	
	set to application/json and List @contexts with Check the Body of the	
	response should contain a @context with 'URL' key not Empty and 'string'	
	type, with 'localld' key not Empty and 'string' type, with 'kind' key not Empty,	
	'string' type, and value set to 'Cached', and 'timestamp and 'DateTime'	
	format and List @contexts with The Response Body `\${response.json()}' might contain the key 'lastUsage' and List @contexts with The Response	
	Body `\${response.json()}' might contain the key 'numberOfHits' and List	
	@contexts with The Response Body `\${response.json()}' might contain the	
	key 'extrainfo' and List @contexts with Check that the only allowed keys in	
	the response body of a @context are 'URL', 'localId', 'kind', 'timestamp',	
	'lastUsage', 'numberOfHits', 'extraInfo' }	
	Traditionage, Transper Office, Extraction 5	

TP Id	TP/NGSI-LD/CTX/Cons/053_07	
Test objective	Check that one can serve a ImplicitlyCreated @context with details set to true	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.4	
Config Id	CF_01	
PICS Selection	PICS_SerOneSpeUse@co	
Initial conditions	with { the SUT containing a ImplicitlyCreated @context created from a subscription query. }	
Permutations		
TP Permutation id	TP/NGSI-LD/CTX/Cons/053_07_01	
Name	053_07_01 Check that one can serve a ImplicitlyCreated @context with details set to true	
Parent Release	v1.5.1	
Description	Check that one can serve a ImplicitlyCreated @context with details set to true	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'GET' Serve a	
	@context with contextID '\${implicit_id}' and details 'true' }	
	then { the SUT sends a valid Response for the operations: Serve a	SUT -> Client
	@context with Response Status Code set to 200 and Serve a @context with	
	Response reason set to 'OK' and Serve a @context with Response Header:	
	Content-Type set to application/json and Serve a @context with Check the	
	Body of the response should contain a @context with 'URL' key not Empty	
	and 'string' type, with 'localld' key not Empty and 'string' type, with 'kind' key	
	not Empty, 'string' type, and value set to 'ImplicitlyCreated', and 'timestamp	
	and 'DateTime' format and Serve a @context with The Response Body	
	`\${response.json()}' might contain the key 'lastUsage' and Serve a @context	
	with The Response Body `\${response.json()}' might contain the key	
	'numberOfHits' and Serve a @context with The Response Body	
	`\${response.json()}' might contain the key 'extraInfo' and Serve a @context	
	with Check that the only allowed keys in the response body of a @context	
	are 'URL', 'localld', 'kind', 'timestamp', 'lastUsage', 'numberOfHits', 'extraInfo'	
]}	

TP Id	TP/NGSI-LD/CTX/Cons/053_03	
Test objective	Check that one gets an error when try to serve a @context	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.4	
Config Id	CF_01	
PICS Selection	PICS_SerOneSpeUse@co	
Initial conditions	with { the SUT containing a Hosted @context and the default Cached Core Co	ntext. }
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Cons/053_03_01	
Name	053_03_01 Serve a @contexts with a wrong id and correct details	
Parent Release	v1.5.1	
Description	Check that an error is returned when one requests for a @context that does no	ot exist
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'GET' Serve a	
	@context with contextID 'wrong_id_context' and details 'true' }	
	then { the SUT sends a valid Response for the operations: Serve a	SUT -> Client
	@context with Response Status Code set to 404 and Serve a @context with	
	Response reason set to 'Not Found' and Serve a @context with Response	
	Body containing the type '\${ERROR_TYPE_RESOURCE_NOT_FOUND}'	
	and Response Body Title is a string and is not \${EMPTY} and Response	
	Body Detail is a string and is not \${EMPTY} and Response Boty Title is not	
	equal to Response Body Detail }	

TP Id	TP/NGSI-LD/CTX/Cons/053_01	
Test objective	Check that one can serve a previous created @context	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.4	
Config Id	CF_01	
PICS Selection	PICS_SerOneSpeUse@co	
Initial conditions	with { the SUT containing a Hosted @context and the default Cached Core Co	ntext. }
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Cons/053_01_01	
Name	053_01_01 Serve a @context without details	
Parent Release	v1.5.1	
Description	Check that one can serve a @context with details equal to empty or false	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts/{contextId}' method set to 'GET' Serve a	
	@context with contextID '\${uri}' and details '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: Serve a	SUT -> Client
	@context with Response Status Code set to 200 and Serve a @context with	
	Response reason set to 'OK' and Serve a @context with Response Header:	
	Content-Type set to application/json and Serve a @context with Check the	
	Body of the response should contain the @context `@context-minimal-	
	valid.json' }	

TP Permutation id	TP/NGSI-LD/CTX/Cons/053_01_02	
Name	053_01_02 Serve a @context with details equal to false	
Parent Release	v1.5.1	
Description	Check that one can serve a @context with details equal to empty or false	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts/{contextId}' method set to 'GET' Serve a @context with contextID '\${uri}' and details 'false' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Serve a @context with Response Status Code set to 200 and Serve a @context with Response reason set to 'OK' and Serve a @context with Response Header: Content-Type set to application/json and Serve a @context with Check the Body of the response should contain the @context `@context-minimal-valid.json' }	SUT -> Client

TP Id	TP/NGSI-LD/CTX/Cons/053_08		
Test objective	Check that the numberOfHits is increased after using a ImplicitlyCreated conte	ext	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.4		
Config Id	CF_01		
PICS Selection	PICS_SerOneSpeUse@co		
Initial conditions	with { the SUT containing a ImplicitlyCreated @context created from a subscription	otion query. }	
	Permutations Permutations		
TP Permutation id	TP/NGSI-LD/CTX/Cons/053_08_01		
Name	053_08_01 Check that the numberOfHits is increased after using a ImplicitlyC	reated context	
Parent Release	v1.5.1		
Description	Check that the numberOfHits is increased after using a ImplicitlyCreated conte	ext	
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts/{contextId}' method set to 'GET' Serve a @context with contextID '\${implicit_id}' and details 'true' }	SUT <- Client	
	then { the SUT sends a valid Response for the operations: Serve a @context with Response Status Code set to 200 and Serve a @context with Check that the numberOfHits in the response body is set to '2' }	SUT -> Client	

4.1.2.2 ListContexts

TP ld	TP/NGSI-LD/CTX/Cons/052_06	
Test objective	Check that one can list all the @context available in the broker with no previous	ıs add
	@context	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.3	
Config Id	CF_01	
PICS Selection	PICS_LisAllCac@co	
Initial conditions	with { the SUT containing a ImplicitlyCreated @context created from a subscription	otion query. }
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_06_01	
Name	052_06_01 List @contexts with neither details or kind and a created Implicitly	Created
	@context	
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query	
	Parameter: kind set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and Notification with Check Context Response Body	
	Containing a list of identifiers and Notification with Check Context Response	
	Body Containing a list of identifiers }	

TP Permutation id	TP/NGSI-LD/CTX/Cons/052_06_02	
Name	052_06_02 List @contexts with no details and kind set to hosted and a create	d
	ImplicitlyCreated @context	~
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query	
	Parameter: kind set to 'Hosted' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and Notification with Check Context Response Body	
	Containing a list of identifiers and Notification with Check Context Response	
	Body Containing a list of identifiers }	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_06_03	
Name	052_06_03 List @contexts with no details and kind set to cached and a create	ed
	ImplicitlyCreated @context	
Parent Release	v1.5.1	
Description	Check that one can list @contexts	D:
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Cached' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	301 -> Ciletit
	reason set to 'OK' and Notification with Check Context Response Body	
	Containing a list of identifiers and Notification with Check Context Response	
	Body Containing a list of identifiers }	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_06_04	
Name	052_06_04 List @contexts with no details and kind set to implicitlycreated and	a created
	ImplicitlyCreated @context	
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query	
	Parameter: kind set to 'ImplicitlyCreated' }	01.17
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and Notification with Check Context Response Body	
	Containing a list of identifiers and Notification with Check Context Response	
	Body Containing a list of identifiers and Notification with Check Context Response	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_06_05	1
Name	052 06 05 List @contexts with details set to false and no kind and a created	
	ImplicitlyCreated @context	
Parent Release	V1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
-	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to 'false' and Query	
	Parameter: kind set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	Transan eat to 'OK' and Natification with Chack Contact Decoace Rady	
	reason set to 'OK' and Notification with Check Context Response Body	
	Containing a list of identifiers and Notification with Check Context Response	
TD Downstation is	Containing a list of identifiers and Notification with Check Context Response Body Containing a list of identifiers }	
	Containing a list of identifiers and Notification with Check Context Response Body Containing a list of identifiers } TP/NGSI-LD/CTX/Cons/052_06_06	ad a aveste d
TP Permutation id Name	Containing a list of identifiers and Notification with Check Context Response Body Containing a list of identifiers } TP/NGSI-LD/CTX/Cons/052_06_06 052_06_06 List @contexts with details set to false and kind equal to hosted an	nd a created
Name	Containing a list of identifiers and Notification with Check Context Response Body Containing a list of identifiers } TP/NGSI-LD/CTX/Cons/052_06_06 052_06_06 List @contexts with details set to false and kind equal to hosted at ImplicitlyCreated @context	nd a created
	Containing a list of identifiers and Notification with Check Context Response Body Containing a list of identifiers } TP/NGSI-LD/CTX/Cons/052_06_06 052_06_06 List @contexts with details set to false and kind equal to hosted an	nd a created

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to 'false' and Query	
	Parameter: kind set to 'Hosted' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and Notification with Check Context Response Body	
	Containing a list of identifiers and Notification with Check Context Response Body Containing a list of identifiers }	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_06_07	
Name	052_06_07 List @contexts with details set to false and kind equal to cached a	nd a created
Traine	ImplicitlyCreated @context	nd a created
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to 'false' and Query	
	Parameter: kind set to 'Cached' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and Notification with Check Context Response Body	
	Containing a list of identifiers and Notification with Check Context Response	
TP Permutation id	Body Containing a list of identifiers } TP/NGSI-LD/CTX/Cons/052_06_08	
Name	052_06_08 List @contexts with details set to false and kind equal to implicitly	created and a
Name	created ImplicitlyCreated @context	realed and a
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
•	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to 'false' and Query	
	Parameter: kind set to 'ImplicitlyCreated' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and Notification with Check Context Response Body	
	Containing a list of identifiers and Notification with Check Context Response	
	Body Containing a list of identifiers }	

TDII	TD NOOL LD (OTY)	
TP ld	TP/NGSI-LD/CTX/Cons/052_04	
Test objective	Check that one gets an error when try to list @context with wrong details or ki	nd
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.3	
Config Id	CF_01	
PICS Selection	PICS_LisAllCac@co	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_04_01	
Name	052_04_01 List @contexts with no details and kind set to other and not previous	usly created
	@context	
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query	
	Parameter: kind set to 'other' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 400 and List @contexts with Response	
	reason set to 'Bad Request' and List @contexts with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and	
	Response Body Title is a string and is not \${EMPTY} and Response Body	
		1
	Detail is a string and is not \${FMPTY} and Response Boty Title is not equal	
	Detail is a string and is not \${EMPTY} and Response Boty Title is not equal to Response Body Detail }	

TP Permutation id	TP/NGSI-LD/CTX/Cons/052_04_02	
Name	052_04_02 List @contexts with details set to other and no kind and not previous	ously created
	@context	ouely created
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
•	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to 'other' and Query	
	Parameter: kind set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 400 and List @contexts with Response	
	reason set to 'Bad Request' and List @contexts with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and	
	Response Body Title is a string and is not \${EMPTY} and Response Body	
	Detail is a string and is not \${EMPTY} and Response Boty Title is not equal	
	to Response Body Detail }	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_04_03	
Name	052_04_03 List @contexts with details set to other and kind set to other and r	not previously
	created @context	
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to 'other' and Query	
	Parameter: kind set to 'other' }	SUT -> Client
	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 400 and List @contexts with Response	SUT -> Client
	reason set to 'Bad Request' and List @contexts with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and	
	Response Body Title is a string and is not \${EMPTY} and Response Body	
	Detail is a string and is not \${EMPTY} and Response Boty Title is not equal	
	to Response Body Detail }	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_04_04	
Name	052_04_04 List @contexts with details set to true and kind set to other and no	ot previously
	created @context	or providuoly
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
•	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to 'true' and Query Parameter:	
	kind set to 'other' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 400 and List @contexts with Response	
	reason set to 'Bad Request' and List @contexts with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and	
	Response Body Title is a string and is not \${EMPTY} and Response Body	
	Detail is a string and is not \${EMPTY} and Response Boty Title is not equal	
	to Response Body Detail }	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_04_05	
Name	052_04_05 List @contexts with details set to other and kind set to Hosted and	d not
	previously created @context	
Parent Release	v1.5.1	
Description	Check that one can list @contexts	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to 'other' and Query	
	Parameter: kind set to 'Hosted' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 400 and List @contexts with Response	
	reason set to 'Bad Request' and List @contexts with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and	
	Response Body Title is a string and is not \${EMPTY} and Response Body	
	Detail is a string and is not \${EMPTY} and Response Boty Title is not equal	
	to Response Body Detail }	

TP Id	TP/NGSI-LD/CTX/Cons/052_02		
Test objective	Check that one can list all the @context available in the broker with one add @context		
Reference		ETSI GS CIM 009 V1.6.1 [1], clause 5.13.3	
Config Id	CF 01		
PICS Selection	PICS_LisAllCac@co		
Initial conditions			
initial conditions	with { the SUT containing a Hosted @context and the default Cached Core Context. }		
TD D	Permutations		
TP Permutation id		TP/NGSI-LD/CTX/Cons/052_02_01	
Name	052_02_01 List @contexts with neither details or kind and with previously one	add @context	
Parent Release	V1.5.1		
Description	Check that one can list @contexts	1	
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to '\${EMPTY}' }	SUT <- Client	
	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to '\${EMPTY}' }	SUT -> Client	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_02_02		
Name	052_02_02 List @contexts with no details and kind equal to hosted and with p add @context	previously one	
Parent Release	v1.5.1		
Description	Check that one can list @contexts		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' }	SUT <- Client	
	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' }	SUT -> Client	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_02_03		
Name	052_02_03 List @contexts with details equal to false and no kind and with preadd @context	eviously one	
Parent Release	v1.5.1		
Description	Check that one can list @contexts		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to '\${EMPTY}' }	SUT <- Client	
	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to '\${EMPTY}' }	SUT -> Client	

TP Permutation id	TP/NGSI-LD/CTX/Cons/052_02_04	
Name	052_02_04 List @contexts with details equal to false and kind equal to hoste	d and with
	previously one add @context	
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to 'Hosted' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' }	SUT -> Client

TP Id	TP/NGSI-LD/CTX/Cons/052_05	
Test objective	Check that one can list all the @context available in the broker with several ac	dd @contexts
	with details equal to true	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.3	
Config Id	CF_01	
PICS Selection	PICS_LisAllCac@co	
Initial conditions	with { the SUT containing a set of three Hosted @contexts and the default Car	ched Core
	Context. }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_05_01	
Name	052_05_01 List @contexts with details set to true and no kind and with previo	usly several
	add @contexts	
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to 'true' and Query Parameter:	
	kind set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and List @contexts with Check Context Response Body	
	Containing a list of identifiers and Query Parameter: kind set to '\${EMPTY}' }	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_05_02	
Name	052_05_02 List @contexts with details set to true and kind set to hosted and	with previously
	several add @contexts	
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to 'true' and Query Parameter:	
	kind set to 'Hosted' }	OUT OF
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and List @contexts with Check Context Response Body	
	Containing a list of identifiers and Query Parameter: kind set to 'Hosted' }	

TP Id	TP/NGSI-LD/CTX/Cons/052_07		
Test objective	Check that one can list all the cached @context entries		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.3		
Config Id	CF_01		
PICS Selection	PICS_LisAllCac@co		
Initial conditions	with { the SUT containing a cached context from creating an entity. }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_07_01		
	052_07_01 List @contexts with details set to true and kind set to cached and with previously several add @contexts		
Parent Release	v1.5.1		
Description	Check that one can find a previously cached context		

Expected behaviour	Test events	Direction
		SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to 'true' and Query Parameter:	
	kind set to 'Cached' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and List @contexts with Check Context Response Body	
	Containing a list of identifiers and Query Parameter: kind set to 'Cached' }	

TP ld	TP/NGSI-LD/CTX/Cons/052_03		
Test objective	Check that one can list all the @context available in the broker with several a	dd @contexts	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.3		
Config Id	CF_01		
PICS Selection	PICS_LisAllCac@co		
Initial conditions	with { the SUT containing a set of three Hosted @contexts and the default Cached Core		
	Context. }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CTX/Cons/052 03 01	TP/NGSI-LD/CTX/Cons/052 03 01	
Name	052_03_01 List @contexts with neither details or kind and with previously several add		
	@context		
Parent Release	v1.5.1		
Description	Check that one can list @contexts		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	OOT V OIICH	
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query		
	Parameter: kind set to '\${EMPTY}' }		
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client	
	with Response Status Code set to 200 and List @contexts with Response	OO1 > OHOIR	
	reason set to 'OK' and List @contexts with Check Context Response Body		
	Containing a list of identifiers and Query Parameter: kind set to '\${EMPTY}' }		
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_03_02		
Name	052_03_02 List @contexts with no details and kind equal to hosted and with	proviously	
Name	several add @context	Dieviously	
Parent Release	v1.5.1		

Description	Check that one can list @contexts	Discotion	
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List		
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query		
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' }		
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client	
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response	SUT -> Client	
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body	SUT -> Client	
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' }	SUT -> Client	
TP Permutation id	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03		
TP Permutation id Name	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with pre		
Name	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context		
Name Parent Release	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1		
Name Parent Release Description	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1 Check that one can list @contexts	eviously	
Name Parent Release	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1 Check that one can list @contexts Test events	eviously Direction	
Name Parent Release Description	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to	eviously	
Name Parent Release Description	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	eviously Direction	
Name Parent Release Description	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query	eviously Direction	
Name Parent Release Description	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to '\${EMPTY}' }	Direction SUT <- Client	
Name Parent Release Description	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to '\${EMPTY}' } then { the SUT sends a valid Response for the operations: List @contexts	eviously Direction	
Name Parent Release Description	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to '\${EMPTY}' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response	Direction SUT <- Client	
Name Parent Release Description	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to '\${EMPTY}' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body	Direction SUT <- Client	
Name Parent Release Description Expected behaviour	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to '\${EMPTY}' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to '\${EMPTY}' }	Direction SUT <- Client	
Name Parent Release Description Expected behaviour TP Permutation id	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to '\${EMPTY}' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to '\${EMPTY}' } TP/NGSI-LD/CTX/Cons/052_03_04	Direction SUT <- Client SUT -> Client	
Name Parent Release Description Expected behaviour	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context V1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to '\${EMPTY}' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to '\${EMPTY}' } TP/NGSI-LD/CTX/Cons/052_03_04 052_03_04 List @contexts with details equal to false and kind equal to hosted	Direction SUT <- Client SUT -> Client	
Name Parent Release Description Expected behaviour TP Permutation id	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to '\${EMPTY}' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to '\${EMPTY}' } TP/NGSI-LD/CTX/Cons/052_03_04	Direction SUT <- Client SUT -> Client	
Name Parent Release Description Expected behaviour TP Permutation id	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context V1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to '\${EMPTY}' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to '\${EMPTY}' } TP/NGSI-LD/CTX/Cons/052_03_04 052_03_04 List @contexts with details equal to false and kind equal to hosted	Direction SUT <- Client SUT -> Client	
Parent Release Description Expected behaviour TP Permutation id Name	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to 'Hosted' } TP/NGSI-LD/CTX/Cons/052_03_03 052_03_03 List @contexts with details equal to false and no kind and with preseveral add @context v1.5.1 Check that one can list @contexts When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to '\${EMPTY}' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: kind set to '\${EMPTY}' } TP/NGSI-LD/CTX/Cons/052_03_04 052_03_04 List @contexts with details equal to false and kind equal to hosted previously several add @context	Direction SUT <- Client SUT -> Client	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to 'false' and Query	
	Parameter: kind set to 'Hosted' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and List @contexts with Check Context Response Body	
	Containing a list of identifiers and Query Parameter: kind set to 'Hosted' }	

TP Id	TP/NGSI-LD/CTX/Cons/052_01	
Test objective	Check that one can list all the @context available in the broker with no previous	uis add
rest objective	@context	as add
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.13.3	
Config Id	CF_01	
PICS Selection	PICS_LisAllCac@co	
Initial conditions	with { the SUT containing an initial state }	
miliar containens	Permutations	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_01_01	
Name	052_01_01 List @contexts with neither details or kind and not previously created @context	
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query	
	Parameter: kind set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and List @contexts with Check Context Response Body	
	Containing a list of identifiers and Query Parameter: response_body set to	
	'response.json()' and Query Parameter: list_contexts set to 'empty_array' }	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_01_02	
Name	052_01_02 List @contexts with no details and kind equal to hosted and not p	reviously
	created @context	
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Took assemble	
Expedica sellavioui	Test events	Direction
Expedied beliavious	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
Expedica seliavioui	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	_
Exposion beliavious	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query	_
Exposion seriavioni	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' }	SUT <- Client
Exposion seriavioni	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts	_
Exposion seriavioni	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response	SUT <- Client
Exposion seriavioni	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body	SUT <- Client
Exposion seriavioui	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to	SUT <- Client
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' }	SUT <- Client
TP Permutation id	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_03	SUT <- Client SUT -> Client
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_03 052_01_03 List @contexts with no details and kind equal to cached and not proceed the set of	SUT <- Client SUT -> Client
TP Permutation id Name	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_03 052_01_03 List @contexts with no details and kind equal to cached and not pereated @context	SUT <- Client SUT -> Client
TP Permutation id Name Parent Release	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_03 052_01_03 List @contexts with no details and kind equal to cached and not parameted @context v1.5.1	SUT <- Client SUT -> Client
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_03 052_01_03 List @contexts with no details and kind equal to cached and not preated @context v1.5.1 Check that one can list @contexts	SUT <- Client SUT -> Client previously
TP Permutation id Name Parent Release	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_03 052_01_03 List @contexts with no details and kind equal to cached and not preated @context v1.5.1 Check that one can list @contexts Test events	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_03 052_01_03 List @contexts with no details and kind equal to cached and not preated @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to	SUT <- Client SUT -> Client previously
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_03 052_01_03 List @contexts with no details and kind equal to cached and not preated @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_03 052_01_03 List @contexts with no details and kind equal to cached and not precated @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_03 052_01_03 List @contexts with no details and kind equal to cached and not preated @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Cached' }	SUT <- Client SUT -> Client Direction SUT <- Client
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_03 052_01_03 List @contexts with no details and kind equal to cached and not preceded @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Cached' } then { the SUT sends a valid Response for the operations: List @contexts	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_03 052_01_03 List @contexts with no details and kind equal to cached and not preated @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Cached' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response	SUT <- Client SUT -> Client Direction SUT <- Client
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Hosted' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_03 052_01_03 List @contexts with no details and kind equal to cached and not preceded @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/jsonIdContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to '\${EMPTY}' and Query Parameter: kind set to 'Cached' } then { the SUT sends a valid Response for the operations: List @contexts	SUT <- Client SUT -> Client Direction SUT <- Client

TP Permutation id	TP/NGSI-LD/CTX/Cons/052_01_04	
Name	052_01_04 List @contexts with no details and kind equal to implicitlycreated	and not
	previously created @context	-
Parent Release	v1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to '\${EMPTY}' and Query	
	Parameter: kind set to 'ImplicitlyCreated' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and List @contexts with Check Context Response Body	
	Containing a list of identifiers and Query Parameter: response_body set to	
TP Permutation id	response.json()' and Query Parameter: list_contexts set to 'empty_array' }	
	TP/NGSI-LD/CTX/Cons/052_01_05	viously spected
Name	052_01_05 List @contexts with details equal to false and no kind and not pre @context	eviously created
Parent Release	V1.5.1	
Description	Check that one can list @contexts	
Expected behaviour	Test events	Direction
-Apostou Bollavioui	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	SOT VE OHERIC
	@contexts: and Query Parameter: details set to 'false' and Query	
	Parameter: kind set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and List @contexts with Check Context Response Body	
	Containing a list of identifiers and Query Parameter: response_body set to	
	'response.json()' and Query Parameter: list_contexts set to 'empty_array' }	
TP Permutation id	TP/NGSI-LD/CTX/Cons/052_01_06	
Name	052_01_06 List @contexts with details equal to false and kind equal to hoster	d and not
Danieri Balanca	previously created @context	
Parent Release	v1.5.1	
Description Expected behaviour	Check that one can list @contexts Test events	Direction
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	SOT <- CHERK
	@contexts: and Query Parameter: details set to 'false' and Query	
	Parameter: kind set to 'Hosted' }	
		SUT -> Client
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
		SUT -> Client
	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response	SUT -> Client
	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' }	SUT -> Client
	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07	
	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache	
Name	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context	
Name Parent Release	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1	
TP Permutation id Name Parent Release Description	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts	ed and not
Name Parent Release	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts Test events	ed and not Direction
Name Parent Release Description	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to	ed and not
Name Parent Release Description	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	ed and not Direction
Name Parent Release Description	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query	ed and not Direction
Name Parent Release Description	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to 'Cached' }	Direction SUT <- Client
Name Parent Release Description	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to 'Cached' } then { the SUT sends a valid Response for the operations: List @contexts	ed and not Direction
Name Parent Release Description	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to 'Cached' } then { the SUT sends a valid Response for the operations: List @contexts with Response	Direction SUT <- Client
Name Parent Release Description	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to 'Cached' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body	Direction SUT <- Client
Name Parent Release Description	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to 'Cached' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to	Direction SUT <- Client
Name Parent Release Description Expected behaviour	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to 'Cached' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body	Direction SUT <- Client
Parent Release Description Expected behaviour TP Permutation id	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to 'Cached' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' }	Direction SUT <- Client
Parent Release Description Expected behaviour TP Permutation id Name	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to 'Cached' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_08	Direction SUT <- Client
Name Parent Release Description	then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_07 052_01_07 List @contexts with details equal to false and kind equal to cache previously created @context v1.5.1 Check that one can list @contexts Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List @contexts: and Query Parameter: details set to 'false' and Query Parameter: kind set to 'Cached' } then { the SUT sends a valid Response for the operations: List @contexts with Response Status Code set to 200 and List @contexts with Response reason set to 'OK' and List @contexts with Check Context Response Body Containing a list of identifiers and Query Parameter: response_body set to 'response.json()' and Query Parameter: list_contexts set to 'empty_array' } TP/NGSI-LD/CTX/Cons/052_01_08 052_01_08 List @contexts with details equal to false and kind equal to implice	Direction SUT <- Client

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/jsonldContexts?\${params_as_string}' method set to 'GET' List	
	@contexts: and Query Parameter: details set to 'false' and Query	
	Parameter: kind set to 'ImplicitlyCreated' }	
	then { the SUT sends a valid Response for the operations: List @contexts	SUT -> Client
	with Response Status Code set to 200 and List @contexts with Response	
	reason set to 'OK' and List @contexts with Check Context Response Body	
	Containing a list of identifiers and Query Parameter: response_body set to	
	response.json()' and Query Parameter: list_contexts set to 'empty_array' }	

4.2 CommonBehaviours

4.2.1 CommonResponses

4.2.1.1 VerifyNotAcceptableMediaType

TP Id	TP/NGSI-LD/CB/HTTP/049_01	
Test objective	Verify throwing 406 HTTP status code (Not Acceptable Media Type) if the "Ac	cept" header
	does not imply "application/json" nor "application/ld+json"	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.4	
Config Id	CF_01	
PICS Selection	PICS_HTTP_PRECOND	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CB/HTTP/049_01_01	
Name	049_01_01 Endpoint get /entities/{entityId}	
Parent Release	v1.3.1	
Description	Verify throwing 406 HTTP status code (Not Acceptable Media Type) if the "Ac	
	does not imply "application/json" nor "application/ld+json" (get /entities/{entityl	d})
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query	
	Parameter: id set to '\${entity_id}' and Query Parameter: accept set to	
	'application/xml' }	
	then { the SUT sends a valid Response for the operation: Query Entity with	SUT -> Client
	Response Status Code set to 406 }	
TP Permutation id	TP/NGSI-LD/CB/HTTP/049_01_02	
Name	049_01_02 Endpoint get /subscriptions/{subscriptionId}	
Parent Release	v1.3.1	
Description	Verify throwing 406 HTTP status code (Not Acceptable Media Type) if the "Ac	cept" header
	does not imply "application/json" nor "application/ld+json" (get	
	/subscriptions/{subscriptionId})	ı
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/{id}' method set to 'GET' Subscription Retrieve with	
	the following data: and Query Parameter: id set to '\${id}' and Query	
	Parameter: accept set to 'application/xml' }	
	then { the SUT sends a valid Response for the operation: Retrieve	SUT -> Client
	Subscription with Response Status Code set to 406 }	
TP Permutation id	TP/NGSI-LD/CB/HTTP/049_01_03	
Name	049_01_03 Endpoint get /csourceRegistrations/	
Parent Release	v1.3.1	
Description	Verify throwing 406 HTTP status code (Not Acceptable Media Type) if the "Ac	
	does not imply "application/json" nor "application/ld+json" (get /csourceRegist	rations/)

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Request a Context	
	Source Registration with Return Entity Type set to 'Building' Header['Accept']	
	set to 'application/xml' }	
	then { the SUT sends a valid Response for the operation: Query Context	SUT -> Client
	Source Registrations With Return with Response Status Code set to 406 }	
TP Permutation id	TP/NGSI-LD/CB/HTTP/049_01_04	
Name	049_01_04 Endpoint get /csourceSubscriptions/	
Parent Release	v1.3.1	
Description	Verify throwing 406 HTTP status code (Not Acceptable Media Type) if the "Acc	
Francisco de la la constancia	does not imply "application/json" nor "application/ld+json" (get /csourceSubscr	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-Id/v1/csourceSubscriptions' method set to 'GET' Query Context Source	
	Registration Subscriptions and Query Parameter: accept set to 'application/xml' }	
	then { the SUT sends a valid Response for the operation: Query Context	SUT -> Client
	Source Registration Subscriptions with Response Status Code set to 406 }	301 -> Client
TP Permutation id	TP/NGSI-LD/CB/HTTP/049 01 05	
Name	049_01_05 Endpoint get /temporal/entities	
Parent Release	v1.3.1	
Description	Verify throwing 406 HTTP status code (Not Acceptable Media Type) if the "Acc	cept" header
	does not imply "application/json" nor "application/ld+json" (get /temporal/entitie	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after'	
	and Query Parameter: timeAt set to '2020-08-01T12:05:00Z' and Query	
	Parameter: accept set to 'application/xml' }	
	then { the SUT sends a valid Response for the operation: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 406 }	

TP Id	TP/NGSI-LD/CB/HTTP/049_02		
Test objective	Verify throwing 406 HTTP status code (Not Acceptable Media Type) if the "Accept" header		
	is "application/geo+json" for operations different than "Retrieve Entity" and "Query Entity"		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.4	-	
Config Id	CF_01		
PICS Selection	PICS_HTTP_PRECOND		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CB/HTTP/049_02_01		
Name	049_02_01 Retrieve subscription by id		
Parent Release	v1.3.1		
Description	Verify throwing 406 HTTP status code (Not Acceptable Media Type) if the "Accept" header		
	is "application/geo+json" for operations different than "Retrieve Entity" and "Query Entity"		
	(get /subscriptions/{subscriptionId})		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/subscriptions/{id}' method set to 'GET' Subscription Retrieve with		
	the following data: and Query Parameter: id set to '\${id}' and Query		
	Parameter: accept set to 'application/geo+json' }		
	then { the SUT sends a valid Response for the operation: Retrieve	SUT -> Client	
	Subscription with Response Status Code set to 406 }		
TP Permutation id	TP/NGSI-LD/CB/HTTP/049_02_02		
Name	049_02_02 Query temporal entities		
Parent Release	v1.3.1		
Description	Verify throwing 406 HTTP status code (Not Acceptable Media Type) if the "Accept" header		
	is "application/geo+json" for operations different than "Retrieve Entity" and "Query Entity"		
	(get /temporal/entities)		

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after'	
	and Query Parameter: timeAt set to '2020-08-01T12:05:00Z' and Query	
	Parameter: accept set to 'application/geo+json' }	
	then { the SUT sends a valid Response for the operation: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 406 }	
TP Permutation id	TP/NGSI-LD/CB/HTTP/049_02_03	
Name	049_02_03 Query context source registration	
Parent Release	v1.3.1	
Description	Verify throwing 406 HTTP status code (Not Acceptable Media Type) if the "Acc	cept" header
	is "application/geo+json" for operations different than "Retrieve Entity" and "Qu	uery Entity"
	(get /csourceRegistrations)	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Request a Context	
	Source Registration with Return Entity Type set to 'Building' Header['Accept']	
	set to 'application/geo+json' }	
	then { the SUT sends a valid Response for the operation: Query Context	SUT -> Client
	Source Registrations With Return with Response Status Code set to 406 }	

4.2.1.2 VerifyMergePatchJson

TP Id	TP/NGSI-LD/CB/HTTP/044_02		
Test objective	Verify that PATCH HTTP requests can be done with "application/merge-patch	+json" as	
	Content-Type		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.4		
Config Id	CF_01		
PICS Selection	PICS_HTTP_PRECOND		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subs	scription	
	\${subscription} with an id set to \${subscription_id} }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CB/HTTP/044_02_01		
Name	044_02_01 Endpoint /subscriptions/{subscriptionId}		
Parent Release	v1.3.1		
Description	Verify that PATCH HTTP requests can be done with "application/merge-patch-	+json" as	
	Content-Type		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request		
	Update Subscription and Header['Link'] contain the context		
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-		
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'		
	and Header['Content-Type'] set to 'application/merge-patch+json' and		
	Payload defined in file 'subscriptions/fragments/subscription-update.json' }		
	then { the SUT sends a valid Response for the operation: Update	SUT -> Client	
	Subscription with Response Status Code set to 204 }		

TP ld	TP/NGSI-LD/CB/HTTP/044_01
Test objective	Verify that PATCH HTTP requests can be done with "application/merge-patch+json" as
	Content-Type
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.4
Config Id	CF_01
PICS Selection	PICS_HTTP_PRECOND
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity \${entity} with
	an id set to \${entityId} }
	Permutations
TP Permutation id	TP/NGSI-LD/CB/HTTP/044_01_01
Name	044_01_01 endpoint /entities/{entityId}/attrs/{attrId}
Parent Release	v1.3.1
Description	Verify that PATCH HTTP requests can be done with "application/merge-patch+json" as
	Content-Type

Expected behaviour	Test events	Direction
		SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'brandName' and	
	Query Parameter: fragment_filename set to 'vehicle-brandname-	
	fragment.json' and Query Parameter: content_type set to 'application/merge-	
	patch+json' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operation: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 }	

4.2.1.3 VerifyLdContextNotAvailable

TP ld	TP/NGSI-LD/CB/HTTP/043_01	
Test objective	Verify receiving 503 - LdContextNotAvailable error if remote JSON-LD @cont	ext cannot be
	retrieved	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.2.2	
Config Id	CF_01	
PICS Selection	PICS_IGNORESYSPROPS_AND_SYSPROPS_IFASKED	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CB/HTTP/043_01_01	
Name	043_01_01 Create entity	
Parent Release	v1.3.1	
Description	Verify receiving 503 – LdContextNotAvailable error if remote JSON-LD @cont	ext cannot be
	retrieved (Create entity)	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	
	set to 'application/ld+json' and payload defined in file: 'building-unretrievable-	
	context.jsonId' }	
	then { the SUT sends a valid Response for the operations: Create Entity	SUT -> Client
	Selecting Content Type with Response Status Code set to 503 and Create	
	Entity Selecting Content Type with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/LdContextNotAvailable' and Create Entity	
	Selecting Content Type with Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CB/HTTP/043_01_02	
Name	043_01_02 Create subscription	
Parent Release	v1.3.1	
Description	Verify receiving 503 – LdContextNotAvailable error if remote JSON-LD @cont	ext cannot be
	retrieved (Create subscription)	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/' method set to 'POST' Request Header['Content-	
	Type'] set to 'application/ld+json' and payload defined in file:	
	'subscriptions/subscription-unretrievable-context.jsonld' }	
	then { the SUT sends a valid Response for the operations: Create	SUT -> Client
	Subscription with Response Status Code set to 503 and Create Subscription	
	with Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/LdContextNotAvailable' and Create Subscription with Response	
TP Permutation id	body containing 'title' element }	
	TP/NGSI-LD/CB/HTTP/043_01_03	
Name	043_01_03 Create Temporal Representation of Entities	
Parent Release	v1.3.1	
Description	Verify receiving 503 – LdContextNotAvailable error if remote JSON-LD @cont	ext cannot be
	retrieved (Create Temporal Representation of Entities)	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'POST' Create or Update	
	Temporal Representation of Entity Selecting Content Type: and Query	
	Parameter: temporal_entity_representation_id set to	
	'\${temporal_entity_representation_id}' and Query Parameter: filename set to	
	'bus-temporal-representation-unretrievable-context.jsonId' and Query	
	Parameter: content_type set to 'application/ld+json' and Query Parameter:	
	accept set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: Create Or Update	SUT -> Client
	Temporal Representation Of Entity Selecting Content Type with Response	
	Status Code set to 503 and Create Or Update Temporal Representation Of	
	Entity Selecting Content Type with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/LdContextNotAvailable' and Create Or	
	Update Temporal Representation Of Entity Selecting Content Type with	
	Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CB/HTTP/043_01_04	
Name	043_01_04 Batch entity create	
Parent Release	v1.3.1	
Description	Verify receiving 503 – LdContextNotAvailable error if remote JSON-LD @cont	ext cannot be
	retrieved (Batch entity create)	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload set to a list of	
	entities to be created }	
	then { the SUT sends a valid Response for the operations: Batch Create	SUT -> Client
	Entities with Response Status Code set to 207 and Batch Create Entities	
	with Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/LdContextNotAvailable' and Batch Create Entities with Response	
	Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/LdContextNotAvailable' and Batch Create Entities with Response	
	body containing 'title' element and Batch Create Entities with Response body	
	containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CB/HTTP/043_01_05	
Name	043_01_05 Create context source registration	
Parent Release Description	v1.3.1	
Description	Verify receiving 503 – LdContextNotAvailable error if remote JSON-LD @cont	ext cannot be
Expected behaviour	retrieved (Create context source registration) Test events	Direction
Expected benaviour	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-Id/v1/csourceRegistrations' method set to 'POST' Request	301 <- Client
	Header['Content-Type'] set to 'application/ld+json' and payload defined in	
	file: '\${updated_payload}' }	
	then { the SUT sends a valid Response for the operation: Create Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 503 }	SOT -> Client

4.2.1.4 VerifyUnsupportedMediaType

TP ld	TP/NGSI-LD/CB/HTTP/048_01	
Test objective	Verify throwing 415 HTTP status code (Unsupported Media Type) if "Content-Type" header	
-	is not "application/json" or "application/ld+json"	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.4	
Config Id	CF_01	
PICS Selection	PICS_HTTP_PRECOND	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CB/HTTP/048_01_01	
Name	048_01_01 Endpoint patch /entities/{entityId}/attrs/{attrId}	
Parent Release	v1.3.1	
Description	Verify throwing 415 HTTP status code (Unsupported Media Type) if "Content-Type" header	
	is not "application/json" or "application/ld+json" (patch /entities/{entityId}/attrs/{attrId})	

Expected behaviour	Test events	Direction
•	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'speed' and Query	
	Parameter: fragment_filename set to 'vehicle-brandname-fragment.jsonId'	
	and Query Parameter: content_type set to 'application/xml' }	
	then { the SUT sends a valid Response for the operation: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 415 }	
TP Permutation id	TP/NGSI-LD/CB/HTTP/048_01_02	
Name	048_01_02 Endpoint patch /subscriptions/{subscriptionId}	
Parent Release	v1.3.1	
Description	Verify throwing 415 HTTP status code (Unsupported Media Type) if "Content-	
-	is not "application/json" or "application/ld+json" (patch /subscriptions/{subscriptions/	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request	
	Update Subscription and Header['Content-Type'] set to 'application/xml' and	
	Payload defined in file 'csourceSubscriptions/fragments/subscription-	
	update.jsonId' }	SUT -> Client
	then { the SUT sends a valid Response for the operation: Update Subscription with Response Status Code set to 415 }	SUI -> CIIEIII
TP Permutation id	TP/NGSI-LD/CB/HTTP/048 01 03	
Name	048_01_03 Endpoint post /entities/	
Parent Release	v1.3.1	
Description	Verify throwing 415 HTTP status code (Unsupported Media Type) if "Content-	Type" header
Description	is not "application/json" or "application/ld+json" (post /entities/)	Type Headel
Expected behaviour	Test events	Direction
Expected Bellavious	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	301 <- Ciletit
	set to 'application/xml' and payload defined in file: 'building-simple-	
	attributes.jsonId' }	
	then { the SUT sends a valid Response for the operation: Create Entity	SUT -> Client
	Selecting Content Type with Response Status Code set to 415 }	00.7
TP Permutation id	TP/NGSI-LD/CB/HTTP/048_01_04	u .
Name	048_01_04 Endpoint post /subscriptions/	
Parent Release	v1.3.1	
Description	Verify throwing 415 HTTP status code (Unsupported Media Type) if "Content-	Type" header
	is not "application/json" or "application/ld+json" (post /subscriptions/)	,,
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/' method set to 'POST' Request Header['Content-	
	Type'] set to 'application/xml' and payload defined in file:	
	'csourceSubscriptions/subscription.jsonId' }	
	then { the SUT sends a valid Response for the operation: Create	SUT -> Client
	Subscription with Response Status Code set to 415 }	
TP Permutation id	TP/NGSI-LD/CB/HTTP/048_01_05	
Name	048_01_05 Endpoint post /entityOperations/create	
Parent Release	V1.3.1	- "· ·
Description	Verify throwing 415 HTTP status code (Unsupported Media Type) if "Content-	
Francisco de la	is not "application/json" or "application/Id+json" (post /entityOperations/create)	
Expected behaviour	Test events	Direction Client
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/xml' and payload set to a list of entities to be created }	
	then { the SUT sends a valid Response for the operation: Batch Create	SUT -> Client
	Entities with Response Status Code set to 415 }	JUI -> CHENT
TP Permutation id	TP/NGSI-LD/CB/HTTP/048_01_06	1
Name	048_01_06 Endpoint post /temporal/entities/	
Parent Release	v1.3.1	
Description	Verify throwing 415 HTTP status code (Unsupported Media Type) if "Content-	Tyne" header
Societion	is not "application/json" or "application/ld+json" (post /temporal/entities/)	Type Headel
	The field application/journ or application/lum/journ (post/temporal/entitles/)	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'POST' Create or Update	
	Temporal Representation of Entity Selecting Content Type: and Query	
	Parameter: temporal_entity_representation_id set to	
	'\${temporal_entity_representation_id}' and Query Parameter: filename set to	
	'vehicle-temporal-representation.jsonId' and Query Parameter: content_type	
	set to 'application/xml' and Query Parameter: accept set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operation: Create Or Update	SUT -> Client
	Temporal Representation Of Entity Selecting Content Type with Response	
	Status Code set to 415 }	

4.2.1.5 VerifyGETWithoutAccept

TP Id	TD/NCCLLD/CD/LITTD/04F 04	
	TP/NGSI-LD/CB/HTTP/045_01	
Test objective	Verify that on a GET HTTP request if nothing is specified on the Accept heads	er,
Defenses	"application/json" is assumed	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.4	
Config Id	CF_01	
PICS Selection	PICS_HTTP_PRECOND	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CB/HTTP/045_01_01	
Name	045_01_01 Endpoint /entities/{entityId}	
Parent Release	v1.3.1	
Description	Verify that on a GET HTTP request if nothing is specified on the Accept heads	er,
	"application/json" is assumed (/entities/{entityId})	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query	
	Parameter: id set to '\${id}' and Query Parameter: Link set to	
	'<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and	
	Query Parameter: accept set to '*/*' }	
	then { the SUT sends a valid Response for the operations: Create Entity	SUT -> Client
	Selecting Content Type with Response Status Code set to 201 and Create	
	Entity Selecting Content Type with Response Status Code set to 200 and	
	Create Entity Selecting Content Type with Response Header: Content-Type	
	set to application/json and Notification with Response Header: Link is not	
	Empty }	
TP Permutation id	TP/NGSI-LD/CB/HTTP/045_01_02	
Name	045_01_02 Endpoint /subscriptions/{subscriptionId}	
Parent Release	v1.3.1	
Description	Verify that on a GET HTTP request if nothing is specified on the Accept heade	er,
	"application/json" is assumed (/subscriptions/{subscriptionId})	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/{id}' method set to 'GET' Subscription Retrieve with	
	the following data: and Query Parameter: id set to '\${id}' and Query	
	Parameter: accept set to '*/*' }	
	then { the SUT sends a valid Response for the operations: Create	SUT -> Client
	Subscription with Response Status Code set to 201 and Create Subscription	
	with Response Status Code set to 200 and Create Subscription with	
	Response Header: Content-Type set to application/json and Notification with	
	Response Header: Link is not Empty }	
TP Permutation id	TP/NGSI-LD/CB/HTTP/045_01_03	•
Name	045_01_03 Endpoint /csourceRegistrations/	
Parent Release	v1.3.1	
Description	Verify that on a GET HTTP request if nothing is specified on the Accept heads	er.
	"application/json" is assumed (/csourceRegistrations/)	,
	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Request a Context	
	Source Registration with Return Entity Type set to 'Vehicle' Header['Accept']	
	set to '*/*' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 201 and	
	Create Context Source Registration With Return with Response Status Code	
	set to 200 and Create Context Source Registration With Return with	
	Response Header: Content-Type set to application/json and Notification with	
TD Dormutation id	Response Header: Link is not Empty }	
TP Permutation id	TP/NGSI-LD/CB/HTTP/045_01_04	
Name	045_01_04 Endpoint /temporal/entities	
Parent Release	V1.3.1	
Description	Verify that on a GET HTTP request if nothing is specified on the Accept heade	r,
Farmanta di biahardaran	"application/json" is assumed (/temporal/entities)	Dissettes
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	l'/ngsi-ld/v1/temporal/entities' method set to 'GET' Request a Temporal	
	Representation of Entities with Return }	01.17
	then { the SUT sends a valid Response for the operations: Create Or Update	SUT -> Client
	Temporal Representation Of Entity Selecting Content Type with Response	
	Status Code set to 201 and Create Or Update Temporal Representation Of	
	Entity Selecting Content Type with Response Status Code set to 200 and	
	Create Or Update Temporal Representation Of Entity Selecting Content	
	Type with Response Header: Content-Type set to application/json and	
	Notification with Response Header: Link is not Empty }	

4.3 ContextSource

4.3.1 Registration

4.3.1.1 RegisterContextSource

TP Id	TP/NGSI-LD/CS/CSR/033_02	
Test objective	Check that one cannot create a context source with invalid content	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.9.2	
Config Id	CF_05	
PICS Selection	PICS_CsoRegCre	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CS/CSR/033_02_01	
Name	033_02_01 Create a context source registration with invalid JSON file	
Parent Release	v1.3.1	
Description	Create a context source registration with invalid JSON file	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Create Context Source Registration Request with Content-Type set to 'application/ld+json' and payload set to '\${subscription_payload}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Create Context Source Registration with Response Status Code set to 400 and Create Context Source Registration with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Create Context Source Registration with Response body containing 'title' element }	SUT -> Client

TP Id	TP/NGSI-LD/CS/CSR/033_01_02	
Test objective	Check that one can create a context source registration that never expires	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.9.2	
Config Id	CF_05	
PICS Selection	PICS_CsoRegCre	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CS/CSR/033_01_02	
Name	033_01_02 Create Context Source Registration That Never Expires	
Parent Release	v1.3.1	
Description	Check that one can create a context source registration that never expires	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceRegistrations' method set to 'POST' Request Header['Content-Type'] set to 'application/Id+json' and payload defined in	SUT <- Client
	file: '\${registration_payload}' } then { the SUT sends a valid Response for the operations: Create Context	

TP ld	TP/NGSI-LD/CS/CSR/033_06	
Test objective	Check that an HTTP error response of type BadRequestData is raised if the C	
	header is "application/json" and the request payload body (as JSON) contains	a "@context"
	term	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_05	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CS/CSR/033_06_01	
Name	033_06_01 Create one context source registration containing a JSON-LD @cr	ontext with a
	JSON content type	
Parent Release	v1.3.1	
Description	Check that an HTTP error response of type BadRequestData is raised if the C	
	header is "application/json" and the request payload body (as JSON) contains	a "@context"
	term	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload defined in	
	file: '\${updated_payload}' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 400 and	
	Create Context Source Registration With Return with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and	
	Create Context Source Registration With Return with Response body	
	containing 'title' element }	

TP ld	TP/NGSI-LD/CS/CSR/033_04
Test objective	Check that the @context is obtained from a Link Header if the Content-Type header is
	"application/json"
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5
Config Id	CF_05
PICS Selection	PICS_HTTP_CONTEXT_RESOLV
Initial conditions	with { the SUT containing an initial state }
Permutations	
TP Permutation id	TP/NGSI-LD/CS/CSR/033_04_01
Name	033_04_01 Create one context source registration using a provided Link header with JSON
	content type with Context
Parent Release	v1.3.1
Description	Check that the @context is obtained from a Link Header if the Content-Type header is "application/json"

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload defined in	
	file: '\${updated_payload}' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 201 and	
	Retrieve Context Source Registration with Response Body containing the	
	key '['information'][0]['entities'][0]['type']', with the value 'Building' }	
TP Permutation id	TP/NGSI-LD/CS/CSR/033_04_02	
Name	033_04_02 Create one context source registration using a provided Link head	ler with JSON
	content type without Context	
Parent Release	v1.3.1	
Description	Check that the @context is obtained from a Link Header if the Content-Type h	eader is
_	"application/json"	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload defined in	
	file: '\${updated_payload}' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 201 and	
	Retrieve Context Source Registration with Response Body containing the	
	key '['information'][0]['entities'][0]['type']', with the value 'https://ngsi-ld-test-	
	suite/context#Building' }	

TP Id	TP/NGSI-LD/CS/CSR/033_01_03	
Test objective	Check that one can create a context source registration without specifying an	ID
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.9.2	
Config Id	CF_05	
PICS Selection	PICS_CsoRegCre	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CS/CSR/033_01_03	
Name	033_01_03 Create Context Source Registration Without Specifying an ID	
Parent Release	v1.3.1	
Description	Check that one can create a context source registration without specifying an	ID
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: '\${payload}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Create Context Source Registration With Return with Response Status Code set to 201 and Retrieve Context Source Registration with Check Created Resource Set To and Query Parameter: 'ignored_keys' set to '\${None}' list of keys }	SUT -> Client

TP Id	TP/NGSI-LD/CS/CSR/033_03
Test objective	Check that one cannot create a context source registration that already exists
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.9.2
Config Id	CF_05
PICS Selection	PICS_CsoRegCre
Initial conditions	with { the SUT being in the "initial state" and the SUT contains a Context Source Registration with id equal to \${context_source_registration_id} and payload set to \${context_source_registration_payload_file_path} }
φ(context_source_registration_payload_ine_patiny } Permutations	
TP Permutation id	TP/NGSI-LD/CS/CSR/033_03_01
Name	033_03_01 Create a context source registration that already exists
Parent Release	v1.3.1
Description	Check that one cannot create a context source registration that already exists

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload defined in	
	file: '\${updated_payload}' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 409 and	
	Create Context Source Registration With Return with Response body	
	containing 'title' element }	

TP Id	TP/NGSI-LD/CS/CSR/033_01_01	
Test objective	Check that one can create a context source registration with specific ID and ex	xpiration date
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.9.2	
Config Id	CF_05	
PICS Selection	PICS_CsoRegCre	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CS/CSR/033_01_01	
Name	033_01_01 Create Context Source Registration With Specific Date Expiration	Date
Parent Release	v1.3.1	
Description	Check that one can create a context source registration with specific ID and ex	xpiration date
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload defined in	
	file: '\${registration_payload}' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 201 and	
	Retrieve Context Source Registration with Check Created Resource Set To	
	and Query Parameter: 'ignored_keys' set to '\${None}' list of keys }	

TP ld	TP/NGSI-LD/CS/CSR/033_05	
Test objective	Check that the default @context is used if the Content-Type header is "application of the Content Cont	ation/ison" and
rest objective	the Link header does not contain a JSON-LD @context	allon/joon and
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_05	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT containing an initial state }	
initial conditions	Permutations	
TP Permutation id	TP/NGSI-LD/CS/CSR/033_05_01	
Name	033_05_01 Create one context source registration using the default context w	ith JSON
Train o	content type with Context	
Parent Release	v1.3.1	
Description	Check that the default @context is used if the Content-Type header is "applicated by the Content Conte	ation/json" and
•	the Link header does not contain a JSON-LD @context and retrieve the inform	
	ngsild context	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload defined in	
	file: '\${updated_payload}' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 201 and	
	Retrieve Context Source Registration with Response Body containing the	
	key '['information'][0]['entities'][0]['type']', with the value 'ngsi-ld:default-	
	context/Building' }	
TP Permutation id	TP/NGSI-LD/CS/CSR/033_05_02	
Name	033_05_02 Create one context source registration using the default context w	ith JSON
	content type without Context	
Parent Release	v1.3.1	
Description	Check that the default @context is used if the Content-Type header is "application of the Content Cont	
	the Link header does not contain a JSON-LD @context and retrieve the inform	nation without
	ngsild context	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload defined in	
	file: '\${updated_payload}' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 201 and	
	Retrieve Context Source Registration with Response Body containing the	
	key '['information'][0]['entities'][0]['type']', with the value 'Building' }	

TP ld	TP/NGSI-LD/CS/CSR/033_07	
Test objective	Check that the @context is obtained from the request payload body itself if the	e Content-
	Type header is "application/ld+json"	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_05	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/CSR/033_07_01	
Name	033_07_01 Create one context source registration using a JSON-LD @context	t obtained
	from the request payload with Context	
Parent Release	v1.3.1	
Description	Check that the @context is obtained from the request payload body itself if the	
	Type header is "application/ld+json" and retrieve the information with ngsild co	ntext
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload defined in	
	file: '\${updated_payload}' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 201 and	
	Retrieve Context Source Registration with Response Body containing the	
	key '['information'][0]['entities'][0]['type']', with the value 'Vehicle' }	
TP Permutation id	TP/NGSI-LD/CS/CSR/033_07_02	
Name	033_07_02 Create one context source registration using a JSON-LD @context	t obtained
	from the request payload without Context	
Parent Release	v1.3.1	
Description	Check that the @context is obtained from the request payload body itself if the	
	Type header is "application/ld+json" and retrieve the information without ngsilo	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload defined in	
	file: '\${updated_payload}' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 201 and	
	Retrieve Context Source Registration with Response Body containing the	
	key '['information'][0]['entities'][0]['type']', with the value 'https://ngsi-ld-test-	
	suite/context#Vehicle' }	

TP Id	TP/NGSI-LD/CS/CSR/033_09
	Check that an HTTP error response of type BadRequestData is raised if the Content-Type header is "application/ld+json" and a JSON-LD Link header is present in the incoming HTTP request
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5
Config Id	CF_05
PICS Selection	PICS_HTTP_CONTEXT_RESOLV
Initial conditions	with { the SUT containing an initial state }

Permutations		
TP Permutation id	TP/NGSI-LD/CS/CSR/033_09_01	
Name	033_09_01 Create one context source registration with a Link header and a JS content type	SON-LD
Parent Release	v1.3.1	
Description	Check that an HTTP error response of type BadRequestData is raised if the C header is "application/ld+json" and a JSON-LD Link header is present in the ir request	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: '\${updated_payload}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Create Context Source Registration With Return with Response Status Code set to 400 and Create Context Source Registration With Return with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Create Context Source Registration With Return with Response body containing 'title' element }	SUT -> Client

TP ld	TP/NGSI-LD/CS/CSR/033_10	
Test objective	Check that one cannot create a context source with invalid content	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_05	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/CSR/033_10_01	
Name	033_10_01 Create a context source registration with a different data structure	than
Parent Release	CSourceRegistration data type v1.3.1	
	111511	
Description Expected behaviour	Check that one cannot create a context source with invalid content Test events	Direction
Expected beliaviour	1000010110	SUT <- Client
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload defined in	
	file: '\${updated_payload}' }	SUT -> Client
	then { the SUT sends a valid Response for the operations: Create Context Source Registration With Return with Response Status Code set to 400 and	SUT -> Client
	Create Context Source Registration With Return with Response Header:	
	Location containing \$\${registration_id}}	
TP Permutation id	TP/NGSI-LD/CS/CSR/033_10_02	
Name	033_10_02 Create a context source registration with a date in the past	
Parent Release	V1.3.1	
Description	Check that one cannot create a context source with invalid content	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request	00. 1 0
	Header['Content-Type'] set to 'application/ld+json' and payload defined in	
	file: '\${updated_payload}' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 400 and	
	Create Context Source Registration With Return with Response Header:	
	Location containing \$\${registration_id}}	

TP ld	TP/NGSI-LD/CS/CSR/033_08
	Check that an HTTP error response of type BadRequestData is raised if the Content-Type header is "application/ld+json" and the request payload body does not contain a @context term
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5
Config Id	CF_05
PICS Selection	PICS_HTTP_CONTEXT_RESOLV
Initial conditions	with { the SUT containing an initial state }

Permutations		
TP Permutation id	TP/NGSI-LD/CS/CSR/033_08_01	
Name	033_08_01 Create one context source registration not containing a JSON-LD a JSON-LD content type	@context with
Parent Release	v1.3.1	
Description	Check that an HTTP error response of type BadRequestData is raised if the C header is "application/ld+json" and the request payload body does not contain term	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: '\${updated_payload}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Create Context Source Registration With Return with Response Status Code set to 400 and Create Context Source Registration With Return with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Create Context Source Registration With Return with Response body containing 'title' element }	SUT -> Client

4.3.1.2 UpdateContextSourceRegistration

TP Id	TP/NGSI-LD/CS/REG/034_05	
Test objective	Check that one can update a context source registration by id	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.9.3	
Config Id	CF_05	
PICS Selection	PICS_CsoRegUpd	
Initial conditions	with { the SUT being in the "initial state" and the SUT contains a Context Source	
	Registration with id equal to \${context_source_registration_id} and payload se	t to
	\${context_source_registration_payload_file_path} }	
	Permutations Permutations	
TP Permutation id	TP/NGSI-LD/CS/REG/034_05_01	
Name	034_05_01 Update a context source registration to never expire	
Parent Release	v1.3.1	
Description	Check that one can update a context source registration by id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{registration_id}' method set to 'PATCH'	
	Update Context Source Registration with id set to '\${registration_id}' and	
	registration update fragment set to '\${registration_update_fragment}' and	
	content-type set to 'application/json' }	
	then { the SUT sends a valid Response for the operations: Update Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 204 and	
	Retrieve Context Source Registration with Check that response body does	
	not contain the key '\$.expiresAt' }	

TP Id	TP/NGSI-LD/CS/REG/034_03
Test objective	Check that one cannot update a context source registration by id if the id is not known to the
	system
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.9.3
Config Id	CF_05
PICS Selection	PICS_CsoRegUpd
Initial conditions	with { the SUT containing an initial state }
Permutations	
TP Permutation id	TP/NGSI-LD/CS/REG/034_03_01
Name	034_03_01 Update a context source registration by id if the id is not known to the system
Parent Release	v1.3.1
Description	Check that one cannot update a context source registration by id if the id is not known to the system

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{registration_id}' method set to 'PATCH'	
	Update Context Source Registration with id set to '\${registration_id}' and	
	registration update fragment set to '\${fragment_with_id}' and content-type	
	set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 404 and	
	Update Context Source Registration With Return with Response reason set	
	to 'Not Found' and Update Context Source Registration With Return with	
	Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/ResourceNotFound' and Response Body Title is a string and is not	
	\${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and	
	Response Boty Title is not equal to Response Body Detail }	

TP ld	TP/NGSI-LD/CS/REG/034_01	
Test objective	Check that one can update a context source registration by id	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.9.3	
Config Id	CF_05	
PICS Selection	PICS_CsoRegUpd	
Initial conditions	with { the SUT being in the "initial state" and the SUT contains a Context Sour	ce
	Registration with id equal to \${context_source_registration_id} and payload se	t to
	\${context_source_registration_payload_file_path}}	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REG/034_01_01	
Name	034_01_01 Update a context source registration by id	
Parent Release	v1.3.1	
Description	Check that one can update a context source registration by id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{registration_id}' method set to 'PATCH'	
	Update Context Source Registration with id set to '\${registration_id}' and	
	registration update fragment set to '\${registration_update_fragment}' and	
	content-type set to 'application/json' }	
	then { the SUT sends a valid Response for the operations: Update Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 204 and	CC. FORM
	Retrieve Context Source Registration with Response Body containing the	
	key '['endpoint']', with the value 'http://my.new.csource.org:1026' }	

TP ld	TD/NCCLL D/CC/DEC/024 0C	
	TP/NGSI-LD/CS/REG/034_06	
Test objective	Check that one cannot update a context source registration if the ld is not pres	sent
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.9.3	
Config Id	CF_05	
PICS Selection	PICS_CsoRegUpd	
Initial conditions	with { the SUT being in the "initial state" and the SUT contains a Context Source	
	Registration with id equal to \${context_source_registration_id} and payload se	t to
	\${context_source_registration_payload_file_path}}	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REG/034_06_01	
Name	034_06_01 Update a context source registration by id if the ld is not present	
Parent Release	v1.3.1	
Description	Check that one cannot update a context source registration under some condi	tions
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{registration_id}' method set to 'PATCH'	
	Update Context Source Registration with id set to '\${EMPTY}' and	
	registration update fragment set to '\${fragment_with_id}' and content-type	
	set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 405 and	00.70
	Update Context Source Registration With Return with Response reason set	
	to 'Method Not Allowed' and Update Context Source Registration With	
	Return with Response does not contain a body }	

TP Id	TP/NGSI-LD/CS/REG/034_04	
Test objective	Check that one cannot update a context source registration under some condit	tions
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.9.3	
Config Id	CF_05	
PICS Selection	PICS_CsoRegUpd	
Initial conditions	with { the SUT being in the "initial state" and the SUT contains a Context Source Registration with id equal to \${context_source_registration_id} and payload set \${context_source_registration_payload_file_path} }	
	Permutations Permutations	
TP Permutation id	TP/NGSI-LD/CS/REG/034_04_01	
Name	034_04_01 Update a context source registration if the request body is invalid	
Parent Release	v1.3.1	
Description	Check that one cannot update a context source registration if the request body	is invalid
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method set to 'PATCH' Update Context Source Registration with CSR Id set to '\${registration_id}' and subscription update from file 'context-source-registration-invalid-json.json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Context Source Registration From File with Response Status Code set to 400 and Update Context Source Registration From File with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Update Context Source Registration From File with Response body containing 'title' element }	SUT -> Client

Check that one cannot update a context source registration under some conditions	ld	TP/NGSI-LD/CS/REG/034_02			
Config Id CF_05	st objective	Check that one cannot update a context source registration under some conditions			
PICS CsoRegUpd					
Initial conditions	nfig ld	CF_05			
Registration with id equal to \${context_source_registration_id} and payload set to \${context_source_registration_payload_file_path}}\$ Permutations TP Permutation id TP/NGSI-LD/CS/REG/034_02_01 Name 034_02_01 Update a context source registration by id if the ld is not a valid URI Parent Release v1.3.1 Description Check that one cannot update a context source registration under some conditions Expected behaviour Test events Direction when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{registration_id}' method set to 'PATCH' Update Context Source Registration with id set to 'invalidURI' and registration update fragment set to '\${fragment_with_id}' and content-type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration With Return with Response Status Code set to 400 and	S Selection				
\$\text{source_registration_payload_file_path}\}\$ Permutations TP Permutation id TP/NGSI-LD/CS/REG/034_02_01 Name 034_02_01 Update a context source registration by id if the Id is not a valid URI Parent Release v1.3.1 Description Check that one cannot update a context source registration under some conditions Expected behaviour Test events Direction when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceRegistrations/{registration_id}' method set to 'PATCH' Update Context Source Registration with id set to 'invalidURI' and registration update fragment set to '\$\fragment_with_id}' and content-type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration With Return with Response Status Code set to 400 and SUT -> Client Sut Source Registration With Return with Response Status Code set to 400 and Sut	ial conditions				
Permutation id TP/NGSI-LD/CS/REG/034_02_01					
TP Permutation id TP/NGSI-LD/CS/REG/034_02_01 Name 034_02_01 Update a context source registration by id if the Id is not a valid URI Parent Release v1.3.1 Description Check that one cannot update a context source registration under some conditions Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceRegistrations/{registration_id}' method set to 'PATCH' Update Context Source Registration with id set to 'invalidURI' and registration update fragment set to '\${fragment_with_id}' and content-type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration With Return with Response Status Code set to 400 and					
Name 034_02_01 Update a context source registration by id if the Id is not a valid URI					
Parent Release v1.3.1 Description Check that one cannot update a context source registration under some conditions Expected behaviour Test events Direction when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceRegistrations/{registration_id}' method set to 'PATCH' Update Context Source Registration with id set to 'invalidURI' and registration update fragment set to '\${fragment_with_id}' and content-type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration With Return with Response Status Code set to 400 and					
Check that one cannot update a context source registration under some conditions Test events					
Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{registration_id}' method set to 'PATCH' Update Context Source Registration with id set to 'invalidURl' and registration update fragment set to '\${fragment_with_id}' and content-type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration With Return with Response Status Code set to 400 and SUT -> Clients SUT -> Clients		-			
when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{registration_id}' method set to 'PATCH' Update Context Source Registration with id set to 'invalidURl' and registration update fragment set to '\${fragment_with_id}' and content-type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration With Return with Response Status Code set to 400 and					
'/ngsi-Id/v1/csourceRegistrations/{registration_id}' method set to 'PATCH' Update Context Source Registration with id set to 'invalidURI' and registration update fragment set to '\${fragment_with_id}' and content-type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration With Return with Response Status Code set to 400 and	pected behaviour				
Update Context Source Registration with id set to 'invalidURI' and registration update fragment set to '\${fragment_with_id}' and content-type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration With Return with Response Status Code set to 400 and			<- Client		
registration update fragment set to '\${fragment_with_id}' and content-type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration With Return with Response Status Code set to 400 and					
set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration With Return with Response Status Code set to 400 and			ļ		
then { the SUT sends a valid Response for the operations: Update Context Source Registration With Return with Response Status Code set to 400 and			ļ		
Source Registration With Return with Response Status Code set to 400 and			. 01: .		
			-> Client		
TUDDATE CONTEXT SOURCE REDISTRATION WITH RETURN WITH RESPONSE reason Set			ļ		
to 'Bad Request' and Update Context Source Registration With Return with Response Body containing the type 'https://uri.etsi.org/ngsi-					
Id/errors/BadRequestData' and Response Body Title is a string and is not					
\${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and			ļ		
Response Boty Title is not equal to Response Body Detail }					
TP Permutation id TP/NGSI-LD/CS/REG/034 02 02	Permutation id				
Name 034_02_02 Update a context source registration if the request body is not of the same data			me data		
type		· · · · · · · · · · · · · · · · · · ·	o data		
Parent Release v1.3.1	rent Release				
Description Check that one cannot update a context source registration under some conditions					

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{registration_id}' method set to 'PATCH'	
	Update Context Source Registration with id set to '\${valid_registration_id}'	
	and registration update fragment set to '\${fragment_with_id}' and content-	
	type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 400 and	
	Update Context Source Registration With Return with Response reason set	
	to 'Bad Request' and Update Context Source Registration With Return with	
	Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/BadRequestData' and Response Body Title is a string and is not	
	\${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and	
TD Dormutation id	Response Boty Title is not equal to Response Body Detail }	
TP Permutation id	TP/NGSI-LD/CS/REG/034_02_03	
Name	034_02_03 Update a context source registration if one attempts to remove a n	nandatory
Parent Release	property v1.3.1	
Description	Check that one cannot update a context source registration under some condi	tions
Expected behaviour	Test events	Direction
Expedica Bellavica	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{registration_id}' method set to 'PATCH'	COT CHOIL
	Update Context Source Registration with id set to '\${valid_registration_id}'	
	and registration update fragment set to '\${fragment_with_id}' and content-	
	type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 400 and	
	Update Context Source Registration With Return with Response reason set	
	to 'Bad Request' and Update Context Source Registration With Return with	
	Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/BadRequestData' and Response Body Title is a string and is not	
	\${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and	
	Response Boty Title is not equal to Response Body Detail }	

4.3.1.3 DeleteContextSourceRegistration

TP ld	TP/NGSI-LD/CS/REG/035_03	
Test objective	Check that one cannot delete a context source registration by id if the id is not	known to the
	system	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.9.4	
Config Id	CF_05	
PICS Selection	PICS_CsoRegDel	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REG/035_03_01	
Name	035_03_01 Delete a context source registration by id	
Parent Release	v1.3.1	
Description	Check that one cannot delete a context source registration by id if the id is not	known to the
	system	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{registration_id}' method set to 'DELETE'	
	Delete Context Source Registration with id set to '\${registration_id}' }	
	then { the SUT sends a valid Response for the operations: Delete Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 404 and	
	Delete Context Source Registration With Return with Response body	
	containing 'title' element }	
	portioning the distribute	

TP Id	TP/NGSI-LD/CS/REG/035_01	
Test objective	Check that one can delete a context source registration by id	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.9.4	
Config Id	CF_05	
PICS Selection	PICS_CsoRegDel	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a list of Conte Registrations (CSRs) providing latest information about some entities }	xt Source
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REG/035_01_01	
Name	035_01_01 Delete a context source registration by id	
Parent Release	v1.3.1	
Description	Check that one can delete a context source registration by id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{registration_id}' method set to 'DELETE'	
	Delete Context Source Registration with id set to '\${registration_id}' }	
	then { the SUT sends a valid Response for the operations: Delete Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 204 and	
	Retrieve Context Source Registration with Response Status Code set to	
	\${response1.status_code} }	

TP Id	TP/NGSI-LD/CS/REG/035_02	1
Test objective		iono
Reference	Check that one cannot delete a context source registration under some condition of the context source registration under some conditions of the context source registration and the context source registration an	IONS
	ETSI GS CIM 009 V1.6.1 [1], clause 5.9.4	
Config Id	CF_05	
PICS Selection	PICS_CsoRegDel	
Initial conditions	with { the SUT being in the "initial state" and the SUT contains a Context Source	
	Registration with id equal to \${context_source_registration_id} and payload se	t to
	\${context_source_registration_payload_file_path} }	
	Permutations Productions	
TP Permutation id	TP/NGSI-LD/CS/REG/035_02_01	
Name	035_02_01 Delete a Context Source Registration if the Id is not present	
Parent Release	v1.3.1	
Description	Check that one cannot delete a context source registration under some conditi	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{registration_id}' method set to 'DELETE'	
	Delete Context Source Registration with id set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: Delete Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 405 and	
	Delete Context Source Registration With Return with Response Body	
	containing the type '\${EMPTY}' and Delete Context Source Registration With	
TP Permutation id		
Name	035_02_02 Delete a Context Source Registration if the Id is not a valid URI	
Parent Release	v1.3.1	
Description	Check that one cannot delete a context source registration under some conditi	ions
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{registration_id}' method set to 'DELETE'	
	Delete Context Source Registration with id set to 'invalidURI' }	
	then { the SUT sends a valid Response for the operations: Delete Context	SUT -> Client
	Source Registration With Return with Response Status Code set to 400 and	
	Delete Context Source Registration With Return with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and	
	Delete Context Source Registration With Return with Response body	
	containing 'title' element }	
Parent Release Description	Return with Response body containing 'title' element } TP/NGSI-LD/CS/REG/035_02_02 035_02_02 Delete a Context Source Registration if the Id is not a valid URI v1.3.1 Check that one cannot delete a context source registration under some conditi Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceRegistrations/{registration_id}' method set to 'DELETE' Delete Context Source Registration with id set to 'invalidURI' } then { the SUT sends a valid Response for the operations: Delete Context Source Registration With Return with Response Status Code set to 400 and Delete Context Source Registration With Return with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Delete Context Source Registration With Return with Response body	Direction SUT <- Client

