



Network Function Virtualisation (NFV) Release 2; Testing; API Conformance Testing Specification

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ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
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Foreword

This Group Specification (GS) has been produced by ETSI Industry Specification Group (ISG) Network Functions Virtualisation (NFV).

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).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

Introduction

The interoperability among the functional entities which supports the requirements and functionalities specified in ETSI NFV deliverables is one of the key and most important aspects to develop and deploy the NFV environment. In order to achieve such interoperability, ETSI NFV TST 007 [i.1] specifies the methodologies and test scenario for the testing of interoperability mainly based on the ETSI NFV IFA specification series which specifies the reference point/interface and functional requirements. At the same time, the validation of the NFV specification compliance of each functional entities is also key aspects to be ensured for the interoperability, in particular protocol solution/API level. Therefore this present document specifies the API conformance testing.

1 Scope

Scope of API conformance is the functionality test in an automated way for ETSI NFV APIs.

The goal of the present document is to specify the methodologies of conformance test including Test Descriptions for NFV implementations with interfaces specified in the following NFV specifications: ETSI GS NFV-SOL 002 [2] for the *Ve-Vnfm* reference point, ETSI GS NFV-SOL 003 [1] for the *Or-Vnfm* reference point and ETSI GS NFV-SOL 005 [3] for the *Os-ma-nfvo* reference point.

Each ETSI NFV SOL deliverable specifies a set of interfaces built on the RESTful approach and meant to be used over the HTTP protocol. The aim of the present document is to define the methodologies and the procedures with Test Descriptions to test conformance of the exchanged HTTP payloads and the implementation of required actions for one or more of the available interfaces within a reference point.

Since the targets of the testing are functionality (semantic checks) and the HTTP payloads (syntax checks), methodologies, including test suite(s) and/or any technologies from any organizations (in particular Open Source Initiatives) that can improve or help the (automated) test execution are also considered as being in the scope of this present document.

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 at <https://docbox.etsi.org/Reference>.

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 NFV-SOL 003 (V2.4.1): "Network Functions Virtualisation (NFV) Release 2; Protocols and Data Models; RESTful protocols specification for the Or-Vnfm Reference Point".
- [2] ETSI GS NFV-SOL 002 (V2.4.1): "Network Functions Virtualisation (NFV) Release 2; Protocols and Data Models; RESTful protocols specification for the Ve-Vnfm Reference Point".
- [3] ETSI GS NFV-SOL 005 (V2.4.1): "Network Functions Virtualisation (NFV) Release 2; Protocols and Data Models; RESTful protocols specification for the Os-Ma-nfvo Reference Point".
- [4] ETSI GS NFV-TST 002 (V1.1.1): "Network Functions Virtualisation (NFV); Testing Methodology; Report on NFV Interoperability Testing Methodology".

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.

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 not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ETSI GR NFV-TST 007 (V2.5.1): "Network Functions Virtualisation (NFV) Release 2; Testing; Guidelines on Interoperability Testing for MANO".
- [i.2] Robot Framework: <http://robotframework.org>.

3 Definition of terms, symbols and abbreviations

3.1 Terms

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

Test Descriptions: set of information required to define/run the API conformance test and to realize the verdict for the API conformance test

3.2 Symbols

Void.

3.3 Abbreviations

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

API	Application Programming Interface
AUT	API Under Test
EM	Element Manager
FUT	Funtion Unter Test
IUT	Implementation Under test
LCM	Life Cycle Management
LCOG	Lifecycle operation granting
NFVI	NFV Infrastructure
NFVO	NFV Orchestrator
NS	Network Service
NSD	Network Service Destriptor
OCC	OCCurrence
PM	Performance Management
PNF	Physical Network Function
PNFD	PNF Descriptor
SUT	System Under Test
TLS	Transport Layer Security
VE	Virtual Element
VIM	Virtualised Infrastructure Manager
VNF	Virtual Network Function
VNF	Virtual Network Function
VNFD	VNF Descriptor
VNFM	VNF Manager
VRQAN	Virtualised Resources Quota Available Notification

4 Methodology

4.1 General

The purpose of general conformance testing is to determine to what extent a single implementation of a particular standard conforms to the individual requirements of that standard. Concepts from ETSI GS NFV-TST 002 [4] are used in the present document.

The important factors which characterize conformance testing are as follows:

- the System or Implementation Under Test (SUT or IUT) defines the boundaries (open interfaces) for testing;
- the conformance test system is a specialized tool (system) built for the purpose of testing and on which specific test scripts can be run;
- the SUT comes from a single supplier (or, at least, a single product line);
- the tests are executed by a dedicated test system that has full control of the SUT and the ability to observe all communications from the SUT;
- the tests are performed at open standardized interfaces that are not (usually) accessible to a normal user (i.e. they are specified at the protocol level);
- the tests are specified at the detailed protocol level and are not usually based on functionality as experienced by a user.
- the tests verify response or related request operation from SUT.

4.2 System under test

The system under test is identified by an implementation of the function under test producing or consuming the API under test e.g. in the case of the Or-vnfm reference point the function under test may be either a NFVO implementation or a VNFM implementation.

The function shall be tested in isolation with respect to other functional blocks in a NFV platform, to guarantee that the outcomes of the conformance tests are not result of interoperability issues with other components.

4.3 Test configurations

4.3.1 General

In accordance with clause 1, the scope of the present document is to define a testing methodology and test suite for both the conformant protocol exchange (i.e. valid serialization and order of messages) and the initialization or execution of the functionalities mandated for each protocol operation, including the conformant management of internal state.

In order to enable the FUT to correctly execute the operations mandated the FUT shall be tested while being executed in a test environment (TSTENV) which provides all the functional elements needed for the correct outcome of the operation.

NOTE: For example, to correctly execute an instantiation a VNFM requires evaluation in a test environment which provides a VIM and NFVI plus the NFVO to grant the operation.

The test system shall provide the implementation of an API Consumer and a Notification Endpoint for the API Under Test (AUT). Moreover, the test configuration may contain observation interfaces between the Test System and the FUT or any other functional block which is part of the test environment. The specification of the mentioned observation interfaces is out of the scope of the present document.

Stimuli to the FUT shall be injected by the Test System via the AUT only.

Conformance checks on the status and outcome of the operations triggered by the protocol shall be verified by the Test System by means of:

- read operations issued via the AUT; or
- reception of notifications on the Notification Endpoint exposed by the test system; or
- other test interfaces to support triggers or verifications.

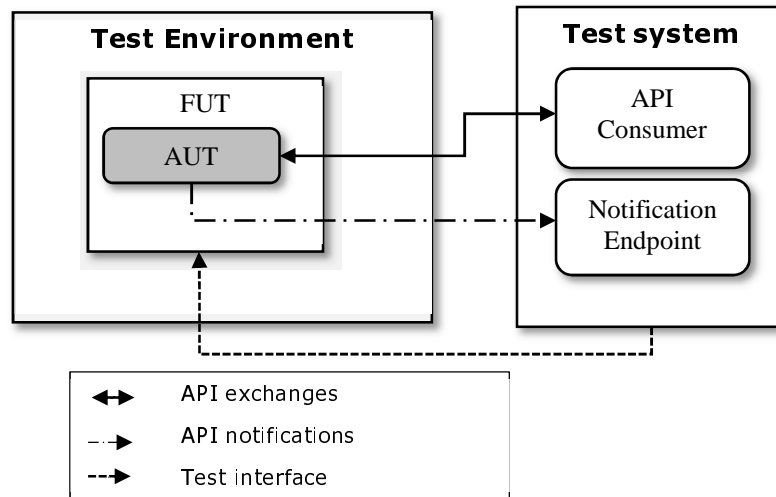


Figure 4.3.1-1: Generic SUT configuration

The test configurations specified in clause 4.3 fulfil the needs of Test Descriptions specified in clauses 5, 6 and 7 for the different FUTs and AUTs in scope of the present document.

4.3.2 Config_prod_VE

The configuration config_prod_VE shall be implemented to test APIs which are produced by FUTs in a VNF or EM. The test environment of the VNF/EM is the NFVI where the test is executed.

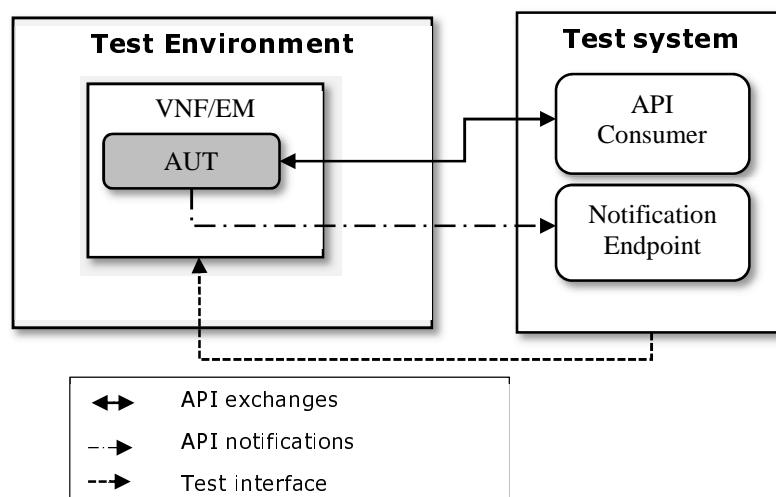


Figure 4.3.2-1: Configuration for tests of APIs with a FUTs as Producer run in a VNF/EM

4.3.3 Config_prod_VNFM

The configuration config_prod_VNFM shall be implemented to test APIs produced by FUTs which implement a VNFM. The test environment of the virtual element is the NFVI where the VE is executed.

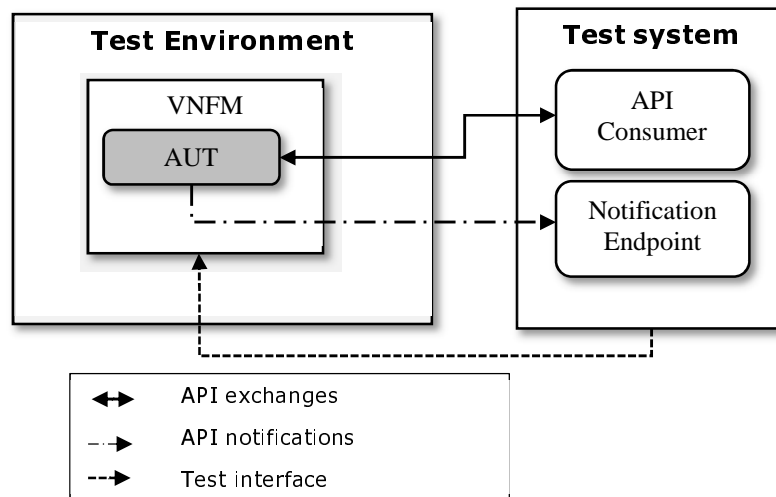


Figure 4.3.3-1: Configuration for tests of APIs with VNFM as Producer

4.3.4 Config_prod_NFVO

The configuration config_prod_NFVO shall be implemented to test APIs produced by FUTs which implement a NFVO. The test environment of the virtual element is an NFV platform providing VNFM, VIM and NFVI.

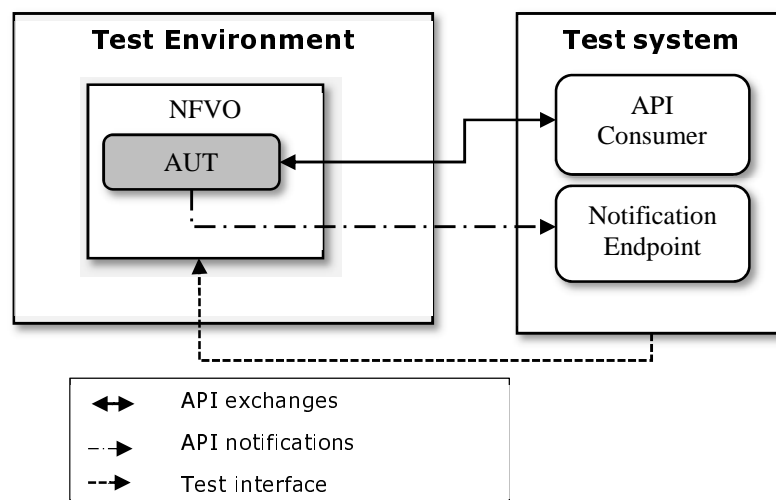


Figure 4.3.4-1: Configuration for tests of APIs with NFVO as Producer

4.3.5 Config_prod_VNFM_GRANT

The configuration config_prod_VNFM_GRANT shall be implemented to test APIs produced by FUTs which implement a VNFM for VNF LCM test cases where an Operation Grant is needed. The test environment of the virtual element is composed by the NFVI where the VE is executed and a NFVO component exposing the VNF Lifecycle Operation Granting API.

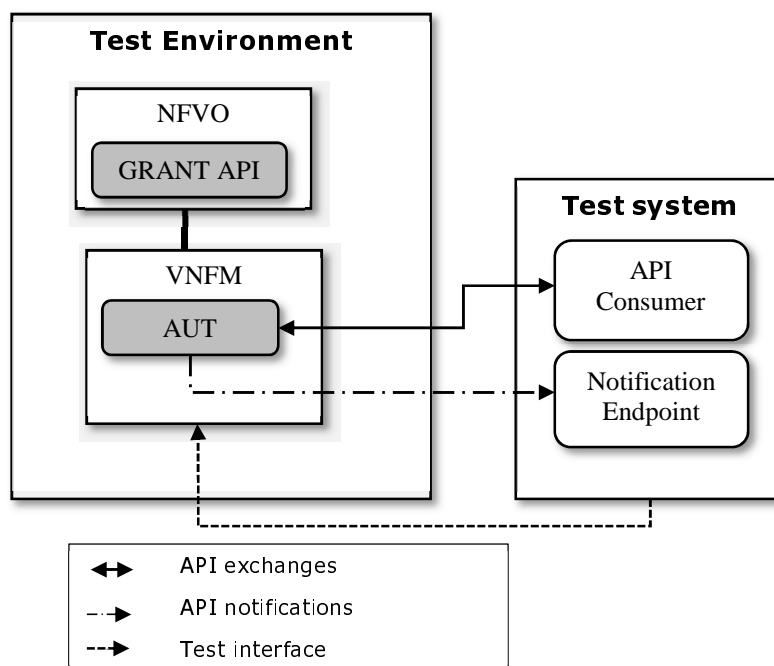


Figure 4.3.5-1: Configuration for tests of APIs with VNFM as Producer, where the VNFLifecycleOperationGranting API is required

4.4 Void

Void.

4.5 Generic Test Description

4.5.1 General

The machine readable language used for the test case implementations is the Robot Framework [i.2].

The Robot code for all test cases is available at: <https://forge.etsi.org/rep/nfv/>.

4.5.2 Test Description format

Test Descriptions specify the information required to run an "API conformance test". Test Descriptions are defined per test, and table 4.5.2-1 defines the elements of the Test Description.

Table 4.5.2-1: Test Description entries

Elements	Definition
Test ID	The Test ID identifies uniquely the test. Naming convention: the Test ID is the number of the clause in the present the present document which includes the Test Descriptions.
Test Objective	The test objective indicates clearly which requirement is intended to be tested in the test. This part eases the understanding of the Test Description behaviour. This also eases the identification of the requirements, which were used as a basis for the test.
Pre-conditions	The pre-conditions field defines the conditions that the state of the SUT shall verify before undergoing the actual Test Description. In the process of the test, if the preconditions are not met, it leads to the assignment of an Inconclusive verdict. This field may include identifiers of other Tests within the present document which may be executed to bring the SUT into a state which verifies the mandated pre-conditions.
Reference	In the reference row, the Test Description writer indicates, the clauses of NFV SOL specification where the tested requirements are expressed. This information is critical, because it justifies the existence and the behaviour of the Test Description. The reference row may refer to several clauses, separated by semi-colon.

Elements	Definition
Config ID	The identifier of the applicable test configuration. A test configuration defines the components that shall be included in Test System and SUT to execute the tests and their connections.
Applicability	Only optional functions which are required for this specific Test Description are listed in this field.
Post-conditions	Definition of the events that the SUT is expected to perform or shall not perform, if any, according to the NFV SOL specifications and following the correct execution of the actions in the expected behaviour below. If the post-conditions concur in the definition of the verdict of the test, a step in the Test Case shall be explicitly provided. Multiple post conditions are separated by semi-colon which expresses a logical AND relation.
Test Case	A set of steps of the test, carried out by the Test System to verify conformance of the SUT to the Test Objective. The steps are written in the form of Keywords in the Robot Framework language [i.2]. The verdict of the Test shall be set to 'Pass' if all the applicable steps in the Test Case are successfully carried out and meet expected results criteria, it shall be set to 'Fail' if any of the steps fails. The Inconclusive verdict applies in all other cases.

The Test Descriptions are formatted as tables as shown in the example shown in table 4.5.2-2.

