ETSI GS CIM 053 V1.1.1 (2025-07)

Context Information Management (CIM); NGSI-LD Test Suite; NGSI-LD Test purposes descriptions for Distributed Operations

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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 ETSI Drafting Rules (Verbal forms for the expression of provisions).

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Introduction

Several NGSI-LD Context Brokers and related software modules, such as data ingestion, event processing, and visualization, are being developed globally, reflecting the widespread adoption of NGSI-LD standards. With multiple open-source implementations available, establishing comprehensive interoperability test cases is essential to ensure that different brokers, even from various vendors, can operate together seamlessly. While these tests do not directly validate the NGSI-LD specification, these tests may also be used to demonstrate whether the implementations can interoperate effectively and whether the NGSI-LD specification should be revised to avoid ambiguity (if any). The results can be applied in specific scenarios to highlight system compatibility, showcase cross-vendor collaboration, and provide valuable feedback for improving overall implementation quality.

1 Scope

The present document extends the draft interoperability test descriptions agreed with ISG CIM.

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

2.2 Informative 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.

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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.

Not applicable.

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:

PICS	Profile Implementation Conformance Statement
SUT	System Under Test
TP	Test Purpose

4 Test Purposes Descriptions

4.1 DistributedOperations

4.1.1 Provision

4.1.1.1 EntityAttributes

4.1.1.1.1 UpdateEntityAttributes

TP Id	TP/NGSI-LD/DistributedOperations/Prov/EA/D004_01_inc
Test objective	Verify that, when one has an inclusive registration on a Context Broker with redirectionOps, one is able to update entities on a Context Source
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2 and 5.6.2
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_UpdAttEnt

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Prov/EA/D004_01_inc
Name	D004_01_inc Query The Context Broker With Type
Parent Release	v1.6.1
Description	Check that if one request the Context Broker to update an entity that matches an inclusive registration, this is updated on the Context Source too

4.1.1.2 Entities

4.1.1.2.1 DeleteEntity

TP Id	TP/NGSI-LD/DistributedOperations/Prov/E/D002_02_01_inc
Test objective	Verify that, when one has an inclusive registration on a Context Broker, one is able to delete entities locally and should get a BatchOperationResult structure
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2, 5.6.6, 6.3.3
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_EntDel and PICS_HTTP_ERRORS

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing an initial Entity ${entity} on the Context Broker
	with an id set to ${entity_id}
	and payload set to ${entity_payload_filename}
	and the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Prov/E/D002_02_01_inc
Name	D002_02_01_inc Delete Entity On The Context Broker
Parent Release	v1.6.1
Description	Verify that, when one has an inclusive registration on a Context Broker, one is able to delete entities locally and should get a BatchOperationResult structure

TP Id	TP/NGSI-LD/DistributedOperations/Prov/E/D002_02_02_inc
Test objective	Verify that, when one has an inclusive registration on a Context Broker, one is able to delete entities on a Context Source and should get a BatchOperationResult structure
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2, 5.6.6 and 6.3.3
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_EntDel and PICS_HTTP_ERRORS

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Prov/E/D002_02_02_inc
Name	D002_02_02_inc Delete Entity On a Context Source
Parent Release	v1.6.1
Description	Verify that, when one has an inclusive registration on a Context Broker, one is able to delete entities on a Context Source and should get a BatchOperationResult structure

TP Id	TP/NGSI-LD/DistributedOperations/Prov/E/D002_01_inc
Test objective	Verify that, when one has an inclusive registration on a Context Broker, one is able to delete entities on both Context Broker and Context Source
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2 and 5.6.6
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_EntDel

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing an initial Entity ${entity} on the Context Broker
	with an id set to ${entity_id}
	and payload set to ${entity_payload_filename}
	and the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Prov/E/D002_01_inc
Name	D002_01_inc Delete Entities On Both Context Broker and Context Source
Parent Release	v1.6.1
Description	Verify that, when one has an inclusive registration on a Context Broker, one is able to delete entities on both Context Broker and Context Source

4.1.1.2.2 CreateEntity

TP Id	TP/NGSI-LD/DistributedOperations/Prov/E/D001_03_02_inc
Test objective	Verify that, when one has an entity on both Context Broker and Context Source and an inclusive registration on the Context Broker, one is not able to create that entity on the Context Source from the Context Broker
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2, 5.6.1 and 6.3.3
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_EntCre and PICS_HTTP_ERRORS

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing an initial Entity ${entity} on the Context Broker
	with an id set to ${entity_id}
	and payload set to ${entity_payload_filename}
	and the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Prov/E/D001_03_02_inc
Name	D001_03_02_inc Create entity already existing on both Context Broker and Context Source
Parent Release	v1.6.1
Description	Check that if one requests the Context Broker to create an entity that matches an inclusive registration and already exists both locally and remotely, this raises an error on both Context Broker and Context Source