4.3.2 RegistrationSubscription

4.3.2.1 ContextSourceRegistrationSubscriptionNotificationBehaviour

TPINGSI-LD/CS/REGSUB/047_16 Check if one updates a context source registration subscription, a CsourceNotification will be sent with all currently matching context source registrations Reference				
be sent with all currently matching context source registrations Reference ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7 Config Id CF 05 PICS NOTIFICATIONS CSR Initial conditions with { the SUT being in the "initial state" and the SUT containing a list of Context Source Registrations (CSRs) providing latest information about some entities and the SUT containing a Context Source Registration Subscription (CSRS1) } Permutations TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_01 Name 047_16_01 MatchFirstContextSource Registration Subscription, a CsourceNotification will be sent with all currently matching context source registrations Expected behaviour Expected behaviour When { the SUT receives a Request from the client containing: URL set to 'ngsi-Id/1/sourceSubscriptions/(subscription.) id/) method set to 'PATCH' Update Context Source Registration Subscription id/subscription id set to 'S(subscription) id/) and subscription update fragment set to S(subscription) update fragment)? If then { the client at \$(endpoint)* receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_context_source_registration_ids set to \$(first_context_source_registration_ids) set to \$(first_context_source_registration_ids) set to \$(first_context_source_registration_ids) and Query Parameter: expected_toint/cation_received Waiting for Notification and validate it and Query Parameter: expected_context_source_registration_ids set to \$(first_context_source_registration_ids) and Query Parameter: expected_toint/cation_data_entities set to '\$(EMPTY)* and Query Parameter: expected_toint/cation_cata_entities set to '\$(EMPTY)* and Query Parameter: expected_notification_data_entities set to '\$(EMPTY)* and Query Parameter: expected_notification_data_entities set to '\$(EMPTY)* and Query Parameter: expected_notification_source_registration subscription, a CsourceNotification will be sent with all currently matching context source registrations Expected behaviour Tes		TP/NGSI-LD/CS/REGSUB/047_16		
Be sent with all currently matching context source registrations	Test objective	Check if one updates a context source registration subscription, a CsourceNotification will		
Reference ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7 Config Id CF 05 PICS Selection PICS NOTIFICATIONS CSR with (the SUT being in the "initial state" and the SUT containing a list of Context Source Registrations (CSRs) providing latest information about some entities and the SUT containing a Context Source Registration Subscription (CSRS1) Permutation id TP/NCSI-LD/CS/REGSUB/047 16 01 Name 047_16_01 MatchFirstContextSourceRegistration Parent Release V1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will be sent with all currently matching context source registrations Expected behaviour Test events Direction Vingsi-Idd/1/csourceSubscriptions/(subscription_id)" method set to PATCH Update Context Source Registration Subscription with subscription dest to S(subscription_id)" and subscription in with subscription of set to S(subscription_id)" and subscription in with subscription of set to S(subscription_id)" and subscription update fragment set to S(subscription_id) and subscription in with subscription containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to S(first_context_source_registration_ids) and Query Parameter: expected_context_source_registration_ids set to S(first_context_source_registration) and Query Parameter: expected_context_source_registration subscription, a CsourceNotification will be sent with all currently matching context source registration SUT < Client Vingsi-Idd/1/csourceSubscription.g(subscription_id) and subscription and Validate it and Query Parameter: expected_context_source_registration subscription id set to S(subscription_id and Validate) in the first of the Subscription received Waiting for Notification	-	be sent with all currently matching context source registrations		
PICS NOTIFICATIONS_CSR with (the SUT being in the "initial state" and the SUT containing a list of Context Source Registrations (CSRs) providing latest information about some entities and the SUT containing a Context Source Registration Subscription (CSRS1)	Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7		
with (the SUT being in the "initial state" and the SUT containing a list of Context Source Registrations (CSRs) providing latest information about some entities and the SUT containing a Context Source Registration Subscription (CSRS1) Permutations	Config Id	CF_05		
with (the SUT being in the "initial state" and the SUT containing a list of Context Source Registrations (CSRs) providing latest information about some entities and the SUT containing a Context Source Registration Subscription (CSRS1)) Permutation	PICS Selection	PICS_NOTIFICATIONS_CSR		
Registrations (CSRs) providing latest information about some entities and the SUT containing a Context Source Registration Subscription (CSRS1) } Permutations TP/NGSI-LD/CS/REGSUB/047_16_01 Name 047_16_01 MatchFirstContextSourceRegistration Parent Release V1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will be sent with all currently matching context source registrations Expected behaviour Test events when { the SUT receives a Request from the client containing: URL set to //ngsi-ldv1//csourceSubscriptions/{subscription id} method set to PATCH' Update Context Source Registration Subscription id set to S{subscription.id} and subscription update fragment set to S{subscription.id} and Query Parameter: expected_subscription_id set to subscription_id and Query Parameter: expected_formation_id set to subscription_id and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_trigger_reason set to 'newly and the parameter is the set to S{subscription_id} and subscription id set to S{subscription_id} and subscription id set to S{subscription_id} and Query Parameter: expected_subscription_id} and Query Parameter: expected_subscription_id and Query Parameter: expected_trigger_reason set to 'newlyMatching' and	Initial conditions		ext Source	
containing a Context Source Registration Subscription (CSRS1) } Permutation id TP/NGSI-LD/CS/REGSUB/047_16_01 Name 047_16_01 MatchFirstContextSource Registration Parent Release 1/3.1 Description Expected behaviour When { the SUT receives a Request from the client containing: URL set to \${\text{subscription_udate_indition_id}} \text{ Surce registration subscription id set to \${\text{subscription_id}} \text{ and Unity of the cere expected behaviour} \text{ Surce Registration Subscription_id} \text{ indition id} \t				
TP Permutation id TP/NGSI-LD/CS/REGSUB/047 16 of the total content of the total content of the content				
Name		Permutations		
Description	TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_16_01		
Check if one updates a context source registration subscription, a CsourceNotification will be sent with all currently matching context source registrations Direction	Name	047_16_01 MatchFirstContextSourceRegistration		
Expected behaviour	Parent Release	v1.3.1		
Expected behaviour	Description	Check if one updates a context source registration subscription, a CsourceNo	tification will	
Test events	•			
when { the SUT receives a Request from the client containing: URL set to //ngsi-ld/v1/csourceSubscriptions/(subscription_id)' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to \$(subscription_id)' and subscription update fragment set to \$(subscription_id)' and subscription update fragment set to \$(subscription_id)' and subscription update fragment set to then the client at \$(endpoint)' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_context_source_registration_ids set to \$(first_context_source_registration_ids) and Query Parameter: expected_tnotification_data_entities set to '\$(first_context_source_registration_id)' and Query Parameter: expected_notification_data_entities set to '\$(EMPTY)' and Query Parameter: timeout set to '\$') TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_02 Name 047_16_02 MatchSecondContextSourceRegistration Parent Release 13.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will be sent with all currently matching context source registrations Expected behaviour Test events Direction Test events Direction Expected behaviour Test events Direction SUT <- Client (ngsi-ld/v1/csourceSubscriptions)(subscription_id)' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\$(subscription_id)' and subscription_id)' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\$(subscription_id)' and Subscription_id set to '\$(subscription_id)' and Query Parameter: expected_context_source_registration_id)' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_trigger_reason set to 'newlyMat	Expected behaviour		Direction	
'/ngsi-Id/M1/csourceSubscriptions/(subscription ind) method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to 'S(subscription_id)' and subscription update fragments et to 'S(subscription_update_fragments') then { the client at '\$(endpoint)' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\$(EMPTY)' and Query Parameter: timeout set to '5') TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_02 Name	_	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
Update Context Source Registration Subscription with subscription id set to \${subscription_id}\$ and subscription update fragment set to \${subscription_update_fragment}\$} Then { the client at \${endpoint}\$ receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_subscription_id' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}\$ and Query Parameter: expected_batching and Query Parameter: expected_batching and parameter in the client containing: URL set to 'name' the SUT receives a Request from the client containing: URL set to 'name' the SUT receives a Request from the client containing: URL set to 'name' the SUT receives a Request from the client containing: URL set to 'name' the Context Source Registration Subscription id' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_update_fragment}}\$ Then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_subscription_id set to 'subscription_id and Query Parameter: expected_notification_data_entities set to 's(EMPTY)' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}\$ and Query Parameter: expected_notification_data_entities set to '\${EMPTY}\$ and Query Parameter: expected_notification_data_e				
S(subscription_id)' and subscription update fragments et to S(subscription_update_fragment)' } Then { the client at 'S(endpoint)' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id_set to 'subscription_id' and Query Parameter: expected_context_source_registration_id' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\$(EMPTY)' and Query Parameter: expected_subscription_data_entities set to '\$(EMPTY)' and Query Parameter: expected_subscription_subscription_subscription, a CsourceNotification will be sent with all currently matching context source registrations Test events				
S(subscription_update_fragment)'				
Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to '\${first_context_source_registration_id}' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id				
Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to '\${first_context_source_registration_id}' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id		then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client	
Parameter: expected_context_source_registration_ids set to \$\f(\frac{\text{sfirst_context_source_registration_id}\) and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\$\text{EMPTY}\) and Query Parameter: timeout set to '5' \} TP Permutation id		Notification received Waiting for Notification and validate it and Query		
"\${first_contexi_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_02 Name 047_16_02 MatchSecondContextSourceRegistration Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will be sent with all currently matching context source registrations Expected behaviour Test events Test events Direction When { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id set to '\${second_context_source_registration_ids} set to '\${second_context_source_registration_ids} set to '\${second_context_source_registration_ids} and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: expected_		Parameter: expected_subscription_id set to 'subscription_id' and Query		
"\${first_contexi_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_02 Name 047_16_02 MatchSecondContextSourceRegistration Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will be sent with all currently matching context source registrations Expected behaviour Test events Test events Direction When { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id set to '\${second_context_source_registration_ids} set to '\${second_context_source_registration_ids} set to '\${second_context_source_registration_ids} and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: expected_				
expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_02 Name				
timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_02 Name 047_16_02 MatchSecondContextSourceRegistration Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will be sent with all currently matching context source registrations Expected behaviour Test events Direction when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to '\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: expected_notification_data_entities_entities_entities_entities_entities_entities_entities_entities_entities_entit		expected_trigger_reason set to 'newlyMatching' and Query Parameter:		
timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_02 Name 047_16_02 MatchSecondContextSourceRegistration Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will be sent with all currently matching context source registrations Expected behaviour Test events Direction when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to '\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: expected_notification_data_entities_entities_entities_entities_entities_entities_entities_entities_entities_entit				
TP Permutation id Name O47_16_02 MatchSecondContextSourceRegistration Parent Release V1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will be sent with all currently matching context source registrations Expected behaviour Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_id}' and subscription update fragment set to '\${subscription_update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to '\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: expected_notification_data_entities se				
Parent Release v1.3.1 Check if one updates a context source registration subscription, a CsourceNotification will be sent with all currently matching context source registrations Expected behaviour Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceSubscriptions//subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to '\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: expected_notification_source_registration_source_registrations_notification_source_registrations_notification_source_registrations_notification_source_registrations_notification_source_registrations_notification_source_registration_source_registration_source_registration_source_registration_source_registration_source_registration_source_registration_source_registration_source_registration_source_registration_source_registration_source_registration_source_registration_source_registration_source_registration_source_registration_source_registration_source_	TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_16_02		
Check if one updates a context source registration subscription, a CsourceNotification will be sent with all currently matching context source registrations Test events	Name	047_16_02 MatchSecondContextSourceRegistration		
be sent with all currently matching context source registrations Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_id}' and subscription update fragment set to '\${subscription_update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to '\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_03 Name 047_16_03 MatchBothContextSourceRegistrations Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will	Parent Release	v1.3.1		
Expected behaviour Test events Direction	Description	Check if one updates a context source registration subscription, a CsourceNo	tification will	
when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_id}' and subscription update fragment set to '\${subscription_update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_id} set to '\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_03 Name	-			
'/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to '\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_03 Name 047_16_03 MatchBothContextSourceRegistrations Parent Release v1.3.1 Check if one updates a context source registration subscription, a CsourceNotification will	Expected behaviour	Test events	Direction	
Update Context Source Registration Subscription with subscription id set to '\${subscription_id}' and subscription update fragment set to '\${subscription_update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to '\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_03 Name 047_16_03 MatchBothContextSourceRegistrations Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will	_	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
\$\frac{\\$ \{\subscription_id\}'\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		'/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH'		
"\${subscription_update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to '\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_03 Name 047_16_03 MatchBothContextSourceRegistrations Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will		Update Context Source Registration Subscription with subscription id set to		
then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to '\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_03 Name 047_16_03 MatchBothContextSourceRegistrations Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will		'\${subscription_id}' and subscription update fragment set to		
Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to '\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_03 Name 047_16_03 MatchBothContextSourceRegistrations Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will		'\${subscription_update_fragment}' }		
Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to '\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_03 Name 047_16_03 MatchBothContextSourceRegistrations Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will		then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client	
Parameter: expected_context_source_registration_ids set to '\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_03 Name 047_16_03 MatchBothContextSourceRegistrations Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will				
"\${second_context_source_registration_id}' and Query Parameter: expected_trigger_reason set to 'newlyMatching' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_03 Name 047_16_03 MatchBothContextSourceRegistrations Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will		Parameter: expected_subscription_id set to 'subscription_id' and Query		
expected_trigger_reason set to 'newlyMatching' and Query Parameter:		Parameter: expected_context_source_registration_ids set to		
expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' } TP Permutation id		'\${second_context_source_registration_id}' and Query Parameter:		
timeout set to '5' } TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_03 Name 047_16_03 MatchBothContextSourceRegistrations Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will		expected_trigger_reason set to 'newlyMatching' and Query Parameter:		
TP Permutation id TP/NGSI-LD/CS/REGSUB/047_16_03 Name 047_16_03 MatchBothContextSourceRegistrations Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will				
Name 047_16_03 MatchBothContextSourceRegistrations Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will				
Name 047_16_03 MatchBothContextSourceRegistrations Parent Release v1.3.1 Description Check if one updates a context source registration subscription, a CsourceNotification will	TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_16_03		
Description Check if one updates a context source registration subscription, a CsourceNotification will		047_16_03 MatchBothContextSourceRegistrations		
	Parent Release	v1.3.1		
	Description	Check if one updates a context source registration subscription, a CsourceNo	tification will	
pe sent with all currently matching context source registrations		be sent with all currently matching context source registrations		

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH'	
	Update Context Source Registration Subscription with subscription id set to	
	'\${subscription_id}' and subscription update fragment set to	
	'\${subscription_update_fragment}' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received Waiting for Notification and validate it and Query	
	Parameter: expected_subscription_id set to 'subscription_id' and Query	
	Parameter: expected_context_source_registration_ids set to	
	'\${first_context_source_registration_id}' and Query Parameter:	
	expected_trigger_reason set to 'newlyMatching' and Query Parameter:	
	expected_notification_data_entities set to '\${EMPTY}' and Query Parameter:	
	timeout set to '5' }	

TP Id	TP/NGSI-LD/CS/REGSUB/047_14		
Test objective	Check if a context source registrations subscription defines a geoQ member, a	1	
1001 020,000.10	CsourceNotification will be triggered from matching context source registration		
	matching location member	o mar a	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7		
Config Id	CF 05		
PICS Selection	PICS_NOTIFICATIONS_CSR		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context Sou	ırce	
	Registration Subscription (CSRS1) }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_14_01		
Name	047_14_01 Receive cSourceNotification For Matching Context Source Registr	ations On	
	Location		
Parent Release	v1.3.1		
Description	Check if a context source registrations subscription defines a geoQ member, a		
	CsourceNotification will be triggered from matching context source registration	s with a	
	matching location member		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Create Context		
	Source Registration Request with Content-Type set to 'application/ld+json'		
	and payload set to '\${context_source_registration_payload}' }		
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client	
	Notification received Waiting for Notification and validate it and Query		
	Parameter: expected_subscription_id set to 'subscription_id' and Query		
	Parameter: expected_context_source_registration_ids set to		
	'expected_context_source_registration_ids' and Query Parameter:		
	expected_trigger_reason set to 'newlyMatching' and Query Parameter:		
	expected_notification_data_entities set to '\${EMPTY}' and Query Parameter:		
	timeout set to '5' }		

TP Id	TP/NGSI-LD/CS/REGSUB/047_10
Test objective	Check if a context source registration subscription defines temporalQ member with
	timeproperty observedAt, the temporal query is matched against the observationInterval of
	matching context source registrations
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7
Config Id	CF_05
PICS Selection	PICS_NOTIFICATIONS_CSR
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context Source
	Registration Subscription (CSRS1) }
	Permutations
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_10_01
Name	047_10_01 Receive cSourceNotification For Matching Context Source Registrations On
	Observation Interval
Parent Release	v1.3.1
Description	Check if a context source registration subscription defines temporalQ member with
	timeproperty observedAt, the temporal query is matched against the observationInterval of
	matching context source registrations

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Create Context	
	Source Registration Request with Content-Type set to 'application/ld+json'	
	and payload set to '\${context_source_registration_payload}' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received Waiting for Notification and validate it and Query	
	Parameter: expected_subscription_id set to 'subscription_id' and Query	
	Parameter: expected_context_source_registration_ids set to	
	'expected_context_source_registration_ids' and Query Parameter:	
	expected_trigger_reason set to 'newlyMatching' and Query Parameter:	
	expected_notification_data_entities set to '\${EMPTY}' and Query Parameter:	
	timeout set to '5' }	

TP ld	TP/NGSI-LD/CS/REGSUB/047_09	
Test objective	Check if a context source registration subscription defines an "entities" member, a	
	CsourceNotification will be triggered from context source registrations with info	ormation
	member matching the described "entities"	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7	
Config Id	CF_05	
PICS Selection	PICS_NOTIFICATIONS_CSR	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_09_01	
Name	047_09_01 Receive cSourceNotification For No Longer Matching Context Sou	ırce
	Registrations Providing Latest Information	
Parent Release	v1.3.1	
Description	Check if a context source registration subscription defines an "entities" member	
	CsourceNotification will be triggered from context source registrations with info	ormation
	member matching the described "entities"	
Expected behaviour	Test events	Direction
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method	
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method set to 'PATCH' Update Context Source Registration with CSR Id set to	
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method set to 'PATCH' Update Context Source Registration with CSR Id set to '\${context_source_registration_id}' and subscription update fragment set to	
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method set to 'PATCH' Update Context Source Registration with CSR Id set to	
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceRegistrations/{context_source_registration_id}' method set to 'PATCH' Update Context Source Registration with CSR Id set to '\${context_source_registration_id}' and subscription update fragment set to '\${update_fragment}' }	SUT <- Client
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method set to 'PATCH' Update Context Source Registration with CSR Id set to '\${context_source_registration_id}' and subscription update fragment set to '\${update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query	SUT <- Client
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method set to 'PATCH' Update Context Source Registration with CSR Id set to '\${context_source_registration_id}' and subscription update fragment set to '\${update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to	SUT <- Client
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method set to 'PATCH' Update Context Source Registration with CSR Id set to '\${context_source_registration_id}' and subscription update fragment set to '\${update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to 'expected_context_source_registration_ids' and Query Parameter:	SUT <- Client
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method set to 'PATCH' Update Context Source Registration with CSR Id set to '\${context_source_registration_id}' and subscription update fragment set to '\${update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to 'expected_context_source_registration_ids' and Query Parameter: expected_trigger_reason set to 'noLongerMatching' and Query Parameter:	SUT <- Client
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method set to 'PATCH' Update Context Source Registration with CSR Id set to '\${context_source_registration_id}' and subscription update fragment set to '\${update_fragment}' } then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to 'expected_context_source_registration_ids' and Query Parameter:	SUT <- Client

TP ld	TP/NGSI-LD/CS/REGSUB/047_12
Test objective	Check if a context source registrations subscription defines entities member and
	watchedAttributes member, a CsourceNotification will be triggered from context source
	registrations with information member matching the described "entities" and "attributes"
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7
Config Id	CF_05
PICS Selection	PICS_NOTIFICATIONS_CSR
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context Source
	Registration Subscription (CSRS1) }
	Permutations
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_12_01
Name	047_12_01 Receive cSourceNotification For Matching Context Source Registrations On
	Watched Attributes
Parent Release	v1.3.1
Description	Check if a context source registrations subscription defines entities member and
	watchedAttributes member, a CsourceNotification will be triggered from context source
	registrations with information member matching the described "entities" and "attributes"

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Create Context	
	Source Registration Request with Content-Type set to 'application/ld+json'	
	and payload set to '\${context_source_registration_payload}' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received Waiting for Notification and validate it and Query	
	Parameter: expected_subscription_id set to 'subscription_id' and Query	
	Parameter: expected_context_source_registration_ids set to	
	'expected_context_source_registration_ids' and Query Parameter:	
	expected_trigger_reason set to 'newlyMatching' and Query Parameter:	
	expected_notification_data_entities set to '\${EMPTY}' and Query Parameter:	
	timeout set to '5' }	

TP ld	TP/NGSI-LD/CS/REGSUB/047_15	
Test objective	Check if a context source registrations subscription does not define a geoprop	erty in the
	geoQ member, a CsourceNotification will be triggered from matching context s	ource
	registrations with a matching location member	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7	
Config Id	CF_05	
PICS Selection	PICS_NOTIFICATIONS_CSR	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context Sou	urce
	Registration Subscription (CSRS1) }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_15_01	
Name	047_15_01 Receive cSourceNotification For Matching Context Source Registr	ations On
	Location As Default	
Parent Release	v1.3.1	
Description	Check if a context source registrations subscription does not define a geoprop	
	geoQ member, a CsourceNotification will be triggered from matching context s	ource
	registrations with a matching location member	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Create Context	
	Source Registration Request with Content-Type set to 'application/ld+json'	
	and payload set to '\${context_source_registration_payload}' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received Waiting for Notification and validate it and Query	
	Parameter: expected_subscription_id set to 'subscription_id' and Query	
	Parameter: expected_context_source_registration_ids set to	
	'expected_context_source_registration_ids' and Query Parameter:	
	expected_trigger_reason set to 'newlyMatching' and Query Parameter:	
	expected_notification_data_entities set to '\${EMPTY}' and Query Parameter:	
	timeout set to '5' }	

TP ld	TP/NGSI-LD/CS/REGSUB/047_13	
Test objective	Check if a context source registrations subscription does not define watchedAttributes member, a CsourceNotification will be triggered from context source registrations with information member matching all attributes of the described entities	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7	
Config Id	CF_05	
PICS Selection	PICS_NOTIFICATIONS_CSR	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context Source Registration Subscription (CSRS1) }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_13_01	
Name	047_13_01 Receive cSourceNotification For Matching Context Source Registrations On Any watchedAttribute	
Parent Release	v1.3.1	
Description	Check if a context source registrations subscription does not define watchedAttributes member, a CsourceNotification will be triggered from context source registrations with information member matching all attributes of the described entities	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Create Context	
	Source Registration Request with Content-Type set to 'application/ld+json'	
	and payload set to '\${context_source_registration_payload}' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received Waiting for Notification and validate it and Query	
	Parameter: expected_subscription_id set to 'subscription_id' and Query	
	Parameter: expected_context_source_registration_ids set to	
	'expected_context_source_registration_ids' and Query Parameter:	
	expected_trigger_reason set to 'newlyMatching' and Query Parameter:	
	expected_notification_data_entities set to '\${EMPTY}' and Query Parameter:	
	timeout set to '5' }	

TP Id	TP/NGSI-LD/CS/REGSUB/047_11		
Test objective	Check if a context source registration subscription defines temporalQ member with		
	timeproperty createdAt or modifiedAt, the temporal query is matched against the		
	managementInterval of matching context source registrations		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7		
Config Id	CF_05		
PICS Selection	PICS_NOTIFICATIONS_CSR		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_11_01		
Name	047_11_01 CreatedAt		
Parent Release	v1.3.1		
Description	Check if a context source registration subscription defines temporalQ member		
	timeproperty createdAt or modifiedAt, the temporal query is matched against the	ne	
	managementInterval of matching context source registrations		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'POST' Create Context		
	Source Registration Subscription with filename set to		
	'\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to		
	'application/ld+json' }		
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client	
	Source Registration Subscription with Response Status Code set to 201 and		
	Create Context Source Registration with Response Status Code set to 201 }		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_11_02		
Name	047_11_02 ModifiedAt		
Parent Release	v1.3.1		
Description	Check if a context source registration subscription defines temporalQ member		
	timeproperty createdAt or modifiedAt, the temporal query is matched against the	ne	
	managementInterval of matching context source registrations		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'POST' Create Context		
	Source Registration Subscription with filename set to		
	\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to		
	application/ld+json' }	OLIT OIL (
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client	
	Source Registration Subscription with Response Status Code set to 201 and		
	Create Context Source Registration with Response Status Code set to 201 }		

TP ld	TP/NGSI-LD/CS/REGSUB/047_08
Test objective	Check if a context source registration subscription does not define a temporalQ member, a
	CsourceNotification will be triggered from matching context source registrations for context
	sources providing latest information
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7
Config Id	CF_05
PICS Selection	PICS_NOTIFICATIONS_CSR
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context Source
	Registration (CSR1) providing latest information about some entities and the SUT containing
	a Context Source Registration Subscription (CSRS1) }

	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_08_01	
Name	047_08_01 Receive cSourceNotification For Matching Context Source Registrations Providing Latest Information	
Parent Release	v1.3.1	
Description	Check if a context source registration subscription does not define a temporal CsourceNotification will be triggered from matching context source registration sources providing latest information	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceRegistrations/{context_source_registration_id}' method set to 'PATCH' Update Context Source Registration with CSR Id set to '\${context_source_registration_id}' and subscription update fragment set to '\${update_fragment}' }	SUT <- Client
	then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for Notification and validate it and Query Parameter: expected_subscription_id set to 'subscription_id' and Query Parameter: expected_context_source_registration_ids set to 'expected_context_source_registration_ids' and Query Parameter: expected_trigger_reason set to 'updated' and Query Parameter: expected_notification_data_entities set to '\${EMPTY}' and Query Parameter: timeout set to '5' }	SUT -> Client

TP ld	TP/NGSI-LD/CS/REGSUB/047_04	
Test objective	The structure of the csource notification message shall be as mandated by cla	use 5.3.2
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7	
Config Id	CF_05	
PICS Selection	PICS_NOTIFICATIONS_CSR	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context Sou Registration Subscription (CSRS1) }	ırce
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_04_01	
Name	047_04_01 Receive cSourceNotification With Compliant Structure	
Parent Release	v1.3.1	
Description	The structure of the csource notification message shall be as mandated by cla	use 5.3.2
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Create Context	
	Source Registration Request with Content-Type set to 'application/ld+json'	
	and payload set to '\${context_source_registration_payload}' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received Waiting for Notification and validate it and Query	
	Parameter: expected_subscription_id set to 'subscription_id' and Query	
	Parameter: expected_context_source_registration_ids set to	
	'expected_context_source_registration_ids' and Query Parameter:	
	expected_trigger_reason set to 'newlyMatching' and Query Parameter:	
	expected_notification_data_entities set to '\${EMPTY}' and Query Parameter:	
	timeout set to '5' }	

TP ld	TP/NGSI-LD/CS/REGSUB/047_06
Test objective	Check that if a cSourceNotification is not sent successfully, the "notification.timesSent" member shall be incremented by one and the notification.lastFailure" and "notification.lastNotification" members shall be updated with the current timestamp and the status of the context source registration subscription shall be updated to "failed"
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7
Config Id	CF_05
PICS Selection	PICS_NOTIFICATIONS_CSR
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context Source Registration Subscription (CSRS1) }

Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_06_01	
Name	047_06_01 If A cSourceNotification Is Not Successfully Sent The Notification Member Shall Be Updated	
Parent Release	v1.3.1	
Description	Check that if a cSourceNotification is not sent successfully, the "notification.tim member shall be incremented by one and the notification.lastFailure" and "notification.lastNotification" members shall be updated with the current timest status of the context source registration subscription shall be updated to "failed	amp and the
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'GET' Retrieve Context Source Registration Subscription with data: and Query Parameter: subscription id set to '\${subscription_id}' }	SUT <- Client
	then { the SUT sends a valid Response for the operation: Retrieve Context Source Registration Subscription with Response containing: * Notification expectation file path set to 'notifications/expectations/1-timesSent-failed.json' * Expected Additional Members set to '\${expected_notification_additional_members}' * Response Body set to '\${response.json()}' }	SUT -> Client

TP Id	TP/NGSI-LD/CS/REGSUB/047_02		
Test objective	Check that if the created context source registration subscription does not defi		
	timeInterval member, a cSourceNotification, with the appropriate trigger reason in the		
	"triggerReason" member, will be sent initially on subscription and whenever the	ere is a	
	change of a matching Context Source Registration		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7		
Config Id	CF_05		
PICS Selection	PICS_NOTIFICATIONS_CSR		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context Sou		
	Registration (CSR1) providing latest information about some entities and the S	SUT containing	
	a Context Source Registration Subscription (CSRS1) }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_02_01		
Name	047_02_01 Receive cSourceNotification Initially On Subscription And Whenev	er There Is A	
	Change Of A Matching Context Source Registration		
Parent Release	v1.3.1		
Description	Check that if the created context source registration subscription does not defi	ne a	
	timeInterval member, a cSourceNotification, with the appropriate trigger reason in the		
	"triggerReason" member, will be sent initially on subscription and whenever there is a		
	change of a matching Context Source Registration	5	
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method		
	set to 'PATCH' Update Context Source Registration with CSR Id set to		
	"\${context_source_registration_id}' and subscription update fragment set to		
	\${update_fragment}' }	OUT Oliver	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client	
	Notification received Waiting for Notification and validate it and Query		
	Parameter: expected_subscription_id set to 'subscription_id' and Query		
	Parameter: expected_context_source_registration_ids set to 'expected_context_source_registration_ids' and Query Parameter:		
	expected_trigger_reason set to 'updated' and Query Parameter:		
	expected_ingger_reason set to updated and Query Parameter. [expected_notification_data_entities set to '\${EMPTY}' and Query Parameter:		
	timeout set to '5' }		
	fillineout set to 5 }		

TP Id	TP/NGSI-LD/CS/REGSUB/047_07
Test objective	Check that a cSourceNotification shall only be sent if and only if the status of the
	corresponding subscription is active, neither paused or expired
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7
Config Id	CF_05
PICS Selection	PICS_NOTIFICATIONS_CSR
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context Source
	Registration Subscription (CSRS1) }

Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_07_01	
Name	047_07_01 PausedSubscription	
Parent Release	v1.3.1	
Description	Check that a cSourceNotification shall only be sent if and only if the status of corresponding subscription is active, neither paused or expired	the
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_id}' and subscription update fragment set to '\${subscription_update_fragment}' }	SUT <- Client
	then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for no Notification data and Query Parameter: timeout set to '5' }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_07_02	1
Name	047_07_02 ExpiredSubscription	
Parent Release	v1.3.1	
Description	Check that a cSourceNotification shall only be sent if and only if the status of corresponding subscription is active, neither paused or expired	the
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_id}' and subscription update fragment set to '\${subscription_update_fragment}' }	SUT <- Client
	then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for no Notification data and Query Parameter: timeout set to '5' }	SUT -> Client

TP Id	TP/NGSI-LD/CS/REGSUB/047_05		
Test objective	Check that if a cSourceNotification is sent successfully to the "endpoint" mem	ber, the	
	"notification.timesSent" member shall be incremented by one and the		
	"notification.lastSuccess" and "notification.lastNotification" members shall be updated with		
	the current timestamp and the status of the context source registration subscription shall be		
	updated to "ok"		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7		
Config Id	CF_05		
PICS Selection	PICS_NOTIFICATIONS_CSR		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context So	urce	
	Registration Subscription (CSRS1) }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_05_01		
Name	047_05_01 If A cSourceNotification Is Successfully Sent The Notification Member Shall Be		
	Updated		
Parent Release	v1.3.1		
Description	Check that if a cSourceNotification is sent successfully to the "endpoint" member, the		
	"notification.timesSent" member shall be incremented by one and the		
	"notification.lastSuccess" and "notification.lastNotification" members shall be updated with		
	the current timestamp and the status of the context source registration subscrupdated to "ok"	iption shall be	
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'GET'		
	Retrieve Context Source Registration Subscription with data: and Query		
	Parameter: subscription id set to '\${subscription_id}' }		
	then { the SUT sends a valid Response for the operation: Retrieve Context	SUT -> Client	
	Source Registration Subscription with Response containing: * Notification		
	expectation file path set to 'notifications/expectations/1-timesSent-ok.json' *		
	Expected Additional Members set to		
	\${expected_notification_additional_members} * Response Body set to		
	'\${response.json()}' }		

TP Id	TP/NGSI-LD/CS/REGSUB/047_01			
Test objective	Check that if the created context source registration subscription defines a timeInterval			
	member, a cSourceNotification will be sent periodically, initially on subscription	n and when		
	the time interval is reached			
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7			
Config Id	CF_05			
PICS Selection	PICS_NOTIFICATIONS_CSR			
Initial conditions	with { the SUT containing an initial state }			
	Permutations			
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_01_01			
Name	047_01_01 Receive cSourceNotification Periodically And Initially On Subscrip	047_01_01 Receive cSourceNotification Periodically And Initially On Subscription		
Parent Release	v1.3.1	v1.3.1		
Description	Check that if the created context source registration subscription defines a tim	eInterval		
	member, a cSourceNotification will be sent periodically, initially on subscription and when			
	the time interval is reached			
Expected behaviour	Test events	Direction		
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client		
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'POST' Create Context			
	Source Registration Subscription with filename set to			
	'\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to			
	'application/ld+json' }			
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client		
	Notification received After waiting '15' seconds }			

TP Id	TP/NGSI-LD/CS/REGSUB/047_03		
Test objective	Check that instead of providing the original context source registration, implementations		
	should return context source registration information relevant for the subscription, in		
	particular only matching RegistrationInfo elements		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.7		
Config Id	CF_05		
PICS Selection	PICS_NOTIFICATIONS_CSR		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context Sou	ırce	
	Registration Subscription (CSRS1) }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/047_03_01		
Name	047_03_01 Receive cSourceNotification With Relevant Information		
Parent Release	v1.3.1		
Description	Check that instead of providing the original context source registration, implem		
	should return context source registration information relevant for the subscription, in		
	particular only matching RegistrationInfo elements		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/csourceRegistrations' method set to 'POST' Create Context		
	Source Registration Request with Content-Type set to 'application/ld+json'		
	and payload set to '\${context_source_registration_payload}' }		
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client	
	Notification received Waiting for Notification and validate it and Query		
	Parameter: expected_subscription_id set to 'subscription_id' and Query		
	Parameter: expected_context_source_registration_ids set to		
	'expected_context_source_registration_ids' and Query Parameter:		
	expected_trigger_reason set to 'newlyMatching' and Query Parameter:		
	expected_notification_data_entities set to		
	'expected_notification_data_entities' and Query Parameter: timeout set to '5'		
	l)	I	

4.3.2.2 DeleteContextSourceRegistrationSubscription

TP ld	TP/NGSI-LD/CS/REGSUB/042_03	
Test objective	Check that one cannot delete an unknown context source registration subscrip	tion
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.6	
Config Id	CF_05	
PICS Selection	PICS_CsoRegSubDel	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/042_03_01	
Name	042_03_01 Delete Unknown Context Source Registration Subscription With In	valid Uri
Parent Release	v1.3.1	
Description	Check that one cannot delete an unknown context source registration subscription	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'DELETE'	
	Delete Context Source Registration Subscription with id set to 'urn:ngsi-	
	Id:Subscription:unknowSubscription' }	
	then { the SUT sends a valid Response for the operations: Delete Context	SUT -> Client
	Source Registration Subscription with Response Status Code set to 404 and	
	Delete Context Source Registration Subscription with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/ResourceNotFound' and	
	Delete Context Source Registration Subscription with Response body	
	containing 'title' element }	

TP Id	TP/NGSI-LD/CS/REGSUB/042_01	
Test objective	Check that one can delete a context source registration subscription	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.6	
Config Id	CF_05	
PICS Selection	PICS_CsoRegSubDel	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context Sou	ırce
	Registration Subscription (CSRS1) }	
Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/042_01_01	
Name	042_01_01 Delete Context Source Registration Subscription	
Parent Release	v1.3.1	
Description	Check that one can delete a context source registration subscription	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'DELETE'	
	Delete Context Source Registration Subscription with id set to	
	'\${subscription_id}' }	
	then { the SUT sends a valid Response for the operations: Delete Context	SUT -> Client
	Source Registration Subscription with Response Status Code set to 204 and	
	Retrieve Context Source Registration Subscription with Response Status	
	Code set to \${response1.status_code} }	

TP Id	TP/NGSI-LD/CS/REGSUB/042_02		
Test objective	Check that one cannot delete a context source registration subscription with an invalid URI		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.6		
Config Id	CF_05		
	PICS_CsoRegSubDel		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/042_02_01		
Name	042_02_01 Delete Context Source Registration Subscription With Invalid Uri		
Parent Release	v1.3.1		
Description	Check that one cannot delete a context source registration subscription with an invalid URI		

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'DELETE'	
	Delete Context Source Registration Subscription with id set to 'invalidUri' }	
	then { the SUT sends a valid Response for the operations: Delete Context	SUT -> Client
	Source Registration Subscription with Response Status Code set to 400 and	
	Delete Context Source Registration Subscription with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and	
	Delete Context Source Registration Subscription with Response body	
	containing 'title' element }	

4.3.2.3 CreateContextSourceRegistrationSubscription

TP Id	TP/NGSI-LD/CS/REGSUB/038_02	
Test objective	Check that one can create a context source registration subscription without p	roviding an id
	and it will be automatically generated	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.2	
Config Id	CF_05	
PICS Selection	PICS_CreSubCsoReg	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/038_02_01	
Name	038_02_01 Create Context Source Registration Subscription Without An Id	
Parent Release	v1.3.1	
Description	Check that one can create a context source registration subscription without p	roviding an id
	and it will be automatically generated	_
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'POST' Create Context	
	Source Registration Subscription with filename set to	
	'\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration Subscription with Response Status Code set to 201 and	
	Retrieve Context Source Registration Subscription with Check Created	
	Resource Set To and Query Parameter: 'ignored_keys' set to '\${None}' list of	
	keys }	

TP ld	TP/NGSI-LD/CS/REGSUB/038_04	
Test objective	Check that one can create a context source registration subscription with isActive member	
	set to false and it's initial status will be set to "paused"	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.2	
Config Id	CF_05	
PICS Selection	PICS_CreSubCsoReg	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/038_04_01	
Name	038_04_01 Create Inactive Context Source Registration Subscription	
Parent Release	v1.3.1	
Description	Check that one can create a context source registration subscription with isActive member	
	set to false and it's initial status will be set to "paused"	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'POST' Create Context	
	Source Registration Subscription with filename set to	
	'\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to	
	'application/ld+json' }	
	laren (and a contract at the contract and a contract at the c	SUT -> Client
	Source Registration Subscription with Response Status Code set to 201 and	
	Create Context Source Registration Subscription with Response Header:	
	Location containing \$\${subscription_id} and Retrieve Context Source	
	Registration Subscription with Check that the payload body contains a	
	boolean attribute with name 'expected_attribute_name=isActive' and value	
	'expected_attribute_value=False and Retrieve Context Source Registration	
	Subscription with Check Response Body containing an Attribute set to and	
	Query Parameter: expected_attribute_name set to 'status' and Query	
	Parameter: response_body set to 'response1.json()' and Query Parameter:	
	expected_attribute_value set to 'paused' }	

TP Id	TP/NGSI-LD/CS/REGSUB/038_06	
Test objective	Check that one can create a context source registration subscription without a	n expiresAt
	member and it will be considered as perpetual	-
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.2	
Config Id	CF_05	
PICS Selection	PICS_CreSubCsoReg	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/038_06_01	
Name	038_06_01 Create Context Source Registration Subscription Without expiresA	t Member
Parent Release	v1.3.1	
Description	Check that one can create a context source registration subscription without a member and it will be considered as perpetual	n expiresAt
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceSubscriptions' method set to 'POST' Create Context Source Registration Subscription with filename set to '\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Create Context Source Registration Subscription with Response Status Code set to 201 and Create Context Source Registration Subscription with Response Header: Location containing \$\${subscription_id} and Retrieve Context Source Registration Subscription with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'status' and Query Parameter: response_body set to 'response1.json()' and Query Parameter: expected_attribute_value set to 'active' }	SUT -> Client

TP ld	TP/NGSI-LD/CS/REGSUB/038_01
Test objective	Check that one can create a minimal context source registration subscription
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.2
Config Id	CF_05
PICS Selection	PICS_CreSubCsoReg
Initial conditions	with { the SUT containing an initial state }
	Permutations
TP Permutation id	TP/NGSI-LD/CS/REGSUB/038_01_01
Name	038_01_01 Create Context Source Registration Subscription
Parent Release	v1.3.1
Description	Check that one can create a minimal context source registration subscription

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceSubscriptions' method set to 'POST' Create Context Source Registration Subscription with filename set to '\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to	SUT <- Client
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Create Context Source Registration Subscription with Response Status Code set to 201 and Create Context Source Registration Subscription with Response Header: Location containing \$\${subscription_id} and Retrieve Context Source Registration Subscription with Check Created Resource Set To and Query Parameter: 'ignored_keys' set to '\${None}' list of keys and Retrieve Context Source Registration Subscription with The Response Body `\${response1.json()}' might contain the key 'lastNotification' in the NotificationParams and Retrieve Context Source Registration Subscription with The Response Body `\${response1.json()}' might contain the key 'lastNotification' in the NotificationParams and Retrieve Context Source Registration Subscription with The Response Body `\${response1.json()}' might contain the key 'lastNotification' in the NotificationParams and Retrieve Context Source Registration Subscription with The Response Body `\${response1.json()}' might contain the key 'lastNotification' in the Response Body `\${response1.json()}' might contain the key 'timesSent' in the NotificationParams }	SUT -> Client

TP Id	TP/NGSI-LD/CS/REGSUB/038_03	
Test objective	Check that one can create a context source registration subscription without process of the context source registration subscription with the context source registration subscription and the context source registration subscription at the context source registration subscription and the context source registration and the context source reg	roviding
	isActive member and will be active by default	-
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.2	
Config Id	CF_05	
PICS Selection	PICS_CreSubCsoReg	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/038_03_01	
Name	038_03_01 Create Context Source Registration Subscription Without isActive	Member
Parent Release	v1.3.1	
Description	Check that one can create a context source registration subscription without prisActive member and will be active by default	roviding
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'POST' Create Context	
	Source Registration Subscription with filename set to	
	<pre>'\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to 'application/ld+json' }</pre>	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration Subscription with Response Status Code set to 201 and	
	Create Context Source Registration Subscription with Response Header:	
	Location containing \$\${subscription_id} and Retrieve Context Source	
	Registration Subscription with Check Response Body containing an Attribute	
	set to and Query Parameter: expected_attribute_name set to 'status' and	
	set to and Query Parameter: expected_attribute_name set to 'status' and Query Parameter: response_body set to 'response1.json()' and Query Parameter: expected_attribute_value set to 'active' }	

TP Id	TP/NGSI-LD/CS/REGSUB/038_07
Test objective	Check that one cannot create a context source registration subscription where another context source registration subscription whose id is equivalent exists
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.2
Config Id	CF_05
PICS Selection	PICS_CreSubCsoReg
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a Context Source Registration Subscription (CSRS1) }

Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/038_07_01	
Name	038_07_01 Create Existing Context Source Registration Subscription	
Parent Release	v1.3.1	
Description	Check that one cannot create a context source registration subscription where context source registration subscription whose id is equivalent exists	another
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceSubscriptions' method set to 'POST' Create Context Source Registration Subscription with filename set to '\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Create Context Source Registration Subscription with Response Status Code set to 409 and Create Context Source Registration Subscription with Response Body containing the type 'problem_type=\${ERROR_TYPE_ALREADY_EXISTS}' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Title is not equal to Response Body Detail }	SUT -> Client

TP/NGSI-LD/CS/REGSUB/038_05	
	kpiresAt
member and when it is due the status of the subscription changes to "expired"	
ETSI GS CIM 009 V1.6.1 [1], clause 5.11.2	
CF_05	
PICS_CreSubCsoReg	
with { the SUT containing an initial state }	
Permutations	
TP/NGSI-LD/CS/REGSUB/038_05_01	
038_05_01 Create Context Source Registration Subscription With expiresAt M	ember
v1.3.1	
Check that one can create a context source registration subscription with an ex	kpiresAt
member and when it is due the status of the subscription changes to "expired"	
1001010000	Direction
	SUT <- Client
	SUT -> Client
	301 -> Client
·	
expected_attribute_value set to 'expired' }	
	Check that one can create a context source registration subscription with an expense and when it is due the status of the subscription changes to "expired" ETSI GS CIM 009 V1.6.1 [1], clause 5.11.2 CF_05 PICS_CreSubCsoReg with { the SUT containing an initial state } Permutations TP/NGSI-LD/CS/REGSUB/038_05_01 038_05_01 Create Context Source Registration Subscription With expiresAt M v1.3.1 Check that one can create a context source registration subscription with an expense and when it is due the status of the subscription changes to "expired" Test events when { the SUT receives a Request from the client containing: URL set to 'Ingsi-Id/v1/csourceSubscriptions' method set to 'POST' Create Context Source Registration Subscription with filename set to '\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Create Context Source Registration Subscription with Response Status Code set to 201 and Create Context Source Registration Subscription with Response Header: Location containing \$\${subscription_id}\$ and Retrieve Context Source Registration Subscription with Check that the dictionary contains the key 'key=expiresAt' with type DateTime and value set to 'expected value=\${expiresAt}' and Retrieve Context Source Registration Subscription with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'status' and Query Parameter: response_body set to 'response1.json()' and Query Parameter:

TP Id	TP/NGSI-LD/CS/REGSUB/038_09
Test objective	Check that one cannot create a context source registration subscription with an expiration
	timestamp representing a moment before the current date and time
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.2
Config Id	CF_05
PICS Selection	PICS_CreSubCsoReg
Initial conditions	with { the SUT containing an initial state }
Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/038_09_01
Name	038_09_01 Create Expired Context Source Registration Subscription
Parent Release	v1.3.1
Description	Check that one cannot create a context source registration subscription with an expiration
	timestamp representing a moment before the current date and time

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'POST' Create Context	
	Source Registration Subscription with filename set to	
	'\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration Subscription with Response Status Code set to 400 and	
	Create Context Source Registration Subscription with Response Body	
	containing the type	
	'problem_type=\${ERROR_TYPE_BAD_REQUEST_DATA}' and Response	
	Body Title is a string and is not \${EMPTY} and Response Body Detail is a	
	string and is not \${EMPTY} and Response Boty Title is not equal to	
	Response Body Detail }	

TP Id	TP/NGSI-LD/CS/REGSUB/038_08	
Test objective	Check that one cannot create a context source registration subscription If the	data types.
100102,000.10	cardinalities and restrictions expressed by clause 5.2.12 are not met	data typoo,
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.2	
Config Id	CF_05	
PICS Selection	PICS_CreSubCsoReg	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/038_08_01	
Name	038_08_01 WithoutNotification	
Parent Release	v1.3.1	
Description	Check that one cannot create a context source registration subscription If the	data types,
-	cardinalities and restrictions expressed by clause 5.2.12 are not met	•••
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'POST' Create Context	
	Source Registration Subscription with filename set to	
	'\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration Subscription with Response Status Code set to 400 and	
	Create Context Source Registration Subscription with Response Body	
	containing the type	
	'problem_type=\${ERROR_TYPE_BAD_REQUEST_DATA}' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a	
	string and is not \${EMPTY} and Response Body Detail is a	
	Response Body Detail }	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/038_08_02	
Name	038_08_02 InvalidType	
Parent Release	v1.3.1	
Description	Check that one cannot create a context source registration subscription If the	data types
2 ccc. ipiion	cardinalities and restrictions expressed by clause 5.2.12 are not met	data typoo,
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'POST' Create Context	
	Source Registration Subscription with filename set to	
	'\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration Subscription with Response Status Code set to 400 and	
	Create Context Source Registration Subscription with Response Body	
	containing the type	
	'problem_type=\${ERROR_TYPE_BAD_REQUEST_DATA}' and Response	
	Body Title is a string and is not \${EMPTY} and Response Body Detail is a	
	string and is not \${EMPTY} and Response Boty Title is not equal to	
	Response Body Detail }	

TP Permutation id	TP/NGSI-LD/CS/REGSUB/038_08_03	
Name	038_08_03 InvalidQuery	
Parent Release	v1.3.1	
Description	Check that one cannot create a context source registration subscription If the	data types,
	cardinalities and restrictions expressed by clause 5.2.12 are not met	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'POST' Create Context	
	Source Registration Subscription with filename set to	
	"\${subscription_payload}', accept set to '\${EMPTY}', and content-type set to	
	'application/ld+json' } then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration Subscription with Response Status Code set to 400 and	SOT -> Client
	Create Context Source Registration Subscription with Response Body	
	containing the type	
	'problem_type=\${ERROR_TYPE_BAD_REQUEST_DATA}' and Response	
	Body Title is a string and is not \${EMPTY} and Response Body Detail is a	
	string and is not \${EMPTY} and Response Boty Title is not equal to	
	Response Body Detail }	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/038_08_04	
Name	038_08_04 EmptyWatchedAttributes	
Parent Release	v1.3.1	
Description	Check that one cannot create a context source registration subscription If the	data types,
	cardinalities and restrictions expressed by clause 5.2.12 are not met	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-Id/v1/csourceSubscriptions' method set to 'POST' Create Context	
	Source Registration Subscription with filename set to "\${subscription_payload}", accept set to "\${EMPTY}", and content-type set to	
	application/ld+ison }	
	then { the SUT sends a valid Response for the operations: Create Context	SUT -> Client
	Source Registration Subscription with Response Status Code set to 400 and	OUT > OHOTIC
	Create Context Source Registration Subscription with Response Body	
	containing the type	
	'problem_type=\${ERROR_TYPE_BAD_REQUEST_DATA}' and Response	
	Body Title is a string and is not \${EMPTY} and Response Body Detail is a	
	string and is not \${EMPTY} and Response Boty Title is not equal to	
	Response Body Detail }	1

4.3.2.4 RetrieveContextSourceRegistrationSubscription

TP Id	TP/NGSI-LD/CS/REGSUB/040_01
Test objective	Check that one can retrieve a context source registration subscription
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.4
Config Id	CF_05
	PICS_CsoRegSubRet
	with { the SUT being in the "initial state" and the SUT containing a Context Source
	Registration Subscription (CSRS1) }
	Permutations
TP Permutation id	TP/NGSI-LD/CS/REGSUB/040_01_01
Name	040_01_01 Retrieve Context Source Registration Subscription
Parent Release	v1.3.1
Description	Check that one can retrieve a context source registration subscription

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'GET'	
	Retrieve Context Source Registration Subscription with data: and Query	
	Parameter: subscription id set to '\${subscription_id}' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Retrieve Context	SUT -> Client
	Source Registration Subscription with Response Status Code set to 200 and	
	Retrieve Context Source Registration Subscription with Response reason	
	set to 'OK' and Retrieve Context Source Registration Subscription with The	
	response headers Link is set to 'expected_link_header=\${expected link	
	header}' and Retrieve Context Source Registration Subscription with Check	
	Created Resource Set To and Query Parameter: 'created_resource' set to	
	'expectation_payload' and Query Parameter: 'response_body' set to	
	'response.json()' and Query Parameter: 'ignored_keys' set to	
	'ignored_attributes' list of keys and Retrieve Context Source Registration	
	Subscription with The Response Body `\${response.json()}' might contain the	
	key 'lastNotification' in the NotificationParams and Retrieve Context Source	
	Registration Subscription with The Response Body `\${response.json()}'	
	might contain the key 'lastFailure' in the NotificationParams and Retrieve	
	Context Source Registration Subscription with The Response Body	
	`\${response.json()}' might contain the key 'lastSuccess' in the	
	NotificationParams and Retrieve Context Source Registration Subscription	
	with The Response Body `\${response.json()}' might contain the key	
	'timesSent' in the NotificationParams }	

TP Id	TP/NGSI-LD/CS/REGSUB/040_03	
Test objective	Check that one cannot retrieve an unknown context source registration subscr	iption, an
	error of type ResourceNotFound shall be raised	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.4	
Config Id	CF_05	
PICS Selection	PICS_CsoRegSubRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/040_03_01	
Name	040_03_01 Retrieve Unknown Context Source Registration Subscription	
Parent Release	v1.3.1	
Description	Check that one cannot retrieve an unknown context source registration subscr	iption, an
	error of type ResourceNotFound shall be raised	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'GET'	
	Retrieve Context Source Registration Subscription with data: and Query	
	Parameter: subscription id set to 'urn:ngsi-	
	Id:Subscription:unknowSubscription' }	
	then { the SUT sends a valid Response for the operations: Retrieve Context	SUT -> Client
	Source Registration Subscription with Response Status Code set to 404 and	
	Retrieve Context Source Registration Subscription with Response reason	
	set to 'Not Found' and Retrieve Context Source Registration Subscription	
	with Response Header: Content-Type set to application/json and Retrieve	
	Context Source Registration Subscription with Response Body containing	
	Context Source Registration Subscription with Response Body containing the type 'problem_type=\${ERROR_TYPE_RESOURCE_NOT_FOUND}' and	
	Context Source Registration Subscription with Response Body containing the type 'problem_type=\${ERROR_TYPE_RESOURCE_NOT_FOUND}' and Response Body Title is a string and is not \${EMPTY} and Response Body	
	Context Source Registration Subscription with Response Body containing the type 'problem_type=\${ERROR_TYPE_RESOURCE_NOT_FOUND}' and	

TP ld	TP/NGSI-LD/CS/REGSUB/040_02
Test objective	Check that one cannot retrieve a context source registration subscription with an invalid URI,
	an error of type BadRequestData shall be raised
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.4
Config Id	CF_05
PICS Selection	PICS_CsoRegSubRet
Initial conditions	with { the SUT containing an initial state }

Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/040_02_01	
Name	040_02_01 Retrieve Context Source Registration Subscription With An Invalid	l ld
Parent Release	v1.3.1	
Description	Check that one cannot retrieve a context source registration subscription with an error of type BadRequestData shall be raised	an invalid URI,
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'GET' Retrieve Context Source Registration Subscription with data: and Query Parameter: subscription id set to 'invalidUri' } then { the SUT sends a valid Response for the operations: Retrieve Context Source Registration Subscription with Response Status Code set to 400 and Retrieve Context Source Registration Subscription with Response reason set to 'Bad Request' and Retrieve Context Source Registration Subscription with Response Header: Content-Type set to application/json and Retrieve Context Source Registration Subscription with Response Body containing the type 'problem_type=\${ERROR_TYPE_BAD_REQUEST_DATA}' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Title is not equal to Response Body Detail }	SUT <- Client

4.3.2.5 UpdateContextSourceRegistrationSubscription

TP ld	TP/NGSI-LD/CS/REGSUB/039_02	
Test objective	Check that one cannot update a context source registration subscription with a	n invalid URI
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.3	
Config Id	CF_05	
PICS Selection	PICS_CsoRegSubUpd	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/039_02_01	
Name	039_02_01 Update Context Source Registration Subscription With Invalid Uri	
Parent Release	v1.3.1	
Description	Check that one cannot update a context source registration subscription with a	n invalid URI
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to 'invalidUri' and subscription update fragment set to '\${subscription_update_fragment}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Context Source Registration Subscription with Response Status Code set to 400 and Update Context Source Registration Subscription with Response Body containing the type 'problem_type=\${ERROR_TYPE_BAD_REQUEST_DATA}' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Detail to Response Body Detail }	SUT -> Client

TP Id	TP/NGSI-LD/CS/REGSUB/039_04		
Test objective	Check that one cannot update a context source registration subscription with a fragment that		
	does not meet the data types and restrictions expressed by clause 5.2.12		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.3		
Config Id	CF_05		
PICS Selection	PICS_CsoRegSubUpd		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a set of Context Source		
	Registration Subscriptions (CSRSs) }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/039_04_01		
Name	039_04_01 InvalidType		
Parent Release	v1.3.1		
Description	Check that one cannot update a context source registration subscription with a fragment that		
	does not meet the data types and restrictions expressed by clause 5.2.12		

Test events	Direction
when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
'\${subscription_update_fragment}' }	
then { the SUT sends a valid Response for the operations: Update Context	SUT -> Client
TP/NGSI-LD/CS/REGSUB/039_04_02	•
039_04_02 InvalidNotification	
v1.3.1	
	a fragment that
	D'
100000000	Direction
	SUT <- Client
then { the SUT sends a valid Response for the operations: Update Context	SUT -> Client
Source Registration Subscription with Response Status Code set to 400 and	
1 '	
Response Body Detail }	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_id}' and subscription update fragment set to '\${subscription_update_fragment}' } then { the SUT sends a valid Response for the operations: Update Context Source Registration Subscription with Response Status Code set to 400 and Update Context Source Registration Subscription with Response Body containing the type 'problem_type=\${ERROR_TYPE_BAD_REQUEST_DATA}' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Detail } TP/NGSI-LD/CS/REGSUB/039_04_02 039_04_02 InvalidNotification v1.3.1 Check that one cannot update a context source registration subscription with a does not meet the data types and restrictions expressed by clause 5.2.12 Test events when { the SUT receives a Request from the client containing: URL set to 'ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription with subscription id set to '\${subscription_update_fragment}' } then { the SUT sends a valid Response for the operations: Update Context Source Registration Subscription with Response Body containing the type 'problem_type=\${ERROR_TYPE_BAD_REQUEST_DATA}' and Response Body containing the type 'problem_type=\${ERROR_TYPE_BAD_REQUEST_DATA}' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body Detail is a string and is not \${EMPTY} and Response Body

TP Id	TP/NGSI-LD/CS/REGSUB/039_01	
Test objective	Check that one can update a context source registration subscription	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.3	
Config Id	CF_05	
PICS Selection	PICS_CsoRegSubUpd	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a set of Conte	ext Source
	Registration Subscriptions (CSRSs) }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/039_01_01	
Name	039_01_01 Update Context Source Registration Subscription	
Parent Release	v1.3.1	
Description	Check that one can update a context source registration subscription	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH'	
	Update Context Source Registration Subscription with subscription id set to	
	'\${subscription_id}' and subscription update fragment set to	
	<u>'\${subscription_update_fragment}'}</u>	
	then { the SUT sends a valid Response for the operations: Update Context	SUT -> Client
	Source Registration Subscription with Response Status Code set to 204 and	
	Update Context Source Registration Subscription with Response does not	
	contain a body and Update Context Source Registration Subscription with	
	Response reason set to 'No Content' and Retrieve Context Source	
	Registration Subscription with Check Updated Entity and Query Parameter:	
	'updated_resource' set to 'subscription' and Query Parameter:	
	'response_body' set to 'response1.json()' and Query Parameter:	

TP ld	TP/NGSI-LD/CS/REGSUB/039_03	
Test objective	Check that one cannot update an unknown context source registration subscri	ption
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.3	
Config Id	CF_05	
PICS Selection	PICS_CsoRegSubUpd	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/039_03_01	
Name	039_03_01 Update Unknown Context Source Registration Subscription	
Parent Release	v1.3.1	
Description	Check that one cannot update an unknown context source registration subscri	ption
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH'	
	Update Context Source Registration Subscription with subscription id set to	
	'urn:ngsi-ld:Subscription:unknowSubscription' and subscription update	
	fragment set to '\${subscription_update_fragment}' }	
	la companie de la com	SUT -> Client
	Source Registration Subscription with Response Status Code set to 404 and	
	Update Context Source Registration Subscription with Response Body	
	containing the type	
	'problem_type=\${ERROR_TYPE_RESOURCE_NOT_FOUND}' and	
	Response Body Title is a string and is not \${EMPTY} and Response Body	
	Detail is a string and is not \${EMPTY} and Response Boty Title is not equal to Response Body Detail }	

TP ld	TP/NGSI-LD/CS/REGSUB/039_05	
Test objective	Check that one cannot update a context source registration subscription with a	an invalid
	request body (invalid JSON document)	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.3	
Config Id	CF_05	
PICS Selection	PICS_CsoRegSubUpd	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a set of Conte	ext Source
	Registration Subscriptions (CSRSs) }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/039_05_01	
Name	039_05_01 Update Context Source Registration Subscription With Invalid JSC	N Fragment
Parent Release	v1.3.1	
Description	Check that one cannot update a context source registration subscription with a	an invalid
	request body (invalid JSON document)	
Expected behaviour	Test events	Direction
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH'	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription from file with subscription	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription from file with subscription id set to '\${subscription_id}' and subscription update fragment set to	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription from file with subscription id set to '\${subscription_id}' and subscription update fragment set to 'csourceSubscriptions/fragments/subscription-update-invalid-json.json' }	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription from file with subscription id set to '\${subscription_id}' and subscription update fragment set to 'csourceSubscriptions/fragments/subscription-update-invalid-json.json' } then { the SUT sends a valid Response for the operations: Update Context	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription from file with subscription id set to '\${subscription_id}' and subscription update fragment set to 'csourceSubscriptions/fragments/subscription-update-invalid-json.json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration Subscription From File with Response Status Code set	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription from file with subscription id set to '\${subscription_id}' and subscription update fragment set to 'csourceSubscriptions/fragments/subscription-update-invalid-json.json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration Subscription From File with Response Status Code set to 400 and Update Context Source Registration Subscription From File with	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription from file with subscription id set to '\${subscription_id}' and subscription update fragment set to 'csourceSubscriptions/fragments/subscription-update-invalid-json.json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration Subscription From File with Response Status Code set to 400 and Update Context Source Registration Subscription From File with Response Body containing the type	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription from file with subscription id set to '\${subscription_id}' and subscription update fragment set to 'csourceSubscriptions/fragments/subscription-update-invalid-json.json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration Subscription From File with Response Status Code set to 400 and Update Context Source Registration Subscription From File with Response Body containing the type 'problem_type=\${ERROR_TYPE_BAD_REQUEST_DATA}' and Response	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription from file with subscription id set to '\${subscription_id}' and subscription update fragment set to 'csourceSubscriptions/fragments/subscription-update-invalid-json.json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration Subscription From File with Response Status Code set to 400 and Update Context Source Registration Subscription From File with Response Body containing the type 'problem_type=\${ERROR_TYPE_BAD_REQUEST_DATA}' and Response Body Title is a string and is not \${EMPTY} and Response Body Detail is a	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions/{subscription_id}' method set to 'PATCH' Update Context Source Registration Subscription from file with subscription id set to '\${subscription_id}' and subscription update fragment set to 'csourceSubscriptions/fragments/subscription-update-invalid-json.json' } then { the SUT sends a valid Response for the operations: Update Context Source Registration Subscription From File with Response Status Code set to 400 and Update Context Source Registration Subscription From File with Response Body containing the type 'problem_type=\${ERROR_TYPE_BAD_REQUEST_DATA}' and Response	SUT <- Client

4.3.2.6 QueryContextSourceRegistrationSubscriptions

TP Id	TP/NGSI-LD/CS/REGSUB/041_01
Test objective	Check that one can query context source registration subscriptions
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.5
Config Id	CF_05
PICS Selection	PICS_RetLisSubCsoReg
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a set of Context Source
	Registration Subscriptions (CSRSs) }

Permutations		
TP Permutation id	TP/NGSI-LD/CS/REGSUB/041_01_01	
Name	041_01_01 Query Context Source Registration Subscriptions	
Parent Release	v1.3.1	
Description	Check that one can query context source registration subscriptions	
Expected behaviour	Test events	Direction
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'GET' Query Context Source Registration Subscriptions and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Context Source Registration Subscriptions with Response Status Code set to 200 and Query Context Source Registration Subscriptions with Response containing: * file set to 'csourceSubscriptions/expectations/subscriptions-035-01.json' * id set to '\${subscription_ids}' * response set to '\${response.json()}' }	SUT -> Client

TP Id	TP/NGSI-LD/CS/REGSUB/041_03	
Test objective	Check that one can query context source registration subscriptions with providing page and	
	limit parameters for pagination	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.5	
Config Id	CF_05	
PICS Selection	PICS_RetLisSubCsoReg	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a set of Conte	ext Source
	Registration Subscriptions (CSRSs) }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/041_03_01	
Name	041_03_01 Query Second Subscription	
Parent Release	v1.3.1	
Description	Check that one can query context source registration subscriptions with provide	ling page and
	limit parameters for pagination	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'GET' Query Context Source	
	Registration Subscriptions and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: limit set to '\${1}' and Query Parameter: page set to	
	 \${2} }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registration Subscriptions with Response Status Code set to 200	
	and Query Context Source Registration Subscriptions with Response Body	
	containing a list of entities equal to '\${1}' of type 'Subscription' with response	
	set to '\${response.json()}' and Query Context Source Registration	
	Subscriptions with Response header with 'Prev' header equal to ' <th></th>	
	ld/v1/csourceSubscriptions?limit=1&page=3>;rel="next";type="application/ld	
	+json" and with 'Next' header equal to '\${response.headers}' }	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/041_03_02	
Name	041_03_02 Query Last Subscription	
Parent Release	v1.3.1	
Description	Check that one can query context source registration subscriptions with provid	ing page and
-	limit parameters for pagination	-· •

Test events	Direction
when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	SUT -> Client
	SUT -> Client
TP/NGSI-LD/CS/REGSUB/041_03_03	'
041_03_03 Query All Subscriptions	
v1.3.1	
Check that one can query context source registration subscriptions with provide	ling page and
100001101110	Direction
	SUT <- Client
	SUT -> Client
	301 -> Client
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceSubscriptions' method set to 'GET' Query Context Source Registration Subscriptions and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' and Query Parameter: limit set to '\${2}' and Query Parameter: page set to '\${2}'} then { the SUT sends a valid Response for the operations: Query Context Source Registration Subscriptions with Response Status Code set to 200 and Query Context Source Registration Subscriptions with Response Body containing a list of entities equal to '\${1}' of type 'Subscription' with response set to '\${response.json()}' and Query Context Source Registration Subscriptions with Response header with 'Prev' header equal to '\${EMPTY}' and with 'Next' header equal to '\${response.headers}' } TP/NGSI-LD/CS/REGSUB/041_03_03 041_03_03 Query All Subscriptions v1.3.1

1		
TP ld	TP/NGSI-LD/CS/REGSUB/041_02	
Test objective	Check that one can query context source registration subscriptions with a limit	parameter
	and it will be the maximum number of subscriptions to be retrieved	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.5	
Config Id	CF_05	
PICS Selection	PICS_RetLisSubCsoReg	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a set of Conte	ext Source
	Registration Subscriptions (CSRSs) }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/041_02_01	
Name	041_02_01 Query One Subscription	
Parent Release	v1.3.1	
Description	Check that one can query context source registration subscriptions with a limit	parameter
	and it will be the maximum number of subscriptions to be retrieved	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'GET' Query Context Source	
	Registration Subscriptions and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: limit set to '\${1}' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registration Subscriptions with Response Status Code set to 200	
	and Query Context Source Registration Subscriptions with Response Body	
	containing a list of entities equal to '\${1}' of type 'Subscription' with response	
	set to '\${response.json()}' }	

TP Permutation id	TP/NGSI-LD/CS/REGSUB/041_02_02	
Name	041_02_02 Query Two Subscription	
Parent Release	v1.3.1	
Description	Check that one can query context source registration subscriptions with a limit parameter	
	and it will be the maximum number of subscriptions to be retrieved	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'GET' Query Context Source	
	Registration Subscriptions and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: limit set to '\${2}' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registration Subscriptions with Response Status Code set to 200	
	and Query Context Source Registration Subscriptions with Response Body	
	containing a list of entities equal to '\${2}' of type 'Subscription' with response	
	set to '\${response.json()}' }	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/041_02_03	
Name	041_02_03 Query All Subscriptions	
Parent Release	v1.3.1	
Description	Check that one can query context source registration subscriptions with a limit	parameter
	and it will be the maximum number of subscriptions to be retrieved	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'GET' Query Context Source	
	Registration Subscriptions and Query Parameter: context set to	
	"https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld	
	and Query Parameter: limit set to '\${15}' }	SUT -> Client
	then { the SUT sends a valid Response for the operations: Query Context Source Registration Subscriptions with Response Status Code set to 200	SOT -> Client
	and Query Context Source Registration Subscriptions with Response Body	
	containing a list of entities equal to '\${3}' of type 'Subscription' with response	
	set to '\${response.json()}' }	
		l

TP ld	TP/NGSI-LD/CS/REGSUB/041_04	
Test objective	Check that one cannot query context source registration subscriptions with inv	alid page and
	limit parameters	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.11.5	
Config Id	CF_05	
PICS Selection	PICS_RetLisSubCsoReg	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/041_04_01	
Name	041_04_01 Invalid Limit	
Parent Release	v1.3.1	
Description	Check that one cannot query context source registration subscriptions with inv	alid page and
	limit parameters	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'GET' Query Context Source	
	Registration Subscriptions and Query Parameter: limit set to '\${-5}' and	
	Query Parameter: page set to '\${2}' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registration Subscriptions with Response Status Code set to 400	
	and Query Context Source Registration Subscriptions with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and	
	Query Context Source Registration Subscriptions with Response body	
TD Downstation id	Query Context Source Registration Subscriptions with Response body containing 'title' element }	
TP Permutation id	Query Context Source Registration Subscriptions with Response body containing 'title' element } TP/NGSI-LD/CS/REGSUB/041_04_02	
Name	Query Context Source Registration Subscriptions with Response body containing 'title' element } TP/NGSI-LD/CS/REGSUB/041_04_02 041_04_02 Invalid Page	
Name Parent Release	Query Context Source Registration Subscriptions with Response body containing 'title' element } TP/NGSI-LD/CS/REGSUB/041_04_02 041_04_02 Invalid Page v1.3.1	
Name	Query Context Source Registration Subscriptions with Response body containing 'title' element } TP/NGSI-LD/CS/REGSUB/041_04_02 041_04_02 Invalid Page	alid page and

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	l'/ngsi-ld/v1/csourceSubscriptions' method set to 'GET' Query Context Source	
	Registration Subscriptions and Query Parameter: limit set to '\${2}' and Query	
	Parameter: page set to '\${-3}' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registration Subscriptions with Response Status Code set to 400	
	and Query Context Source Registration Subscriptions with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and	
	Query Context Source Registration Subscriptions with Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CS/REGSUB/041_04_03	
Name	041_04_03 Invalid Limit And Page	
Parent Release	v1.3.1	
Description	Check that one cannot query context source registration subscriptions with inv	alid page and
	limit parameters	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceSubscriptions' method set to 'GET' Query Context Source	
	Registration Subscriptions and Query Parameter: limit set to '\${0}' and Query	
	Parameter: page set to '\${0}' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registration Subscriptions with Response Status Code set to 400	
	and Query Context Source Registration Subscriptions with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and	
	Query Context Source Registration Subscriptions with Response body containing 'title' element }	

4.3.3 Discovery

4.3.3.1 QueryContextSourceRegistrations

TP Id	TP/NGSI-LD/CS/DISC/037_08	
Test objective	Check that one can query context source registrations. If no temporal query is	
	Context Source Registrations for Context Sources providing latest information	are
	considered	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.2	
Config Id	CF_05	
PICS Selection	PICS_DisCsoReg	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_08_01	
Name	037_08_01 Query Context Source Registration Without Temporal Query	
Parent Release	v1.3.1	
Description	Check that one can query context source registrations. If no temporal query is	present, only
	Context Source Registrations for Context Sources providing latest information	are
	considered	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: type set to 'Vehicle' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification	
	with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	

TP Id	TD/NCCLLD/CC/DICC/027_44	
	TP/NGSI-LD/CS/DISC/037_11	J 1::t
Test objective	Check that one can query context source registrations with providing page and	ılmıt
Deference	parameters, pagination logic shall be in place as mandated by clause 5.5.9.	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.2	
Config Id	CF_05	
PICS Selection	PICS_DisCsoReg	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a list of Conte	ext Source
	Registrations (CSRs) providing latest information about some entities }	
TD Democratical interest	Permutations	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_11_01	
Name	037_11_01 Query Second Subscription	
Parent Release	V1.3.1	1.12 - 24
Description	Check that one can query context source registrations with providing page and	limit
	parameters, pagination logic shall be in place as mandated by clause 5.5.9.	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: type set to 'Building' and Query Parameter: limit set to	
	'\${1}' and Query Parameter: offset set to '\${2}' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Query	
	Context Source Registrations with Response Body containing a list of	
	entities equal to '\${1}' of type 'ContextSourceRegistration' with response set	
	to '\${response.json()}' and Query Context Source Registrations with	
	Response header with 'Prev' header equal to ' <th></th>	
	ld/v1/csourceSubscriptions?type=Building&limit=1&offset=3>;rel="next";type	
	="application/ld+json" and with 'Next' header equal to '\${response.json()}' }	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_11_02	
Name	037_11_02 Query Last Subscription	
Parent Release	v1.3.1	1.12 - 24
Description	Check that one can query context source registrations with providing page and	limit
	parameters, pagination logic shall be in place as mandated by clause 5.5.9.	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: type set to 'Building' and Query Parameter: limit set to	
	'\${2}' and Query Parameter: offset set to '\${2}' }	0
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Query	
	Context Source Registrations with Response Body containing a list of	
	entities equal to '\${1}' of type 'ContextSourceRegistration' with response set	
	to '\${response.json()}' and Query Context Source Registrations with	
	Response header with 'Prev' header equal to '\${EMPTY}' and with 'Next'	
TD D	header equal to '\${response.json()}' }	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_11_03	
Name	037_11_03 Query All Subscriptions	
Parent Release	v1.3.1	
Description	Check that one can query context source registrations with providing page and	d limit
	parameters, pagination logic shall be in place as mandated by clause 5.5.9.	