Table 4.5.2-2: Test Description entries examples

Test Purpose	
Test ID	A.B.C.D.E
Test Objective	Example Test Objective.
Pre-conditions	Precondition example.
Reference	Reference 1; reference 2.
Config ID	Configuration_example_id
Applicability	Applicability statement example.
Post-conditions	Precondition 1; Precondition 2; Precondition 3.
Test Case	
<p>Step Number One Step Number Two Steps are described with use of below expressions:</p> <ul style="list-style-type: none"> • GET all [resource] [expression] to query URI of [resource] to SUT by GET operation with [expression]. • GET [resource] [expression] to query individual [resource] to SUT by GET operation with [expression]. • Send [HTTP method] Request to [purpose] / [HTTP method] [resource] to send request to SUT by [HTTP method], i.e. POST, PUT, PATCH, DELETE. Same as "Send [HTTP method] Request to [purpose]". • Check HTTP Response Status [expression] to check if the status code in the response which corresponds to the previous step request from SUT matches [expression]. • Check HTTP Response Header [expression] to check if the contents of HTTP header in the response which corresponds to the previous step request from SUT matches [expression]. • Check HTTP Response Body [expression] to check if the JSON of the body in the payload of the response which corresponds to the previous step request from SUT matches [expression]. • Check Postcondition [resource] Exists to check if [resource] of the SUT is accessible by GET operation. • Check Postcondition [resource] is [expression] to check if [resource] matches [expression] by GET operation. • Check [notification name] Http Request Body [expression] Upon [notification name] received, to check if the JSON of the body in the payload of HTTP post request from SUT matches [expression]. • Trigger [condition] (external action) Test environment prepares [condition] for the particular test to run. • Check [resource] [condition] to check if the attribute of the [resource] in JSON in the payload of the response from SUT matches [condition] according to the "Post-Conditions" or "Pre-conditions" by GET operation. 	

4.5.3 Scope of the tests

4.5.3.1 General

In addition to the material described in clause 4.5.1, the behaviours of the SUT shall be tested in terms of:

- expected handling of the messages received from Test System
- expected actions inside the SUT

These two items above shall be checked by examining information retrieved by other operations performed by Test Systems e.g. GET or appropriate notification messages. These checks of expected handling and internal actions shall be based on material provided in the referenced specifications including all error cases.

Further checking includes:

- The expected correct response messages sent back to the Test system.

The above item shall be checked by analysing received messages by Test Systems. These checks of response correctness shall be based on material provided in the referenced specifications, including all error cases.

4.5.3.2 General characteristics of the reference points

This clause describes the basic principles of ETSI GS NFV-SOL 002 [2], ETSI GS NFV-SOL 003 [1], and ETSI GS NFV-SOL 005 [3] which are considered in API conformance test.

From the API conformance test point of view, the reference points have below characteristics:

- Asynchronous API and State handling by notifications: applicable for Os-Ma-Nfvo, Or-Vnfm:
 - Due to the varieties of the reasons, e.g. consuming time of process handling, "VNF Lifecycle Management interface" defined in ETSI GS NFV-SOL 003 [1], clause 5 and "NS Lifecycle Management interface" defined in ETSI GS NFV-SOL 005 [3], clause 6 are designed as asynchronous way, i.e. API designed is based on the combination of the specific methods with task resources and state handling by related attributes signalled via notification messages.
 - For example, the operation "Instantiate VNF" is triggered by POST message with task "Instantiate VNF" sent from NFVO to VNFM, then VNFM sends "provisional" response "202 accepted" back to NFVO, which means "accepted request" (ETSI GS NFV-SOL 003 [1], clause 5.4.4). Based on the subscriptions registered in VNFM, the appropriate notification message will be sent toward NFVO with the state of the processing in the VNFM at that time. After finishing the process of instantiating VNF in the VNFM, the notification message with the notification endpoint resource which is set to "operationState=COMPLETED" shall be sent (ETSI GS NFV-SOL 003 [1], clause 5.4.18), which mean that the VNF has been instantiated. In order to verify such "Asynchronous API" characteristics, the Robot code implements "workflow test" which include series of operations required for "VNF Lifecycle Management interface" and "NS Lifecycle Management interface" operations
- Linked resource: applicable for Os-Ma-Nfvo, Ve-Vnfm, Or-Vnfm:
 - According to ETSI GS NFV-SOL 003 [1], clause 4.3.3.1, ETSI GS NFV-SOL 005 [3], clause 4.3.3.1 and ETSI GS NFV-SOL 002 [2], clause 4.3.3.1, "link" pointing to the resources which may be fetched by API consumer, may be used on the reference point. It is used in order to avoid "big" response messages and to avoid repeating information request messages. Therefore the validity of such linked resources are also verified by test, as same as resources in the response message itself.
- Request and response data values: applicable for Os-Ma-Nfvo, Ve-Vnfm, Or-Vnfm:
 - According to the ETSI GS NFV-SOL 003 [1] and ETSI GS NFV-SOL 002 [2], clause 5.5, a VNF LCM request use the relevant values e.g. set in the valid VNFD, i.e. InstantiateVnfRequest, ScaleVnfRequest, ScaleVnfToLevelRequest, ChangeVnfFlavourRequest, TerminateVnfRequest HealVnfRequest, OperateVnfRequest and ChangeExtVnfConnectivityRequest.

- According to the ETSI GS NFV-SOL 005 [3], clause 6.5, a NS LCM request uses the relevant values e.g. set in the valid NSD, i.e. InstantiateNsRequest, ScaleNsRequest, UpdateNsRequest, TerminateNsRequest, and HealNsRequest.
- Test system verify if each attribute of the response body uses relevant values e.g. set in the valid VNFD/NSD.

NOTE 1: This is not considered in the present document.

- Grant exchange: applicable for Or-Vnfm:
 - According to ETSI GS NFV-SOL 003 [1], clause 9.1, the VNFM executes Grant Request before certain LCM operations are executed for the direct mode. The test system verifies if each attribute of Grant request body uses relevant values e.g. set in the valid VNFD.

NOTE 2: The value validation is not considered in the present document.

NOTE 3: The Robot code implements "Individual Grant". The test for "Grant exchange in the VNF LCM operations" in the workflow test requires specific test configuration "Config_prod_VNFM_GRANT" specified in clause 4.3, but "Grant exchange" part in the VNF LCM is not considered by the Robot code in the present document.

- VIM registration: applicable for Or-Vnfm:
 - According to ETSI GS NFV-SOL 003 [1] clause 4.4.1.6, the VNFM uses VIM related information according to ETSI GS NFV-SOL 003 [1] clause Annex C.5, the test system import the latest VIM registration before testing.

NOTE 4: The test system imports the values for the VIM related information via test configurations.

4.5.3.3 Basic behaviours of the API producer/consumer and verification steps

4.5.3.3.0 Introduction

Expected behaviours of the API producer specified in the SOL specifications targeted by the tests (i.e. ETSI GS NFV-SOL 002 [2], ETSI GS NFV-SOL 003 [1] and ETSI GS NFV-SOL 005 [3]) are categorized as follows:

- Producer sends event triggered notifications based on consumer subscriptions
- Producer sends periodic notifications based on the consumer subscriptions
- Producer executes the requested API operation
- Consumer fetches the files/package info

These four categories are expanded hereafter.

4.5.3.3.1 Producer sends event triggered notifications based on consumer subscriptions

Typical example for this case is "Fault management". The producer sends a notification to the consumer with mechanism "filter" and "callback". The Test System checks if the notification aligns to the conditions of the subscription.

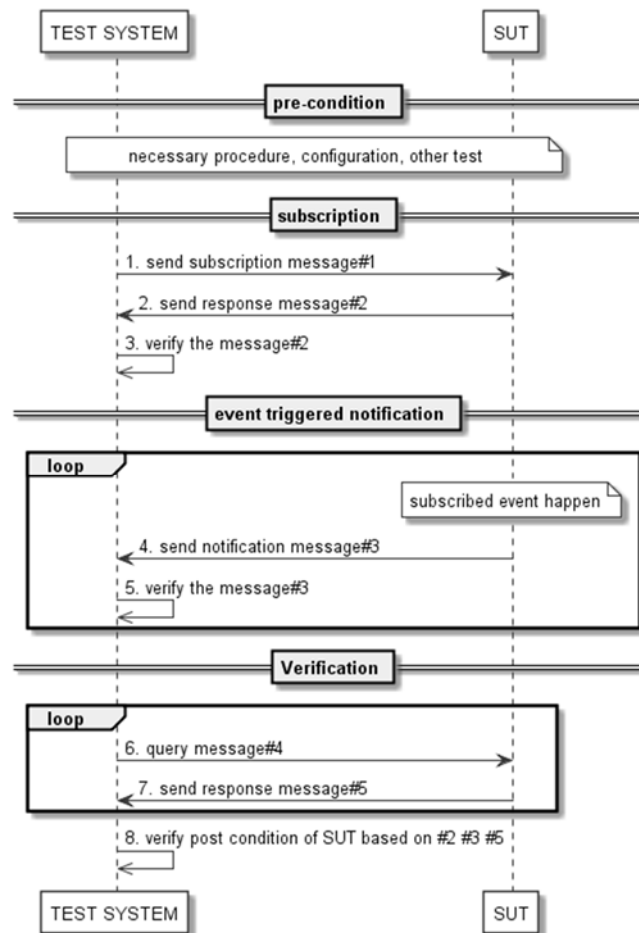


Figure 4.5.3.3.1-1: Verification procedure

The basic method of verification follows the steps as illustrated in figure 4.5.3.3.1-1:

Preconditions: Before sending message#1, required features/functionalities are executed, e.g. API authentication, etc. Other tests as pre-condition are executed beforehand if required.

- 1) Test System sends subscription message#1. Test System sets the data and attributes of the request body with correct/incorrect cardinalities and values.

NOTE 1: The data for the request are set from test configuration set by test users. The verification for the data is not considered in the present document. See 2-D, 2-E in clause 4.5.4.

- 2) Upon receiving the subscription message#1 from Test System, the SUT shall handle this subscription according to the requirements defined in SOL specifications, the response message#2 are sent to the Test System.
- 3) Test System verifies the received response message#2, in terms of expected response code, expected HTTP header, HTTP body, cardinality of the responded data, fulfilment of the requirements described in the description field, and verification aspects shown below, etc.
 - a) Verification aspects: 1-C, 2-C, 2-D, 2-E, 2-F, 2-G (see clause 4.5.4)
- 4) When the events which are matched to the subscribed criteria made by message#1 happen in SUT, notification message#3 sends to the Test System.

NOTE 2: How to make subscribed event in SUT to match the criteria is out of scope of the present document.

- 5) Test System verifies the received response message#3, in terms of expected response code, expected HTTP header, HTTP body, cardinality of the responded data, fulfilment of the requirements described in the description field, and verification aspects shown below, etc. steps 4 and 5 can be looped.
 - a) Verification aspects: 1-C, 2-C, 2-D, 2-E, 2-F, 2-G (see clause 4.5.4).
- 6) After expected API messages exchange, The Test System may have some verification aspects which require retrieval of information from the SUT, e.g. linked resources embedded in the response message. In that case, the Test System may invoke a query message to the SUT.
- 7) As a reaction to the step 6, the SUT may send additional messages to the Test System. In this case, the verification is identical to the step 5.
- 8) In addition to the verification done by step 2, step 3 step 5 and step 7, The Test System verifies the expected post conditions for the SUT.
 - a) Verification aspects: 2-H (see clause 4.5.4).

4.5.3.3.2 Producer sends periodic notifications based on the consumer subscriptions

Typical example for this case is "Performance management". The producer sends a periodic notification to the consumer as requested in the subscription. The Test System checks if the notification aligns to the conditions of the subscription.

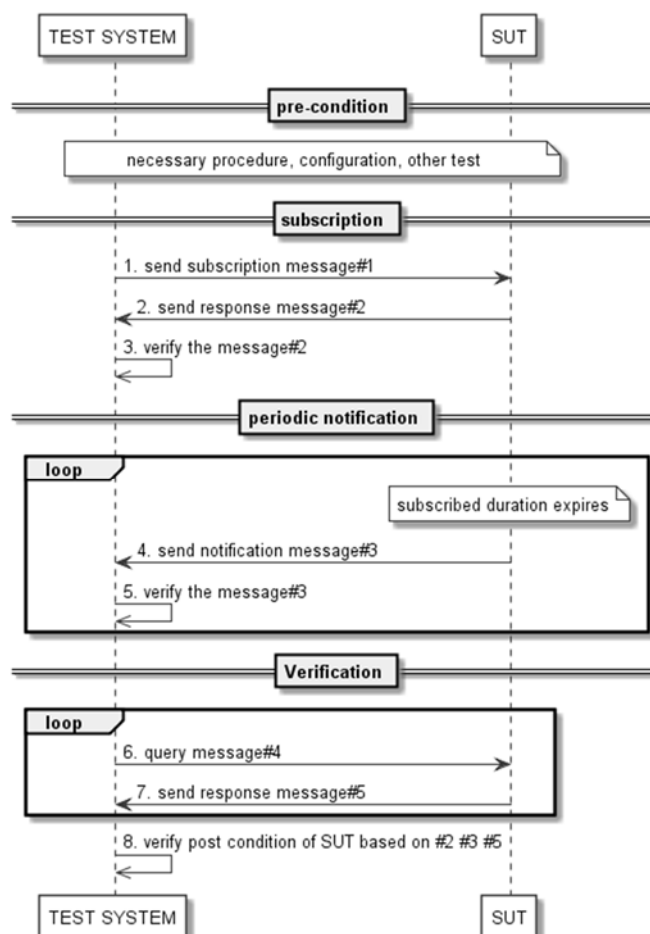


Figure 4.5.3.3.2-1: verification procedure

The basic method of verification follows the steps as illustrated in figure 4.5.3.3.2-1:

Preconditions: Before sending message#1, required features/functionalities are executed, e.g. API authentication, etc. Other tests as pre-condition are executed beforehand if required.

NOTE: Even figure 4.5.3.3.2-1 shows the series of the message exchanges as sequence flow, the Robot code/Test Descriptions implements the tests per individual interface basis, i.e. the tests for subscription, the tests for notification.

- 1) Identical to the step 1 of the clause 4.5.3.3.1.
- 2) Identical to the step 2 of the clause 4.5.3.3.1.
- 3) Identical to the step 3 of the clause 4.5.3.3.1.
- 4) When the reporting period which is subscribed to the SUT by message#1 expires, notification message#3 sends to the Test System.
- 5) Identical to the step 5 of the clause 4.5.3.3.1.
- 6) Identical to the step 6 of the clause 4.5.3.3.1.
- 7) Identical to the step 7 of the clause 4.5.3.3.1.
- 8) Identical to the step 8 of the clause 4.5.3.3.1.

4.5.3.3.3 Producer executes the requested API operation

Typical example for this case is "Life Cycle Management". Based on the concept "Asynchronous API", the producer starts the operation by receiving a request message from the consumer, and sends some notifications back based on the operational status. The Test System checks if the procedure is correct, i.e. start with a request, send notifications with an appropriate status, complete operation and correct status of the resources and status of the producer.

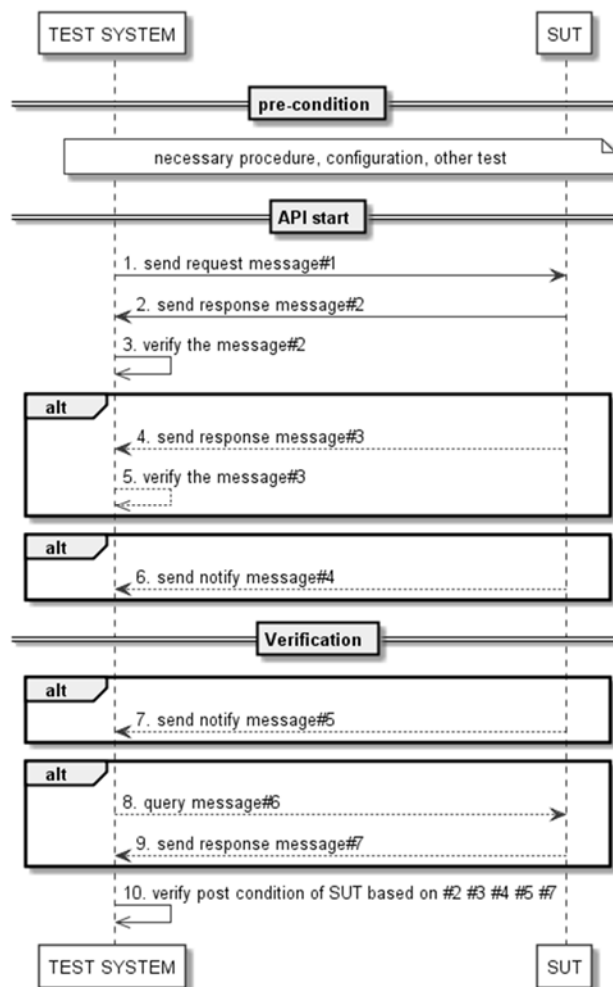


Figure 4.5.3.3.3-1: Verification procedure

The basic method of verification follows the steps as illustrated in figure 4.5.3.3.3-1:

Preconditions: Before sending message#1, required features/functionality are executed, e.g. API authentication, etc. Other tests as pre-condition are executed beforehand if required.

- 1) Test System sends request message#1. Test System sets the data and attributes of the request body with correct/incorrect cardinalities and values.

NOTE: The data for the request are set from test configuration set by test users. The verification for the data is not considered in the present document. See 2-D, 2-E in clause 4.5.4.