TP Id	TP/NGSI-LD/DistributedOperations/Prov/E/D001_01_inc
Test objective	Verify that, when one has an inclusive registration on a Context Broker, one is able to create entities on both Context Broker and Context Source
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2 and 5.6.1
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_EntCre

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing an initial Entity id set to ${entity_id}
	and the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Prov/E/D001_01_inc
Name	D001_01_inc Create Entity On Both Context Broker and Context Source
Parent Release	v1.6.1
Description	Check that if one requests the Context Broker to create an entity that matches an inclusive registration, this is created on the Context Source too

TP Id	TP/NGSI-LD/DistributedOperations/Prov/E/D001_03_03_inc
Test objective	Verify that, when one has an entity on a Context Source and an inclusive registration on a Context Broker, one is not able to create that entity on the Context Source from the Context Broker but one is able to create it on the Context Broker
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2, 5.6.1 and 6.3.3
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_EntCre and PICS_HTTP_ERRORS

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Prov/E/D001_03_03_inc
Name	D001_03_03_inc Create entity already existing remotely on the Context Broker
Parent Release	v1.6.1
Description	Check that if one requests the Context Broker to create an entity that matches an inclusive registration and already exists remotely, this raises an error on the Context Source, but it works on the Context Broker

TP Id	TP/NGSI-LD/DistributedOperations/Prov/E/D001_03_01_inc
Test objective	Verify that, when one has an entity and an inclusive registration on a Context Broker, one is able to create that entity on a Context Source from the Context Broker but gets an error for the Context Broker
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2, 5.6.1 and 6.3.3
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_EntCre and PICS_HTTP_ERRORS

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing an initial Entity ${entity} on the Context Broker
	with an id set to ${entity_id}
	and payload set to ${entity_payload_filename}
	and the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Prov/E/D001_03_01_inc
Name	D001_03_01_inc Create entity already existing locally on a Context Source
Parent Release	v1.6.1
Description	Check that if one requests the Context Broker to create an entity that matches an inclusive registration and already exists locally, this raises an error on the Context Broker but is created correctly on the Context Source

TP Id	TP/NGSI-LD/DistributedOperations/Prov/E/D001_02_inc
Test objective	Check that if one requests the Context Broker to create an entity that matches an inclusive registration but is malformed, this is created neither on the Context Broker nor on the Context Source
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2, 5.6.1 and 6.3.3
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_EntCre and PICS_HTTP_ERRORS

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Prov/E/D001_02_inc
Name	D001_02_inc Request to create an entity with a malformed id on both Context Broker and Context Source
Parent Release	v1.6.1
Description	Check that if one requests the Context Broker to create an entity that matches an inclusive registration but is malformed, this is created neither on the Context Broker nor on the Context Source

4.1.2 Consumption

4.1.2.1 Entity

4.1.2.1.1 QueryEntities

TP Id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_02_inc
Test objective	Verify that, when one has an inclusive registration on a Context Broker and an entity only on a Context Source, if one queries the Context Broker with local flag entity not found error is raised
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2, 5.7.2 and 6.3.18
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_QueEnt_AND_QueEntPos

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_02_inc
Name	D011_02_inc Query The Context Broker With Local Flag
Parent Release	v1.6.1
Description	Check that if one queries with the local flag, no entity from Context Source gets returned

TP Id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_01_aux
Test objective	Verify that when an auxiliary registration exists on a Context Broker and an entity with the same ID exists both locally in the Context Broker and remotely in the Context Source with different attributes, a query request to the Context Broker is correctly forwarded to the Context Source, and the response includes the local entity enriched with additional, non-conflicting attributes from the Context Source
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2 and 5.7.1
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_EntRet

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing an initial Entity ${entity} on the Context Broker
	with an id set to ${entity_id}
	and payload set to ${entity_payload_filename}
	and the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_01_aux
Name	D011_01_aux Query entities that exists on both the Context Source and the Context Broker from the Context Broker
Parent Release	v1.6.1
Description	Check that if one queries the Context Broker for type, entities get merged correctly

TP Id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_01_01_inc
Test objective	Verify that, when one has an inclusive registration on a Context Broker and an entity only on a Context Source, if one queries the Context Broker the query gets forwarded to the Context Source correctly
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2 and 5.7.2
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_QueEnt_AND_QueEntPos

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_01_01_inc
Name	D011_01_01_inc Query The Context Broker With Type
Parent Release	v1.6.1
Description	Check that if one queries the Context Broker for type, entity with matching type on a Context Source gets returned

TP Id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_01_04_inc
Test objective	Verify that, when one has an inclusive registration on a Context Broker, one entity on it and another on a Context Source, if one queries the Context Broker the query gets forwarded to the Context Source correctly
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2 and 5.7.2
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_QueEnt_AND_QueEntPos

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing an initial Entity ${entity} on the Context Broker
	with an id set to ${entity_id}
	and payload set to ${entity_payload_filename}
	and the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_01_04_inc
Name	D011_01_04_inc Query The Context Broker With Type and Attribute In Neither
Parent Release	v1.6.1
Description	Check that if one queries for attribute present in neither of the entities, neither of them gets returned