Expected behaviour	Test events	Direction
		SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: type set to 'Building' and Query Parameter: limit set to	
	'\${15}' and Query Parameter: offset set to '\${0}' }	
	lanen (and a a contact at commercial principle and a provincial attention of a contact and a contac	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Query	
	Context Source Registrations with Response Body containing a list of	
	entities equal to '\${2}' of type 'ContextSourceRegistration' with response set	
	to '\${response.json()}' and Query Context Source Registrations with	
	Response header with 'Prev' header equal to '\${EMPTY}' and with 'Next'	
	header equal to '\${response.json()}' }	

TP Id	TP/NGSI-LD/CS/DISC/037_09	
Test objective	Check that one can query context source registrations. If present, the tempora	I query is
	matched against the observationInterval or the managementInterval	. ,
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.2	
Config Id	CF_05	
PICS Selection	PICS_DisCsoReg	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_09_01	
Name	037_09_01 Observation Interval With observedAt	
Parent Release	v1.3.1	
Description	Check that one can query context source registrations. If present, the tempora	I query is
	matched against the observationInterval or the managementInterval	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: type set to 'Building' and Query Parameter:	
	timeproperty set to 'observedAt' and Query Parameter: timerel set to 'before'	
	and Query Parameter: timeAt set to '2021-08-01T22:00:00Z' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification	
	with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_09_02	
Name	037_09_02 Observation Interval Without timeproperty	
Parent Release	v1.3.1	
Description	Check that one can query context source registrations. If present, the tempora	Il query is
=	matched against the observationInterval or the managementInterval	D '
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	"https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld	
	and Query Parameter: type set to 'Building' and Query Parameter:	
	timeproperty set to '\${EMPTY}' and Query Parameter: timerel set to 'before' and Query Parameter: timeAt set to '2021-08-01T22:00:00Z' }	
		SUT -> Client
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_09_03	1
Name	037_09_03 Management Interval With createdAt	
Parent Release		
raieiii Keiease	v1.3.1	
Description	Chook that any can guary contact course registrations. If present the territoria	l augresia
Description	Check that one can query context source registrations. If present, the tempora matched against the observationInterval or the managementInterval	Il query is

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: type set to 'Building' and Query Parameter:	
	timeproperty set to 'createdAt' and Query Parameter: timerel set to 'before'	
	and Query Parameter: timeAt set to '2021-08-01T22:00:00Z' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification	
	with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_09_04	
Name	037_09_04 Management Interval With modifiedAt	
Parent Release	v1.3.1	
Description	Check that one can query context source registrations. If present, the tempora	ıl query is
	matched against the observationInterval or the managementInterval	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: type set to 'Building' and Query Parameter:	
	timeproperty set to 'modifiedAt' and Query Parameter: timerel set to 'before'	
	and Query Parameter: timeAt set to '2021-08-01T22:00:00Z' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification	
	with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	

TP ld	TP/NGSI-LD/CS/DISC/037_10	
Test objective	Check that one can query context source registrations. If present, the conditions specified by	
rest objective	the context source query match the respective Context Source Properties	is specified by
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.2	
Config Id	CF 05	
PICS Selection	PICS_DisCsoReg	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a list of Conte	vt Source
initial conditions	Registrations (CSRs) providing latest information about some entities }	ixi Source
	Permutations	
TP Permutation id		
Name	037_10_01 With list of Entity Ids	
Parent Release	V1.3.1	
Description	Check that one can query context source registrations. If present, the condition	ns specified by
2 ccc. ipiicii	the context source query match the respective Context Source Properties	no opcomou by
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	out a chorn
	Representation of Entity and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: id set to	
	'\${first_context_source_registration_id},\${third_context_source_registration_i	
	d}' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification	
	with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_10_02	
Name	037_10_02 With NGSI-LD Query	`
Parent Release	v1.3.1	
Description	Check that one can query context source registrations. If present, the condition	ns specified by
	the context source query match the respective Context Source Properties	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: q set to 'csourceProperty1=="aValue"' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification	
	with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	

TP Id	TP/NGSI-LD/CS/DISC/037_01	
Test objective	Check that one can query context source registrations if at least one of list of E	Entity Types or
	list of Attribute names is present	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.2	
Config Id	CF_05	
PICS Selection	PICS_DisCsoReg	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing a list of Conte	ext Source
	Registrations (CSRs) providing latest information about some entities }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_01_01	
Name	037_01_01 With list of entity types	
Parent Release	v1.3.1	
Description	Check that one can query context source registrations if at least one of list of I	Entity Types or
	list of Attribute names is present	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: type set to 'Building' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification	
	with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_01_02	
Name	037_01_02 With list of attribute names	
Parent Release	v1.3.1	
Description	Check that one can query context source registrations if at least one of list of B	Entity Types or
	list of Attribute names is present	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: attrs set to 'name' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification	
	with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	

-	TD NOOL LD 100 ID 100 1007 and
TP Id	TP/NGSI-LD/CS/DISC/037_03
Test objective	Check that one cannot query context source registrations, if the list of Entity identifiers includes a URI which it is not valid, or the query, geo-query or temporal query are not syntactically valid
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.2
Config Id	CF_05
PICS Selection	PICS_DisCsoReg
Initial conditions	with { the SUT containing an initial state }

	Permutations	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_03_01	
Name	037_03_01 Invalid URI	
Parent Release	v1.3.1	
Description	Check that one cannot query context source registrations, if the list of Entity identifiers includes a URI which it is not valid, or the query, geo-query or temporal query are not syntactically valid	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: id set to 'invalidUri' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Context Source Registrations with Response Status Code set to 400 and Query Context Source Registrations with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Query Context Source Registrations with Response body containing 'title' element }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CS/DISC/037_03_02	
Name	037_03_02 Invalid Query	
Parent Release	V1.3.1	1
Description	Check that one cannot query context source registrations, if the list of Entity ic includes a URI which it is not valid, or the query, geo-query or temporal query syntactically valid	
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to	Direction
	l'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: q set to '(invalidQuery' } then { the SUT sends a valid Response for the operations: Query Context Source Registrations with Response Status Code set to 400 and Query Context Source Registrations with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Query Context Source Registrations with Response body containing 'title' element }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CS/DISC/037_03_03	
Name	037_03_03 Invalid GeoQuery	
Parent Release	v1.3.1	
Description	Check that one cannot query context source registrations, if the list of Entity ic includes a URI which it is not valid, or the query, geo-query or temporal query syntactically valid	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: georel set to 'within' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Context Source Registrations with Response Status Code set to 400 and Query Context Source Registrations with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Query Context Source Registrations with Response body containing 'title' element }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CS/DISC/037_03_04	
Name	037_03_04 Invalid Temporal Query	
Parent Release	v1.3.1	
Description	Check that one cannot query context source registrations, if the list of Entity ic includes a URI which it is not valid, or the query, geo-query or temporal query syntactically valid	

Expected behaviour	Test events	Direction
	1 - (SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: timerel set to 'before' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 400 and Query	
	Context Source Registrations with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Query Context	
	Source Registrations with Response body containing 'title' element }	

TP ld	TP/NGSI-LD/CS/DISC/037_07	
Test objective	Check that one can query context source registrations. If present, the geoquer	y is matched
	against the GeoProperty programmatic parameter identified in the geoquery	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.2	
Config Id	CF_05	
PICS Selection	PICS_DisCsoReg	
Initial conditions	with { the SUT being in the "initial state" and the SUT contains a Context Sour	
	Registration with id equal to \${context_source_registration_id} and payload se	t to
	\${context_source_registration_payload_file_path} }	
TD Democratica id	Permutations	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_07_01	
Name	037_07_01 Near Point	
Parent Release	v1.3.1	
Description	Check that one can query context source registrations. If present, the geoquer	y is matched
Expected behaviour	against the GeoProperty programmatic parameter identified in the geoquery Test events	Direction
Expected Deliavious	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	301 <- Client
	Representation of Entity and Query Parameter: context set to	
	"https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld	
	and Query Parameter: type set to 'Building' and Query Parameter: georel set	
	to 'near;maxDistance==2000' and Query Parameter: geometry set to 'Point'	
	and Query Parameter: coordinates set to '[-8.503,41.202]' and Query	
	Parameter: geoproperty set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification	
	with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_07_02	
Name	037_07_02 Within Polygon	
Parent Release	v1.3.1	
Description	Check that one can query context source registrations. If present, the geoquer	y is matched
	against the GeoProperty programmatic parameter identified in the geoquery	1
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld	
	and Query Parameter: type set to 'Building' and Query Parameter: georel set	
	to 'within' and Query Parameter: geometry set to 'Polygon' and Query	
	Parameter: coordinates set to '[[-13.503,47.202],[6.541,	
	52.961],[20.37,44.653],[9.46,32.57],[-15.23,21.37]]' and Query Parameter:	
	geoproperty set to 'location' } then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification	SUI -> Client
	with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	
	Tresolved against the detault 30014-LD Context }	<u> </u>

TP Id	TP/NGSI-LD/CS/DISC/037_05	
Test objective	Check that one can query context source registrations matching EntityInfo of	
	RegistrationInfo	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.2	
Config Id	CF_05	
PICS Selection	PICS_DisCsoReg	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_05_01	
Name	037_05_01 Registration With EntityInfo Matching The Query	
Parent Release	v1.3.1	
Description	Check that one can query context source registrations matching EntityInfo of	
•	RegistrationInfo	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: type set to 'OffStreetParking' and Query Parameter:	
	idPattern set to '.*downtown\$'}	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification	
	with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_05_02	
Name	037_05_02 Registration Without EntityInfo	
Parent Release	v1.3.1	
Description	Check that one can query context source registrations matching EntityInfo of	
	RegistrationInfo	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: type set to 'OffStreetParking' and Query Parameter:	
	idPattern set to '.*downtown\$' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification	
	with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	

TP ld	TP/NGSI-LD/CS/DISC/037_02		
Test objective	Check that one cannot query context source registrations, if neither Entity types nor Attribute		
	names are provided, an error of type 400 shall be raised.		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.2		
Config Id	CF_05		
PICS Selection	PICS_DisCsoReg		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CS/DISC/037_02_01		
Name	037_02_01 Query Context Source Registrations Without Entity Types and Attribute Names		
Parent Release	v1.3.1		
Description	Check that one cannot query context source registrations, if neither Entity types nor Attribute		
	names are provided, an error of type 400 shall be raised.		

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 400 and Query	
	Context Source Registrations with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Query Context	
	Source Registrations with Response body containing 'title' element }	

TP Id	TP/NGSI-LD/CS/DISC/037_04	
Test objective	Check that one can query context source registrations. If a JSON-LD context is	s not
	provided, then all the query terms shall be resolved against the default JSON-	LD @context
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.2	
Config Id	CF_05	
PICS Selection	PICS_DisCsoReg	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/DISC/037_04_01	
Name	037_04_01 Query Context Source Registrations Without Context	
Parent Release	v1.3.1	
Description	Check that one can query context source registrations. If a JSON-LD context is not	
	provided, then all the query terms shall be resolved against the default JSON-	LD @context
Expected behaviour Test events		Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
	Representation of Entity and Query Parameter: id set to	
	'\${context_source_registration_id}' and Query Parameter: type set to	
	'https://ngsi-ld-test-suite/context#Building' }	
	then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
	Source Registrations with Response Status Code set to 200 and Notification	
	with Response body set to list of all matching Context Source Registrations	
	resolved against the default JSON-LD context }	

·	
	relationship
names of RegistrationInfo	
ETSI GS CIM 009 V1.6.1 [1], clause 5.10.2	
CF_05	
PICS_DisCsoReg	
with { the SUT being in the "initial state" and the SUT contains a Context Source	ce
Registration with id equal to \${context_source_registration_id} and payload se	t to
\${context_source_registration_payload_file_path}}	
Permutations	
TP/NGSI-LD/CS/DISC/037_06_01	
037_06_01 Query With Matching Properties And Relationships	
v1.3.1	
Check that one can query context source registrations matching property and relationship	
names of RegistrationInfo	
Test events Direction	
when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
'/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal	
Representation of Entity and Query Parameter: context set to	
'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
and Query Parameter: type set to 'Building' and Query Parameter: attrs set	
to 'name,locatedAt' }	
then { the SUT sends a valid Response for the operations: Query Context	SUT -> Client
Source Registrations with Response Status Code set to 200 and Notification	
with Response body set to list of all matching Context Source Registrations	
resolved against the default JSON-LD context }	
	PICS_DisCsoReg with { the SUT being in the "initial state" and the SUT contains a Context Source Registration with id equal to \${context_source_registration_id} and payload se \${context_source_registration_payload_file_path} } Permutations TP/NGSI-LD/CS/DISC/037_06_01 037_06_01 Query With Matching Properties And Relationships v1.3.1 Check that one can query context source registrations matching property and names of RegistrationInfo Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite-compound.jsonId' and Query Parameter: type set to 'Building' and Query Parameter: attrs set to 'name,locatedAt' } then { the SUT sends a valid Response for the operations: Query Context Source Registrations with Response Status Code set to 200 and Notification with Response body set to list of all matching Context Source Registrations

TP Permutation id	TP/NGSI-LD/CS/DISC/037_06_02	
Name	037_06_02 Query Without Properties And Relationships	
Parent Release	v1.3.1	
Description	Check that one can query context source registrations matching property and names of RegistrationInfo	relationship
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: type set to 'Building' and Query Parameter: attrs set to '\${EMPTY}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Context Source Registrations with Response Status Code set to 200 and Notification with Response body set to list of all matching Context Source Registrations resolved against the default JSON-LD context }	SUT -> Client

4.3.3.2 RetrieveContextSourceRegistration

TP ld	TP/NGSI-LD/CS/DISC/036 01	
Test objective	Check that one cannot retrieve a Context Source Registration, if the context so	ource
	registration id is not a valid URI	Juico
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.1	
Config Id	CF_05	
PICS Selection	PICS_CsoRegRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/DISC/036_01_01	
Name	036_01_01 Invalid Id	
Parent Release	v1.3.1	
Description	Check that one cannot retrieve a Context Source Registration, if the context so	ource
-	registration id is not a valid URI	
Expected behaviour	Test events	Direction
-	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method	
	set to 'GET' Retrieve Context Source Registration with data: and Query	
	Parameter: context source registration id set to 'invalidUri' }	
	then { the SUT sends a valid Response for the operations: Retrieve Context	SUT -> Client
	Source Registration with Response Status Code set to 400 and Retrieve	OO1 > OHOIR
	Context Source Registration with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Retrieve Context	
	Source Registration with Response body containing 'title' element }	

TP Id	TP/NGSI-LD/CS/DISC/036_03		
Test objective	Check that one can retrieve a Context Source Registration. Term to URI expansion of		
	Attribute names shall be observed.		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.1		
Config Id	CF_05		
PICS Selection	PICS_CsoRegRet		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CS/DISC/036_03_01		
Name	036_03_01 Retrieve Context Source Registration With Default Core Context		
Parent Release	v1.3.1		
Description	Check that one can retrieve a Context Source Registration. Term to URI expansion of		
	Attribute names shall be observed.		

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method set to 'GET' Retrieve Context Source Registration with data: and Query	SUT <- Client
	Parameter: context source registration id set to [\${context_source_registration_id}' }	
	then { the SUT sends a valid Response for the operations: Retrieve Context Source Registration with Response Status Code set to 200 and Retrieve Context Source Registration with Response containing: * file set to 'csourceRegistrations/expectations/context-source-registration-expanded-format.json' * id set to '\${context_source_registration_id}' * response set to '\${response.json()}' }	SUT -> Client

TP ld	TP/NGSI-LD/CS/DISC/036_05	
Test objective	Check that the JSON-LD @context is obtained from a Link header if present a	ind that the
	default JSON-LD @context is used if not present	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_05	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT being in the "initial state" and the SUT contains a Context Sour	
	Registration with id equal to \${context_source_registration_id} and payload se	t to
	\$\{context_source_registration_payload_file_path\}\}	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/DISC/036_05_01	
Name	036_05_01 EmptyJsonLdContext	
Parent Release	v1.3.1	
Description	Check that the JSON-LD @context is obtained from a Link header if present a	ind that the
	default JSON-LD @context is used if not present	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method	
	set to 'GET' Retrieve Context Source Registration with data: and Query	
	Parameter: context source registration id set to	
	'\${context_source_registration_id}' and Query Parameter: context set to	
	\${EMPTY}' }	0
	then { the SUT sends a valid Response for the operations: Retrieve Context	SUT -> Client
	Source Registration with Response Status Code set to 200 and Retrieve	
	Context Source Registration with Response containing: * file set to	
	'csourceRegistrations/expectations/context-source-registration-expanded- format.json' * id set to '\${context_source_registration_id}' * response set to	
	s{response.json()}' }	
TP Permutation id	TP/NGSI-LD/CS/DISC/036_05_02	
Name	036_05_02 CreationTimeJsonLdContext	
Parent Release	V1.3.1	
Description	Check that the JSON-LD @context is obtained from a Link header if present a	and that the
Description	default JSON-LD @context is used if not present	ind that the
Expected behaviour	Test events	Direction
Exposion sometrous	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method	COT CHOIR
	set to 'GET' Retrieve Context Source Registration with data: and Query	
	Parameter: context source registration id set to	
	'\${context_source_registration_id}' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' }	
	then { the SUT sends a valid Response for the operations: Retrieve Context	SUT -> Client
	Source Registration with Response Status Code set to 200 and Retrieve	
	Context Source Registration with Response containing: * file set to	
	'csourceRegistrations/expectations/context-source-registration.json' * id set	
	to '\${context_source_registration_id}' * response set to '\${response.json()}' }	

TP Id	TP/NGSI-LD/CS/DISC/036_02	
Test objective	Check that one cannot retrieve a Context Source Registration, if the NGSI-LD	
	not know about the target context source registration, because there is no exis	sting context
	source registration whose id (URI) is equivalent	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.1	
Config Id	CF_05	
PICS Selection	PICS_CsoRegRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/DISC/036_02_01	
Name	036_02_01 Retrieve Unknown Context Source Registration	
Parent Release	v1.3.1	
Description	Check that one cannot retrieve a Context Source Registration, if the NGSI-LD	
	not know about the target context source registration, because there is no exis	sting context
	source registration whose id (URI) is equivalent	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method	
	set to 'GET' Retrieve Context Source Registration with data: and Query	
	Parameter: context source registration id set to 'urn:ngsi-	
	ld:ContextSourceRegistration:unknowRegistration' }	
	then { the SUT sends a valid Response for the operations: Retrieve Context	SUT -> Client
	Source Registration with Response Status Code set to 404 and Retrieve	
	Context Source Registration with Response Body containing the type	
	https://uri.etsi.org/ngsi-ld/errors/ResourceNotFound and Retrieve Context	
	Source Registration with Response body containing 'title' element }	

TP Id	TP/NGSI-LD/CS/DISC/036_04	
Test objective	Check that one can retrieve a Context Source Registration	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.10.1	
Config Id	CF_05	
PICS Selection	PICS_CsoRegRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CS/DISC/036_04_01	
Name	036_04_01 Retrieve Context Source Registration	
Parent Release	v1.3.1	
Description	Check that one can retrieve a Context Source Registration	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/csourceRegistrations/{context_source_registration_id}' method	
	set to 'GET' Retrieve Context Source Registration with data: and Query	
	Parameter: context source registration id set to	
	'\${context_source_registration_id}' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Retrieve Context	SUT -> Client
	Source Registration with Response Status Code set to 200 and Retrieve	
	Context Source Registration with Response containing: * file set to	
	'csourceRegistrations/expectations/context-source-registration.json' * id set	
	to '\${context_source_registration_id}' * response set to '\${response.json()}' }	

4.4 ContextInformation

4.4.1 Provision

4.4.1.1 TemporalEntity

4.4.1.1.1 CreateTemporalRepresentationOfEntity

TP ld	TP/NGSI-LD/CI/Prov/TE/007_02	
Test objective	Check that one cannot create a temporal entity with an empty/invalid json/id	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.11	
Config Id	CF 01	
PICS Selection	PICS_TemEvoEntCre	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TE/007_02_01	
Name	007_02_01 Create a temporal entity with an invalid json	
Parent Release	v1.3.1	
Description	Check that one cannot create a temporal entity with an empty/invalid json/id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities' method set to 'POST' Create Temporal Representation of Entity Selecting Content Type: and Query Parameter: filename set to 'vehicle-temporal-representation-invalid-json.jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Create Temporal Representation Of Entity Selecting Content Type with Response Status	SUT <- Client
	Code set to 400 and Create Temporal Representation Of Entity Selecting Content Type with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/InvalidRequest' and Create Temporal Representation Of Entity Selecting Content Type with Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CI/Prov/TE/007_02_02	
Name	007_02_02 Create a temporal entity with an empty json	
Parent Release	v1.3.1	
Description	Check that one cannot create a temporal entity with an empty/invalid json/id	1
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'POST' Create Temporal Representation of Entity Selecting Content Type: and Query Parameter: filename set to 'vehicle-temporal-representation-empty-json.jsonld' and Query Parameter: content_type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Create Temporal Representation Of Entity Selecting Content Type with Response Status Code set to 400 and Create Temporal Representation Of Entity Selecting Content Type with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/InvalidRequest' and Create Temporal Representation Of Entity Selecting Content Type with Response body containing 'title' element }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Prov/TE/007_01	
Test objective	Check that one can create a temporal representation of an entity	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.11	
Config Id	CF_01	
PICS Selection	PICS_TemEvoEntCre	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TE/007_01_01	
Name	007_01_01 Create a temporal representation of an entity	
Parent Release	v1.3.1	
Description	Check that one can create a temporal representation of an entity	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'POST' Create or Update	
	Temporal Representation of Entity Selecting Content Type: and Query	
	Parameter: temporal_entity_representation_id set to	
	"\${temporal_entity_representation_id}" and Query Parameter: filename set to	
	'vehicle-create-temporal-representation.jsonld' and Query Parameter:	
	content_type set to 'application/ld+json' and Query Parameter: accept set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: Create Or Update	SUT -> Client
	Temporal Representation Of Entity Selecting Content Type with Response	
	Status Code set to 201 and Retrieve Temporal Representation Of Entity with	
	Check Created Resource Set To and Query Parameter: 'ignored_keys' set to	
	"\${None}' list of keys }	
TP Permutation id	TP/NGSI-LD/CI/Prov/TE/007_01_02	
Name	007_01_02 Create a temporal entity with no context	
Parent Release	v1.3.1	
Description	Check that one can create a temporal representation of an entity	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'POST' Create or Update	
	Temporal Representation of Entity Selecting Content Type: and Query	
	Parameter: temporal_entity_representation_id set to	
	"\${temporal_entity_representation_id}" and Query Parameter: filename set to	
	'vehicle-create-temporal-representation-without-context.jsonld' and Query	
	Parameter: content_type set to 'application/json' and Query Parameter: accept set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: Create Or Update	SUT -> Client
	Temporal Representation Of Entity Selecting Content Type with Response	
	Status Code set to 201 and Retrieve Temporal Representation Of Entity with	
	Check Created Resource Set To and Query Parameter: 'ignored_keys' set to	
	'\${None}' list of keys }	L

TP Id	TP/NGSI-LD/CI/Prov/TE/007_03	
Test objective	Check that one cannot create a temporal entity with an empty/invalid json/id	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.11	
Config Id	CF_01	
PICS Selection	PICS_TemEvoEntCre	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TE/007_03_01	
Name	007_03_01 Create a temporal entity with missing id	
Parent Release	v1.3.1	
Description	Check that one cannot create a temporal entity with an invalid @context	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'POST' Create or Update Temporal Representation of Entity Selecting Content Type: and Query Parameter: temporal_entity_representation_id set to '\${EMPTY}' and Query Parameter: filename set to 'vehicle-temporal-representation-without-id.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: accept set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Create Or Update Temporal Representation Of Entity Selecting Content Type with Response Status Code set to 400 }	SUT <- Client SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/TE/007_03_02	
Name	007_03_02 Create a temporal invalid URI	
Parent Release	v1.3.1	
Description	Check that one cannot create a temporal entity with an invalid @context	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'POST' Create or Update	
	Temporal Representation of Entity Selecting Content Type: and Query	
	Parameter: temporal_entity_representation_id set to 'invalidId' and Query	
	Parameter: filename set to 'vehicle-temporal-representation.jsonId' and	
	Query Parameter: content_type set to 'application/ld+json' and Query	
	Parameter: accept set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operation: Create Or Update	SUT -> Client
	Temporal Representation Of Entity Selecting Content Type with Response	
	Status Code set to 400 }	

4.4.1.1.2 DeleteTemporalRepresentationOfEntity

TP ld	TP/NGSI-LD/CI/Prov/TE/009 01	
Test objective	Check that one can delete a temporal representation of an entity with simple to	mnoral
rest objective	properties	Filipolai
Reference		
	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.16	
Config Id	CF_01	
PICS Selection	PICS_TemEvoEntDel	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Tem	poral Entity
	\${entity} with an id set to \${temporal_entity_representation_id} }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/TE/009_01_01	
Name	009_01_01 Delete a temporal representation of an entity with simple temporal	properties
Parent Release	v1.3.1	
Description	Check that one can delete a temporal representation of an entity with simple to	emporal
	properties	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'DELETE' Delete Temporal Representation Of Entity With Returning	
	Response with id set to '\${temporal_entity_representation_id}' }	
	then { the SUT sends a valid Response for the operations: Delete Temporal	SUT -> Client
	Representation Of Entity With Returning Response with Response Status	
	Code set to 204 and Retrieve Temporal Representation Of Entity with	
	Response Status Code set to \${response1.status_code}}	
	Incepholise status code set to aftespolise tistatus_code} }	

I== · ·		
TP Id	TP/NGSI-LD/CI/Prov/TE/009_03	
Test objective	Check that an error is raised if one deletes a temporal entity with a non-existing	g/invalid
	EntityId	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.16	
Config Id	CF_01	
PICS Selection	PICS_TemEvoEntDel	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TE/009_03_01	
Name	009_03_01 Delete a temporal representation of an entity with an unknown enti	ty id
Parent Release	v1.3.1	
Description	Check that an error is raised if one deletes a temporal entity with a non-existing	g entity id
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'DELETE' Delete Temporal Representation Of Entity With Returning	
	Response with id set to '\${temporal_entity_id}' }	
	then { the SUT sends a valid Response for the operations: Delete Temporal	SUT -> Client
	Representation Of Entity With Returning Response with Response Status	
	Code set to 404 and Delete Temporal Representation Of Entity With	
	Returning Response with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/ResourceNotFound' and Delete Temporal	
	Representation Of Entity With Returning Response with Response body containing 'title' element }	

TP Id	TP/NGSI-LD/CI/Prov/TE/009_02	
Test objective	Check that an error is raised if one deletes a temporal entity with an empty/inv	alid EntityId
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.16	Í
Config Id	CF_01	
PICS Selection	PICS_TemEvoEntDel	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TE/009_02_01	
Name	009_02_01 Delete a temporal representation of an entity with an empty entity	id
Parent Release	v1.3.1	
Description	Check that an error is raised if one deletes a temporal entity with an empty/inv	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'DELETE' Delete Temporal Representation Of Entity With Returning	
	Response with id set to '\${EMPTY}' }	01.17
	then { the SUT sends a valid Response for the operations: Delete Temporal	SUT -> Client
	Representation Of Entity With Returning Response with Response Status	
	Code set to 405 and Delete Temporal Representation Of Entity With	
	Returning Response with Response Body containing the type '\${EMPTY}' and Delete Temporal Representation Of Entity With Returning Response	
	with Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CI/Prov/TE/009_02_02	
Name	009_02_02 Delete a temporal representation of an entity with an invalid entity	id
Parent Release	v1.3.1	iu
Description	Check that an error is raised if one deletes a temporal entity with an empty/inv	alid EntityId
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'DELETE' Delete Temporal Representation Of Entity With Returning	
	Response with id set to 'invalidId' }	
	then { the SUT sends a valid Response for the operations: Delete Temporal	SUT -> Client
	Representation Of Entity With Returning Response with Response Status	
	Code set to 400 and Delete Temporal Representation Of Entity With	
	Returning Response with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Delete Temporal	
	Representation Of Entity With Returning Response with Response body	
	containing 'title' element }	

4.4.1.1.3 UpdateTemporalRepresentationOfEntity

TP Id	TP/NGSI-LD/CI/Prov/TE/008_01	
Test objective	Check that one can update a temporal representation of an entity with simple temporal	
	properties	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.11	
Config Id	CF_01	
PICS Selection	PICS_TemEvoEntCre	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/TE/008_01_01	
Name	008_01_01 Update a temporal representation of an entity with simple temporal properties	
Parent Release	v1.3.1	
Description	Check that one can update a temporal representation of an entity with simple temporal properties	

Expected behaviour	Test events	Direction
	· · · · · · · · · · · · · · · · · · ·	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'POST' Create or Update	
	Temporal Representation of Entity Selecting Content Type: and Query	
	Parameter: temporal_entity_representation_id set to	
	'\${temporal_entity_representation_id}' and Query Parameter: filename set to	
	'vehicle-temporal-representation-update.jsonId' and Query Parameter:	
	content_type set to 'application/ld+json' and Query Parameter: accept set to	
	'\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: Create Or Update	SUT -> Client
	Temporal Representation Of Entity Selecting Content Type with Response	
	Status Code set to 204 and Retrieve Temporal Representation Of Entity with	
	Check Updated Entity and Query Parameter: 'updated_resource' set to	
	'temporal_entity_expectation_payload' and Query Parameter:	
	'response_body' set to 'response2.json()' and Query Parameter:	
	<pre>'ignored_keys' set to 'ignored_attributes' }</pre>	

4.4.1.2 EntityAttributes

4.4.1.2.1 AppendEntityAttributes

TP ld	TP/NGSI-LD/CI/Prov/EA/010_04	
Test objective	Check that one can append entity attributes with noOverwrite option	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.3	
Config Id	CF_01	
PICS Selection	PICS_AppAttEnt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit an id set to \${entityId} }	y \${entity} with
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/010_04_01	
Name	010_04_01 Append entity attributes and ignore existing multi-attribute instance	Э
Parent Release	v1.3.1	
Description	Check that one can append entity attributes with noOverwrite option	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{id}/attrs?options=\${options}' method set to 'POST' Append entity attributes with parameters: and Query Parameter: id set to '\${entity_id}' and Query Parameter: fragment_filename set to 'vehicle-attribute-to-add-fragment.jsonld' and Query Parameter: content_type set to 'application/Id+json' and Query Parameter: options set to 'noOverwrite' } then { the SUT sends a valid Response for the operations: Append Entity Attributes With Parameters with Response Status Code set to 207 and Append Entity Attributes With Parameters with Response body containing update result set to '\${expected_update_result}' and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' }	SUT <- Client SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/010_04_02	
Name	010_04_02 Append entity attributes with a new multi-attribute instance	
Parent Release	v1.3.1	
Description	Check that one can append entity attributes with noOverwrite option	

Expected behaviour	Test events	Direction
		SUT <- Client
	'/ngsi-ld/v1/entities/{id}/attrs?options=\${options}' method set to 'POST'	
	Append entity attributes with parameters: and Query Parameter: id set to	
	'\${entity_id}' and Query Parameter: fragment_filename set to 'vehicle-speed-	
	different-datasetid-fragment.jsonId' and Query Parameter: content_type set	
	to 'application/ld+json' and Query Parameter: options set to 'noOverwrite' }	
		SUT -> Client
	Attributes With Parameters with Response Status Code set to 204 and	
	Append Entity Attributes With Parameters with Response body containing	
	update result set to '\${expected_update_result}' and Retrieve Entity by Id	
	with Check Updated Entity and Query Parameter: 'updated_resource' set to	
	'entity_expectation_payload' and Query Parameter: 'response_body' set to	
	'response1.json()' and Query Parameter: 'ignored_keys' set to	
	'ignored_attributes' }	

TP ld	TP/NGSI-LD/CI/Prov/EA/010_06	
Test objective	Check that one can append a LanguageProperty property to an entity	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 5.6.3	
Config Id	CF_01	
PICS Selection	PICS_LANG and PICS_AppAttEnt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit an id set to \${entityId} }	y \${entity} with
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/010_06_01	
Name	010_06_01 Append a LanguageProperty property	
Parent Release	v1.4.1	
Description	Check that one can append a LanguageProperty property to an entity	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}/attrs' method set to 'POST' Append Entity Attributes and Query Parameter: id set to '\${entity_id}' and Query Parameter: fragment_filename set to 'vehicle-new-language-property-fragment.jsonld' and Query Parameter: content_type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Append Entity	SUT <- Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' }	

TP Id	TP/NGSI-LD/CI/Prov/EA/010_02	
Test objective	Check that one cannot append entity attributes with invalid/missing id or invalid	d request body
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.3	
Config Id	CF_01	
PICS Selection	PICS AppAttEnt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity an id set to \${entityId}}	y \${entity} with
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/010_02_01	
Name	010_02_01 Append entity attributes if the entity ld is not present	
Parent Release	v1.3.1	
Description	Check that one cannot append entity attributes with invalid/missing id or invalid	d request body
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}/attrs' method set to 'POST' Append Entity Attributes and Query Parameter: id set to '\${EMPTY}' and Query Parameter: fragment_filename set to 'vehicle-attribute-to-add-fragment.jsonld' and Query Parameter: content_type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Append Entity Attributes with Response Status Code set to 400 and Append Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Append Entity Attributes with Response body containing 'title' element }	SUT -> Client

TP Permutation id	TP/NGSI-LD/CI/Prov/EA/010_02_02	
Name	010_02_02 Append entity attributes if the Entity Id is not a valid URI	
Parent Release	v1.3.1	
Description	Check that one cannot append entity attributes with invalid/missing id or invalid	d request body
Expected behaviour	Test events	Direction
	'/ngsi-ld/v1/entities/{id}/attrs' method set to 'POST' Append Entity Attributes and Query Parameter: id set to 'thisisaninvaliduri' and Query Parameter: fragment_filename set to 'vehicle-attribute-to-add-fragment.jsonld' and Query Parameter: content_type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Append Entity Attributes with Response Status Code set to 400 and Append Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Append Entity Attributes with Response body containing 'title' element }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Prov/EA/010_07	
Test objective	Check that one can append a scope to an entity	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.18, 5.6.3	
Config Id	CF_01	
PICS Selection	PICS_SCOPES and PICS_AppAttEnt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	y \${entity} with
	an id set to \${entityId} }	
	Permutations Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/010_07_01	
Name	010_07_01 Append scope to an entity with overwrite enabled	
Parent Release	v1.5.1	
Description	Check that scope is replaced if overwrite is enabled	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id	
	and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept	
	set to 'application/json' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Append Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Append Entity	
	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys'	
TD Downstation id	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' }	
TP Permutation id	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01	
Name	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01 010_07_01 Append scope to an entity with overwrite disabled	
Name Parent Release	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01 010_07_01 Append scope to an entity with overwrite disabled v1.5.1	
Name Parent Release Description	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01 010_07_01 Append scope to an entity with overwrite disabled v1.5.1 Check that scope is appended if overwrite is disabled	Direction
Name Parent Release	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01 010_07_01 Append scope to an entity with overwrite disabled v1.5.1 Check that scope is appended if overwrite is disabled Test events	Direction SLIT a Client
Name Parent Release Description	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01 010_07_01 Append scope to an entity with overwrite disabled v1.5.1 Check that scope is appended if overwrite is disabled Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client
Name Parent Release Description	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01 010_07_01 Append scope to an entity with overwrite disabled v1.5.1 Check that scope is appended if overwrite is disabled Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id	
Name Parent Release Description	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01 010_07_01 Append scope to an entity with overwrite disabled v1.5.1 Check that scope is appended if overwrite is disabled Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept	
Name Parent Release Description	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01 010_07_01 Append scope to an entity with overwrite disabled v1.5.1 Check that scope is appended if overwrite is disabled Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to	
Name Parent Release Description	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01 010_07_01 Append scope to an entity with overwrite disabled v1.5.1 Check that scope is appended if overwrite is disabled Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-	
Name Parent Release Description	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01 010_07_01 Append scope to an entity with overwrite disabled v1.5.1 Check that scope is appended if overwrite is disabled Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' }	SUT <- Client
Name Parent Release Description	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01 010_07_01 Append scope to an entity with overwrite disabled v1.5.1 Check that scope is appended if overwrite is disabled Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Append Entity	
Name Parent Release Description	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01 010_07_01 Append scope to an entity with overwrite disabled v1.5.1 Check that scope is appended if overwrite is disabled Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Append Entity Attributes With Parameters with Response Status Code set to 204 and	SUT <- Client
Name Parent Release Description	Attributes with Response Status Code set to 204 and Append Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/010_07_01 010_07_01 Append scope to an entity with overwrite disabled v1.5.1 Check that scope is appended if overwrite is disabled Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Append Entity	SUT <- Client

TP Id	TP/NGSI-LD/CI/Prov/EA/010_05
Test objective	Check that one cannot append entity attributes with invalid/missing id or invalid request body
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.3
Config Id	CF_01
PICS Selection	PICS_AppAttEnt
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity \${entity} with
	an id set to \${entityId} }

Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/010_05_01	
Name	010_05_01 Append entity attributes with invalid entity fragments	
Parent Release	v1.3.1	
Description	Check that one cannot append entity attributes with invalid entity fragments	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}/attrs' method set to 'POST' Append Entity Attributes and Query Parameter: id set to '\${entity_id}' and Query Parameter: fragment_filename set to 'invalid-fragment.jsonld' and Query Parameter: content_type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Append Entity Attributes with Response Status Code set to 400 and Append Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/InvalidRequest' and Append Entity Attributes with Response body containing 'title' element }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Prov/EA/010_01	
Test objective	Check that one can append entity attributes	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.3	
Config Id	CF_01	
PICS Selection	PICS_AppAttEnt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	ty \${entity} with
	an id set to \${entityId} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/010_01_01	
Name	010_01_01 Append entity attributes	
Parent Release	v1.3.1	
Description	Check that one can append entity attributes	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}/attrs' method set to 'POST' Append Entity Attributes	
	and Query Parameter: id set to '\${entity_id}' and Query Parameter:	
	fragment_filename set to 'vehicle-new-attribute-fragment.jsonId' and Query	
	Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Append Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	
	with Check Updated Entity and Query Parameter: 'updated_resource' set to	
	'entity_expectation_payload' and Query Parameter: 'response_body' set to	
	response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/010_01_02	
Name	010_01_02 Append entity attributes with different datasetid	
Parent Release	v1.3.1	
Description	Check that one can append entity attributes	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}/attrs' method set to 'POST' Append Entity Attributes	
	and Query Parameter: id set to '\${entity_id}' and Query Parameter:	
	fragment_filename set to 'vehicle-speed-different-datasetid-fragment.jsonld'	
	and Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Append Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	
	with Check Updated Entity and Query Parameter: 'updated_resource' set to	
	'entity_expectation_payload' and Query Parameter: 'response_body' set to	
	response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' }	

TP ld	TP/NGSI-LD/CI/Prov/EA/010_03
Test objective	Check that one cannot append entity attributes if the entity id is not known to the system
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.3
Config Id	CF_01
PICS Selection	PICS_AppAttEnt
Initial conditions	with { the SUT containing an initial state }

Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/010_03_01	
Name	010_03_01 Append entity attributes when the entity id is not known to the syst	em
Parent Release	v1.3.1	
Description	Check that one cannot append entity attributes if the entity id is not known to the	ne system
Expected behaviour	Test events	Direction
	'/ngsi-ld/v1/entities/{id}/attrs' method set to 'POST' Append Entity Attributes and Query Parameter: id set to '\${entity_id}' and Query Parameter: fragment_filename set to 'vehicle-attribute-to-add-fragment.jsonld' and Query Parameter: content_type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Append Entity Attributes with Response Status Code set to 404 and Append Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/ResourceNotFound' and Append Entity Attributes with Response body containing 'title' element }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Prov/EA/010_09	
Test objective	Check that one can append an operationSpace geospatial Property to an entity	y
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.7, 5.6.3	
Config Id	CF_01	
PICS Selection	PICS_AppAttEnt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity	y \${entity} with
	an id set to \${entityId} }	·
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/010_09	
Name	010_09 Append operationSpace geospatial Property to an entity	
Parent Release	v1.3.1	
Description	Check that one can append an operationSpace geospatial Property to an entity	y
Expected behaviour	Test events	Direction
		SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id	
	and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept	
	set to 'application/json' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	lanen (and a a contact at tame track areas at the above and the first at the areas	SUT -> Client
	Attributes with Response Status Code set to 204 and Append Entity	
	Attributes with Check Updated Entity and Query Parameter: 'ignored_keys'	
	set to '\${None}' }	

TP Id	TP/NGSI-LD/CI/Prov/EA/010 08	
	_	4:4.
Test objective	Check that one can append an observationSpace geospatial Property to an er	ıııy
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.7, 5.6.3	
Config Id	CF_01	
PICS Selection	PICS_AppAttEnt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	y \${entity} with
	an id set to \${entityId} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/010_08	
Name	010_08 Append observationSpace geospatial Property to an entity	
Parent Release	v1.3.1	
Description	Check that one can append an observationSpace geospatial Property to an er	ntity
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id	
	and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept	
	set to 'application/json' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' }	
	then { the SUT sends a valid Response for the operations: Append Entity	SUT -> Client
		301 -> Client
	Attributes with Response Status Code set to 204 and Append Entity	
	Attributes with Check Updated Entity and Query Parameter: 'ignored_keys'	
	set to '\${None}' }	

4.4.1.2.2 UpdateEntityAttributes

TP Id	TP/NGSI-LD/CI/Prov/EA/011_04	
Test objective	Check that one cannot update entity attributes with invalid request body	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.2	
Config Id	CF_01	
PICS Selection	PICS_UpdAttEnt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity	y \${entity} with
	an id set to \${entityId} }	·
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_04_01	
Name	011_04_01 Update entity attributes with invalid entity fragments	
Parent Release	v1.3.1	
Description	Check that one cannot update an attribute if the entity fragment is invalid	
Expected behaviour	Test events	Direction
		SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
		SUT -> Client
	Attributes with Response Status Code set to 400 and Update Entity	
	Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/InvalidRequest' and Update Entity Attributes with Response body	
	containing 'title' element }	

TP ld	TP/NGSI-LD/CI/Prov/EA/011_06	
Test objective	Check that you can update the types on an entity	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.16, 5.6.2	
Config Id	CF 01	
PICS Selection	PICS_MULTITYPING and PICS_UpdAttEnt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	y \${entity} with
	an id set to \${entityId} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_06_01	
Name	011_06_01 AppendOneType	
Parent Release	v1.5.1	
Description	Check that type is appended if it is not yet in the target entity	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-ld-test-suite-compound.jsonId' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 204 and Update Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_06_02	
Name	011_06_02 AppendTwoTypes	
Parent Release	v1.5.1	
Description	Check that type is appended if it is not yet in the target entity	1
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-ld-test-suite-compound.jsonId' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 204 and Update Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' }	SUT -> Client

TP/NGSI-LD/CI/Prov/EA/011_06_03	
011_06_03 AppendExistingType	
v1.5.1	
Check that type is appended if it is not yet in the target entity	
Test events	Direction
when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	0.1.
	SUT -> Client
	Direction
1001010110	
	SUT <- Client
	SUT -> Client
	0.011
set to '\${None}' }	
	011_06_03 AppendExistingType v1.5.1 Check that type is appended if it is not yet in the target entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 204 and Update Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${\none}' \} TP/NGSI-LD/CI/Prov/EA/011_06_04 011_06_04 AppendOneTypeAndOneExisting v1.5.1 Check that type is appended if it is not yet in the target entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 204 and Update Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys'

TP ld	TP/NGSI-LD/CI/Prov/EA/011_02	
Test objective	Check that one cannot update entity attributes with invalid/missing id or invalid	request body
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.2	
Config Id	CF_01	
PICS Selection	PICS_UpdAttEnt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity	y \${entity} with
	an id set to \${entityId} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_02_01	
Name	011_02_01 Update an attribute if the Entity Id is not present	
Parent Release	v1.3.1	
Description	Check that one cannot update entity attributes with invalid/missing id or invalid	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}' method set to 'PATCH' Update Entity Attributes and Query Parameter: id set to '\${EMPTY}' and Query Parameter: fragment_filename set to 'vehicle-speed-two-datasetid-01-fragment.jsonld' and Query Parameter: content_type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 400 and Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Update Entity Attributes with Response body containing 'title' element }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_02_02	
Name	011_02_02 Update an attribute if the Entity Id is not a valid URI	
Parent Release	v1.3.1	
Description	Check that one cannot update entity attributes with invalid/missing id or invalid	request body

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Update Entity Attributes and Query Parameter: id set to 'thisisaninvaliduri' and Query Parameter: fragment_filename set to 'vehicle-speed-two-datasetid-01-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 400 and Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Update Entity Attributes with Response body containing 'title' element }	SUT -> Client

TDII	TENION I DIOUE VENION OF	
TP Id	TP/NGSI-LD/CI/Prov/EA/011_07	
Test objective	Check that one can delete an attribute using NGSI-LD Null in an Update Attrib	outes operation
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 5.6.2, 6.6.3.2	
Config Id	CF_01	
PICS Selection	PICS_LANG and PICS_UpdAttEnt and PICS_UpdAttEnt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Enti	ty \${entity} with
	an id set to \${entityId} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_07_01	
Name	011_07_01 Delete a Property	
Parent Release	v1.6.1	
Description	Check that one can delete an attribute using NGSI-LD Null in an Update Attrib	outes operation
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'ngsild-null/null-property.jsonId'	
	and Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	
	with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	property.jsonId' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_07_02	•
Name	011_07_02 Delete a Relationship	
Parent Release	v1.6.1	
Description	Check that one can delete an attribute using NGSI-LD Null in an Update Attrib	outes operation
Expected behaviour	Test events	Direction
•	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'ngsild-null/null-	
	relationship.jsonld' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	
	with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	relationship.jsonId' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_07_03	
Name	011_07_03 Delete a GeoProperty	
Parent Release	v1.6.1	
Description	Check that one can delete an attribute using NGSI-LD Null in an Update Attrib	outes operation
		cated operation

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}' method set to 'PATCH' Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and Query Parameter: fragment_filename set to 'ngsild-null/null-geoproperty.jsonld' and Query Parameter: content_type set to 'application/ld_son' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-geoproperty.jsonld' }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_07_04	
Name	011_07_04 Delete a LanguageProperty	
Parent Release	v1.6.1	
Description	Check that one can delete an attribute using NGSI-LD Null in an Update Attrib	utes operation
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and Query Parameter: fragment_filename set to 'ngsild-null/null-languageproperty.jsonld' and Query Parameter: content_type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-languageproperty.jsonld' }	SUT -> Client

TP/NGSI-LD/CI/Prov/EA/011_05	
Check that one can update a scope in an entity	
ETSI GS CIM 009 V1.6.1 [1], clauses 4.18, 5.6.2	
CF_01	
PICS_SCOPES and PICS_UpdAttEnt	
with { the SUT being in the "initial state" and the SUT containing an initial Entit	y \${entity} with
an id set to \${entityId} }	
Permutations	
TP/NGSI-LD/CI/Prov/EA/011_05_01	
011_05_01 Update scope to an entity already having a scope	
v1.5.1	
Check that scope is replaced if entity already has a scope	
Test events	Direction
10010100	Direction SUT <- Client
when { the SUT receives a Request from the client containing: URL set to	
10010100	
when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept	
when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to	
when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-ld-test-suite-compound.jsonId' }	
when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Update Entity	SUT <- Client
when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 204 and Update Entity	SUT <- Client
when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Update Entity	SUT <- Client
when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 204 and Update Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys'	SUT <- Client
when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 204 and Update Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' }	SUT <- Client
when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 204 and Update Entity Attributes with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' } TP/NGSI-LD/CI/Prov/EA/011_05_02	SUT <- Client
	ETSI GS CIM 009 V1.6.1 [1], clauses 4.18, 5.6.2 CF_01 PICS_SCOPES and PICS_UpdAttEnt with { the SUT being in the "initial state" and the SUT containing an initial Entit an id set to \${entityId} } Permutations TP/NGSI-LD/CI/Prov/EA/011_05_01 011_05_01 Update scope to an entity already having a scope v1.5.1

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id	
	and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept	
	set to 'application/json' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 207 and Update Entity	
	Attributes with Check Updated Entity and Query Parameter: 'ignored_keys'	
	set to '\${None}' }	

TP ld	TP/NGSI-LD/CI/Prov/EA/011_01	
Test objective	Check that one can update entity attributes	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.2	
Config Id	CF_01	
PICS Selection	PICS_UpdAttEnt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	y \${entity} with
	an id set to \${entityId} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_01_01	
Name	011_01_01 Check that one can update existing attributes with no datasetId	
Parent Release	v1.3.1	
Description	Check that one can update entity attributes	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and Query Parameter: fragment_filename set to 'vehicle-speed-two-datasetid-01-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_01_02	I.
Name	011_01_02 Check that one can update existing attributes with the datasetId	
Parent Release	v1.3.1	
Description	Check that one can update entity attributes	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and Query Parameter: fragment_filename set to 'vehicle-speed-two-datasetid-02-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_01_03	•
Name	011_01_03 Check that one can update existing attributes and append non-exi	sting attributes
Parent Release	v1.3.1	<u> </u>
Description	Check that one can update entity attributes	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'vehicle-speed-two-datasetid-03-	
	fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' }	
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	SOT -> Client
	with Check Updated Entity and Query Parameter: 'updated_resource' set to	
	'entity_expectation_payload' and Query Parameter: 'response_body' set to	
	'response1.json()' and Query Parameter: 'ignored_keys' set to	
	'ignored_attributes' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_01_04	
Name	011_01_04 Check that one can change the type of an existing attribute	
Parent Release	v1.3.1	
Description	Check that one can update entity attributes	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'vehicle-speed-two-datasetid-04-fragment.jsonId' and Query Parameter: content_type set to	
	agnient.jsond and Query Parameter. content_type set to application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	OOT > OHOTIC
	with Check Updated Entity and Query Parameter: 'updated_resource' set to	
	'entity_expectation_payload' and Query Parameter: 'response_body' set to	
	'response1.json()' and Query Parameter: 'ignored_keys' set to	
	'ignored_attributes' }	

TP Id	TP/NGSI-LD/CI/Prov/EA/011_03	
Test objective	Check that one cannot update entity attributes if the entity id or attributes are r	not known to
	the system	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.2	
Config Id	CF_01	
PICS Selection	PICS_UpdAttEnt	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_03_01	
Name	011_03_01 Update entity attributes when the entity id is not known to the systematical content of the systematical	em
Parent Release	v1.3.1	
Description	Check that one cannot update entity attributes if the entity id or attributes are r	not known to
	the system	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'vehicle-speed-two-datasetid-01-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 404 and Update Entity	
	Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/ResourceNotFound' and Update Entity Attributes with Response	
	body containing 'title' element }	

TP Id	TP/NGSI-LD/CI/Prov/EA/011_09
Test objective	Check that one can delete the default attribute instance using NGSI-LD Null in an Update
	Attributes operation
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 5.6.2, 6.6.3.2
Config Id	CF_01
PICS Selection	PICS_LANG and PICS_UpdAttEnt and PICS_UpdAttEnt
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity \${entity} with
	an id set to \${entityId} }

	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_09_01	
Name	011_09_01 Delete a Property	
Parent Release	v1.6.1	
Description	Check that one can delete the default attribute instance using NGSI-LD Null Attributes operation	n an Update
Expected behaviour	Test events	Direction
•	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'ngsild-null/null-property.jsonId'	
	and Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	
	with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	property-default-instance.jsonld' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_09_02	
Name	011_09_02 Delete a Relationship	
Parent Release	v1.6.1	
Description	Check that one can delete the default attribute instance using NGSI-LD Null	n an Update
F	Attributes operation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'ngsild-null/null-	
	relationship.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	OUT FOROIR
	with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	relationship-default-instance.jsonId' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_09_03	
Name	011_09_03 Delete a GeoProperty	
Parent Release	v1.6.1	
Description	Check that one can delete the default attribute instance using NGSI-LD Null	n an Update
	Attributes operation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'ngsild-null/null-	
	geoproperty.jsonld' and Query Parameter: content_type set to	
	'application/ld+json' }	01.17
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	
	with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
TD Permutation id	geoproperty-default-instance.jsonId' } TP/NGSI-LD/CI/Prov/EA/011_09_04	
TP Permutation id Name	011_09_04 Delete a LanguageProperty	
Parent Release	v1.6.1	
Description	Check that one can delete the default attribute instance using NGSI-LD Null	n an Lindata
Description	Attributes operation	ii aii opuale
	/ turbatos oporation	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and Query Parameter: fragment_filename set to 'ngsild-null/null-languageproperty.jsonId' and Query Parameter: content_type set to 'application/Id+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-languageproperty-default-instance.jsonld' }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Prov/EA/011_08	
Test objective	Check that one can delete a specific attribute instance using NGSI-LD Null in	an Undate
	Attributes operation	an opaato
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 5.6.2, 6.6.3.2	
Config Id	CF 01	
PICS Selection	PICS_LANG and PICS_UpdAttEnt and PICS_UpdAttEnt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Ent	ity \${entity} with
	an id set to \${entityId}}	ity φ(σικιτy) with
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_08_01	
Name	011_08_01 Delete a Property	
Parent Release	v1.6.1	
Description	Check that one can delete a specific attribute instance using NGSI-LD Null in	an Update
•	Attributes operation	
Expected behaviour	Test events	Direction
•	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'ngsild-null/null-property-	
	instance.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	
	with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	property-instance.jsonld' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_08_02	
Name	011_08_02 Delete a Relationship	
Parent Release	v1.6.1	
Description	Check that one can delete a specific attribute instance using NGSI-LD Null in	an Update
	Attributes operation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'ngsild-null/null-relationship-	
	instance.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	0
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	
	with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
TD Dormutation is	relationship-instance.jsonId' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_08_03	
Name	011_08_03 Delete a GeoProperty	
Parent Release	v1.6.1	11. 1.4
Description	Check that one can delete a specific attribute instance using NGSI-LD Null in	an Update
	Attributes operation	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'ngsild-null/null-geoproperty-instance.jsonId' and Query Parameter: content_type set to	
	application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	COT > CHOIR
	with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	geoproperty-instance.jsonld' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/011_08_04	
Name	011_08_04 Delete a LanguageProperty	
Parent Release	v1.6.1	
Description	Check that one can delete a specific attribute instance using NGSI-LD Null in a	an Update
	Attributes operation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'ngsild-null/null-	
	languageproperty-instance.jsonld' and Query Parameter: content_type set to l'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	
	with Response Body containing en entity element with id set to	
	entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	languageproperty-instance.jsonld' }	

4.4.1.2.3 ReplaceEntityAttribute

TP ld	TP/NGSI-LD/CI/Prov/EA/055 03	
Test objective	Check that the correct error type is returned when replacing an attribute with fa	aulty data
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 5.6.19, 6.7.3.3	y a.a
Config Id	CF_01	
PICS Selection	PICS_AttRep and PICS_AttRep	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	y \${entity} with
	an id set to \${entityId} }	, . (),
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/055_03_01	
Name	055_03_01 Replace entity attribute giving an invalid entity ID	
Parent Release	v1.6.1	
Description	Check that the correct error type is returned when replacing an attribute with fa	aulty data
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}/attrs/{attr_id}' method set to 'PUT' Replace	
	Attribute Selecting Content Type and Query Parameter: entity_id set to	
	'\${target_entity_id}' and Query Parameter: attr_id set to 'isParked' and Query	
	Parameter: attribute_fragment set to '\${attribute}' and Query Parameter:	
	content_type set to 'application/json' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operation: Replace Attribute	SUT -> Client
	Selecting Content Type with Response Status Code set to 400 }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/055_03_02	
Name	055_03_02 Replace entity attribute giving a nonexistent entity ID	
Parent Release	v1.6.1	
Description	Check that the correct error type is returned when replacing an attribute with fa	aulty data

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}/attrs/{attr_id}' method set to 'PUT' Replace	
	Attribute Selecting Content Type and Query Parameter: entity_id set to	
	'\${target_entity_id}' and Query Parameter: attr_id set to 'isParked' and Query	
	Parameter: attribute_fragment set to '\${attribute}' and Query Parameter:	
	content_type set to 'application/json' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operation: Replace Attribute	SUT -> Client
	Selecting Content Type with Response Status Code set to 404 }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/055_03_03	
Name	055_03_03 Replace entity attribute giving an invalid attribute name	
Parent Release	v1.6.1	
Description	Check that the correct error type is returned when replacing an attribute with fa	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}/attrs/{attr_id}' method set to 'PUT' Replace	
	Attribute Selecting Content Type and Query Parameter: entity_id set to	
	'\${target_entity_id}' and Query Parameter: attr_id set to '@invalid' and Query	
	Parameter: attribute_fragment set to '\${attribute}' and Query Parameter:	
	content_type set to 'application/json' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operation: Replace Attribute	SUT -> Client
	Selecting Content Type with Response Status Code set to 400 }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/055_03_04	
Name	055_03_04 Replace entity attribute giving a nonexistent attribute name	
Parent Release	v1.6.1	
Description	Check that the correct error type is returned when replacing an attribute with fa	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}/attrs/{attr_id}' method set to 'PUT' Replace	
	Attribute Selecting Content Type and Query Parameter: entity_id set to	
	'\${target_entity_id}' and Query Parameter: attr_id set to 'brandName' and	
	Query Parameter: attribute_fragment set to '\${attribute}' and Query	
	Parameter: content_type set to 'application/json' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operation: Replace Attribute	SUT -> Client
		SUT -> Client
TP Permutation id	Selecting Content Type with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/055_03_05	
Name Parent Release	055_03_05 Replace entity attribute giving a scope attribute v1.6.1	
		aulty data
Description Expected behaviour	Check that the correct error type is returned when replacing an attribute with fa Test events	
Expected behaviour		Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}/attrs/{attr_id}' method set to 'PUT' Replace	
	Attribute Selecting Content Type and Query Parameter: entity_id set to	
	"\${target_entity_id}' and Query Parameter: attr_id set to 'scope' and Query	
	Parameter: attribute_fragment set to '\${attribute}' and Query Parameter:	
	content_type set to 'application/json' and Query Parameter: context set to	
	"https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/- //raw/develop/resources/isonld-contexts/ngsi-ld-test-suite-compound isonld'	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operation: Replace Attribute	SUT -> Client
	Selecting Content Type with Response Status Code set to 400 }	SUI -> CIIENT

TP ld	TP/NGSI-LD/CI/Prov/EA/055_01
Test objective	Check that one can replace an existing entity attribute and that its createdAt Temporal Property remains unchanged
	i Toperty Ternams unchanged
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 5.6.19, 6.7.3.3
Config Id	CF_01
PICS Selection	PICS_AttRep and PICS_AttRep
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity \${entity} with
	an id set to \${entityld}.}

	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/055_01_01	
Name	055_01_01 Replace entity attribute	
Parent Release	v1.6.1	
Description	Check that one can replace an existing entity attribute and that its createdAt T	emporal
•	Property remains unchanged	•
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}/attrs/{attr_id}' method set to 'PUT' Replace	
	Attribute Selecting Content Type and Query Parameter: entity_id set to	
	'\${entity_id}' and Query Parameter: attr_id set to 'isParked' and Query	
	Parameter: attribute_fragment set to '\${attribute}' and Query Parameter:	
	content_type set to 'application/json' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	01.17
	then { the SUT sends a valid Response for the operations: Replace Attribute	SUT -> Client
	Selecting Content Type with Response Status Code set to 204 and Retrieve	
	Entity by Id with Check Updated Entity and Query Parameter:	
	'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter:	
	'ignored_keys' set to 'ignored_attributes' and Retrieve Entity by Id with	
	Response Body containing the key 'json_path_expr=['isParked']['createdAt']',	
	with the value 'value_to_check=\${createdAt}' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/055_01_02	II.
Name	055_01_02 Replace entity attribute giving a new attribute type	
Parent Release	v1.6.1	
Description	Check that one can replace an existing entity attribute and that its createdAt T	emporal
	Property remains unchanged	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}/attrs/{attr_id}' method set to 'PUT' Replace	
	Attribute Selecting Content Type and Query Parameter: entity_id set to	
	\${entity_id}' and Query Parameter: attr_id set to 'isParked' and Query	
	Parameter: attribute_fragment set to '\${attribute}' and Query Parameter:	
	content_type set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Replace Attribute	SUT -> Client
	Selecting Content Type with Response Status Code set to 204 and Retrieve	301 -> Client
	Entity by Id with Check Updated Entity and Query Parameter:	
	'updated_resource' set to 'entity_expectation_payload' and Query	
	Parameter: 'response_body' set to 'response1.json()' and Query Parameter:	
	'ignored_keys' set to 'ignored_attributes' and Retrieve Entity by Id with	
	Response Body containing the key 'json_path_expr=['isParked']['createdAt']',	
	with the value 'value_to_check=\${createdAt}' }	

TP Id	TP/NGSI-LD/CI/Prov/EA/055_02
Test objective	Check that one can replace an existing multi-instance entity attribute and that its createdAt
•	Temporal Property remains unchanged
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 5.6.19, 6.7.3.3
Config Id	CF_01
PICS Selection	PICS_AttRep and PICS_AttRep
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity \${entity} with
	an id set to \${entityId} }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/055_02_01
Name	055_02_01 Replace entity attribute giving no datasetId
Parent Release	v1.6.1
Description	Check that one can replace an existing multi-instance entity attribute and that its createdAt
	Temporal Property remains unchanged

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}/attrs/{attr_id}' method set to 'PUT' Replace	
	Attribute Selecting Content Type and Query Parameter: entity_id set to	
	'\${entity_id}' and Query Parameter: attr_id set to 'speed' and Query	
	Parameter: attribute_fragment set to '\${attribute}' and Query Parameter:	
	content_type set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' }	
	then { the SUT sends a valid Response for the operations: Replace Attribute	SUT -> Client
	Selecting Content Type with Response Status Code set to 204 and Retrieve	301 -> Client
	Entity by Id with Check Updated Entity and Query Parameter:	
	'updated_resource' set to 'entity_expectation_payload' and Query	
	Parameter: 'response_body' set to 'response1.json()' and Query Parameter:	
	'ignored_keys' set to 'ignored_attributes' and Retrieve Entity by Id with	
	Response Body containing the key 'json_path_expr=['speed'][0]['createdAt']',	
	with the value 'value_to_check=\${createdAt}' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/055_02_02	•
Name	055_02_02 Replace entity attribute giving a datasetId	
Parent Release	v1.6.1	
Description	Check that one can replace an existing multi-instance entity attribute and that	its createdAt
	Temporal Property remains unchanged	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}/attrs/{attr_id}' method set to 'PUT' Replace	
	Attribute Selecting Content Type and Query Parameter: entity_id set to	
	'\${entity_id}' and Query Parameter: attr_id set to 'speed' and Query	
	Parameter: attribute_fragment set to '\${attribute}' and Query Parameter:	
	content_type set to 'application/json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' }	
	then { the SUT sends a valid Response for the operations: Replace Attribute	SUT -> Client
	Selecting Content Type with Response Status Code set to 204 and Retrieve	301 -> Client
	Entity by Id with Check Updated Entity and Query Parameter:	
	'updated_resource' set to 'entity_expectation_payload' and Query	
	Parameter: 'response_body' set to 'response1.json()' and Query Parameter:	
	'ignored_keys' set to 'ignored_attributes' and Retrieve Entity by Id with	
	Response Body containing the key 'json_path_expr=['speed'][0]['createdAt']',	
	with the value 'value_to_check=\${createdAt}' }	

4.4.1.2.4 PartialAttributeUpdate

TP ld	TP/NGSI-LD/CI/Prov/EA/012_02
Test objective	Check that one cannot perform a partial update on an entity attribute with invalid data
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.4
Config Id	CF_01
PICS Selection	PICS_ParAttUpd
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity \${entity} with
	an id set to \${entityId} }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_02_01
Name	012_02_01 Make a partial attribute update if the Entity Id is not present
Parent Release	v1.3.1
Description	Check that one cannot perform a partial update on an entity attribute with missing entity id

I=	T	Di ati
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set to '\${EMPTY}' and Query Parameter: AttributeId set to 'speed' and Query	
	Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 400 and Partial Update	
	Entity Attributes with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Partial Update Entity	
	Attributes with Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_02_02	
Name	012_02_02 Make a partial attribute update if the Entity Id is not a valid URI	
Parent Release	v1.3.1	
Description	Check that one cannot perform a partial update on an entity attribute with inva	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to 'thisisaninvaliduri' and Query Parameter: Attributeld set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-	
	fragment.jsonld' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 400 and Partial Update	00.7
	Entity Attributes with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Partial Update Entity	
	Attributes with Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_02_03	
Name	012_02_03 Make a partial attribute update if the Attribute type does not match	1
Parent Release Description	v1.3.1	
II IASCRINTIAN	Check that one cannot perform a partial update on an entity attribute with a different attribute	
Description		noroni attributo
•	type Test events	
Expected behaviour	type	Direction SUT <- Client
•	type Test events	Direction
•	type Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityld set	Direction
•	type Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and	Direction
•	type Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-	Direction
•	type Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment_jsonId' and Query Parameter: content_type set to	Direction
•	type Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment_jsonId' and Query Parameter: content_type set to 'application/Id+json' }	Direction SUT <- Client
•	type Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment_jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update	Direction
•	type Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment_jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update	Direction SUT <- Client
•	type Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment_jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type	Direction SUT <- Client
•	type Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment_isonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Partial Update Entity	Direction SUT <- Client
•	type Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element }	Direction SUT <- Client
Expected behaviour	type Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment_isonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Partial Update Entity	Direction SUT <- Client
Expected behaviour TP Permutation id Name Parent Release	type Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: Attributeld set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element } TP/NGSI-LD/CI/Prov/EA/012_02_04 012_02_04 Make a partial attribute update if the entity fragment is empty v1.3.1	Direction SUT <- Client SUT -> Client
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element } TP/NGSI-LD/CI/Prov/EA/012_02_04 012_02_04 Make a partial attribute update if the entity fragment is empty v1.3.1 Check that one cannot perform a partial update on an entity attribute with an experience of the containing and the set of the entity attribute with an experience of the sum of the set of the entity attribute with an experience of the sum of the entity fragment is empty v1.3.1	Direction SUT <- Client SUT -> Client
Expected behaviour TP Permutation id Name Parent Release	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element } TP/NGSI-LD/CI/Prov/EA/012_02_04 012_02_04 Make a partial attribute update if the entity fragment is empty v1.3.1 Check that one cannot perform a partial update on an entity attribute with an expense of the client of the entity attribute with an expense of the client of the entity attribute with an expense of the client of the entity attribute with an expense of the client of the entity attribute with an expense of the client of the entity attribute with an expense of the entity attribute to 'Anna Anna Anna	Direction SUT <- Client SUT -> Client SUT -> Client Empty fragment Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element } TP/NGSI-LD/CI/Prov/EA/012_02_04 012_02_04 Make a partial attribute update if the entity fragment is empty v1.3.1 Check that one cannot perform a partial update on an entity attribute with an example of the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client SUT -> Client
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element } TP/NGSI-LD/CI/Prov/EA/012_02_04 012_02_04 Make a partial attribute update if the entity fragment is empty v1.3.1 Check that one cannot perform a partial update on an entity attribute with an example of the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	Direction SUT <- Client SUT -> Client SUT -> Client Empty fragment Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment_jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element } TP/NGSI-LD/CI/Prov/EA/012_02_04 012_02_04 Make a partial attribute update if the entity fragment is empty v1.3.1 Check that one cannot perform a partial update on an entity attribute with an example of the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set	Direction SUT <- Client SUT -> Client SUT -> Client Empty fragment Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element } TP/NGSI-LD/CI/Prov/EA/012_02_04 012_02_04 Make a partial attribute update if the entity fragment is empty v1.3.1 Check that one cannot perform a partial update on an entity attribute with an expense of the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and	Direction SUT <- Client SUT -> Client SUT -> Client Empty fragment Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element } TP/NGSI-LD/CI/Prov/EA/012_02_04 012_02_04 Make a partial attribute update if the entity fragment is empty v1.3.1 Check that one cannot perform a partial update on an entity attribute with an expense of the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'empty-fragment.json' and Query	Direction SUT <- Client SUT -> Client SUT -> Client Empty fragment Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element } TP/NGSI-LD/CI/Prov/EA/012_02_04 012_02_04 Make a partial attribute update if the entity fragment is empty v1.3.1 Check that one cannot perform a partial update on an entity attribute with an expense vents when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'empty-fragment.json' and Query Parameter: content_type set to 'application/Id+json' }	Direction SUT <- Client SUT -> Client Empty fragment Direction SUT <- Client
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment_jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element } TP/NGSI-LD/CI/Prov/EA/012_02_04 012_02_04 Make a partial attribute update if the entity fragment is empty v1.3.1 Check that one cannot perform a partial update on an entity attribute with an expense of the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'empty-fragment.json' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update	Direction SUT <- Client SUT -> Client SUT -> Client Empty fragment Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element } TP/NGSI-LD/CI/Prov/EA/012_02_04 012_02_04 Make a partial attribute update if the entity fragment is empty v1.3.1 Check that one cannot perform a partial update on an entity attribute with an example of the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'empty-fragment.json' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update	Direction SUT <- Client SUT -> Client Empty fragment Direction SUT <- Client
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element } TP/NGSI-LD/CI/Prov/EA/012_02_04 012_02_04 Make a partial attribute update if the entity fragment is empty v1.3.1 Check that one cannot perform a partial update on an entity attribute with an expense vents when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'empty-fragment.json' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Body containing the type	SUT -> Client SUT -> Client Empty fragment Direction SUT Client
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-different-type-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Partial Update Entity Attributes with Response body containing 'title' element } TP/NGSI-LD/CI/Prov/EA/012_02_04 012_02_04 Make a partial attribute update if the entity fragment is empty v1.3.1 Check that one cannot perform a partial update on an entity attribute with an example of the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'empty-fragment.json' and Query Parameter: content_type set to 'application/Id+json' } then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 400 and Partial Update	SUT -> Client SUT -> Client Empty fragment Direction SUT Client

TP Id	TP/NGSI-LD/CI/Prov/EA/012_06	
Test objective	Check that one can delete a specific attribute instance using NGSI-LD Null in an Partial	
•	Attribute Update operation	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 5.6.4 and 6.7.3.1	
Config Id	CF_01	
PICS Selection	PICS_LANG and PICS_ParAttUpd and PICS_ParAttUpd	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	y \${entity} with
	an id set to \${entityId} }	
TD D	Permutations (7) (7) (7) (7) (7)	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_06_01	
Name	012_06_01 Delete a Property	
Parent Release Description	V1.6.1	on Dortial
Description	Check that one can delete a specific attribute instance using NGSI-LD Null in Attribute Update operation	an Faniai
Expected behaviour	Test events	Direction
Expedica bellaviour	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	COT CHOIL
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'name' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-property-instance-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Retrieve Entity	
	by Id with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
TD D	property-instance.jsonId' }	
TP Permutation id Name	TP/NGSI-LD/CI/Prov/EA/012_06_02	
Parent Release	012_06_02 Delete a Relationship	
Description Description	Check that one can delete a specific attribute instance using NGSI-LD Null in	on Partial
Description	Attribute Update operation	anraniai
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'locatedAt' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-relationship-instance-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Retrieve Entity	
	by Id with Response Body containing en entity element with id set to	
	<pre>'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted- relationship-instance.jsonId' }</pre>	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_06_03	
Name	012_06_03 Delete a GeoProperty	
Parent Release	v1.6.1	
Description	Check that one can delete a specific attribute instance using NGSI-LD Null in	an Partial
	Attribute Update operation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'location' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-geoproperty-instance-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	CLIT > Clions
	then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 204 and Retrieve Entity	SUT -> Client
	by Id with Response Body containing en entity element with id set to	
	entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	geoproperty-instance.jsonld' }	

TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_06_04	
Name	012_06_04 Delete a LanguageProperty	
Parent Release	v1.6.1	
Description	Check that one can delete a specific attribute instance using NGSI-LD Null in a Attribute Update operation	an Partial
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: AttributeId set to 'street' and Query Parameter: fragment_filename set to 'ngsild-null/null-languageproperty-instance-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-languageproperty-instance.jsonld' }	SUT -> Client

TP ld	TP/NGSI-LD/CI/Prov/EA/012_04	
Test objective	Check that one can perform a partial update on a LanguageProperty property	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18 and 5.6.4	
Config Id	CF_01	
PICS Selection	PICS_LANG and PICS_ParAttUpd	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity	y \${entity} with
	an id set to \${entityId} and an attribute with an id set to \${atrId} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_04_01	
Name	012_04_01 Check that one can partially update a LanguageProperty property	
Parent Release	v1.4.1	
Description	Check that one can perform a partial update on a LanguageProperty property	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'street' and Query	
	Parameter: fragment_filename set to 'building-language-property-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Retrieve Entity	
	by Id with Check Updated Entity and Query Parameter: 'ignored_keys' set to	
	\${None}' }	

TP ld	TP/NGSI-LD/CI/Prov/EA/012_03
Test objective	Check that one cannot perform a partial update on an entity attribute if the entity id or
	attribute is not known to the system
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.4
Config Id	CF_01
PICS Selection	PICS_ParAttUpd
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity \${entity} with
	an id set to \${entityId} }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_03_01
Name	012_03_01 Partial update when the Entity Id is not known to the system
Parent Release	v1.3.1
Description	Check that one cannot perform a partial update on an entity attribute if the entity id or
	attribute is not known to the system

when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	ection
	- Ciletit
Request Partial Update Entity Attributes and Query Parameter: entityld set	
to '\${not_found_entity_id}' and Query Parameter: Attributed set to 'speed'	
and Query Parameter: fragment_filename set to 'vehicle-isparked-	
fragment.jsonId' and Query Parameter: content_type set to	
'application/ld+json' }	
	> Client
Entity Attributes with Response Status Code set to 404 and Partial Update	
Entity Attributes with Response Body containing the type	
'https://uri.etsi.org/ngsi-ld/errors/ResourceNotFound' and Partial Update	
Entity Attributes with Response body containing 'title' element }	
utation id TP/NGSI-LD/CI/Prov/EA/012_03_02	
012_03_02 Partial update when no default instance and no datasetId specified	
elease v1.3.1	
ion Check that one cannot perform a partial update on an entity attribute if the entity id or	ſ
attribute is not known to the system	
	ection
	- Client
'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
Request Partial Update Entity Attributes and Query Parameter: entityld set	
to '\${valid_entity_id}' and Query Parameter: Attributeld set to 'speed' and	
Query Parameter: fragment_filename set to 'vehicle-speed-no-datasetid-	
fragment.jsonId' and Query Parameter: content_type set to	
'application/ld+json' } then { the SUT sends a valid Response for the operations: Partial Update SUT ->	> Client
	> Client
Entity Attributes with Response Status Code set to 404 and Partial Update Entity Attributes with Response Body containing the type	
https://uri.etsi.org/ngsi-Id/errors/ResourceNotFound' and Partial Update	
Entity Attributes with Response body containing 'title' element }	
utation id TP/NGSI-LD/CI/Prov/EA/012_03_03	
012_03_03 Partial update when no instance with the datasetId specified	
1012_00_001 artial apaate when no instance with the datasetia specified	
elease v1.3.1	r
elease v1.3.1 ion Check that one cannot perform a partial update on an entity attribute if the entity id or	r
elease v1.3.1 Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system	ection
elease v1.3.1 ion Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system d behaviour Test events Dire	
v1.3.1	ection
v1.3.1 Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events Dire	ection Client
V1.3.1 Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events Dire	ection
V1.3.1 Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events Dire	ection Client
V1.3.1 Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events Dire	ection Client
V1.3.1 Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events Dire	ection Client
V1.3.1 Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events Dire	ection Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events	ection Client
V1.3.1 Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events Dire	ection Client
V1.3.1 Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events Dire	ection Client -> Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-unknown-datasetid-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' }	ection Client -> Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: AttributeId set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-unknown-datasetid-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' }	ction - Client > Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events Dire	ction - Client - Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events	ction - Client > Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events	ction - Client - Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events	ction - Client - Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events	ction - Client - Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events	ction - Client - Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events	ction - Client - Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events	> Client > Client c- Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events	ction - Client - Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/(entity)d/jattrs/(attribute)d/j method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityld set to '\${valid_entity_id}' and Query Parameter: Attributeld set to 'speed' and Query Parameter: fragment_filename set to vehicle-speed-unknown-datasetid-fragment.jsonld' and Query Parameter: content_type set to 'application/ld+json'} then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/ResourceNotFound' and Partial Update Entity Attributes with Response body containing 'title' element } Utation id TP/NGSI-LD/CI/Prov/EA/012_03_04	> Client > Client c- Client
Check that one cannot perform a partial update on an entity attribute if the entity id or attribute is not known to the system Test events	> Client > Client c- Client

TP ld	TP/NGSI-LD/CI/Prov/EA/012_01	
Test objective	Check that one can perform a partial update on an entity attribute	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.4	
Config Id	CF_01	
PICS Selection	PICS_ParAttUpd	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	v \${entity} with
	an id set to \${entityId} and an attribute with an id set to \${atrId} }	<i>γ</i> φ(σγ)
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_01_01	
Name	012_01_01 Check that one can partially update an attribute	
Parent Release	v1.3.1	
Description	Check that one can perform a partial update on an entity attribute	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: AttributeId set to 'isParked' and Query Parameter: fragment_filename set to 'vehicle-isparked-fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_01_02	
Name	012_01_02 Check that one can partially update an attribute by specifying the	datasetId
Parent Release	v1.3.1	
Description	Check that one can perform a partial update on an entity attribute	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}' method set to 'PATCH' Request Partial Update Entity Attributes and Query Parameter: entityld set to '\${entity_id}' and Query Parameter: Attributeld set to 'speed' and Query Parameter: fragment_filename set to 'vehicle-speed-equal-datasetid-fragment.jsonld' and Query Parameter: content_type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Partial Update Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' }	SUT -> Client

TP ld	TP/NGSI-LD/CI/Prov/EA/012_05
Test objective	Check that one can delete an attribute using NGSI-LD Null in an Partial Attribute Update
	operation
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 5.6.4 and 6.7.3.1
Config Id	CF_01
PICS Selection	PICS_LANG and PICS_ParAttUpd and PICS_ParAttUpd
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity \${entity} with
	an id set to \${entityId} }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_05_01
Name	012_05_01 Delete a Property
Parent Release	v1.6.1
Description	Check that one can delete an attribute using NGSI-LD Null in an Partial Attribute Update
	operation

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'name' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-property-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Retrieve Entity	
	by Id with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	property.jsonId' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_05_02	
Name	012_05_02 Delete a Relationship	
Parent Release	v1.6.1	
Description	Check that one can delete an attribute using NGSI-LD Null in an Partial Attribute	ute Update
	operation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'locatedAt' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-relationship-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	0.1.
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Retrieve Entity	
	by Id with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
TD Dammartation id	relationship.jsonId' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_05_03	
Name Parent Release	012_05_03 Delete a GeoProperty	
	V1.6.1	.4
Description	Check that one can delete an attribute using NGSI-LD Null in an Partial Attribute using NGSI-LD Null in Attribute using	ute Opdate
Expected behaviour	operation	Direction
Expected behaviour	Test events	Direction SUT <- Client
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	SUT <- Client
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: Attributed set to 'location' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-geoproperty-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Retrieve Entity	OOT > OHOTIC
	by Id with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	geoproperty.jsonId' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_05_04	1
Name	012_05_04 Delete a LanguageProperty	
Parent Release	v1.6.1	
Description	Check that one can delete an attribute using NGSI-LD Null in an Partial Attribute	ute Update
•	operation	
	Tabarana.	