- 2) Upon receiving the request message#1 from Test System, the response message#2 are sent to the Test System with an appropriate response code and HTTP body based on the result of the SUT executed procedure.
- 3) Test System verifies the received response message#2, in terms of expected response code, expected HTTP header, HTTP body, cardinality of the responded data, fulfilment of the requirements described in the description field, and verification aspects shown below, etc.
 - a) Verification aspects: 1-C, 2-A, 2-C, 2-D, 2-E, 2-F, 2-G (see clause 4.5.4).
- 4) Optionally, the API may have more than 1 message exchange in particular for messages sent from the SUT to the Test System. In that case this step follows step 2.
- 5) Identical to the step 3.
- 6) Optionally, the SUT may send notification messages to the Test System which shows the status of the processing of the messages in the SUT, e.g. STARTING/PROCESSING etc., based on the consumer subscriptions.
- 7) After SUT completed the requested processing in the SUT, the SUT may send the notification message to the Test System which shows the status of the processing "COMPLETED".
- 8) After expected API messages exchange, the Test System may have some verification aspects which require retrieval of information from the SUT, e.g. linked resources embedded in the response message. In that case, the Test System may invoke a query message to the SUT.
- 9) As reaction to the step 8, the SUT may send additional messages to the Test System. In this case, the verification follows step 3.
- 10) In addition to the verification done by step 2, step 3, step 4, step 5 and step 7 (optional), the Test System verifies the expected post conditions for the SUT.
 - a) Verification aspects: 2-H (see clause 4.5.4).

4.5.3.3.4 Consumer fetches the files/package info

Typical example for this case is fetching files of a VNFD, VNF package, NSD and PNFD. The Test System checks if the file or package info is correctly received.

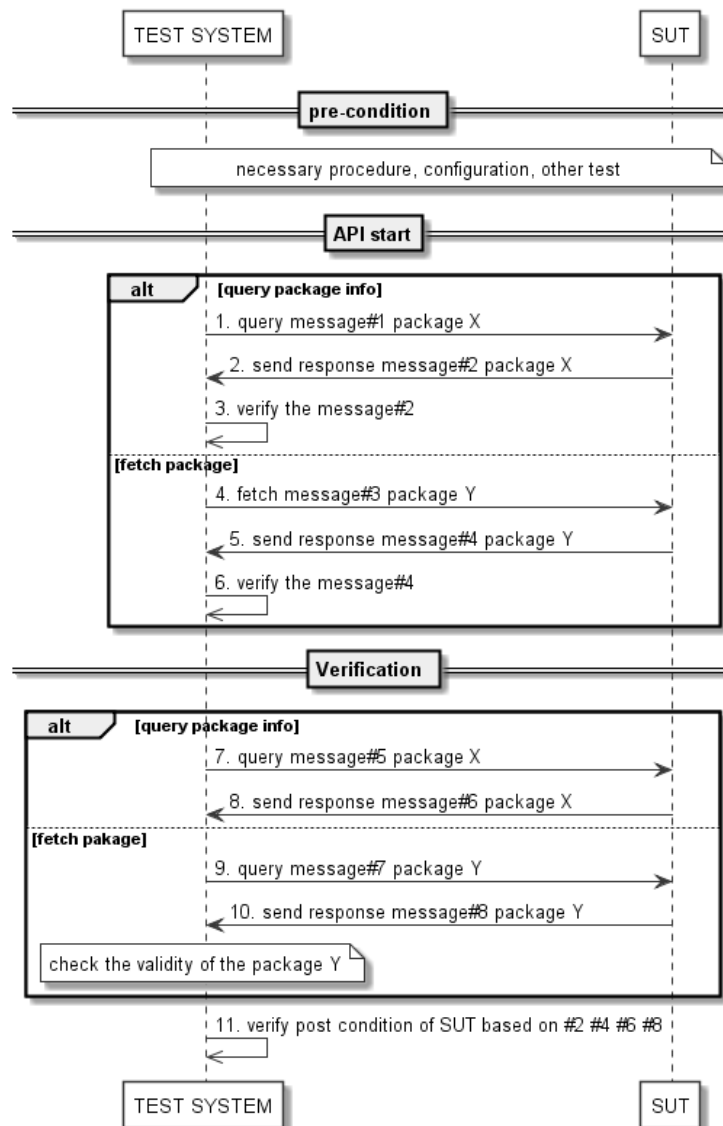


Figure 4.5.3.3.4-1: Verification procedure

The basic method of verification follows the steps as illustrated in figure 4.5.3.3.4-1:

Preconditions: Before sending message#1, required features/functionalities are executed, e.g. API authentication, etc. Other tests as pre-condition are executed beforehand if required.

NOTE 1: Even the figure 4.5.3.3.1-1 shows the series of the message exchanges as sequence flow, the Robot code/Test Descriptions implements the tests per individual interface basis, i.e. the tests for query the package info, the tests for fetch the packages.

- 1) Test System sends query message#1 for information of the package X. Test System sets the data and attributes of the request body with correct/incorrect cardinalities and values.

NOTE 2: The data for the request are set by test configuration set by test users. The verification for the data is not considered in the present document. See 2-D, 2-E in clause 4.5.4.

- 2) Upon receiving the query message#1 from Test System, the SUT shall handle this subscription according to the requirements defined in SOL specifications, the response message#2 are sent to the Test System.
- 3) Test System verifies the received response message#2, in terms of expected response code, expected HTTP header, HTTP body, cardinality of the responded data, fulfilment of the requirements described in the description field, and verification aspects shown below, etc.
 - a) Verification aspects: 1-C, 2-C, 2-D, 2-E, 2-F, 2-G (see clause 4.5.4).

- 4) Alternately to the step 1, Test System sends fetch message#3 to retrieve the package Y. Test System sets the data and attributes of the request body with correct/incorrect.
 - a) Verification aspects: 2-E, 2-F in clause 4.5.4.
- 5) Upon receiving the fetch message#3 from Test System, the SUT shall handle this request according to the requirements defined in SOL specifications, the response message#4 with package Y are sent to the Test System with an appropriate response code and HTTP body based on the result of the SUT executed procedure.
- 6) Identical to the step 3, for message#4.
- 7) After expected API messages exchange, the Test System may have some verification aspects which require retrieval of information from the SUT, e.g. linked resources embedded in the response message. In that case, the Test System may invoke a query message to the SUT. And in order to the verification of the package X information fetched by step 2, the Test System sends query message#5 to the SUT.
- 8) As reaction to the step 7, the SUT may send additional messages to the Test System. In this case, the verification is identical to the step 3.
- 9) The Test System may have some verification aspects which require retrieval of information from the SUT, e.g. linked resources embedded in the response message. In that case, the Test System may invoke a query message to the SUT. And in order to the verification of the package Y information fetched by step 5, Test System sends query message#7 to the SUT.
- 10) As reaction to the step 9, the SUT may send additional messages to the Test System. In this case, the verification is identical to the step 10.
- 11) In addition to the verification done by step 3 and step 6, The Test System verifies the expected post conditions for the SUT.
 - a) Verification aspects: 2-H (see clause 4.5.4).

4.5.3.4 Workflow test considerations

The asynchronous API concept introduced in ETSI GS NFV-SOL 002 [2], ETSI GS NFV-SOL 003 [1] and ETSI GS NFV-SOL 005 [3] describes set of lifecycle operations and relations among them. Asynchronous API, though described in form of flow as informative in the base specifications, is one of the key and critical design concepts of NFV SOL specifications and for deployment of NFV systems. Therefore, the present document includes a set of workflow Test Descriptions to test such characteristics and, in particular, to include checks on the postconditions of the request for LCM operations.

NOTE 1: As an example, the request of instantiation of a VNF expects as a post condition the asynchronous notifications of the status change of the VNF throughout the instantiation process. A workflow Test Description includes checks on the actual notifications of such status changes.

NOTE 2: The workflow Test Descriptions for ETSI GS NFV-SOL 002 [2] aspects are not considered in the present document.

The workflow Test Descriptions are listed in annex B.

4.5.4 Verification

4.5.4.0 Introduction

Since the scope of the API conformance test includes syntax and semantics verifications, this clause defines the methodology of the verification executed by the Test System.

4.5.4.1 Common verification aspects

The common verification aspects checked by the Test System are defined in table 4.5.4.1-1.

Table 4.5.4.1-1: Common verification aspects

Verification aspects	Notes
1-A: URI handling	If the SUT receives an invalid URI by HTTP method with either an invalid path or invalid values for the resources, the SUT shall return the appropriate error response code to the Test System according to the SOL specification. The Test System tests the support of HTTP over TLS version 1.2.
1-B: Attribute selectors	Expected attributes or sub-resources shall be sent from the SUT according to attribute selector parameter by a query operation from the Test System. The Test System tests all of the operations with parameters if those work correctly.
1-C: HTTP header fields	Expected HTTP headers shall be sent from the SUT. The Test System tests all of the operations with parameters if those work correctly.
1-D: Error reporting	In case of some types of errors occurred in the SUT, the error response with type ProblemDetails data are returned to the Test System. The Test System tests all attributes of the ProblemDetails regarding the error experienced by the SUT.
1-E: API authorization	For the case of making an API call, OAuth2.0 is required for authentication between API consumer and API producer. For the case of the notification, OAuth2.0 or HTTP Basic authentication is used. From the API producer point of view, if the passed access token is invalid, API producer should return appropriate errors, e.g. 401 unauthorized, 403 insufficient scope.

4.5.4.2 Verification aspects for individual API

The verification aspects for individual APIs checked by the Test System are defined in table 4.5.4.2-1.

Table 4.5.4.2-1: Common verification aspects for each API

Verification aspects	Notes
2-A: Asynchronous API	As described in clause 4.5.3, one of the typical behaviours of Asynchronous API, the requested behaviours are not completed by a response message but as a combination of notifications. See note 1.
2-B: Void	Void
2-C: Method support	The Test System verifies all of the Supported HTTP method, e.g. all types of the specified method with all types of the specified response codes.
2-D: Attributes set in the request body	The Test System generates request messages with body covering the following cardinality aspects: <ul style="list-style-type: none"> • Data set in the request body, e.g. if not set when cardinality is 1, treat as error. • Attributes in the data, e.g. if not set according to the specified cardinality. • The data set in the request body are retrieved from test configuration set by test users. • For some of the Test Descriptions, the Test System set the values into request messages those are coming from previous procedures. • JSON schema validation is supported
2-E: Value validation of the attribute	Test system verifies if each attribute of the messages body uses relevant values e.g. set in the corresponding VNFD/NSD. If the values set in the attributes of the data provided in the request body are not matching to the conditions in the description part, the SUT shall treat them as error. See note 2.
2-F: Response messages validation	The Test System checks the syntax of the HTTP header and body, the cardinalities and the conditions described in the description part. See note 3.
2-G: Resource validation	The Test System checks if the related resources in the SUT are in the expected status after having received the response messages, by checking the notifications from the SUT or by initiating a GET request towards the SUT.
2-H: Void	Void
NOTE 1:	The Robot code implements "workflow test", which includes series of operations required for VNF Lifecycle Management interface and NS Lifecycle Management interface. Special considerations on "workflow Test Descriptions" are described in clause 4.5.3.4.
NOTE 2:	This verification is not considered in the present document.
NOTE 3:	The current version of the Robot code implements as following: <ul style="list-style-type: none"> – JSON schema validation is supported. – Conditional check for the requirements of the data type, i.e. requirements described in the description part of the data type table in the SOL specifications is not performed.

4.5.4.3 Verification aspects not considered

The current version of the present document and test code is not considering the aspects for verification listed in table 4.5.4.3-1.

Table 4.5.4.3-1: Exception of the verification aspects for API conformance test

Verification aspects not considered by this version of document and test code	Notes
Multiple times notification test	Multiple times notification test based on the conditions subscribed. See clause 4.5.3.3.2.

5 Os-Ma-Nfvo Reference Point

5.1 General

Based on the methodology (see clause 4), e.g. characteristics (see clause 4.5.3.2), basic behaviours of the API (see clause 4.5.3.3) and verification aspects (see clause 4.5.4), the clause 5 describes the Test Descriptions for Os-Ma-Nfvo reference point testing. The Test Description format is described in clause 4.5.2.

5.2 Test configuration

Test configurations are described in clause 4.3. In clause 5, below test configurations shall be implemented to run the tests for APIs on Os-Ma-Nfvo reference point, which are shown in the "Config ID" field in the Test Descriptions.

- Config_prod_NFVO: FUT which implements NFVO

5.3 Test Descriptions

5.3.1 NSD Management interface

5.3.1.1 Network Service Descriptors Resource Endpoint

5.3.1.1.1 GET all Network Service Descriptors Information

Test Purpose	
Test ID	5.3.1.1.1
Test title	GET all Network Service Descriptors Information
Test objective	The objective is to test the retrieval of all the Network Service Descriptors information and perform a JSON schema and content validation of the collected data structure
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET all Network Service Descriptors Information Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is NsdInfos	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptors.robot>.

5.3.1.1.2 GET Network Service Descriptors Information with attribute-based filter

Test Purpose	
Test ID	5.3.1.1.2
Test title	GET Network Service Descriptors Information with attribute-based filter
Test objective	The objective is to test the retrieval of Network Service Descriptors information using attribute-based filter, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued attribute-based filter
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Network Service Descriptors Information with attribute-based filter	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is NsdInfos	
Check HTTP Response Body NsdInfos Matches the requested attribute-based filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptores.robot>.

5.3.1.1.3 GET Network Service Descriptors Information with invalid attribute-based filter

Test Purpose	
Test ID	5.3.1.1.3
Test title	GET Network Service Descriptors Information with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of Network Service Descriptors information fails when using invalid attribute-based filter, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Network Service Descriptors Information with invalid attribute-based filter	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptores.robot>.

5.3.1.1.4 Get all Network Service Descriptors Information with malformed authorization token

Test Purpose	
Test ID	5.3.1.1.4
Test title	Get all Network Service Descriptors Information with malformed authorization token
Test objective	The objective is to test that the retrieval of Network Service Descriptors Information fails when using malformed authorization token
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clauses 4.5.3.3 and 5.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO requires the usage of access tokens for authorizing the API requests
Post-Conditions	None
Test Case	
Get all Network Service Descriptors Information with malformed authorization token	
Check HTTP Response Status Code Is 400	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptores.robot>.

5.3.1.1.5 Get all Network Service Descriptors Information without authorization token

Test Purpose	
Test ID	5.3.1.1.5
Test title	Get all Network Service Descriptors Information without authorization token
Test objective	The objective is to test that the retrieval of Network Service Descriptors Information fails when omitting the authorization token
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clauses 4.5.3.3 and 5.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO requires the usage of access tokens for authorizing the API requests
Post-Conditions	None
Test Case	
Get all Network Service Descriptors Information without authorization token	
Check HTTP Response Status Code Is 401	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptors.robot>.

5.3.1.1.6 GET all Network Service Descriptors Information with expired or revoked authorization token

Test Purpose	
Test ID	5.3.1.1.6
Test title	GET all Network Service Descriptors Information with expired or revoked authorization token
Test objective	The objective is to test that the retrieval of Network Service Descriptors Information fails when using expired or revoked authorization token
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clauses 4.5.3.3 and 5.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO requires the usage of access tokens for authorizing the API requests
Post-Conditions	None
Test Case	
Get all Network Service Descriptors Information with expired or revoked authorization token	
Check HTTP Response Status Code Is 401	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptors.robot>.

5.3.1.1.7 GET all Network Service Descriptors Information with "all_fields" attribute selector

Test Purpose	
Test ID	5.3.1.1.7
Test title	GET all Network Service Descriptors Information with "all_fields" attribute selector
Test objective	The objective is to test the retrieval of all Network Service Descriptors Information with "all_fields" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "all_fields" selector
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clauses 4.3.3.2.1 and 5.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET all Network Service Descriptors Information with all_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is NsdInfos	
Check HTTP Response Body NsdInfos Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptors.robot>.

5.3.1.1.8 GET all Network Service Descriptors Information with "exclude_default" attribute selector

Test Purpose	
Test ID	5.3.1.1.8
Test title	GET all Network Service Descriptors Information with "exclude_default" attribute selector
Test objective	The objective is to test the retrieval of all Network Service Descriptors Information with "exclude_default" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "exclude_default" selector
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clauses 4.3.3.2.1 and 5.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET all Network Service Descriptors Information with exclude_default attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is NsdInfos Check HTTP Response Body NsdInfos Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptors.robot>.

5.3.1.1.9 GET all Network Service Descriptors Information with "fields" attribute selector

Test Purpose	
Test ID	5.3.1.1.9
Test title	GET all Network Service Descriptors Information with "fields" attribute selector
Test objective	The objective is to test the retrieval of all Network Service Descriptors Information "fields" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "fields" selector
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clauses 4.3.3.2.1 and 5.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the use of "fields" attribute selector
Post-Conditions	None
Test Case	
GET all Network Service Descriptors Information with fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is NsdInfos Check HTTP Response Body NsdInfos Matches the requested fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptors.robot>.

5.3.1.1.10 GET all Network Service Descriptors Information with "exclude_fields" attribute selector

Test Purpose	
Test ID	5.3.1.1.10
Test title	GET all Network Service Descriptors Information with "exclude_fields" attribute selector
Test objective	The objective is to test the retrieval of all VNF performance monitoring "exclude_fields" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "exclude_fields" selector
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clauses 4.3.3.2.1 and 5.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the use of "exclude_fields" attribute selector
Post-Conditions	None

Test Case	
GET all Network Service Descriptors Information with exclude_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is NsdInfos	
Check HTTP Response Body NsdInfos Matches the requested exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptores.robot>.