TP Id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_01_02_inc
Test objective	Verify that, when one has an inclusive registration on a Context Broker and an entity only on a Context Source, if one queries the Context Broker the query gets forwarded to the Context Source correctly
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2 and 5.7.2
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_QueEnt_AND_QueEntPos

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_01_02_inc
Name	D011_01_02_inc Query The Context Broker With Type And Missing Attribute
Parent Release	v1.6.1
Description	Check that if one queries for type and an attribute that is missing, no entity gets returned

TP Id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_01_05_inc
Test objective	Verify that, when one has an inclusive registration on a Context Broker, entities with same id on the Context Broker and on a Context Source, if one queries the Context Broker the query gets forwarded to the Context Source correctly
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2 and 5.7.2
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_QueEnt_AND_QueEntPos

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing an initial Entity ${entity} on the Context Broker
	with an id set to ${entity_id}
	and payload set to ${entity_payload_filename}
	and the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_01_05_inc
Name	D011_01_05_inc Query The Context Broker With Type
Parent Release	v1.6.1
Description	Check that entities on the Context Broker and Context Source with the same id get merged and returned as one entity

TP Id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_01_03_inc
Test objective	Verify that, when one has an inclusive registration on a Context Broker, one entity on it and another on a Context Source, if one queries the Context Broker the query gets forwarded to the Context Source correctly
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2 and 5.7.2
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_QueEnt_AND_QueEntPos

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing an initial Entity ${entity} on the Context Broker
	with an id set to ${entity_id}
	and payload set to ${entity_payload_filename}
	and the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Cons/E/D011_01_03_inc
Name	D011_01_03_inc Query The Context Broker With Type and Attribute
Parent Release	v1.6.1
Description	Check that if one queries for attribute present in an entity on a Context Source, only that entity gets returned

4.1.2.1.2 RetrieveEntity

TP Id	TP/NGSI-LD/DistributedOperations/Cons/E/D010_02_inc
Test objective	Verify that, when one has an inclusive registration on a Context Broker and an entity only on a Context Source, if one retrieves entity from the Context Broker with local flag entity not found error is raised
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2, 5.7.1 and 6.3.18
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_EntRet

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Cons/E/D010_02_inc
Name	D010_02_inc Retrieve entity on a Context Source from the Context Broker with local flag
Parent Release	v1.6.1
Description	Check that if one retrieves entity living on a Context Source from a Context Broker with local flag, entity not found error is raised

TP Id	TP/NGSI-LD/DistributedOperations/Cons/E/D010_01_aux
Test objective	Verify that when an auxiliary registration exists on a Context Broker and an entity with the same ID exists both locally in the Context Broker and remotely in the Context Source with different attributes, a retrieval request to the Context Broker is correctly forwarded to the Context Source, and the response includes the local entity enriched with additional, non-conflicting attributes from the Context Source
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2 and 5.7.1
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_EntRet

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing an initial Entity ${entity} on the Context Broker
	with an id set to ${entity_id}
	and payload set to ${entity_payload_filename}
	and the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Cons/E/D010_01_aux
Name	D010_01_aux Retrieve entity that exists on both the Context Source and the Context Broker from the Context Broker
Parent Release	v1.6.1
Description	Check that if one retrieves entity living on on both the Context Broker and a Context Source, entities get merged correctly

TP Id	TP/NGSI-LD/DistributedOperations/Cons/E/D010_01_inc
Test objective	Verify that, when one has an inclusive registration on a Context Broker and an entity only on a Context Source, if one retrieves entity from the Context Broker the request gets forwarded to the Context Source correctly
Reference	ETSI GS CIM 009 V1.6.1 [1], clauses 4.3.3, 4.3.6.2 and 5.7.1
Config Id	CF_06
PICS Selection	PICS_DISTRIBUTED and PICS_INCLUSIVECSR_AND_AUXILIARYCSR and PICS_EntRet

Initial conditions	with {
	the SUT being in the "initial state" and
	the SUT containing a Context Source Registration
	with id equal to ${registration_id}
	and payload set to ${registration_payload_file_path}
	and the SUT containing a Context Source Mock Server
	}

Permutations	
TP Permutation id	TP/NGSI-LD/DistributedOperations/Cons/E/D010_01_inc
Name	D010_01_inc Retrieve entity on a Context Source from the Context Broker
Parent Release	v1.6.1
Description	Check that if one retrieves entity living on a Context Source from a Context Broker, entity gets returned

Annex A (informative): Change history

Date	Version	Information about changes
December 2024	0.0.1	Early draft version of automatically generated content for T039
May 2025	0.0.2	Final draft version of automatically generated content for T039
May 2025	0.0.3	Editorial changes to the "initial configuration" clauses in tables
June 2025	0.0.4	Editorial changes to the "initial configuration" clauses in tables which are now indented
July 2025	1.1.1	First published version

History

Version	Date	Status
V1.1.1	July 2025	Publication