Expected behaviour	Test events	Direction
		SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: Attributeld set to 'street' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-languageproperty-	
	fragment.jsonld' and Query Parameter: content_type set to	
	'application/ld+json' }	
	lance (and a contract a contract and a characters are a characters a	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Retrieve Entity	
	by Id with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	languageproperty.jsonld' }	

TP Id	TP/NGSI-LD/CI/Prov/EA/012_07	
Test objective	Check that one can delete the default attribute instance using NGSI-LD Null in	on Dortiol
rest objective	Attribute Update operation	i ali Falliai
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 5.6.4 and 6.7.3.1	
Config Id	CF_01	
PICS Selection	PICS_LANG and PICS_ParAttUpd and PICS_ParAttUpd	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	ty \${entity} with
	an id set to \${entityId} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_07_01	
Name	012_07_01 Delete a Property	
Parent Release	v1.6.1	
Description	Check that one can delete the default attribute instance using NGSI-LD Null in	n an Partial
	Attribute Update operation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'name' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-property-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Retrieve Entity	
	by Id with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	property-default-instance.jsonId' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_07_02	•
Name	012_07_02 Delete a Relationship	
Parent Release	v1.6.1	
Description	Check that one can delete the default attribute instance using NGSI-LD Null in	n an Partial
	Attribute Update operation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityld}/attrs/{attributeId}' method set to 'PATCH'	OOT COMOTIC
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'locatedAt' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-relationship-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Retrieve Entity	OO1 > OIIOIII
	by Id with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	relationship-default-instance.jsonld' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_07_03	1
Name	012_07_03 Delete a GeoProperty	
Parent Release		
	V1.6.1	on Dortici
Description	Check that one can delete the default attribute instance using NGSI-LD Null in	ı an Partiai
	Attribute Update operation	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'location' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-geoproperty-	
	fragment.jsonId' and Query Parameter: content_type set to 'application/Id+json' }	
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Retrieve Entity	
	by Id with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	geoproperty-default-instance.jsonld' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/012_07_04	
Name	012_07_04 Delete a LanguageProperty	
Parent Release	v1.6.1	
Description	Check that one can delete the default attribute instance using NGSI-LD Null in	an Partial
	Attribute Update operation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	SUT <- Client
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'street' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-languageproperty-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Retrieve Entity	
	by Id with Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-	
	languageproperty-default-instance.jsonld' }	

4.4.1.2.5 DeleteEntityAttribute

TP Id	TP/NGSI-LD/CI/Prov/EA/013_02	
Test objective	Check that one cannot delete an attribute from an entity with invalid/missing id	S
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.5	
Config Id	CF_01	
PICS Selection	PICS_AttDel	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity	y \${entity} with
	an id set to \${entityId} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/013_02_01	
Name	013_02_01 Delete an attribute if the Entity Id is not present	
Parent Release	v1.3.1	
Description	Check that one cannot delete an attribute from an entity with invalid/missing ids	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${EMPTY}' and Query Parameter: attributeId set to 'speed' and Query	
	Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set	
	to 'false' }	
	then { the SUT sends a valid Response for the operation: Delete Entity	SUT -> Client
	Attributes with Response Status Code set to 400 }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/013_02_02	
Name	013_02_02 Delete an attribute if the Entity Id is not a valid URI	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to 'thisIsAnInvalidURI' and Query Parameter: attributeId set to 'speed' and	
	Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter:	
	deleteAll set to 'false' }	
	then { the SUT sends a valid Response for the operation: Delete Entity	SUT -> Client
	Attributes with Response Status Code set to 400 }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/013_02_03	
Name	013_02_03 Delete an attribute if the Attribute Name is not present	
Parent Release	v1.3.1	
Description	Check that one cannot delete an attribute from an entity with invalid/missing id	S
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${valid_entity_id}' and Query Parameter: attributeId set to '\${EMPTY}' and	
	Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter:	
	deleteAll set to 'false' }	
	then { the SUT sends a valid Response for the operation: Delete Entity	SUT -> Client
	Attributes with Response Status Code set to 405 }	

TP ld	TP/NGSI-LD/CI/Prov/EA/013_06		
Test objective	Check that one can delete an operationSpace geospatial Property from an ent	ity	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.7 and 5.6.5		
Config Id	CF_01		
PICS Selection	PICS_AttDel		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity	y \${entity} with	
	an id set to \${entityId} }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/013_06		
Name	013_06 Delete an operationSpace geospatial Property from an entity		
Parent Release	v1.3.1		
Description	Check that one can delete an operationSpace geospatial Property from an ent	ity	
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query		
	Parameter: id set to '\${entity_id}' and Query Parameter: Link set to		
	'<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-		
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;		
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" }		
	then { the SUT sends a valid Response for the operations: Delete Entity	SUT -> Client	
	Attributes with Response Status Code set to 204 and Delete Entity Attributes		
	with Check Updated Entity and Query Parameter: 'ignored_keys' set to		
	'\${None}' }		

TP ld	TP/NGSI-LD/CI/Prov/EA/013_04
Test objective	Check that one can delete a scope from an entity
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.18 and 5.6.5
Config Id	CF_01
PICS Selection	PICS_SCOPES and PICS_AttDel
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity \${entity} with
	an id set to \${entityId} }
	Permutations Permutations
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/013_04
Name	013_04 Delete scope from an entity
Parent Release	v1.5.1
Description	Check that one can delete a scope from an entity

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Request Retrieve Entity by Id	
	and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept	
	set to 'application/json' }	
	then { the SUT sends a valid Response for the operations: Delete Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Delete Entity Attributes	
	with Check Updated Entity and Query Parameter: 'ignored_keys' set to	
	'\${None}' }	

TP ld	TP/NGSI-LD/CI/Prov/EA/013_03	
Test objective	Check that one cannot delete an attribute from an entity with invalid/missing ids	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.5	13
Config Id	CF_01	
PICS Selection	PICS_AttDel	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	v ¢(optity) with
illitial collutions	an id set to \${entityId}}	y φ{entity} with
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/013_03_01	
Name	013_03_01 Delete an attribute when the Entity Id is not known to the system	
Parent Release	v1.3.1	
Description	Check that one cannot delete an attribute from an entity with invalid/missing id	le
Expected behaviour	Test events	Direction
Expected Bellaviour	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}?\${params_as_string}' method	OOT CONCIL
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${not_found_entity_id}' and Query Parameter: attributeld set to 'speed'	
	and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter:	
	deleteAll set to 'false' }	
	then { the SUT sends a valid Response for the operation: Delete Entity	SUT -> Client
	Attributes with Response Status Code set to 404 }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/013_03_02	
Name	013_03_02 Delete an attribute when the Entity does not contain the target attr	ibute id
Parent Release	v1.3.1	
Description	Check that one cannot delete an attribute from an entity with invalid/missing id	ls
Expected behaviour	Test events	Direction
_	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to 'Chalid antity id)' and Ouany Daramatan attributald act to 'not Found' and	
	to '\${valid_entity_id}' and Query Parameter: attributeId set to 'notFound' and	
	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter:	
	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' }	
	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity	SUT -> Client
	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 }	SUT -> Client
TP Permutation id	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/013_03_03	
TP Permutation id	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/013_03_03 013_03_03 Delete an attribute when the Entity does not contain the target attr	
Name	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/013_03_03 013_03_03 Delete an attribute when the Entity does not contain the target attr same datasetId	
Name Parent Release	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/013_03_03 013_03_03 Delete an attribute when the Entity does not contain the target attr same datasetId v1.3.1	ibute with
Name Parent Release Description	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/013_03_03 013_03_03 Delete an attribute when the Entity does not contain the target attr same datasetId v1.3.1 Check that one cannot delete an attribute from an entity with invalid/missing id	ibute with
Name Parent Release	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/013_03_03 013_03_03 Delete an attribute when the Entity does not contain the target attr same datasetId v1.3.1 Check that one cannot delete an attribute from an entity with invalid/missing id Test events	ibute with
Name Parent Release Description	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/013_03_03 013_03_03 Delete an attribute when the Entity does not contain the target attr same datasetId v1.3.1 Check that one cannot delete an attribute from an entity with invalid/missing id Test events when { the SUT receives a Request from the client containing: URL set to	ibute with
Name Parent Release Description	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/013_03_03 013_03_03 Delete an attribute when the Entity does not contain the target attr same datasetId v1.3.1 Check that one cannot delete an attribute from an entity with invalid/missing id Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	ibute with
Name Parent Release Description	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/013_03_03 013_03_03 Delete an attribute when the Entity does not contain the target attr same datasetId v1.3.1 Check that one cannot delete an attribute from an entity with invalid/missing id Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set	ibute with
Name Parent Release Description	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/013_03_03 013_03_03 Delete an attribute when the Entity does not contain the target attr same datasetId v1.3.1 Check that one cannot delete an attribute from an entity with invalid/missing id Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: attributeId set to 'speed' and	ibute with
Name Parent Release Description	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/013_03_03 013_03_03 Delete an attribute when the Entity does not contain the target attr same datasetId v1.3.1 Check that one cannot delete an attribute from an entity with invalid/missing id Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter:	ibute with
Name Parent Release Description	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/013_03_03 013_03_03 Delete an attribute when the Entity does not contain the target attr same datasetId v1.3.1 Check that one cannot delete an attribute from an entity with invalid/missing id Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' }	ibute with S Direction SUT <- Client
Name Parent Release Description	Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to 'false' } then { the SUT sends a valid Response for the operation: Delete Entity Attributes with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/EA/013_03_03 013_03_03 Delete an attribute when the Entity does not contain the target attr same datasetId v1.3.1 Check that one cannot delete an attribute from an entity with invalid/missing id Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${valid_entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter:	ibute with

TP Id	TD/NCSLLD/CI/Droy/FA/042_04	
Test objective	TP/NGSI-LD/CI/Prov/EA/013_01 Check that one can delete an attribute from an entity	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.5	
Config Id	CF 01	
PICS Selection	PICS_AttDel	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	v \${entity} with
	an id set to \${entityId} }	, , ,
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/013_01_01	
Name	013_01_01 Delete an attribute with the default instance	
Parent Release	v1.3.1	
Description	Check that one can delete an attribute from an entity Test events	Direction
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client
	//ngsi-ld/v1/entities/{entityld}/attrs/{attributeId}?\${params_as_string}' method	SOT <- CHEFT
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query	
	Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set	
	to '\${deleteAll}' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Delete Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Retrieve Entity by Id	
	with Check Updated Entity and Query Parameter: 'updated_resource' set to	
	'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to	
	'ignored_attributes' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/013_01_02	
Name	013_01_02 Delete an attribute with the datasetId	
Parent Release	v1.3.1	
Description	Check that one can delete an attribute from an entity	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityld}/attrs/{attributeId}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query	
	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set	
	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to	
	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-	
	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity	SUT -> Client
	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id	SUT -> Client
	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to	SUT -> Client
	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to	SUT -> Client
	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to	SUT -> Client
TP Permutation id	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' }	SUT -> Client
TP Permutation id	to '\${entity_id}' and Query Parameter: attributeld set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03	SUT -> Client
Name	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances	SUT -> Client
Name Parent Release	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances	SUT -> Client
Name	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances	SUT -> Client Direction
Name Parent Release Description	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances v1.3.1 Check that one can delete an attribute from an entity Test events when { the SUT receives a Request from the client containing: URL set to	
Name Parent Release Description	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances v1.3.1 Check that one can delete an attribute from an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	Direction
Name Parent Release Description	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances v1.3.1 Check that one can delete an attribute from an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set	Direction
Name Parent Release Description	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances v1.3.1 Check that one can delete an attribute from an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query	Direction
Name Parent Release Description	to '\${entity_id}' and Query Parameter: attributeld set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances v1.3.1 Check that one can delete an attribute from an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: deleteAll set	Direction
Name Parent Release Description	to '\${entity_id}' and Query Parameter: attributeld set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances v1.3.1 Check that one can delete an attribute from an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}??\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to	Direction
Name Parent Release Description	to '\${entity_id}' and Query Parameter: attributeld set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances v1.3.1 Check that one can delete an attribute from an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-	Direction
Name Parent Release Description	to '\${entity_id}' and Query Parameter: attributeld set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances v1.3.1 Check that one can delete an attribute from an entity Test events when { the SUT receives a Request from the client containing: URL set to 'ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite-compound.jsonId' }	Direction
Name Parent Release Description	to '\${entity_id}' and Query Parameter: attributeld set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances v1.3.1 Check that one can delete an attribute from an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-	Direction SUT <- Client
Name Parent Release Description	to '\${entity_id}' and Query Parameter: attributeld set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances v1.3.1 Check that one can delete an attribute from an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeld}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeld set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to	Direction SUT <- Client
Name Parent Release Description	to '\${entity_id}' and Query Parameter: attributeId set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances v1.3.1 Check that one can delete an attribute from an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}??\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${datasetId}' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'response_body' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to	Direction SUT <- Client
Name Parent Release Description	to '\${entity_id}' and Query Parameter: attributeld set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to 'entity_expectation_payload' and Query Parameter: 'response_body' set to 'response2.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/EA/013_01_03 013_01_03 Delete all target attribute instances v1.3.1 Check that one can delete an attribute from an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeld}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeld set to 'speed' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteAll}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Retrieve Entity by Id with Check Updated Entity and Query Parameter: 'updated_resource' set to	Direction SUT <- Client

TP Id	TP/NGSI-LD/CI/Prov/EA/013_05	
Test objective	Check that one can delete an observationSpace geospatial Property from an e	entity
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.7 and 5.6.5	-
Config Id	CF_01	
PICS Selection	PICS_AttDel	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit an id set to \${entityId} }	y \${entity} with
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/EA/013_05	
Name	013_05 Delete an observationSpace geospatial Property from an entity	
Parent Release	v1.3.1	
Description	Check that one can delete an observationSpace geospatial Property from an e	entity
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query	
	Parameter: id set to '\${entity_id}' and Query Parameter: Link set to	
	'<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" }	CLIT . Client
	then { the SUT sends a valid Response for the operations: Delete Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Delete Entity Attributes	
	with Check Updated Entity and Query Parameter: 'ignored_keys' set to '\${None}' }	

4.4.1.3 BatchEntities

4.4.1.3.1 CreateBatchOfEntities

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TP Id	TP/NGSI-LD/CI/Prov/BE/003_08	
Test objective	Check that an HTTP error response of type BadRequestData is raised if the C	
	header is "application/ld+json" and the request payload body does not contain	a @context
	term	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_01	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_08_01	
Name	003_08_01 Create a batch of one entity not containing a JSON-LD @context v	with a JSON-
	LD content type	
Parent Release	v1.3.1	
Description	Check that an HTTP error response of type BadRequestData is raised if the C	
	header is "application/ld+json" and the request payload body does not contain	a @context
	term	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload set to a list of	
	entities to be created }	
	then { the SUT sends a valid Response for the operations: Batch Create	SUT -> Client
	Entities with Response Status Code set to 207 and Batch Create Entities	
	with Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/BadRequestData' and Batch Create Entities with Response body	
	containing 'title' element }	

TP Id	TP/NGSI-LD/CI/Prov/BE/003_10	
Test objective	Check that one can create a batch of entities where two have the same id	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 5.5.11 and 5.6.7	
Config Id	CF_01	
PICS Selection	PICS_SAME_ENTITY_IN_ARRAY and PICS_BatEntCre	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_10_01	
Name	003_10_01 Create a batch of three valid entities where two have the same id	
Parent Release	v1.5.1	
Description	Check that one can create a batch of entities where two have the same id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request	
	Header['Content-Type'] set to " and payload set to a list of entities to be	
	created }	
	then { the SUT sends a valid Response for the operations: Batch Create	SUT -> Client
	Entities with Response Status Code set to 207 and Batch Create Entities	
	with Response body containing batch operation result set to	
	'\${expected_batch_operation_result}' }	

TP Id	TP/NGSI-LD/CI/Prov/BE/003_09	
Test objective	Check that an HTTP error response of type BadRequestData is raised if the C	ontent-Type
	header is "application/ld+json" and a JSON-LD Link header is present in the in	coming HTTP
	request	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_01	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_09_01	
Name	003_09_01 Create a batch of one entity with a Link header and a JSON-LD co	ntent type
Parent Release	v1.3.1	
Description	Check that an HTTP error response of type BadRequestData is raised if the C	ontent-Type
	header is "application/ld+json" and a JSON-LD Link header is present in the in	coming HTTP
	request	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/Id+json' and payload set to a list of	
	entities to be created }	
	then { the SUT sends a valid Response for the operations: Batch Create	SUT -> Client
	Entities with Response Status Code set to 400 and Batch Create Entities	
	with Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/BadRequestData' and Batch Create Entities with Response body	
	containing 'title' element }	

TP ld	TP/NGSI-LD/CI/Prov/BE/003_03
Test objective	Check that one cannot create a batch of entities with an invalid request
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.7
Config Id	CF_01
PICS Selection	PICS_BatEntCre
Initial conditions	with { the SUT containing an initial state }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_03_01
Name	003_03_01 InvalidJson
Parent Release	v1.3.1
Description	Check that one cannot create a batch of entities with an invalid request

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Batch Entity	
	Delete Request with operation set to 'create', Content-Type set to	
	'application/ld+json', and body set to 'batch/invalid-json.jsonId }	
	then { the SUT sends a valid Response for the operations: Batch Request	SUT -> Client
	Entities From File with Response Status Code set to 400 and Batch Request	
	Entities From File with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/InvalidRequest' and Batch Request Entities	
	From File with Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_03_02	
Name	003_03_02 EmptyJson	
Parent Release	v1.3.1	
Description	Check that one cannot create a batch of entities with an invalid request	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Batch Entity	
	Delete Request with operation set to 'create', Content-Type set to	
	'application/ld+json', and body set to 'batch/empty.jsonId }	
	then { the SUT sends a valid Response for the operations: Batch Request	SUT -> Client
	Entities From File with Response Status Code set to 400 and Batch Request	
	Entities From File with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Batch Request	
	Entities From File with Response body containing 'title' element }	

TP Id	TP/NGSI-LD/CI/Prov/BE/003_01	
Test objective	Check that one can create a batch of entities	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.7	
Config Id	CF_01	
PICS Selection	PICS_BatEntCre	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_01_01	
Name	003_01_01 MinimalEntity	
Parent Release	v1.3.1	
Description	Check that one can create a batch of entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request	
	Header['Content-Type'] set to " and payload set to a list of entities to be	
	created }	
	then { the SUT sends a valid Response for the operations: Batch Create	SUT -> Client
	Entities with Response Status Code set to 201 and Batch Create Entities	
	with Response Body set to an array of created entities ids and Query	
	Entities with Check Created Resource Set To and Query Parameter:	
	'expected_resources' set to 'entities_to_be_created' and Query Parameter:	
	'response_body' set to 'response1.json()' and Query Parameter:	
TD Downstation id	'ignored_keys' set to '\${None}' }	
TP Permutation id Name	TP/NGSI-LD/CI/Prov/BE/003_01_02	
Parent Release	003_01_02 EntityWithSimpleProperties v1.3.1	
Description	Check that one can create a batch of entities	Direction
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request	SUT <- Client
	Header['Content-Type'] set to " and payload set to a list of entities to be	
	created }	
	then { the SUT sends a valid Response for the operations: Batch Create	SUT -> Client
	Entities with Response Status Code set to 201 and Batch Create Entities	301 -> Client
	with Response Body set to an array of created entities ids and Query	
	Entities with Check Created Resource Set To and Query Parameter:	
	expected_resources' set to 'entities_to_be_created' and Query Parameter:	
	'response_body' set to 'response1.json()' and Query Parameter:	
	'ignored_keys' set to '\${None}' }	
	rightered_itely det to will tend j	

TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_01_03	
Name	003_01_03 EntityWithSimpleRelationships	
Parent Release	v1.3.1	
Description	Check that one can create a batch of entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to " and payload set to a list of entities to be created }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Create Entities with Response Status Code set to 201 and Batch Create Entities with Response Body set to an array of created entities ids and Query Entities with Check Created Resource Set To and Query Parameter: 'expected_resources' set to 'entities_to_be_created' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_01_04	
Name	003_01_04 EntityWithRelationshipsProperties	
Parent Release	v1.3.1	
Description	Check that one can create a batch of entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to " and payload set to a list of entities to be created }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Create Entities with Response Status Code set to 201 and Batch Create Entities with Response Body set to an array of created entities ids and Query Entities with Check Created Resource Set To and Query Parameter: 'expected_resources' set to 'entities_to_be_created' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Prov/BE/003_05		
Test objective	Check that the default @context is used if the Content-Type header is "applica	tion/json" and	
	the Link header does not contain a JSON-LD @context		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5		
Config Id	CF_01		
PICS Selection	PICS_HTTP_CONTEXT_RESOLV		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_05_01		
Name	003_05_01 Create a batch of one entity using the default context with JSON c	ontent type	
Parent Release	v1.3.1		
Description	Check that the default @context is used if the Content-Type header is "application/json" and		
	the Link header does not contain a JSON-LD @context and retrieve the entity without		
	context		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
		SOT <- CHELL	
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request	SOT <- CITETIL	
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload set to a list of	SOT <- Client	
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload set to a list of entities to be created }		
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload set to a list of entities to be created } then { the SUT sends a valid Response for the operations: Batch Create	SUT -> Client	
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload set to a list of entities to be created } then { the SUT sends a valid Response for the operations: Batch Create Entities with Response Status Code set to 201 and Retrieve Entity by Id with		
	'/ngsi-Id/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload set to a list of entities to be created } then { the SUT sends a valid Response for the operations: Batch Create Entities with Response Status Code set to 201 and Retrieve Entity by Id with Check Response Body containing an Attribute set to and Query Parameter:		
	'/ngsi-Id/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload set to a list of entities to be created } then { the SUT sends a valid Response for the operations: Batch Create Entities with Response Status Code set to 201 and Retrieve Entity by Id with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'almostFull' and Query Parameter:		
	'/ngsi-Id/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload set to a list of entities to be created } then { the SUT sends a valid Response for the operations: Batch Create Entities with Response Status Code set to 201 and Retrieve Entity by Id with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'almostFull' and Query Parameter: response_body set to 'response1.json()' }		
TP Permutation id	'/ngsi-Id/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload set to a list of entities to be created } then { the SUT sends a valid Response for the operations: Batch Create Entities with Response Status Code set to 201 and Retrieve Entity by Id with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'almostFull' and Query Parameter: response_body set to 'response1.json()' } TP/NGSI-LD/CI/Prov/BE/003_05_02	SUT -> Client	
Name	'/ngsi-Id/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload set to a list of entities to be created } then { the SUT sends a valid Response for the operations: Batch Create Entities with Response Status Code set to 201 and Retrieve Entity by Id with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'almostFull' and Query Parameter: response_body set to 'response1.json()' } TP/NGSI-LD/CI/Prov/BE/003_05_02 003_05_02 Create a batch of one entity using the default context with JSON c	SUT -> Client	
Name Parent Release	'/ngsi-Id/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload set to a list of entities to be created } then { the SUT sends a valid Response for the operations: Batch Create Entities with Response Status Code set to 201 and Retrieve Entity by Id with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'almostFull' and Query Parameter: response_body set to 'response1.json()' } TP/NGSI-LD/CI/Prov/BE/003_05_02 003_05_02 Create a batch of one entity using the default context with JSON c v1.3.1	SUT -> Client ontent type	
Name	'/ngsi-Id/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload set to a list of entities to be created } then { the SUT sends a valid Response for the operations: Batch Create Entities with Response Status Code set to 201 and Retrieve Entity by Id with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'almostFull' and Query Parameter: response_body set to 'response1.json()' } TP/NGSI-LD/CI/Prov/BE/003_05_02 003_05_02 Create a batch of one entity using the default context with JSON c	SUT -> Client ontent type ation/json" and	

Expected behaviour	Test events	Direction
	1 - (SUT <- Client
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/json' and payload set to a list of	
	entities to be created }	
	then { the SUT sends a valid Response for the operations: Batch Create	SUT -> Client
	Entities with Response Status Code set to 201 and Retrieve Entity by Id with	
	Check Response Body containing an Attribute set to and Query Parameter:	
	expected_attribute_name set to 'ngsi-ld:default-context/almostFull' and	
	Query Parameter: response_body set to 'response1.json()' }	

TP Id	TP/NGSI-LD/CI/Prov/BE/003_07	
Test objective	Check that the @context is obtained from the request payload body itself if the	Content-
	Type header is "application/ld+json"	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_01	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_07_01	
Name	003_07_01 Create a batch of one entity using a JSON-LD @context obtained	from the
	request payload	
Parent Release	v1.3.1	
Description	Check that the @context is obtained from the request payload body itself if the	
	Type header is "application/ld+json" and the response attribute should be com	pacted as one
	used the same context as provided when creating the entity	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload set to a list of	
	entities to be created }	01.17
	then { the SUT sends a valid Response for the operations: Batch Create	SUT -> Client
	Entities with Response Status Code set to 201 and Retrieve Entity by Id with Check Response Body containing an Attribute set to and Query Parameter:	
	expected_attribute_name set to 'almostFull' and Query Parameter:	
	response_body set to 'response1.json()' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_07_02	
Name	003_07_02 Create a batch of one entity using a JSON-LD @context obtained	from the
Name	request payload	nom me
Parent Release	v1.3.1	
Description	Check that the @context is obtained from the request payload body itself if the	Content-
Description	Type header is "application/ld+json" and response attribute should not be com	
	did not provide a context containing this term	pacica as one
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/ld+json' and payload set to a list of	
	entities to be created }	
	then { the SUT sends a valid Response for the operations: Batch Create	SUT -> Client
	Entities with Response Status Code set to 201 and Retrieve Entity by Id with	
	Check Response Body containing an Attribute set to and Query Parameter:	
	expected_attribute_name set to 'https://ngsi-ld-test-suite/context#almostFull'	
	and Query Parameter: response_body set to 'response1.json()' }	

TP Id	TP/NGSI-LD/CI/Prov/BE/003_02	
Test objective	Check that one can create a batch of entities where some will succeed and others will fail	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.7	
Config Id	CF_01	
PICS Selection	PICS_BatEntCre	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_02_01	
Name	003_02_01 Create a batch of two valid entities and one invalid entity	
Parent Release	v1.3.1	
Description	Check that one can create a batch of two valid entities and one invalid entity	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to " and payload set to a list of entities to be created }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Create Entities with Response Status Code set to 207 and Batch Create Entities with Response Status Code set to 207 and Batch Create Entities with Response body containing batch operation result set to '\${expected_batch_operation_result}' and Query Entities with Check Created Resource Set To and Query Parameter: 'ignored_keys' set to '\${None}' }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Prov/BE/003 06		
Test objective	Check that an HTTP error response of type BadRequestData is raised if the C	ontent-Type	
rest objective	header is "application/json" and the request payload body (as JSON) contains		
	term	a @context	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5		
	CF_01		
Config Id PICS Selection			
	PICS_HTTP_CONTEXT_RESOLV		
Initial conditions	with { the SUT containing an initial state }		
TD Downstation id	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_06_01	- 1001	
Name	003_06_01 Create a batch of one entity containing a JSON-LD @context with	a JSON	
Parent Release	v1.3.1		
Description	Check that an HTTP error response of type BadRequestData is raised if the Cheader is "application/json" and the request payload body (as JSON) contains		
		a @context	
Expected behaviour	Test events	Direction	
Expected behaviour	1000000		
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-Id/v1/entityOperations/create' method set to 'POST' Request		
	Header['Content-Type'] set to 'application/json' and payload set to a list of		
	entities to be created }	OUT Officer	
	then { the SUT sends a valid Response for the operations: Batch Create	SUT -> Client	
	Entities with Response Status Code set to 207 and Batch Create Entities		
	with Response Body containing the type 'https://uri.etsi.org/ngsi-		
	Id/errors/BadRequestData' and Batch Create Entities with Response body		
	containing 'title' element }	I	

TP Id	TP/NGSI-LD/CI/Prov/BE/003_04	
Test objective	Check that the @context is obtained from a Link Header if the Content-Type h	eader is
-	"application/json"	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_01	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_04_01	
Name	003_04_01 Create a batch of one entity using a provided Link header with JSC	ON content
	type and retrieve the entity with context detail	
Parent Release	v1.3.1	
Description	Check that the @context is obtained from a Link Header if the Content-Type h	eader is
	"application/json"	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request	
	Header['Content-Type'] set to 'application/json' and payload set to a list of	
	entities to be created }	
	then { the SUT sends a valid Response for the operations: Batch Create	SUT -> Client
	Entities with Response Status Code set to 201 and Retrieve Entity by Id with	
	Check Response Body containing an Attribute set to and Query Parameter:	
	expected_attribute_name set to 'almostFull' and Query Parameter:	
	response_body set to 'response1.json()' }	

TP Permutation id	TP/NGSI-LD/CI/Prov/BE/003_04_02	
Name	003_04_02 Create a batch of one entity using a provided Link header with JS0 type and retrieve the entity without context detail	ON content
Parent Release	v1.3.1	
Description	Check that the @context is obtained from a Link Header if the Content-Type h "application/json"	eader is
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/create' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload set to a list of entities to be created }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Create Entities with Response Status Code set to 201 and Retrieve Entity by Id with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'https://ngsi-Id-test-suite/context#almostFull' and Query Parameter: response_body set to 'response1.json()' }	SUT -> Client

4.4.1.3.2 MergeBatchOfEntities

TP Id	TP/NGSI-LD/CI/Prov/BE/057_01	
Test objective	Check that you can merge a batch of entities	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.17	
Config Id	CF_01	
	PICS_EntMer	
Initial conditions		
initial conditions	with { the SUT being in the "initial state" and and containing a list of entities } Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/057_01_01	
	057_01_01 MergeAnEmptyEntity	
Parent Release	v1.6.1	
Description		
Expected behaviour	Check that you can merge a batch of entities Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/merge' method set to 'POST' Request batch merge operation over entity from entities_to_be_merged '@{entities_to_be_merged}' with Content-Type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Batch Merge	SUT <- Client
	Entities with Response Status Code set to 204 and Query Entities with Response body containing a list containing entity elements with different types and Query Parameter: filename set to 'expectation_filename' and Query Parameter: entities_representation_ids set to 'entities_ids_to_be_merged' and Query Parameter: response_body set to 'response1.json()' and Query Parameter: ignore_core_context_version set to 'True' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/057_01_02	
Name	057_01_02 MergeSimpleProperties	
Parent Release	v1.6.1	
Description	Check that you can merge a batch of entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/merge' method set to 'POST' Request batch merge operation over entity from entities_to_be_merged '@{entities_to_be_merged}' with Content-Type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Merge Entities with Response Status Code set to 204 and Query Entities with Response body containing a list containing entity elements with different types and Query Parameter: filename set to 'expectation_filename' and Query Parameter: entities_representation_ids set to 'entities_ids_to_be_merged' and Query Parameter: response_body set to	SUT -> Client
	'response1.json()' and Query Parameter: ignore_core_context_version set to 'True' }	
TP Permutation id	'True' }	
TP Permutation id Name	'True' } TP/NGSI-LD/CI/Prov/BE/057_01_03	
1	'True' }	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/merge' method set to 'POST' Request batch	
	merge operation over entity from entities_to_be_merged	
	'@{entities_to_be_merged}' with Content-Type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Batch Merge	SUT -> Client
	Entities with Response Status Code set to 204 and Query Entities with	
	Response body containing a list containing entity elements with different	
	types and Query Parameter: filename set to 'expectation_filename' and Query Parameter: entities_representation_ids set to	
	'entities_ids_to_be_merged' and Query Parameter: response_body set to	
	'response1.json()' and Query Parameter: ignore_core_context_version set to	
	True' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/057_01_04	
Name	057_01_04 MergePropertyWithPartialData	
Parent Release	v1.6.1	
Description	Check that you can merge a batch of entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/merge' method set to 'POST' Request batch	
	merge operation over entity from entities_to_be_merged	
	'@{entities_to_be_merged}' with Content-Type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Batch Merge	SUT -> Client
	Entities with Response Status Code set to 204 and Query Entities with	
	Response body containing a list containing entity elements with different	
	types and Query Parameter: filename set to 'expectation_filename' and Query Parameter: entities_representation_ids set to	
	'entities_ids_to_be_merged' and Query Parameter: response_body set to	
	'response1.json()' and Query Parameter: ignore_core_context_version set to	
	True' }	

<u> </u>	
TP/NGSI-LD/CI/Prov/BE/057_03	
Check that you cannot merge a batch of entities with an invalid request	
ETSI GS CIM 009 V1.6.1 [1], clause 5.6.17	
CF_01	
PICS_EntMer	
with { the SUT containing an initial state }	
Permutations	
TP/NGSI-LD/CI/Prov/BE/057_03_01	
057_03_01 InvalidJson	
v1.6.1	
Check that you cannot merge a batch of entities with an invalid request	
Test events	Direction
when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entityOperations/merge' method set to 'POST' Batch Entity Delete Request with operation set to 'merge', Content-Type set to 'application/Id+json', and body set to '\${filename} } then { the SUT sends a valid Response for the operations: Batch Request Entities From File with Response Status Code set to \${expected_status_code} and Batch Request Entities From File with Response Body containing the type 'type=\${problem_type}' and Batch Request Entities From File with Response Body containing 'title' element and Batch Request Entities From File with Response Body containing the type 'type=\${problem_type}' and Batch Request Entities From File with Response Body containing 'title' element }	SUT <- Client SUT -> Client
TP/NGSI-LD/CI/Prov/BE/057_03_02	
057_03_02 InvalidJsonLd	
v1.6.1	
	Check that you cannot merge a batch of entities with an invalid request ETSI GS CIM 009 V1.6.1 [1], clause 5.6.17 CF_01 PICS_EntMer with { the SUT containing an initial state } Permutations TP/NGSI-LD/CI/Prov/BE/057_03_01 057_03_01 InvalidJson v1.6.1 Check that you cannot merge a batch of entities with an invalid request Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entityOperations/merge' method set to 'POST' Batch Entity Delete Request with operation set to 'merge', Content-Type set to 'application/Id+json', and body set to '\${filename} } then { the SUT sends a valid Response for the operations: Batch Request Entities From File with Response Status Code set to \${expected_status_code} and Batch Request Entities From File with Response Body containing the type 'type=\${problem_type}' and Batch Request Entities From File with Response Body containing the type 'type=\${problem_type}' and Batch Request Entities From File with Response Body containing the type 'type=\${problem_type}' and Batch Request Entities From File with Response Body containing the type 'type=\${problem_type}' and Batch Request Entities From File with Response Body containing 'title' element } TP/NGSI-LD/CI/Prov/BE/057_03_02 057_03_02 InvalidJsonLd

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/merge' method set to 'POST' Batch Entity	
	Delete Request with operation set to 'merge', Content-Type set to	
	'application/ld+json', and body set to '\${filename} }	
	then { the SUT sends a valid Response for the operations: Batch Request	SUT -> Client
	Entities From File with Response Status Code set to	
	\${expected_status_code} and Batch Request Entities From File with	
	Response Body containing the type 'type=\${problem_type}' and Batch	
	Request Entities From File with Response body containing 'title' element and	
	Batch Request Entities From File with Response Body containing the type	
	'type=\${problem_type}' and Batch Request Entities From File with Response	
	body containing 'title' element }	

TP ld	TP/NGSI-LD/CI/Prov/BE/057_02	
Test objective	Check that you can merge a batch of entities where some will succeed and oth	ners will fail
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.17	
Config Id	CF_01	
PICS Selection	PICS_EntMer	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/057_02_01	
Name	057_02_01 Merge a batch should succeed for existing entities and fail for non	existing one
	by returning 207 status	
Parent Release	v1.6.1	
Description	Check that you can merge a batch of non-existing and existing entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/merge' method set to 'POST' Request batch	
	merge operation over entity from entities_to_be_merged	
	'@{entities_to_be_merged}' with Content-Type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Batch Merge	SUT -> Client
	Entities with Response Status Code set to 207 and Batch Merge Entities	
	with Response body containing batch operation result set to	
	'\${expected_batch_operation_result}' and Query Entities with Updated	
	Entities set to '\${merged_entities}' valid entities }	

4.4.1.3.3 UpsertBatchOfEntities

TP ld	TP/NGSI-LD/CI/Prov/BE/004 08	
Test objective	Check that you can upsert a batch of existing entities with new types and they replaced	will be
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.16 and 5.6.8	
Config Id	CF_01	
PICS Selection	PICS_MULTITYPING and PICS_BatEntCreUpdUps	
Initial conditions	with { the SUT being in the "initial state" and and containing a list of entities }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_08_01	
Name	004_08_01 EntityWithNewTypes	
Parent Release	v1.3.1	
Description	Check that you can upsert a batch of existing entities with new types	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to 'POST' Request batch upsert operation over entity from filename '@{entities_to_be_upserted}' with update_option set to 'replace' and Content-Type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Batch Upsert	SUT <- Client SUT -> Client
	Entities with Response Status Code set to 204 and Query Entities with Updated Entities set to '\${entities_to_be_upserted}' valid entities }	

TP Id	TP/NGSI-LD/CI/Prov/BE/004_06	
Test objective	Check that one cannot upsert a batch of entities with an invalid request	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.8	
Config Id	CF_01	
PICS Selection	PICS_BatEntCreUpdUps	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_06_01	
Name	004_06_01 InvalidJson	
Parent Release	v1.3.1	
Description	Check that one cannot upsert a batch of entities with an invalid request	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/upsert' method set to 'POST' Batch Entity Delete Request with operation set to 'upsert', Content-Type set to 'application/ld+json', and body set to 'batch/invalid-json.jsonId }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Request Entities From File with Response Status Code set to 400 and Batch Request Entities From File with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/InvalidRequest' and Batch Request Entities From File with Response body containing 'title' element and Batch Request Entities From File with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/InvalidRequest' and Batch Request Entities From File with Response body containing 'title' element }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_06_02	
Name	004 06 02 InvalidJsonLd	
Parent Release	v1.3.1	
Description	Check that one cannot upsert a batch of entities with an invalid request	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/upsert' method set to 'POST' Batch Entity Delete Request with operation set to 'upsert', Content-Type set to 'application/ld+json', and body set to 'batch/invalid-json-ld.jsonld }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Request Entities From File with Response Status Code set to 207 and Batch Request Entities From File with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Batch Request Entities From File with Response body containing 'title' element and Batch Request Entities From File with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Batch Request Entities From File with Response body containing 'title' element }	SUT -> Client

TP ld	TP/NGSI-LD/CI/Prov/BE/004_04		
Test objective	Check that one can upsert a batch of entities with update option		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.8		
Config Id	CF_01		
PICS Selection	PICS_BatEntCreUpdUps		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	y \${entity} with	
	an id set to \${entityId} }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_04_01		
Name	004_04_01 EntityWithSimpleProperties		
Parent Release	v1.3.1		
Description	Check that one can upsert a batch of entities with update option		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to		
	'POST' Request batch upsert operation over entity from filename		
	'@{entities_to_be_upserted}' with update_option set to 'update' and Content-		
	Type set to 'application/ld+json' }		
	then { the SUT sends a valid Response for the operations: Batch Upsert	SUT -> Client	
	Entities with Response Status Code set to 201 and Batch Upsert Entities		
	with Response Body set to an array of created entities ids and Query		
	Entities with Updated Entities set to '\${updated_entities}' valid entities }		

TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_04_02	
Name	004_04_02 EntityWithSimpleRelationships	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of entities with update option	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entityOperations/upsert?options=\${update_option}' method set to 'POST' Request batch upsert operation over entity from filename	SUT <- Client
	'@{entities_to_be_upserted}' with update_option set to 'update' and Content- Type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Batch Upsert Entities with Response Status Code set to 201 and Batch Upsert Entities	SUT -> Client
	with Response Body set to an array of created entities ids and Query Entities with Updated Entities set to '\${updated_entities}' valid entities }	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_04_03	
Name	004_04_03 EntityWithRelationshipsProperties	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of entities with update option	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to 'POST' Request batch upsert operation over entity from filename '@{entities_to_be_upserted}' with update_option set to 'update' and Content-	SUT <- Client
	Type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Batch Upsert Entities with Response Status Code set to 201 and Batch Upsert Entities with Response Body set to an array of created entities ids and Query Entities with Updated Entities set to '\${updated_entities}' valid entities }	SUT -> Client

TP ld	TP/NGSI-LD/CI/Prov/BE/004_02	
Test objective	Check that one can upsert a batch of non-existing and existing entities where	non-existing
	will be created and existing will be replaced	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.8	
Config Id	CF_01	
PICS Selection	PICS_BatEntCreUpdUps	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_02_01	
Name	004_02_01 EntityWithSimpleProperties	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of non-existing and existing entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to 'POST' Request batch upsert operation over entity from filename	
	'@{entities_to_be_upserted}' with update_option set to 'replace' and	
	Content-Type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Batch Upsert	SUT -> Client
	Entities with Response Status Code set to 201 and Batch Upsert Entities	
	with Response Body set to an array of created entities ids and Query	
	Entities with Updated Entities set to '\${entities_to_be_upserted}' valid	
	entities }	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_02_02	
Name	004_02_02 EntityWithSimpleRelationships	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of non-existing and existing entities	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to	
	POST' Request batch upsert operation over entity from filename	
	'@{entities_to_be_upserted}' with update_option set to 'replace' and	
	Content-Type set to 'application/Id+json' }	SUT -> Client
	then { the SUT sends a valid Response for the operations: Batch Upsert Entities with Response Status Code set to 201 and Batch Upsert Entities	SUT -> Client
	with Response Body set to an array of created entities ids and Query	
	Entities with Updated Entities set to '\${entities_to_be_upserted}' valid	
	lentities }	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_02_03	
Name	004_02_03 EntityWithRelationshipsProperties	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of non-existing and existing entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to	
	POST' Request batch upsert operation over entity from filename	
	'@{entities_to_be_upserted}' with update_option set to 'replace' and	
	Content-Type set to 'application/Id+json' }	OUT OF THE
	then { the SUT sends a valid Response for the operations: Batch Upsert	SUT -> Client
	Entities with Response Status Code set to 201 and Batch Upsert Entities with Response Body set to an array of created entities ids and Query	
	Entities with Updated Entities set to '\${entities_to_be_upserted}' valid	
	entities }	

TP ld	TP/NGSI-LD/CI/Prov/BE/004_05	
Test objective	Check that one can upsert a batch of entities where some will succeed and oth	ners will fail
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.8	
Config Id	CF_01	
PICS Selection	PICS_BatEntCreUpdUps	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_05_01	
Name	004_05_01 Upsert a batch of two valid entities and one invalid entity	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of two valid entities and one invalid entity	
Expected behaviour	Test events	Direction
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to 'POST' Request batch upsert operation over entity from filename '@{entities_to_be_upserted}' with update_option set to 'replace' and Content-Type set to 'application/ld+json' }	Direction SUT <- Client

TP ld	TP/NGSI-LD/CI/Prov/BE/004_07
Test objective	Check that one can upsert a batch of entities where two have the same id
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 5.5.11 and 5.6.8
Config Id	CF_01
PICS Selection	PICS_SAME_ENTITY_IN_ARRAY and PICS_BatEntCreUpdUps
Initial conditions	with { the SUT containing an initial state }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_07_01
Name	004_07_01 Upsert a batch of three valid entities where two have the same id
Parent Release	v1.5.1
Description	Check that one can upsert a batch of where two have the same id

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to	
	'POST' Request batch upsert operation over entity from filename	
	'@{entities_to_be_upserted}' with update_option set to 'replace' and	
	Content-Type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Batch Upsert	SUT -> Client
	Entities with Response Status Code set to 201 and Batch Upsert Entities	
	with Response Body set to an array of created entities ids }	

TP Id	TP/NGSI-LD/CI/Prov/BE/004_03	
Test objective	Check that one can upsert a batch of existing entities and they will be replaced	1
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.16, 4.18 and 5.6.8	-
Config Id	CF_01	
PICS Selection	PICS_MULTITYPING and PICS_SCOPES and PICS_BatEntCreUpdUps	
Initial conditions	with { the SUT being in the "initial state" and and containing a list of entities }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_03_01	
Name	004_03_01 EntityWithSimpleProperties	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of existing entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to 'POST' Request batch upsert operation over entity from filename '@{entities_to_be_upserted}' with update_option set to 'replace' and Content-Type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Batch Upsert Entities with Response Status Code set to 204 and Query Entities with	SUT <- Client SUT -> Client
TP Permutation id	Updated Entities set to '\${entities_to_be_upserted}' valid entities } TP/NGSI-LD/CI/Prov/BE/004_03_02	
Name	004_03_02 EntityWithSimpleRelationships	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of existing entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to 'POST' Request batch upsert operation over entity from filename '@{entities_to_be_upserted}' with update_option set to 'replace' and Content-Type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Batch Upsert Entities with Response Status Code set to 204 and Query Entities with Updated Entities set to '\${entities_to_be_upserted}' valid entities }	SUT <- Client SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_03_03	l .
Name	004_03_03 EntityWithRelationshipsProperties	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of existing entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to 'POST' Request batch upsert operation over entity from filename '@{entities_to_be_upserted}' with update_option set to 'replace' and Content-Type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Upsert Entities with Response Status Code set to 204 and Query Entities with Updated Entities set to '\${entities_to_be_upserted}' valid entities }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_03_04	
Name	004_03_04 EntityWithScope	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of existing entities	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to	
	'POST' Request batch upsert operation over entity from filename	
	'@{entities_to_be_upserted}' with update_option set to 'replace' and	
	Content-Type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Batch Upsert	SUT -> Client
	Entities with Response Status Code set to 204 and Query Entities with	
	Updated Entities set to '\${entities_to_be_upserted}' valid entities }	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_03_05	
Name	004_03_05 EntityWithTypes	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of existing entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to	
	'POST' Request batch upsert operation over entity from filename	
	'@{entities_to_be_upserted}' with update_option set to 'replace' and	
	Content-Type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Batch Upsert	SUT -> Client
	Entities with Response Status Code set to 204 and Query Entities with	
	Updated Entities set to '\${entities_to_be_upserted}' valid entities }	

TP Id	TP/NGSI-LD/CI/Prov/BE/004_01	
Test objective	Check that one can upsert a batch of non-existing entities and they will be created	ated
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.8	
Config Id	CF_01	
PICS Selection	PICS_BatEntCreUpdUps	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_01_01	
Name	004_01_01 EntityWithSimpleProperties	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of non-existing entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entityOperations/upsert?options=\${update_option}' method set to 'POST' Request batch upsert operation over entity from filename '@{entities_to_be_upserted}' with update_option set to 'replace' and Content-Type set to 'application/Id+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Upsert Entities with Response Status Code set to 201 and Batch Upsert Entities with Response Body set to an array of created entities ids and Query Entities with Updated Entities set to '\${entities_to_be_upserted}' valid entities }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_01_02	
Name	004_01_02 EntityWithSimpleRelationships	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of non-existing entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to 'POST' Request batch upsert operation over entity from filename '@{entities_to_be_upserted}' with update_option set to 'replace' and Content-Type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Upsert Entities with Response Status Code set to 201 and Batch Upsert Entities with Response Body set to an array of created entities ids and Query Entities with Updated Entities set to '\${entities_to_be_upserted}' valid entities }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/004_01_03	
Name	004_01_03 EntityWithRelationshipsProperties	
Parent Release	v1.3.1	
Description	Check that one can upsert a batch of non-existing entities	
•		

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/upsert?options=\${update_option}' method set to	
	'POST' Request batch upsert operation over entity from filename	
	'@{entities_to_be_upserted}' with update_option set to 'replace' and	
	Content-Type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Batch Upsert	SUT -> Client
	Entities with Response Status Code set to 201 and Batch Upsert Entities	
	with Response Body set to an array of created entities ids and Query	
	Entities with Updated Entities set to '\${entities_to_be_upserted}' valid	
	entities }	

4.4.1.3.4 UpdateBatchOfEntities

TOLL	TRINION LIDIOUR IREINOS AA	
TP ld	TP/NGSI-LD/CI/Prov/BE/005_04	
Test objective	Check that one cannot update a batch of entities with an invalid request	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.9	
Config Id	CF_01	
PICS Selection	PICS_BatEntUpd	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/005_04_01	
Name	005_04_01 InvalidJson	
Parent Release	v1.3.1	
Description	Check that one cannot update a batch of entities with an invalid request	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/update' method set to 'POST' Batch Entity	
	Delete Request with operation set to 'update', Content-Type set to	
	'application/ld+json', and body set to 'batch/invalid-json.jsonId }	
	then { the SUT sends a valid Response for the operations: Batch Request	SUT -> Client
	Entities From File with Response Status Code set to 400 and Batch Request	
	Entities From File with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/InvalidRequest' and Batch Request Entities	
	From File with Response body containing 'title' element and Batch Request	
	Entities From File with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/InvalidRequest' and Batch Request Entities	
	From File with Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/005_04_02	
Name	005_04_02 InvalidJsonLd	
Parent Release	v1.3.1	
Description	Check that one cannot update a batch of entities with an invalid request	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/update' method set to 'POST' Batch Entity	
	Delete Request with operation set to 'update', Content-Type set to	
	'application/ld+json', and body set to 'batch/invalid-json-ld.jsonId }	
	then { the SUT sends a valid Response for the operations: Batch Request	SUT -> Client
	Entities From File with Response Status Code set to 207 and Batch Request	
	Entities From File with Response Body containing the type	
	https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Batch Request	
	Entities From File with Response body containing 'title' element and Batch	
	Request Entities From File with Response Body containing the type	
	https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Batch Request	
	Entities From File with Response body containing 'title' element }	

TP Id	TP/NGSI-LD/CI/Prov/BE/005_02
Test objective	Check that one can update a batch of entities with noOverwrite option
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.9
Config Id	CF_01
PICS Selection	PICS_BatEntUpd
Initial conditions	with { the SUT being in the "initial state" and and containing a list of entities }

	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/005_02_01	
Name	005_02_01 EntityWithExistingAttributes	
Parent Release	v1.3.1	
Description	Check that one can update a batch of entities with noOverwrite option	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/update?\${params_as_string}' method set to	
	'POST' Request batch update operation over entity from filename	
	'@{entities_to_be_updated}' with overwrite_option set to '\${EMPTY}' and	
	Content-Type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Batch Update	SUT -> Client
	Entities with Response Status Code set to 207 and Query Entities with	
	Updated Entities set to '\${updated_entities}' valid entities }	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/005_02_02	
Name	005_02_02 EntityWithNewAttribute	
Parent Release	v1.3.1	
Description	Check that one can update a batch of entities with noOverwrite option	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/update?\${params_as_string}' method set to	
	'POST' Request batch update operation over entity from filename	
	@{entities_to_be_updated}' with overwrite_option set to '\${EMPTY}' and	
	Content-Type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Batch Update	SUT -> Client
	Entities with Response Status Code set to 204 and Query Entities with	
	Updated Entities set to '\${updated_entities}' valid entities }	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/005_02_03	
Name	005_02_03 EntityWithNewAndExistingAttribute	
Parent Release	v1.3.1	
Description	Check that one can update a batch of entities with noOverwrite option	B
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/update?\${params_as_string}' method set to	
	'POST' Request batch update operation over entity from filename	
	'@{entities_to_be_updated}' with overwrite_option set to '\${EMPTY}' and	
	Content-Type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Batch Update	SUT -> Client
	Entities with Response Status Code set to 207 and Query Entities with	SUT -> Client
	Updated Entities set to '\${updated_entities}' valid entities }	

TP Id	TP/NGSI-LD/CI/Prov/BE/005_05	
Test objective	Check that you can update types of entities in a batch update operation	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.16 and 5.6.9	
Config Id	CF_01	
PICS Selection	PICS_MULTITYPING and PICS_BatEntUpd	
Initial conditions	with { the SUT being in the "initial state" and and containing a list of entities }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/005_05_01	
Name	005_05_01 EntityWithNewType	
Parent Release	v1.3.1	
Description	Check that you can update types of entities in a batch update operation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/update?\${params_as_string}' method set to 'POST' Request batch update operation over entity from filename '@{entities_to_be_updated}' with overwrite_option set to '\${EMPTY}' and Content-Type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Update Entities with Response Status Code set to 204 and Query Entities with Updated Entities set to '\${updated_entities}' valid entities }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Prov/BE/005 03	
Test objective	Check that one can update a batch of entities where some will succeed and or	thers will fail
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.9	
Config Id	CF_01	
PICS Selection	PICS_BatEntUpd	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/005_03_01	
Name	005_03_01 Update a batch of non-existing and existing entities	
Parent Release	v1.3.1	
Description	Check that one can update a batch of non-existing and existing entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entityOperations/update?\${params_as_string}' method set to 'POST' Request batch update operation over entity from filename '@{entities_to_be_updated}' with overwrite_option set to '\${EMPTY}' and Content-Type set to 'application/Id+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Update Entities with Response Status Code set to 207 and Batch Update Entities	SUT -> Client

TP Id	TP/NGSI-LD/CI/Prov/BE/005_01	
Test objective	Check that one can update a batch of entities	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.9	
Config Id	CF_01	
PICS Selection	PICS_BatEntUpd	
Initial conditions	with { the SUT being in the "initial state" and and containing a list of entities }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/005_01_01	
Name	005_01_01 EntityWithSimpleProperties	
Parent Release	v1.3.1	
Description	Check that one can update a batch of entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/update?\${params_as_string}' method set to 'POST' Request batch update operation over entity from filename '@{entities_to_be_updated}' with overwrite_option set to '\${EMPTY}' and Content-Type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Update Entities with Response Status Code set to 204 and Query Entities with Updated Entities set to '\${updated_entities}' valid entities }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/005_01_02	
Name	005_01_02 EntityWithSimpleRelationships	
Parent Release	v1.3.1	
Description	Check that one can update a batch of entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/update?\${params_as_string}' method set to 'POST' Request batch update operation over entity from filename '@{entities_to_be_updated}' with overwrite_option set to '\${EMPTY}' and Content-Type set to 'application/ld+json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Update Entities with Response Status Code set to 204 and Query Entities with Updated Entities set to '\${updated_entities}' valid entities }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/005_01_03	
Name	005_01_03 EntityWithRelationshipsProperties	
Parent Release	v1.3.1	
Description	Check that one can update a batch of entities	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/update?\${params_as_string}' method set to	
	'POST' Request batch update operation over entity from filename	
	'@{entities_to_be_updated}' with overwrite_option set to '\${EMPTY}' and	
	Content-Type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Batch Update	SUT -> Client
	Entities with Response Status Code set to 204 and Query Entities with	
	Updated Entities set to '\${updated_entities}' valid entities }	

4.4.1.3.5 DeleteBatchOfEntities

TD L-I	TD/NOOL L D/O/D/DE/000, 00	
TP Id	TP/NGSI-LD/CI/Prov/BE/006_02	
Test objective	Check that one can delete a batch of entities where some will succeed and other	ners will fail
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.10	
Config Id	CF_01	
PICS Selection	PICS_BatEntDel	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit an id set to \${entityId} }	y \${entity} with
Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/006_02_01	
Name	006_02_01 Delete a batch of non-existing and existing entities	
Parent Release	v1.3.1	
Description	Check that one can delete a batch of non-existing and existing entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/delete' method set to 'POST' Batch Delete Entities: and Query Parameter: entities_ids_to_be_deleted set to '@{entities_ids_to_be_deleted}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Delete Entities with Response Status Code set to 207 and Batch Delete Entities with Response Status Code set to 207 and \${response.json()} with Response body containing batch operation result set to '\${response1}' and Query Entities with Response body is empty }	SUT -> Client

TP ld	TP/NGSI-LD/CI/Prov/BE/006_04	
Test objective	Check that one can delete a batch of entities with the same id	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 5.5.11 and 5.6.10	
Config Id	CF_01	
PICS Selection	PICS_SAME_ENTITY_IN_ARRAY and PICS_BatEntDel	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	y \${entity} with
	an id set to \${entityId} }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/006_04_01	
Name	006_04_01 Delete a batch of existing entities with the same id	
Parent Release	v1.5.1	
Description	Check that one can delete a batch entities with the same id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/delete' method set to 'POST' Batch Delete	
	Entities: and Query Parameter: entities_ids_to_be_deleted set to	
	'@{entities_ids_to_be_deleted}' }	
	then { the SUT sends a valid Response for the operations: Batch Delete	SUT -> Client
	Entities with Response Status Code set to 207 and \${response.json()} with	
	Response body containing batch operation result set to '\${response1}' }	

TP Id	TP/NGSI-LD/CI/Prov/BE/006_01
Test objective	Check that one can delete a batch of entities
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.10
Config Id	CF_01
PICS Selection	PICS_BatEntDel
Initial conditions	with { the SUT being in the "initial state" and and containing a list of entities }

	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/006_01_01	
Name	006_01_01 Delete a batch of entities	
Parent Release	v1.3.1	
Description	Check that one can delete a batch of entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entityOperations/delete' method set to 'POST' Batch Delete Entities: and Query Parameter: entities_ids_to_be_deleted set to '@{entities_ids_to_be_deleted}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Batch Delete Entities with Response Status Code set to 204 and Query Entities with Response body is empty }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Prov/BE/006_03	
Test objective	Check that one cannot delete a batch of entities with an invalid request	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.10	
Config Id	CF_01	
PICS Selection	PICS_BatEntDel	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/006_03_01	
Name	006_03_01 InvalidJson	
Parent Release	v1.3.1	
Description	Check that one cannot delete a batch of entities with an invalid request	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entityOperations/delete' method set to 'POST' Batch Entity	SUT <- Client
	Delete Request with operation set to 'delete', Content-Type set to	
	'application/ld+json', and body set to 'batch/invalid-json.jsonId }	
	then { the SUT sends a valid Response for the operations: Batch Request	SUT -> Client
	Entities From File with Response Status Code set to 400 and Batch Request	
	Entities From File with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/InvalidRequest' and Batch Request Entities	
	From File with Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CI/Prov/BE/006_03_02	
Name	006_03_02 EmptyJson	
Parent Release	v1.3.1	
Description	Check that one cannot delete a batch of entities with an invalid request	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entityOperations/delete' method set to 'POST' Batch Entity	SUT <- Client
	Delete Request with operation set to 'delete', Content-Type set to	
	'application/ld+json', and body set to 'batch/empty.jsonId }	
	then { the SUT sends a valid Response for the operations: Batch Request	SUT -> Client
	Entities From File with Response Status Code set to 400 and Batch Request	
	Entities From File with Response Body containing the type	
	'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Batch Request	
	Entities From File with Response body containing 'title' element }	

4.4.1.4 TemporalEntityAttributes

4.4.1.4.1 DeleteAttribute

TP ld	TP/NGSI-LD/CI/Prov/TEA/015_03
Test objective	Check that an error is raised if one deletes a temporal entity with an unknown
-	EntityId/Attribute Id
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.13
Config Id	CF_01
PICS Selection	PICS_AttTemEvoEntDel
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Temporal Entity
	\${entity} with an id set to \${temporal_entity_representation_id} }

	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/015_03_01	
Name	015_03_01 Delete an attribute to a temporal entity if the entity id does not exist	st
Parent Release	v1.3.1	
Description	Check that an error is raised if one deletes a temporal entity with an unknown	
•	EntityId/Attribute Id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi- Id/v1/temporal/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Attribute From Temporal Entity: and Query Parameter: entityId set to '\${unknown_temporal_entity_id}' and Query Parameter: attributeId set to 'fuelLevel' and Query Parameter: content_type set to 'application/json' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/- //raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Delete Attribute From Temporal Entity with Response Status Code set to 404 and Delete Attribute From Temporal Entity with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/ResourceNotFound' and Delete Attribute From Temporal Entity with Response body containing 'title' element }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/015_03_02	
Name	015_03_02 Delete an attribute to a temporal entity if the entity does not contain attribute	in the target
Parent Release	v1.3.1	
Description	Check that an error is raised if one deletes a temporal entity with an unknown EntityId/Attribute Id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi- Id/v1/temporal/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Attribute From Temporal Entity: and Query Parameter: entityId set to '\${valid_temporal_entity_id}' and Query Parameter: attributeId set to 'notExistingAttribute' and Query Parameter: content_type set to 'application/json' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Attribute From Temporal Entity with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/ResourceNotFound' and Delete Attribute From Temporal Entity with Response body containing 'title' element }	SUT <- Client SUT -> Client

TP Id	TP/NGSI-LD/CI/Prov/TEA/015_01	
Test objective	Check that one can delete an attribute of a temporal representation of an entity with simple	
	temporal properties	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.13	
Config Id	CF_01	
PICS Selection	PICS_AttTemEvoEntDel	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Temporal Entity	
	\${entity} with an id set to \${temporal_entity_representation_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/015_01_01	
Name	015_01_01 Delete an attribute from a temporal representation of an entity without	
	deleteAll/datasetId	
Parent Release	v1.3.1	
Description	Check that one can delete an attribute of a temporal representation of an entity with simple	
	temporal properties	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-	
	ld/v1/temporal/entities/{entityId}/attrs/{attributeId}?\${params_as_string}'	
	method set to 'DELETE' Delete Attribute From Temporal Entity: and Query	
	Parameter: entityId set to '\${temporal_entity_representation_id}' and Query	
	Parameter: attributeld set to 'fuelLevel' and Query Parameter: content_type	
	set to 'application/json' and Query Parameter: datasetId set to '\${datasetId}' and Query Parameter: deleteAll set to '\${deleteall}' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Delete Attribute	SUT -> Client
	From Temporal Entity with Response Status Code set to 204 and Retrieve	
	Temporal Representation Of Entity with Check Updated Entity and Query	
	Parameter: 'updated_resource' set to 'temporal_entity_expectation_payload'	
	and Query Parameter: 'response_body' set to 'response1.json()' and Query	
TP Permutation id	Parameter: 'ignored_keys' set to 'ignored_attributes' } TP/NGSI-LD/CI/Prov/TEA/015_01_02	
Name	015_01_02 Delete an attribute from a temporal representation of an entity with	datasetId
Parent Release	v1.3.1	Tualasella
Description	Check that one can delete an attribute of a temporal representation of an entit	v with simple
	temporal properties	y mar ompio
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-	
	ld/v1/temporal/entities/{entityld}/attrs/{attributeld}?\${params_as_string}'	
	method set to 'DELETE' Delete Attribute From Temporal Entity: and Query	
	Parameter: entityId set to '\$\text{temporal_entity_representation_id}' and Query Parameter: attributeId set to 'fuelLevel' and Query Parameter: content_type	
	set to 'application/json' and Query Parameter: datasetId set to '\${datasetId}'	
	and Query Parameter: deleteAll set to '\${deleteall}' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Delete Attribute	SUT -> Client
	From Temporal Entity with Response Status Code set to 204 and Retrieve	
	Temporal Representation Of Entity with Check Updated Entity and Query	
	Parameter: 'updated_resource' set to 'temporal_entity_expectation_payload' and Query Parameter: 'response_body' set to 'response1.json()' and Query	
	Parameter: 'ignored_keys' set to 'ignored_attributes' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/015_01_03	
Name	015_01_03 Delete an attribute from a temporal representation of an entity with	deleteAll
Parent Release	v1.3.1	
Description	Check that one can delete an attribute of a temporal representation of an entit	y with simple
	temporal properties	<u>-</u>
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-	
	ld/v1/temporal/entities/{entityld}/attrs/{attributeld}?\${params_as_string}' method set to 'DELETE' Delete Attribute From Temporal Entity: and Query	
	Parameter: entityId set to '\$\{\temporal_entity_representation_id\}' and Query	
	Parameter: attributeld set to 'fuelLevel' and Query Parameter: content_type	
	set to 'application/json' and Query Parameter: datasetId set to '\${datasetId}'	
	and Query Parameter: deleteAll set to '\${deleteall}' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Delete Attribute	SUT -> Client
	From Temporal Entity with Response Status Code set to 204 and Retrieve	
	Temporal Representation Of Entity with Check Updated Entity and Query Parameter: 'updated_resource' set to 'temporal_entity_expectation_payload'	
	and Query Parameter: 'response_body' set to 'response1.json()' and Query	
	Parameter: 'ignored_keys' set to 'ignored_attributes' }	
	is a same to a light of the lig	I

TP Id	TP/NGSI-LD/CI/Prov/TEA/015_02	
Test objective	Check that an error is raised if one deletes an attribute to temporal entity with	an
	unknown/invalid Entity/Attribute Id	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.13	
Config Id	CF_01	
PICS Selection	PICS_AttTemEvoEntDel	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Tem	poral Entity
	\${entity} with an id set to \${temporal_entity_representation_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/015_02_01	
Name	015_02_01 Delete an attribute to a temporal representation of an entity with a	missing entity
	id	
Parent Release	v1.3.1	
Description	Check that an error is raised if one deletes an attribute to temporal entity with unknown/invalid Entity/Attribute Id	an
Expected behaviour	Test events	Direction
-	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-	
	ld/v1/temporal/entities/{entityId}/attrs/{attributeId}?\${params_as_string}'	
	method set to 'DELETE' Delete Attribute From Temporal Entity: and Query	
	Parameter: entityId set to '\${EMPTY}' and Query Parameter: attributeId set	
	to 'speed' and Query Parameter: content_type set to 'application/json' and	
	Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter:	
	deleteAll set to 'false' and Query Parameter: context set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: Delete Attribute	SUT -> Client
	From Temporal Entity with Response Status Code set to 400 and Delete	
	Attribute From Temporal Entity with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Delete Attribute From	
TD Dammartation id	Temporal Entity with Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/015_02_02	
Name	015_02_02 Delete an attribute to a temporal representation of an entity with a id	n invalid entity
Parent Release	v1.3.1	
Description	Check that an error is raised if one deletes an attribute to temporal entity with unknown/invalid Entity/Attribute Id	an
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-	
	ld/v1/temporal/entities/{entityId}/attrs/{attributeId}?\${params_as_string}'	
	method set to 'DELETE' Delete Attribute From Temporal Entity: and Query	
	Parameter: entityld set to 'invalidId' and Query Parameter: attributeId set to	
	'speed' and Query Parameter: content_type set to 'application/json' and	
	Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter:	
	deleteAll set to 'false' and Query Parameter: context set to '\${EMPTY}' }	OUT O''
	then { the SUT sends a valid Response for the operations: Delete Attribute	SUT -> Client
	From Temporal Entity with Response Status Code set to 400 and Delete	
	Attribute From Temporal Entity with Response Body containing the type	
	"https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Delete Attribute From	
TD Dormutation id	Temporal Entity with Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/015_02_03	n involid
Name	015_02_03 Delete an attribute to a temporal representation of an entity with a	ii iiivalid
Parent Release	v1.3.1	
Description	Check that an error is raised if one deletes an attribute to temporal entity with	an
	unknown/invalid Entity/Attribute Id	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	l'/ngsi-	
	ld/v1/temporal/entities/{entityId}/attrs/{attributeId}?\${params_as_string}'	
	method set to 'DELETE' Delete Attribute From Temporal Entity: and Query	
	Parameter: entityId set to '\${valid_temporal_entity_id}' and Query	
	Parameter: attributeId set to 'invalid(Name' and Query Parameter:	
	content_type set to 'application/json' and Query Parameter: datasetId set to	
	'\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query	
	Parameter: context set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: Delete Attribute	SUT -> Client
	From Temporal Entity with Response Status Code set to 400 and Delete	
	Attribute From Temporal Entity with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Delete Attribute From	
	Temporal Entity with Response body containing 'title' element }	

4.4.1.4.2 DeleteAttributeInstance

TP ld	TP/NGSI-LD/CI/Prov/TEA/017_01	
Test objective	Check that one can delete an attribute instance in temporal representation of a	an entity
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.15	•
Config Id	CF_01	
PICS Selection	PICS_AttInsTemEvoEnt	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/017_01_01	
Name	017_01_01 Delete an attribute instance in temporal representation of an entity	
Parent Release	v1.3.1	
Description	Check that one can delete an attribute instance in temporal representation of a	an entity
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_id}/attrs/speed/{instanceId}' method set to 'DELETE' Delete Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to '\${temporal_entity_representation_id}' and Query Parameter: attributeld set to 'speed' and Query Parameter: instanceId set to '\${instanceId}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Attribute Instance From Temporal Entity with Response Status Code set to 204 and Retrieve Temporal Representation Of Entity with Check Updated Entity and Query Parameter: 'updated_resource' set to 'temporal_entity_expectation_payload' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' }	SUT <- Client

TP ld	TP/NGSI-LD/CI/Prov/TEA/017_03
Test objective	Check that one cannot delete an attribute instance in temporal representation of an entity if
	the EntityId/AttributeId/InstanceId is not right
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.15
Config Id	CF_01
PICS Selection	PICS_AttInsTemEvoEnt
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Temporal Entity
	\${entity} with an id set to \${temporal_entity_representation_id} }
Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/017_03_01
Name	017_03_01 Delete an attribute instance in temporal representation of an entity if the entity
	with given id is not found
Parent Release	v1.3.1
Description	Check that one cannot delete an attribute instance in temporal representation of an entity if
	the EntityId/AttributeId/InstanceId is not found