5.3.1.1.11 Create new Network Service Descriptor Resource

Test Purpose	
Test ID	5.3.1.1.11
Test title	Create new Network Service Descriptor Resource
Test objective	The objective is to test the creation of a new Create new Network Service Descriptor resource and perform the JSON schema validation of the returned structure
Pre-conditions	None
Reference	Clause 5.4.2.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The Network Service Descriptor resource is successfully created on the NFVO
Test Case	
Send Post Request to create new Network Service Descriptor Resource	
Check HTTP Response Status Code Is 201	
Check HTTP Response Body Json Schema Is NsdInfo	
Check HTTP Response Header Contains Location	
Check Postcondition NsdInfo Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptores.robot>.

5.3.1.1.12 PUT all Network Service Descriptors - Method not implemented

Test Purpose	
Test ID	5.3.1.1.12
Test title	PUT all Network Service Descriptors Information - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify Network Service Descriptors Information
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clause 5.4.2.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for all Network Service Descriptors	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptores.robot>.

5.3.1.1.13 PATCH all Network Service Descriptors - Method not implemented

Test Purpose	
Test ID	5.3.1.1.13
Test title	PATCH all Network Service Descriptors Information - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update Network Service Descriptors Information
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clause 5.4.2.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for all Network Service Descriptors Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptors.robot>.

5.3.1.1.14 DELETE all Network Service Descriptors - Method not implemented

Test Purpose	
Test ID	5.3.1.1.14
Test title	DELETE all Network Service Descriptors Information - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete Network Service Descriptors Information
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clause 5.4.2.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The Network Service Descriptors are not deleted by the failed operation
Test Case	
Send DELETE Request for all Network Service Descriptors Check HTTP Response Status Code Is 405 Check Postcondition Network Service Descriptors Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDescriptors.robot>.

5.3.1.2 Individual NS Descriptor Resource Endpoint

5.3.1.2.1 GET Individual Network Service Descriptor Information

Test Purpose	
Test ID	5.3.1.2.1
Test title	GET Individual Network Service Descriptor Information
Test objective	The objective is to test the retrieval of an individual Network Service Descriptor information and perform a JSON schema validation of the collected data structure
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clause 5.4.3.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual Network Service Descriptor Information Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is NsdInfo Check HTTP Response Header Contains ETag Check HTTP Response Body NsdInfo Identifier matches the requested Network Service Descriptor Information	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualNSDescriptor.robot>.

5.3.1.2.2 GET Individual Network Service Descriptor Information with invalid resource identifier

Test Purpose	
Test ID	5.3.1.2.2
Test title	GET Individual Network Service Descriptor Information with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual Network Service Descriptor Information fails when using an invalid resource identifier
Pre-conditions	One or more Network Service Descriptors are set in the NFVO
Reference	Clause 5.4.3.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual Network Service Descriptor Information with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualNSDescriptor.robot>.

5.3.1.2.3 Disable Individual Network Service Descriptor

Test Purpose	
Test ID	5.3.1.2.3
Test title	Disable Individual Network Service Descriptor
Test objective	The objective is to test the disabling of an individual Network Service Descriptor and perform a JSON schema and content validation of the collected data structure
Pre-conditions	One or more Network Service Descriptors are set in the NFVO in enabled operational state
Reference	Clause 5.4.3.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The Network Service Descriptor is in operational state DISABLED and usage state is not modified
Test Case	
Send PATCH to disable Individual Network Service Descriptor Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is NsdInfoModification Check Postcondition Network Service Descriptor is in operational state DISABLED Check Postcondition Network Service Descriptor usage state is unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualNSDescriptor.robot>.

5.3.1.2.4 Enable Individual Network Service Descriptor

Test Purpose	
Test ID	5.3.1.2.4
Test title	Enable Individual Network Service Descriptor
Test objective	The objective is to test the enabling of an individual Network Service Descriptor and perform a JSON schema and content validation of the collected data structure
Pre-conditions	One or more Network Service Descriptors are set in the NFVO in DISABLED operational state (Test ID 5.3.1.2.3)
Reference	Clause 5.4.3.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The Network Service Descriptor is in operational state ENABLED and usage state is not modified

Test Case
Send PATCH to enable Individual Network Service Descriptor Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is NsdInfoModification Check Postcondition Network Service Descriptor is in operational state ENABLED Check Postcondition Network Service Descriptor usage state is unmodified (Implicit)

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualNSDescriptor.robot>.

5.3.1.2.5 Enable Individual Network Service Descriptor with conflict due to operational state ENABLED

Test Purpose	
Test ID	5.3.1.2.5
Test title	Enable Individual Network Service Descriptor with conflict due to operational state ENABLED
Test objective	The objective is to test that enabling an individual Network Service Descriptor that is already in ENABLED operational state fails and perform a JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more Network Service Descriptors are set in the NFVO in ENABLED operational state (Test ID 5.3.1.2.4)
Reference	Clause 5.4.3.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH to enable Individual Network Service Descriptor Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualNSDescriptor.robot>.

5.3.1.2.6 Enable Individual Network Service Descriptor with conflict due to onboarding state

Test Purpose	
Test ID	5.3.1.2.6
Test title	Enable Individual Network Service Descriptor with conflict due to onboarding state
Test objective	The objective is to test that the retrieval of an Network Service Descriptor fails due to a conflict when the Network Service Descriptor is not in onboarding state ONBOARDED in the NFVO. The test also performs a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more Network Service Descriptors are set in the NFVO in ENABLED operational state. The onboarding state of the Network Service Descriptor for which the enabling is requested is different from ONBOARDED
Reference	Clause 5.4.3.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH to enable Individual Network Service Descriptor in onboarding state different from ONBOARDED Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualNSDescriptor.robot>.

5.3.1.2.7 Enable Individual Network Service Descriptor with HTTP Etag precondition failure

Test Purpose	
Test ID	5.3.1.2.7
Test title	Enable Individual Network Service Descriptor with HTTP Etag precondition failure
Test objective	The objective is to test that the retrieval of an Network Service Descriptor fails due to a precondition failure when using an incorrect Http Etag identified
Pre-conditions	One or more Network Service Descriptors are set in the NFVO in ENABLED operational state (Test ID 5.3.1.2.4).
Reference	Clause 5.4.3.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH to enable Individual Network Service Descriptor with HTTP Etag precondition failure Check HTTP Response Status Code Is 412	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualNSDescriptor.robot>.

5.3.1.2.8 DELETE Individual Network Service Descriptor

Test Purpose	
Test ID	5.3.1.2.9
Test title	DELETE Individual Network Service Descriptor
Test objective	The objective is to test the deletion of an individual Network Service Descriptor
Pre-conditions	One or more Network Service Descriptors are set in the NFVO in DISABLED operational state and NOT_IN_USE usage state
Reference	Clause 5.4.3.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The Network Service Descriptor is not available anymore in the NFVO
Test Case	
Send DELETE Request for Individual Network Service Descriptor Check HTTP Response Status Code Is 204 Check Postcondition Network Service Descriptor is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualNSDescriptor.robot>.

5.3.1.2.9 DELETE Individual Network Service Descriptor in operational state ENABLED

Test Purpose	
Test ID	5.3.1.2.10
Test title	DELETE Individual Network Service Descriptor in operational state ENABLED
Test objective	The objective is to test that the deletion of an individual Network Service Descriptor in operational state ENABLED fails. The test also performs a JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more Network Service Descriptors are set in the NFVO in ENABLED operational state (Test ID 5.3.1.2.4)
Reference	Clause 5.4.3.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The Network Service Descriptor is not deleted by the failed operation
Test Case	
Send DELETE Request for Individual Network Service Descriptor in operational state ENABLED Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails Check Postcondition Network Service Descriptor Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualNSDescriptor.robot>.

5.3.1.2.10 POST Individual Network Service Descriptor - Method not implemented

Test Purpose	
Test ID	5.3.1.2.11
Test title	POST Individual Network Service Descriptor - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new Network Service Descriptor
Pre-conditions	None
Reference	Clause 5.4.3.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for Individual Network Service Descriptor Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualNSDescriptor.robot>.

5.3.1.2.11 PUT Individual Network Service Descriptor - Method not implemented

Test Purpose	
Test ID	5.3.1.2.12
Test title	PUT Individual Network Service Descriptor - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify a new Network Service Descriptor
Pre-conditions	None
Reference	Clause 5.4.3.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for Individual Network Service Descriptor Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualNSDescriptor.robot>.

5.3.1.3 NSD Content Resource Endpoint

5.3.1.3.1 Get single file NSD Content in Plain Format

Test Purpose	
Test ID	5.3.1.3.1
Test title	Get single file NSD Content in Plain Format
Test objective	The objective is to test the retrieval of the NSD Content in plain format and perform a validation that returned content is in plain format
Pre-conditions	One or more NSDs are onboarded in the NFVO.
Reference	Clause 5.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NSD is implemented as a single file
Post-Conditions	None
Test Case	
Get single file NSD Content in Plain Format Check HTTP Response Status Code Is 200 Check HTTP Response Header Content-Type Is text/plain	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.2 Get NSD Content in Zip Format

Test Purpose	
Test ID	5.3.1.3.2
Test title	Get NSD Content in Zip Format
Test objective	The objective is to test the retrieval of the NSD Content in zip format and perform a validation that returned content is in zip format
Pre-conditions	One or more NSDs are onboarded in the NFVO
Reference	Clause 5.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get NSD Content in Zip Format Check HTTP Response Status Code Is 200 Check HTTP Response Header Content-Type Is application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.3 Get single file NSD Content in Plain or Zip Format

Test Purpose	
Test ID	5.3.1.3.3
Test title	Get single file NSD Content in Plain or Zip Format
Test objective	The objective is to test the retrieval of the single file NSD Content when requesting Plain or Zip format to NFVO by including both formats in the request, and perform a validation that returned content is in Plain or Zip format
Pre-conditions	One or more NSDs are onboarded in the NFVO
Reference	Clause 5.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NSD Content is implemented as a single file
Post-Conditions	None
Test Case	
Get single file NSD Content in Plain or Zip Format Check HTTP Response Status Code Is 200 Check HTTP Response Header Content-Type Is Any of text/plain application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.4 Get multi file NSD Content in Plain or Zip Format

Test Purpose	
Test ID	5.3.1.3.4
Test title	Get multi file NSD Content in Plain or Zip Format
Test objective	The objective is to test the retrieval of the multi file NSD Content when requesting Plain or Zip format to NFVO by including both formats in the request, and perform a validation that returned content is in Zip format
Pre-conditions	One or more NSDs are onboarded in the NFVO
Reference	Clause 5.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NSD is implemented as a multi file
Post-Conditions	None
Test Case	
Get multi file NSD Content in Plain or Zip Format Check HTTP Response Status Code Is 200 Check HTTP Response Header Content-Type Is application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.5 Get multi file NSD Content in Plain Format

Test Purpose	
Test ID	5.3.1.3.5
Test title	Get multi file NSD Content in Plain Format
Test objective	The objective is to test that the retrieval of the multi file NSD Content fails when requesting it in Plain format, and perform a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more NSDs are onboarded in the NFVO
Reference	Clause 5.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NSD Content is implemented as a multi file
Post-Conditions	None
Test Case	
Get multi file NSD Content in Plain Format Check HTTP Response Status Code Is 406 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.6 Get NSD Content with invalid resource identifier

Test Purpose	
Test ID	5.3.1.3.6
Test title	Get NSD Content with invalid resource identifier
Test objective	The objective is to test that the retrieval of the NSD Content fails when using an invalid resource identifier
Pre-conditions	None
Reference	Clause 5.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get NSD Content with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.7 Get NSD Content with conflict due to onboarding state

Test Purpose	
Test ID	5.3.1.3.7
Test title	Get NSD Content with conflict due to onboarding state
Test objective	The objective is to test that the retrieval of the NSD Content fails due to a conflict when the NSD is not in onboarding state ONBOARDED in the NFVO. The test also performs a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	The onboarding state of the NSD for which the NSD Content is requested is different from ONBOARDED
Reference	Clause 5.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get NSD Content with conflict due to onboarding state Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.8 GET NSD Content with Range Request and NFVO supporting Range Requests

Test Purpose	
Test ID	5.3.1.3.8
Test title	GET NSD Content with Range Request and NFVO supporting Range Requests
Test objective	The objective is to test the retrieval of NSD Content when using a range request to return single range of bytes from the file, with the NFVO supporting it. The test also perform a validation that returned content matches the issued range
Pre-conditions	One or more NSDs are onboarded in the NFVO.
Reference	Clause 5.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports range requests to return single range of bytes from the NSD file
Post-Conditions	None
Test Case	
GET NSD Content with Range Request Check HTTP Response Status Code Is 206 Check HTTP Response Header Content-Type Is application/zip Check HTTP Response Header Content-Range Is Present and Matches the requested range Check HTTP Response Header Content-Length Is Present and Matches the requested range length	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.9 GET NSD Content with Range Request and NFVO not supporting Range Requests

Test Purpose	
Test ID	5.3.1.3.9
Test title	GET NSD Content with Range Request and NFVO not supporting Range Requests
Test objective	The objective is to test that the retrieval of NSD Content, when using a range request to return single range of bytes from the file and the NFVO not supporting it, returns the full NSD file
Pre-conditions	One or more NSDs are onboarded in the NFVO
Reference	Clause 5.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO does not support range requests to return single range of bytes from the NSD file
Post-Conditions	None
Test Case	
GET NSD Content with Range Request Check HTTP Response Status Code Is 200 Check HTTP Response Header Content-Type Is application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.10 GET NSD Content with invalid Range Request

Test Purpose	
Test ID	5.3.1.3.10
Test title	GET NSD Content with invalid Range Request
Test objective	The objective is to test that the retrieval of NSD Content fails when using a range request that does not match any available byte range in the file
Pre-conditions	One or more NSDs are onboarded in the NFVO
Reference	Clause 5.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports range requests to return single range of bytes from the NSD file
Post-Conditions	None
Test Case	
GET NSD Content with invalid Range Request Check HTTP Response Status Code Is 416	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.11 Upload NSD Content as Zip file in asynchronous mode

Test Purpose	
Test ID	5.3.1.3.11
Test title	Upload NSD Content as Zip file in asynchronous mode
Test objective	The objective is to test the upload of an NSD Content in Zip format when the NFVO supports the asynchronous upload mode
Pre-conditions	One or more NSDs are onboarded in the NFVO
Reference	Clause 5.4.4.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the upload of NSD contents in asynchronous mode
Post-Conditions	None
Test Case	
Send PUT Request to upload NSD Content as zip file in asynchronous mode	
Check HTTP Response Status Code Is 202	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.12 Upload NSD Content as plain text file in asynchronous mode

Test Purpose	
Test ID	5.3.1.3.12
Test title	Upload NSD Content as plain text file in asynchronous mode
Test objective	The objective is to test the upload of an NSD Content in plain text format when the NFVO supports the asynchronous upload mode
Pre-conditions	One or more NSDs are onboarded in the NFVO
Reference	Clause 5.4.4.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the upload of NSD contents in asynchronous mode
Post-Conditions	None
Test Case	
Send PUT Request to upload NSD Content as plain text file in asynchronous mode	
Check HTTP Response Status Code Is 202	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.13 Upload NSD Content as Zip file in synchronous mode

Test Purpose	
Test ID	5.3.1.3.13
Test title	Upload NSD Content as Zip file in synchronous mode
Test objective	The objective is to test the upload of an NSD Content in Zip format when the NFVO supports the synchronous upload mode
Pre-conditions	One or more NSDs are onboarded in the NFVO
Reference	Clause 5.4.4.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the upload of NSD contents in synchronous mode
Post-Conditions	The NSD content is successfully uploaded and available in the NFVO
Test Case	
Send PUT Request to upload NSD Content as zip file in synchronous mode	
Check HTTP Response Status Code Is 204	
Check Postcondition NSD Content is uploaded and available in the NFVO	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.14 Upload NSD Content as plain text file in synchronous mode

Test Purpose	
Test ID	5.3.1.3.14
Test title	Upload NSD Content as plain text file in synchronous mode
Test objective	The objective is to test the upload of an NSD Content in plain text format when the NFVO supports the synchronous upload mode
Pre-conditions	One or more NSDs are onboarded in the NFVO
Reference	Clause 5.4.4.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the upload of NSD contents in synchronous mode
Post-Conditions	The NSD content is successfully uploaded and available in the NFVO
Test Case	
Send PUT Request to upload NSD Content as plain text file in synchronous mode	
Check HTTP Response Status Code Is 204	
Check Postcondition NSD Content is uploaded and available in the NFVO	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.15 Upload NSD Content with conflict due to onboarding state

Test Purpose	
Test ID	5.3.1.3.15
Test title	Upload NSD Content with conflict due to onboarding state
Test objective	The objective is to test that the upload of the NSD Content fails due to a conflict when the NSD is not in onboarding state CREATED in the NFVO. The test also performs a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	The onboarding state of the NSD for which the NSD Content is requested is different from ONBOARDED
Reference	Clause 5.4.4.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request to upload NSD Content with conflict due to onboarding state	
Check HTTP Response Status Code Is 409	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.16 POST NSD Content - Method not implemented

Test Purpose	
Test ID	5.3.1.3.16
Test title	POST NSD Content - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new Network Service Descriptor content
Pre-conditions	None
Reference	Clause 5.4.4.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for NSD Content	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.17 PATCH NSD Content - Method not implemented

Test Purpose	
Test ID	5.3.1.3.16
Test title	PATCH NSD Content - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update Network Service Descriptor content
Pre-conditions	None
Reference	Clause 5.4.4.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for NSD Content Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.3.18 DELETE NSD Content - Method not implemented

Test Purpose	
Test ID	5.3.1.3.17
Test title	DELETE NSD Content - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete Network Service Descriptor content
Pre-conditions	None
Reference	Clause 5.4.4.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NSD content is not deleted by the failed operation
Test Case	
Send DELETE Request for NSD Content Check HTTP Response Status Code Is 405 Check Postcondition NSD Content Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDContent.robot>.

5.3.1.4 PNF Descriptors Resource Endpoint

5.3.1.4.1 GET all PNF Descriptors Information

Test Purpose	
Test ID	5.3.1.4.1
Test title	GET all PNF Descriptors Information
Test objective	The objective is to test the retrieval of all the PNF Descriptors information and perform a JSON schema and content validation of the collected data structure
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clause 5.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET all PNF Descriptors Information Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PnfdInfos	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDescriptors.robot>.

5.3.1.4.2 GET PNF Descriptors Information with attribute-based filter

Test Purpose	
Test ID	5.3.1.4.2
Test title	GET PNF Descriptors Information with attribute-based filter
Test objective	The objective is to test the retrieval of PNF Descriptors information using attribute-based filter, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued attribute-based filter
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clause 5.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET PNF Descriptors Information with attribute-based filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PnfdInfos Check HTTP Response Body PnfdInfos Matches the requested attribute-based filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDescriptors.robot>.

5.3.1.4.3 GET PNF Descriptors Information with invalid attribute-based filter

Test Purpose	
Test ID	5.3.1.4.3
Test title	GET PNF Descriptors Information with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of PNF Descriptors information fails when using invalid attribute-based filter, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clause 5.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET PNF Descriptors Information with invalid attribute-based filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDescriptors.robot>.

5.3.1.4.4 GET all PNF Descriptors Information with "all_fields" attribute selector

Test Purpose	
Test ID	5.3.1.4.4
Test title	GET all PNF Descriptors Information with "all_fields" attribute selector
Test objective	The objective is to test the retrieval of all PNF Descriptors Information with "all_fields" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "all_fields" selector
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clauses 4.3.3.2.1 and 5.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET all PNF Descriptors Information with all_fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PnfdInfos Check HTTP Response Body PnfdInfos Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDescriptors.robot>.

5.3.1.4.5 GET all PNF Descriptors Information with "exclude_default" attribute selector

Test Purpose	
Test ID	5.3.1.4.5
Test title	GET all PNF Descriptors Information with "exclude_default" attribute selector
Test objective	The objective is to test the retrieval of all PNF Descriptors Information with "exclude_default" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "exclude_default" selector
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clauses 4.3.3.2.1 and 5.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET all PNF Descriptors Information with exclude_default attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PnfdInfos	
Check HTTP Response Body PnfdInfos Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDescriptors.robot>.

5.3.1.4.6 GET all PNF Descriptors Information with "fields" attribute selector

Test Purpose	
Test ID	5.3.1.4.6
Test title	GET all PNF Descriptors Information with "fields" attribute selector
Test objective	The objective is to test the retrieval of all PNF Descriptors Information with "fields" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "fields" selector
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clauses 4.3.3.2.1 and 5.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the use of "fields" attribute selector
Post-Conditions	None
Test Case	
GET all PNF Descriptors Information with fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PnfdInfos	
Check HTTP Response Body PnfdInfos Matches the requested fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDescriptors.robot>.

5.3.1.4.7 GET all PNF Descriptors Information with "exclude_fields" attribute selector

Test Purpose	
Test ID	5.3.1.4.7
Test title	GET all PNF Descriptors Information with "exclude_fields" attribute selector
Test objective	The objective is to test the retrieval of all PNF Descriptors Information with "exclude_fields" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "exclude_fields" selector
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clauses 4.3.3.2.1 and 5.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the use of "exclude_fields" attribute selector
Post-Conditions	None
Test Case	
GET all PNF Descriptors Information with exclude_fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PnfdInfos Check HTTP Response Body PnfdInfos Matches the requested exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDescriptors.robot>.

5.3.1.4.8 Create new PNF Descriptor Resource

Test Purpose	
Test ID	5.3.1.4.8
Test title	Create new PNF Descriptor Resource
Test objective	The objective is to test the creation of a new Create new PNF Descriptor resource and perform the JSON schema validation of the returned structure
Pre-conditions	None
Reference	Clause 5.4.5.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The PNF Descriptor resource is successfully created on the NFVO
Test Case	
Send Post Request to create new PNF Descriptor Resource Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is PnfdInfo Check HTTP Response Header Contains Location Check Postcondition PnfdInfo Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDescriptors.robot>.

5.3.1.4.9 PUT all PNF Descriptors - Method not implemented

Test Purpose	
Test ID	5.3.1.4.9
Test title	PUT all PNF Descriptors Information - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify PNF Descriptors Information
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clause 5.4.5.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for all PNF Descriptors Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDescriptors.robot>.

5.3.1.4.10 PATCH all PNF Descriptors - Method not implemented

Test Purpose	
Test ID	5.3.1.4.10
Test title	PATCH all PNF Descriptors Information - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update NF Descriptors Information
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clause 5.4.5.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for all PNF Descriptors Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDescriptors.robot>.

5.3.1.4.11 DELETE all PNF Descriptors - Method not implemented

Test Purpose	
Test ID	5.3.1.4.11
Test title	DELETE all PNF Descriptors Information - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete PNF Descriptors Information
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clause 5.4.5.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The PNF Descriptors are not deleted by the failed operation
Test Case	
Send DELETE Request for all PNF Descriptors Check HTTP Response Status Code Is 405 Check Postcondition PNF Descriptors Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDescriptors.robot>.

5.3.1.5 Individual PNF Descriptor Resource Endpoint

5.3.1.5.1 GET Individual PNF Descriptor Information

Test Purpose	
Test ID	5.3.1.5.1
Test title	GET Individual PNF Descriptor Information
Test objective	The objective is to test the retrieval of an individual PNF Descriptor information and perform a JSON schema validation of the collected data structure
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clause 5.4.6.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual PNF Descriptor Information Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PnfInfo Check HTTP Response Header Contains ETag Check HTTP Response Body PnfInfo Identifier matches the requested PNF Descriptor Information	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualPnfDescriptor.robot>.

5.3.1.5.2 GET Individual PNF Descriptor Information with invalid resource identifier

Test Purpose	
Test ID	5.3.1.5.2
Test title	GET Individual PNF Descriptor Information with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual PNF Descriptor Information fails when using an invalid resource identifier
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clause 5.4.6.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual PNF Descriptor Information with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualPnfDescriptor.robot>.

5.3.1.5.3 Update Individual PNF Descriptor

Test Purpose	
Test ID	5.3.1.5.3
Test title	Update Individual PNF Descriptor
Test objective	The objective is to test the update of an individual PNF Descriptor and perform a JSON schema and content validation of the collected data structure
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clause 5.4.6.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The PNF Descriptor is modified according to the update request
Test Case	
Send PATCH to update Individual PNF Descriptor Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PnfInfoModification Check Postcondition PNF Descriptor is modified according to the requested update	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualPnfDescriptor.robot>.

5.3.1.5.4 Update Individual PNF Descriptor with HTTP Etag precondition failure

Test Purpose	
Test ID	5.3.1.5.4
Test title	Update Individual PNF Descriptor with HTTP Etag precondition failure
Test objective	The objective is to test that the update of a PNF Descriptor fails due to a precondition failure when using an incorrect Http Etag identified
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clause 5.4.6.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH to update Individual PNF Descriptor with HTTP Etag precondition failure Check HTTP Response Status Code Is 412	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualPnfDescriptor.robot>.

5.3.1.5.5 POST Individual PNF Descriptor - Method not implemented

Test Purpose	
Test ID	5.3.1.5.5
Test title	POST Individual PNF Descriptor - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new PNF Descriptor
Pre-conditions	None
Reference	Clause 5.4.6.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for Individual PNF Descriptor Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualPnfDescriptor.robot>.

5.3.1.5.6 PUT Individual PNF Descriptor - Method not implemented

Test Purpose	
Test ID	5.3.1.5.6
Test title	PUT Individual PNF Descriptor - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify a PNF Descriptor
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clause 5.4.6.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for Individual PNF Descriptor Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualPnfDescriptor.robot>.

5.3.1.5.7 DELETE Individual PNF Descriptor

Test Purpose	
Test ID	5.3.1.5.7
Test title	DELETE Individual PNF Descriptor
Test objective	The objective is to test the deletion of an individual PNF Descriptor
Pre-conditions	One or more PNF Descriptors are onboarded in the NFVO
Reference	Clause 5.4.6.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The PNF Descriptor is not available anymore in the NFVO
Test Case	
Send DELETE Request for Individual PNF Descriptor Check HTTP Response Status Code Is 204 Check Postcondition PNF Descriptor is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualPnfDescriptor.robot>.

5.3.1.6 PNFDF Content Resource Endpoint

5.3.1.6.1 Get PNFDF Content

Test Purpose	
Test ID	5.3.1.6.1
Test title	Get PNFDF Content
Test objective	The objective is to test the retrieval of the PNFDF Content in plain format and perform a validation that returned content is in plain format
Pre-conditions	One or more PNFDFs are onboarded in the NFVO
Reference	Clause 5.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get PNFDF Content Check HTTP Response Status Code Is 200 Check HTTP Response Header Content-Type Is text/plain	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDFContent.robot>.

5.3.1.6.2 Get PNFDF Content with invalid resource identifier

Test Purpose	
Test ID	5.3.1.6.2
Test title	Get PNFDF Content with invalid resource identifier
Test objective	The objective is to test that the retrieval of the PNFDF Content fails when using an invalid resource identifier
Pre-conditions	None
Reference	Clause 5.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get PNFDF Content with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDFContent.robot>.

5.3.1.6.3 Get PNFDF Content with conflict due to onboarding state

Test Purpose	
Test ID	5.3.1.6.3
Test title	Get PNFDF Content with conflict due to onboarding state
Test objective	The objective is to test that the retrieval of the PNFDF Content fails due to a conflict when the PNFDF is not in onboarding state ONBOARDED in the NFVO. The test also performs a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	The onboarding state of the PNFDF for which the PNFDF Content is requested is different from ONBOARDED
Reference	Clause 5.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get PNFDF Content with conflict due to onboarding state Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDContent.robot>.

5.3.1.6.4 Upload PNFD Content as plain text file

Test Purpose	
Test ID	5.3.1.6.4
Test title	Upload PNFD Content as plain text file
Test objective	The objective is to test the upload of a PNFD Content in plain text format
Pre-conditions	One or more PNFDs are onboarded in the NFVO
Reference	Clause 5.4.7.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The uploaded PNFD content is available in the NFVO
Test Case	
Send PUT Request to upload PNFD Content as plain text file	
Check HTTP Response Status Code Is 204	
Check Postcondition PNFD Content Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDContent.robot>.

5.3.1.6.5 Upload PNFD Content with conflict due to onboarding state

Test Purpose	
Test ID	5.3.1.6.5
Test title	Upload PNFD Content with conflict due to onboarding state
Test objective	The objective is to test that the upload of the PNFD Content fails due to a conflict when the PNFD is not in onboarding state CREATED in the NFVO. The test also performs a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	The onboarding state of the PNFD for which the PNFD Content is requested is different from CREATED
Reference	Clause 5.4.7.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request to upload PNFD Content with conflict due to onboarding state	
Check HTTP Response Status Code Is 409	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDContent.robot>.

5.3.1.6.6 POST PNFD Content - Method not implemented

Test Purpose	
Test ID	5.3.1.6.6
Test title	POST PNFD Content - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new PNF Descriptor content
Pre-conditions	None
Reference	Clause 5.4.7.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for PNFD Content	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDContent.robot>.

5.3.1.6.7 PATCH PNFD Content - Method not implemented

Test Purpose	
Test ID	5.3.1.6.7
Test title	PATCH PNFD Content - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update PNF Descriptor content
Pre-conditions	None
Reference	Clause 5.4.7.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for PNFD Content Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDContent.robot>.

5.3.1.6.8 DELETE PNFD Content - Method not implemented

Test Purpose	
Test ID	5.3.1.6.8
Test title	DELETE PNFD Content - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete PNF Descriptor content
Pre-conditions	None
Reference	Clause 5.4.7.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The PNFD content is not deleted by the failed operation
Test Case	
Send DELETE Request for PNFD Content Check HTTP Response Status Code Is 405 Check Postcondition PNFD Content Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/PNFDContent.robot>.

5.3.1.7 Subscriptions Resource Endpoint

5.3.1.7.1 Get All NSD Management Subscriptions

Test Purpose	
Test ID	5.3.1.7.1
Test title	Get All NSD Management Subscriptions
Test objective	The objective is to test the retrieval of all NSD Management subscriptions and perform a JSON schema validation of the returned subscriptions data structure
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.8.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get all NSD Management Subscriptions Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is NsdmSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/Subscriptions.robot>.

5.3.1.7.2 Get NSD Management Subscriptions with attribute-based filter

Test Purpose	
Test ID	5.3.1.7.2
Test title	Get NSD Management Subscriptions with attribute-based filter
Test objective	The objective is to test the retrieval of NSD Management subscriptions using attribute-based filter, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued attribute-based filters
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.8.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get NSD Management Subscriptions with attribute-based filters Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is NsdmSubscription Check HTTP Response Body Subscriptions Match the requested Attribute-Based Filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/Subscriptions.robot>.

5.3.1.7.3 Get NSD Management Subscriptions with invalid attribute-based filter

Test Purpose	
Test ID	5.3.1.7.3
Test title	Get NSD Management Subscriptions with attribute-based filters
Test objective	The objective is to test that the retrieval of NSD Management subscriptions fails when using invalid attribute-based filters, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.8.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get NSD Management Subscriptions with invalid attribute-based filters Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/Subscriptions.robot>.

5.3.1.7.4 GET NSD Management Subscription with invalid resource endpoint

Test Purpose	
Test ID	5.3.1.7.4
Test title	GET NSD Management Subscription with invalid resource endpoint
Test objective	The objective is to test that the retrieval of all NSD Management subscriptions fails when using invalid resource endpoint
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.8.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get NSD Management Subscriptions with invalid resource endpoint Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/Subscriptions.robot>.

5.3.1.7.5 Create new NSD Management subscription

Test Purpose	
Test ID	5.3.1.7.5
Test title	Create new NSD Management subscription
Test objective	The objective is to test the creation of a new NSD Management subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	None
Reference	Clause 5.4.8.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NSD Management subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for NSD Management Subscription	
Check HTTP Response Status Code Is 201	
Check HTTP Response Body Json Schema Is NsdmSubscription	
Check HTTP Response Body NsdmSubscription Attributes Values Match the Issued Subscription	
Check Postcondition NSD Management Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/Subscriptions.robot>.

5.3.1.7.6 Create duplicated NSD Management subscription with NFVO not creating duplicated subscriptions

Test Purpose	
Test ID	5.3.1.7.6
Test title	Create duplicated NSD Management subscription with NFVO not creating duplicated subscriptions
Test objective	The objective is to test the attempt of a creation of a duplicated NSD Management subscription and check that no new subscription is created by the NFVO and a link to the original subscription is returned
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.8.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO does not support the creation of duplicated subscriptions
Post-Conditions	The existing NSD Management subscription returned is available in the NFVO
Test Case	
Send Post Request for Duplicated NSD Management Subscription	
Check HTTP Response Status Code Is 303	
Check HTTP Response Body Is Empty	
Check HTTP Response Header Contains Location	
Check Postcondition Subscription Resource Returned in Location Header Is Available	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/Subscriptions.robot>.

5.3.1.7.7 Create duplicated NSD Management subscription with NFVO creating duplicated subscriptions

Test Purpose	
Test ID	5.3.1.7.7
Test title	Create duplicated NSD Management subscription with NFVO creating duplicated subscriptions
Test objective	The objective is to test the creation of a duplicated NSD Management subscription and perform a JSON schema and content validation of the returned duplicated subscription data structure
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.8.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the creation of duplicated subscriptions
Post-Conditions	The duplicated NSD Management subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for Duplicated NSD Management Subscription Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is PmSubscription Check HTTP Response Body NsdmSubscription Attributes Values Match the Issued Subscription Check Postcondition NSD Management Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/Subscriptions.robot>.

5.3.1.7.8 PUT NSD Management Subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.1.7.8
Test title	PUT NSD Management Subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify NSD Management subscriptions
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.8.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Put Request for NSD Management Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/Subscriptions.robot>.

5.3.1.7.9 PATCH NSD Management Subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.1.7.9
Test title	PATCH NSD Management Subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update NSD Management subscriptions
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.8.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Patch Request for NSD Management Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/Subscriptions.robot>.