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-	
	ld/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}'	
	method set to 'DELETE' Delete Attribute Instance from Temporal Entity: and	
	Query Parameter: temporal_entity_id set to '\${unknown_temporal_entity_id}'	
	and Query Parameter: attributeId set to '\${attributeId}' and Query Parameter:	
	instanceld set to '\${instanceld}' and Query Parameter: content_type set to	
	'application/json' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operation: Delete Attribute	SUT -> Client
	Instance From Temporal Entity with Response Status Code set to 404 }	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/017_03_02	
Name	017_03_02 Delete an attribute instance in temporal representation of an entity	if the target
	attribute is not found	
Parent Release	v1.3.1	
Description	Check that one cannot delete an attribute instance in temporal representation	of an entity if
	the EntityId/AttributeId/InstanceId is not found	T D '
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-	
	Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeld}/{instanceld}'	
	method set to 'DELETE' Delete Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to	
	'\$\temporal_entity_representation_id\' and Query Parameter: attributeld set	
	to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and	
	Query Parameter: content_type set to 'application/json' and Query	
	Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operation: Delete Attribute	SUT -> Client
	Instance From Temporal Entity with Response Status Code set to 404 }	00.
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/017_03_03	.1
Name	017_03_03 Delete an attribute instance in temporal representation of an entity	if the target
	attribute instance is not found	3
Parent Release	v1.3.1	
Description	Check that one cannot delete an attribute instance in temporal representation	of an entity if
•	the EntityId/AttributeId/InstanceId is not found	,
Expected behaviour	Test events	Direction
•	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-	
	ld/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}'	
	method set to 'DELETE' Delete Attribute Instance from Temporal Entity: and	
	Query Parameter: temporal_entity_id set to	
	'\$\temporal_entity_representation_id\' and Query Parameter: attributeld set	
	to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and	
	Query Parameter: content_type set to 'application/json' and Query	
	Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	<u> </u>
	then { the SUT sends a valid Response for the operation: Delete Attribute	SUT -> Client
	Instance From Temporal Entity with Response Status Code set to 404 }	

TP ld	TP/NGSI-LD/CI/Prov/TEA/017_02
Test objective	Check that one cannot delete an attribute instance in temporal representation of an entity if
	the EntityId/AttributeId/InstanceId is not right
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.15
Config Id	CF_01
PICS Selection	PICS_AttInsTemEvoEnt
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Temporal Entity
	\${entity} with an id set to \${temporal_entity_representation_id} }

	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/017_02_01	
Name	017_02_01 Delete an attribute instance in temporal representation of an entity	if the entity id
	is not valid	•
Parent Release	v1.3.1	
Description	Check that one cannot delete an attribute instance in temporal representation	of an entity if
-	the EntityId/AttributeId/InstanceId is not right	•
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	l'/ngsi-	
	ld/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeld}/{instanceld}'	
	method set to 'DELETE' Delete Attribute Instance from Temporal Entity: and	
	Query Parameter: temporal_entity_id set to 'invalidId' and Query Parameter:	
	attributeld set to '\${attributeld}' and Query Parameter: instanceld set to	
	\$\finstanceId\}' and Query Parameter: content_type set to 'application/json'	
	and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-	
	test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-	
	compound.jsonld' }	
	then { the SUT sends a valid Response for the operation: Delete Attribute	SUT -> Client
		301 -> Client
TD Dormutotion id	Instance From Temporal Entity with Response Status Code set to 400 }	1
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/017_02_02	if the entire it is
Name	017_02_02 Delete an attribute instance in temporal representation of an entity	if the entity id
	is not present	
Parent Release	v1.3.1	
Description	Check that one cannot delete an attribute instance in temporal representation	of an entity if
	the EntityId/AttributeId/InstanceId is not right	•
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-	
	ld/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeld}/{instanceld}'	
	method set to 'DELETE' Delete Attribute Instance from Temporal Entity: and	
	Query Parameter: temporal_entity_id set to '\${EMPTY}' and Query	
	Parameter: attributeld set to '\${attributeld}' and Query Parameter: instanceld	
	set to '\${instanceId}' and Query Parameter: content_type set to	
	'application/json' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operation: Delete Attribute	SUT -> Client
	Instance From Temporal Entity with Response Status Code set to 400 }	CCT > CHOIR
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/017_02_03	1
Name	017_02_03 Delete an attribute instance in temporal representation of an entity	if the
Name	instance id is not valid	ii tiite
Parent Release		
	v1.3.1	-f
Description	Check that one cannot delete an attribute instance in temporal representation	of an entity if
	the EntityId/AttributeId/InstanceId is not right	T =
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-	
	ld/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeld}/{instanceld}'	
	method set to 'DELETE' Delete Attribute Instance from Temporal Entity: and	
	Query Parameter: temporal_entity_id set to	
	'\${temporal_entity_representation_id}' and Query Parameter: attributeld set	
	to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and	
	Query Parameter: content_type set to 'application/json' and Query	
	Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	<u> </u>
	then { the SUT sends a valid Response for the operation: Delete Attribute	SUT -> Client
	Instance From Temporal Entity with Response Status Code set to 400 }]
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/017_02_04	•
Name	017_02_04 Delete an attribute instance in temporal representation of an entity	if the attribute
	name is not a valid name	and attribute
Parent Release	v1.3.1	
Description	Check that one cannot delete an attribute instance in temporal representation	of an ontity if
Description		or arr critity if
	the EntityId/AttributeId/InstanceId is not right	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-	
	ld/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeld}/{instanceld}'	
	method set to 'DELETE' Delete Attribute Instance from Temporal Entity: and	
	Query Parameter: temporal_entity_id set to	
	'\${temporal_entity_representation_id}' and Query Parameter: attributeld set	
	to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and	
	Query Parameter: content_type set to 'application/json' and Query	
	Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operation: Delete Attribute	SUT -> Client
	Instance From Temporal Entity with Response Status Code set to 400 }	301 -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/017_02_05	1
Name	017_02_05 Delete an attribute instance in temporal representation of an entity	if the attribute
	name is not present	ii iiio aiiibato
Parent Release	v1.3.1	
Description	Check that one cannot delete an attribute instance in temporal representation	of an entity if
	the EntityId/AttributeId/InstanceId is not right	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-	SUT <- Client
	ld/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeld}/{instanceld}'	
	method set to 'DELETE' Delete Attribute Instance from Temporal Entity: and	
	Query Parameter: temporal_entity_id set to	
	'\${temporal_entity_representation_id}' and Query Parameter: attributeId set	
	to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and	
	Query Parameter: content_type set to 'application/json' and Query	
	Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operation: Delete Attribute	SUT -> Client
	Instance From Temporal Entity with Response Status Code set to 400 }	

4.4.1.4.3 AddAttributes

TP Id	TP/NGSI-LD/CI/Prov/TEA/014_03	
Test objective	Check that an error is raised if one adds an attribute to a non-existent entity	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.12	
Config Id	CF_01	
PICS Selection	PICS_TemEvoAttEntIns	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/014_03_01	
Name	014_03_01 Add Attribute To Temporal Entity	
Parent Release	v1.3.1	
Description	Check that an error is raised if one adds an attribute to a non-existent entity	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_id}/attrs' method set to 'POST'	
	Append Attribute to Temporal Entity and Query Parameter: id set to	
	'\${not_found_temporal_entity_representation_id}' and Query Parameter:	
	fragment_filename set to 'vehicle-temporal-representation-fragment.jsonld'	
	and Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operation: Append Attribute	SUT -> Client
	To Temporal Entity with Response Status Code set to 404 }	

TP Id	TP/NGSI-LD/CI/Prov/TEA/014_01
Test objective	Check that one can add a simple temporal attribute to a temporal representation of an entity
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.12
Config Id	CF_01
PICS Selection	PICS_TemEvoAttEntIns
Initial conditions	with { the SUT containing an initial state }

	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/014_01_01	
Name	014_01_01 Add an attribute to a temporal entity with simple temporal properties	es
Parent Release	v1.3.1	
Description	Check that one can add a simple temporal attribute to a temporal representation	on of an entity
Expected behaviour	Test events	Direction
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_id}/attrs' method set to 'POST' Append Attribute to Temporal Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: fragment_filename set to 'vehicle-temporal-representation-fragment.jsonld' and Query Parameter: content_type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Append Attribute	SUT <- Client
	To Temporal Entity with Response Status Code set to 204 and Retrieve Temporal Representation Of Entity with Check Updated Entity and Query Parameter: 'updated_resource' set to 'temporal_entity_expectation_payload' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to 'ignored_attributes' }	

TP Id	TP/NGSI-LD/CI/Prov/TEA/014_04	
Test objective	Check that an error is raised if one adds a temporal entity attribute with empty	/invalid
	content	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.12	
Config Id	CF_01	
PICS Selection	PICS_TemEvoAttEntIns	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Tem	poral Entity
	\${entity} with an id set to \${temporal_entity_representation_id} }	,
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/014_04_01	
Name	014_04_01 Add an attribute to a temporal representation of an entity with invalid content	
Parent Release	v1.3.1	
Description	Check that an error is raised if one adds a temporal entity attribute with empty/invalid	
-	content	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_id}/attrs' method set to 'POST'	
	Append Attribute to Temporal Entity and Query Parameter: id set to	
	'\${temporal_entity_representation_id}' and Query Parameter:	
	fragment_filename set to 'vehicle-temporal-representation-invalid-json-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Append Attribute	SUT -> Client
	To Temporal Entity with Response Status Code set to 400 and Append	
	Attribute To Temporal Entity with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/InvalidRequest' and Append Attribute To	
	Temporal Entity with Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/014_04_02	
Name	014_04_02 Add an attribute to a temporal representation of an entity with emp	oty content
Parent Release	v1.3.1	
Description	Check that an error is raised if one adds a temporal entity attribute with empty	/invalid
	content	I 5: .:
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_id}/attrs' method set to 'POST'	
	Append Attribute to Temporal Entity and Query Parameter: id set to	
	'\${temporal_entity_representation_id}' and Query Parameter:	
	fragment_filename set to 'vehicle-temporal-representation-empty-json-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	SUT -> Client
	then { the SUT sends a valid Response for the operations: Append Attribute	SUI -> Client
	To Temporal Entity with Response Status Code set to 400 and Append	
	Attribute To Temporal Entity with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/InvalidRequest' and Append Attribute To Temporal Entity with Response body containing 'title' element }	

TP ld	TP/NGSI-LD/CI/Prov/TEA/014_02	
Test objective	Check that an error is raised if one adds an attribute to a temporal entity with it	nvalid content
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.12	
Config Id	CF_01	
PICS Selection	PICS_TemEvoAttEntIns	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Tem	poral Entity
	\${entity} with an id set to \${temporal_entity_representation_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/014_02_01	
Name	014_02_01 Add an attribute to a temporal representation of an entity with an empty entity id	
Parent Release	v1.3.1	
Description	Check that an error is raised if one adds a temporal entity attribute with a non-	
	existing/invalid EntityId	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_id}/attrs' method set to 'POST'	
	Append Attribute to Temporal Entity and Query Parameter: id set to	
	'\${EMPTY}' and Query Parameter: fragment_filename set to 'vehicle-	
	temporal-representation-fragment.jsonId' and Query Parameter:	
	content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operation: Append Attribute	SUT -> Client
	To Temporal Entity with Response Status Code set to 400 }	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/014_02_02	
Name	014_02_02 Add an attribute to a temporal representation of an entity with an in	nvalid entity id
Parent Release	v1.3.1	
Description	Check that an error is raised if one adds a temporal entity attribute with a non-	
	existing/invalid EntityId	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_id}/attrs' method set to 'POST'	
	Append Attribute to Temporal Entity and Query Parameter: id set to	
	'thisIsAninvalidId' and Query Parameter: fragment_filename set to 'vehicle-	
	temporal-representation-fragment.jsonld' and Query Parameter:	
	content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operation: Append Attribute	SUT -> Client
	To Temporal Entity with Response Status Code set to 400 }	

4.4.1.4.4 PartialUpdateAttributeInstance

TP ld	TP/NGSI-LD/CI/Prov/TEA/016_01	
Test objective	Check that one can modify an attribute instance in temporal representation of	an entity
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.14	
Config Id	CF_01	
PICS Selection	PICS_AttInsTemEvoEnt	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/016_01_01	
Name	016_01_01 Modify attribute instance in temporal representation of an entity	
Parent Release	v1.3.1	
Description	Check that one can partially update an attribute instance of a temporal represe	entation of an
	entity	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: accept set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Modify Attribute	SUT -> Client
	Instance From Temporal Entity with Response Status Code set to 204 and	
	Retrieve Temporal Representation Of Entity with Check Updated Entity and	
	Query Parameter: 'ignored_keys' set to '\${None}' }	

TP Id	TP/NGSI-LD/CI/Prov/TEA/016_03		
Test objective	Check that one cannot partially modify attribute instance in temporal represent	ation of an	
	entity if the EntityId/AttributeId/InstanceId is not found		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.14		
Config Id	CF_01		
PICS Selection	PICS AttInsTemEvoEnt		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Tem	poral Entity	
	\${entity} with an id set to \${temporal_entity_representation_id} }	,	
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/016_03_01		
Name	016_03_01 Modify attribute instance in temporal representation of an entity if t	he entity with	
	given id is not found		
Parent Release	v1.3.1		
Description	Check that one cannot partially modify attribute instance in temporal represent		
	entity if the EntityId/AttributeId/InstanceId is not found	D :	
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	/ngsi-		
	ld/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and		
	Query Parameter: temporal_entity_id set to '\${unknown_temporal_entity_id}'		
	and Query Parameter: attributeld set to '\${attributeld}' and Query Parameter:		
	instanceId set to '\${instanceId}' and Query Parameter: fragment_filename		
	set to 'vehicle-temporal-modify-attribute-instance-fragment.jsonld' and Query		
	Parameter: content_type set to 'application/json' and Query Parameter:		
	context set to '\${EMPTY}' }		
	then { the SUT sends a valid Response for the operation: Modify Attribute	SUT -> Client	
	Instance From Temporal Entity with Response Status Code set to 404 }		
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/016_03_02		
Name	016_03_02 Modify attribute instance in temporal representation of an entity if t	he target	
	attribute is not found		
Parent Release	v1.3.1		
Description	Check that one cannot partially modify attribute instance in temporal represent	ation of an	
Everated bahaviave	entity if the EntityId/AttributeId/InstanceId is not found	Direction	
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client	
	'/ngsi-	SOT <- CHEIR	
	Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}'		
	method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and		
	Query Parameter: temporal_entity_id set to		
	'\${temporal_entity_representation_id}' and Query Parameter: attributeld set		
	to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and		
	Query Parameter: fragment_filename set to 'vehicle-temporal-modify-		
	lettribute inctance fragment is cold and Query Deremeter; content type set to		
	attribute-instance-fragment.jsonld' and Query Parameter: content_type set to		
	'application/json' and Query Parameter: context set to '\${EMPTY}' }		
	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute	SUT -> Client	
TD Down to the second	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 }	SUT -> Client	
TP Permutation id	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03		
TP Permutation id	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if t		
Name	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if t attribute instance is not found		
Name Parent Release	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if t attribute instance is not found v1.3.1	he target	
Name	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if tattribute instance is not found v1.3.1 Check that one cannot partially modify attribute instance in temporal represent	he target	
Name Parent Release Description	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if tattribute instance is not found v1.3.1 Check that one cannot partially modify attribute instance in temporal represent entity if the EntityId/AttributeId/InstanceId is not found	he target	
Name Parent Release	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if tattribute instance is not found v1.3.1 Check that one cannot partially modify attribute instance in temporal represent entity if the EntityId/AttributeId/InstanceId is not found Test events	he target ation of an Direction	
Name Parent Release Description	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if tattribute instance is not found v1.3.1 Check that one cannot partially modify attribute instance in temporal represent entity if the EntityId/AttributeId/InstanceId is not found Test events when { the SUT receives a Request from the client containing: URL set to	he target	
Name Parent Release Description	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if tattribute instance is not found v1.3.1 Check that one cannot partially modify attribute instance in temporal represent entity if the EntityId/AttributeId/InstanceId is not found Test events	he target ation of an Direction	
Name Parent Release Description	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if tattribute instance is not found v1.3.1 Check that one cannot partially modify attribute instance in temporal represententity if the EntityId/AttributeId/InstanceId is not found Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-	he target ation of an Direction	
Name Parent Release Description	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if tattribute instance is not found v1.3.1 Check that one cannot partially modify attribute instance in temporal represent entity if the EntityId/AttributeId/InstanceId is not found Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to	he target ation of an Direction	
Name Parent Release Description	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if tattribute instance is not found v1.3.1 Check that one cannot partially modify attribute instance in temporal represent entity if the EntityId/AttributeId/InstanceId is not found Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set	he target ation of an Direction	
Name Parent Release Description	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if tattribute instance is not found v1.3.1 Check that one cannot partially modify attribute instance in temporal represent entity if the EntityId/AttributeId/InstanceId is not found Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and	he target ation of an Direction	
Name Parent Release Description	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if tattribute instance is not found v1.3.1 Check that one cannot partially modify attribute instance in temporal represent entity if the EntityId/AttributeId/InstanceId is not found Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and Query Parameter: fragment_filename set to 'vehicle-temporal-modify-	he target ation of an Direction	
Name Parent Release Description	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if tattribute instance is not found v1.3.1 Check that one cannot partially modify attribute instance in temporal represent entity if the EntityId/AttributeId/InstanceId is not found Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and Query Parameter: fragment_filename set to 'vehicle-temporal-modify-attribute-instance-fragment.jsonId' and Query Parameter: content_type set to	he target ation of an Direction	
Name Parent Release Description	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if tattribute instance is not found v1.3.1 Check that one cannot partially modify attribute instance in temporal represent entity if the EntityId/AttributeId/InstanceId is not found Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and Query Parameter: fragment_filename set to 'vehicle-temporal-modify-attribute-instance-fragment.jsonId' and Query Parameter: content_type set to 'application/json' and Query Parameter: context set to '\${EMPTY}' }	he target ation of an Direction SUT <- Client	
Name Parent Release Description	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute Instance From Temporal Entity with Response Status Code set to 404 } TP/NGSI-LD/CI/Prov/TEA/016_03_03 016_03_03 Modify attribute instance in temporal representation of an entity if tattribute instance is not found v1.3.1 Check that one cannot partially modify attribute instance in temporal represent entity if the EntityId/AttributeId/InstanceId is not found Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and Query Parameter: fragment_filename set to 'vehicle-temporal-modify-attribute-instance-fragment.jsonId' and Query Parameter: content_type set to	he target ation of an Direction	

TP ld	TP/NGSI-LD/CI/Prov/TEA/016_02		
Test objective	Check that one cannot modify an attribute instance in temporal representation	of an entity if	
	the EntityId/AttributeId/InstanceId is not right		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.14		
Config Id	CF_01		
PICS Selection	PICS_AttInsTemEvoEnt		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Tem	poral Entity	
	\${entity} with an id set to \${temporal_entity_representation_id} } Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/016_02_01		
Name	016_02_01 Modify attribute instance in temporal representation of an entity if t	he entity id is	
	not valid		
Parent Release	v1.3.1	v1.3.1	
Description	Check that one cannot partially modify attribute instance in temporal represent	ation of an	
Europeted babasiasus	entity if the EntityId/AttributeId/InstanceId is not right	Divention	
Expected behaviour	Test events	Direction SUT <- Client	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-	SUT <- Client	
	Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}'		
	method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and		
	Query Parameter: temporal_entity_id set to 'invalidId' and Query Parameter:		
	attributeld set to '\${attributeld}' and Query Parameter: instanceld set to		
	'\${instanceId}' and Query Parameter: fragment_filename set to 'vehicle-		
	temporal-modify-attribute-instance-fragment.jsonId' and Query Parameter:		
	content_type set to 'application/json' and Query Parameter: context set to		
	'\${EMPTY}' }		
	then { the SUT sends a valid Response for the operation: Modify Attribute	SUT -> Client	
	Instance From Temporal Entity with Response Status Code set to 400 }		
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/016_02_02	harante da la	
Name	016_02_02 Modify attribute instance in temporal representation of an entity if t	ne entity id is	
Parent Release	v1.3.1		
Description	Check that one cannot partially modify attribute instance in temporal represent	ation of an	
2 Goon paron	entity if the EntityId/AttributeId/InstanceId is not right	ation of an	
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-		
	ld/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeld}/{instanceld}'		
	method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and		
	Query Parameter: temporal_entity_id set to '\${EMPTY}' and Query Parameter: attributeld set to '\${attributeld}' and Query Parameter: instanceld		
	set to '\${instanceId}' and Query Parameter: fragment_filename set to		
	'vehicle-temporal-modify-attribute-instance-fragment.jsonld' and Query		
	Parameter: content_type set to 'application/json' and Query Parameter:		
	context set to '\${EMPTY}' }		
	then { the SUT sends a valid Response for the operation: Modify Attribute	SUT -> Client	
	Instance From Temporal Entity with Response Status Code set to 400 }		
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/016_02_03		
Name	016_02_03 Modify attribute instance in temporal representation of an entity if t	ne instance id	
Parent Polosco	is not valid v1.3.1		
Parent Release Description	Check that one cannot partially modify attribute instance in temporal represent	ation of an	
Description	entity if the EntityId/AttributeId/InstanceId is not right	allon or an	
Expected behaviour	formity in the Entity at Attributera/instance and not right	1	
	Test events	Direction	
	Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client	
Exposion bollavious	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-	SUT <- Client	
- postou bondvioui	when { the SUT receives a Request from the client containing: URL set to		
- postou bondvioui	when { the SUT receives a Request from the client containing: URL set to '/ngsi- Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and		
Exposica solidatodi	when { the SUT receives a Request from the client containing: URL set to '/ngsi- ld/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeld}/{instanceld}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to		
Exposica solidatodi	when { the SUT receives a Request from the client containing: URL set to '/ngsi- Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set		
Exposica sondvious	when { the SUT receives a Request from the client containing: URL set to '/ngsi- Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and		
Exposica sonavioui	when { the SUT receives a Request from the client containing: URL set to '/ngsi- Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and Query Parameter: fragment_filename set to 'vehicle-temporal-modify-		
- Apostou Bolidvioui	when { the SUT receives a Request from the client containing: URL set to '/ngsi- Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and Query Parameter: fragment_filename set to 'vehicle-temporal-modify- attribute-instance-fragment.jsonId' and Query Parameter: content_type set to		
	when { the SUT receives a Request from the client containing: URL set to '/ngsi- Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeld}/{instanceld}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to '\${temporal_entity_representation_id}' and Query Parameter: attributeld set to '\${attributeld}' and Query Parameter: instanceld set to '\${instanceld}' and Query Parameter: fragment_filename set to 'vehicle-temporal-modify- attribute-instance-fragment.jsonId' and Query Parameter: content_type set to 'application/json' and Query Parameter: context set to '\${EMPTY}' }	SUT <- Client	
- Apostou Bolidaloui	when { the SUT receives a Request from the client containing: URL set to '/ngsi- Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and Query Parameter: fragment_filename set to 'vehicle-temporal-modify- attribute-instance-fragment.jsonId' and Query Parameter: content_type set to		

TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/016_02_04	
Name	016_02_04 Modify attribute instance in temporal representation of an entity if t	he instance id
	is not present	
Parent Release	v1.3.1	
Description	Check that one cannot partially modify attribute instance in temporal represent	ation of an
	entity if the EntityId/AttributeId/InstanceId is not right	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	l'/ngsi-	
	Id/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeld}/{instanceld}'	
	method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and Query Parameter: temporal_entity_id set to	
	'\${temporal_entity_representation_id}' and Query Parameter: attributeld set	
	to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and	
	Query Parameter: fragment_filename set to 'vehicle-temporal-modify-	
	attribute-instance-fragment.jsonld' and Query Parameter: content_type set to	
	'application/json' and Query Parameter: context set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operation: Modify Attribute	SUT -> Client
	Instance From Temporal Entity with Response Status Code set to 405 }	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/016_02_05	
Name	016_02_05 Modify attribute instance in temporal representation of an entity if t	he attribute
	name is not a valid name	
Parent Release	v1.3.1	
Description	Check that one cannot partially modify attribute instance in temporal represent	ation of an
	entity if the EntityId/AttributeId/InstanceId is not right	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-	
	ld/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeId}/{instanceId}' method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and	
	Query Parameter: temporal_entity_id set to	
	'\${temporal_entity_representation_id}' and Query Parameter: attributeld set	
	to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and	
	Query Parameter: fragment_filename set to 'vehicle-temporal-modify-	
	attribute-instance-fragment.jsonld' and Query Parameter: content_type set to	
	'application/json' and Query Parameter: context set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operation: Modify Attribute	SUT -> Client
	Instance From Temporal Entity with Response Status Code set to 400 }	
TP Permutation id	TP/NGSI-LD/CI/Prov/TEA/016_02_06	
Name	016_02_06 Modify attribute instance in temporal representation of an entity if t	he attribute
Parent Release	name is not present	
Description	v1.3.1 Check that one cannot partially modify attribute instance in temporal represent	ation of an
Description	entity if the EntityId/AttributeId/InstanceId is not right	ation of an
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	l'/ngsi-	
	ld/v1/temporal/entities/{temporal_entity_id}/attrs/{attributeld}/{instanceld}'	
	method set to 'PATCH' Modify Attribute Instance from Temporal Entity: and	
	Query Parameter: temporal_entity_id set to	
	'\${temporal_entity_representation_id}' and Query Parameter: attributeld set	
	to '\${attributeId}' and Query Parameter: instanceId set to '\${instanceId}' and	
	Query Parameter: fragment_filename set to 'vehicle-temporal-modify-	
	attribute-instance-fragment.jsonId' and Query Parameter: content_type set to	
	'application/json' and Query Parameter: context set to '\${EMPTY}' } then { the SUT sends a valid Response for the operation: Modify Attribute	SUT -> Client
	Instance From Temporal Entity with Response Status Code set to 405 }	SUT-> Client
	Instance From Temporal Entity with Nesponse Status Code set to 403 }	l .

4.4.1.5 Entities

4.4.1.5.1 DeleteEntity

TP Id	TP/NGSI-LD/CI/Prov/E/002 03	
Test objective	Check that one cannot delete an entity if the entity id is not known to the syste	m
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.6	
Config Id	CF_01	
PICS Selection	PICS_EntDel	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/E/002_03_01	
Name	002_03_01 Delete an entity with an id not known to the system	
Parent Release	v1.3.1	
Description	Check that one cannot delete an entity if the entity id is not known to the syste	m
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'DELETE' Delete Entity Request with id set to '\${entity_id}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Delete Entity by Id with Response Status Code set to 404 and Delete Entity by Id with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/ResourceNotFound' and Delete Entity by Id with Response body containing 'title' element }	SUT -> Client

TP ld	TP/NGSI-LD/CI/Prov/E/002_01	
Test objective	Check that one can delete an entity by id	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.6	
Config Id	CF_01	
PICS Selection	PICS_EntDel	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	ty \${entity} with
	an id set to \${entityId} }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/E/002_01_01	
Name	002_01_01 Delete an entity	
Parent Release	v1.3.1	
Description	Check that one can delete an entity by id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'DELETE' Delete Entity Request with	
	id set to '\${entity_id}' }	
	then { the SUT sends a valid Response for the operations: Delete Entity by	SUT -> Client
	Id with Response Status Code set to 204 and Retrieve Entity by Id with	
	Response Status Code set to \${response2.status_code} }	

TP ld	TD/MCSLLD/CI/Drov/E/002_02	
	TP/NGSI-LD/CI/Prov/E/002_02	
Test objective	Check that one cannot delete an entity with invalid/missing id	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.6	
Config Id	CF_01	
PICS Selection	PICS_EntDel	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/E/002_02_01	
Name	002_02_01 Delete an entity if the Entity Id is not present	
Parent Release	v1.3.1	
Description	Check that one cannot delete an entity with invalid/missing id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'DELETE' Delete Entity Request with	
	lid set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: Delete Entity by	SUT -> Client
	ld with Response Status Code set to 405 and Delete Entity by Id with	
	Response Body containing the type '\${EMPTY}' and Delete Entity by Id with	
	Response body containing 'title' element }	

TP Permutation id	TP/NGSI-LD/CI/Prov/E/002_02_02	
Name	002_02_02 Delete an entity if the Entity Id is not a valid URI	
Parent Release	v1.3.1	
Description	Check that one cannot delete an entity with invalid/missing id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'DELETE' Delete Entity Request with id set to 'thisisaninvaliduri' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Delete Entity by Id with Response Status Code set to 400 and Delete Entity by Id with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Delete Entity by Id with Response body containing 'title' element }	SUT -> Client

4.4.1.5.2 CreateEntity

TP ld	TP/NGSI-LD/CI/Prov/E/001_07	
Test objective	Check that the @context is obtained from the request payload body itself if the	e Content-
	Type header is "application/ld+json"	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_01	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	***************************************	
Name	001_07_01 Create one entity using a JSON-LD @context obtained from the r	equest
	payload with ld context	
Parent Release	v1.3.1	
Description	Check that the @context is obtained from the request payload body itself if the	e Content-
	Type header is "application/ld+json" and retrieve with ld context	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	
	set to 'application/ld+json' and payload defined in file: 'building-simple-	
	attributes.jsonld' } then { the SUT sends a valid Response for the operation: Retrieve Entity by	SUT -> Client
	Id with Check Response Body containing an Attribute set to and Query	301 -> Client
	Parameter: expected_attribute_name set to 'almostFull' and Query	
	Parameter: response_body set to 'response1.json()' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_07_02	
Name	001_07_02 Create one entity using a JSON-LD @context obtained from the r	eauest
	payload without context	- 1
Parent Release	v1.3.1	
Description	Check that the @context is obtained from the request payload body itself if the	e Content-
	Type header is "application/ld+json" and retrieve without context	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	
	set to 'application/ld+json' and payload defined in file: 'building-simple-	
	attributes.jsonId' }	
	then { the SUT sends a valid Response for the operation: Retrieve Entity by	SUT -> Client
	ld with Check Response Body containing an Attribute set to and Query	
	Parameter: expected_attribute_name set to 'https://ngsi-ld-test-	
	suite/context#almostFull' and Query Parameter: response_body set to	
	response1.json()' }	

TP Id	TP/NGSI-LD/CI/Prov/E/001_05
	Check that the default @context is used if the Content-Type header is "application/json" and the Link header does not contain a JSON-LD @context
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5
Config Id	CF_01
PICS Selection	PICS_HTTP_CONTEXT_RESOLV
Initial conditions	with { the SUT containing an initial state }

Permutations		
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_05_01	
Name	001_05_01 Create one entity using the default context with JSON content type without context	e and request
Parent Release	v1.3.1	
Description	Check that the default @context is used if the Content-Type header is "applicate the Link header does not contain a JSON-LD @context, requesting without co	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload defined in file: 'building-simple-attributes.json' }	SUT <- Client
	then { the SUT sends a valid Response for the operation: Retrieve Entity by Id with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'almostFull' and Query Parameter: response_body set to 'response1.json()' }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_05_02	
Name	001_05_02 Create one entity using the default context with JSON content type with context	e and request
Parent Release	v1.3.1	
Description	Check that the default @context is used if the Content-Type header is "applicate the Link header does not contain a JSON-LD @context, requesting with context."	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload defined in file: 'building-simple-attributes.json' }	SUT <- Client
	then { the SUT sends a valid Response for the operation: Retrieve Entity by Id with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'ngsi-Id:default-context/almostFull' and Query Parameter: response_body set to 'response1.json()' }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Prov/E/001_01	
Test objective	Check that one can create an entity	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.1	
Config Id	CF_01	
PICS Selection	PICS_EntCre	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_01_01	
Name	001_01_01 MinimalEntity	
Parent Release	v1.3.1	
Description	Check that one can create an entity	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload defined in file: 'building-minimal.json' } then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query	SUT <- Client
	Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_01_02	l
Name	001_01_02 EntityWithSimpleProperties	
Parent Release	v1.3.1	
Description	Check that one can create an entity	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	
	set to 'application/ld+json' and payload defined in file: 'building-simple-	
	attributes.jsonId' }	
	then { the SUT sends a valid Response for the operations: Create Entity	SUT -> Client
	Selecting Content Type with Response Status Code set to 201 and Create	
	Entity Selecting Content Type with Response Header: Location containing	
	\$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To	
	and Query Parameter: 'created_resource' set to 'created_entity' and Query	
	Parameter: 'response_body' set to 'response1.json()' and Query Parameter:	
	'ignored_keys' set to '\${None}' list of keys }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_01_03	
Name	001_01_03 EntityWithRelationshipsProperties	
Parent Release	v1.3.1	
Description	Check that one can create an entity	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	
	set to 'application/ld+json' and payload defined in file: 'building-relationship-	
	of-property.jsonId' }	
	then { the SUT sends a valid Response for the operations: Create Entity	SUT -> Client
	Selecting Content Type with Response Status Code set to 201 and Create	
	Entity Selecting Content Type with Response Header: Location containing	
	\$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To	
	and Query Parameter: 'created_resource' set to 'created_entity' and Query	
	Parameter: 'response_body' set to 'response1.json()' and Query Parameter:	
TD Dammartation in	'ignored_keys' set to '\${None}' list of keys }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_01_04	
Name	001_01_04 EntityWithLocationAttribute	
Parent Release	V1.3.1	
Description Expected behaviour	Check that one can create an entity Test events	Direction
Expected beliavious	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	l'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	301 <- Client
	set to 'application/ld+json' and payload defined in file: 'building-location-	
	attribute.jsonId' }	
	fattribute.jsoriid j	
	then I the SLIT sends a valid Response for the operations: Create Entity	SLIT -> Client
	then { the SUT sends a valid Response for the operations: Create Entity	SUT -> Client
	Selecting Content Type with Response Status Code set to 201 and Create	SUT -> Client
	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing	SUT -> Client
	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To	SUT -> Client
	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query	SUT -> Client
	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter:	SUT -> Client
TP Permutation id	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys }	SUT -> Client
TP Permutation id	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05	SUT -> Client
TP Permutation id Name Parent Release	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05 001_01_05 EntityWithNonCoreGeoProperty	SUT -> Client
Name Parent Release	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05 001_01_05 EntityWithNonCoreGeoProperty v1.3.1	SUT -> Client
Name Parent Release Description	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05 001_01_05 EntityWithNonCoreGeoProperty	SUT -> Client Direction
Name Parent Release	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05 001_01_05 EntityWithNonCoreGeoProperty v1.3.1 Check that one can create an entity Test events	
Name Parent Release Description	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05 001_01_05 EntityWithNonCoreGeoProperty v1.3.1 Check that one can create an entity	Direction
Name Parent Release Description	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05 001_01_05 EntityWithNonCoreGeoProperty v1.3.1 Check that one can create an entity Test events when { the SUT receives a Request from the client containing: URL set to	Direction
Name Parent Release Description	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05 001_01_05 EntityWithNonCoreGeoProperty v1.3.1 Check that one can create an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	Direction
Name Parent Release Description	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05 001_01_05 EntityWithNonCoreGeoProperty v1.3.1 Check that one can create an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-non-core-	Direction
Name Parent Release Description	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05 001_01_05 EntityWithNonCoreGeoProperty v1.3.1 Check that one can create an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-non-coregeoproperty-attribute.jsonld' }	Direction SUT <- Client
Name Parent Release Description	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05 001_01_05 EntityWithNonCoreGeoProperty v1.3.1 Check that one can create an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/Id+json' and payload defined in file: 'building-non-core-geoproperty-attribute.jsonId' } then { the SUT sends a valid Response for the operations: Create Entity	Direction SUT <- Client
Name Parent Release Description	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05 001_01_05 EntityWithNonCoreGeoProperty v1.3.1 Check that one can create an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/Id+json' and payload defined in file: 'building-non-core-geoproperty-attribute.jsonId' } then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 201 and Create	Direction SUT <- Client
Name Parent Release Description	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05 001_01_05 EntityWithNonCoreGeoProperty v1.3.1 Check that one can create an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/Id+json' and payload defined in file: 'building-non-core-geoproperty-attribute.jsonId' } then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing	Direction SUT <- Client
Name Parent Release Description	Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_01_05 001_01_05 EntityWithNonCoreGeoProperty v1.3.1 Check that one can create an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/Id+json' and payload defined in file: 'building-non-core-geoproperty-attribute.jsonId' } then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To	Direction SUT <- Client

TP Id	TP/NGSI-LD/CI/Prov/E/001_03	
Test objective	Check that one cannot create an entity with an existing id	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.1	
Config Id	CF_01	
PICS Selection	PICS_EntCre	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_03_01	
Name	001_03_01 Create one valid entity and one invalid entity	
Parent Release	v1.3.1	
Description	Check that one cannot create an entity with an existing id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-minimal.jsonld' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 409 and Create Entity Selecting Content Type with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/AlreadyExists' and Create Entity Selecting Content Type with Response body containing 'title' element }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Prov/E/001_04	
Test objective	Check that the @context is obtained from a Link Header if the Content-Type I	ander is
rest objective	"application/json"	leader is
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_01	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_04_01	
Name	001_04_01 Create one entity using a provided Link header with JSON content NGSILD context	t type and
Parent Release	v1.3.1	
Description	Check that the @context is obtained from a Link Header if the Content-Type I "application/json"	neader is
Expected behaviour	Test events	Direction
TP Permutation id Name Parent Release	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload defined in file: 'building-simple-attributes.json' } then { the SUT sends a valid Response for the operation: Retrieve Entity by Id with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'almostFull' and Query Parameter: response_body set to 'response1.json()' } TP/NGSI-LD/CI/Prov/E/001_04_02 001_04_02 Create one entity using a provided Link header with JSON content context	SUT <- Client SUT -> Client
Description	Check that the @context is obtained from a Link Header if the Content-Type I "application/json"	reader is
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload defined in file: 'building-simple-attributes.json' } then { the SUT sends a valid Response for the operation: Retrieve Entity by Id with Check Response Body containing an Attribute set to and Query	SUT <- Client SUT -> Client
	Parameter: expected_attribute_name set to 'https://ngsi-ld-test-suite/context#almostFull' and Query Parameter: response_body set to 'response1.json()' }	

TP ld	TP/NGSI-LD/CI/Prov/E/001_06	
Test objective	Check that an HTTP error response of type BadRequestData is raised if the C	
	header is "application/json" and the request payload body (as JSON) contains	a "@context"
	term	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_01	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_06_01	
Name	001_06_01 Create one entity containing a JSON-LD @context with a JSON c	ontent type
Parent Release	v1.3.1	
Description	Check that an HTTP error response of type BadRequestData is raised if the Content-Type	
	header is "application/json" and the request payload body (as JSON) contains	a "@context"
	term	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-Id/v1/entities/' method set to 'POST' Request Header['Content-Type']	
	set to 'application/json' and payload defined in file: 'building-simple-	
	attributes.jsonld' }	
	then { the SUT sends a valid Response for the operations: Create Entity	SUT -> Client
	Selecting Content Type with Response Status Code set to 400 and Create	
	Entity Selecting Content Type with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Create Entity	
	Selecting Content Type with Response body containing 'title' element }	

TP Id	TP/NGSI-LD/CI/Prov/E/001_02	
Test objective	Check that one cannot create an entity with an invalid request	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.6.1	
Config Id	CF_01	
PICS Selection	PICS_EntCre	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_02_01	
Name	001_02_01 InvalidJson	
Parent Release	v1.3.1	
Description	Check that one cannot create an entity with an invalid request	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request creation of an entity from	
	filename 'invalid-json.jsonId' and Content-Type set to 'application/Id+json' }	
	then { the SUT sends a valid Response for the operations: Create Entity	SUT -> Client
	From File with Response Status Code set to 400 and Create Entity From	
	File with Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/InvalidRequest' and Create Entity From File with Response body	
	containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_02_02	
Name	001_02_02 EmptyJson	
Parent Release	V1.3.1	
Description	Check that one cannot create an entity with an invalid request	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request creation of an entity from	
	filename 'empty.jsonId' and Content-Type set to 'application/Id+json' }	01.17
	then { the SUT sends a valid Response for the operations: Create Entity	SUT -> Client
	From File with Response Status Code set to 400 and Create Entity From	
	File with Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/InvalidRequest' and Create Entity From File with Response body	
TP Permutation id	containing 'title' element } TP/NGSI-LD/CI/Prov/E/001_02_03	
Name	001_02_03 EntityWithNoContext	
Parent Release	v1.3.1	
Description	Check that one cannot create an entity with an invalid request	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request creation of an entity from filename 'building-minimal.json' and Content-Type set to 'application/ld+json'	SUT <- Client
	then { the SUT sends a valid Response for the operations: Create Entity From File with Response Status Code set to 400 and Create Entity From File with Response Body containing the type 'https://uri.etsi.org/ngsi- Id/errors/BadRequestData' and Create Entity From File with Response body containing 'title' element }	SUT -> Client

TP ld	TP/NGSI-LD/CI/Prov/E/001_13	
Test objective	Check that one can create an entity with operationSpace geospatial Property	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.7, 5.6.1	
Config Id	CF_01	
PICS Selection	PICS_EntCre	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_13	
Name	001_13 Create Entity With operationSpace Geospatial Property	
Parent Release	v1.3.1	
Description	Check that one can create an entity with operationSpace geospatial Property	
Expected behaviour	Test events	Direction
Expected behaviour	When { the SUT receives a Request from the client containing: URL set to	SUT <- Client
Expected behaviour	100101000	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-operation-	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-operation-space-geoproperty.jsonld' }	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-operation-space-geoproperty.jsonld' } then { the SUT sends a valid Response for the operations: Create Entity	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-operation-space-geoproperty.jsonld' } then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 201 and Create	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-operation-space-geoproperty.jsonld' } then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-operation-space-geoproperty.jsonld' } then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To	SUT <- Client

TP/NGSI-LD/CI/Prov/E/001_11	
Check that one can create an entity with one or more scopes	
ETSI GS CIM 009 V1.6.1 [1], clause 4.18	
CF_01	
PICS_SCOPES	
with { the SUT containing an initial state }	
Permutations	
TP/NGSI-LD/CI/Prov/E/001_11_01	
001_11_01 EntityWithOneScope	
v1.5.1	
Check that one can create an entity with one or more scopes	
Test events	Direction
when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload defined in file: 'building-minimal-with-one-scope.json' }	SUT <- Client
then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To	SUT -> Client
TP/NGSI-LD/CI/Prov/E/001_11_02	
001_11_02 EntityWithManyScopes	·
v1.5.1	
	ETSI GS CIM 009 V1.6.1 [1], clause 4.18 CF_01 PICS_SCOPES with { the SUT containing an initial state } Permutations TP/NGSI-LD/CI/Prov/E/001_11_01 001_11_01 EntityWithOneScope v1.5.1 Check that one can create an entity with one or more scopes Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/json' and payload defined in file: 'building-minimal-with-one-scope.json' } then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\$(entity_id) and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'ignored_keys' set to '\${None}' list of keys } TP/NGSI-LD/CI/Prov/E/001_11_02 001_11_02 EntityWithManyScopes

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	
	set to 'application/json' and payload defined in file: 'building-minimal-with-	
	many-scopes.json' }	
	then { the SUT sends a valid Response for the operations: Create Entity	SUT -> Client
	Selecting Content Type with Response Status Code set to 201 and Create	
	Entity Selecting Content Type with Response Header: Location containing	
	\$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To	
	and Query Parameter: 'ignored_keys' set to '\${None}' list of keys }	

TP ld	TP/NGSI-LD/CI/Prov/E/001_08	
Test objective	Check that an HTTP error response of type BadRequestData is raised if the C	
	header is "application/ld+json" and the request payload body does not contain	a @context
	term	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_01	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_08_01	
Name	001_08_01 Create one entity not containing a JSON-LD @context with a JSO	N-LD content
	type	
Parent Release	v1.3.1	
Description	Check that an HTTP error response of type BadRequestData is raised if the C	ontent-Type
	header is "application/ld+json" and the request payload body does not contain	a @context
	term	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	
	set to 'application/ld+json' and payload defined in file: 'building-simple-	
	attributes.json' }	
	then { the SUT sends a valid Response for the operations: Create Entity	SUT -> Client
	Selecting Content Type with Response Status Code set to 400 and Create	
	Entity Selecting Content Type with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Create Entity	
	Selecting Content Type with Response body containing 'title' element }	

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<u>-</u>	
Check that one can create an entity with a LanguageProperty property	
ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18 and 5.6.1	
CF_01	
PICS_LANG and PICS_EntCre	
with { the SUT containing an initial state }	
Permutations	
TP/NGSI-LD/CI/Prov/E/001_10_01	<u></u>
001_10_01 EntityWithLanguageProperty	
v1.4.1	
Check that one can create an entity with a LanguageProperty property	
Test events	Direction
when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	
set to 'application/ld+json' and payload defined in file: 'building-language-	
property.jsonId' }	
then { the SUT sends a valid Response for the operations: Create Entity	SUT -> Client
Selecting Content Type with Response Status Code set to 201 and Create	
'ignored_keys' set to '\${None}' list of keys }	
	PICS_LANG and PICS_EntCre with { the SUT containing an initial state } Permutations TP/NGSI-LD/CI/Prov/E/001_10_01 001_10_01 EntityWithLanguageProperty v1.4.1 Check that one can create an entity with a LanguageProperty property Test events when { the SUT receives a Request from the client containing: URL set to /ngsi-Id/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/Id+json' and payload defined in file: 'building-language-property.jsonId' } then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query Parameter: 'response_body' set to 'response1.json()' and Query Parameter:

TP Id	TP/NGSI-LD/CI/Prov/E/001_09	
Test objective	Check that an HTTP error response of type BadRequestData is raised if the Cheader is "application/ld+json" and a JSON-LD Link header is present in the irrequest	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_01	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_09_01	
Name	001_09_01 Create one entity with a Link header and a JSON-LD content type	1
Parent Release	v1.3.1	
Description	Check that an HTTP error response of type BadRequestData is raised if the Cheader is "application/ld+json" and a JSON-LD Link header is present in the irrequest	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-simple-attributes.jsonld' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 400 and Create Entity Selecting Content Type with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Create Entity Selecting Content Type with Response body containing 'title' element }	SUT -> Client

TP ld	TP/NGSI-LD/CI/Prov/E/001_12	
Test objective	Check that one can create an entity with observationSpace geospatial Property	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.7, 5.6.1	
Config Id	CF_01	
PICS Selection	PICS_EntCre	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/001_12	
Name	001_12 Create Entity With observationSpace Geospatial Property	
Parent Release	v1.3.1	
Description	Check that one can create an entity with observationSpace geospatial Propert	у
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'POST' Request Header['Content-Type']	SUT <- Client
		SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-observation-space-geoproperty.jsonld' } then { the SUT sends a valid Response for the operations: Create Entity	SUT <- Client SUT -> Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-observation-space-geoproperty.jsonld' }	
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-observation-space-geoproperty.jsonld' } then { the SUT sends a valid Response for the operations: Create Entity	
	'/ngsi-id/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-observation-space-geoproperty.jsonld' } then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To	
	'/ngsi-id/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-observation-space-geoproperty.jsonld' } then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To and Query Parameter: 'created_resource' set to 'created_entity' and Query	
	'/ngsi-id/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'building-observation-space-geoproperty.jsonld' } then { the SUT sends a valid Response for the operations: Create Entity Selecting Content Type with Response Status Code set to 201 and Create Entity Selecting Content Type with Response Header: Location containing \$\${entity_id} and Retrieve Entity by Id with Check Created Resource Set To	

4.4.1.5.3 ReplaceEntity

TP ld	TP/NGSI-LD/CI/Prov/E/054_03
Test objective	Check that one can replace an existing entity and that scopes are replaced
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.18, 5.6.18 and 6.5.3.3
Config Id	CF_01
PICS Selection	PICS_SCOPES and PICS_EntRep and PICS_EntRep
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity \${entity} with
	an id set to \${entityId} }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Prov/E/054_03_01
Name	054_03_01 Replace an existing entity having scopes
Parent Release	v1.6.1
Description	Check that one can replace an existing entity and that scopes are replaced

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PUT' Replace Entity and Query	
	Parameter: entity_id set to '\${entity_id}' and Query Parameter: filename set	
	to '\${entity_replacement_filename}' and Query Parameter: content_type set	
	to 'application/json' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
		SUT -> Client
	with Response Status Code set to 204 and Retrieve Entity by Id with	
	Response Body containing en entity element with id set to	
	'entity_id=\${entity_id}' and body content set to	
	'expectation_filename=\${expectation_filename}' }	

TP Id	TP/NGSI-LD/CI/Prov/E/054_01	
Test objective	Check that one can replace an existing entity and that its createdAt Temporal I	Property
	remains unchanged	-
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 5.6.18 and 6.5.3.3	
Config Id	CF_01	
PICS Selection	PICS_EntRep and PICS_EntRep	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity	y \${entity} with
	an id set to \${entityId} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/054_01_01	
Name	054_01_01 Replace an existing entity	
Parent Release	v1.6.1	
Description	Check that one can replace an existing entity and that its createdAt Temporal I	Property
	remains unchanged	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PUT' Replace Entity Selecting	
	Content Type and Query Parameter: entity_id set to '\${entity_id}' and Query	
	Parameter: entity_fragment set to '\${entity}' and Query Parameter:	
	content_type set to 'application/json' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Replace Entity	SUT -> Client
	Selecting Content Type with Response Status Code set to 204 and Retrieve	
	Entity by Id with Check Updated Entity and Query Parameter:	
	'updated_resource' set to 'entity_expectation_payload' and Query	
	Parameter: 'response_body' set to 'response1.json()' and Query Parameter:	
	'ignored_keys' set to 'ignored_attributes' and Retrieve Entity by Id with	
	Check Response Body containing an Attribute set to and Query Parameter:	
	expected_attribute_name set to 'createdAt' and Query Parameter:	
	response_body set to 'response1.json()' and Query Parameter:	
	expected_attribute_value set to 'createdAt' }	

TP ld	TP/NGSI-LD/CI/Prov/E/054_02
Test objective	Check that if the target entity ID is faulty an error is raised
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 5.6.18 and 6.5.3.3
Config Id	CF_01
PICS Selection	PICS_EntRep and PICS_EntRep
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity \${entity} with
	an id set to \${entityId} }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Prov/E/054_02_01
Name	054_02_01 Replace an existing entity giving an invalid Id
Parent Release	v1.6.1
Description	Check that if the target entity ID is faulty an error is raised

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PUT' Replace Entity Selecting	
	Content Type and Query Parameter: entity_id set to 'invalidUri' and Query	
	Parameter: entity_fragment set to '\${entity}' and Query Parameter:	
	content_type set to 'application/json' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	01.17
	then { the SUT sends a valid Response for the operation: Replace Entity	SUT -> Client
TD D	Selecting Content Type with Response Status Code set to 400 }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/054_02_02	
Name	054_02_02 Replace an existing entity without giving an Id	
Parent Release	v1.6.1	
Description	Check that if the target entity ID is faulty an error is raised	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PUT' Replace Entity Selecting	
	Content Type and Query Parameter: entity_id set to '\${EMPTY}' and Query	
	Parameter: entity_fragment set to '\${entity}' and Query Parameter:	
	content_type set to 'application/json' and Query Parameter: context set to	
	"https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operation: Replace Entity	SUT -> Client
		SUT -> Client
TP Permutation id	Selecting Content Type with Response Status Code set to 400 } TP/NGSI-LD/CI/Prov/E/054 02 03	
Name		
Parent Release	054_02_03 Replace an existing entity giving a nonexistent Id	
Description	Check that if the target entity ID is faulty an error is raised	
Expected behaviour	Test events	Direction
Expected benaviour	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PUT' Replace Entity Selecting	SUT <- CITETIL
	Content Type and Query Parameter: entity_id set to 'urn:ngsi-	
	ld:Building:Nonexistent' and Query Parameter: entity_fragment set to	
	'\${entity}' and Query Parameter: content_type set to 'application/json' and	
	Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-	
	suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-	
	compound.jsonId' }	
	then { the SUT sends a valid Response for the operation: Replace Entity	SUT -> Client
	Selecting Content Type with Response Status Code set to 404 }	CO 1 / OHOIN
	[20.00m.g Comm. Type min Hoopened Clarac Code Cot to 101]	I

4.4.1.5.4 MergeEntity

TP Id	TP/NGSI-LD/CI/Prov/E/056_05
Test objective	Check that one can delete the default attribute instance using NGSI-LD Null in a Merge Entity operation
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 4.5.5, 5.6.17 and 6.5.3.4
Config Id	CF_01
PICS Selection	PICS_LANG and PICS_P_DATASETID_AND_R_DATASETID and PICS_EntMer and PICS_EntMer
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity \${entity} with an id set to \${entityId} }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_05_01
Name	056_05_01 Delete a Property instance
Parent Release	v1.6.1
Description	Check that one can delete the default attribute instance using NGSI-LD Null in a Merge Entity operation

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	OUT CHOIR
	Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	
	entity_filename set to 'fragmentEntities/ngsild-null/building-null-	
	property.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' and Query Parameter: context set to " }	
	then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client
	Response Status Code set to 204 and Query Entity with Response Body	
	containing en entity element with id set to 'entity_id=\${entity_id}' and body	
	content set to 'ngsild-null/building-deleted-property-default-instance.jsonld' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_05_02	•
Name	056_05_02 Delete a Relationship instance	
Parent Release	v1.6.1	
Description	Check that one can delete the default attribute instance using NGSI-LD Null in	n a Merge
•	Entity operation	Ü
Expected behaviour	Test events	Direction
-	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	
	Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	
	entity_filename set to 'fragmentEntities/ngsild-null/building-null-	
	relationship.jsonld' and Query Parameter: content_type set to	
	'application/ld+json' and Query Parameter: context set to " }	
	then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client
	Response Status Code set to 204 and Query Entity with Response Body	
	containing en entity element with id set to 'entity_id=\${entity_id}' and body	
	content set to 'ngsild-null/building-deleted-relationship-default-	
	instance.jsonId' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_05_03	
Name	056_05_03 Delete a GeoProperty instance	
Parent Release	v1.6.1	
Description	Check that one can delete the default attribute instance using NGSI-LD Null in	n a Merge
	Entity operation	T
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	
	Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	
	entity_filename set to 'fragmentEntities/ngsild-null/building-null-	
	geoproperty.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' and Query Parameter: context set to " }	OLIT Oli a rat
	then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client
	Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body	
	content set to 'ngsild-null/building-deleted-geoproperty-default-	
	instance.jsonId' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_05_04	
Name	056_05_04 Delete a LanguageProperty instance	
Parent Release	v1.6.1	
Description	Check that one can delete the default attribute instance using NGSI-LD Null in	n a Morga
Description	Entity operation	i a ivierge
Expected behaviour	Test events	Direction
Expedied beliavious	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	OUT CHEFT
	Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	
	entity_filename set to 'fragmentEntities/ngsild-null/building-null-	
	languageproperty.jsonld' and Query Parameter: content_type set to	
	'application/ld+json' and Query Parameter: content_type set to	
	then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client
	Response Status Code set to 204 and Query Entity with Response Body	OO1 -> OHEHI
	containing en entity element with id set to 'entity_id=\${entity_id}' and body	
	content set to 'ngsild-null/building-deleted-languageproperty-default-	
	instance.jsonId' }	
	In ordinarion portion j	<u>1</u>

TP ld	TD/NCCLLD/CI/Drov/E/056, 04	
Test objective	TP/NGSI-LD/CI/Prov/E/056_01	
Reference	Check that one can merge an entity ETSI GS CIM 009 V1.6.1 [1], clauses 5.6.17 and 6.5.3.4	
Config Id	CF_01	
PICS Selection	PICS_EntMer and PICS_EntMer	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	h, Clantity) with
initial conditions	an id set to \${entityId} }	iy φ{eniny} wiin
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_01_01	
Name	056_01_01 MergeAnEmptyEntity	
Parent Release	v1.6.1	
Description	Check that one can merge an entity	
Expected behaviour	Test events	Direction
Expedica Bellaviour	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	OOT CONCIN
	Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	
	entity_filename set to 'building-minimal.jsonId' and Query Parameter:	
	content_type set to 'application/ld+json' and Query Parameter: context set to	
	then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client
	Response Status Code set to 204 and Query Entity with Response Body	
	containing en entity element with id set to 'entity_id=\${entity_id}' and body	
	content set to 'merge/building-non-edited.jsonId' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_01_02	•
Name	056_01_02 MergeSimpleProperties	
Parent Release	v1.6.1	
Description	Check that one can merge an entity	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
		OU - OHOIR
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	SST V SHOIR
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query	
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter:	
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "}	
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to " } then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body	
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: context set to "application/ld+json' and Query Parameter: context set to "application" and Query Parameter: context set to "application" and Query Parameter: context set to "application" and	
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: context set to "application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' }	
TP Permutation id	'/ngsi-Id/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonId' and Query Parameter: context set to "application/Id+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonId' } TP/NGSI-LD/CI/Prov/E/056_01_03	
Name	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship	
Name Parent Release	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1	
Name Parent Release Description	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity	SUT -> Client
Name Parent Release	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events	SUT -> Client Direction
Name Parent Release Description	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events when { the SUT receives a Request from the client containing: URL set to	SUT -> Client
Name Parent Release Description	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	SUT -> Client Direction
Name Parent Release Description	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	SUT -> Client Direction
Name Parent Release Description	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-relationship.jsonld' and Query Parameter:	SUT -> Client Direction
Name Parent Release Description	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	SUT -> Client Direction
Name Parent Release Description	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to " } then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-relationship.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "}	SUT -> Client Direction SUT <- Client
Name Parent Release Description	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/Cl/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-relationship.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client Direction
Name Parent Release Description	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/Cl/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-relationship.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body	SUT -> Client Direction SUT <- Client
Name Parent Release Description	'/ngsi-Id/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/Id+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-relationship.jsonld' and Query Parameter: content_type set to 'application/Id+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body	SUT -> Client Direction SUT <- Client
Name Parent Release Description Expected behaviour	'/ngsi-Id/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_filename set to 'building-relationship.jsonld' and Query Parameter: entity_filename set to 'application/Id+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-with-relationship.jsonld' }	SUT -> Client Direction SUT <- Client
Name Parent Release Description Expected behaviour TP Permutation id	'/ngsi-Id/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-relationship.jsonld' and Query Parameter: content_type set to 'application/Id+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-with-relationship.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_04	SUT -> Client Direction SUT <- Client
Name Parent Release Description Expected behaviour TP Permutation id Name	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/Cl/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-relationship.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-with-relationship.jsonld' } TP/NGSI-LD/Cl/Prov/E/056_01_04 056_01_04 MergePropertyWithPartialData	SUT -> Client Direction SUT <- Client
Name Parent Release Description Expected behaviour TP Permutation id	'/ngsi-Id/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-simple-attributes-second.jsonld' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-attributes-edited.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_03 056_01_03 MergeSimpleRelationship v1.6.1 Check that one can merge an entity Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'building-relationship.jsonld' and Query Parameter: content_type set to 'application/Id+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'merge/building-with-relationship.jsonld' } TP/NGSI-LD/CI/Prov/E/056_01_04	SUT -> Client Direction SUT <- Client

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	
	Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	
	entity_filename set to 'merge/building-only-airQualityLevel-value.jsonld' and	
	Query Parameter: content_type set to 'application/ld+json' and Query	
	Parameter: context set to " }	
	then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client
	Response Status Code set to 204 and Query Entity with Response Body	
	containing en entity element with id set to 'entity_id=\${entity_id}' and body	
	content set to 'merge/building-with-changed-airQualityLevel.jsonId' }	

TP Id	TP/NGSI-LD/CI/Prov/E/056_03	
Test objective	Check that one can delete an attribute using NGSI-LD Null in a Merge Entity o	peration
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 4.5.5, 5.6.17 and 6.5.3.4	
Config Id	CF_01	
PICS Selection	PICS_LANG and PICS_P_DATASETID_AND_R_DATASETID and PICS_Entl	Mer and
	PICS_EntMer	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	v \${entity} with
	an id set to \${entityId} }	, , , ,,
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_03_01	
Name	056_03_01 Delete a Property	
Parent Release	v1.6.1	
Description	Check that one can delete an attribute using NGSI-LD Null in a Merge Entity o	peration
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	
	Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	
	entity_filename set to 'fragmentEntities/ngsild-null/building-null-	
	property.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' and Query Parameter: context set to " }	
		SUT -> Client
	Response Status Code set to 204 and Query Entity with Response Body	
	containing en entity element with id set to 'entity_id=\${entity_id}' and body	
	content set to 'ngsild-null/building-deleted-property.jsonld' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_03_02	
Name	056_03_02 Delete a Relationship	
Parent Release	v1.6.1	
Description	Check that one can delete an attribute using NGSI-LD Null in a Merge Entity of	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	
	Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	
	entity_filename set to 'fragmentEntities/ngsild-null/building-null-	
	relationship.jsonld' and Query Parameter: content_type set to	
	'application/ld+json' and Query Parameter: context set to " }	
		SUT -> Client
	Response Status Code set to 204 and Query Entity with Response Body	
	containing en entity element with id set to 'entity_id=\${entity_id}' and body	
	content set to 'ngsild-null/building-deleted-relationship.jsonId' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_03_03	
Name	056_03_03 Delete a GeoProperty	
Parent Release	V1.6.1	
Description	Check that one can delete an attribute using NGSI-LD Null in a Merge Entity of	peration

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	
	Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	
	entity_filename set to 'fragmentEntities/ngsild-null/building-null-	
	geoproperty.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' and Query Parameter: context set to " }	
	then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client
	Response Status Code set to 204 and Query Entity with Response Body	
	containing en entity element with id set to 'entity_id=\${entity_id}' and body	
	content set to 'ngsild-null/building-deleted-geoproperty.jsonId' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_03_04	
Name	056_03_04 Delete a LanguageProperty	
Parent Release	v1.6.1	
Description	Check that one can delete an attribute using NGSI-LD Null in a Merge Entity of	peration
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	
	Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	
	entity_filename set to 'fragmentEntities/ngsild-null/building-null-	
	languageproperty.jsonld' and Query Parameter: content_type set to	
	'application/ld+json' and Query Parameter: context set to " }	
	then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client
	Response Status Code set to 204 and Query Entity with Response Body	
	containing en entity element with id set to 'entity_id=\${entity_id}' and body	
	content set to 'ngsild-null/building-deleted-languageproperty.jsonld' }	

TP ld	TP/NGSI-LD/CI/Prov/E/056_04	
Test objective	Check that one can delete a specific attribute instance using NGSI-LD Null in a operation	a Merge Entity
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 4.5.5, 5.6.17 and 6.5.3.4	
Config Id	CF_01	
PICS Selection	PICS_LANG and PICS_P_DATASETID_AND_R_DATASETID and PICS_EntMer and PICS_EntMer	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity an id set to \${entityId} }	y \${entity} with
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_04_01	
Name	056_04_01 Delete a Property instance	
Parent Release	v1.6.1	
Description	Check that one can delete a specific attribute instance using NGSI-LD Null in a Merge Entity operation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-property-instance.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "}	SUT <- Client
	then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to 'ngsild-null/building-deleted-property-instance.jsonId' }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_04_02	
Name	056_04_02 Delete a Relationship instance	
Parent Release	v1.6.1	
Description	Check that one can delete a specific attribute instance using NGSI-LD Null in a operation	a Merge Entity

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	SUT <- Client
	entity_filename set to 'fragmentEntities/ngsild-null/building-null-relationship-instance.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' and Query Parameter: context set to " }	
	then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client
	Response Status Code set to 204 and Query Entity with Response Body	
	containing en entity element with id set to 'entity_id=\${entity_id}' and body	
TD Dammartation in	content set to 'ngsild-null/building-deleted-relationship-instance.jsonld' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_04_03	
Name Parant Palance	056_04_03 Delete a GeoProperty instance	
Parent Release	V1.6.1	o Morgo Entity
Description	Check that one can delete a specific attribute instance using NGSI-LD Null in operation	a Merge Entity
Expected behaviour	Test events	Direction
Expedica Bellavical	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	OOT CONCIN
	Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	
	entity_filename set to 'fragmentEntities/ngsild-null/building-null-geoproperty-	
	instance.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' and Query Parameter: context set to " }	
	then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client
	Response Status Code set to 204 and Query Entity with Response Body	
	containing en entity element with id set to 'entity_id=\${entity_id}' and body	
	content set to 'ngsild-null/building-deleted-geoproperty-instance.jsonld' }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_04_04	
Name	056_04_04 Delete a LanguageProperty instance	
Parent Release	v1.6.1	
Description	Check that one can delete a specific attribute instance using NGSI-LD Null in operation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	
	Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	
	entity_filename set to 'fragmentEntities/ngsild-null/building-null-	
	languageproperty-instance.jsonld' and Query Parameter: content_type set to	
	'application/ld+json' and Query Parameter: context set to " }	CLIT . Client
	then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client
	Response Status Code set to 204 and Query Entity with Response Body	
	containing en entity element with id set to 'entity_id=\${entity_id}' and body	
	content set to 'ngsild-null/building-deleted-languageproperty-instance.jsonld'	

TP ld	TP/NGSI-LD/CI/Prov/E/056_02
Test objective	Check that if the target entity ID is faulty an error is raised
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 5.6.17 and 6.5.3.4
Config Id	CF_01
PICS Selection	PICS_EntMer and PICS_EntMer
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity \${entity} with
	an id set to \${entityId} }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_02_01
Name	056_02_01 Merge an existing entity giving an invalid Id
Parent Release	v1.6.1
Description	Check that if the target entity ID is faulty an error is raised

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	
	Query Parameter: entity_id set to 'invalidUri' and Query Parameter:	
	entity_filename set to '\${entity_replacement_filename}' and Query	
	Parameter: content_type set to 'application/json' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operation: Merge Entity with	SUT -> Client
	Response Status Code set to 400 }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_02_02	
Name	056_02_02 Merge an existing entity without giving an Id	
Parent Release	v1.6.1	
Description	Check that if the target entity ID is faulty an error is raised	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	
	Query Parameter: entity_id set to '\${EMPTY}' and Query Parameter:	
	entity_filename set to '\${entity_replacement_filename}' and Query	
	Parameter: content_type set to 'application/json' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operation: Merge Entity with	SUT -> Client
	Response Status Code set to 400 }	
TP Permutation id	TP/NGSI-LD/CI/Prov/E/056_02_03	
Name	056_02_03 Merge an existing entity giving a nonexistent Id	
Parent Release	v1.6.1	
Description	Check that if the target entity ID is faulty an error is raised	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	
	Query Parameter: entity_id set to 'urn:ngsi-ld:Building:Nonexistent' and	
	Query Parameter: entity_filename set to '\${entity_replacement_filename}'	
	and Query Parameter: content_type set to 'application/json' and Query	
	Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operation: Merge Entity with	SUT -> Client
	Response Status Code set to 404 }	<u> </u>

4.4.2 Consumption

4.4.2.1 Entity

4.4.2.1.1 QueryEntities

TD I-I	TD/NOOL D/OL/O /5/040 40
TP ld	TP/NGSI-LD/CI/Cons/E/019_10
Test objective	Check that one can query several entities based on complex geoqueries with Point target
•	geometries
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.10 and 5.7.2
Config Id	CF_01
PICS Selection	PICS_QueEnt_AND_QueEntPos
Initial conditions	with { the SUT containing an initial state }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_10_01
Name	019_10_01 QueryOnEqualsPoint
Parent Release	v1.3.1
Description	Check that one can query with an exact point

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_types set to 'Building' and Query Parameter: Link set to	
	'<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and	
	Query Parameter: geometry set	
	to 'Point' and Query Parameter: coordinates set to '[13.3986, 52.5547]' and	
	Query Parameter: count set to 'true' }	OLIT OF 1
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_10_02	
Name	019_10_02 QueryOnMaxDistancePoint	
Parent Release	v1.3.1	
Description	Check that one can query with a max distance	
Expected behaviour	Test events	Direction
Expedica bellavioui	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	OUT CHOIR
	Parameter: entity_types set to 'Building' and Query Parameter: Link set to	
	'<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and	
	Query Parameter: georel set to 'near;maxDistance==15000' and Query	
	Parameter: geometry set to 'Point' and Query Parameter: coordinates set to	
	[13.388930, 52.534473]' and Query Parameter: count set to 'true' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
TD D (Header: NGSILD-Results-Count equals to 2 }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_10_03	
Name Parent Release	019_10_03 QueryOnMinDistancePoint v1.3.1	
	Check that one can query with a min distance	
II)accrintian		
Description Expected behaviour		Direction
Expected behaviour	Test events	Direction
	Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'near;minDistance==15000' and Query	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: geometry set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: geometry set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' }	SUT <- Client
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: geometry set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response	SUT <- Client
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-compound.jsonld>; rel="http://www.w3.org/ns/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 }	SUT <- Client
Expected behaviour TP Permutation id	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04	SUT <- Client
TP Permutation id Name	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon	SUT <- Client
TP Permutation id Name Parent Release	When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: geometry set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04	SUT <- Client
TP Permutation id Name Parent Release Description	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon	SUT <- Client
TP Permutation id Name Parent Release	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon Test events	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon Test events when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
TP Permutation id Name Parent Release Description	When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite-compound.jsonld>; //raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' and	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite-compound.jsonld>; //raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: geometry set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: geometry set	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId>; rel="http://www.w3.org/ns/json-Id#context";type="application/Id+json"' and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId>; rel="http://www.w3.org/ns/json-Id#context";type="application/Id+json" and Query Parameter: georel set to 'within' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-Id-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-Id#context";type="application/Id+json"' and Query Parameter: geometry set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite-compound.jsonId>; rel="http://www.w3.org/ns/json-Id#contexts/ngsi-Id-test-suite-compound.jsonId>; rel="http://www.w3.org/ns/json-Id#context*;type="application/Id+json" and Query Parameter: georel set to 'within' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[13.1616211,52.5438124],[13.597641,52.4840224],[13.5948944,52.34027 82],[13.142395,52.386428],[13.1616211,52.5438124]]]' and Query Parameter: count set to 'true' }	SUT -> Client SUT -> Client Direction SUT Client
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-compound.jsonId>; rel='http://www.w3.org/ns/json-Id#context*,'type="application/Id+json" and Query Parameter: georel set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to 's\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId>; rel="http://www.w3.org/ns/json-Id#context";type="application/Id+json" and Query Parameter: georel set to 'within' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[13.1616211,52.5438124],[13.597641,52.4840224],[13.5948944,52.34027 82],[13.142395,52.386428],[13.1616211,52.5438124]]]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-Id-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-Id#context";type="application/Id+json"' and Query Parameter: geometry set to 'near;minDistance==15000' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.388930, 52.534473]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_10_04 019_10_04 QueryOnWithinPolygon v1.3.1 Check that one can query within a polygon Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite-compound.jsonId>; rel="http://www.w3.org/ns/json-Id#contexts/ngsi-Id-test-suite-compound.jsonId>; rel="http://www.w3.org/ns/json-Id#context*;type="application/Id+json" and Query Parameter: georel set to 'within' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[13.1616211,52.5438124],[13.597641,52.4840224],[13.5948944,52.34027 82],[13.142395,52.386428],[13.1616211,52.5438124]]]' and Query Parameter: count set to 'true' }	SUT -> Client SUT -> Client Direction SUT Client

TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_10_05	
Name	019_10_05 QueryOnDisjointPolygon	
Parent Release	v1.3.1	
Description	Check that one can query with a disjoint polygon	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and	SUT <- Client
	Query Parameter: georel set to 'disjoint' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[[13.1616211,52.5438124],[13.597641,52.4840224],[13.5948944,52.34027 82],[13.142395,52.386428],[13.1616211,52.5438124]]]' and Query Parameter: count set to 'true' }	
	then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_10_06	
Name	019_10_06 QueryOnDisjointPoint	
Parent Release	V1.3.1	
Description	Check that one can query with a disjoint point	l Bi
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'disjoint' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.3986, 52.5547]' and Query Parameter: count set to 'true' }	
	then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 2 }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_10_07	
Name	019_10_07 QueryOnContainsPoint	
Parent Release	v1.3.1	
Description	Check that one can query with a contains point	Direction
Expected behaviour	When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'contains' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.3986, 52.5547] and Query Parameter: count set to 'true' }	Direction SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_10_08	
Name	019_10_08 QueryOnIntersectsPoint	
Parent Release	v1.3.1	
Description	Check that one can query with an intersects point	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_types set to 'Building' and Query Parameter: Link set to	
	'<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and	
	Query Parameter: georel set to 'intersects' and Query Parameter: geometry	
	set to 'Point' and Query Parameter: coordinates set to '[13.3986, 52.5547]'	
	and Query Parameter: count set to 'true' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Header: NGSILD-Results-Count equals to 1 }	

TP ld	TP/NGSI-LD/CI/Cons/E/019_03_04		
Test objective	Check that one cannot query entities if the requested attribute names are inco	rrect	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2		
Config Id	CF_01		
PICS Selection	PICS_QueEnt_AND_QueEntPos		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_03_04		
Name	019_03_04 Query several entities based on incorrect attribute names		
Parent Release	v1.3.1		
Description	Check that one cannot query entities if the requested attribute names are inco	rrect	
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query		
	Parameter: attrs set to '\${attributes_to_be_retrieved}' }		
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client	
	with Response Status Code set to 400 and Query Entities with Response		
	Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData'		
	and Query Entities with Response body containing 'title' element }		