5.3.1.7.10 DELETE NSD Management Subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.1.7.10
Test title	DELETE NSD Management Subscriptions - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete NSD Management subscriptions
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.8.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NSD Management subscriptions are not deleted by the failed operation
Test Case	
Send Delete Request for NSD Management Subscriptions	
Check HTTP Response Status Code Is 405	
Check Postcondition NSD Management Subscriptions Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/Subscriptions.robot>.

5.3.1.8 Individual Subscription Resource Endpoint

5.3.1.8.1 GET Individual NSD Management Subscription

Test Purpose	
Test ID	5.3.1.8.1
Test title	GET Individual NSD Management Subscription
Test objective	The objective is to test the retrieval of individual NSD Management subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.9.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get Individual NSD Management Subscription	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PkgmSubscription	
Check HTTP Response Body Subscription Identifier matches the requested Subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualSubscription.robot>.

5.3.1.8.2 GET Individual NSD Management Subscription with invalid resource identifier

Test Purpose	
Test ID	5.3.1.8.2
Test title	GET Individual NSD Management Subscription with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual NSD Management subscription fails when using an invalid resource identifier
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.9.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET individual NSD Management Subscription with invalid resource identifier	
Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualSubscription.robot>.

5.3.1.8.3 DELETE Individual NSD Management Subscription with invalid resource identifier

Test Purpose	
Test ID	5.3.1.8.3
Test title	DELETE Individual NSD Management Subscription with invalid resource identifier
Test objective	The objective is to test that the deletion of an individual NSD Management subscription fails when using an invalid resource identifier
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.9.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Delete request for individual NSD Management Subscription with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualSubscription.robot>.

5.3.1.8.4 POST Individual NSD Management Subscription - Method not implemented

Test Purpose	
Test ID	5.3.1.8.4
Test title	POST Individual NSD Management Subscription - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new NSD Management Subscription
Pre-conditions	None
Reference	Clause 5.4.9.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NSD Management Subscription is not created on the NFVO
Test Case	
Send Post request for individual NSD Management Subscription Check HTTP Response Status Code Is 405 Check Postcondition NSD Management Subscription is not Created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualSubscription.robot>.

5.3.1.8.5 PUT Individual NSD Management Subscription - Method not implemented

Test Purpose	
Test ID	5.3.1.8.5
Test title	PUT Individual NSD Management Subscription - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing NSD Management subscription
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.9.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NSD Management subscription is not modified by the operation
Test Case	
Send Put request for individual NSD Management Subscription Check HTTP Response Status Code Is 405 Check Postcondition NSD Management Subscription is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualSubscription.robot>.

5.3.1.8.6 PATCH Individual NSD Management Subscription - Method not implemented

Test Purpose	
Test ID	5.3.1.8.6
Test title	PATCH Individual NSD Management Subscription - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing NSD Management subscription
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.9.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NSD Management subscription is not modified by the operation
Test Case	
Send Patch request for individual NSD Management Subscription	
Check HTTP Response Status Code Is 405	
Check Postcondition NSD Management Subscription is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualSubscription.robot>.

5.3.1.8.7 DELETE Individual NSD Management Subscription

Test Purpose	
Test ID	5.3.1.8.7
Test title	DELETE Individual NSD Management Subscription
Test objective	The objective is to test the deletion of an individual NSD Management subscription
Pre-conditions	At least one NSD Management subscription is available in the NFVO
Reference	Clause 5.4.9.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NSD Management Subscription is not available anymore in the NFVO
Test Case	
Send Delete request for individual NSD Management Subscription	
Check HTTP Response Status Code Is 204	
Check Postcondition NSD Management Subscription is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/IndividualSubscription.robot>.

5.3.1.9 Notifications Endpoint

5.3.1.9.1 NSD Onboarding Notification

Test Purpose	
Test ID	5.3.1.9.1
Test title	NSD Onboarding Notification
Test objective	The objective is to test the dispatch of NSD Onboarding notification when the NSD onboarding operation is successfully completed, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A NSD management subscription for onboarding notifications is available in the NFVO
Reference	Clause 5.4.10.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the completion of NSD Onboarding (external action)	
Check NSD Onboarding Notification Http Request Body Json Schema Is NsdOnboardingNotification	
Check NSD Onboarding Notification Http Request Body notificationType attribute Is NsdOnboardingNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDManagementNotification.robot>.

5.3.1.9.2 NSD Onboarding Failure Notification

Test Purpose	
Test ID	5.3.1.9.2
Test title	NSD Onboarding Failure Notification
Test objective	The objective is to test the dispatch of NSD Onboarding failure notification when the NSD onboarding operation fails, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A NSD management subscription for onboarding failure notifications is available in the NFVO
Reference	Clause 5.4.10.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the failure of NSD Onboarding (external action) Check NSD Onboarding Failure Notification Http Request Body Json Schema Is NsdOnboardingFailureNotification Check NSD Onboarding Failure Notification Http Request Body notificationType attribute Is NsdOnboardingFailureNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDManagementNotification.robot>.

5.3.1.9.3 NSD Operational State Change Notification

Test Purpose	
Test ID	5.3.1.9.3
Test title	NSD Operational State Change Notification
Test objective	The objective is to test the dispatch of NSD Operational State Change notification when the NSD operational status change in the NFVO, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A NSD management subscription for operational state change notifications is available in the NFVO
Reference	Clause 5.4.10.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the change of NSD Operational State (external action) Check NSD Operational State Change Notification Http Request Body Json Schema Is NsdChangeNotification Check NSD Operational State Change Notification Http Request Body notificationType attribute Is NsdChangeNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDManagementNotification.robot>.

5.3.1.9.4 NSD Deletion Notification

Test Purpose	
Test ID	5.3.1.9.4
Test title	NSD Deletion Notification
Test objective	The objective is to test the dispatch of NSD Deletion notification when the NSD is deleted from the NFVO, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A NSD management subscription for deletion notifications is available in the NFVO
Reference	Clause 5.4.10.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the deletion of NSD (external action) Check NSD Deletion Notification Http Request Body Json Schema Is NsdDeletionNotification Check NSD Deletion Notification Http Request Body notificationType attribute Is NsdDeletionNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDManagementNotification.robot>.

5.3.1.9.5 PNFD Onboarding Notification

Test Purpose	
Test ID	5.3.1.9.5
Test title	PNFD Onboarding Notification
Test objective	The objective is to test the dispatch of PNFD Onboarding notification when the PNFD onboarding operation is successfully completed, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A PNFD management subscription for onboarding notifications is available in the NFVO
Reference	Clause 5.4.10.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the completion of PNFD Onboarding (external action) Check PNFD Onboarding Notification Http Request Body Json Schema Is PnfdOnboardingNotification Check PNFD Onboarding Notification Http Request Body notificationType attribute Is PnfdOnboardingNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDManagementNotification.robot>.

5.3.1.9.6 PNFD Onboarding Failure Notification

Test Purpose	
Test ID	5.3.1.9.6
Test title	PNFD Onboarding Failure Notification
Test objective	The objective is to test the dispatch of PNFD Onboarding failure notification when the PNFD onboarding operation fails, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A PNFD management subscription for onboarding failure notifications is available in the NFVO
Reference	Clause 5.4.10.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the failure of PNFD Onboarding (external action) Check PNFD Onboarding Failure Notification Http Request Body Json Schema Is PnfdOnboardingFailureNotification Check PNFD Onboarding Failure Notification Http Request Body notificationType attribute Is PnfdOnboardingFailureNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDManagementNotification.robot>.

5.3.1.9.7 PNFD Deletion Notification

Test Purpose	
Test ID	5.3.1.9.7
Test title	PNFD Deletion Notification
Test objective	The objective is to test the dispatch of PNFD Deletion notification when the PNFD is deleted from the NFVO, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A PNFD management subscription for deletion notifications is available in the NFVO
Reference	Clause 5.4.10.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the deletion of PNFD (external action) Check PNFD Deletion Notification Http Request Body Json Schema Is PnfdDeletionNotification Check PNFD Deletion Notification Http Request Body notificationType attribute Is PnfdDeletionNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSDManagement-API/NSDManagementNotification.robot>.

5.3.2 NS Lifecycle Management interface

5.3.2.1 NsInstances

5.3.2.1.1 POST Create a new NsInstance

Test Purpose	
Test ID	5.3.2.1.1
Test title	POST Create a new NsInstance
Test objective	The objective is to test the creation of a new Ns Instances and perform a JSON schema validation of the collected instance data structure
Pre-conditions	None
Reference	Clause 6.4.2.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	A Ns instance is instantiated
Test Case	
POST New nsInstance Check HTTP Response Status Code Is 201 Check HTTP Response Header Contains Location Check HTTP Response Body Json Schema Is NsInstance	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSInstances.robot>.

5.3.2.1.2 GET information about multiple NS instances

Test Purpose	
Test ID	5.3.2.1.2
Test title	GET information about multiple NS instances
Test objective	The objective is to test the retrieval of all the available NS Instances and perform a JSON schema and content validation of the collected instance data structure
Pre-conditions	An existing Ns instance
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET NsInstances Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is NsInstances	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSInstances.robot>.

5.3.2.1.3 GET information about multiple NS instances Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	5.3.2.1.3
Test title	GET information about multiple NS instances Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is to test the retrieval of all the available NS Instances using attribute-based filter and perform a JSON schema and content validation of the collected instance data structure
Pre-conditions	A Ns instance is instantiated, a bad filter parameter (filter parameters are listed in table 6.4.2.3.2-1 - ETSI GS NFV-SOL 005 [3] v2.4.1)
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET NsInstance Invalid Attribute-Based filtering parameter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSInstances.robot>.

5.3.2.1.4 GET information about multiple NS instances Bad Request Invalid attribute selector

Test Purpose	
Test ID	5.3.2.1.4
Test title	GET information about multiple NS instances Bad Request Invalid attribute selector
Test objective	The objective is to test the retrieval of all the available NS Instances using attribute-based filter and perform a JSON schema and content validation of the collected instance data structure
Pre-conditions	A Ns instance is instantiated, a bad attribute selector (attribute selectors are listed in table 6.4.2.3.2-1 - ETSI GS NFV-SOL 005 [3] v2.4.1)
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET NsInstance Invalid Attribute Selector Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSInstances.robot>.

5.3.2.1.5 GET NSInstances with "all_fields" attribute selector

Test Purpose	
Test ID	5.3.2.1.5
Test title	GET NSInstances with "all_fields" attribute selector
Test objective	The objective is to retrieve the list of active NSInstances with attribute selector
Pre-conditions	None
Reference	Clause 6.4.2.3.2 - ETSI ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get NSInstances with all_fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is FmSubscriptions Check HTTP Response Body NSInstances Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSInstances.robot>.

5.3.2.1.6 GET NSInstances with "exclude_default" attribute selector

Test Purpose	
Test ID	5.3.2.1.6
Test title	GET NSInstances with "exclude_default" attribute selector
Test objective	The objective is to retrieve the list of active NSInstances with attribute selector
Pre-conditions	None
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get NSInstances with exclude_default attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is FmSubscriptions	
Check HTTP Response Body NSInstances Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSInstances.robot>.

5.3.2.1.7 GET NSInstances with "fields" attribute selector

Test Purpose	
Test ID	5.3.2.1.7
Test title	GET NSInstances with "fields" attribute selector
Test objective	The objective is to retrieve the list of active NSInstances with attribute selector
Pre-conditions	None
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get NSInstances with fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is FmSubscriptions	
Check HTTP Response Body NSInstances Matches the requested fields attribute selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSInstances.robot>.

5.3.2.1.8 GET NSInstances with "exclude_fields" attribute selector

Test Purpose	
Test ID	5.3.2.1.8
Test title	GET NSInstances with "exclude_fields" attribute selector
Test objective	The objective is to retrieve the list of active NSInstances with attribute selector
Pre-conditions	None
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get NSInstances with exclude_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is FmSubscriptions	
Check HTTP Response Body NSInstances Matches the requested exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSInstances.robot>.

5.3.2.1.9 PUT NSInstances - Method not implemented

Test Purpose	
Test ID	5.3.2.1.9
Test title	PUT Individual NS instance - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.2.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not modified by the operation
Test Case	
PUT NSInstances Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSInstances.robot>.

5.3.2.1.10 PATCH NSInstances - Method not implemented

Test Purpose	
Test ID	5.3.2.1.10
Test title	PATCH NSInstances - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.2.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not modified by the operation
Test Case	
PATCH NSInstances Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSInstances.robot>.

5.3.2.1.11 DELETE NSInstances - Method not implemented

Test Purpose	
Test ID	5.3.2.1.11
Test title	DELETE NSInstances - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 6.4.2.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not deleted by the operation
Test Case	
DELETE NSInstances Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSInstances.robot>.

5.3.2.2 Individual NSInstance

5.3.2.2.1 POST Individual NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.2.1
Test title	POST Individual NSInstance - Method not implemented
Test objective	The objective is to test that POST method is not implemented
Pre-conditions	None
Reference	Clause 6.4.3.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not created on the NFVO
Test Case	
POST IndividualNSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualNSInstance.robot>.

5.3.2.2.2 GET Information about an individual NS Instance

Test Purpose	
Test ID	5.3.2.2.2
Test title	GET Information about an individual NS Instance
Test objective	The objective is to test that GET method returns an individual NS instance
Pre-conditions	None
Reference	Clause 6.4.3.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET IndividualNSInstance Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is NsInstance	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualNSInstance.robot>.

5.3.2.2.3 PUT Individual NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.2.3
Test title	PUT Individual NSInstance - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.3.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not modified on the NFVO
Test Case	
PUT IndividualNSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualNSInstance.robot>.

5.3.2.2.4 PATCH Individual NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.2.4
Test title	PATCH Individual NSInstance - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.3.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not modified on the NFVO
Test Case	
PATCH IndividualNSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualNSInstance.robot>.

5.3.2.2.5 DELETE Individual NSInstance

Test Purpose	
Test ID	5.3.2.2.5
Test title	DELETE Individual NSInstance
Test objective	The objective is to test that DELETE method delete a not INSTANTIATED NS instance
Pre-conditions	NS instance is not INSTANTIATED
Reference	Clause 6.4.3.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is deleted from the NFVO
Test Case	
DELETE IndividualNSInstance Check HTTP Response Status Code Is 204	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualNSInstance.robot>.

5.3.2.2.6 DELETE Individual NSInstance Conflict

Test Purpose	
Test ID	5.3.2.2.6
Test title	DELETE Individual NSInstance Conflict
Test objective	The objective is to test that DELETE method cannot delete an INSTANTIATED NS instance
Pre-conditions	One instance of a NS in INSTANTIATED state
Reference	Clause 6.4.3.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not deleted from the NFVO
Test Case	
DELETE IndividualNSInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualNSInstance.robot>.

5.3.2.3 Instantiate NS Task

5.3.2.3.1 POST Instantiate a nsInstance

Test Purpose	
Test ID	5.3.2.3.1
Test title	POST Instantiate a nsInstance
Test objective	The objective is to test that POST method instantiate a new NS instance
Pre-conditions	None
Reference	Clause 6.4.4.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is instantiated on the NFVO
Test Case	
POST Instantiate nsInstance Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check resource INSTANTIATED	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/InstantiateNSTask.robot>.

5.3.2.3.2 POST Instantiate a nsInstance Conflict

Test Purpose	
Test ID	5.3.2.3.2
Test title	POST Instantiate a nsInstance Conflict
Test objective	The objective is to test that the operation cannot be performed due to a conflict with the state of resource (i.e. the resource is in INSTANTIATED state)
Pre-conditions	resource is in INSTANTIATED state
Reference	Clause 6.4.4.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not instantiated on the NFVO
Test Case	
POST Instantiate nsInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails Check resource not_instantiated	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/InstantiateNSTask.robot>.

5.3.2.3.3 GET Instantiate NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.3.3
Test title	GET Instantiate NSInstance - Method not implemented
Test objective	The objective is to test that the operation cannot be performed due because method is not implemented
Pre-conditions	None
Reference	Clause 6.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Instantiate NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/InstantiateNSTask.robot>.

5.3.2.3.4 PUT Instantiate NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.3.4
Test title	PUT Instantiate NSInstance - Method not implemented
Test objective	The objective is to test that the operation cannot be performed due because method is not implemented
Pre-conditions	None
Reference	Clause 6.4.4.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT Instantiate NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/InstantiateNSTask.robot>.

5.3.2.3.5 PATCH Instantiate NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.3.5
Test title	PATCH Instantiate NSInstance - Method not implemented
Test objective	The objective is to test that the operation cannot be performed due because method is not implemented
Pre-conditions	None
Reference	Clause 6.4.4.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH Instantiate NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/InstantiateNSTask.robot>.

5.3.2.3.6 DELETE Instantiate NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.3.6
Test title	DELETE Instantiate NSInstance - Method not implemented
Test objective	The objective is to test that the operation cannot be performed due because method is not implemented
Pre-conditions	None
Reference	Clause 6.4.4.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
DELETE Instantiate NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/InstantiateNSTask.robot>.

5.3.2.4 Scale a nsInstance

5.3.2.4.1 POST Scale a nsInstance

Test Purpose	
Test ID	5.3.2.4.1
Test title	POST Scale a nsInstance
Test objective	The objective is to test that POST method scales NS instance
Pre-conditions	the resource is in NOT_INSTANTIATED state
Reference	Clause 6.4.5.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
POST scale nsInstance Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check resource existence	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ScaleNSTask.robot>.

5.3.2.4.2 POST Instantiate a nsInstance Conflict

Test Purpose	
Test ID	5.3.2.4.2
Test title	POST Instantiate a nsInstance Conflict
Test objective	The objective is to test that POST method cannot scale NS instance because of conflict in resource status (i.e. because the resource is in not in NOT_INSTANTIATED state)
Pre-conditions	the resource is in not in NOT_INSTANTIATED state
Reference	Clause 6.4.5.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The Scale NS operation is not triggered on the NFVO
Test Case	
POST scale nsInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ScaleNSTask.robot>.

5.3.2.4.3 GET Scale NSInstance- Method not implemented

Test Purpose	
Test ID	5.3.2.4.3
Test title	GET Scale NSInstance- Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 6.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET scale NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ScaleNSTask.robot>.

5.3.2.4.4 PUT Scale NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.4.4
Test title	PUT Scale NSInstance - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.5.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT scale NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ScaleNSTask.robot>.

5.3.2.4.5 PATCH Scale NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.4.5
Test title	PATCH Scale NSInstance - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.5.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH scale NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ScaleNSTask.robot>.

5.3.2.4.6 DELETE Scale NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.4.6
Test title	DELETE Scale NSInstance - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 6.4.5.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
DELETE scale NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ScaleNSTask.robot>.

5.3.2.5 Update a NSInstance

5.3.2.5.1 POST Update a NSInstance

Test Purpose	
Test ID	5.3.2.5.1
Test title	POST Update a NSInstance
Test objective	The objective is to test that POST method update a NS instance
Pre-conditions	an existing NS Instance
Reference	Clause 6.4.6.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is updated on the NFVO
Test Case	
POST Update NSInstance Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/UpdateNSTask.robot>.

5.3.2.5.2 POST Update a NSInstance Conflict

Test Purpose	
Test ID	5.3.2.5.2
Test title	POST Update a NSInstance Conflict
Test objective	The objective is to test that POST method fail if a NS Instance is not existing or is not in NOT_INSTANTIATED state
Pre-conditions	an existing NS Instance
Reference	Clause 6.4.6.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not updated on the NFVO
Test Case	
POST Update NSInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/UpdateNSTask.robot>.

5.3.2.5.3 GET Update NSInstance- Method not implemented

Test Purpose	
Test ID	5.3.2.5.3
Test title	GET Update NSInstance- Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 6.4.6.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Update NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/UpdateNSTask.robot>.

5.3.2.5.4 PUT Update NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.5.4
Test title	PUT Update NSInstance - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.6.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not updated on the NFVO
Test Case	
PUT Update NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/UpdateNSTask.robot>.

5.3.2.5.5 PATCH Update NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.5.5
Test title	PATCH Update NSInstance - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.6.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not updated on the NFVO
Test Case	
PATCH Update NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/UpdateNSTask.robot>.

5.3.2.5.6 DELETE Update NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.5.6
Test title	DELETE Update NSInstance - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 6.4.6.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not deleted on the NFVO
Test Case	
DELETE Update NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/UpdateNSTask.robot>.

5.3.2.6 Heal a NSInstance

5.3.2.6.1 POST Heal a NSInstance

Test Purpose	
Test ID	5.3.2.6.1
Test title	POST Heal a NSInstance
Test objective	The objective is to test that POST method trigger a Heal NS instance
Pre-conditions	resource status is not in NOT_INSTANTIATED state
Reference	Clause 6.4.7.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
POST Heal NSInstance Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/HealNSTask.robot>.

5.3.2.6.2 POST Heal a NSInstance Conflict

Test Purpose	
Test ID	5.3.2.6.2
Test title	POST Heal a NSInstance Conflict
Test objective	The objective is to test that POST method fail if NS instance is not in NOT_INSTANTIATE state
Pre-conditions	resource status is in NOT_INSTANTIATED state
Reference	Clause 6.4.7.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
POST Heal NSInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/HealNSTask.robot>.

5.3.2.6.3 GET Heal NSInstance- Method not implemented

Test Purpose	
Test ID	5.3.2.6.3
Test title	GET Heal NSInstance- Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 6.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Heal NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/HealNSTask.robot>.

5.3.2.6.4 PUT Heal NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.6.4
Test title	PUT Heal NSInstance - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.7.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT Heal NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/HealNSTask.robot>.

5.3.2.6.5 PATCH Heal NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.6.4
Test title	PATCH Heal NSInstance - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.7.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH Heal NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/HealNSTask.robot>.

5.3.2.6.6 DELETE Heal NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.6.4
Test title	DELETE Heal NSInstance - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 6.4.7.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
DELETE Heal NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/HealNSTask.robot>.

5.3.2.7 Terminate a NSInstance

5.3.2.7.1 POST Terminate a NSInstance

Test Purpose	
Test ID	5.3.2.7.1
Test title	POST Terminate a NSInstance
Test objective	The objective is to test that POST method terminate the NS
Pre-conditions	NS instance in INSTANTIATED state
Reference	Clause 6.4.8.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	NS instance has NOT_INSTANTIATED state
Test Case	
POST Terminate NSInstance Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check resource not_instantiated	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/TerminateNSTask.robot>.

5.3.2.7.2 POST Terminate a NSInstance Conflict

Test Purpose	
Test ID	5.3.2.7.2
Test title	POST Terminate a NSInstance Conflict
Test objective	The objective is to test that POST method cannot terminate the NS because of conflict in resource status (i.e. the resource is not in INSTANTIATED state)
Pre-conditions	NS instance is in NOT_INSTANTIATED state
Reference	Clause 6.4.8.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	NS instance is in NOT_INSTANTIATED state
Test Case	
POST Terminate NSInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails Check resource not_instantiated	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/TerminateNSTask.robot>.

5.3.2.7.3 GET Terminate NSInstance- Method not implemented

Test Purpose	
Test ID	5.3.2.7.3
Test title	GET Terminate NSInstance - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 6.4.8.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Terminate NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/TerminateNSTask.robot>.

5.3.2.7.4 PUT Terminate NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.7.4
Test title	PUT Terminate NSInstance - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.8.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	resource state not modified
Test Case	
PUT Terminate NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/TerminateNSTask.robot>.

5.3.2.7.5 PATCH Terminate NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.7.5
Test title	PATCH Terminate NSInstance - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.8.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	resource state not modified
Test Case	
PATCH Terminate NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/TerminateNSTask.robot>.

5.3.2.7.6 DELETE Terminate NSInstance - Method not implemented

Test Purpose	
Test ID	5.3.2.7.5
Test title	DELETE Terminate NSInstance - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 6.4.8.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	resource state not modified
Test Case	
DELETE Terminate NSInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/TerminateNSTask.robot>.

5.3.2.8 NS LCM occurrences

5.3.2.8.1 POST NS LCM occurrences - Method not implemented

Test Purpose	
Test ID	5.3.2.8.1
Test title	POST NS LCM occurrences - Method not implemented
Test objective	The objective is to test that POST method is not implemented
Pre-conditions	None
Reference	Clause 6.4.9.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
POST NS LCM OP Occurrences Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSLCMOccurrences.robot>.

5.3.2.8.2 GET status information about multiple NS LCM occurrences

Test Purpose	
Test ID	5.3.2.8.2
Test title	GET status information about multiple NS LCM occurrences
Test objective	The objective is to test that GET method returns a list of LCM occurrences of the NS
Pre-conditions	At least one LCM occurrences available in the NFVO
Reference	Clause 6.4.9.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET NS LCM OP Occurrences Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is NsLcmOpOccs	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSLCMOccurrences.robot>.

5.3.2.8.3 GET status information about multiple NS LCM occurrences Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	5.3.2.8.3
Test title	GET status information about multiple NS LCM occurrences Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is to test that GET method fail because of wrong query parameter
Pre-conditions	At least one LCM occurrences available in the NFVO, Invalid filter parameter
Reference	Clause 6.4.9.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET NS LCM OP Occurrences Invalid attribute-based filtering parameters Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSLCMOccurrences.robot>.

5.3.2.8.4 GET status information about multiple NS LCM occurrences Bad Request Invalid attribute selector

Test Purpose	
Test ID	5.3.2.8.4
Test title	GET status information about multiple NS LCM occurrences Bad Request Invalid attribute selector
Test objective	The objective is to test that GET method fail because of wrong attributes selector
Pre-conditions	At least one LCM occurrences available in the NFVO, Invalid attribute selector
Reference	Clause 6.4.9.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET NS LCM OP Occurrences Invalid attribute selector Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSLCMOccurrences.robot>.

5.3.2.8.5 PUT status information about multiple NS LCM occurrences - Method not implemented

Test Purpose	
Test ID	5.3.2.8.5
Test title	PUT status information about multiple NS LCM occurrences - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.9.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT NS LCM OP Occurrences Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSLCMOccurrences.robot>.

5.3.2.8.6 PATCH status information about multiple NS LCM occurrences - Method not implemented

Test Purpose	
Test ID	5.3.2.8.6
Test title	PATCH status information about multiple NS LCM occurrences - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.9.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH NS LCM OP Occurrences Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSLCMOccurrences.robot>.

5.3.2.8.7 DELETE status information about multiple NS LCM occurrences - Method not implemented

Test Purpose	
Test ID	5.3.2.8.7
Test title	DELETE status information about multiple NS LCM occurrences - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 6.4.9.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
DELETE NS LCM OP Occurrences Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NSLCMOccurrences.robot>.

5.3.2.9 Individual NS LCM Occurrences

5.3.2.9.1 Post Individual NS LCM Occurrences - Method not implemented

Test Purpose	
Test ID	5.3.2.9.1
Test title	Post Individual NS LCM occurrences - Method not implemented
Test objective	The objective is to test that POST method is not implemented
Pre-conditions	None
Reference	Clause 6.4.10.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not created in the NFVO
Test Case	
POST Individual NS LCM OP Occurrence Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualNSLCMOccurrences.robot>.

5.3.2.9.2 Get status information about Individual NS LCM occurrences

Test Purpose	
Test ID	5.3.2.9.2
Test title	Get status information about Individual NS LCM occurrences
Test objective	The objective is to test that GET method returns the LCM occurrence of the NS
Pre-conditions	None
Reference	Clause 6.4.10.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual NS LCM OP Occurrence Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is NsLcmOpOcc	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualNSLCMOccurrences.robot>.

5.3.2.9.3 PUT status information about Individual NS LCM occurrences - Method not implemented

Test Purpose	
Test ID	5.3.2.9.3
Test title	PUT status information about Individual NS LCM occurrences - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.10.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not modified from the NFVO
Test Case	
PUT Individual NS LCM OP Occurrence Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualNSLCMOccurrences.robot>.

5.3.2.9.4 PATCH status information about Individual NS LCM occurrences - Method not implemented

Test Purpose	
Test ID	5.3.2.9.4
Test title	PATCH status information about Individual NS LCM occurrences - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.10.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not modified from the NFVO
Test Case	
PATCH Individual NS LCM OP Occurrence Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualNSLCMOccurrences.robot>.

5.3.2.9.5 DELETE status information about Individual NS LCM occurrences - Method not implemented

Test Purpose	
Test ID	5.3.2.9.5
Test title	DELETE status information about Individual NS LCM occurrences - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 6.4.10.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS instance is not deleted from the NFVO
Test Case	
DELETE Individual NS LCM OP Occurrence Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualNSLCMOccurrences.robot>.

5.3.2.10 Retry operation task

5.3.2.10.1 Post Retry operation task

Test Purpose	
Test ID	5.3.2.10.1
Test title	Post Retry operation task
Test objective	The objective is to test that POST method trigger a retry of NS lifecycle operation in case of temporary failure
Pre-conditions	NS instance status equal to FAILED_TEMP
Reference	Clause 6.4.11.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	NS instance status not equal to FAILED_TEMP
Test Case	
POST Retry operation task Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check operation resource state is not FAILED_TEMP	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RetryOperationTask.robot>.

5.3.2.10.2 Post Retry operation task Not Found

Test Purpose	
Test ID	5.3.2.10.2
Test title	Post Retry operation task Not Found
Test objective	The objective is to test that POST method fail in case of NS lifecycle operation not found
Pre-conditions	None
Reference	Clause 6.4.11.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
POST Retry operation task Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RetryOperationTask.robot>.

5.3.2.10.3 Post Retry operation task Conflict

Test Purpose	
Test ID	5.3.2.10.3
Test title	Post Retry operation task Conflict
Test objective	The objective is to test that POST method fail in case of NS lifecycle operation status conflict (i.e. NS instance status not equal to FAILED_TEMP)
Pre-conditions	NS instance status not equal to FAILED_TEMP
Reference	Clause 6.4.11.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
POST Retry operation task Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RetryOperationTask.robot>.

5.3.2.10.4 GET Retry operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.10.4
Test title	GET Retry operation task - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 6.4.11.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Retry operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RetryOperationTask.robot>.

5.3.2.10.5 PUT Retry operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.10.5
Test title	PUT Retry operation task - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.11.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT Retry operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RetryOperationTask.robot>.

5.3.2.10.6 PATCH Retry operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.10.6
Test title	PATCH Retry operation task - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.11.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH Retry operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RetryOperationTask.robot>.

5.3.2.10.7 DELETE Retry operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.10.7
Test title	DELETE Retry operation task - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 6.4.11.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
DELETE Retry operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RetryOperationTask.robot>.

5.3.2.11 Rollback operation task

5.3.2.11.1 POST Rollback operation task

Test Purpose	
Test ID	5.3.2.11.1
Test title	POST Rollback operation task
Test objective	The objective is to test that POST method triggers a rollback on the NS LCM operation
Pre-conditions	NS instance status equal to FAILED_TEMP
Reference	Clause 6.4.12.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	NS instance status not equal to FAILED_TEMP
Test Case	
POST Rollback operation task Check HTTP Response Status Code Is 202 Check operation resource state is not FAILED_TEMP	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RollbackOperationTask.robot>.

5.3.2.11.2 POST Rollback operation task Not Found

Test Purpose	
Test ID	5.3.2.11.2
Test title	POST Rollback operation task Not Found
Test objective	The objective is to test that POST method fails if NS LCM operation is not found
Pre-conditions	None
Reference	Clause 6.4.12.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
POST Rollback operation task Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RollbackOperationTask.robot>.

5.3.2.11.3 POST Rollback operation task Conflict

Test Purpose	
Test ID	5.3.2.11.3
Test title	POST Rollback operation task Conflict
Test objective	The objective is to test that POST method fail in case of NS LCM operation status conflict (i.e. NS instance status not equal to FAILED_TEMP)
Pre-conditions	NS instance status not equal to FAILED_TEMP
Reference	Clause 6.4.12.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
POST Rollback operation task Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RollbackOperationTask.robot>.

5.3.2.11.4 GET Rollback operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.11.4
Test title	GET Rollback operation task - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 6.4.12.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Rollback operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RollbackOperationTask.robot>.

5.3.2.11.5 PUT Rollback operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.11.5
Test title	PUT Rollback operation task - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.12.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT Rollback operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RollbackOperationTask.robot>.

5.3.2.11.6 PATCH Rollback operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.11.6
Test title	PATCH Rollback operation task - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.12.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH Rollback operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RollbackOperationTask.robot>.

5.3.2.11.7 DELETE Rollback operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.11.7
Test title	DELETE Rollback operation task - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 6.4.12.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
DELETE Rollback operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/RollbackOperationTask.robot>.

5.3.2.12 Continue operation task

5.3.2.12.1 POST Continue operation task

Test Purpose	
Test ID	5.3.2.12.1
Test title	POST Continue operation task
Test objective	The objective is to test that POST method trigger a continue on the LCM operation
Pre-conditions	NS instance status equal to FAILED_TEMP
Reference	Clause 6.4.13.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	NS instance status not equal to FAILED_TEMP
Test Case	
POST Continue operation task Check HTTP Response Status Code Is 202 Check operation resource state is not FAILED_TEMP	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ContinueOperationTask.robot>.

5.3.2.12.2 POST Continue operation task Not Found

Test Purpose	
Test ID	5.3.2.12.2
Test title	POST Continue operation task Not Found
Test objective	The objective is to test that POST method cannot perform a continue operation task because the resource is not found
Pre-conditions	None
Reference	Clause 6.4.13.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
POST Continue operation task Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ContinueOperationTask.robot>.

5.3.2.12.3 POST Continue operation task Conflict

Test Purpose	
Test ID	5.3.2.12.3
Test title	POST Continue operation task Conflict
Test objective	The objective is to test that POST method fail in case of operation status conflict (i.e. NS instance status not equal to FAILED_TEMP)
Pre-conditions	NS instance status not equal to FAILED_TEMP
Reference	Clause 6.4.13.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
POST Continue operation task Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ContinueOperationTask.robot>.

5.3.2.12.4 GET Continue operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.12.4
Test title	GET Continue operation task - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 6.4.13.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Continue operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ContinueOperationTask.robot>.

5.3.2.12.5 PUT Continue operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.13.5
Test title	PUT Continue operation task - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.13.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT Continue operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ContinueOperationTask.robot>.