	T	
TP Id	TP/NGSI-LD/CI/Cons/E/019_02_04	
Test objective	Check that one can query several entities via POST Interaction based on attrib	ute names
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF_01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_02_04	
Name	019_02_04 Query several entities via POST Interaction based on attribute nan	nes
Parent Release	v1.3.1	
Description	Check that one can query several entities via POST Interaction based on attrib	ute names
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/query' method set to 'POST' Get Entities Via	
	POST Request: and Query Parameter: attrs set to	
	'\${attributes_to_be_retrieved}' and Query Parameter: content_type set to	
	'application/json' and Query Parameter: accept set to 'application/json' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	Via POST with Response Status Code set to 200 and Query Entities Via	
	POST with Response Body containing a list containing Entity Elements and	
	Query Parameter: expectation_filename set to 'vehicle-simple-attributes-	
	core-context.json' and Query Parameter: entities_ids set to	
	'entities_ids_to_be_retrieved' and Query Parameter:	
	ignore_core_context_version set to 'False' }	

TP Id	TP/NGSI-LD/CI/Cons/E/019_09	
Test objective	Check that one can query several entities based on q	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF_01	
PICS Selection	PICS QueEnt AND QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_09_01	
Name	019_09_01 QueryOnName	
Parent Release	v1.3.1	
Description	Check that one can query several entities based on ids	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: q set to 'name=="Eiffel Tower" and Query Parameter: count set	
	to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context;"type="application/ld+json" }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	00.7
	Header: NGSILD-Results-Count equals to 1 }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_09_02	•
Name	019_09_02 QueryOnNameAndAlmostFullFalse	
Parent Release	v1.3.1	
Description	Check that one can query several entities based on ids	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: q set to 'name=="Pisa Tower";almostFull==false' and Query	
	Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context;"type="application/ld+json" }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	COT > CHOTH
	Header: NGSILD-Results-Count equals to 1 }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_09_03	
Name	019_09_03 QueryOnNameAndAlmostFullFalse	
Parent Release	v1.3.1	
Description	Check that one can query several entities based on ids	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: q set to 'name=="Pisa Tower";almostFull==false' and Query Parameter: count set to 'true' and Query Parameter: Link set to	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Header: NGSILD-Results-Count equals to 1 }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_09_04	
Name	019_09_04 QueryOnNameOrAlmostFullFalse	
Parent Release	v1.3.1	
Description	Check that one can query several entities based on ids	I 5: ::
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to 'name=="Pisa Tower" almostFull==false' and Query	
	Parameter: count set to 'true' and Query Parameter: Link set to	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Header: NGSILD-Results-Count equals to 3 }	

TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_09_05	
Name	019_09_05 QueryOnNamesAndAlmostFullFalse	
Parent Release	v1.3.1	
Description	Check that one can query several entities based on ids	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to '(name=="Pisa Tower" name=="Eiffel Tower");almostFull==false' and Query Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-"	SUT <- Client
	ld#context";type="application/ld+json"; }	
	then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 2 }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_09_06	•
Name	019_09_06 QueryOnAirQualityLevel	
Parent Release	v1.3.1	
Description	Check that one can query several entities based on ids	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to 'airQualityLevel==4' and Query Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_09_07	
Name	019_09_07 QueryOnAirQualityLevelRange	
D		
Parent Release	v1.3.1	
Description	Check that one can query several entities based on ids	
	Check that one can query several entities based on ids Test events	Direction Client
Description	Check that one can query several entities based on ids Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to 'airQualityLevel>=4;airQualityLevel<7' and Query Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	Direction SUT <- Client
Description Expected behaviour	Check that one can query several entities based on ids Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to 'airQualityLevel>=4;airQualityLevel<7' and Query Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId>; rel="http://www.w3.org/ns/json-Id#context";type="application/Id+json"' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 2 }	
Description Expected behaviour TP Permutation id	Check that one can query several entities based on ids Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to 'airQualityLevel>=4;airQualityLevel<7' and Query Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 2 } TP/NGSI-LD/CI/Cons/E/019_09_08	SUT <- Client
Description Expected behaviour TP Permutation id Name	Check that one can query several entities based on ids Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to 'airQualityLevel>=4;airQualityLevel<7' and Query Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 2 } TP/NGSI-LD/CI/Cons/E/019_09_08 019_09_08 QueryOnLocatedInExisting	SUT <- Client
Description Expected behaviour TP Permutation id Name Parent Release	Check that one can query several entities based on ids Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to 'airQualityLevel>=4;airQualityLevel<7' and Query Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 2 } TP/NGSI-LD/CI/Cons/E/019_09_08 019_09_08 QueryOnLocatedInExisting v1.3.1	SUT <- Client
Description Expected behaviour TP Permutation id Name Parent Release Description	Check that one can query several entities based on ids Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to 'airQualityLevel>=4;airQualityLevel<7' and Query Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-campound.jsonld>; rel="http://www.w3.org/ns/jsonl-d#contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 2 } TP/NGSI-LD/CI/Cons/E/019_09_08 019_09_08 QueryOnLocatedInExisting v1.3.1 Check that one can query several entities based on ids	SUT <- Client SUT -> Client
Description Expected behaviour TP Permutation id Name Parent Release	Check that one can query several entities based on ids Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to 'airQualityLevel>=4;airQualityLevel<7' and Query Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 2 } TP/NGSI-LD/CI/Cons/E/019_09_08 019_09_08 QueryOnLocatedInExisting v1.3.1	SUT <- Client
Description Expected behaviour TP Permutation id Name Parent Release Description	Check that one can query several entities based on ids Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to 'airQualityLevel>=4;airQualityLevel<7' and Query Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId>; rel="http://www.w3.org/ns/json-Id#context";type="application/Id+json"' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 2 } TP/NGSI-LD/CI/Cons/E/019_09_08 019_09_08 QueryOnLocatedInExisting v1.3.1 Check that one can query several entities based on ids Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to 'locatedIn==urn:ngsi-Id:City:Pisa' and Query Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite-compound.jsonId>;/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId>;	SUT <- Client SUT -> Client Direction
TP Permutation id Name Parent Release Description Expected behaviour	Check that one can query several entities based on ids Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to 'airQualityLevel>=4;airQualityLevel<7' and Query Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonld-context/ngsi-Id-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-Id#context";type="application/Id+json"' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 2 } TP/NGSI-LD/CI/Cons/E/019_09_08 019_09_08 QueryOnLocatedInExisting v1.3.1 Check that one can query several entities based on ids Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: q set to 'locatedIn==urn:ngsi-Id:City:Pisa' and Query Parameter: count set to 'true' and Query Parameter: Link set to '<\$https://orge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-Id-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-Id#context";type="application/Id+json" } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_09_09	SUT <- Client SUT -> Client Direction SUT <- Client

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: q set to 'locatedIn==urn:ngsi-ld:City:Paris' and Query Parameter:	
	count set to 'true' and Query Parameter: Link set to	
	<pre>'<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-</pre>	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Header: NGSILD-Results-Count equals to 0 }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_09_10	
Name	019_09_10 QueryOnLocatedInTwoCities	
Parent Release	v1.3.1	
Description	Check that one can query several entities based on ids	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: q set to 'locatedIn==urn:ngsi-ld:City:Pisa locatedIn==urn:ngsi-	
	ld:City:Paris' and Query Parameter: count set to 'true' and Query Parameter:	
	Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Header: NGSILD-Results-Count equals to 1 }	

	T	
TP ld	TP/NGSI-LD/CI/Cons/E/019_02_06	
Test objective	Check that one can query two entities via POST Interaction based on ids	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF_01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_02_06	
Name	019_02_06 Query two entities via POST Interaction based on ids	
Parent Release	v1.3.1	
Description	Check that one can query two entities via POST Interaction based on ids	
Expected behaviour	Test events	Direction
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/query' method set to 'POST' Get Entities Via	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/query' method set to 'POST' Get Entities Via	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/query' method set to 'POST' Get Entities Via POST Request: and Query Parameter: entities set to '\${entities}' and Query	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/query' method set to 'POST' Get Entities Via POST Request: and Query Parameter: entities set to '\${entities}' and Query Parameter: content_type set to 'application/json' and Query Parameter: accept set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/query' method set to 'POST' Get Entities Via POST Request: and Query Parameter: entities set to '\${entities}' and Query Parameter: content_type set to 'application/json' and Query Parameter: accept set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities Via POST with Response Status Code set to 200 and Query Entities Via	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/query' method set to 'POST' Get Entities Via POST Request: and Query Parameter: entities set to '\${entities}' and Query Parameter: content_type set to 'application/json' and Query Parameter: accept set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entityOperations/query' method set to 'POST' Get Entities Via POST Request: and Query Parameter: entities set to '\${entities}' and Query Parameter: content_type set to 'application/json' and Query Parameter: accept set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities Via POST with Response Status Code set to 200 and Query Entities Via	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entityOperations/query' method set to 'POST' Get Entities Via POST Request: and Query Parameter: entities set to '\${entities}' and Query Parameter: content_type set to 'application/json' and Query Parameter: accept set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities Via POST with Response Status Code set to 200 and Query Entities Via POST with Response Body containing a list containing Entity Elements and	SUT <- Client

TP ld	TP/NGSI-LD/CI/Cons/E/019_03_02
Test objective	Check that one cannot query entities if the requested entity types are incorrect
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2
Config Id	CF_01
PICS Selection	PICS_QueEnt_AND_QueEntPos
Initial conditions	with { the SUT containing an initial state }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_03_02
Name	019_03_02 Query entities based on incorrect entity types
Parent Release	v1.3.1
Description	Check that one cannot query entities if the requested entity types are incorrect

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_types set to '\${entity_types_to_be_retrieved}' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 400 and Query Entities with Response	
	Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData'	
	and Query Entities with Response body containing 'title' element }	

TP Id	TP/NGSI-LD/CI/Cons/E/019_02_02	
Test objective	Check that one can query several entities via POST Interaction based on the e	entity type
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF_01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_02_02	
Name	019_02_02 Query several entities via POST Interaction based on the entities t	ypes
Parent Release	v1.3.1	
Description	Check that one can query several entities via POST Interaction based on the e	entity type
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/query' method set to 'POST' Get Entities Via	
	IDOCT Degreets and Orient Denometers entities set to 'C(entities)' and Orient	
	POST Request: and Query Parameter: entities set to '\${entities}' and Query	
	Parameter: accept set to 'application/ld+json' and Query Parameter:	
	Parameter: accept set to 'application/ld+json' and Query Parameter: content_type set to 'application/json' }	
	Parameter: accept set to 'application/ld+json' and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	Parameter: accept set to 'application/ld+json' and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities Via POST with Response Status Code set to 200 and Query Entities Via	SUT -> Client
	Parameter: accept set to 'application/ld+json' and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities Via POST with Response Status Code set to 200 and Query Entities Via POST with Response body containing a list containing entity elements with	SUT -> Client
	Parameter: accept set to 'application/ld+json' and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities Via POST with Response Status Code set to 200 and Query Entities Via POST with Response body containing a list containing entity elements with different types and Query Parameter: filename set to 'two-vehicles.jsonld'	SUT -> Client
	Parameter: accept set to 'application/ld+json' and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities Via POST with Response Status Code set to 200 and Query Entities Via POST with Response body containing a list containing entity elements with different types and Query Parameter: filename set to 'two-vehicles.jsonld' and Query Parameter: entities_representation_ids set to	SUT -> Client
	Parameter: accept set to 'application/ld+json' and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities Via POST with Response Status Code set to 200 and Query Entities Via POST with Response body containing a list containing entity elements with different types and Query Parameter: filename set to 'two-vehicles.jsonld' and Query Parameter: entities_representation_ids set to 'entities_ids_to_be_compared' and Query Parameter: response_body set to	SUT -> Client
	Parameter: accept set to 'application/ld+json' and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities Via POST with Response Status Code set to 200 and Query Entities Via POST with Response body containing a list containing entity elements with different types and Query Parameter: filename set to 'two-vehicles.jsonld' and Query Parameter: entities_representation_ids set to	SUT -> Client

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TP Id	TP/NGSI-LD/CI/Cons/E/019_03_05	
Test objective	Check that one cannot query entities if the request has a wrong geometryProp	erty
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF_01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_03_05	
Name	019_03_05 Query entities when the request has a wrong geometryProperty	
Parent Release	v1.3.1	
Description	Check that one cannot query entities if the request has a wrong geometryProp	erty
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query	
	Parameter: geoproperty set to 'location' and Query Parameter: georel set to	
	'invalid' and Query Parameter: geometry set to 'Point' and Query Parameter:	
	coordinates set to '[-8.503,41.202]' and Query Parameter: Link set to	
	<pre>'<\https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-</pre>	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 400 and Query Entities with Response	CC , CHOIR
	Rody containing the type 'https://uri.etsi.org/ngsi-ld/errors/RadReguestData'	
	Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Query Entities with Response body containing 'title' element }	

TP Id	TD/N/CSLLD/CI/Cons/E/010 11	
Test objective	TP/NGSI-LD/CI/Cons/E/019_11 Check that one can guery several entities based on complex geogueries with leading to the complex geogueries.	Dolugon target
rest objective	geometries	Polygon larget
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.10, 5.7.2	
Config Id	CF 01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
initial conditions	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_11_01	
Name	019_11_01 QueryOnEqualsPolygon	
Parent Release	v1.3.1	
Description	Check that one can query with an exact polygon	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'equals' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[13.2865906,52.5648645],[13.2879639,52.5648645],[13.2797241,52.4988 679],[13.477478,52.4712703],[13.5049438,52.5373084],[13.2865906,52.564 8645]]]' and Query Parameter: count set to 'true' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_11_02	1
Name	019_11_02 QueryOnIntersectsPolygon	
Parent Release	v1.3.1	
Description	Check that one can query with an intersects polygon	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId>; rel="http://www.w3.org/ns/json-Id#context";type="application/Id+json" and Query Parameter: georel set to 'intersects' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[13.3456421,52.4794848],[13.3641815,52.4428773],[13.4177399,52.4730 023],[13.3459854,52.479903],[13.3456421,52.4794848]]]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response	SUT -> Client
	Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/- /raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' and Query Parameter: georel set to 'intersects' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[[13.3456421,52.4794848],[13.3641815,52.4428773],[13.4177399,52.4730 023],[13.3459854,52.479903],[13.3456421,52.4794848]]]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 }	SUT -> Client
TP Permutation id	Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/- /raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'intersects' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[13.3456421,52.4794848],[13.3641815,52.4428773],[13.4177399,52.4730 023],[13.3459854,52.479903],[13.3456421,52.4794848]]]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_11_03	SUT -> Client
Name	Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/- /raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' and Query Parameter: georel set to 'intersects' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[13.3456421,52.4794848],[13.3641815,52.4428773],[13.4177399,52.4730 023],[13.3459854,52.479903],[13.3456421,52.4794848]]]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_11_03 019_11_03 QueryOnContainsPolygonMatching	SUT -> Client
Name Parent Release	Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' and Query Parameter: georel set to 'intersects' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[13.3456421,52.4794848],[13.3641815,52.4428773],[13.4177399,52.4730 023],[13.3459854,52.479903],[13.3456421,52.4794848]]]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_11_03	SUT -> Client
Name Parent Release Description	Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'intersects' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[13.3456421,52.4794848],[13.3641815,52.4428773],[13.4177399,52.4730 023],[13.3459854,52.479903],[13.3456421,52.4794848]]]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_11_03 019_11_03 QueryOnContainsPolygonMatching v1.3.1 Check that one can query with a contains polygon	
Name Parent Release	Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'intersects' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[13.3456421,52.4794848],[13.3641815,52.4428773],[13.4177399,52.4730 023],[13.3459854,52.479903],[13.3456421,52.4794848]]]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_11_03	Direction
Name Parent Release Description	Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'intersects' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[13.3456421,52.4794848],[13.3641815,52.4428773],[13.4177399,52.4730 023],[13.3459854,52.479903],[13.3456421,52.4794848]]]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 } TP/NGSI-LD/CI/Cons/E/019_11_03 019_11_03 QueryOnContainsPolygonMatching v1.3.1 Check that one can query with a contains polygon	

TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_11_04	
Name	019_11_04 QueryOnContainsPolygonNotMatching	
Parent Release	v1.3.1	
Description	Check that one can query with a contains polygon without matching geometrie	·S
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and	SUT <- Client
	Query Parameter: georel set to 'contains' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[[13.1369019,52.5198225],[13.1365585,52.5200314],[13.131752,52.49809 07],[13.1832504,52.5026887],[13.1369019,52.5198225]]]' and Query Parameter: count set to 'true' } then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 0 }	COT 7 CHOIR
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_11_05	
Name	019_11_05 QueryOnDisjointPolygon	
Parent Release	v1.3.1	
Description	Check that one can query with a disjoint polygon	l 51 /1
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client
	'/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId>; rel="http://www.w3.org/ns/json-Id#context";type="application/Id+json" and Query Parameter: georel set to 'disjoint' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[13.1369019,52.5198225],[13.1365585,52.5200314],[13.131752,52.49809 07],[13.1832504,52.5026887],[13.1369019,52.5198225]]]' and Query Parameter: count set to 'true' }	
	then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 2 }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_11_06	
Name	019_11_06 QueryOnWithinPolygon	
Parent Release	v1.3.1	
Description	Check that one can query with a within polygon	I 5
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to 'Building' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: georel set to 'within' and Query Parameter: geometry set to 'Polygon' and Query Parameter: coordinates set to '[[13.3023834,52.4903066],[13.3027267,52.4905156],[13.2745743,52.4656 32],[13.3343124,52.4185447],[13.4311295,52.47107],[13.3023834,52.49030 66]]]' and Query Parameter: count set to 'true' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Header: NGSILD-Results-Count equals to 1 }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_11_07	
Name	019_11_07 QueryOnOverlapsPolygon	
Parent Release	v1.3.1	
Description	Check that one can query with an overlaps polygon	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_types set to 'Building' and Query Parameter: Link set to	
	<pre> <\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-</pre>	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and	
	Query Parameter: georel set to 'overlaps' and Query Parameter: geometry	
	set to 'Polygon' and Query Parameter: coordinates set to '[[[13.3456421,52.4794848],[13.3641815,52.4428773],[13.4177399,52.4730	
	[[[13.3450421,52.4794646],[13.3641615,52.4426773],[13.4177399,52.4730	
	Parameter: count set to 'true' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	OOT > OHOTIC
	Header: NGSILD-Results-Count equals to 1 }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_11_08	
Name	019_11_08 QueryOnContainsPoint	
Parent Release	v1.3.1	
Description	Check that one can query with a contains point	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_types set to 'Building' and Query Parameter: Link set to	
	<pre> <\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-</pre>	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and	
	Query Parameter: georel set to 'contains' and Query Parameter: geometry	
	set to 'Point' and Query Parameter: coordinates set to '[13.3442688,52.4650045]' and Query Parameter: count set to 'true' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	OOT -> CHEIR
	Header: NGSILD-Results-Count equals to 1 }	
	1. 1000 to 1 j	1

TP Id	TP/NGSI-LD/CI/Cons/E/019_02_05	
Test objective	Check that one can query entitites via POST Interaction asking for a GeoJSON	1
	representation	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF_01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_02_05	
Name	019_02_05 Query several entities via POST Interaction asking for a GeoJSON	I
	representation	
Parent Release	v1.3.1	
Description	Check that one can query entities via POST Interaction asking for a GeoJSON	
	representation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/query' method set to 'POST' Get Entities Via	
	POST Request: and Query Parameter: entities set to '\${entities}' and Query	
	Parameter: accept set to 'application/geo+json' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld	
	and Query Parameter: content_type set to 'application/json' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	Via POST with Response Status Code set to 200 and Query Entities Via	
	POST with response body : response_body=\${response.json()} found in alternatives : alternatives=\${alternatives} }	

TP Id	TD/NGSLLD/CI/Cons/E/010_08	
Test objective	TP/NGSI-LD/CI/Cons/E/019_08 Ouery entities with Entity Type Selection Language	
Reference	Query entities with Entity Type Selection Language. ETSI GS CIM 009 V1.6.1 [1], clauses 4.17 and 5.7.2	
Config Id PICS Selection	CF_01	
Initial conditions	PICS_TYPESELECTLANG and PICS_QueEnt_AND_QueEntPos	
initial conditions	with { the SUT containing an initial state } Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_08_01	
Name	019_08_01 query with one type	
Parent Release	v1.5.1	
Description	Query entities with Entity Type Selection Language.	
Expected behaviour	Test events	Direction
Expected beliavious	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query	OOT <= Ollerit
	Parameter: entity_types set to '\${entity_types_selection}' and Query	
	Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Body contains entities ids }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_08_02	
Name	019_08_02 query with the AND operator	
Parent Release	v1.5.1	
Description	Query entities with Entity Type Selection Language.	
Expected behaviour	Test events	Direction
•	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_types set to '\${entity_types_selection}' and Query	
	Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Body contains entities ids }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_08_03	
Name	019_08_03 query with the OR operator	
Parent Release	v1.5.1	
Description	Query entities with Entity Type Selection Language.	1 5: 4:
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	//ngsi-ld/v1/entities/ method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_types set to '\${entity_types_selection}' and Query	
	Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/- /raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	OOT -> Ollerit
	Body contains entities ids }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019 08 04	
Name	019_08_04 different query with the OR operator	
Parent Release	v1.5.1	
Description	Query entities with Entity Type Selection Language.	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_types set to '\${entity_types_selection}' and Query	
	Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Body contains entities ids }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_08_05	
Name	019_08_05 query with two operators	
Parent Release	v1.5.1	
Description	Query entities with Entity Type Selection Language.	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_types set to '\${entity_types_selection}' and Query	
	Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Body contains entities ids }	

TP ld	TP/NGSI-LD/CI/Cons/E/019_03_01	
Test objective	Check that one cannot query entities if the requested ids are incorrect	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF_01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_03_01	
Name	019_03_01 Query entities based on incorrect ids	
Parent Release	v1.3.1	
Description	Check that one cannot query entities if the requested ids are incorrect	
Expected behaviour	Test events	Direction
-	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_ids set to '\${entities_ids_to_be_retrieved}' and Query	
	Parameter: entity_types set to '\${entity_types_to_be_retrieved}' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 400 and Query Entities with Response	
	Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData'	
	and Query Entities with Response body containing 'title' element }	

TP ld	TP/NGSI-LD/CI/Cons/E/019 02 01	
Test objective	Check that one can query one entity via POST Interaction based on id	
Reference		
	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF_01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_02_01	
Name	019_02_01 Query one entity via POST Interaction based on id	
Parent Release	v1.3.1	
Description	Check that one can query one entity via POST Interaction based on id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/query' method set to 'POST' Get Entities Via	
	POST Request: and Query Parameter: entities set to '\${entities}' and Query	
	POST Request: and Query Parameter: entities set to '\${entities}' and Query Parameter: content_type set to 'application/json' and Query Parameter:	
	POST Request: and Query Parameter: entities set to '\${entities}' and Query Parameter: content_type set to 'application/json' and Query Parameter: accept set to 'application/json' }	CLIT . Client
	POST Request: and Query Parameter: entities set to '\${entities}' and Query Parameter: content_type set to 'application/json' and Query Parameter: accept set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	POST Request: and Query Parameter: entities set to '\${entities}' and Query Parameter: content_type set to 'application/json' and Query Parameter: accept set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities Via POST with Response Status Code set to 200 and Query Entities Via	SUT -> Client
	POST Request: and Query Parameter: entities set to '\${entities}' and Query Parameter: content_type set to 'application/json' and Query Parameter: accept set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities Via POST with Response Status Code set to 200 and Query Entities Via POST with Response Body containing a list containing Entity Elements and	SUT -> Client
	POST Request: and Query Parameter: entities set to '\${entities}' and Query Parameter: content_type set to 'application/json' and Query Parameter: accept set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities Via POST with Response Status Code set to 200 and Query Entities Via	SUT -> Client
	POST Request: and Query Parameter: entities set to '\${entities}' and Query Parameter: content_type set to 'application/json' and Query Parameter: accept set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Entities Via POST with Response Status Code set to 200 and Query Entities Via POST with Response Body containing a list containing Entity Elements and	SUT -> Client

TP ld	TP/NGSI-LD/CI/Cons/E/019 03 03	
Test objective	Check that one cannot query entities if the requested id pattern is incorrect	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF 01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_03_03	
Name	019_03_03 Query several entities based on incorrect id pattern	
Parent Release	v1.3.1	
Description	Check that one cannot query entities if the requested id pattern is incorrect	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_id_pattern set to 'invalid_entity_id_pattern**' and Query	
	Parameter: entity_types set to '\${entity_types_to_be_retrieved}' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 400 and Query Entities with Response	
	Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData'	
	and Query Entities with Response body containing 'title' element }	

TP ld	TP/NGSI-LD/CI/Cons/E/019_02_03	
Test objective	Check that one can query several entities via POST Interaction based on the g	iven id
	pattern	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF_01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_02_03	
Name	019_02_03 Query several entities via POST Interaction based on the given id	pattern
Parent Release	v1.3.1	
Description	Check that one can query several entities via POST Interaction based on the g	iven id
	pattern	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entityOperations/query' method set to 'POST' Get Entities Via	
	POST Request: and Query Parameter: entities set to '\${entities}' and Query	
	Parameter: content_type set to 'application/json' and Query Parameter:	
	accept set to 'application/json' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	Via POST with Response Status Code set to 200 and Query Entities Via	
	POST with Response Body containing a list containing Entity Elements and	
	Query Parameter: expectation_filename set to 'building-minimal.json' and	
	Query Parameter: expectation_filename set to 'building-minimal.json' and Query Parameter: entities_ids set to 'entities_ids_to_be_compared' and	

TP ld	TP/NGSI-LD/CI/Cons/E/019_01_02		
Test objective	Check that one can query several entities based on the entities types		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2		
Config Id	CF_01		
PICS Selection	PICS_QueEnt_AND_QueEntPos		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_01_02		
Name	019_01_02 Query several entities based on the entities types		
Parent Release	v1.3.1		
Description	Check that one can query several entities based on the entities types		

Expected behaviour	Test events	Direction
		SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query	
	Parameter: accept set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	body containing a list containing entity elements with different types and	
	Query Parameter: filename set to 'two-types-vehicle-offstreetparking.jsonId'	
	and Query Parameter: entities_representation_ids set to	
	'entities_ids_to_be_compared' and Query Parameter: response_body set to	
	'response.json()' and Query Parameter: ignore_core_context_version set to	
	True' }	

TP ld	TP/NGSI-LD/CI/Cons/E/019_04	
Test objective	Check that the queried entities by Id can be returned in a simplified representa	ation
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.7	
Config Id	CF_01	
PICS Selection	PICS_HTTP_SIMP_REPR	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_04_01	
Name	019_04_01 Query entities in a simplified representation	
Parent Release	v1.3.1	
Description	Check that the queried entities by Id can be returned in a simplified representa	ntion
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_ids set to '\${entities_ids_to_be_retrieved}' and Query	
	Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query	
	Parameter: options set to 'keyValues' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Body containing a list containing Entity Elements and Query Parameter:	
	expectation_filename set to 'building-simple-attributes-simplified.json' and	
	Query Parameter: entities_ids set to 'entities_ids_to_be_compared' and Query Parameter: ignore_core_context_version set to 'False' }	

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TP ld	TP/NGSI-LD/CI/Cons/E/019_01_06	
Test objective	Check that one can query several entities based on scopes	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 4.19	
Config Id	CF_01	
PICS Selection	PICS_SCOPESELECTLANG	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_01_06	
Name	019_01_06 QueryWithFullScope	
Parent Release	v1.5.1	
Description	Check that one can query several entities based on scopes	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: scopeq set to '/Madrid/Gardens/ParqueNorte' and Query	
	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Body containing a list of entities equal to '\${2}' of type 'https://ngsi-ld-test-	
	suite/context#Building' with response set to '\${response.json()}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_01_06	_
Name	019_01_06 QueryWithPlusMatching	
Parent Release	v1.5.1	
Description	Check that one can query several entities based on scopes	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: scopeq set to '/Madrid/+/ParqueNorte' and Query Parameter:	
	<pre>entity_types set to 'https://ngsi-ld-test-suite/context#Building' }</pre>	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	0.0.1
	Body containing a list of entities equal to '\${2}' of type 'https://ngsi-ld-test-	
	suite/context#Building' with response set to '\${response.json()}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_01_06	1
Name	019_01_06 QueryWithHashMatching	
Parent Release	v1.5.1	
Description	Check that one can query several entities based on scopes	
Expected behaviour	Test events	Direction
•	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: scopeq set to '/CompanyA/#' and Query Parameter: entity_types	
	set to 'https://ngsi-ld-test-suite/context#Building' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	0.0.1
	Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test-	
	suite/context#Building' with response set to '\${response.json()}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_01_06	I
Name	019_01_06 QueryNonEmptyScope	
Parent Release	v1.5.1	
Description	Check that one can query several entities based on scopes	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: scopeq set to '/#' and Query Parameter: entity_types set to	
	'https://ngsi-ld-test-suite/context#Building' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Body containing a list of entities equal to '\${2}' of type 'https://ngsi-ld-test-	
	suite/context#Building' with response set to '\${response.json()}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_01_06	1
Name	019_01_06 QueryWithAndScope	
Parent Release	v1.5.1	
Description	Check that one can query several entities based on scopes	
Expected behaviour	Test events	Direction
•	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: scopeq set to	
	'/Madrid/Gardens/ParqueNorte;/CompanyA/OrganizationB/UnitC' and Query	
	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' }	
		SUT -> Client
	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' }	SUT -> Client
	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test-	SUT -> Client
	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test-suite/context#Building' with response set to '\${response.json()}' }	SUT -> Client
TP Permutation id	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test-	SUT -> Client
TP Permutation id	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test-suite/context#Building' with response set to '\${response.json()}' }	SUT -> Client
Name Parent Release	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test- suite/context#Building' with response set to '\${response.json()}' } TP/NGSI-LD/CI/Cons/E/019_01_06 019_01_06 QueryWithOrScope v1.5.1	SUT -> Client
Name	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test- suite/context#Building' with response set to '\${response.json()}' } TP/NGSI-LD/CI/Cons/E/019_01_06 019_01_06 QueryWithOrScope	SUT -> Client
Name Parent Release	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test- suite/context#Building' with response set to '\${response.json()}' } TP/NGSI-LD/CI/Cons/E/019_01_06 019_01_06 QueryWithOrScope v1.5.1 Check that one can query several entities based on scopes Test events	Direction
Name Parent Release Description	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test-suite/context#Building' with response set to '\${response.json()}' } TP/NGSI-LD/CI/Cons/E/019_01_06 019_01_06 QueryWithOrScope v1.5.1 Check that one can query several entities based on scopes Test events when { the SUT receives a Request from the client containing: URL set to	
Name Parent Release Description	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test-suite/context#Building' with response set to '\${response.json()}' } TP/NGSI-LD/CI/Cons/E/019_01_06 019_01_06 QueryWithOrScope v1.5.1 Check that one can query several entities based on scopes Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	Direction
Name Parent Release Description	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test-suite/context#Building' with response set to '\${response.json()}' } TP/NGSI-LD/CI/Cons/E/019_01_06 019_01_06 QueryWithOrScope v1.5.1 Check that one can query several entities based on scopes Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: scopeq set to	Direction
Name Parent Release Description	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test-suite/context#Building' with response set to '\${response.json()}' } TP/NGSI-LD/CI/Cons/E/019_01_06 019_01_06 QueryWithOrScope v1.5.1 Check that one can query several entities based on scopes Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: scopeq set to '/Madrid/Gardens/ParqueNorte,/CompanyA/OrganizationB/UnitC' and Query	Direction
Name Parent Release Description	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test-suite/context#Building' with response set to '\${response.json()}' } TP/NGSI-LD/CI/Cons/E/019_01_06 019_01_06 QueryWithOrScope v1.5.1 Check that one can query several entities based on scopes Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: scopeq set to '/Madrid/Gardens/ParqueNorte,/CompanyA/OrganizationB/UnitC' and Query Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' }	Direction
Name Parent Release Description	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test-suite/context#Building' with response set to '\${response.json()}' } TP/NGSI-LD/CI/Cons/E/019_01_06 019_01_06 QueryWithOrScope v1.5.1 Check that one can query several entities based on scopes Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: scopeq set to '/Madrid/Gardens/ParqueNorte,/CompanyA/OrganizationB/UnitC' and Query Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities	Direction
Name Parent Release Description	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test-suite/context#Building' with response set to '\${response.json()}' } TP/NGSI-LD/CI/Cons/E/019_01_06 019_01_06 QueryWithOrScope v1.5.1 Check that one can query several entities based on scopes Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: scopeq set to '/Madrid/Gardens/ParqueNorte,/CompanyA/OrganizationB/UnitC' and Query Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response	Direction SUT <- Client
Name Parent Release Description	Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${1}' of type 'https://ngsi-ld-test-suite/context#Building' with response set to '\${response.json()}' } TP/NGSI-LD/CI/Cons/E/019_01_06 019_01_06 QueryWithOrScope v1.5.1 Check that one can query several entities based on scopes Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: scopeq set to '/Madrid/Gardens/ParqueNorte,/CompanyA/OrganizationB/UnitC' and Query Parameter: entity_types set to 'https://ngsi-ld-test-suite/context#Building' } then { the SUT sends a valid Response for the operations: Query Entities	Direction SUT <- Client

TP ld	TP/NGSI-LD/CI/Cons/E/019_01_04	
Test objective	Check that one can query several entities based on attribute names	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF_01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_01_04	
Name	019_01_04 Query several entities based on attribute names	
Parent Release	v1.3.1	
Description	Check that one can query several entities based on attribute names	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: attrs set to '\${attributes_to_be_retrieved}' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Body containing a list containing Entity Elements and Query Parameter:	
	expectation_filename set to 'building-attributes-query.json' and Query	
	Parameter: entities_ids set to 'entities_ids_to_be_compared' and Query	
	Parameter: ignore_core_context_version set to 'False' }	

TP Id	TP/NGSI-LD/CI/Cons/E/019_06	
Test objective	Check that one can query entities specifying a maximum number of results	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.10	
Config Id	CF_01	
PICS Selection	PICS_HTTP_PAGINATION_LIMIT	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_06_01	
Name	019_06_01 Query entities specifying a maximum number of results	
Parent Release	v1.3.1	
Description	Check that one can query entities specifying a maximum number of results	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_ids set to '\${entities_ids_to_be_retrieved}' and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: limit set to '2' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list of entities equal to '\${2}' of type 'https://ngsi-ld-test-suite/context#Building' with response set to '\${response.json()}' }	SUT -> Client

TP ld	TP/NGSI-LD/CI/Cons/E/019_01_03	
Test objective	Check that one can query several entities based on the given id pattern	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF_01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_01_03	
Name	019_01_03 Query several entities based on the given id pattern	
Parent Release	v1.3.1	
Description	Check that one can query several entities based on the given id pattern	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_id_pattern set to 'urn:ngsi-ld:Building:.*' and Query	
	Parameter: entity_types set to '\${entity_types_to_be_retrieved}' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Body containing a list containing Entity Elements and Query Parameter:	
	expectation_filename set to 'building-minimal.json' and Query Parameter:	
	entities_ids set to 'entities_ids_to_be_compared' and Query Parameter:	
	response_body set to 'response.json()' and Query Parameter:	
	ignore_core_context_version set to 'False' }	

TP Id	TP/NGSI-LD/CI/Cons/E/019_01_01	
Test objective	Check that one can query several entities based on ids	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF_01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_01_01	
Name	019_01_01 Query several entities based on ids	
Parent Release	v1.3.1	
Description	Check that one can query several entities based on ids	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_ids set to '\${entities_ids_to_be_retrieved}' and Query	
	Parameter: entity_types set to '\${entity_types_to_be_retrieved}' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with Response	
	Body containing a list containing Entity Elements and Query Parameter:	
	laypootation, filanama act to 'building minimal ican' and Quary Darameter:	
	expectation_filename set to 'building-minimal.json' and Query Parameter:	
	entities_ids set to 'entities_ids_to_be_compared' and Query Parameter:	

TP ld	TP/NGSI-LD/CI/Cons/E/019_01_05	
Test objective	Check that one can query entities based on a geoquery	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.2	
Config Id	CF_01	
PICS Selection	PICS_QueEnt_AND_QueEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_01_05	
Name	019_01_05 Query several entities based on a geoquery	
Parent Release	v1.3.1	
Description	Check that one can query entities based on a geoquery	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: accept set to 'application/ld+json' and Query Parameter: georel set to 'equals' and Query Parameter: geometry set to 'Point' and Query Parameter: coordinates set to '[13.3986, 52.5547]' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Entities with Response Status Code set to 200 and Query Entities with Response Body containing a list containing Entity Elements and Query Parameter: expectation_filename set to 'building-geoproperty-query.jsonld' and Query Parameter: entities_ids set to 'entities_ids_to_be_compared' and Query Parameter: ignore_core_context_version set to 'False' }	SUT -> Client

TP ld	TP/NGSI-LD/CI/Cons/E/019_07	
Test objective	If the count parameter is set to true the special HTTP header NGSILD-Results	-Count is set
	in the response and it shall contain the total number of matching results.	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 5.7.2, 6.3.13	
Config Id	CF_01	
PICS Selection	PICS_QueEnt_AND_QueEntPos and PICS_HTTP_COUNT_RESULTS	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_07_01	
Name	019_07_01 Check that the total number of matching results is returned if the c	ount
	parameter is set to true and only the entity type is provided	
Parent Release	v1.3.1	
Description	If the count parameter is set to true the special HTTP header NGSILD-Results	-Count is set
	in the response and it shall contain the total number of matching results.	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_types set to 'Building' and Query Parameter: q set to '\${q}'	
	and Query Parameter: count set to 'true' and Query Parameter: Link set to	
	'<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to \${expected_status_code} and Query	
	Entities with Response Header: NGSILD-Results-Count equals to 2 }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_07_02	
Name	019_07_02 Check that the total number of matching results is returned if the c	ount
	parameter is set to true and a q parameter is provided	
Parent Release	v1.3.1	
Description	If the count parameter is set to true the special HTTP header NGSILD-Results	-Count is set
	in the response and it shall contain the total number of matching results.	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_types set to 'Building' and Query Parameter: q set to '\${q}'	
	and Query Parameter: count set to 'true' and Query Parameter: Link set to	
	<pre>'<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/- 'reput/develor /reput/develor /reput</pre>	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" }	CLIT . Oliant
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to \${expected_status_code} and Query	
	Entities with Response Header: NGSILD-Results-Count equals to 1 }	

TP Id	TP/NGSI-LD/CI/Cons/E/019_05
Test objective	Check that the queried entities by id can be returned in GeoJSON format
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.7
Config Id	CF_01
PICS Selection	PICS_HTTP_SIMP_REPR
Initial conditions	with { the SUT containing an initial state }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Cons/E/019_05_01
Name	019_05_01 Get an entity by id that can be returned in GeoJSON format
Parent Release	v1.3.1
Description	Check that the queried entities by id can be returned in GeoJSON format

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'GET' Get Entities Request: and Query	
	Parameter: entity_ids set to '\${entities_ids_to_be_retrieved}' and Query	
	Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query	
	Parameter: accept set to 'application/geo+json' and Query Parameter: Link	
	set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' }	
	then { the SUT sends a valid Response for the operations: Query Entities	SUT -> Client
	with Response Status Code set to 200 and Query Entities with response	
	body: response_body=\${response.json()} found in alternatives:	
	alternatives=\${alternatives} }	

4.4.2.1.2 RetrieveEntity

TP Id	TP/NGSI-LD/CI/Cons/E/018_09	
Test objective	Check that an entity with operationSpace geospatial Property can be retrieved	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.7 and 5.7.1	
Config Id	CF_01	
PICS Selection	PICS_EntRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_09_01	
Name	018_09_01 Simplified	
Parent Release	v1.3.1	
Description	Check that an entity with operationSpace geospatial Property can be retrieved	
Expected behaviour	Test events	Direction
TP Permutation id Name Parent Release	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query Parameter: id set to '\${entity_id}' and Query Parameter: options set to 'keyValues' and Query Parameter: Link set to 'shttps://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' } then { the SUT sends a valid Response for the operations: Query Entity with Response Status Code set to 200 and Query Entity with Response Body containing en entity element with id set to '\${entity_id}' and body content set to 'building-operation-space-geoproperty-simplified.jsonld' } TP/NGSI-LD/CI/Cons/E/018_09_02 Normalized v1.3.1	SUT <- Client SUT -> Client
Description	Check that an entity with operationSpace geospatial Property can be retrieved	1
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query Parameter: id set to '\${entity_id}' and Query Parameter: options set to '\${EMPTY}' and Query Parameter: Link set to '\${https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' } then { the SUT sends a valid Response for the operations: Query Entity with	SUT <- Client
	Response Status Code set to 200 and Query Entity with Response Body containing en entity element with id set to '\${entity_id}' and body content set to 'building-operation-space-geoproperty-normalized.jsonId' }	

TP ld	TP/NGSI-LD/CI/Cons/E/018_01_02
Test objective	Check that one can query some attributes from an entity
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.1
Config Id	CF_01
PICS Selection	PICS_EntRet
Initial conditions	with { the SUT containing an initial state }

Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_01_02	
Name	018_01_02 Query some attributes from an entity	
Parent Release	v1.3.1	
Description	Check that one can query some attributes from an entity	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/ld+json' and Query Parameter: attrs set to '\${attributes_to_be_retrieved}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Entity with Response Status Code set to 200 and Query Entity with Response Body containing en entity element with id set to '\${entity_id}' and body content set to 'building-simple-attributes-query.jsonld' }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Cons/E/018_08	
Test objective	Check that an entity with observationSpace geospatial Property can be retrieved	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.7 and 5.7.1	
Config Id	CF_01	
PICS Selection	PICS_EntRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_08_01	
Name	018_08_01 Simplified	
Parent Release	v1.3.1	
Description	Check that an entity with observationSpace geospatial Property can be retriev	ed
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query	
	Parameter: id set to '\${entity_id}' and Query Parameter: options set to	
	'keyValues' and Query Parameter: Link set to	
	<pre> <\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-</pre>	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' }	
	then { the SUT sends a valid Response for the operations: Query Entity with	SUT -> Client
	Response Status Code set to 200 and Query Entity with Response Body	
	containing en entity element with id set to '\${entity_id}' and body content set	
	to 'building-observation-space-geoproperty-simplified.jsonld' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_08_02	
Name	018_08_02 Normalized	
Parent Release	v1.3.1	
Description	Check that an entity with observationSpace geospatial Property can be retriev	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query	
	Parameter: id set to '\${entity_id}' and Query Parameter: options set to	
	'\${EMPTY}' and Query Parameter: Link set to	
	<pre>'<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-</pre>	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' }	
	then { the SUT sends a valid Response for the operations: Query Entity with	SUT -> Client
	Response Status Code set to 200 and Query Entity with Response Body	
	containing en entity element with id set to '\${entity_id}' and body content set	
	to 'building-observation-space-geoproperty-normalized.jsonId' }	

TP ld	TP/NGSI-LD/CI/Cons/E/018_01_01
Test objective	Check that one can get an entity by id
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.1
Config Id	CF_01
PICS Selection	PICS_EntRet
Initial conditions	with { the SUT containing an initial state }

Permutations			
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_01_01		
Name	018_01_01 Get an entity by id		
Parent Release	v1.3.1		
Description	Check that one can get an entity by id		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/ld+json' }	SUT <- Client	
	then { the SUT sends a valid Response for the operations: Query Entity with Response Status Code set to 200 and Query Entity with Response Body containing en entity element with id set to '\${entity_id}' and body content set to 'building-simple-attributes.jsonId' }	SUT -> Client	

TP ld	TP/NGSI-LD/CI/Cons/E/018_02			
Test objective	Check that one cannot get an entity with invalid id			
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.1			
Config Id	CF_01			
PICS Selection	PICS_EntRet			
Initial conditions	with { the SUT containing an initial state }			
Permutations				
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_02_01			
Name	018_02_01 Get an entity if the Entity Id is not a valid URI			
Parent Release	v1.3.1			
Description	Check that one cannot get an entity with invalid/missing id			
Expected behaviour	Test events	Direction		
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query	SUT <- Client		
	Parameter: id set to 'thisisaninvaliduri' and Query Parameter: accept set to 'application/ld+json' }			
	then { the SUT sends a valid Response for the operations: Query Entity with	SUT -> Client		
	Response Status Code set to 400 and Query Entity with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Query Entity with Response body containing 'title' element }			

TP ld	TP/NGSI-LD/CI/Cons/E/018_03_02			
Test objective	Check that one cannot get an entity if an attribute is not known to the system			
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.1			
Config Id	CF_01			
PICS Selection	PICS_EntRet			
Initial conditions	with { the SUT containing an initial state }			
Permutations				
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_03_02			
Name	018_03_02 Get an entity if an attribute is not known to the system			
Parent Release	v1.3.1			
Description	Check that one cannot get an entity if an attribute is not known to the system			
Expected behaviour	Test events	Direction		
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client		
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query			
	Parameter: id set to '\${entity_id}' and Query Parameter: accept set to			
	'application/ld+json' and Query Parameter: attrs set to			
	'\${attributes_to_be_retrieved}' }			
	then { the SUT sends a valid Response for the operations: Query Entity with	SUT -> Client		
	Response Status Code set to 404 and Query Entity with Response Body			
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/ResourceNotFound' and			
	Query Entity with Response body containing 'title' element }			

TP Id	TP/NGSI-LD/CI/Cons/E/018_04	
Test objective	Check that the queried entity by Id can be returned in a simplified representation	on
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.7	
Config Id	CF_01	
PICS Selection	PICS_HTTP_SIMP_REPR	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit an id set to \${entityId} }	y \${entity} with
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_04_01	
Name	018_04_01 Get an entity in a simplified representation	
Parent Release	v1.3.1	
Description	Check that the queried entity by Id can be returned in a simplified representation	on
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/ld+json' and Query Parameter: options set to 'keyValues' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Entity with Response Status Code set to 200 and Query Entity with Response Body containing en entity element with id set to '\${entity_id}' and body content set to 'building-simple-attributes-simplified.jsonId' }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Cons/E/018_06	
Test objective	Check that the JSON-LD @context is obtained from a Link header if present a	nd that the
•	default JSON-LD @context is used if not present	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.5	
Config Id	CF_01	
PICS Selection	PICS_HTTP_CONTEXT_RESOLV	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entit	y \${entity} with
	an id set to \${entityId} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_06_01	
Name	018_06_01 EmptyJsonLdContext	
Parent Release	v1.3.1	
Description	Check that the JSON-LD @context is obtained from a Link header if present a	nd that the
	default JSON-LD @context is used if not present	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query	
	Parameter: id set to '\${entity_id}' and Query Parameter: accept set to	
	'application/json' and Query Parameter: Link set to '<\$\${EMPTY}>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" }	SUT -> Client
	then { the SUT sends a valid Response for the operations: Query Entity with Response Status Code set to 200 and Query Entity with Response Body	SUT -> Client
	containing en entity element with id set to '\${entity_id}' and body content set	
	to 'building-simple-attributes-expanded.json' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_06_02	
Name	018_06_02 CreationTimeJsonLdContext	
Parent Release	v1.3.1	
Description	Check that the JSON-LD @context is obtained from a Link header if present a	nd that the
	default JSON-LD @context is used if not present	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query	
	Parameter: id set to '\${entity_id}' and Query Parameter: accept set to	
	'application/json' and Query Parameter: Link set to	
	<pre>'<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-</pre>	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' }	
	then { the SUT sends a valid Response for the operations: Query Entity with	SUT -> Client
	Response Status Code set to 200 and Query Entity with Response Body	
	containing en entity element with id set to '\${entity_id}' and body content set	
	to 'building-simple-attributes-compacted.json' }	

TP Id	TP/NGSI-LD/CI/Cons/E/018_03_01	
Test objective	Check that one cannot get an entity if the entity id is not known to the system	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.1	
Config Id	CF_01	
PICS Selection	PICS_EntRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_03_01	
Name	018_03_01 Get an entity if the Entity Id is not known to the system	
Parent Release	v1.3.1	
Description	Check that one cannot get an entity if the entity id is not known to the system	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query	SUT <- Client
	Parameter: id set to '\${entity_id}' and Query Parameter: accept set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Query Entity with	SUT -> Client
	Response Status Code set to 404 and Query Entity with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/ResourceNotFound' and	
	Query Entity with Response body containing 'title' element }	

TP Id	TP/NGSI-LD/CI/Cons/E/018 07	
Test objective	Check that one can retrieve an entity using Language Filter	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.15 and 5.7.1	
Config Id	CF_01	
PICS Selection	PICS_LANGFILTER and PICS_EntRet	
Initial conditions	with { the SUT containing an initial state }	
illitial colluitions	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_07_01	
Name	018_07_01 Retrieve an entity using a specific natural language	
Parent Release	v1.4.1	
Description	Check that one can retrieve an entity using Language Filter	
Expected behaviour	Test events	Direction
TP Permutation id	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/ld+json' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: options set to '\${EMPTY}' and Query Parameter: lang set to 'fr' } then { the SUT sends a valid Response for the operations: Query Entity with Response Status Code set to 200 and Query Entity with Response Body containing en entity element with id set to '\${entity_id}' and body content set to 'building-language-property-fr-filter.jsonld' } TP/NGSI-LD/CI/Cons/E/018_07_02 018_07_02 Retrieve an entity using multiple natural languages with no ranked	SUT <- Client SUT -> Client
Parent Release	v1.4.1	preference
Description	Check that one can retrieve an entity using Language Filter	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/ld+json' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: options set to '\${EMPTY}' and Query Parameter: lang set to 'fr-CH,fr' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Entity with Response Status Code set to 200 and Query Entity with Response Body containing en entity element with id set to '\${entity_id}' and body content set to 'building-language-property-fr-filter.jsonld' }	SUT -> Client

TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_07_03	
Name	018_07_03 Retrieve an entity with any supported language	
Parent Release	v1.4.1	
Description	Check that one can retrieve an entity using Language Filter	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/ld+json' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: options set to '\${EMPTY}' and Query Parameter: lang set to '*' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Entity with Response Status Code set to 200 and Query Entity with Response Body containing en entity element with id set to '\${entity_id}' and body content set to 'building-language-property-any-language-filter.jsonId' }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_07_04	
Name Parent Release	018_07_04 Retrieve an entity using multiple natural languages with ranked pr	erences
Description	V1.4.1	
Expected behaviour	Check that one can retrieve an entity using Language Filter	Direction
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/ld+json' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: options set to '\${EMPTY}' and Query Parameter: lang set to 'fr-CH,fr;q=0.9,en;q=0.8,*;q=0.5' }	
TDD	then { the SUT sends a valid Response for the operations: Query Entity with Response Status Code set to 200 and Query Entity with Response Body containing en entity element with id set to '\${entity_id}' and body content set to 'building-language-property-fr-filter.jsonld' }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_07_05	
Name	018_07_05 Retrieve an entity using a specific natural language with simplified representation	
Parent Release	V1.4.1	
Description Expected behaviour	Check that one can retrieve an entity using Language Filter	Divertion
Expected senaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/ld+json' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: options set to 'keyValues' and Query Parameter: lang set to 'fr' }	Direction SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Entity with Response Status Code set to 200 and Query Entity with Response Body containing en entity element with id set to '\${entity_id}' and body content set to 'building-language-property-fr-filter-simplified.jsonld' }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_07_06	
Name	018_07_06 Retrieve an entity with any supported language with simplified rep	resentation
Parent Release	v1.4.1	
Description	Check that one can retrieve an entity using Language Filter	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query	
	Parameter: id set to '\${entity_id}' and Query Parameter: accept set to	
	'application/ld+json' and Query Parameter: Link set to	
	<pre> <\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-</pre>	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and	
	Query Parameter: options set to 'keyValues' and Query Parameter: lang set	
	to '*' }	
	then { the SUT sends a valid Response for the operations: Query Entity with	SUT -> Client
	Response Status Code set to 200 and Query Entity with Response Body	
	containing en entity element with id set to '\${entity_id}' and body content set	
	to 'building-language-property-any-language-filter-simplified.jsonld' }	

TP Id	TP/NGSI-LD/CI/Cons/E/018_05	
Test objective	Check that the queried entity by id can be returned in a GeoJSON format	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 6.3.7	
Config Id	CF 01	
PICS Selection	PICS_HTTP_SIMP_REPR	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_05_01	
Name	018 05 01 Simplified	
Parent Release	v1.3.1	
Description	Check that the queried entity by id can be returned in a GeoJSON format	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/geo+json' and Query Parameter: options set to 'keyValues' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: geometryProperty set to '\${geometry_property}' } then { the SUT sends a valid Response for the operations: Query Entity with Response Status Code set to 200 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body	SUT <- Client SUT -> Client
TP Permutation id	content set to '\${EMPTY}' } TP/NGSI-LD/CI/Cons/E/018 05 02	
Name	018_05_02 Normalized	
Parent Release	v1.3.1	
Description	Check that the queried entity by id can be returned in a GeoJSON format	
Expected behaviour	Test events	Direction
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query Parameter: id set to '\${entity_id}' and Query Parameter: accept set to 'application/geo+json' and Query Parameter: options set to '\${EMPTY}' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: geometryProperty set to '\${geometry_property}' } then { the SUT sends a valid Response for the operations: Query Entity with	SUT <- Client
	Response Status Code set to 200 and Query Entity with Response Body containing en entity element with id set to 'entity_id=\${entity_id}' and body content set to '\${EMPTY}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_05_03	
Name	018_05_03 with geometryProperty	
Parent Release	v1.3.1	
Description	Check that the queried entity by id can be returned in a GeoJSON format	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query	
	Parameter: id set to '\${entity_id}' and Query Parameter: accept set to	
	'application/geo+json' and Query Parameter: options set to '\${EMPTY}' and	
	Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-	
	suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-	
	compound.jsonId>; rel="http://www.w3.org/ns/json-	
	Id#context";type="application/Id+json" and Query Parameter:	
	geometryProperty set to '\${geometry_property}' } then { the SUT sends a valid Response for the operations: Query Entity with	SUT -> Client
	Response Status Code set to 200 and Query Entity with Response Body	301 -> Client
	containing en entity element with id set to 'entity_id=\${entity_id}' and body	
	content set to 'observationSpace' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/E/018_05_04	
Name	018_05_04 with nonexistent geometryProperty	
Parent Release	v1.3.1	
Description	Check that the queried entity by id can be returned in a GeoJSON format	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'GET' Get Entity Request: and Query	
	Parameter: id set to '\${entity_id}' and Query Parameter: accept set to	
	'application/geo+json' and Query Parameter: options set to '\${EMPTY}' and	
	Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-	
	suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-	
	compound.jsonId>; rel="http://www.w3.org/ns/json-	
	Id#context";type="application/Id+json" and Query Parameter:	
	geometryProperty set to '\${geometry_property}' } then { the SUT sends a valid Response for the operations: Query Entity with	SUT -> Client
	Response Status Code set to 200 and Query Entity with Response Body	301 -> Client
	containing en entity element with id set to 'entity id=\${entity id}' and body	
	content set to 'operationSpace' }	
	position out to operationopass ;	J

4.4.2.2 TemporalEntity

4.4.2.2.1 RetrieveTemporalEvolutionOfEntity

TP ld	TP/NGSI-LD/CI/Cons/TE/020_17		
Test objective	Check that one can retrieve the temporal evolution of an entity following the deletedAt		
	temporal property		
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18 and 5.7.3		
Config Id	CF_01		
PICS Selection	PICS_LANG and PICS_TemEvoEntRet		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Temporal Entity		
	\${entity} with an id set to \${temporal_entity_representation_id} }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_17_01		
Name	020_17_01 With a Property		
Parent Release	v1.6.1		
Description	Check that one can retrieve the temporal evolution of an entity following the deletedAt		
	temporal property		

Expected behaviour	Test events	Direction
P • • • • • • • • • • • • • • • • • • •	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${temporal_entity_representation_id}' and Query Parameter: attributeId	
	set to 'fuelLevel' and Query Parameter: datasetId set to '\${EMPTY}' and	
	Query Parameter: deleteAll set to 'false' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200	
	and Retrieve Temporal Representation Of Entity with Response Body	
	containing EntityTemporal element containing attribute instances in the time	
	range specified by the NGSI-LD temporal query: * the payload is defined in	
	the file set to 'vehicle-temporal-representation-property-020-17.jsonld' * the	
	id was changed to	
	'temporal_entity_representation_id=\${temporal_entity_representation_id}' *	
TD D (response body to be checked set to 'response_body=\${response2.json()}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_17_02	
Name	020_17_02 With a Relationship	
Parent Release	v1.6.1	
Description	Check that one can retrieve the temporal evolution of an entity following the de	eletedAt
Expected behaviour	temporal property Test events	Direction
Expected beliavious	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}?\${params_as_string}' method	SUT <- CITETIL
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${temporal_entity_representation_id}' and Query Parameter: attributeId	
	set to 'isParkedIn' and Query Parameter: datasetId set to '\${EMPTY}' and	
	Query Parameter: deleteAll set to 'false' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200	00.70
	and Retrieve Temporal Representation Of Entity with Response Body	
	containing EntityTemporal element containing attribute instances in the time	
	range specified by the NGSI-LD temporal query: * the payload is defined in	
	the file set to 'vehicle-temporal-representation-relationship-020-17.jsonld' *	
	the file set to 'vehicle-temporal-representation-relationship-020-17.jsonld' * the id was changed to	
	the id was changed to	
TP Permutation id	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' *	
	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' }	
TP Permutation id Name Parent Release	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1	
Name	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the definition of the control of the contro	eletedAt
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property	
Name Parent Release	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events	Direction
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events when { the SUT receives a Request from the client containing: URL set to	
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	Direction
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	Direction
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}??\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId	Direction
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query	Direction
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query Parameter: context set to	Direction
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	Direction
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	Direction SUT <- Client
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Retrieve	Direction
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 200	Direction SUT <- Client
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set to '\${temporal_entity_representation_id}' and Query Parameter: attributeld set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Body	Direction SUT <- Client
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set to '\${temporal_entity_representation_id}' and Query Parameter: attributeld set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-ld-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time	Direction SUT <- Client
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property **Test events** when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeld}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-ld-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in	Direction SUT <- Client
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property **Test events** when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in the file set to 'vehicle-temporal-representation-languageproperty-020-	Direction SUT <- Client
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeld}??\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in the file set to 'vehicle-temporal-representation-languageproperty-020-17.jsonId' * the id was changed to	Direction SUT <- Client
Name Parent Release Description	the id was changed to 'temporal_entity_representation_id=\${temporal_entity_representation_id}' * response body to be checked set to 'response_body=\${response2.json()}' } TP/NGSI-LD/CI/Cons/TE/020_17_03 020_17_03 With a LanguageProperty v1.6.1 Check that one can retrieve the temporal evolution of an entity following the detemporal property **Test events** when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${temporal_entity_representation_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to 'false' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in the file set to 'vehicle-temporal-representation-languageproperty-020-	Direction SUT <- Client

TP Id	P/NGSI-LD/CI/Cons/TE/020_13	
	heck temporal pagination is applied when retrieving the temporal evolution of	f an ontity
	TSI GS CIM 009 V1.6.1 [1], clauses 5.7.3 and 6.3.10	i all cillity
	F 01	
	ICS_TemEvoEntRet and PICS_HTTP_PAGINATION_LIMIT rith { the SUT containing an initial state }	
mitial conditions w	Permutations	
TD Dormutation id	P/NGSI-LD/CI/Cons/TE/020_13_01	
	20_13_01 retrieve an entity with 20 instances on two attributes	
	1.5.1	
	heck temporal pagination behavior	Direction
Expected behaviour	Test events	
	then { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	o 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	I set to '\${temporal_entity_representation_id}' and Query Parameter: ptions set to '\${representation}' and Query Parameter: context set to	
	ittps://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	aw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId	
	nd Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
	meAt set to '\${timeAt}' and Query Parameter: endTimeAt set to	
	fendTimeAt}' and Query Parameter: lastN set to '\${lastN}' }	
	nen { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	emporal Representation Of Entity with Response Status Code set to 206	301 -> Client
	nd Notification with Content range part date-time equals \${unit} and	
	otification with Content range part \${rangeStart} equals	
	{expectedRangeStart} and Notification with Content range part	
	{rangeEnd} equals \${expectedRangeEnd} and Notification with Content	
	ange part \${size} equals \${expectedSize} }	
	P/NGSI-LD/CI/Cons/TE/020_13_02	L
	20_13_02 retrieve the entity with lastN	
	1.5.1	
	heck temporal pagination behavior	
Expected behaviour	Test events	Direction
	hen { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	I set to '\${temporal_entity_representation_id}' and Query Parameter:	
	ptions set to '\${representation}' and Query Parameter: context set to	
	ttps://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	aw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
aı	nd Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
tir	meAt set to '\${timeAt}' and Query Parameter: endTimeAt set to	
	{endTimeAt}' and Query Parameter: lastN set to '\${lastN}' }	
th	nen { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	emporal Representation Of Entity with Response Status Code set to 206	
	nd Notification with Content range part date-time equals \${unit} and	
	otification with Content range part \${rangeStart} equals	
	(expectedRangeStart) and Notification with Content range part	
	{rangeEnd} equals \${expectedRangeEnd} and Notification with Content	
	ange part \${size} equals \${expectedSize} }	
T D D	P/NGSI-LD/CI/Cons/TE/020_13_03	
Name 02	20_13_03 retrieve the entity with lastN and timerel before	
Name 02 Parent Release v		

Expected behaviour	Test events	Direction
Expected behaviour	Test events	Direction Client
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	SUT <- Client
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\$\temporal_entity_representation_id\' and Query Parameter:	
	options set to '\${representation}' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld	
	and Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
	timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to	
	\$\text{endTimeAt} and Query Parameter: lastN set to '\$\text{lastN}' \}	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 206	0.0
	and Notification with Content range part date-time equals \${unit} and	
	Notification with Content range part \${rangeStart} equals	
	\${expectedRangeStart} and Notification with Content range part	
	\${rangeEnd} equals \${expectedRangeEnd} and Notification with Content	
	range part \${size} equals \${expectedSize} }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_13_04	
Name	020_13_04 retrieve the entity with lastN and timerel between	
Parent Release	v1.5.1	
Description	Check temporal pagination behavior	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' and Query Parameter:	
	options set to '\${representation}' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: timerel set to '\$\timerel\' and Query Parameter:	
	timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to	
	\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' }	OUT OF THE
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 206	
	and Notification with Content range part date-time equals \${unit} and Notification with Content range part \${rangeStart} equals	
	\$\{\text{expectedRangeStart}\}\ \and\ \text{Notification with Content range part}	
	\${rangeEnd} equals \${expectedRangeEnd} and Notification with Content	
	range part \${size} equals \${expected Size} }	
TD Downertation in	TP/NGSI-LD/CI/Cons/TE/020_13_05	
LE Permitation id		
TP Permutation id	020 13 05 retrieve the entity with lastN and timerel after	
Name	020_13_05 retrieve the entity with lastN and timerel after	
Name Parent Release	v1.5.1	
Name Parent Release Description	v1.5.1 Check temporal pagination behavior	Direction
Name Parent Release	v1.5.1 Check temporal pagination behavior Test events	Direction SUT <- Client
Name Parent Release Description	v1.5.1 Check temporal pagination behavior Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client
Name Parent Release Description	v1.5.1 Check temporal pagination behavior Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
Name Parent Release Description	v1.5.1 Check temporal pagination behavior Test events when { the SUT receives a Request from the client containing: URL set to	
Name Parent Release Description	v1.5.1 Check temporal pagination behavior Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
Name Parent Release Description	v1.5.1 Check temporal pagination behavior Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter:	
Name Parent Release Description	v1.5.1 Check temporal pagination behavior Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
Name Parent Release Description	v1.5.1 Check temporal pagination behavior Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
Name Parent Release Description	v1.5.1 Check temporal pagination behavior Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to	
Name Parent Release Description	v1.5.1 Check temporal pagination behavior Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' }	SUT <- Client
Name Parent Release Description	V1.5.1 Check temporal pagination behavior Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve	
Name Parent Release Description	V1.5.1 Check temporal pagination behavior Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206	SUT <- Client
Name Parent Release Description	V1.5.1 Check temporal pagination behavior Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and	SUT <- Client
Name Parent Release Description	V1.5.1 Check temporal pagination behavior Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part \${rangeStart} equals	SUT <- Client
Name Parent Release Description	V1.5.1 Check temporal pagination behavior Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part	SUT <- Client
Name Parent Release Description	V1.5.1 Check temporal pagination behavior Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/- /raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals \${expectedRangeEnd} and Notification with Content	SUT <- Client
Name Parent Release Description Expected behaviour	Check temporal pagination behavior Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/- /raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals \${expectedRangeEnd} and Notification with Content range part \${size} equals \${expectedSize} }	SUT <- Client
Name Parent Release Description Expected behaviour	Check temporal pagination behavior Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals \${expectedRangeEnd} and Notification with Content range part \${size} equals \${expectedSize} } TP/NGSI-LD/CI/Cons/TE/020_13_06	SUT <- Client
Name Parent Release Description Expected behaviour TP Permutation id Name	Check temporal pagination behavior Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${endTimeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification with Content range part \$frangeStart} equals \${expectedRangeStart} and Notification with Content range part \$frangeEnd} equals \${expectedRangeEnd} and Notification with Content range part \$frangeEnd} equals \$f	SUT <- Client
Name Parent Release Description Expected behaviour	Check temporal pagination behavior Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals \${expectedRangeEnd} and Notification with Content range part \${size} equals \${expectedSize} } TP/NGSI-LD/CI/Cons/TE/020_13_06	SUT <- Client

Expected behaviour	Toot events	Direction
Expected behaviour	Test events	Direction Client
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	SUT <- Client
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' and Query Parameter:	
	options set to '\${representation}' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld	
	and Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
	timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to	
	\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 206	OO1 > OHOIR
	and Notification with Content range part date-time equals \${unit} and	
	Notification with Content range part \$\{\text{rangeStart}\}\ equals	
	\${expectedRangeStart} and Notification with Content range part	
	\${rangeEnd} equals \${expectedRangeEnd} and Notification with Content	
	range part \${size} equals \${expectedSize} }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_13_07	
Name	020_13_07 retrieve the entity with timerel between	
Parent Release	v1.5.1	
Description	Check temporal pagination behavior	
Expected behaviour	Test events	Direction
=xpooted bondriou	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	OOT CONCIN
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' and Query Parameter:	
	options set to '\${representation}' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId	
	and Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
	timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to	
	\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 206	
	and Notification with Content range part date-time equals \${unit} and	
	Notification with Content range part \${rangeStart} equals	
	\${expectedRangeStart} and Notification with Content range part	
	\${rangeEnd} equals \${expectedRangeEnd} and Notification with Content	
	range part \${size} equals \${expectedSize} }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_13_08	
Name	020_13_08 retrieve the entity with timerel after	
Parent Release	v1.5.1	
— • • •		
Description	Check temporal pagination behavior	
Description Expected behaviour	Test events	Direction
	Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter:	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId'	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' and Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' }	SUT <- Client
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206	SUT <- Client
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit}}	SUT <- Client
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part \${rangeStart} equals	SUT <- Client
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${endTimeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part	SUT <- Client
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals \${expectedRangeEnd} and Notification with Content	SUT <- Client
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals \${expectedRangeEnd} and Notification with Content range part \${and Notification with Content	SUT <- Client
Expected behaviour TP Permutation id	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification with Content range part \$frangeStart} equals \${expectedRangeStart} and Notification with Content range part \$frangeEnd} equals \${expectedRangeEnd} and Notification with Content range part \$frangeEnd} equals \${expectedSize} } TP/NGSI-LD/CI/Cons/TE/020_13_09	SUT <- Client
TP Permutation id Name	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${range part \${range part \${range part \${size} equals \${expectedRangeEnd} and Notification with Content range part \${size} equals \${expectedSize} } TP/NGSI-LD/CI/Cons/TE/020_13_09 020_13_09 retrieve the entity with temporalValues and timerel after	SUT <- Client
Expected behaviour TP Permutation id	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification with Content range part \$frangeStart} equals \${expectedRangeStart} and Notification with Content range part \$frangeEnd} equals \${expectedRangeEnd} and Notification with Content range part \$frangeEnd} equals \${expectedSize} } TP/NGSI-LD/CI/Cons/TE/020_13_09	SUT <- Client

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId'	SUT <- Client
	and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to	
	\$\{\text{endTimeAt}\'\ \text{and Query Parameter: lastN set to '\$\{\text{lastN}\'\}\} \\ then \{\text{the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \$\{\text{unit}\}\ \text{ and Notification with Content range part \$\{\text{rangeStart}\}\ \text{ equals }\{\text{expectedRangeStart}\}\ \text{ and Notification with Content range part }\{\text{rangeEnd}\}\ \text{ equals }\{\text{expectedRangeEnd}\}\ \text{ and Notification with Content range part }\{\text{size}\}\ \text{ equals }\{\text{expectedSize}\}\}	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_13_10	
Name	020_13_10 retrieve the entity with temporalValues, lastN and timerel between	
Parent Release	v1.5.1	
Description	Check temporal pagination behavior	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals \${expectedRangeEnd} and Notification with Content range part \${size} equals \${expectedSize} }	SUT -> Client

TP ld	TP/NGSI-LD/CI/Cons/TE/020_08	
Test objective	Check that one cannot retrieve the temporal evolution of non-existing entity att	ributes
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.3	
Config Id	CF_01	
PICS Selection	PICS_TemEvoEntRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_08_01	
Name	020_08_01 Retrieve the temporal evolution of non-existing entity attributes	
Parent Release	v1.3.1	
Description	Check that one cannot retrieve the temporal evolution of non-existing entity att	ributes
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' and Query Parameter: attrs	
	set to '\${temporal_attributes_to_be_retrieved}' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 404	
	and Retrieve Temporal Representation Of Entity with Response Body	
	and Retrieve Temporal Representation Of Entity with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/ResourceNotFound' and	
	and Retrieve Temporal Representation Of Entity with Response Body	

TP ld	TP/NGSI-LD/CI/Cons/TE/020_11	
Test objective	Check that one can retrieve the temporal evolution of an entity with the aggreg	ated temporal
,	representation	,a.toa topo.a.
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.19 and 5.7.3	
Config Id	CF 01	
PICS Selection	PICS_AGGRTEMPORAL and PICS_TemEvoEntRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_11_01	
Name	020_11_01 One aggregate method aggregated by one hour duration	
Parent Release	v1.4.1	
Description	Check that one can retrieve the temporal evolution of an entity with the aggreg	ated temporal
•	representation	
Expected behaviour	Test events	Direction
TP Permutation id Name Parent Release	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: attrs set to '\${EMPTY}' and Query Parameter: options set to '\${options}' and Query Parameter: aggrMethods set to '\${aggr_methods}' and Query Parameter: aggrPeriodDuration set to '\${aggr_period_duration}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-Id-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 200 and Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in the file set to 'vehicle-temporal-representation-aggregated-avg-PT1H.json' * the id was changed to '\${temporal_entity_representation_id}' * response body to be checked set to '\${response.json()}' } TP/NGSI-LD/CI/Cons/TE/020_11_02 020_11_02 One aggregate method aggregated by one hour duration asking for v1.4.1	
Description	Check that one can retrieve the temporal evolution of an entity with the aggreg representation	ated temporal
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: attrs set to 'fuelLevel' and Query Parameter: options set to '\${options}' and Query Parameter: aggrMethods set to '\${aggr_methods}' and Query Parameter: aggrPeriodDuration set to '\${aggr_period_duration}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	SUT <- Client
TP Permutation id	then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 200 and Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in the file set to 'vehicle-temporal-representation-aggregated-avg-PT1H-fuelLevel.json' * the id was changed to '\${temporal_entity_representation_id}' * response body to be checked set to '\${response.json()}' } TP/NGSI-LD/CI/Cons/TE/020_11_03	SUT -> Client
Name	020_11_03 Multiple aggregate methods aggregated by one hour duration	
Parent Release	V1.4.1	
Description	Check that one can retrieve the temporal evolution of an entity with the aggreg representation	ated temporal

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' and Query Parameter: attrs	
	set to '\${EMPTY}' and Query Parameter: options set to '\${options}' and	
	Query Parameter: aggrMethods set to '\${aggr_methods}' and Query	
	Parameter: aggrPeriodDuration set to '\${aggr_period_duration}' and Query	
	Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200	
	and Retrieve Temporal Representation Of Entity with Response Body	
	containing EntityTemporal element containing attribute instances in the time	
	range specified by the NGSI-LD temporal query: * the payload is defined in	
	the file set to 'vehicle-temporal-representation-aggregated-avg-max-	
	PT1H.json' * the id was changed to '\${temporal_entity_representation_id}' *	
	response body to be checked set to '\${response.json()}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_11_04	
Name	020_11_04 Multiple aggregate methods aggregated by one day duration	
Parent Release	v1.4.1	
Description	Check that one can retrieve the temporal evolution of an entity with the aggreg	gated temporal
	representation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' and Query Parameter: attrs	
	set to '\${EMPTY}' and Query Parameter: options set to '\${options}' and	
	Query Parameter: aggrMethods set to '\${aggr_methods}' and Query	
	Parameter: aggrPeriodDuration set to '\$\aggr_period_duration\' and Query	
	Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	SUT -> Client
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200	
	and Retrieve Temporal Representation Of Entity with Response Body	
	containing EntityTemporal element containing attribute instances in the time	
	range specified by the NGSI-LD temporal query: * the payload is defined in	
	the file set to 'vehicle-temporal-representation-aggregated-min-max-	
	P1D.json' * the id was changed to '\${temporal_entity_representation_id}' * response body to be checked set to '\${response.json()}' }	

TP Id	TP/NGSI-LD/CI/Cons/TE/020_14
Test objective	Check that the time range cut before the second attribute to avoid missing data in content-
	range
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 5.7.3 and 6.3.10
Config Id	CF_01
PICS Selection	PICS_TemEvoEntRet and PICS_HTTP_PAGINATION_LIMIT
Initial conditions	with { the SUT containing an initial state }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_14_01
Name	020_14_01 retrieve an entity with 60 instances of unsynchronized attributes
Parent Release	v1.5.1
Description	Check that the time range cut before the second attribute

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId	
	and Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
	timeAt set to '\${timeAt}' and Query Parameter: lastN set to '\${lastN}' }	SUT -> Client
	then { the SUT sends a valid Response for the operation: Retrieve Temporal Representation Of Entity with data is empty:	SUT -> Client
	\${response.json()}[\${emptyAttr}] }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_14_02	
Name	020_14_02 retrieve the entity with lastN	
Parent Release	v1.5.1	
Description	Check that the time range cut before the second attribute	
Expected behaviour	Test events	Direction
Expected believious	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	OUT CHICH
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
	timeAt set to '\${timeAt}' and Query Parameter: lastN set to '\${lastN}' }	
	then { the SUT sends a valid Response for the operation: Retrieve Temporal	SUT -> Client
	Representation Of Entity with data is empty:	
	\${response.json()}[\${emptyAttr}] }	

TP Id	TP/NGSI-LD/CI/Cons/TE/020_09	
Test objective	Check that one cannot retrieve the temporal evolution of an entity with an inva	lid request
	content	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.3	
Config Id	CF_01	
PICS Selection	PICS_TemEvoEntRet	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Tem	poral Entity
	<pre>\${entity} with an id set to \${temporal_entity_representation_id} }</pre>	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_09_01	
Name	020_09_01 After	
Parent Release	v1.3.1	
Description	Check that one cannot retrieve the temporal evolution of an entity with an inva	lid request
Expected behaviour	Test events	Direction
Expected Bellavious	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	l'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	on a chora
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' and Query Parameter: timerel	
	set to 'after' and Query Parameter: timeAt set to '\${EMPTY}' and Query	
	Parameter: endTimeAt set to '\${EMPTY}' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 400	
	and Retrieve Temporal Representation Of Entity with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and	
	Retrieve Temporal Representation Of Entity with Response body containing	
TD D	title' element }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_09_02	
Name	020_09_02 Before	
Parent Release	v1.3.1	l'.l
Description	Check that one cannot retrieve the temporal evolution of an entity with an inva	iia request
	content	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: timerel set to 'before' and Query Parameter: timeAt set to '\${EMPTY}' and Query Parameter: endTimeAt set to '\${EMPTY}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 400 and Retrieve Temporal Representation Of Entity with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Retrieve Temporal Representation Of Entity with Response body containing 'title' element }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_09_03	
Name	020_09_03 Between	
Parent Release	v1.3.1	
Description	Check that one cannot retrieve the temporal evolution of an entity with an invacontent	lid request
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: timerel set to 'between' and Query Parameter: timeAt set to '2020-08-01T12:00:00Z' and Query Parameter: endTimeAt set to '\${EMPTY}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 400 and Retrieve Temporal Representation Of Entity with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Retrieve Temporal Representation Of Entity with Response body containing 'title' element }	SUT -> Client

TP Id	TP/NGSI-LD/CI/Cons/TE/020_10	
Test objective	Check that one can retrieve the temporal evolution of an entity with the simplifi	ed temporal
	representation	·
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.3	
Config Id	CF_01	
PICS Selection	PICS_TemEvoEntRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_10_01	
Name	020_10_01 Retrieve the temporal evolution of an entity with the simplified temporal	poral
	representation	
Parent Release	v1.3.1	
Description	Check that one can retrieve the temporal evolution of an entity with the simplifi	ed temporal
	representation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' and Query Parameter:	
	options set to '\${options}' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200	
	and Retrieve Temporal Representation Of Entity with Response Body	
	containing EntityTemporal element containing attribute instances in the time	
	range specified by the NGSI-LD temporal query: * the payload is defined in	
	the file set to 'vehicle-temporal-representation-020-10.jsonld' * the id was	
	changed to '\${temporal_entity_representation_id}' * response body to be	
	checked set to '\${response.json()}' }	

P Id TP/NGSI-LD/CI/Cons/TE/020_12 est objective Check that one can retrieve the temporal evolution of an entity with a LanguageProperty property eference ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 4.5.7, 4.5.9 and 5.7.3 onfig Id CF_01 ICS Selection PICS_LANG and PICS_P_TEMPORAL_REP and PICS_P_SIMPTEMPORAL_REP_AND_R_SIMPTEMPORAL_REP and PICS_TemEvoEntRet
property eference ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 4.5.7, 4.5.9 and 5.7.3 onfig Id CF_01 ICS Selection PICS_LANG and PICS_P_TEMPORAL_REP and PICS_P_SIMPTEMPORAL_REP_AND_R_SIMPTEMPORAL_REP and PICS_TemEvoEntRet
eference ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 4.5.7, 4.5.9 and 5.7.3 onfig Id CF_01 ICS Selection PICS_LANG and PICS_P_TEMPORAL_REP and PICS_P_SIMPTEMPORAL_REP_AND_R_SIMPTEMPORAL_REP and PICS_TemEvoEntRet
onfig Id CF_01 ICS Selection PICS_LANG and PICS_P_TEMPORAL_REP and PICS_P_SIMPTEMPORAL_REP_AND_R_SIMPTEMPORAL_REP and PICS_TemEvoEntRet
PICS_LANG and PICS_P_TEMPORAL_REP and PICS_P_SIMPTEMPORAL_REP_AND_R_SIMPTEMPORAL_REP and PICS_TemEvoEntRet
PICS_P_SIMPTEMPORAL_REP_AND_R_SIMPTEMPORAL_REP and PICS_TemEvoEntRet
PICS_TemEvoEntRet
with { the SUT containing an initial state }
Permutations
P Permutation id TP/NGSI-LD/CI/Cons/TE/020_12_01
ame 020_12_01 Retrieve the normalized temporal representation of an entity with a
LanguageProperty property
arent Release v1.4.1
escription Check that one can retrieve the temporal evolution of an entity with a LanguageProperty
property
xpected behaviour Test events Direction
when { the SUT receives a Request from the client containing: URL set to SUT <- Clien
'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set
to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:
id set to '\${temporal_entity_representation_id}' and Query Parameter:
options set to '\${EMPTY}' and Query Parameter: context set to
'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-
/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }
then { the SUT sends a valid Response for the operations: Retrieve SUT -> Clier
Temporal Representation Of Entity with Response Status Code set to 200
and Retrieve Temporal Representation Of Entity with Response Body
containing EntityTemporal element containing attribute instances in the time
range specified by the NGSI-LD temporal query: * the payload is defined in
the file set to 'vehicle-language-property-normalized-temporal-
representation.jsonld' * the id was changed to
'\${temporal_entity_representation_id}' * response body to be checked set to
'\$\{response.json()\}' \} P Permutation id
ame 020_12_02 Retrieve the simplified temporal representation of an entity with a
LanguageProperty property arent Release v1.4.1
property xpected behaviour Test events Direction
when { the SUT receives a Request from the client containing: URL set to SUT <- Clien
'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set
to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:
id set to '\${temporal_entity_representation_id}' and Query Parameter:
options set to 'temporalValues' and Query Parameter: context set to
https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-
/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' }
then { the SUT sends a valid Response for the operations: Retrieve SUT -> Clier
Temporal Representation Of Entity with Response Status Code set to 200
and Retrieve Temporal Representation Of Entity with Response Body
containing EntityTemporal element containing attribute instances in the time
range specified by the NGSI-LD temporal query: * the payload is defined in
the file set to 'vehicle-language-property-simplified-temporal-
representation.jsonld' * the id was changed to
'\${temporal_entity_representation_id}' * response body to be checked set to
'\${response.json()}' }

TP Id	TP/NGSI-LD/CI/Cons/TE/020_07
Test objective	Check that one cannot retrieve the temporal evolution of a non-existing entity
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.3
Config Id	CF_01
PICS Selection	PICS_TemEvoEntRet
Initial conditions	with { the SUT containing an initial state }

Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_07_01	
Name	020_07_01 Retrieve the temporal evolution of a non-existing entity	
Parent Release	v1.3.1	
Description	Check that one cannot retrieve the temporal evolution of a non-existing entity	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to 'urn:ngsi-Id:Vehicle:unknowEntity' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 404 and Retrieve Temporal Representation Of Entity with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/ResourceNotFound' and Retrieve Temporal Representation Of Entity with Response body containing 'title' element }	SUT -> Client

TP/NGSI-LD/CI/Cons/TE/020_05 Test objective Check that one can retrieve the temporal evolution of the last N instances of entity attributed to be carried t	
Reference ETSI GS CIM 009 V1.6.1 [1], clause 5.7.3 Config Id CF_01 PICS Selection PICS_TemEvoEntRet Initial conditions with { the SUT being in the "initial state" and the SUT containing an initial Temporal Entity \${entity} with an id set to \${temporal_entity_representation_id} } Permutations	
Config Id CF_01 PICS Selection PICS_TemEvoEntRet Initial conditions with { the SUT being in the "initial state" and the SUT containing an initial Temporal Entity \${entity} with an id set to \${temporal_entity_representation_id} } Permutations	
PICS_TemEvoEntRet Initial conditions	
Initial conditions with { the SUT being in the "initial state" and the SUT containing an initial Temporal Entity \${entity} with an id set to \${temporal_entity_representation_id} } Permutations	
\${entity} with an id set to \${temporal_entity_representation_id} } Permutations	
Permutations	
Name 020_05_01 Retrieve Some Instances	-
Parent Release v1.3.1	-
Description Check that one can retrieve the temporal evolution of the last N instances of entity attributed in the last N instances of entity attributed i	es
Expected behaviour Test events Direction	
when { the SUT receives a Request from the client containing: URL set to SUT <- Cli	
'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	J. 11
to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
id set to '\${temporal_entity_representation_id}' and Query Parameter: lastN	
set to '4' and Query Parameter: context set to	
https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
then { the SUT sends a valid Response for the operations: Retrieve SUT -> Cli	ent
Temporal Representation Of Entity with Response Status Code set to 200	
and Retrieve Temporal Representation Of Entity with Response Body	
containing EntityTemporal element containing attribute instances in the time	
range specified by the NGSI-LD temporal query: * the payload is defined in	
the file set to 'vehicle-temporal-representation-020-05-01.jsonId' * the id was	
changed to '\${temporal_entity_representation_id}' * response body to be	
checked set to '\${response.json()}' }	
TP Permutation id TP/NGSI-LD/CI/Cons/TE/020_05_02	
Name 020_05_02 Retrieve All Instances	
Parent Release v1.3.1	
Description Check that one can retrieve the temporal evolution of the last N instances of entity attribu	es
Expected behaviour Test events Direction	n
when { the SUT receives a Request from the client containing: URL set to SUT <- Cli	ent
'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
id set to '\${temporal_entity_representation_id}' and Query Parameter: lastN	
set to '7' and Query Parameter: context set to	
'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' }	
then { the SUT sends a valid Response for the operations: Retrieve SUT -> Cli	ent
Temporal Representation Of Entity with Response Status Code set to 200	
and Retrieve Temporal Representation Of Entity with Response Body	
containing EntityTemporal element containing attribute instances in the time	
range specified by the NGSI-LD temporal query: * the payload is defined in	
the file set to 'vehicle-temporal-representation-020-05-02.jsonId' * the id was	
changed to '\${temporal_entity_representation_id}' * response body to be	
checked set to '\${response.json()}' }	

TP Id	TP/NGSI-LD/CI/Cons/TE/020_01	
Test objective	Check that one can retrieve the temporal evolution of an entity	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.3	
Config Id	CF_01	
PICS Selection	PICS_TemEvoEntRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_01_01	
Name	020_01_01 Retrieve the temporal evolution of an entity	
Parent Release	v1.3.1	
Description	Check that one can retrieve the temporal evolution of an entity	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 200	SUT -> Client
		SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200 and Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200 and Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200 and Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in the file set to 'vehicle-temporal-representation-020-01.jsonId' * the id was	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200 and Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in	SUT -> Client

TP ld	TP/NGSI-LD/CI/Cons/TE/020_18		
Test objective	Check that one can retrieve the temporal evolution of an entity following the deletedAt		
	temporal property with temporal values		
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18, 5.7.3		
Config Id	CF 01		
PICS Selection	PICS_LANG and PICS_TemEvoEntRet		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Tem	poral Entity	
	\${entity} with an id set to \${temporal_entity_representation_id}}		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_18_01		
Name	020_18_01 With a Property		
Parent Release	v1.6.1		
Description	Check that one can retrieve the temporal evolution of an entity following the de	eletedAt	
	temporal property with temporal values		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method		
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set		
	to '\${temporal_entity_representation_id}' and Query Parameter: attributeId		
	set to 'fuelLevel' and Query Parameter: datasetId set to '\${EMPTY}' and		
	Query Parameter: deleteAll set to 'false' and Query Parameter: context set to		
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-		
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }		
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client	
	Temporal Representation Of Entity with Response Status Code set to 200		
	and Retrieve Temporal Representation Of Entity with Response Body		
	containing EntityTemporal element containing attribute instances in the time		
	range specified by the NGSI-LD temporal query: * the payload is defined in		
	the file set to 'vehicle-temporal-values-representation-property-020-18.jsonld'		
	* the id was changed to		
	'temporal_entity_representation_id=\${temporal_entity_representation_id}' *		
	response body to be checked set to 'response_body=\${response2.json()}' }		
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_18_02		
Name	020_18_02 With a Relationship		
Parent Release	v1.6.1		
Description	Check that one can retrieve the temporal evolution of an entity following the de	eletedAt	
	temporal property with temporal values		

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	SUT <- Client
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${temporal_entity_representation_id}' and Query Parameter: attributeId	
	set to 'isParkedIn' and Query Parameter: datasetId set to '\${EMPTY}' and	
	Query Parameter: deleteAll set to 'false' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	OUT Officer
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200	
	and Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time	
	range specified by the NGSI-LD temporal query: * the payload is defined in	
	the file set to 'vehicle-temporal-values-representation-relationship-020-	
	18.jsonld' * the id was changed to	
	'temporal_entity_representation_id=\${temporal_entity_representation_id}' *	
	response body to be checked set to 'response_body=\${response2.json()}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_18_03	1
Name	020_18_03 With a LanguageProperty	
Parent Release	v1.6.1	
Description	Check that one can retrieve the temporal evolution of an entity following the de	eletedAt
	temporal property with temporal values	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${temporal_entity_representation_id}' and Query Parameter: attributeld	
	set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query	
	Parameter: deleteAll set to 'false' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200	SUT -> Client
	and Retrieve Temporal Representation Of Entity with Response Body	
	containing EntityTemporal element containing attribute instances in the time	
	range specified by the NGSI-LD temporal query: * the payload is defined in	
	the file set to 'vehicle-temporal-values-representation-languageproperty-020-	
	18. jsonld' * the id was changed to	
	'temporal_entity_representation_id=\${temporal_entity_representation_id}' *	
	response body to be checked set to 'response_body=\${response2.json()}' }	

TP ld	TP/NGSI-LD/CI/Cons/TE/020_03		
Test objective	Check that one can retrieve the temporal evolution of certain attributes of an entity		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.3		
Config Id	CF_01		
PICS Selection	PICS_TemEvoEntRet		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Temporal Entity		
	\${entity} with an id set to \${temporal_entity_representation_id} }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_03_01		
Name	020_03_01 With one attribute		
Parent Release	v1.3.1		
Description	Check that one can retrieve the temporal evolution of certain attributes of an entity		

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' and Query Parameter: attrs	
	set to 'fuelLevel' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200	
	and Retrieve Temporal Representation Of Entity with Response Body	
	containing EntityTemporal element containing attribute instances in the time	
	range specified by the NGSI-LD temporal query: * the payload is defined in	
	the file set to 'vehicle-temporal-representation-020-03-01.jsonld' * the id was	
	changed to '\${temporal_entity_representation_id}' * response body to be	
	checked set to '\${response.json()}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_03_02	
Name	020_03_02 With two attributes	
Parent Release	v1.3.1	
Description	Check that one can retrieve the temporal evolution of certain attributes of an e	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to '\${temporal_entity_representation_id}' and Query Parameter: attrs	
	set to 'fuelLevel,speed' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200	
	and Retrieve Temporal Representation Of Entity with Response Body	
	containing EntityTemporal element containing attribute instances in the time	
	range specified by the NGSI-LD temporal query: * the payload is defined in	
	the file set to 'vehicle-temporal-representation-020-03-02.jsonld' * the id was	
	changed to '\${temporal_entity_representation_id}' * response body to be	
	checked set to '\${response.json()}' }	

-			
TP Id	TP/NGSI-LD/CI/Cons/TE/020_20		
Test objective	Check that one can retrieve the temporal evolution of a scope following the deletedAt		
	temporal property with temporal values		
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.18, 5.7.3 and 6.19.3.1		
Config Id	CF_01		
PICS Selection	PICS_SCOPES and PICS_TemEvoEntRet and PICS_TemEvoEntRet		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Temporal Entity		
	\${entity} with an id set to \${temporal_entity_representation_id} }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_20_01		
Name	020_20_01 With a Scope		
Parent Release	v1.6.1		
Description	Check that one can retrieve the temporal evolution of a scope following the deletedAt		
	temporal property with temporal values		

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${temporal_entity_representation_id}' and Query Parameter: attributeId	
	set to 'scope' and Query Parameter: datasetId set to '\${EMPTY}' and Query	
	Parameter: deleteAll set to 'false' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200	
	and Retrieve Temporal Representation Of Entity with Response Body	
	containing EntityTemporal element containing attribute instances in the time	
	range specified by the NGSI-LD temporal query: * the payload is defined in	
	the file set to 'vehicle-temporal-representation-property-020-20.jsonld' * the	
	id was changed to	
	'temporal_entity_representation_id=\${temporal_entity_representation_id}' *	
	response body to be checked set to 'response_body=\${response2.json()}' }	

TP Id	TP/NGSI-LD/CI/Cons/TE/020_04			
Test objective	Check that one can retrieve the temporal evolution of an entity matching the gi	ven NGSI-LD		
	temporal query			
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.3			
Config Id	CF_01			
PICS Selection	PICS_TemEvoEntRet			
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Tem	poral Entity		
	\$\{entity\} with an id set to \$\{temporal_entity_representation_id\} \}			
	Permutations			
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_04_01			
Name	020_04_01 After			
Parent Release	v1.3.1			
Description	Check that one can retrieve the temporal evolution of an entity matching the gi	ven NGSI-LD		
	temporal query			
Expected behaviour	Test events	Direction		
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client		
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set			
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:			
	id set to '\${temporal_entity_representation_id}' and Query Parameter: timerel			
	set to 'after' and Query Parameter: timeAt set to '2020-08-01T13:03:00Z' and			
	Query Parameter: endTimeAt set to '\${EMPTY}' and Query Parameter:			
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-			
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }			
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client		
	Temporal Representation Of Entity with Response Status Code set to 200			
	and Retrieve Temporal Representation Of Entity with Response Body			
	containing EntityTemporal element containing attribute instances in the time			
	range specified by the NGSI-LD temporal query: * the payload is defined in			
	the file set to 'vehicle-temporal-representation-020-04-01.jsonId' * the id was			
	changed to '\${temporal_entity_representation_id}' * response body to be			
TP Permutation id	checked set to '\${response.json()}' }			
Name	TP/NGSI-LD/CI/Cons/TE/020_04_02 020 04 02 Before			
Parent Release	V1.3.1			
		von NCCLLD		
Description	Check that one can retrieve the temporal evolution of an entity matching the gi	ven NGSI-LD		
	temporal query			

Expected behaviour	Test events	Direction
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: timerel set to 'before' and Query Parameter: timeAt set to '2020-08-01T12:05:00Z' and Query Parameter: endTimeAt set to '\${EMPTY}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Body	SUT -> Client
	containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in the file set to 'vehicle-temporal-representation-020-04-02.jsonld' * the id was changed to '\${temporal_entity_representation_id}' * response body to be checked set to '\${response.json()}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_04_03	
Name	020_04_03 Between	
Parent Release	v1.3.1	
Description	Check that one can retrieve the temporal evolution of an entity matching the gi	iven NGSI-LD
	temporal query	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: timerel set to 'between' and Query Parameter: timeAt set to '2020-08-01T12:00:00Z' and Query Parameter: endTimeAt set to '2020-08-01T13:00:00Z' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite//raw/develop/resources/jsonId-contexts/ngsi-ld-test-suite-compound.jsonId' }	Direction SUT <- Client
	then { the SUT sends a valid Response for the operations: Retrieve Temporal Representation Of Entity with Response Status Code set to 200 and Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in the file set to 'vehicle-temporal-representation-020-04-03.jsonld' * the id was changed to '\${temporal_entity_representation_id}' * response body to be checked set to '\${response.json()}' }	SUT -> Client

TP ld	TP/NGSI-LD/CI/Cons/TE/020 06	
Test objective	Check that one cannot retrieve the temporal evolution of an entity with an inva	lid id (invalid
	URI)	na ia (iiivana
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.3	
Config Id	CF_01	
PICS Selection	PICS_TemEvoEntRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_06_01	
Name	020_06_01 Retrieve the temporal evolution of an entity with an invalid id	
Parent Release	v1.3.1	
Description	Check that one cannot retrieve the temporal evolution of an entity with an invalid id (invalid	
	URI)	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set	
	to 'GET' Retrieve Temporal Representation of Entity and Query Parameter:	
	id set to 'invalidUri' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 400	
	and Retrieve Temporal Representation Of Entity with Response Body	
	containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and	
	Retrieve Temporal Representation Of Entity with Response body containing	
	'title' element }	

TP ld	TP/NGSI-LD/CI/Cons/TE/020_02	
Test objective	Check that one can retrieve the temporal evolution of an entity using a context	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.3	
Config Id	CF_01	
PICS Selection	PICS_TemEvoEntRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_02_01	
Name	020_02_01 Retrieve the temporal evolution of an entity using a context	
Parent Release	v1.3.1	
Description	Check that one can retrieve the temporal evolution of an entity using a context	
Expected behaviour	Test events	Direction
	'/ngsi-ld/v1/temporal/entities/{temporal_entity_representation_id}' method set to 'GET' Retrieve Temporal Representation of Entity and Query Parameter: id set to '\${temporal_entity_representation_id}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Retrieve	SUT <- Client
	Temporal Representation Of Entity with Response Status Code set to 200 and Retrieve Temporal Representation Of Entity with Response Body containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in the file set to 'vehicle-temporal-representation-020-02.jsonld' * the id was changed to '\${temporal_entity_representation_id}' * response body to be checked set to '\${response.json()}' }	

TP ld	TP/NGSI-LD/CI/Cons/TE/020_19	
Test objective	Check that one can retrieve the temporal evolution of a scope following the de	leted At
rest objective	temporal property	iotou/tt
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.18, 5.7.3 and 6.19.3.1	
Config Id	CF 01	
PICS Selection	PICS_SCOPES and PICS_TemEvoEntRet and PICS_TemEvoEntRet	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Tem	noral Entity
	\${entity} with an id set to \${temporal_entity_representation_id} }	porar Entity
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/020_19_01	
Name	020_19_01 With a Scope	
Parent Release	v1.6.1	
Description	Check that one can retrieve the temporal evolution of a scope following the de	letedAt
	temporal property	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${temporal_entity_representation_id}' and Query Parameter: attributeId	
	set to 'scope' and Query Parameter: datasetId set to '\${EMPTY}' and Query	
	Parameter: deleteAll set to 'false' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Temporal Representation Of Entity with Response Status Code set to 200	
	and Retrieve Temporal Representation Of Entity with Response Body	
	containing EntityTemporal element containing attribute instances in the time	
	range specified by the NGSI-LD temporal query: * the payload is defined in	
	the file set to 'vehicle-temporal-representation-property-020-19.jsonld' * the	
	id was changed to	
	'temporal_entity_representation_id=\${temporal_entity_representation_id}' *	
	response body to be checked set to 'response_body=\${response2.json()}' }	

4.4.2.2.2 QueryTemporalEvolutionOfEntities

TP Id	TP/NGSI-LD/CI/Cons/TE/021_15	
Test objective	Check temporal pagination is applied when querying the temporal evolution of	ontition
Reference		enuues
	ETSI GS CIM 009 V1.6.1 [1], clauses 5.7.4 and 6.3.10	
Config Id	CF_01	51001 1 10 AT
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos and PICS_HTTP_PAGINAT	HON_LIMIT
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_15_01	
Name	021_15_01 retrieve the entity with lastN and timerel before	
Parent Release	v1.5.1	
Description	Check temporal pagination behavior on multiple entity endpoint	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite-compound.jsonId' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${astN}' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 206 and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals \${expectedRangeEnd} and Notification with Content range part \${size}	SUT <- Client SUT -> Client
	equals \${expectedSize} }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_15_02	•
Name	021_15_02 retrieve the entity with lastN and timerel between	
Parent Release	v1.5.1	
Description	Check temporal pagination behavior on multiple entity endpoint	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 206 and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals \${expectedRangeEnd} and Notification with Content range Part \${rangeEnd} equals \${expectedSize} }	SUT <- Client
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_15_03	
Name	021_15_03 retrieve the entity with lastN and timerel after	
Parent Release	v1.5.1	
Description	Check temporal pagination behavior on multiple entity endpoint	
Dogoriphon	Tonock tomporal pagination behavior on multiple entity enapoint	

Everated bahaviaus	Test events	Dissotion
Expected behaviour	Test events	Direction Client
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal	SUT <- Client
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: options set to	
	stentity_types_to_be_remevedy and Query Parameter: options set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld	
	and Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
	timeAt set to '\$\timeAt\}' and Query Parameter: endTimeAt set to	
	'\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' }	
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 206 and	301 -> Client
	Notification with Content range part date-time equals \${unit} and Notification	
	with Content range part \$\{\text{rangeStart}\} equals \$\{\text{expectedRangeStart}\} and	
	Notification with Content range part \${rangeEnd} equals	
	\${expectedRangeEnd} and Notification with Content range part \${size}	
	equals \${expectedSize} }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_15_04	
Name	021_15_04 retrieve the entity with timerel before	
Parent Release		
Description	V1.5.1 Check tomporal pagination behavior on multiple entity endpoint	
	Check temporal pagination behavior on multiple entity endpoint	Direction
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	\${entity_types_to_be_retrieved}' and Query Parameter: options set to	
	'\${representation}' and Query Parameter: context set to	
	"https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld	
	and Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
	timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to	
	'\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' }	OUT OF THE
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 206 and	
	Notification with Content range part date-time equals \${unit} and Notification	
	with Content range part \${rangeStart} equals \${expectedRangeStart} and	
	Notification with Content range part \$\{\text{rangeEnd}\}\ equals	
	\$\{\text{expectedRangeEnd}\}\ \text{and Notification with Content range part \$\{\text{size}\}\ \text{equals \$\{\text{expectedSize}\}\}\	
TD Dormutation id		
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_15_05	
Name	021_15_05 retrieve the entity with timerel between	
Parent Release	v1.5.1 Check temporal pagination behavior on multiple entity endpoint	
Description	Check temporal padination behavior on multiple entity endpoint	
		Dinastian
Expected behaviour	Test events	Direction
Expected benaviour	Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client
Expected benaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
Expected benaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to	
Expected benaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to	
Expected benaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to	
Expected benaviour	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
Expected benaviour	When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
Expected benaviour	When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
Expected behaviour	When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to	
Expected behaviour	When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' }	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Query Temporal	
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 206 and	SUT <- Client
Expected benaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification	SUT <- Client
Expected benaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 206 and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and	SUT <- Client
Expected behaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${astN}' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 206 and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals	SUT <- Client
Expected benaviour	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${astN}' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 206 and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals \${expectedRangeEnd} and Notification with Content range part \${size}	SUT <- Client
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-Id-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${endTimeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 206 and Notification with Content range part \$tate-time equals \$tand Notification with Content rang	SUT <- Client
TP Permutation id	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-Id-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 206 and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals \${expectedRangeEnd} and Notification with Content range part \${rangeEnd} equals \${expectedSize} } TP/NGSI-LD/CI/Cons/TE/021_15_06	SUT <- Client
TP Permutation id Name	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 206 and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals \${expectedRangeEnd} and Notification with Content range part \${rangeEnd} equals \${expectedSize} } TP/NGSI-LD/CI/Cons/TE/021_15_06 021_15_06 retrieve the entity with timerel after	SUT <- Client
TP Permutation id	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: options set to '\${representation}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-Id-test-suite-compound.jsonld' and Query Parameter: timerel set to '\${timerel}' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 206 and Notification with Content range part \${rangeStart} equals \${expectedRangeStart} and Notification with Content range part \${rangeEnd} equals \${expectedRangeEnd} and Notification with Content range part \${rangeEnd} equals \${expectedSize} } TP/NGSI-LD/CI/Cons/TE/021_15_06	SUT <- Client

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: options set to	
	'\${representation}' and Query Parameter: context set to	
	"https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
	timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to	
	'\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' }	CLIT . Cliant
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} and Notification	
	with Content range part \${rangeStart} equals \${expectedRangeStart} and	
	Notification with Content range part \${rangeEnd} equals	
	\${expectedRangeEnd} and Notification with Content range part \${size}	
	equals \${expectedSize} }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_15_07	II.
Name	021_15_07 retrieve the entity with temporalValues and timerel after	
Parent Release	v1.5.1	
Description	Check temporal pagination behavior on multiple entity endpoint	
Expected behaviour	Test events	Direction
•	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: options set to	
	'\${representation}' and Query Parameter: context set to	
	"https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
	timeAt set to '\${timeAt}' and Query Parameter: endTimeAt set to	
	'\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 206 and	SUT -> Client
	Notification with Content range part date-time equals \${unit} and Notification	
	with Content range part \${rangeStart} equals \${expectedRangeStart} and	
	Notification with Content range part \${rangeEnd} equals	
	\${expectedRangeEnd} and Notification with Content range part \${size}	
	equals \${expectedSize} }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_15_08	•
Name	021_15_08 retrieve the entity with temporalValues, lastN and timerel between	
Parent Release	v1.5.1	
Description	Check temporal pagination behavior on multiple entity endpoint	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: options set to	
	'\${representation}' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: timerel set to '\${timerel}' and Query Parameter:	
	timeAt set to '\$\timeAt\' and Query Parameter: endTimeAt set to	
	<pre>'\${endTimeAt}' and Query Parameter: lastN set to '\${lastN}' } then { the SUT sends a valid Response for the operations: Query Temporal</pre>	SUT -> Client
	Representation Of Entities with Response Status Code set to 206 and	SUI -> Client
	Notification with Content range part date-time equals \${unit} and Notification	
	with Content range part \${rangeStart} equals \${expectedRangeStart} and	
	Notification with Content range part \${rangeEnd} equals	
	\${expectedRangeEnd} and Notification with Content range part \${size}	
	equals \${expectedSize} }	
	Todamo Aforbasioners)	1

TP Id	TP/NGSI-LD/CI/Cons/TE/021_17	
Test objective	Check that one can retrieve the temporal evolution of entities with the aggregation	ted temporal
1001 00,000.110	representation	tod tomporal
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.19 and 5.7.3	
Config Id	CF_01	
PICS Selection	PICS_AGGRTEMPORAL and PICS_TemEvoEntRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_17_01	
Name	021_17_01 One aggregate method aggregated by one hour duration	
Parent Release	V1.4.1	
Description	Check that one can retrieve the temporal evolution of entities with the aggrega representation	ted temporal
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${types}' and Query Parameter: attrs set to '\${EMPTY}' and Query Parameter: options set to '\${options}' and Query Parameter: aggrMethods set to '\${aggr_methods}' and Query Parameter: aggrPeriodDuration set to '\${aggr_period_duration}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-Id-test-suite-compound.jsonld' and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-01-01T12:03:00Z' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Body containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in the file set to 'vehicle-temporal-representation-aggregated-avg-PT1H.json' * the id was changed to '\${first_temporal_entity_representation_id}' * response body	SUT <- Client SUT -> Client
	to be checked set to '\${response.json()[0]}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_17_02	
Name	021_17_02 One aggregate method aggregated by one hour duration asking for	r one attribute
Parent Release	v1.4.1	
Description	Check that one can retrieve the temporal evolution of entities with the aggrega	ted temporal
Expected behaviour	representation Test events	Direction
Expected benaviour	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${types}' and Query Parameter: attrs set to 'fuelLevel' and Query Parameter: options set to '\${options}' and Query Parameter: aggrMethods set to '\${aggr_methods}' and Query Parameter: aggrPeriodDuration set to '\${aggr_period_duration}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-Id-test-suite-compound.jsonld' and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-01-01T12:03:00Z' }	
	then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 200 and Query Temporal Representation Of Entities with Response Body containing EntityTemporal element containing attribute instances in the time range specified by the NGSI-LD temporal query: * the payload is defined in the file set to 'vehicle-temporal-representation-aggregated-avg-PT1H-fuelLevel.json' * the id was changed to '\${first_temporal_entity_representation_id}' * response body to be checked set to '\${response.json()[0]}' }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_17_03	
Name	021_17_03 Multiple aggregate methods aggregated by one hour duration	
Parent Release	v1.4.1	4 1 4 · · · · · · · · · · · · · · · ·
Description	Check that one can retrieve the temporal evolution of entities with the aggregate representation	ted temporal

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${types}' and Query Parameter: attrs set to '\${EMPTY}' and Query	
	Parameter: options set to '\${options}' and Query Parameter: aggrMethods	
	set to '\${aggr_methods}' and Query Parameter: aggrPeriodDuration set to	
	'\${aggr_period_duration}' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-01-01T12:03:00Z' }	
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 and Query	oo i y onom
	Temporal Representation Of Entities with Response Body containing	
	EntityTemporal element containing attribute instances in the time range	
	specified by the NGSI-LD temporal query: * the payload is defined in the file	
	set to 'vehicle-temporal-representation-aggregated-avg-max-PT1H.json' *	
	the id was changed to '\$\first_temporal_entity_representation_id\' * response	
	body to be checked set to '\${response.json()[0]}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_17_04	
Name	021_17_04 Multiple aggregate methods aggregated by one day duration	
Parent Release	v1.4.1	
Description	Check that one can retrieve the temporal evolution of entities with the aggrega	ted temporal
	representation	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${types}' and Query Parameter: attrs set to '\${EMPTY}' and Query	
	Parameter: options set to '\${options}' and Query Parameter: aggrMethods	
	set to '\${aggr_methods}' and Query Parameter: aggrPeriodDuration set to	
	'\${aggr_period_duration}' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld	
	and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set	
	to '2020-01-01T12:03:00Z' }	OUT OF THE
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 and Query	
	Temporal Representation Of Entities with Response Body containing	
	EntityTemporal element containing attribute instances in the time range	
	specified by the NGSI-LD temporal query: * the payload is defined in the file	
	set to 'vehicle-temporal-representation-aggregated-min-max-P1D.json' * the id was changed to '\${first_temporal_entity_representation_id}' * response	
	lody to be checked set to '\${response.json()[0]}' }	
	IDUCIY TO DE CHECKEG SELTO \${TESPOHSE.[SON()[U]} }	1

TP Id	TP/NGSI-LD/CI/Cons/TE/021_13		
Test objective	Check that one can query the temporal evolution of entities using the entityOperations		
	method		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4		
Config Id	CF_01		
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos		
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an a list of Temporal		
	Entities }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_13_01		
Name	021_13_01 After One Entity		
Parent Release	v1.3.1		
Description	Check that one can query the temporal evolution of entities using the entityOperations method		
	memou		

Exposted behaviour	Tost events	Direction
Expected behaviour	Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client
	l'/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query	SUT <- Client
	Temporal Representation of Entities Via POST Request: and Query	
	Parameter: query_file_name set to 'entity-operations-after-query.jsonld' and	
	Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-	
	suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-	
	compound.jsonld>; rel="http://www.w3.org/ns/json-	
	ld#context";type="application/ld+json" and Query Parameter: content_type	
	set to 'application/json' }	
		SUT -> Client
	Representation Of Entities Via Post with Response Status Code set to 200	
	and Query Temporal Representation Of Entities Via Post with Request	
	response body containing a list that contains Entity Temporal Elements compared with file 'vehicles-temporal-representation-021-13-01.jsonld' and	
	using the list of entity ids define in '\${temporal_entities_representation_ids}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_13_02	
Name	021_13_02 Before One Entity	
Parent Release	v1.3.1	
Description	Check that one can query the temporal evolution of entities using the entityOpe	erations
2 coonpact	method	orationio
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query	
	Temporal Representation of Entities Via POST Request: and Query	
	Parameter: query_file_name set to 'entity-operations-before-query.jsonld'	
	and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-	
	test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-	
	compound.jsonId>; rel="http://www.w3.org/ns/json- ld#context";type="application/ld+json" and Query Parameter: content_type	
	set to 'application/json' }	
		SUT -> Client
	Representation Of Entities Via Post with Response Status Code set to 200	OO 1 > OHOIR
	and Query Temporal Representation Of Entities Via Post with Request	
	response body containing a list that contains Entity Temporal Elements	
	compared with file 'vehicles-temporal-representation-021-13-02.jsonld' and	
	using the list of entity ids define in '\${temporal_entities_representation_ids}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_13_03	
Name	021_13_03 Between One Entity	
Parent Release	v1.3.1	4:
	v1.3.1 Check that one can query the temporal evolution of entities using the entityOpo	erations
Parent Release Description	v1.3.1 Check that one can query the temporal evolution of entities using the entityOpe method	
Parent Release	v1.3.1 Check that one can query the temporal evolution of entities using the entityOpemethod Test events	Direction
Parent Release Description	v1.3.1 Check that one can query the temporal evolution of entities using the entityOpemethod Test events when { the SUT receives a Request from the client containing: URL set to	
Parent Release Description	v1.3.1 Check that one can query the temporal evolution of entities using the entityOpemethod Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query	Direction
Parent Release Description	v1.3.1 Check that one can query the temporal evolution of entities using the entityOpemethod Test events when { the SUT receives a Request from the client containing: URL set to	Direction
Parent Release Description	v1.3.1 Check that one can query the temporal evolution of entities using the entityOpemethod Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query	Direction
Parent Release Description	v1.3.1 Check that one can query the temporal evolution of entities using the entityOpe method Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-between-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite-	Direction
Parent Release Description	v1.3.1 Check that one can query the temporal evolution of entities using the entityOpe method Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-between-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-"	Direction
Parent Release Description	v1.3.1 Check that one can query the temporal evolution of entities using the entityOpe method Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-between-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: content_type	Direction
Parent Release Description	v1.3.1 Check that one can query the temporal evolution of entities using the entityOpe method Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-between-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: content_type set to 'application/json' }	Direction SUT <- Client
Parent Release Description	v1.3.1 Check that one can query the temporal evolution of entities using the entityOpe method Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-between-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Temporal	Direction
Parent Release Description	V1.3.1 Check that one can query the temporal evolution of entities using the entityOpe method Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-between-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities Via Post with Response Status Code set to 200	Direction SUT <- Client
Parent Release Description	V1.3.1 Check that one can query the temporal evolution of entities using the entityOpe method Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-between-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities Via Post with Request	Direction SUT <- Client
Parent Release Description	V1.3.1 Check that one can query the temporal evolution of entities using the entityOpe method Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-between-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities Via Post with Request response body containing a list that contains Entity Temporal Elements	Direction SUT <- Client
Parent Release Description	V1.3.1 Check that one can query the temporal evolution of entities using the entityOpe method Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-between-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities Via Post with Request response body containing a list that contains Entity Temporal Elements compared with file 'vehicles-temporal-representation-021-13-03.jsonld' and	Direction SUT <- Client
Parent Release Description	V1.3.1 Check that one can query the temporal evolution of entities using the entityOpe method Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-between-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities Via Post with Request response body containing a list that contains Entity Temporal Elements	Direction SUT <- Client
Parent Release Description Expected behaviour	V1.3.1 Check that one can query the temporal evolution of entities using the entityOpe method Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-between-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities Via Post with Request response body containing a list that contains Entity Temporal Elements compared with file 'vehicles-temporal-representation-021-13-03.jsonld' and using the list of entity ids define in '\${temporal_entities_representation_ids}' }	Direction SUT <- Client
Parent Release Description Expected behaviour TP Permutation id Name Parent Release	Check that one can query the temporal evolution of entities using the entityOpe method Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-between-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities Via Post with Request response body containing a list that contains Entity Temporal Elements compared with file 'vehicles-temporal-representation-021-13-03.jsonld' and using the list of entity ids define in '\${temporal_entities_representation_ids}' } TP/NGSI-LD/CI/Cons/TE/021_13_04 021_13_04 After Two Entities	Direction SUT <- Client SUT -> Client
Parent Release Description Expected behaviour TP Permutation id Name	Check that one can query the temporal evolution of entities using the entityOpe method Test events When { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-between-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json"' and Query Parameter: content_type set to 'application/json' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities Via Post with Request response body containing a list that contains Entity Temporal Elements compared with file 'vehicles-temporal-representation-021-13-03.jsonld' and using the list of entity ids define in '\${temporal_entities_representation_ids}' } TP/NGSI-LD/CI/Cons/TE/021_13_04 021_13_04 After Two Entities	Direction SUT <- Client SUT -> Client

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query	
	Temporal Representation of Entities Via POST Request: and Query	
	Parameter: query_file_name set to 'entity-operations-after-query-two-	
	entities.jsonld' and Query Parameter: Link set to	
	<pre>'<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-</pre>	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>;	
	rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and	
	Query Parameter: content_type set to 'application/json' }	
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities Via Post with Response Status Code set to 200	
	and Query Temporal Representation Of Entities Via Post with Request	
	response body containing a list that contains Entity Temporal Elements	
	compared with file 'vehicles-bus-temporal-representation-021-13-04.jsonId'	
	and using the list of entity ids define in	
	'\${temporal_entities_representation_ids}' }	

TP Id	TP/NGSI-LD/CI/Cons/TE/021_08	
Test objective	Check that one can query the temporal evolution of entities matching the giver	NGSI-LD
	query	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4	
Config Id	CF_01	
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_08_01	
Name	021_08_01 Query the temporal evolution of entities matching the given NGSI-	LD query
Parent Release	v1.3.1	
Description	Check that one can query the temporal evolution of entities matching the giver	NGSI-LD
	query	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	"\${entity_types_to_be_retrieved}" and Query Parameter: ngsild_query set to	
	'speed>90' and Query Parameter: timerel set to 'after' and Query Parameter:	
	timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	OLIT OF C
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 and Query	
	Temporal Representation Of Entities with Request response body containing	
	a list that contains Entity Temporal Elements compared with file 'vehicles-	
	temporal-representation-021-08.jsonld' and using the list of entity ids define in '\${temporal_entities_representation_ids}' }	

TP ld	TP/NGSI-LD/CI/Cons/TE/021_11	
Test objective	Check that one can query the temporal evolution of entities with a limit to the number of	
	entities to be retrieved	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4	
Config Id	CF_01	
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an a list of Temporal	
	Entities }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_11_01	
Name	021_11_01 Query Some entities	
Parent Release	v1.3.1	
Description	Check that one can query the temporal evolution of entities with a limit to the number of	
	entities to be retrieved	

Test events	Direction
when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	SUT -> Client
	SUT -> Client
v1.3.1	
Check that one can query the temporal evolution of entities with a limit to the r	number of
entities to be retrieved	
Test events	Direction
	SUT <- Client
	SUT -> Client
	Jour -> Client
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: limit set to '\${2}' and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 200 and Query Temporal Representation Of Entities with Response Body containing a list of entities equal to '\${2}' of type 'Vehicle' with response set to '\${response_json()}' } TP/NGSI-LD/CI/Cons/TE/021_11_02 021_11_02 Query All entities v1.3.1 Check that one can query the temporal evolution of entities with a limit to the rentities to be retrieved

TP Id	TP/NGSI-LD/CI/Cons/TE/021_16	
Test objective	Check temporal pagination is applied when querying the temporal evolution of POST	entities via
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 5.7.3 and 6.3.10	
Config Id	CF_01	
PICS Selection	PICS_TemEvoEntRet and PICS_HTTP_PAGINATION_LIMIT	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_16_01	
Name	021_16_01 retrieve the entities via post	
Parent Release	v1.5.1	
Description	Check that temporal pagination is triggered on the post temporal query	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entityOperations/query' method set to 'POST' Query Temporal Representation of Entities Via POST Request: and Query Parameter: query_file_name set to 'entity-operations-before-query.jsonld' and Query Parameter: Link set to '<\$https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld>; rel="http://www.w3.org/ns/json-ld#context";type="application/ld+json" and Query Parameter: content_type set to 'application/json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities Via Post with Response Status Code set to 206 and Notification with Content range part date-time equals \${unit} }	SUT -> Client

TP Id	TD/N/CQLLD/C//Cons/TE/024_44	
Test objective	TP/NGSI-LD/CI/Cons/TE/021_14	rantasantation
Reference	Check that one can query the temporal evolution of entities with the simplified ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4	representation
Config Id	CF_01	
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos	
Initial conditions	with { the SUT being in the "initial state" and and containing a list of entities }	
initial containents	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_14_01	
Name	021_14_01 After	
Parent Release	v1.3.1	
Description	Check that one can query the temporal evolution of entities with the simplified	representation
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	"\${entity_types_to_be_retrieved}" and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter:	
	endTimeAt set to '\${endTimeAt}' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId	
	and Query Parameter: options set to 'temporalValues' }	
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 and Query	
	Temporal Representation Of Entities with Request response body containing	
	a list that contains Entity Temporal Elements compared with file 'vehicles-	
	temporal-representation-021-14-01.json' and using the list of entity ids define	
TD Downstation id	in '\${temporal_entities_representation_ids}' }	
TP Permutation id Name	TP/NGSI-LD/CI/Cons/TE/021_14_02	
Parent Release	021_14_02 Before v1.3.1	
Description	Check that one can query the temporal evolution of entities with the simplified	renresentation
Expected behaviour	Test events	Direction
Expedica Bellatica.	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	00. 4 0
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to	
	before' and Query Parameter: timeAt set to '\${timeAt}' and Query	
	Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: context	
	set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/- /raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: options set to 'temporalValues' }	
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 and Query	OO 1 > OHOITE
	Temporal Representation Of Entities with Request response body containing	
	a list that contains Entity Temporal Elements compared with file 'vehicles-	
	temporal-representation-021-14-02.json' and using the list of entity ids define	
	in '\${temporal_entities_representation_ids}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_14_02	
Name	021_14_02 Between	
Parent Release	V1.3.1	ronroc = = 4 - 4
Description Expected behaviour	Check that one can query the temporal evolution of entities with the simplified Test events	Direction
Expected bellaviour	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal	SOT < Client
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to	
	'between' and Query Parameter: timeAt set to '\${timeAt}' and Query	
	Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: context	
	set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld	
	and Query Parameter: options set to 'temporalValues' }	OUT - Olient
	then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 200 and Query	SUT -> Client
	Temporal Representation Of Entities with Request response body containing	
	a list that contains Entity Temporal Elements compared with file 'vehicles-	
	temporal-representation-021-14-03.json' and using the list of entity ids define	
	in '\${temporal_entities_representation_ids}' }	

TP ld	TP/NGSI-LD/CI/Cons/TE/021_09	
Test objective	Check that one can query the temporal evolution of entities matching the given	NGSLI D
TOUR ODJECTIVE	geo-query	I NGOI-LD
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4	
Config Id	CF 01	
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an a list of Te	mporal
initial conditions	Entities }	прогаг
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_09_01	
Name	021_09_01 Near Point	
Parent Release	v1.3.1	
Description Description	Check that one can query the temporal evolution of entities matching the given	NGSLLD
Description		I NGSI-LD
Expected behaviour	geo-query Test events	Direction
Expected beliaviour		SUT <- Client
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	SUT <- Client
	Representation of Entities and Query Parameter: entity_types set to	
	\$\{\text{entity_types_to_be_retrieved}\}\ \text{and Query Parameter: georel set to}	
	'near;maxDistance==2000' and Query Parameter: geometry set to 'Point'	
	and Query Parameter: coordinates set to '[-8.503,41.202]' and Query	
	Parameter: geoproperty set to '\${EMPTY}' and Query Parameter: timerel set	
	to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and	
	Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-	
	suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-	
	compound.jsonld' }	OUT Oli a mate
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 and Query	
	Temporal Representation Of Entities with Request response body containing	
	a list that contains Entity Temporal Elements compared with file 'vehicles-	
	temporal-representation-021-09.jsonld' and using the list of entity ids define	
TD Dammartation in	in '\${temporal_entities_representation_ids}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_09_02	
Name	021_09_02 Within Polygon	
Parent Release	v1.3.1	
Description	Check that one can query the temporal evolution of entities matching the giver	n NGSI-LD
	geo-query	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: georel set to 'within'	
	and Query Parameter: geometry set to 'Polygon' and Query Parameter:	
	coordinates set to '[[[-13.503,47.202],[6.541,	
	52.961],[20.37,44.653],[9.46,32.57],[-13.503,32.57],[-13.503,47.202]]]' and	
	Query Parameter: geoproperty set to 'location' and Query Parameter: timerel	
	set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and	
	Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-	
	suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-	
	compound.jsonld' }	A
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 and Query	
	Temporal Representation Of Entities with Request response body containing	
	a list that contains Entity Temporal Elements compared with file 'vehicles-	
	temporal-representation-021-09.jsonld' and using the list of entity ids define	
	in '\${temporal_entities_representation_ids}' }	

TP ld	TP/NGSI-LD/CI/Cons/TE/021_10	
Test objective	Check that one can query the temporal evolution of entities matching the giver	n NGSI-LD
-	Context Source filter	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4	
Config Id	CF_01	
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos	
Initial conditions	with { the SUT containing a Context Source Registration of a context source (Context Source Registration of a context source Registration of a context source (Context Source Registration of a context source Registration of a context source Registration of a context source (Context Source Registration of a context source Registration of	CS1) providing
	temporal information of two entities of type Building between 2020-08-01T22:0	7:00Z and
	2021-08-01T21:07:00Z and CS1 containing two temporal entities of type Build	ing and
	temporal evolution of those entities in the mentioned interval. }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_10_01	
Name	021_10_01 Query the temporal evolution of entities matching the given NGSI-	LD context
	source filter	
Parent Release	v1.3.1	
Description	Check that one can query the temporal evolution of entities matching the giver	n NGSI-LD
	Context Source filter	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: csf set to 'endpoint'	
	and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set	
	to '2020-07-01T12:05:00Z' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	0.12
	then { the SUT sends a valid Response for the operation: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 }	

TP Id	TP/NGSI-LD/CI/Cons/TE/021_12	
Test objective	Check that one cannot query the temporal evolution of entities with an invalid r	equest or
	invalid request content	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4	
Config Id	CF_01	
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_12_01	
Name	021_12_01 Query the temporal evolution of entities with an invalid request	
Parent Release	v1.3.1	
Description	Check that one cannot query the temporal evolution of entities with an invalid r	equest
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	when the our receives a request from the cheft containing. One set to	OUT < CHELL
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	SOT < Sherit
		OOT < Onem
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	OOT < OHER
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	SOT < SHELL
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query	oor <- olient
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	SUT -> Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 400 and Query Temporal Representation Of Entities with Response Body containing the	
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 400 and Query	

TP Id	TP/NGSI-LD/CI/Cons/TE/021_07
Test objective	Check that one can query the temporal evolution of entities matching the given id pattern
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4
Config Id	CF_01
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos
Initial conditions	with { the SUT containing an initial state }

	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_07_01	
Name	021_07_01 Query the temporal evolution of entities matching the given id patte	ern
Parent Release	v1.3.1	
Description	Check that one can query the temporal evolution of entities matching the given	n id pattern
Expected behaviour	Test events	Direction
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: entity_id_pattern set to 'urn:ngsi-ld:Vehicle:.*' and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	SUT <- Client SUT -> Client
	a list that contains Entity Temporal Elements compared with file 'vehicles-temporal-representation-021-07.jsonld' and using the list of entity ids define in '\${temporal_entities_representation_ids}' }	

TP ld	TP/NGSI-LD/CI/Cons/TE/021_05	
Test objective	Check that one can query the temporal evolution of entities matching the given	type(s)
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4	
Config Id	CF_01	
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_05_01	
Name	021_05_01 Query the temporal evolution of entities matching the given type(s)	
Parent Release	v1.3.1	
Description	Check that one can query the temporal evolution of entities matching the given	type(s)
Expected behaviour	Test events	Direction
	1 . (SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after'	
	and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query	
	Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	lanen (and a a contact at toma track and a character at a conficuency	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 and Query	
	Temporal Representation Of Entities with Request response body containing	
	a list that contains Entity Temporal Elements compared with file 'vehicles-	
	temporal-representation-021-05.jsonld' and using the list of entity ids define	
	in '\${temporal_entities_representation_ids}' }	

TP ld	TP/NGSI-LD/CI/Cons/TE/021_01	
Test objective	Check that one can query the temporal evolution of entities	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4	
Config Id	CF_01	
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos	
Initial conditions	with { the SUT being in the "initial state" and and containing a list of entities }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_01_01	
Name	021_01_01 After	
Parent Release	v1.3.1	
Description	Check that one can query the temporal evolution of entities	

Expected behaviour	Test events	Direction
-	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after'	
	and Query Parameter: timeAt set to '\${timeAt}' and Query Parameter:	
	endTimeAt set to '\${endTimeAt}' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 and Query	
	Temporal Representation Of Entities with Request response body containing	
	a list that contains Entity Temporal Elements compared with file 'vehicles-	
	temporal-representation-021-01-01.jsonld' and using the list of entity ids	
	define in '\${temporal_entities_representation_ids}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_01_02	
Name	021_01_02 Before	
Parent Release	v1.3.1	
Description	Check that one can query the temporal evolution of entities	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to	
	'before' and Query Parameter: timeAt set to '\${timeAt}' and Query	
	Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: context	
	set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 and Query	
	Temporal Representation Of Entities with Request response body containing	
	a list that contains Entity Temporal Elements compared with file 'vehicles-	
	temporal-representation-021-01-02.jsonld' and using the list of entity ids	
	define in '\${temporal_entities_representation_ids}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_01_03	
Name	021_01_03 Between	
Parent Release	V1.3.1	
Description	Check that one can query the temporal evolution of entities	Discotion
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to	
	between' and Query Parameter: timeAt set to '\${timeAt}' and Query	
	Parameter: endTimeAt set to '\${endTimeAt}' and Query Parameter: context	
	set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' }	CLIT . Oli t
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 and Query	
	Temporal Representation Of Entities with Request response body containing	
	a list that contains Entity Temporal Elements compared with file 'vehicles-	
	temporal-representation-021-01-03.jsonId' and using the list of entity ids	
	define in '\${temporal_entities_representation_ids}' }	

TP Id	TP/NGSI-LD/CI/Cons/TE/021_03
Test objective	Check that one can query the temporal evolution of the last N instances of entities attributes
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4
Config Id	CF_01
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos
Initial conditions	with { the SUT containing an initial state }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_03_01
Name	021_03_01 Query the temporal evolution of the last N instances of entities attributes
Parent Release	v1.3.1
Description	Check that one can query the temporal evolution of the last N instances of entities attributes

Expected behaviour	Test events	Direction
		SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after'	
	and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query	
	Parameter: lastN set to '4' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	lanen (and a contract a name in the contract of an electric state) in the contract of the con	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 and Query	
	Temporal Representation Of Entities with Request response body containing	
	a list that contains Entity Temporal Elements compared with file 'vehicles-	
	temporal-representation-021-03.jsonld' and using the list of entity ids define	
	in '\${temporal_entities_representation_ids}' }	

TP Id	TP/NGSI-LD/CI/Cons/TE/021_04		
Test objective	Check that one can query the temporal evolution of entities using a context		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4		
Config Id	CF_01		
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos		
Initial conditions	with { the SUT containing an initial state }		
Permutations			
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_04_01		
Name	021_04_01 Query the temporal evolution of entities using a context		
Parent Release	v1.3.1		
Description	Check that one can query the temporal evolution of entities using a context		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal		
	Representation of Entities and Query Parameter: entity_types set to		
	interpretation of Entitles and Educity i arameters of the justice and the		
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after'		
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query		
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after'		
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query		
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'} then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client	
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 200 and Query	SUT -> Client	
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 200 and Query Temporal Representation Of Entities with Request response body containing	SUT -> Client	
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 200 and Query Temporal Representation Of Entities with Request response body containing a list that contains Entity Temporal Elements compared with file 'vehicles-	SUT -> Client	
	'\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 200 and Query Temporal Representation Of Entities with Request response body containing	SUT -> Client	

TP ld	TP/NGSI-LD/CI/Cons/TE/021_06	
Test objective	Check that one can query the temporal evolution of entities matching the given identifier(s)	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4	
Config Id	CF_01	
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_06_01	
Name	021_06_01 Query the temporal evolution of entities matching the given identifier(s)	
Parent Release	v1.3.1	
Description	Check that one can guery the temporal evolution of entities matching the given identifier(s)	

Expected behaviour	Test events	Direction
		SUT <- Client
	'/ngsi-ld/v1/temporal/entities' method set to 'GET' Query Temporal	
	Representation of Entities and Query Parameter: entity_types set to	
	'\${entity_types_to_be_retrieved}' and Query Parameter: entity_ids set to	
	'\${entity_ids_to_be_retrieved}' and Query Parameter: timerel set to 'after'	
	and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query	
	Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Query Temporal	SUT -> Client
	Representation Of Entities with Response Status Code set to 200 and Query	
	Temporal Representation Of Entities with Request response body containing	
	a list that contains Entity Temporal Elements compared with file 'vehicles-	
	temporal-representation-021-06.jsonld' and using the list of entity ids define	
	in '\${temporal_entities_representation_ids}' }	

TP ld	TP/NGSI-LD/CI/Cons/TE/021_02	
Test objective	Check that one can query the temporal evolution of certain attributes of entities	3
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.4	
Config Id	CF_01	
PICS Selection	PICS_QueTemEvoEnt_AND_QueTemEvoEntPos	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/TE/021_02_01	
Name	021_02_01 Query the temporal evolution of certain attributes of entities	
Parent Release	v1.3.1	
Description	Check that one can query the temporal evolution of certain attributes of entities	3
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/temporal/entities' method set to 'GET' Query Temporal Representation of Entities and Query Parameter: entity_types set to '\${entity_types_to_be_retrieved}' and Query Parameter: timerel set to 'after' and Query Parameter: timeAt set to '2020-07-01T12:05:00Z' and Query Parameter: attrs set to '\${temporal_attributes_to_be_retrieved}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-Id-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Query Temporal Representation Of Entities with Response Status Code set to 200 and Query Temporal Representation Of Entities with Request response body containing a list that contains Entity Temporal Elements compared with file 'vehicles-temporal-representation-021-02.jsonId' and using the list of entity ids define	SUT <- Client SUT -> Client

4.4.2.3 Discovery

4.4.2.3.1 RetrieveDetailsOfAvailableEntityTypes

TP Id	TP/NGSI-LD/CI/Cons/DISC/023_01	
Test objective	Check that one can retrieve a list with a detailed representation of NGSI-LD entity types	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.6	
Config Id	CF_01	
PICS Selection	PICS_RetAvaEntTyp	
Initial conditions	with { the SUT being in the "initial state" and and containing a list of entities }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/DISC/023_01_01	
Name	023_01_01 WithoutJsonLdContext	
Parent Release	v1.3.1	
Description	Check that one can retrieve a list with a detailed representation of NGSI-LD entity types	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/types' method set to 'GET' Retrieve entity types: and Query	
	Parameter: context set to '\${EMPTY}' and Query Parameter: details set to	
	'true' }	
	then { the SUT sends a valid Response for the operations: Retrieve Entity	SUT -> Client
	Types with Response Status Code set to 200 and Retrieve Entity Types with	
	Response Body containing an Entity Type Element with expectation body	
	equal to file: 'types/expectations/entity-type-023-01-01.json' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/DISC/023_01_02	
Name	023_01_02 WithJsonLdContext	
Parent Release	v1.3.1	
Description	Check that one can retrieve a list with a detailed representation of NGSI-LD er	ntity types
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/types' method set to 'GET' Retrieve entity types: and Query	
	Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: details set to 'true' }	
	then { the SUT sends a valid Response for the operations: Retrieve Entity	SUT -> Client
	Types with Response Status Code set to 200 and Retrieve Entity Types with	
	Response Body containing an Entity Type Element with expectation body	
	equal to file: 'types/expectations/entity-type-023-01-02.json' }	

4.4.2.3.2 RetrieveAvailableEntityTypeInformation

TP Id	TP/NGSI-LD/CI/Cons/DISC/024_02	
Test objective	Check that one can retrieve a detailed representation of a specified NGSI-LD e	entity type
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.7	7 71
Config Id	CF_01	
PICS Selection	PICS_DetAvaEntTyp	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/DISC/024_02_01	
Name	024_02_01 WithCompactedType	
Parent Release	v1.3.1	
Description	Check that one can retrieve a detailed representation of a specified NGSI-LD	entity type
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/types/{type}' method set to 'GET' Retrieve Entity Type, with type	
	set to 'Building', with Header['Link'] containing	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Retrieve Entity	SUT -> Client
	Type with Response Status Code set to 200 and Retrieve Entity Type with	
	Response body containing an Entity Type Info with expectation body set to	
	file 'types/expectations/entity-type-info-024-01.json' and response body to be	
TD Dammet attack to	checked set to '\${response.json()}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/DISC/024_02_02	
Name	024_02_02 WithExpandedType	
Parent Release	V1.3.1	***
Description	Check that one can retrieve a detailed representation of a specified NGSI-LD	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/types/{type}' method set to 'GET' Retrieve Entity Type, with type	
	set to 'https%3A%2F%2Fngsi-ld-test-suite%2Fcontext%23Building', with	
	Header['Link'] containing 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Retrieve Entity	SUT -> Client
	Type with Response Status Code set to 200 and Retrieve Entity Type with	301 -> Cliefit
	Response body containing an Entity Type Info with expectation body set to	
	file 'types/expectations/entity-type-info-024-01.json' and response body to be	
	checked set to '\${response.json()}' }	
	Jonestica cot to #(1-openios.joon(/)))	l

TP ld	TP/NGSI-LD/CI/Cons/DISC/024_01		
Test objective	Check that one cannot retrieve a detailed representation of an unknown NGSI-	-LD entity type	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.7		
Config Id	CF_01		
PICS Selection	PICS_DetAvaEntTyp		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/DISC/024_01_01		
Name	024_01_01 Retrieve Detailed Representation Of Available Entity Type Without	Context	
Parent Release	v1.3.1		
Description	Check that one cannot retrieve a detailed representation of an unknown NGSI-	LD entity type	
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/types/{type}' method set to 'GET' Retrieve Entity Type, with type		
	set to 'Building' }		
		SUT -> Client	
	Type with Response Status Code set to 404 and Retrieve Entity Type with		
	Response Body containing the type 'https://uri.etsi.org/ngsi-		
	ld/errors/ResourceNotFound' and Retrieve Entity Type with Response body		
	containing 'title' element }		

4.4.2.3.3 RetrieveDetailsOfAvailableAttributes

TP ld	TP/NGSI-LD/CI/Cons/DISC/026_01	
Test objective	Check that one can retrieve a list with a detailed representation of NGSI-LD at	tributes
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.9	
Config Id	CF_01	
PICS Selection	PICS_AvaAtt	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Entity	y \${entity} with
	an id set to \${entityId} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/DISC/026_01_01	
Name	026_01_01 WithoutJsonLdContext	
Parent Release	v1.3.1	
Description	Check that one can retrieve a list with a detailed representation of NGSI-LD at	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/attributes' method set to 'GET' Retrieve attributes: and Query	
	Parameter: context set to '\${EMPTY}' and Query Parameter: details set to	
	'true' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Attributes with Response Status Code set to 200 and Retrieve Attributes	
	with Response body containing an array of attributes * with the expected	
	payload defined in the file 'types/expectations/attribute-026-01-01.json' * and	
TD Downsytation id	response body set to '\${response.json()}' }	
TP Permutation id	TP/NGSI-LD/CI/Cons/DISC/026_01_02	
Name	026_01_02 WithJsonLdContext	
Parent Release	V1.3.1	tuda t = =
Description	Check that one can retrieve a list with a detailed representation of NGSI-LD at Test events	
Expected behaviour	1 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/attributes' method set to 'GET' Retrieve attributes: and Query	SUT <- Client
	Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld	
	and Query Parameter: details set to 'true' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Attributes with Response Status Code set to 200 and Retrieve Attributes	OO 1 -> OHERIC
	with Response body containing an array of attributes * with the expected	
	payload defined in the file 'types/expectations/attribute-026-01-02.json' * and	
	response body set to '\${response.json()}' }	

4.4.2.3.4 RetrieveAvailableAttributeInformation

TP Id	TP/NGSI-LD/CI/Cons/DISC/027_02	
Test objective	Check that one can retrieve a list with a detailed representation of NGSI-LD at	tributes
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.10	
Config Id	CF_01	
PICS Selection	PICS_DetAvaAtt	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/DISC/027_02_01	
Name	027_02_01 WithCompactedAttributeName	
Parent Release	v1.3.1	
Description	Check that one can retrieve a list with a detailed representation of NGSI-LD at	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/attributes/{attribute_name}' method set to 'GET' Retrieve	
	Attribute with attributeName set to '\${attributeName}' }	
	then { the SUT sends a valid Response for the operations: Retrieve Attribute	SUT -> Client
	with Response Status Code set to 200 and Retrieve Attribute with Response	
	body containing an array of attributes * with the expected payload defined in	
	the file 'types/expectations/attribute-027-01.json' * and response body set to	
TP Permutation id	'\${response.json()}' } TP/NGSI-LD/CI/Cons/DISC/027_02_02	
Name	027_02_02 WithExpandedAttributeName	
Parent Release	v1.3.1	
Description	Check that one can retrieve a list with a detailed representation of NGSI-LD at	tributos
Expected behaviour	Test events	Direction
Expected beliavious	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	l'/ngsi-ld/v1/attributes/{attribute_name}' method set to 'GET' Retrieve	OUT CHICH
	Attribute with attributeName set to '\${attributeName}' }	
	then { the SUT sends a valid Response for the operations: Retrieve Attribute	SUT -> Client
	with Response Status Code set to 200 and Retrieve Attribute with Response	
	body containing an array of attributes * with the expected payload defined in	
	the file 'types/expectations/attribute-027-01.json' * and response body set to	
	'\${response.json()}' }	

TP Id	TP/NGSI-LD/CI/Cons/DISC/027_01	
Test objective	Check that one cannot retrieve a detailed representation of an unknown NGSI-	LD attribute
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.10	
Config Id	CF_01	
PICS Selection	PICS_DetAvaAtt	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/Cons/DISC/027_01_01	
Name	027_01_01 Retrieve Detailed Representation Of Available Attribute Without Co	ontext
Parent Release	v1.3.1	
Description	Check that one cannot retrieve a detailed representation of an unknown NGSI-	LD attribute
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/attributes/{attribute_name}' method set to 'GET' Retrieve	
	Attribute with attributeName set to 'airQualityLevel' }	
	then { the SUT sends a valid Response for the operations: Retrieve Attribute	SUT -> Client
	with Response Status Code set to 404 and Retrieve Attribute with Response	
	Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/ResourceNotFound' and Retrieve Attribute with Response body	
	containing 'title' element }	

4.4.2.3.5 RetrieveAvailableAttributes

TP ld	TP/NGSI-LD/CI/Cons/DISC/025_01
Test objective	Check that one can retrieve a list of NGSI-LD attributes
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.8
Config Id	CF_01
PICS Selection	PICS AvaAtt

Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Enti-	tv \${entitv} with	
	an id set to \${entityId} }	., +(,	
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/Cons/DISC/025_01_01		
Name	025_01_01 WithoutJsonLdContext		
Parent Release	v1.3.1		
Description	Check that one can retrieve a list of NGSI-LD attributes		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/attributes' method set to 'GET' Retrieve attributes: and Query Parameter: context set to '\${EMPTY}' }	SUT <- Client	
	then { the SUT sends a valid Response for the operations: Retrieve Attributes with Response Status Code set to 200 and Retrieve Attributes with Response Body containing an Attribute List element * with filename set to 'types/expectations/attribute-list-025-01-01.json' * response set to '\${response.json()}' }	SUT -> Client	
TP Permutation id	TP/NGSI-LD/CI/Cons/DISC/025_01_02	•	
Name	025_01_02 WithJsonLdContext		
Parent Release	v1.3.1		
Description	Check that one can retrieve a list of NGSI-LD attributes		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/attributes' method set to 'GET' Retrieve attributes: and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	SUT <- Client	
	then { the SUT sends a valid Response for the operations: Retrieve Attributes with Response Status Code set to 200 and Retrieve Attributes with Response Body containing an Attribute List element * with filename set to 'types/expectations/attribute-list-025-01-02.json' * response set to '\${response.json()}' }	SUT -> Client	

4.4.2.3.6 RetrieveAvailableEntityTypes

TP ld	TP/NGSI-LD/CI/Cons/DISC/022_01	
Test objective	Check that one can retrieve a list of NGSI-LD entity types	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.7.5	
Config Id	CF 01	
PICS Selection		
Initial conditions	PICS_RetAvaEntTyp	
initial conditions	with { the SUT being in the "initial state" and and containing a list of entities } Permutations	
TP Permutation id		
Name	TP/NGSI-LD/CI/Cons/DISC/022_01_01	
Parent Release	022_01_01 WithoutJsonLdContext	
	V1.3.1	
Description	Check that one can retrieve a list of NGSI-LD entity types Test events	Direction
Expected behaviour	1101111111	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/types' method set to 'GET' Retrieve entity types: and Query	
	Parameter: context set to '\${EMPTY}' }	OLIT OF I
	then { the SUT sends a valid Response for the operations: Retrieve Entity	SUT -> Client
	Types with Response Status Code set to 200 and Retrieve Entity Types with	
	Response Body containing an Entity Type List with expectation body equal	
TP Permutation id	to file: 'types/expectations/entity-type-list-022-01-01.json' } TP/NGSI-LD/CI/Cons/DISC/022_01_02	
Name		
Parent Release	022_01_02 WithJsonLdContext v1.3.1	
	1.11011	
Description	Check that one can retrieve a list of NGSI-LD entity types	Dissettes
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/types' method set to 'GET' Retrieve entity types: and Query	
	Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId' }	CLIT . Olianat
	then { the SUT sends a valid Response for the operations: Retrieve Entity	SUT -> Client
	Types with Response Status Code set to 200 and Retrieve Entity Types with	
	Response Body containing an Entity Type List with expectation body equal	
	to file: 'types/expectations/entity-type-list-022-01-02.json' }	

4.4.3 Subscription

4.4.3.1 QuerySubscriptions

TP Id	TP/NGSI-LD/CI/SUB/031_02	
Test objective	Check that one can query a list of subscriptions: Pagination logic shall be in place	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.4	
Config Id	CF_01	
PICS Selection	PICS_RetLisSub	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Sub-	ecription
ilitiai colluitions	\$\subscription\} with an id set to \$\subscription_id\}	Scription
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/031_02_01	
Name	031_02_01 Query Second Subscription	
Parent Release	v1.3.1	
Description	Check that one can query a list of subscriptions: Pagination logic shall be in pl	lace
Expected behaviour	Test events	Direction
Expected bellaviour	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	l'/ngsi-ld/v1/subscriptions/' method set to 'GET' Query Subscription Request	301 <- Client
	with data: and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonId-contexts/ngsi-ld-test-suite-compound.jsonId	
	and Query Parameter: limit set to '\${1}' and Query Parameter: offset set to	
	\$\frac{4}{1}\right\ and Query Parameter: accept set to 'application/ld+json' \right\}	
	then { the SUT sends a valid Response for the operations: Query	SUT -> Client
	Subscriptions with Response Status Code set to 200 and Query	OO1 > OHOIR
	Subscriptions with Response Body containing a list of entities equal to	
	'\${expectation_subscription_number}' of type 'Subscription' with response	
	set to '\${response.json()}' and Query Subscriptions with Response header	
	with 'Prev' header equal to ' <th></th>	
	ld/v1/subscriptions?limit=1&offset=2>;rel="next";type="application/ld+json"	
	and with 'Next' header equal to '\${response.headers}' }	
TP Permutation id	TP/NGSI-LD/CI/SUB/031_02_02	•
Name	031_02_02 Query Last Subscription	
Parent Release	v1.3.1	
Description	Check that one can query a list of subscriptions: Pagination logic shall be in pl	lace
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/' method set to 'GET' Query Subscription Request	
	with data: and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: limit set to '\${1}' and Query Parameter: offset set to	
	'\${2}' and Query Parameter: accept set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Query	SUT -> Client
	Subscriptions with Response Status Code set to 200 and Query	
	Subscriptions with Response Body containing a list of entities equal to	
	'\${expectation_subscription_number}' of type 'Subscription' with response	
	set to '\${response.json()}' and Query Subscriptions with Response header	
	with 'Prev' header equal to '\${EMPTY}' and with 'Next' header equal to	
	'\${response.headers}' }	
TP Permutation id	TP/NGSI-LD/CI/SUB/031_02_03	
Name	031_02_03 Query All Subscriptions	
Parent Release Description	v1.3.1	
	Check that one can query a list of subscriptions: Pagination logic shall be in place	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/' method set to 'GET' Query Subscription Request	
	with data: and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Query Parameter: limit set to '\${15}' and Query Parameter: offset set to	
	'\${0}' and Query Parameter: accept set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Query	SUT -> Client
	Subscriptions with Response Status Code set to 200 and Query	
	Subscriptions with Response Body containing a list of entities equal to	
	'\${expectation_subscription_number}' of type 'Subscription' with response	
	set to '\${response.json()}' and Query Subscriptions with Response header	
	with 'Prev' header equal to '\${EMPTY}' and with 'Next' header equal to	
	'\${response.headers}' }	

TP Id	TP/NGSI-LD/CI/SUB/031_01	
Test objective	Check that one can query a list of subscriptions	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.4	
Config Id	CF_01	
PICS Selection	PICS_RetLisSub	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/031_01_01	
Name	031_01_01 Query Subscriptions	
Parent Release	v1.3.1	
Description	Check that one can query a list of subscriptions	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/' method set to 'GET' Query Subscription Request	
	with data: and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Query	SUT -> Client
	Subscriptions with Response Status Code set to 200 and Query	
	Subscriptions with Response containing: * file set to	
	'subscriptions/expectations/subscriptions-031-01.json' * id set to	
	'\${subscription_ids}' * response set to '\${response.json()}' }	

4.4.3.2 UpdateSubscription

TP Id	TP/NGSI-LD/CI/SUB/029_01		
Test objective	Check that one cannot update a subscription: If the Subscription id is not presonal valid URI, then an error of type BadRequestData shall be raised	ent or it is not	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.2		
Config Id	CF_01		
PICS Selection	PICS_SubUpd		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/SUB/029_01_01		
Name	029_01_01 NotPresentId		
Parent Release	v1.3.1		
Description	Check that one cannot update a subscription: If the Subscription id is not present or it is not a valid URI, then an error of type BadRequestData shall be raised		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request Update Subscription and Header['Content-Type'] set to 'application/json' and Payload defined in file 'subscriptions/fragments/subscription-update.json' }	SUT <- Client	
	then { the SUT sends a valid Response for the operations: Update Subscription with Response Status Code set to 405 and Update Subscription with Response Body containing the type '\${EMPTY}' and Update Subscription with Response body containing 'title' element }	SUT -> Client	

TP Permutation id	TP/NGSI-LD/CI/SUB/029_01_02	
Name	029_01_02 InvalidId	
Parent Release	v1.3.1	
Description	Check that one cannot update a subscription: If the Subscription id is not presonal valid URI, then an error of type BadRequestData shall be raised	ent or it is not
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request Update Subscription and Header['Content-Type'] set to 'application/json' and Payload defined in file 'subscriptions/fragments/subscription-update.json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Subscription with Response Status Code set to 400 and Update Subscription with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Update Subscription with Response body containing 'title' element }	SUT -> Client

TP Id	TP/NGSI-LD/CI/SUB/029_03	
Test objective	Check that one cannot update a subscription: If the data types and restriction a	are not met by
	the Subscription Fragment, then an error of type BadRequestData shall be raise	sed
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.2	
Config Id	CF_01	
PICS Selection	PICS_SubUpd	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/029_03_01	
Name	029_03_01 Update Subscription With Invalid Fragment	
Parent Release	v1.3.1	
Description	Check that one cannot update a subscription: If the data types and restriction a	are not met by
	the Subscription Fragment, then an error of type BadRequestData shall be raise	sed
Expected behaviour	ted behaviour Test events Dire	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request	
	Update Subscription and Header['Content-Type'] set to 'application/json' and	
	Payload defined in file 'subscriptions/fragments/subscription-invalid-	
	update.json' }	
	then { the SUT sends a valid Response for the operations: Update	SUT -> Client
	Subscription with Response Status Code set to 400 and Update	
	Subscription with Response Body containing the type	
	https://uri.etsi.org/ngsi-ld/errors/BadRequestDatal and Update Subscription	
	with Response body containing 'title' element }	

TP Id	TP/NGSI-LD/CI/SUB/029_07
Test objective	Check that one can update a subscription: If isActive is equal to true and expiresAt is not present, then status shall be updated to "active", if and only if, the previous value of status was different than "expired"
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.2
Config Id	CF_01
PICS Selection	PICS_SubUpd
Initial conditions	with { the SUT containing an initial state }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/SUB/029_07_01
Name	029_07_01 ActiveTrue
Parent Release	v1.3.1
Description	Check that one can update a subscription: If isActive is equal to true and expiresAt is not present, then status shall be updated to "active", if and only if, the previous value of status was different than "expired"

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request Update Subscription and Header['Content-Type'] set to 'application/json' and Payload defined in file 'subscriptions/fragments/subscription-isActive-true-update.ison' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Subscription with Response Status Code set to 204 and Retrieve Subscription with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'status' and Query Parameter: response_body set to 'response1.json()' and Query Parameter: expected_attribute_value set to 'active' }	SUT -> Client

TP Id	TP/NGSI-LD/CI/SUB/029_05	
Test objective	Check that one can update a subcription: Term to URI expansion of Attribute r	names shall be
	observed	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.2	
Config Id	CF_01	
PICS Selection	PICS_SubUpd	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/029_05_01	
Name	029_05_01 Update Subscription With Term to Uri Expansion with Context	
Parent Release	v1.3.1	
Description	Check that one can update a subcription: Term to URI expansion of Attribute r	names shall be
	observed	
Expected behaviour	Test events	Direction
-	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request	
	Update Subscription and Header['Link'] contain the context	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Header['Content-Type'] set to 'application/json' and Payload defined in	
	file 'subscriptions/fragments/subscription-vehicle-entities.json' }	
	then { the SUT sends a valid Response for the operations: Update	SUT -> Client
	Subscription with Response Status Code set to 204 and Retrieve	
	Subscription with Response Body containing the same content defined in file	
	'subscriptions/expectations/subscription-vehicle.jsonId' with subscription id	
	'\${subscription_id}' }	
TP Permutation id	TP/NGSI-LD/CI/SUB/029_05_02	
Name	029_05_02 Update Subscription With Term to Uri Expansion without Context	
Parent Release	v1.3.1	
Description	Check that one can update a subcription: Term to URI expansion of Attribute r	names shall be
	observed	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request	
	Update Subscription and Header['Link'] contain the context	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonId-contexts/ngsi-Id-test-suite-compound.jsonId'	
	and Header['Content-Type'] set to 'application/json' and Payload defined in	
	file 'subscriptions/fragments/subscription-vehicle-entities.json' }	
	then { the SUT sends a valid Response for the operations: Update	SUT -> Client
	Subscription with Response Status Code set to 204 and Retrieve	
	Subscription with Response Body containing the same content defined in file	
	'subscriptions/expectations/subscription-vehicle-expanded-types.jsonId' with	
	subscription id '\${subscription_id}' }	

TP Id	TP/NGSI-LD/CI/SUB/029_02
Test objective	Check that one cannot update a subscription: If the NGSI-LD System does not know about the target Subscription, because there is no existing Subscription whose id (URI) is equivalent, an error of type ResourceNotFound shall be raised
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.2
Config Id	CF_01
PICS Selection	PICS SubUpd

Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/SUB/029_02_01	
Name	029_02_01 Update Unknown Subscription	
Parent Release	v1.3.1	
Description	Check that one cannot update a subscription: If the NGSI-LD System does not know about the target Subscription, because there is no existing Subscription whose id (URI) is equivalent, an error of type ResourceNotFound shall be raised	
Expected behaviour Test events		Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request Update Subscription and Header['Content-Type'] set to 'application/json' and Payload defined in file 'subscriptions/fragments/subscription-update.json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Subscription with Response Status Code set to 404 and Update Subscription with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/ResourceNotFound' and Update Subscription with Response body containing 'title' element }	SUT -> Client

TP ld	TP/NGSI-LD/CI/SUB/029_04	
Test objective	Check that one cannot update a subscription: Any attempt to remove (by settir in the Fragment) mandatory properties of a Subscription (clause 5.2.12) shall error of type BadRequestData	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.2	
Config Id	CF_01	
PICS Selection	PICS_SubUpd	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/029_04_01	
Name	029_04_01 Update Subscription With Null Mandatory Properties	
Parent Release	v1.3.1	
Description	Check that one cannot update a subscription: Any attempt to remove (by setting them to null in the Fragment) mandatory properties of a Subscription (clause 5.2.12) shall result in an error of type BadRequestData	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request Update Subscription and Header['Content-Type'] set to 'application/json' and Payload defined in file 'subscriptions/fragments/subscription-null-properties-update.json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Subscription with Response Status Code set to 400 and Update Subscription with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Update Subscription with Response body containing 'title' element }	SUT -> Client

TP ld	TP/NGSI-LD/CI/SUB/029_06		
Test objective	Check that one can update a subscription: The implementation shall modify the target		
	Subscription		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.2		
Config Id	CF_01		
PICS Selection	PICS_SubUpd		
Initial conditions	with { the SUT containing an initial state }		
Permutations			
TP Permutation id	TP/NGSI-LD/CI/SUB/029_06_01		
Name	029_06_01 Update Subscription		
Parent Release	v1.3.1		
Description	Check that one can update a subscription: The implementation shall modify the target		
	Subscription		

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request	
	Update Subscription and Header['Link'] contain the context	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld'	
	and Header['Content-Type'] set to 'application/json' and Payload defined in	
	file 'subscriptions/fragments/subscription-update.json' }	
	then { the SUT sends a valid Response for the operations: Update	SUT -> Client
	Subscription with Response Status Code set to 204 and Retrieve	
	Subscription with Check Updated Entity and Query Parameter:	
	'updated_resource' set to 'subscription' and Query Parameter:	
	response_body' set to 'response1.json()' and Query Parameter:	
	'ignored_keys' set to 'ignored_attributes' }	

TP Id	TP/NGSI-LD/CI/SUB/029_08	
Test objective	Check that one can update a subscription: If isActive is equal to true and expir	esAt
	corresponds to a DateTime in the future, then status shall be updated to "activ	e"
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.2	
Config Id	CF_01	
PICS Selection	PICS_SubUpd	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/029_08_01	
Name	029_08_01 ActiveTrueExpiresAt	
Parent Release	v1.3.1	
Description	Check that one can update a subscription: If isActive is equal to true and expire	esAt
	corresponds to a DateTime in the future, then status shall be updated to "activ	e"
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request	
	Update Subscription and Header['Content-Type'] set to 'application/json' and	
	Payload defined in file 'subscriptions/fragments/subscription-isActive-	
	expiresAt-update.json' }	
	then { the SUT sends a valid Response for the operations: Update	SUT -> Client
	Subscription with Response Status Code set to 204 and Retrieve	
	Subscription with Check Response Body containing an Attribute set to and	
	Query Parameter: expected_attribute_name set to 'status' and Query	
	Parameter: response_body set to 'response1.json()' and Query Parameter:	
	expected_attribute_value set to 'active' }	

1		
TP ld	TP/NGSI-LD/CI/SUB/029_11	
Test objective	Check that one cannot update a subscription: If expiresAt is included but refer	ring to a
	DateTime in the past, then a BadRequestData error shall be raised	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.2	
Config Id	CF_01	
PICS Selection	PICS_SubUpd	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/029_11_01	
Name	029_11_01 Update Subscription With ExpiresAt In The Past	
Parent Release	v1.3.1	
Description	Check that one cannot update a subscription: If expiresAt is included but refer	ring to a
	DateTime in the past, then a BadRequestData error shall be raised	-
Expected behaviour	ed behaviour Test events Direct	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request	
	Update Subscription and Header['Content-Type'] set to 'application/json' and	
	Payload defined in file 'subscriptions/fragments/subscription-expiresAt-	
	update.json' }	
	then { the SUT sends a valid Response for the operations: Update	SUT -> Client
	Subscription with Response Status Code set to 400 and Update	
	Subscription with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Update Subscription	
	with Response body containing 'title' element }	

TP Id	TP/NGSI-LD/CI/SUB/029_09	
Test objective	Check that one can update a subscription: If isActive is equal to false and expi present, then status shall be updated to "paused", if and only if, the previous v was different than "expired"	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.2	
Config Id	CF_01	
PICS Selection	PICS_SubUpd	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/029_09_01	
Name	029_09_01 Update Subscription Status To Paused	
Parent Release	v1.3.1	
Description	Check that one can update a subscription: If isActive is equal to false and expi present, then status shall be updated to "paused", if and only if, the previous v was different than "expired"	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request Update Subscription and Header['Content-Type'] set to 'application/json' and Payload defined in file 'subscriptions/fragments/subscription-isActive-false-update.json' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Subscription with Response Status Code set to 204 and Retrieve Subscription with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'status' and Query Parameter: response_body set to 'response1.json()' and Query Parameter: expected_attribute_value set to 'paused' }	SUT -> Client

TP Id	TP/NGSI-LD/CI/SUB/029_10	
Test objective	Check that one can update a subscription: If only expiresAt is included and ref DateTime in the future, then status shall be updated to "active", if and only if the value of status was "expired"	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.2	
Config Id	CF_01	
PICS Selection	PICS_SubUpd	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/029_10_01	
Name	029_10_01 Activate Expired Subscription	
Parent Release	v1.3.1	
Description	Check that one can update a subscription: If only expiresAt is included and ref DateTime in the future, then status shall be updated to "active", if and only if the value of status was "expired"	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'PATCH' Request Update Subscription and Header['Content-Type'] set to 'application/json' and Payload defined in file '\${subscription_update_fragment_file_path}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Update Subscription with Response Status Code set to 204 and Retrieve Subscription with Check Response Body containing an Attribute set to and Query Parameter: expected_attribute_name set to 'status' and Query Parameter: response_body set to 'response1.json()' and Query Parameter: expected_attribute_value set to 'active' }	SUT -> Client

4.4.3.3 SubscriptionNotificationBehaviour

TP Id	TP/NGSI-LD/CI/SUB/046_16_02
Test objective	If a subscription defines an entity type selection query, a notification shall be sent whenever
	an entity matches the query.
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6
Config Id	CF 01

PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_16_02	
Name	046_16_02 Check that a notification is not sent if the entity type does not mat type selection	ch the entity
Parent Release	v1.5.1	
Description	If a subscription defines an entity type selection query, a notification shall not be sent if the entity type does not match the query	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'vehicle-simple-attributes.jsonld' }	SUT <- Client
	then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Waiting for no Notification data and Query Parameter: timeout set to '5' }	SUT -> Client

TP Id	TP/NGSI-LD/CI/SUB/046_22_02	
Test objective	Check that a notification is sent with keyValues when an attribute is deleted an	d
	attributeDeleted notification trigger is configured for this specific attribute	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subs	cription
	\${subscription} with an id set to \${subscription_id} and an initial Entity \${entity}	with an id set
	to \${entity_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_02	
Name	046_22_02 Check that a notification is sent with matching entity	
Parent Release	v1.6.1	
Description	Delete an attribute and check the received notification	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: attributeId set to 'name' and Query	
	Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set	
	to '\${EMPTY}' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Delete Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Notification with	
	Notification containing entity element set to 'entity-deleted-name-attribute-	
	keyValues.json' }	

TP Id	TP/NGSI-LD/CI/SUB/046_14	
Test objective	The Notification content shall be JSON-LD when endpoint.accept is set to JSON-LD	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/SUB/046_14_01	
Name	046_14_01 Check that a notification is sent as JSON-LD	
Parent Release	v1.3.1	
Description	The Notification content shall be JSON-LD when endpoint.accept is set to	
	'application/ld+ison'	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operation: Notification with	SUT -> Client
	The dictionary `\${notification}[data][0]' should contain the key '@context' }	

TP ld	TP/NGSI-LD/CI/SUB/046_10	
Test objective	The Notification content shall be JSON by default.	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_10_01	
Name	046_10_01 Check that the notification is sent as JSON	
Parent Release	v1.3.1	
Description	The Notification shall be sent as JSON	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received After waiting '10' seconds }	

TP ld	TP/NGSI-LD/CI/SUB/046_22_06	
Test objective	Check that a notification is sent in normalized format when an attribute with a statasetId is deleted and attributeDeleted notification trigger is configured for the attribute	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.5 and 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_P_DATASETID_AND_R_DATASETID and PICS_NOTIFICATIONS_SU	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subs \${subscription} with an id set to \${subscription_id} and an initial Entity \${entity} to \${entity_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_06	
Name	046_22_06 Check that a notification is sent with matching entity	
Parent Release	v1.6.1	
Description	Delete an attribute with a specific datasetId and check the received notification)
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to 'urn:ngsi-ld:Dataset:french-name' and Query Parameter: deleteAll set to '\${EMPTY}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-ld-test-suite-compound.jsonId' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Notification with Notification containing entity element set to 'entity-deleted-name-attribute-instance-normalized.json' }	SUT -> Client

TP ld	TP/NGSI-LD/CI/SUB/046_09
,	A Notification shall be sent (as mandated by each concrete binding and including any optional endpoint.receiverInfo defined by clause 5.2.22) to the endpoint specified by the endpoint.uri member of the notification structure defined by clause 5.2.14
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6
Config Id	CF_01

PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_09_01	
Name	046_09_01 Check that a notification is sent to the endpoint	
Parent Release	v1.3.1	
Description	A Notification shall be sent (as mandated by each concrete binding and includ optional endpoint.receiverInfo defined by clause 5.2.22) to the endpoint specifiendpoint.uri member of the notification structure defined by clause 5.2.1	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and Query Parameter: fragment_filename set to '\${fragment_filename}' and Query Parameter: content_type set to 'application/ld+json' }	SUT <- Client
	then { the client at '\${endpoint}' receives a valid Notification containing: Notification received After waiting '10' seconds and Notification received The dictionary `\${headers}' should contain the key 'X-Additional-Key' }	SUT -> Client

TP ld	TP/NGSI-LD/CI/SUB/046_22_04	
Test objective	Check that a notification is sent in normalized format when an attribute is delet	ted and
	attributeDeleted notification trigger is configured for this specific attribute	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subs	scription
	\${subscription} with an id set to \${subscription_id} and an initial Entity \${entity}	with an id set
	to \${entity_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_04	
Name	046_22_04 Check that a notification is sent with matching entity	
Parent Release	v1.6.1	
Description	Delete an attribute and check the received notification	
2000 i pii 0 i i	20:010 4:1 44:104:0 4:14 0:100:14:10 1:000:104:10	
Expected behaviour	Test events	Direction
	Test events when { the SUT receives a Request from the client containing: URL set to	Direction SUT <- Client
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityld}/attrs/{attributeId}?\${params_as_string}' method	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'name' and Query	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to '\${EMPTY}' and Query Parameter: context set to	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to '\${EMPTY}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to '\${EMPTY}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite-compound.jsonId' }	SUT <- Client
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to '\${EMPTY}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-ld-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity	
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set to '\${entity_id}' and Query Parameter: attributeld set to 'name' and Query Parameter: datasetld set to '\${EMPTY}' and Query Parameter: deleteAll set to '\${EMPTY}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' } then { the SUT sends a valid Response for the operations: Delete Entity Attributes with Response Status Code set to 204 and Notification with	SUT <- Client
	Test events when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'name' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to '\${EMPTY}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-ld-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operations: Delete Entity	SUT <- Client

TP ld	TP/NGSI-LD/CI/SUB/046_12
Test objective	A Notification shall be sent (as mandated by each concrete binding and including any optional endpoint.info defined by clause 5.2.22) to the endpoint specified by the endpoint.uri member of the notification structure defined by clause 5.2.14
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6
Config Id	CF_01
PICS Selection	PICS_NOTIFICATIONS_SUB
Initial conditions	with { the SUT containing an initial state }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/SUB/046_12_01
Name	046_12_01 Check that lastNotification is updated
Parent Release	v1.3.1
Description	The status, lastNotification and lastSuccess members shall be updated with expected value and dates. This test will check these formats.

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/{id}' method set to 'GET' Subscription Retrieve with	
	the following data: and Query Parameter: id set to '\${subscription_id}' and	
	Query Parameter: accept set to 'application/ld+json' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received After waiting '10' seconds and Notification received	
	Notification data: '\${notification_info}[0][status]' equal to 'ok' and Notification	
	received The dictionary `\${notification_info}[0]' should contain the key	
	'status' and Notification received The dictionary `\${notification_info}[0]'	
	should contain the key 'lastNotification' and Notification received The	
	dictionary `\${notification_info}[0]' should contain the key 'lastSuccess' }	

TP Id	TP/NGSI-LD/CI/SUB/046_22_03	
Test objective	Check that a notification is not sent when an attribute is deleted and attributeD	eleted
	notification trigger is not configured for this specific attribute	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subs \${subscription} with an id set to \${subscription_id} and an initial Entity \${entity} to \${entity_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_03	
Name	046_22_03 Check that a notification is not sent with updated entity	
Parent Release	v1.6.1	
Description	Delete a not watched attribute and check no notification is received	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityId set to '\${entity_id}' and Query Parameter: attributeId set to 'airQualityLevel' and Query Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set to '\${EMPTY}' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonId-contexts/ngsi-ld-test-suite-compound.jsonId' } then { the SUT sends a valid Response for the operation: Delete Entity	SUT <- Client SUT -> Client
	Attributes with Response Status Code set to 204 }	CC. FORIOR

TP ld	TP/NGSI-LD/CI/SUB/046_16_01	
Test objective	If a subscription defines an entity type selection query, a notification shall be sent whenever	
	an entity matches the query.	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/SUB/046_16_01	
Name	046_16_01 Check that a notification is sent with entity matching the entity type selection	
Parent Release	v1.5.1	
Description	If a subscription defines an entity type selection query, a notification shall be sent whenever	
	an entity matches the query.	

Expected behaviour	Test events	Direction
	1	SUT <- Client
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']	
	set to 'application/ld+json' and payload defined in file: 'building-simple-	
	attributes.jsonld' }	
		SUT -> Client
	Notification received After waiting '5' seconds and Notification received	
	Notification data: '\${notification}[subscriptionId]' equal to '\${subscription_id}'	
	and Notification received Notification data: '\${notification}[data][0][id]' equal	
	to '\${entity_id}' and Notification received The dictionary `\${notification}'	
	should contain the key 'data' and Notification received The variable	
	`\${notification}[data]' should not be '\${EMPTY}' }	

TP Id	TP/NGSI-LD/CI/SUB/046_15	
Test objective	If a Subscription defines a throttling member, a Notification shall not be sent if	the throttling
	specified (in seconds) has not elapsed yet.	-
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_15_01	
Name	046_15_01 Check that a notification is not sent if the throttling has not elapsed	l yet
Parent Release	v1.3.1	
Description	If a Subscription defines a throttling member, a Notification shall not be sent if	the throttling
	specified (in seconds) has not elapsed yet.	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'airQualityLevel-fragment.jsonId'	
	and Query Parameter: content_type set to 'application/ld+json' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received After waiting '10' seconds and Notification received	
	Waiting for no Notification data and Query Parameter: timeout set to '5' }	

TP Id	TP/NGSI-LD/CI/SUB/046 17	
Test objective	The system generated attributes are included in the response payload body of	a notification
	if sysAttrs parameter is set to true.	a
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_17_01	
Name	046_17_01 Check that the response payload body contains the system general	ated attributes
	if sysAttrs parameter is set to true	
Parent Release	v1.6.1	
Description	The system generated attributes are included in the response payload body of	a notification
	if sysAttrs parameter is set to true.	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received After waiting '10' seconds and Notification received The	
	dictionary `\${notification}[data][0]' should contain the key 'createdAt' and	
	Notification received The dictionary `\${notification}[data][0]' should contain	
	the key 'modifiedAt' }	

TP ld	TP/NGSI-LD/CI/SUB/046 22 01	
Test objective	Check that a notification is sent with keyValues when an attribute is deleted an	nd.
rest objective	attributeDeleted notification trigger is configured	iu
Deference		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subs	scription
	\${subscription} with an id set to \${subscription_id} and an initial Entity \${entity}	with an id set
	to \${entity_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_01	
Name	046_22_01 Check that a notification is sent with matching entity	
Parent Release	v1.6.1	
Description	Delete an attribute and check the received notification	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: attributeId set to 'name' and Query	
	Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set	
	to '\${EMPTY}' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Delete Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Notification with	
	Notification containing entity element set to 'entity-deleted-name-attribute-	
	keyValues.json' }	
	ine y values. jour j	

TP Id	TP/NGSI-LD/CI/SUB/046_22_05	
Test objective	Check that a notification is sent in normalized format with sysAttrs when an at	tribute is
	deleted and attributeDeleted notification trigger is configured for this specific a	ttribute
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Sub-	
	\$\subscription\} with an id set to \$\subscription_id\} and an initial Entity \$\left\{entity\}	with an id set
	to \${entity_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_05	
Name	046_22_05 Check that a notification is sent with matching entity	
Parent Release	v1.6.1	
Description	Delete an attribute and check the received notification	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: attributeId set to 'name' and Query	
	Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set	
	to '\${EMPTY}' and Query Parameter: context set to	
	'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operation: Delete Entity	SUT -> Client
	Attributes with Response Status Code set to 204 }	

TP ld	TP/NGSI-LD/CI/SUB/046_13
Test objective	If the response to the notification request is different than 200 OK then implementations shall: Update notification.lastFailure with a timestamp representing the current date and time, update notification.status to "failed"
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6
Config Id	CF_01
PICS Selection	PICS_NOTIFICATIONS_SUB
Initial conditions	with { the SUT containing an initial state }

	Permutations		
TP Permutation id	TP/NGSI-LD/CI/SUB/046_13_01		
Name	046_13_01 Check that lastFailure and status are updated if a notification could	d not be sent	
Parent Release	v1.3.1		
Description	If the response to the notification request is different than 200 OK then implem shall: Update notification.lastFailure with a timestamp representing the current time, update notification.status to "failed"		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/{id}' method set to 'GET' Subscription Retrieve with the following data: and Query Parameter: id set to '\${subscription_id}' and Query Parameter: accept set to 'application/ld+json' and Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	SUT <- Client	
	then { the client at '\${endpoint}' receives a valid Notification containing: Notification received Notification data: '\${notification_info}[0][status]' equal to 'failed' and Notification received The dictionary `\${notification_info}[0]' should contain the key 'status' and Notification received The dictionary `\${notification_info}[0]' should contain the key 'lastFailure' }	SUT -> Client	

TD Id	TD/NCCLL D/CL/CLID/OAC 44	
TP Id	TP/NGSI-LD/CI/SUB/046_11	
Test objective	A Notification shall be sent (as mandated by each concrete binding and including	
	optional endpoint.info defined by clause 5.2.22) to the endpoint specified by th	e endpoint.uri
	member of the notification structure defined by clause 5.2.14	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_11_01	
Name	046_11_01 Check that timesSent is increased by one	
Parent Release	v1.3.1	
Description	The notification.timesSent member shall be incremented by one.	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/{id}' method set to 'GET' Subscription Retrieve with	
	the following data: and Query Parameter: id set to '\${subscription_id}' and	
	Query Parameter: accept set to 'application/ld+json' and Query Parameter:	
	context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received After waiting '10' seconds and Notification received	
	Notification data: '\${response.json()}[notification][timesSent]' equal to '\${1}'	
	and Retrieve Subscription received The dictionary	
	`\${response.json()}[notification]' should contain the key 'timesSent' }	

TP Id	TP/NGSI-LD/CI/SUB/046_22_07
Test objective	Check that a notification is sent with keyValues when an attribute with a specific datasetId is
	deleted and attributeDeleted notification trigger is configured for this specific attribute
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.5 and 5.8.6
Config Id	CF_01
PICS Selection	PICS_P_DATASETID_AND_R_DATASETID and PICS_NOTIFICATIONS_SUB
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subscription
	\${subscription} with an id set to \${subscription_id} and an initial Entity \${entity} with an id set
	to \${entity_id} }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_07
Name	046_22_07 Check that a notification is sent with matching entity
Parent Release	v1.6.1
Description	Delete an attribute with a specific datasetId and check the received notification

Expected behaviour	Test events	Direction
		SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: attributeId set to 'name' and Query	
	Parameter: datasetId set to 'urn:ngsi-ld:Dataset:french-name' and Query	
	Parameter: deleteAll set to '\${EMPTY}' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
		SUT -> Client
	Attributes with Response Status Code set to 204 and Notification with	
	Notification containing entity element set to 'entity-deleted-name-attribute-	
	instance-keyValues.json' }	

TDII	TD(NOO) D(O) D(O)	
TP Id	TP/NGSI-LD/CI/SUB/046_08	
Test objective	Check that a notification is only sent if and only if the status is active	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Sub	scription
	\${subscription} with an id set to \${subscription_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_08_01	
Name	046_08_01 Check that a notification is sent with all attributes	
Parent Release	v1.3.1	
Description	The structure of the notification message shall be as mandated by clause 5.3.	
	absence of the notification.attributes member of a Subscription means that all	Entity
	Attributes shall be included. All attributes are included	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'airQualityLevel-fragment.jsonId'	
	and Query Parameter: content_type set to 'application/ld+json' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received After waiting '5' seconds and Notification received	
	Notification data: '\${notification}[subscriptionId]' equal to '\${subscription_id}'	
	and Notification received Notification data: '\${notification}[data][0][id]' equal	
	to '\${entity_id}' and Notification received Notification data:	
	'\${notification}[data][0][name][value]' equal to 'Eiffel Tower' and Notification	
	received The dictionary `\${notification}' should contain the key 'data' and	
	Notification received The dictionary `\${notification}[data][0]' should contain	
	the key 'almostFull' and Notification received The dictionary	
	`\${notification}[data][0]' should contain the key 'airQualityLevel' and	
	Notification received The dictionary `\${notification}[data][0]' should contain	
	the key 'subCategory' and Notification received The variable	
	`\${notification}[data]' should not be '\${EMPTY}' }	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_08_02	
Name	046_08_02 Check that a notification is sent with all attributes in simplified form	nat
Parent Release	v1.3.1	
Description	The structure of the notification message shall be as mandated by clause 5.3.	
	absence of the notification.attributes member of a Subscription means that all	
	Attributes shall be included If the notification.format member value is "keyValu	
	simplified representation of the entities (as mandated by clause 4.5.3) shall be	e provided

Expected behaviour	Test events	Direction
		SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'airQualityLevel-fragment.jsonId'	
	and Query Parameter: content_type set to 'application/ld+json' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received After waiting '5' seconds and Notification received	
	Notification data: '\${notification}[subscriptionId]' equal to '\${subscription_id}'	
	and Notification received Notification data: '\${notification}[data][0][id]' equal	
	to '\${entity_id}' and Notification received Notification data:	
	\${notification}[data][0][name]' equal to 'Eiffel Tower' and Notification	
	received The dictionary `\${notification}' should contain the key 'data' and	
	Notification received The variable `\${notification}[data]' should not be	
	'\${EMPTY}' }	

TP Id	TP/NGSI-LD/CI/SUB/046_04	
Test objective	If a Subscription does not define a timeInterval member, the notification shall be	
	whenever there is a change in the watched Attributes. The notification messag	
	include all the subscribed Entities that changed and that match (as mandated	by clauses 4.9
	and 4.10) the query and geoquery conditions	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_04_01	
Name	046_04_01 Check that a notification is sent with all entities	
Parent Release	v1.3.1	
Description	The notification message shall include all the subscribed Entities that changed	
	match (as mandated by clauses 4.9 and 4.10) the query and geoquery condition	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'airQualityLevel-fragment.jsonId'	
	and Query Parameter: content_type set to 'application/ld+json' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received After waiting '5' seconds and Notification received	
	Notification data: '\${notification}[subscriptionId]' equal to '\${subscription_id}'	
	and Notification received Notification data: '\${notification}[data][0][id]' equal	
	to '\${entity_id}' and Notification received Notification data:	
	'\${notification}[data][0][airQualityLevel][value]' equal to '\${5}' and Notification	
	received Notification data: '\${notification}[data][0][name][value]' equal to	
	received Notification data: '\${notification}[data][0][name][value]' equal to 'Eiffel Tower' and Notification received The dictionary `\${notification}' should	
	received Notification data: '\${notification}[data][0][name][value]' equal to	

TP Id	TP/NGSI-LD/CI/SUB/046_22_12
Test objective	Check that a notification is sent in normalized format when an entity is deleted and
-	attributeDeleted notification trigger is configured for a matching attribute in deleted entity
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6
Config Id	CF_01
PICS Selection	PICS_NOTIFICATIONS_SUB
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subscription
	\${subscription} with an id set to \${subscription_id} and an initial Entity \${entity} with an id set
	to \${entity_id} }
	Permutations
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_12
Name	046_22_12 Check that a notification is sent with matching entity
Parent Release	v1.6.1
Description	Delete an entity with a matching attribute and check the received notification

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'DELETE' Delete Entity Request with id set to '\${entity_id}' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Delete Entity by Id with Response Status Code set to 204 and Notification with Notification containing entity element set to 'entity-deleted-name-attribute-on-entity-deleted-normalized.json' }	SUT -> Client

TP Id	TP/NGSI-LD/CI/SUB/046_22_10	
Test objective	Check that a notification is sent in normalized format when a relationship is de	leted via
	NGSI-LD Null in a Merge Entity operation and attributeDeleted notification trig	ger is
	configured for this specific relationship	_
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subs	scription
	\${subscription} with an id set to \${subscription_id} and an initial Entity \${entity}	
	to \${entity_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_10_01	
Name	046_22_10_01 Check that a notification is sent with matching entity when dele	eting via
	Merge Entity operation	
Parent Release	v1.6.1	
Description	Delete a relationship via Merge Entity operation and check the received notific	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	
	Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	
	entity_filename set to 'fragmentEntities/ngsild-null/building-null-	
	relationship.jsonld' and Query Parameter: content_type set to	
	'application/ld+json' and Query Parameter: context set to " }	
	then { the SUT sends a valid Response for the operations: Merge Entity with	SUT -> Client
	Response Status Code set to 204 and Notification with Notification	
	containing entity element set to 'entity-different-attributes-types-deleted-	
	locatedAt-attribute-normalized.json' }	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_10_02	
Name	046_22_10_02 Check that a notification is sent with matching entity when dele	eting via
	Update Attributes operation	
Parent Release	v1.6.1	
Description	Delete a relationship via Update Attributes operation and check the received n	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'ngsild-null/null-	
	relationship.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	OUT OF THE
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Notification with	
	Notification containing entity element set to 'entity-different-attributes-types-	
TP Permutation id	deleted-locatedAt-attribute-normalized.json' } TP/NGSI-LD/CI/SUB/046_22_10_03	
Name		oting via
Ivaille	046_22_10_03 Check that a notification is sent with matching entity when dele Partial Attribute Update operation	eung via
Parent Release		
Description	v1.6.1 Delete a relationship via Update Partial Attribute Update operation and check	the received
Description		uie received
	notification	

Expected behaviour	Test events	Direction
	1 . (SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'locatedAt' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-relationship-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Notification with	
	Notification containing entity element set to 'entity-different-attributes-types-	
	deleted-locatedAt-attribute-normalized.json' }	

TP ld	TP/NGSI-LD/CI/SUB/046 06		
Test objective	Check that a notification is sent when an entity is created and entityCreated no	otification	
•	trigger is configured		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6		
Config Id	CF_01		
PICS Selection	PICS_NOTIFICATIONS_SUB		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/SUB/046_06_01		
Name	046_06_01 Check that a notification is sent with all matching entities		
Parent Release	v1.6.1		
Description	Check that a notification is sent when an entity is created and entityCreated notification		
	trigger is configured		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/entities/' method set to 'POST' Request Header['Content-Type']		
	set to 'application/ld+json' and payload defined in file: 'building-location-		
	attribute.jsonId' }		
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client	
	Notification received After waiting '10' seconds and Notification received		
	Notification data: '\${notification}[subscriptionId]' equal to '\${subscription_id}'		
	and Notification received Notification data: '\${notification}[data][0][id]' equal		
	to '\${entity_id}' }		

TP Id	TP/NGSI-LD/CI/SUB/046_22_09	
Test objective	Check that a notification is sent in normalized format when an attribute is delet LD Null in a Merge Entity operation and attributeDeleted notification trigger is of the constitution of	
Reference	this specific attribute	
	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subs \${subscription} with an id set to \${subscription_id} and an initial Entity \${entity} to \${entity_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_09_01	
Name	046_22_09_01 Check that a notification is sent with matching entity when dele Merge Entity operation	eting via
Parent Release	v1.6.1	
Description	Delete an attribute via Merge Entity operation and check the received notificat	ion
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-property.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Notification with Notification containing entity element set to 'entity-different-attributes-types-deleted-name-attribute-normalized.json' }	SUT <- Client SUT -> Client

TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_09_02	
Name	046_22_09_02 Check that a notification is sent with matching entity when dele	eting via
	Update Attributes operation	Ü
Parent Release	v1.6.1	
Description	Delete an attribute via Update Attributes operation and check the received no	tification
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'ngsild-null/null-property.jsonld'	
	and Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Notification with	
	Notification containing entity element set to 'entity-different-attributes-types-	
TD Dommutation id	deleted-name-attribute-normalized.json' }	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_09_03	
Name	046_22_09_03 Check that a notification is sent with matching entity when del	eting via
Parent Release	Partial Attribute Update operation v1.6.1	
	111411	i
Description	Delete an attribute via Update Partial Attribute Update operation and check th notification	e received
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'name' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-property-	
	fragment.jsonId' and Query Parameter: content_type set to	
	'application/ld+json' }	01.17
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Notification with	
	Notification containing entity element set to 'entity-different-attributes-types-	
	deleted-name-attribute-normalized.json' }	

TP ld	TP/NGSI-LD/CI/SUB/046_21_02	
Test objective	Check that a notification is sent with sysAttrs when an entity is deleted and ent	tityDeleted
	notification trigger is configured	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subs	scription
	\${subscription} with an id set to \${subscription_id} and an initial Entity \${entity}	with an id set
	to \${entity_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_21_02	
Name	046_21_02 Check that a notification is sent with matching entity	
Parent Release	v1.6.1	
Description	Delete an entity and check the received notification	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{id}' method set to 'DELETE' Delete Entity Request with	
	id set to '\${entity_id}' }	
	then { the SUT sends a valid Response for the operation: Delete Entity by Id	SUT -> Client
	with Response Status Code set to 204 }	

TP ld	TP/NGSI-LD/CI/SUB/046_02
Test objective	If a Subscription defines a timeInterval member, a Notification shall be sent periodically, when the time interval (in seconds) specified in such value field is reached, regardless of Attribute changes.
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6
Config Id	CF_01
PICS Selection	PICS_NOTIFICATIONS_SUB
Initial conditions	with { the SUT containing an initial state }

Permutations		
TP Permutation id	TP/NGSI-LD/CI/SUB/046_02_01	
Name	046_02_01 Check that a notification is sent on the timeInterval	
Parent Release	v1.3.1	
Description	If a Subscription defines a timeInterval member, a Notification shall be sent pe when the time interval (in seconds) specified in such value field is reached, req Attribute changes.	gardless of
Expected behaviour	Test events	Direction
	The client at \${endpoint} receives a valid Notification containing a subscription with id set to \${subscriptionId} and status equals 'active' and timeInterval is set to '\${timeInterval}' and watchedAttributes is 'Empty' and q is 'Empty' and geoQ is 'Empty' and with subscription.entity with type 'Building' and notification.endpoint.accept is 'application/json' When the timeinterval is reached at \${timeInterval} seconds the SUT needs to send out a notification to the client sends a notification to the client every \${timeInterval} seconds	SUT <- Client
	then { the client at '\${endpoint}' receives a valid Notification containing: Notification received After waiting '15' seconds and Notification received After waiting '15' seconds and Notification received Notification data: '\${notification}{subscriptionId}' equal to '\${subscription_id}' and Notification received Notification data: '\${notification}{data}[0][id]' equal to '\${entity_id}' and Notification received Notification data: '\${notification}{data}[0][name][value]' equal to 'Eiffel Tower' and Notification received The dictionary `\${notification}' should contain the key 'data' and Notification received The variable `\${notification}[data]' should not be '\${EMPTY}' and Notification received The expression ``\${notification}[data][0][airQualityLevel][value]'=='4.0' or '\${notification}[data][0][airQualityLevel][value]'=='4" should be True }	SUT -> Client

TP Id	TP/NGSI-LD/CI/SUB/046 22 11	
Test objective	Check that a notification is sent in normalized format when a language propert	tv is deleted
, , , , , , , , , , , , , , , , , , , ,	via NGSI-LD Null in a Merge Entity operation and attributeDeleted notification trigger is	
	configured for this specific property	55
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.18 and 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_LANG and PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subs	scription
	\${subscription} with an id set to \${subscription_id} and an initial Entity \${entity}	with an id set
	to \${entity_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_11_01	
Name	046_22_11_01 Check that a notification is sent with matching entity when dele	eting via
	Merge Entity operation	
Parent Release	v1.6.1	
Description	Delete a language property via Merge Entity operation and check the received	notification
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter:	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-languageproperty.jsonld' and Query Parameter: content_type set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-languageproperty.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "}	
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-languageproperty.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with	SUT <- Client SUT -> Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-languageproperty.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Notification with Notification	
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-languageproperty.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Notification with Notification containing entity element set to 'entity-different-attributes-types-deleted-	
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-languageproperty.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Notification with Notification containing entity element set to 'entity-different-attributes-types-deleted-street-attribute-normalized.json' }	
TP Permutation id	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-languageproperty.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Notification with Notification containing entity element set to 'entity-different-attributes-types-deleted-street-attribute-normalized.json' } TP/NGSI-LD/CI/SUB/046_22_11_02	SUT -> Client
	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-languageproperty.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Notification with Notification containing entity element set to 'entity-different-attributes-types-deleted-street-attribute-normalized.json' } TP/NGSI-LD/CI/SUB/046_22_11_02 046_22_11_02 Check that a notification is sent with matching entity when deleted-street-attributes-types-del	SUT -> Client
TP Permutation id Name	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-languageproperty.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Notification with Notification containing entity element set to 'entity-different-attributes-types-deleted-street-attribute-normalized.json' } TP/NGSI-LD/CI/SUB/046_22_11_02 046_22_11_02 Check that a notification is sent with matching entity when deleted Dydate Attributes operation	SUT -> Client
TP Permutation id Name Parent Release	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-languageproperty.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Notification with Notification containing entity element set to 'entity-different-attributes-types-deleted-street-attribute-normalized.json' } TP/NGSI-LD/CI/SUB/046_22_11_02 046_22_11_02 Check that a notification is sent with matching entity when deleted-but the street attributes operation v1.6.1	SUT -> Client
TP Permutation id Name	'/ngsi-ld/v1/entities/{entity_id}' method set to 'PATCH' Merge Entity and Query Parameter: entity_id set to '\${entity_id}' and Query Parameter: entity_filename set to 'fragmentEntities/ngsild-null/building-null-languageproperty.jsonld' and Query Parameter: content_type set to 'application/ld+json' and Query Parameter: context set to "} then { the SUT sends a valid Response for the operations: Merge Entity with Response Status Code set to 204 and Notification with Notification containing entity element set to 'entity-different-attributes-types-deleted-street-attribute-normalized.json' } TP/NGSI-LD/CI/SUB/046_22_11_02 046_22_11_02 Check that a notification is sent with matching entity when deleted Dydate Attributes operation	SUT -> Client

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'ngsild-null/null-	
	languageproperty.jsonld' and Query Parameter: content_type set to	
	'application/ld+json' }	OUT Officer
	then { the SUT sends a valid Response for the operations: Update Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Notification with	
	Notification containing entity element set to 'entity-different-attributes-types-deleted-street-attribute-normalized.json' }	
TP Permutation id	TP/NGSI-LD/CI/SUB/046 22 11 03	
Name	046_22_11_03 Check that a notification is sent with matching entity when dele	eting via
	Partial Attribute Update operation	3
Parent Release	v1.6.1	
Description	Delete a language property via Update Partial Attribute Update operation and	check the
	received notification	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Request Partial Update Entity Attributes and Query Parameter: entityId set	
	to '\${entity_id}' and Query Parameter: AttributeId set to 'street' and Query	
	Parameter: fragment_filename set to 'ngsild-null/null-languageproperty-	
	fragment.jsonId' and Query Parameter: content_type set to	
	application/ld+json' }	2
	then { the SUT sends a valid Response for the operations: Partial Update	SUT -> Client
	Entity Attributes with Response Status Code set to 204 and Notification with	
	Notification containing entity element set to 'entity-different-attributes-types-	
	deleted-street-attribute-normalized.json' }	

TP Id	TP/NGSI-LD/CI/SUB/046_07	
Test objective	Check that a notification is only sent if and only if the status is active	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subs	scription
	\$\{\subscription\}\ with an id set to \$\{\subscription_id\}\}	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_07_01	
Name	046_07_01 Check notification structure	
Parent Release	v1.3.1	
Description	The structure of the notification message shall be as mandated by clause 5.3.	Valid
	notification with attributes as stated above	1
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityld}/attrs/{attributeld}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' } then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received After waiting '5' seconds }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/SUB/046_07_02	
Name	046_07_02 Check correct attributes are included	
Parent Release	v1.3.1	
Description	The structure of the notification message shall be as mandated by clause 5.3.	The Entity
2000. ip.i.o.i.	Attributes included (Properties or Relationships) shall be those specified by the	
	notification.attributes member in the Subscription data type (clause 5.2.12).	
Expected behaviour	Test events	Direction
•	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received After waiting '5' seconds and Notification received The	
	dictionary `\${notification}[data][0]' should contain the key 'airQualityLevel' }	

TP Permutation id	TP/NGSI-LD/CI/SUB/046_07_03	
Name	046_07_03 Check URI expansion is observed	
Parent Release	v1.3.1	
Description	The structure of the notification message shall be as mandated by clause 5.3.	URI
	expansion shall be observed (clause 5.5.7).	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and Query Parameter: fragment_filename set to '\${fragment_filename}' and Query Parameter: content_type set to 'application/ld+json' }	SUT <- Client
	then { the client at '\${endpoint}' receives a valid Notification containing: Notification received After waiting '5' seconds and Notification received The dictionary `\${notification}[data][0]' should contain the key 'https://ngsi-ld-test-suite/context#airQualityLevel' }	SUT -> Client

TP ld	TP/NGSI-LD/CI/SUB/046_22_08	
Test objective	Check that a notification is sent when all instances of an attribute are deleted a	and
-	attributeDeleted notification trigger is configured for this specific attribute	
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.5.5 and 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_P_DATASETID_AND_R_DATASETID and PICS_NOTIFICATIONS_SU	IB
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subs	scription
	\${subscription} with an id set to \${subscription_id} and an initial Entity \${entity}	with an id set
	to \${entity_id} }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_22_08	
Name	046_22_08 Check that a notification is sent with matching entity	
Parent Release	v1.6.1	
Description	Delete all instances of an attribute and check the received notification	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}?\${params_as_string}' method	
	set to 'DELETE' Delete Entity Attributes: and Query Parameter: entityld set	
	to '\${entity_id}' and Query Parameter: attributeId set to 'name' and Query	
	Parameter: datasetId set to '\${EMPTY}' and Query Parameter: deleteAll set	
	to '\${true}' and Query Parameter: context set to	
	https://forge.etsi.org/rep/cim/ngsi-ld-test-suite/-	
	/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-compound.jsonld' }	
	then { the SUT sends a valid Response for the operations: Delete Entity	SUT -> Client
	Attributes with Response Status Code set to 204 and Notification with	
	Response Body containing the key 'json_path_expr=['name']['value']', with	
	the value 'value_to_check=urn:ngsi-ld:null' }	

TP Id	TP/NGSI-LD/CI/SUB/046_05	
Test objective	If a Subscription does not define a timeInterval member, the notification shall be sent	
-	whenever there is a change in the watched Attributes and the entity matches the q	
	parameter. The notification message shall include all the subscribed Entities that changed	
	and that match (as mandated by clauses 4.9 and 4.10) the query and geoquery conditions	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_05_01	
Name	046_05_01 Check that a notification is sent with all entities	
Parent Release	v1.3.1	
Description	The notification message shall include all the subscribed Entities that changed and that	
	match (as mandated by clauses 4.9 and 4.10) the query and geoquery conditions	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'airQualityLevel-fragment.jsonId'	
	and Query Parameter: content_type set to 'application/ld+json' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received After waiting '5' seconds and Notification received	
	Notification data: '\${notification}[subscriptionId]' equal to '\${subscription_id}'	
	and Notification received Notification data: '\${notification}[data][0][id]' equal	
	to '\${entity_id}' and Notification received Notification data:	
	\${notification}[data][0][name][value]' equal to 'Eiffel Tower' and Notification	
	received The dictionary `\${notification}' should contain the key 'data' and	
	Notification received The variable `\${notification}[data]' should not be	
	'\${EMPTY}' and Notification received The expression	
	`'\${notification}[data][0][airQualityLevel][value]'=='5.0' or	
	'\${notification}[data][0][airQualityLevel][value]'=='5" should be True }	

TP/NGSI-LD/CI/SUB/046_22_13		
Check that a notification is sent in normalized format with sysAttrs when an entity is deleted		
and attributeDeleted notification trigger is configured for a matching attribute in	deleted entity	
ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	•	
CF_01		
PICS_NOTIFICATIONS_SUB		
with { the SUT being in the "initial state" and the SUT containing an initial Subs	cription	
\${subscription} with an id set to \${subscription_id} and an initial Entity \${entity}	with an id set	
to \${entity_id} }		
Permutations		
TP/NGSI-LD/CI/SUB/046_22_13		
046_22_13 Check that a notification is sent with matching entity		
v1.6.1		
Delete an entity with a matching attribute and check the received notification		
Test events	Direction	
when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
/ngsi-ld/v1/entities/{id}' method set to 'DELETE' Delete Entity Request with		
id set to '\${entity_id}' }		
then { the SUT sends a valid Response for the operations: Delete Entity by	SUT -> Client	
ld with Response Status Code set to 204 and Notification with Notification		
containing entity element set to 'entity-deleted-name-attribute-on-entity-		
deleted-normalized-sysAttrs.json' }		
	Check that a notification is sent in normalized format with sysAttrs when an enand attributeDeleted notification trigger is configured for a matching attribute in ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6 CF_01 PICS_NOTIFICATIONS_SUB with { the SUT being in the "initial state" and the SUT containing an initial Substantial state and an initial Entity \${entity} on \${entity_id}} Permutations TP/NGSI-LD/CI/SUB/046_22_13 Delete an entity with a matching attribute and check the received notification Test events when { the SUT receives a Request from the client containing: URL set to /ngsi-Id/v1/entities/{id}' method set to 'DELETE' Delete Entity Request with d set to '\${entity_id}' } when { the SUT sends a valid Response for the operations: Delete Entity by d with Response Status Code set to 204 and Notification with Notification containing entity element set to 'entity-deleted-name-attribute-on-entity-	

TP ld	TP/NGSI-LD/CI/SUB/046_18		
Test objective	The system generated attributes are not included in the response payload body of a		
	notification if sysAttrs parameter is set to false.	a, 0. a	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6		
Config Id	CF_01		
PICS Selection	PICS_NOTIFICATIONS_SUB		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/SUB/046_18_01		
Name	046_18_01 Check that the response payload body does not contain the system generated		
	attributes if sysAttrs parameter is set to false		
Parent Release	v1.6.1		
Description	The system generated attributes are not included in the response payload body of a		
	notification if sysAttrs parameter is set to false.	_	
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	SUT <- Client	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and		
	Query Parameter: fragment_filename set to '\${fragment_filename}' and		
	Query Parameter: content_type set to 'application/ld+json' }		
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client	
	Notification received After waiting '10' seconds }		

TP ld	TP/NGSI-LD/CI/SUB/046 21 01			
Test objective	Check that a notification is sent when an entity is deleted and entityDeleted no trigger is configured	tification		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6			
Config Id	CF_01			
PICS Selection	PICS_NOTIFICATIONS_SUB			
Initial conditions	with { the SUT being in the "initial state" and the SUT containing an initial Subscription \${subscription} with an id set to \${subscription_id} and an initial Entity \${entity} with an id set to \${entity_id} }			
	Permutations			
TP Permutation id	TP/NGSI-LD/CI/SUB/046_21_01			
Name	046_21_01 Check that a notification is sent with matching entity			
Parent Release	v1.6.1			
Description	Delete an entity and check the received notification			
Expected behaviour	Test events Direction			
when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{id}' method set to 'DELETE' Delete Entity Request with id set to '\${entity_id}' }				
	then { the SUT sends a valid Response for the operation: Delete Entity by Id with Response Status Code set to 204 }	SUT -> Client		

TP Id	TP/NGSI-LD/CI/SUB/046 01	
Test objective	Check that a notification is only sent if and only if the status is active	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_01_01	
Name	046_01_01 Check that a notification is only sent if status is active	
Parent Release	v1.3.1	
Description	Check that a notification is only sent if and only if the status is active	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'airQualityLevel-fragment.jsonId'	
	1	
	and Query Parameter: content_type set to 'application/ld+json' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
		SUT -> Client
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	then { the client at '\${endpoint}' receives a valid Notification containing: Notification received After waiting '10' seconds and Notification received Notification data: '\${notification}[subscriptionId]' equal to '\${subscription_id}'	SUT -> Client
	then { the client at '\${endpoint}' receives a valid Notification containing: Notification received After waiting '10' seconds and Notification received	SUT -> Client

TD L-I	TD/NOOL LD/OL/OLID/040, 00	
TP ld	TP/NGSI-LD/CI/SUB/046_03	
Test objective	A notification with all subscribed Entities will be included if query or geoquery are not	
	defined.	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/046_03_01	
Name	046_03_01 Check that a notification is sent with all entities	
Parent Release	v1.3.1	
Description	A notification with all subscribed Entities will be included if query or geoquery are not	
	defined.	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to 'airQualityLevel-fragment.jsonId'	
	and Query Parameter: content_type set to 'application/ld+json' }	
	then { the client at '\${endpoint}' receives a valid Notification containing:	SUT -> Client
	Notification received After waiting '5' seconds and Notification received	
	Notification data: '\${notification}[subscriptionId]' equal to '\${subscription_id}'	
	and Notification received Notification data: '\${notification}[data][0][id]' equal	
	to '\${entity_id}' and Notification received Notification data:	
	\${notification}[data][0][name][value]' equal to 'Eiffel Tower' and Notification	
	received The dictionary `\${notification}' should contain the key 'data' and	
	Notification received The variable `\${notification}[data]' should not be	
	'\${EMPTY}' and Notification received The expression	
	`'\${notification}[data][0][airQualityLevel][value]'=='5.0' or	
	'\${notification}[data][0][airQualityLevel][value]'=='5" should be True }	

4.4.3.3.1 MQTT

TP ld	TP/NGSI-LD/CI/SUB/MQTT/058_04	
Test objective	Check that the mqtt notification payload is well formed	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with the SUT being in the "initial state" and the SUT containing an initial Subscription \${subscription} with an id set to \${subscription_id} and an notification endpoint set to a mqtt broker }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/MQTT/058_04_01	
Name	058_04_01 Basic Subscription	
Parent Release	v1.3.1	
Description	Check that the broker send well formed data	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH' Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and Query Parameter: fragment_filename set to '\${fragment_filename}' and Query Parameter: content_type set to 'application/ld+json' } then { the SUT sends a valid Response for the operations: Notification with Received message \${message} with key metadata and Notification with Received message \${message} with key body and Notification with Received message \${message}[metadata] with key Content-Type and Notification with Received message \${message}[metadata] with key Link and Notification with expected field \${message}[metadata][test-receiver-key] equals field test-receiver-info and Notification with expected field \${message}[body][type] equals field Notification and Notification with Received message \${message}[body][data][0] with key id and Notification with Received message \${message}[body][data][0] with key type }	SUT <- Client SUT -> Client

TP Id	TP/NGSI-LD/CI/SUB/MQTT/058_02
Test objective	Check that the mqtt notification is received with different qos
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6
Config Id	CF_01
PICS Selection	PICS_NOTIFICATIONS_SUB
Initial conditions	with the SUT being in the "initial state" and the SUT containing an initial Subscription \${subscription} with an id set to \${subscription_id} and an notification endpoint set to a mqtt broker }

	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/MQTT/058_02_01	
Name	058_02_01 With Default QoS	
Parent Release	v1.3.1	
Description	Check that the broker supports different quality of service (qos)	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operation: Notification with	SUT -> Client
	Received messages \${listenMessages} }	
TP Permutation id	TP/NGSI-LD/CI/SUB/MQTT/058_02_02	
Name	058_02_02 With QoS 1	
Parent Release	v1.3.1	
Description	Check that the broker supports different quality of service (qos)	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operation: Notification with	SUT -> Client
	Received messages \${listenMessages} }	
TP Permutation id	TP/NGSI-LD/CI/SUB/MQTT/058_02_03	
Name	058_02_03 With QoS 2	
Parent Release	v1.3.1	
Description	Check that the broker supports different quality of service (qos)	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	OUT OF
	then { the SUT sends a valid Response for the operation: Notification with	SUT -> Client
	Received messages \${listenMessages} }	

TP Id	TD/NCCLLD/CL/CLID/MOTT/CCC, C4	
	TP/NGSI-LD/CI/SUB/MQTT/058_01	
Test objective	Check that the Mqtt Notification is received with different userInfo and port	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6	
Config Id	CF_01	
PICS Selection	PICS_NOTIFICATIONS_SUB	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/MQTT/058_01_01	
Name	058_01_01 Without User And Port	
Parent Release	v1.3.1	
Description	Check that the broker uses the authentication information from the endpoint u	ırl
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\$\{fragment_filename\}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operation: Notification with	SUT -> Client
	Received messages \${listenMessages} }	
TP Permutation id	TP/NGSI-LD/CI/SUB/MQTT/058_01_02	•
Name	058_01_02 With Non Default Port	
Parent Release	v1.3.1	
Description	Check that the broker uses the authentication information from the endpoint u	ırl

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operation: Notification with	SUT -> Client
	Received messages \${listenMessages} }	
TP Permutation id	TP/NGSI-LD/CI/SUB/MQTT/058_01_03	
Name	058_01_03 With User	
Parent Release	v1.3.1	
Description	Check that the broker uses the authentication information from the endpoint	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operation: Notification with	SUT -> Client
	Received messages \${listenMessages} }	
TP Permutation id	TP/NGSI-LD/CI/SUB/MQTT/058_01_04	
Name	058_01_04 With User And Password	
Parent Release	v1.3.1	
Description	Check that the broker uses the authentication information from the endpoint	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operation: Notification with	SUT -> Client
TD Dammartation id	Received messages \${listenMessages} }	
TP Permutation id	TP/NGSI-LD/CI/SUB/MQTT/058_01_05	
Name Parent Release	058_01_05 With User Password And Non Default Port	
	v1.3.1	
Description	Check that the broker uses the authentication information from the endpoint	Direction
Expected behaviour	Test events	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	SUT -> Client
	then { the SUT sends a valid Response for the operation: Notification with	SOI -> Client
	Received messages \${listenMessages} }	

TP Id	TP/NGSI-LD/CI/SUB/MQTT/058_03		
Test objective	Check that mqtt notification is received with different mqtt version		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.6		
Config Id	CF_01		
PICS Selection	PICS_NOTIFICATIONS_SUB		
Initial conditions	with the SUT being in the "initial state" and the SUT containing an initial Subscription		
	\${subscription} with an id set to \${subscription_id} and an notification endpoint set to a mqtt		
	broker }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/SUB/MQTT/058_03_01		
Name	058_03_01 With Default Protocol		
Parent Release	v1.3.1		
Description	Check that the broker support different mqtt version		

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operation: Notification with	SUT -> Client
	Received messages \${listenMessages} }	
TP Permutation id	TP/NGSI-LD/CI/SUB/MQTT/058_03_02	
Name	058_03_02 With MQTT 3.1.1 Protocol	
Parent Release	v1.3.1	
Description	Check that the broker support different mqtt version	_
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operation: Notification with	SUT -> Client
	Received messages \${listenMessages} }	
TP Permutation id	TP/NGSI-LD/CI/SUB/MQTT/058_03_03	
Name	058_03_03 With MQTT 5.0 Protocol	
Parent Release	v1.3.1	
Description	Check that the broker support different mqtt version	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/entities/{entityId}/attrs/{attributeId}' method set to 'PATCH'	
	Update Entity Attributes and Query Parameter: id set to '\${entity_id}' and	
	Query Parameter: fragment_filename set to '\${fragment_filename}' and	
	Query Parameter: content_type set to 'application/ld+json' }	
	then { the SUT sends a valid Response for the operation: Notification with	SUT -> Client
	Received messages \${listenMessages} }	

4.4.3.4 RetrieveSubscription

TP ld	TD/NCCLLD/CUCLD/000 00		
	TP/NGSI-LD/CI/SUB/030_02		
Test objective	Check that one cannot retrieve a subscription: If the identifier provided does no		
	to any existing subscription in the system then an error of type ResourceNotFo	ound shall be	
	raised		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.3		
Config Id	CF_01		
PICS Selection	PICS_SubRet		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/SUB/030_02_01		
Name	030_02_01 Retrieve Unknown Subscription		
Parent Release	v1.3.1		
Description	Check that one cannot retrieve a subscription: If the identifier provided does not correspond		
	to any existing subscription in the system then an error of type ResourceNotFound shall be		
	raised		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client	
	'/ngsi-ld/v1/subscriptions/{id}' method set to 'GET' Subscription Retrieve with		
	the following data: and Query Parameter: id set to 'urn:ngsi-		
	ld:Subscription:unknowSubscription' }		
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client	
	Subscription with Response Status Code set to 404 and Retrieve		
	Subscription with Response Body containing the type		
	Subscription with Response Status Code set to 404 and Retrieve	SUT -> Client	

TP ld	TP/NGSI-LD/CI/SUB/030_01	
Test objective	Check that one cannot retrieve a subscription if the subscription Id is not a valuan error of type BadRequestData shall be raised	d URI, then
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.3	
Config Id	CF_01	
PICS Selection	PICS_SubRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/030_01_01	
Name	030_01_01 InvalidId	
Parent Release	v1.3.1	
Description	Check that one cannot retrieve a subscription: If the subscription Id is not pres a valid URI, then an error of type BadRequestData shall be raised	ent or it is not
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/subscriptions/{id}' method set to 'GET' Subscription Retrieve with the following data: and Query Parameter: id set to 'InvalidUri' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Retrieve Subscription with Response Status Code set to 400 and Retrieve Subscription with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Retrieve Subscription with Response body containing 'title' element }	SUT -> Client

TP Id	TP/NGSI-LD/CI/SUB/030_03	
Test objective	Check that one can retrieve a subscription	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.3	
Config Id	CF_01	
PICS Selection	PICS_SubRet	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/030_03_01	
Name	030_03_01 Retrieve Subscription	
Parent Release	v1.3.1	
Description	Check that one can retrieve a subscription	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/{id}' method set to 'GET' Subscription Retrieve with	
	the following data: and Query Parameter: id set to '\${subscription_id}' and	
	Query Parameter: context set to 'https://forge.etsi.org/rep/cim/ngsi-ld-test-	
	suite/-/raw/develop/resources/jsonld-contexts/ngsi-ld-test-suite-	
	compound.jsonId' }	
	then { the SUT sends a valid Response for the operations: Retrieve	SUT -> Client
	Subscription with Response Status Code set to 200 and Retrieve	
	Subscription with Response Body containing the same content defined in file	
	'subscriptions/expectations/subscriptions-030-03.json' with subscription id	
	\${subscription_id}' }	

4.4.3.5 CreateSubscription

TP ld	TP/NGSI-LD/CI/SUB/028_01	
Test objective	Check that one can create a subscription	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.1	
Config Id	CF_01	
	PICS_CreSub	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/028_01_01	
Name	028_01_01 Create Subscription	
Parent Release	v1.3.1	
Description	Check that one can create a subscription	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-Id/v1/subscriptions/' method set to 'POST' Request Header['Content-Type'] set to 'application/Id+json' and payload defined in file:	SUT <- Client
	'subscriptions/subscription.jsonId' }	
	then { the SUT sends a valid Response for the operation: Retrieve	SUT -> Client
	Subscription with Check Created Resource Set To and Query Parameter:	
	ignored_keys' set to '\${None}' list of keys }	

TP Id	TP/NGSI-LD/CI/SUB/028_03	
Test objective	Check that one cannot create a subscription with an invalid/empty id	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.1	
Config Id	CF_01	
PICS Selection	PICS_CreSub	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/028_03_01	
Name	028_03_01 InvalidId	
Parent Release	v1.3.1	
Description	Check that one cannot create a subscription with an invalid/empty id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/' method set to 'POST' Request Header['Content-	SUT <- Client
	Type'] set to 'application/ld+json' and payload defined in file:	
	'subscriptions/subscription.jsonId' }	
	then { the SUT sends a valid Response for the operations: Create	SUT -> Client
	Subscription with Response Status Code set to 400 and Create Subscription	
	with Response Body containing the type 'https://uri.etsi.org/ngsi-	
	Id/errors/BadRequestData' and Create Subscription with Response body	
	containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CI/SUB/028_03_02	
Name	028_03_02 Emptyld	
Parent Release	v1.3.1	
Description	Check that one cannot create a subscription with an invalid/empty id	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/' method set to 'POST' Request Header['Content-	SUT <- Client
	Type'] set to 'application/ld+json' and payload defined in file:	
	subscriptions/subscription.jsonId' }	OUT OF THE
	then { the SUT sends a valid Response for the operations: Create	SUT -> Client
	Subscription with Response Status Code set to 400 and Create Subscription	
	with Response Body containing the type 'https://uri.etsi.org/ngsi- ld/errors/BadRequestData' and Create Subscription with Response body	
	containing 'title' element }	
	portaining the element y	1

TP ld	TP/NGSI-LD/CI/SUB/028_05	
Test objective	Check that one cannot create a subscription with invalid throttling	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.1	
Config Id	CF_01	
PICS Selection	PICS_CreSub	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/028_05_01	
Name	028_05_01 ThrottlingAndTimeIntervalConjunction	
Parent Release	v1.3.1	
Description	Check that one cannot create a subscription with invalid throttling	

Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/' method set to 'POST' Create Subscription	
	Request with Header['Content-Type'] set to 'application/ld+json' and payload	
	defined in file: 'subscription-invalid-throttling-timeInterval.jsonId' }	
	then { the SUT sends a valid Response for the operations: Create	SUT -> Client
	Subscription From File with Response Status Code set to 400 and Create	
	Subscription From File with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Create Subscription	
	From File with Response body containing 'title' element }	
TP Permutation id	TP/NGSI-LD/CI/SUB/028_05_02	
Name	028_05_02 NegativeThrottling	
Parent Release	v1.3.1	
Description	Check that one cannot create a subscription with invalid throttling	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/' method set to 'POST' Create Subscription	
	Request with Header['Content-Type'] set to 'application/ld+json' and payload	
	defined in file: 'subscription-invalid-negative-throttling.jsonld' }	
	then { the SUT sends a valid Response for the operations: Create	SUT -> Client
	Subscription From File with Response Status Code set to 400 and Create	
	Subscription From File with Response Body containing the type	
	'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Create Subscription	
	From File with Response body containing 'title' element }	

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TP Id	TP/NGSI-LD/CI/SUB/028_02	
Test objective	Check that one cannot create a subscription with an invalid request	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.1	
Config Id	CF_01	
PICS Selection	PICS_CreSub	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/028_02_01	
Name	028_02_01 InvalidJson	
Parent Release	v1.3.1	
Description	Check that one cannot create a subscription with an invalid request	
Expected behaviour	Test events	Direction
·	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/' method set to 'POST' Create Subscription Request with Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'subscription-invalid-json.jsonId' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Create Subscription From File with Response Status Code set to 400 and Create Subscription From File with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/InvalidRequest' and Create Subscription From File with Response body containing 'title' element }	SUT -> Client
TP Permutation id	TP/NGSI-LD/CI/SUB/028_02_02	
Name	028_02_02 EmptyJson	
Parent Release	v1.3.1	
Description	Check that one cannot create a subscription with an invalid request	
Expected behaviour	Test events	Direction
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/' method set to 'POST' Create Subscription Request with Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'subscription-empty.jsonld' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Create Subscription From File with Response Status Code set to 400 and Create Subscription From File with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/BadRequestData' and Create Subscription From File with Response body containing 'title' element }	SUT -> Client

TP Id	TP/NGSI-LD/CI/SUB/028_04		
Test objective	Check that one cannot create a subscription with an existing id		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.1		
Config Id	CF_01		
PICS Selection	PICS_CreSub		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/SUB/028_04_01		
Name	028_04_01 Create a subscription with an id known to the system		
Parent Release	v1.3.1		
Description	Check that one cannot create a subscription with an existing id		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/' method set to 'POST' Request Header['Content-Type'] set to 'application/ld+json' and payload defined in file: 'subscriptions/subscription.jsonId' }	SUT <- Client	
	then { the SUT sends a valid Response for the operations: Create Subscription with Response Status Code set to 409 and Create Subscription with Response Body containing the type 'https://uri.etsi.org/ngsi-ld/errors/AlreadyExists' and Create Subscription with Response body containing 'title' element }	SUT -> Client	

4.4.3.6 DeleteSubscription

TP ld	TP/NGSI-LD/CI/SUB/032_02	
Test objective	Check that one cannot delete a subscription: If the subscription id provided do correspond to any existing subscription in the system then an error of type ResourceNotFound shall be raised	es not
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.5	
Config Id	CF 01	
PICS Selection	PICS SubDel	
Initial conditions	with { the SUT containing an initial state }	
	Permutations	
TP Permutation id	TP/NGSI-LD/CI/SUB/032_02_01	
Name	032_02_01 Delete Unknown Subscription	
Parent Release	v1.3.1	
Description	Check that one cannot delete a subscription: If the subscription id provided do correspond to any existing subscription in the system then an error of type ResourceNotFound shall be raised	es not
Expected behaviour	haviour Test events Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'DELETE' Delete Subscription with id set to 'urn:ngsi-ld:Subscription:unknowSubscription' }	SUT <- Client
	then { the SUT sends a valid Response for the operations: Delete Subscription with Response Status Code set to 404 and Delete Subscription with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/ResourceNotFound' and Delete Subscription with Response body containing 'title' element }	SUT -> Client

TP Id	TP/NGSI-LD/CI/SUB/032_03	
Test objective	cobjective Check that one can delete a subscription	
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.5	
Config Id	CF_01	
PICS Selection	PICS_SubDel	
Initial conditions	with { the SUT containing an initial state }	
Permutations		
TP Permutation id	TP/NGSI-LD/CI/SUB/032_03_01	
	032_03_01 Delete Subscription	
Parent Release	v1.3.1	
Description	Check that one can delete a subscription	

Expected behaviour	Test events Di	
	when { the SUT receives a Request from the client containing: URL set to	SUT <- Client
	'/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'DELETE' Delete	
	Subscription with id set to '\${subscription_id}' }	
	then { the SUT sends a valid Response for the operations: Delete	SUT -> Client
	Subscription with Response Status Code set to 204 and Retrieve	
	Subscription with Response Status Code set to \${response1.status_code} }	

TP ld	TP/NGSI-LD/CI/SUB/032_01		
Test objective	Check that one cannot delete a subscription: If the subscription Id is not present or it is not a		
	valid URI, then an error shall be raised		
Reference	ETSI GS CIM 009 V1.6.1 [1], clause 5.8.5		
Config Id	CF_01		
PICS Selection	PICS_SubDel		
Initial conditions	with { the SUT containing an initial state }		
	Permutations		
TP Permutation id	TP/NGSI-LD/CI/SUB/032_01_01		
Name	032_01_01 NotPresentId		
Parent Release	v1.3.1		
Description	Check that one cannot delete a subscription: If the subscription Id is not present or it is not a valid URI, then an error shall be raised		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'DELETE' Delete Subscription with id set to '\${EMPTY}' }	SUT <- Client	
	then { the SUT sends a valid Response for the operations: Delete Subscription with Response Status Code set to 405 and Delete Subscription with Response Body containing the type '\${EMPTY}' and Delete Subscription with Response body containing 'title' element }	SUT -> Client	
TP Permutation id	TP/NGSI-LD/CI/SUB/032_01_02		
Name	032_01_02 InvalidId		
Parent Release	v1.3.1		
Description	Check that one cannot delete a subscription: If the subscription Id is not present or it is not a valid URI, then an error shall be raised		
Expected behaviour	Test events	Direction	
	when { the SUT receives a Request from the client containing: URL set to '/ngsi-ld/v1/subscriptions/{subscription_id}' method set to 'DELETE' Delete Subscription with id set to 'InvalidUri' }	SUT <- Client	
	then { the SUT sends a valid Response for the operations: Delete Subscription with Response Status Code set to 400 and Delete Subscription with Response Body containing the type 'https://uri.etsi.org/ngsi-Id/errors/BadRequestData' and Delete Subscription with Response body containing 'title' element }	SUT -> Client	

Annex A (informative): Bibliography

• ISO 8601:2004: "Data elements and interchange formats -- Information interchange -- Representation of dates and times".

Annex B (informative): Change history

Date	Version	Information about changes
October, 19th 2020	V0.0.1	First draft of document
February, 4 th 2021	V1.0.1	Stable draft approved by ISG-CIM
March, 23 rd 2021	V1.0.2	
April 28th 2021	V1.1.1	Last Technical Officer review for Publication pre-processing with ETSI EditHelp
October, 4th 2023	V1.2.1	Stable draft approved by ISG-CIM
November 2023	V1.3.1	First draft version of automatically generated content
December 2023	V1.4.1	Second draft version of automatically generated content
February 2024	V1.5.1	Third draft version of automatically generated content
March 2024	V1.6.1	Fourth draft version of automatically generated content. Cleanup revisions
March 2024	V1.7.1	Fifth draft version of automatically generated content, including v1.4 and v1.5 tests. Technical Officer review for Publication pre-processing with ETSI EditHelp
April 2024	V2.1.1	Early draft version of automatically generated content for T039
December 2024	V2.2.2	Stable draft version of automatically generated content for T039
May 2025	V2.2.3	Final draft version of automatically generated content for T039

History

Version	Date	Status
V1.1.1	May 2021	Publication
V2.1.1	April 2024	Publication
V3.1.1	July 2025	Publication