5.3.2.12.6 PATCH Continue operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.13.5
Test title	PATCH Continue operation task - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.14.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH Continue operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ContinueOperationTask.robot>.

5.3.2.12.7 DELETE Continue operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.13.5
Test title	DELETE Continue operation task - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 6.4.14.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
DELETE Continue operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ContinueOperationTask.robot>.

5.3.2.13 Fail operation task

5.3.2.13.1 Post Fail operation task

Test Purpose	
Test ID	5.3.2.13.1
Test title	Post Fail operation task
Test objective	The objective is to test that POST method trigger a state change to "finally failed" on the LCM operation
Pre-conditions	NS instance status equal to FAILED_TEMP
Reference	Clause 6.4.14.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Depends on test Check resource FAILED_TEMP POST Fail operation task Check HTTP Response Status Code Is 202	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/FailOperationTask.robot>.

5.3.2.13.2 Post Fail operation task Not Found

Test Purpose	
Test ID	5.3.2.13.2
Test title	Post Fail operation task Not Found
Test objective	The objective is to test that POST method fail if the LCM operation is not found
Pre-conditions	None
Reference	Clause 6.4.14.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Check Fail not supported POST Fail operation task Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/FailOperationTask.robot>.

5.3.2.13.3 Post Fail operation task Conflict

Test Purpose	
Test ID	5.3.2.13.3
Test title	Post Fail operation task Conflict
Test objective	The objective is to test that POST method fail in case of status conflict on the LCM operation
Pre-conditions	None
Reference	Clause 6.4.14.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Depends on test failure Check resource FAILED_TEMP POST Fail operation task Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/FailOperationTask.robot>.

5.3.2.13.4 GET Fail operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.13.4
Test title	GET Fail operation task - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 6.4.14.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Fail operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/FailOperationTask.robot>.

5.3.2.13.5 PUT Fail operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.13.5
Test title	PUT Fail operation task - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.14.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT Fail operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/FailOperationTask.robot>.

5.3.2.13.6 PATCH Fail operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.13.6
Test title	PATCH Fail operation task - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.14.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH Fail operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/FailOperationTask.robot>.

5.3.2.13.7 DELETE Fail operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.13.7
Test title	DELETE Fail operation task - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 6.4.14.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
DELETE Fail operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/FailOperationTask.robot>.

5.3.2.14 Cancel operation task

5.3.2.14.1 POST Cancel operation task

Test Purpose	
Test ID	5.3.2.14.1
Test title	POST Cancel operation task
Test objective	The objective is to test that POST method cancel the NS LCM operation
Pre-conditions	NS instance status equal to STARTING, PROCESSING or ROLLING_BACK
Reference	Clause 6.4.15.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	NS instance status equal to FAILED_TEMP
Test Case	
POST Cancel operation task Check HTTP Response Status Code Is 202 Check operation resource state is FAILED_TEMP	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/CancelOperationTask.robot>.

5.3.2.14.2 POST Cancel operation task Not Found

Test Purpose	
Test ID	5.3.2.14.2
Test title	POST Cancel operation task Not Found
Test objective	The objective is to test that POST method fail completing the Cancel NS LCM operation if the resource is not found
Pre-conditions	None
Reference	Clause 6.4.15.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
POST Cancel operation task Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/CancelOperationTask.robot>.

5.3.2.14.3 POST Cancel operation task Conflict

Test Purpose	
Test ID	5.3.2.14.3
Test title	POST Cancel operation task Conflict
Test objective	The objective is to test that POST method fail if a status conflict exist on the NS LCM operation. (i.e. NS instance status not equal to STARTING, PROCESSING or ROLLING_BACK)
Pre-conditions	NS instance status not equal to STARTING, PROCESSING or ROLLING_BACK
Reference	Clause 6.4.15.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
POST Cancel operation task Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/CancelOperationTask.robot>.

5.3.2.14.4 GET Cancel operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.14.4
Test title	GET Cancel operation task - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 6.4.15.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Cancel operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/CancelOperationTask.robot>.

5.3.2.14.5 PUT Cancel operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.14.5
Test title	PUT Cancel operation task - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.15.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT Cancel operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/CancelOperationTask.robot>.

5.3.2.14.6 PATCH Cancel operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.14.6
Test title	PATCH Cancel operation task - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.15.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH Cancel operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/CancelOperationTask.robot>.

5.3.2.14.7 DELETE Cancel operation task - Method not implemented

Test Purpose	
Test ID	5.3.2.14.7
Test title	DELETE Cancel operation task - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 6.4.15.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
DELETE Cancel operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/CancelOperationTask.robot>.

5.3.2.15 Subscriptions

5.3.2.15.1 POST Create a new subscription

Test Purpose	
Test ID	5.3.2.15.1
Test title	POST Create a new subscription
Test objective	The objective is to test that POST method create a subscription
Pre-conditions	None
Reference	Clause 6.4.16.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	Subscription is created in the NFVO
Test Case	
POST subscriptions Check HTTP Response Status Code Is 201 Check HTTP Response Header Contains Location Check HTTP Response Body Json Schema Is subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/Subscriptions.robot>.

5.3.2.15.2 POST Create a new Subscription - DUPLICATION

Test Purpose	
Test ID	5.3.2.15.2
Test title	POST Create a new subscription - DUPLICATION
Test objective	The objective is to test that POST method create a duplicate subscription
Pre-conditions	A subscription shall already exist
Reference	Clause 6.4.16.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	Duplication supported by NFVO
Post-Conditions	Duplicate subscription is created in the NFVO
Test Case	
POST subscriptions DUPLICATION Check HTTP Response Status Code Is 201 Check HTTP Response Header Contains Location Check HTTP Response Body Json Schema Is subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/Subscriptions.robot>.

5.3.2.15.3 POST Create a new Subscription - NO-DUPLICATION

Test Purpose	
Test ID	5.3.2.15.3
Test title	POST Create a new subscription - NO-DUPLICATION
Test objective	The objective is to test that POST method cannot create a duplicate subscription
Pre-conditions	A subscription shall already exist
Reference	Clause 6.4.16.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	Duplication NOT supported by NFVO
Post-Conditions	Duplicate subscription is not created in the NFVO
Test Case	
POST subscriptions NO DUPLICATION Check HTTP Response Status Code Is 303 Check HTTP Response Header Contains Location	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/Subscriptions.robot>.

5.3.2.15.4 GET Subscriptions

Test Purpose	
Test ID	5.3.2.15.4
Test title	GET Subscriptions
Test objective	The objective is to test that GET method retrieves the list of existing subscriptions
Pre-conditions	None
Reference	Clause 6.4.16.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Subscriptions Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is subscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/Subscriptions.robot>.

5.3.2.15.5 GET Subscription - Filter

Test Purpose	
Test ID	5.3.2.15.5
Test title	GET Subscription - Filter
Test objective	The objective is Get the list of active subscriptions using a filter
Pre-conditions	None
Reference	Clause 6.4.16.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Subscriptions with filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is subscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/Subscriptions.robot>.

5.3.2.15.6 GET subscriptions - Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	5.3.2.15.6
Test title	GET subscriptions - Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is Get the list of active subscriptions using an invalid filter
Pre-conditions	None
Reference	Clause 6.4.16.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions - invalid filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/Subscriptions.robot>.

5.3.2.15.7 GET subscriptions with "all_fields" attribute selector

Test Purpose	
Test ID	5.3.2.15.7
Test title	GET subscriptions with "all_fields" attribute selector
Test objective	The objective is to retrieve the list of active subscriptions with attribute selector
Pre-conditions	
Reference	Clause 6.4.16.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	
Post-Conditions	
Test Case	
Get subscriptions with all_fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is FmSubscriptions Check HTTP Response Body subscriptions Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/Subscriptions.robot>.

5.3.2.15.8 GET subscriptions with "exclude_default" attribute selector

Test Purpose	
Test ID	5.3.2.15.8
Test title	GET subscriptions with "exclude_default" attribute selector
Test objective	The objective is to retrieve the list of active subscriptions with attribute selector
Pre-conditions	
Reference	Clause 6.4.16.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	
Post-Conditions	
Test Case	
Get subscriptions with exclude_default attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is FmSubscriptions	
Check HTTP Response Body subscriptions Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/Subscriptions.robot>.

5.3.2.15.9 GET subscriptions with "fields" attribute selector

Test Purpose	
Test ID	5.3.2.15.9
Test title	GET subscriptions with "fields" attribute selector
Test objective	The objective is to retrieve the list of active subscriptions with attribute selector
Pre-conditions	
Reference	Clause 6.4.16.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	
Post-Conditions	
Test Case	
Get subscriptions with fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is FmSubscriptions	
Check HTTP Response Body subscriptions Matches the requested fields attribute selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/Subscriptions.robot>.

5.3.2.15.10 GET subscriptions with "exclude_fields" attribute selector

Test Purpose	
Test ID	5.3.2.15.10
Test title	GET subscriptions with "exclude_fields" attribute selector
Test objective	The objective is to retrieve the list of active subscriptions with attribute selector
Pre-conditions	
Reference	Clause 6.4.16.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	
Post-Conditions	
Test Case	
Get subscriptions with exclude_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is FmSubscriptions	
Check HTTP Response Body subscriptions Matches the requested exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/Subscriptions.robot>.

5.3.2.15.11 PUT subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.2.15.7
Test title	PUT subscriptions - Method not implemented
Test objective	The objective is to test that PUT method cannot modify a NS lifecycle management subscription
Pre-conditions	None
Reference	Clause 6.4.16.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/Subscriptions.robot>.

5.3.2.15.12 PATCH subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.2.15.8
Test title	PATCH subscriptions - Method not implemented
Test objective	The objective is to test that PUT method cannot modify a NS lifecycle management subscription
Pre-conditions	None
Reference	Clause 6.4.16.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/Subscriptions.robot>.

5.3.2.15.13 DELETE subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.2.15.9
Test title	DELETE subscriptions - Method not implemented
Test objective	The objective is to test that DELETE method cannot modify a NS lifecycle management subscription
Pre-conditions	None
Reference	Clause 6.4.16.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	Subscription is not deleted
Test Case	
DELETE subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/Subscriptions.robot>.

5.3.2.16 Individual Subscription

5.3.2.16.1 POST Individual Subscription - Method not implemented

Test Purpose	
Test ID	5.3.2.16.1
Test title	POST Individual Subscription - Method not implemented
Test objective	The objective is to test that POST method is not implemented
Pre-conditions	None
Reference	Clause 6.4.17.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS lifecycle management subscription is not created on the NFVO
Test Case	
POST Individual Subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualSubscription.robot>.

5.3.2.16.2 GET Information about an individual subscription

Test Purpose	
Test ID	5.3.2.16.2
Test title	GET Information about an individual subscription
Test objective	The objective is to test the retrieval of NS lifecycle management subscription and perform a JSON schema validation of the returned subscription data structure
Pre-conditions	None
Reference	Clause 6.4.17.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual subscription Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualSubscription.robot>.

5.3.2.16.3 PUT an individual subscription - Method not implemented

Test Purpose	
Test ID	5.3.2.16.3
Test title	PUT an individual subscription - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 6.4.17.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS lifecycle management subscription is not modified by the operation
Test Case	
PUT Individual Subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualSubscription.robot>.

5.3.2.16.4 PATCH an individual subscription - Method not implemented

Test Purpose	
Test ID	5.3.2.16.4
Test title	PATCH an individual subscription - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 6.4.17.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS lifecycle management subscription is not modified by the operation
Test Case	
PATCH Individual Subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualSubscription.robot>.

5.3.2.16.5 DELETE an individual subscription

Test Purpose	
Test ID	5.3.2.16.5
Test title	DELETE an individual subscription
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	At least one lifecycle management subscription is available in the NFVO
Reference	Clause 6.4.17.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS lifecycle management subscription is not available anymore on NFVO
Test Case	
DELETE Individual Subscription Check HTTP Response Status Code Is 204	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/IndividualSubscription.robot>.

5.3.2.17 Notification Endpoint

5.3.2.17.1 NS LCM Operation Occurrence Start Notification

Test Purpose	
Test ID	5.3.2.17.1
Test title	NS LCM Operation Occurrence Start Notification
Test objective	The objective is to test the dispatch of NS LCM Operation Occurrence Start Notification when a new NS LCM operation is started in the NFVO, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A subscription for NS LCM Operation Occurrence notifications is available in the NFVO
Reference	Clause 6.4.18.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger a NS LCM operation (external action) Check NS LCM Operation Occurrence Start Notification Http POST Request Body Json Schema Is NsLcmOperationOccurrenceNotification Check NS LCM Operation Occurrence Start Notification Http POST Request Body notificationType attribute Is NsLcmOperationOccurrenceNotification Check NS LCM Operation Occurrence Start Notification Http POST Request Body notificationStatus attribute Is START	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NotificationEndpoint.robot>.

5.3.2.17.2 NS LCM Operation Occurrence Result Notification

Test Purpose	
Test ID	5.3.2.17.2
Test title	NS LCM Operation Occurrence Result Notification
Test objective	The objective is to test the dispatch of NS LCM Operation Occurrence Result Notification when a NS LCM operation is completed in the NFVO, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	An NS LCM operation is in progress, and a subscription for NS LCM Operation Occurrence notifications is available in the NFVO
Reference	Clause 6.4.18.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the completion of an NS LCM operation (external action) Check NS LCM Operation Occurrence Result Notification Http POST Request Body Json Schema Is NsLcmOperationOccurrenceNotification Check NS LCM Operation Occurrence Result Notification Http POST Request Body notificationType attribute Is NsLcmOperationOccurrenceNotification Check NS LCM Operation Occurrence Start Notification Http POST Request Body notificationStatus attribute Is RESULT	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NotificationEndpoint.robot>.

5.3.2.17.3 NS Identifier Creation Notification

Test Purpose	
Test ID	5.3.2.17.3
Test title	NS Identifier Creation Notification
Test objective	The objective is to test the dispatch of NS Identifier Creation Notification when a new NS instance resource is created in the NFVO, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A subscription for NS identifier creation notifications is available in the NFVO
Reference	Clause 6.4.18.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the creation of a NS instance resource (external action) Check NS Identifier Creation Notification Http POST Request Body Json Schema Is NsIdentifierDeletionNotification Check NS Identifier Creation Notification Http POST Request Body notificationType attribute Is NsIdentifierDeletionNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NotificationEndpoint.robot>.

5.3.2.17.4 NS Identifier Deletion Notification

Test Purpose	
Test ID	5.3.2.17.4
Test title	NS Identifier Deletion Notification
Test objective	The objective is to test the dispatch of NS Identifier Deletion Notification when a NS instance resource is deleted in the NFVO, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A NS instance resource is created, and a subscription for NS identifier creation notifications is available in the NFVO
Reference	Clause 6.4.18.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the deletion of a NS instance resource (external action) Check NS Identifier Deletion Notification Http POST Request Body Json Schema Is NsIdentifierCreationNotification Check NS Identifier Deletion Notification Http POST Request Body notificationType attribute Is NsIdentifierCreationNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/NotificationEndpoint.robot>.

5.3.2.18 Other NSLCM operations

5.3.2.18.1 NS Instance Creation

Test Purpose	
Test ID	5.3.2.17
Test title	NS Instance Creation
Test objective	The objective is to test the workflow for Creating a NS instance
Pre-conditions	None
Reference	Clause 6.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS lifecycle management operation occurrence is in NOT_INSTANTIATED state
Test Case	
POST New nsInstance Check HTTP Response Status Code Is 201 Check HTTP Response Header Contains Location Check HTTP Response Body Json Schema Is NsIdentifierCreationNotification Check resource not_instantiated	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/CreateNSInstanceWorkflow.robot>.

5.3.2.18.2 NS Instance Deletion

Test Purpose	
Test ID	5.3.2.18
Test title	NS Instance Deletion
Test objective	The objective is to test the workflow for Deleting a NS instance
Pre-conditions	the resource is in NOT_INSTANTIATED state
Reference	Clause 6.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Check resource not_instantiated DELETE IndividualNSInstance Check HTTP Response Status Code Is 204 Check HTTP Response Body Json Schema Is NsIdentifierDeletionNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/DeleteNSInstanceWorkflow.robot>.

5.3.2.18.3 Heal Flow of NS lifecycle management operations

Test Purpose	
Test ID	5.3.2.19
Test title	Heal Flow of NS lifecycle management operations
Test objective	The objective is to test the workflow for Healing a NS instance
Pre-conditions	the resource is in INSTANTIATED state
Reference	Clause 6.4.7 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Check resource instantiated POST Heal NSInstance Check HTTP Response Status Code Is 202 Check Operation Occurrence Id Check Operation Notification Status is START Check Operation Notification Status is RESULT Check resource instantiated	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/HealNSTaskWorkflow.robot>.

5.3.2.18.4 Instantiate Flow of NS lifecycle management operations

Test Purpose	
Test ID	5.3.2.20
Test title	Instantiate Flow of NS lifecycle management operations
Test objective	The objective is to test the workflow for Instantiate a NS instance
Pre-conditions	the resource is in NOT_INSTANTIATED state
Reference	Clause 6.4.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	the resource is in INSTANTIATED state
Test Case	
Check resource existence Check resource not_instantiated POST Instantiate nsInstance Check HTTP Response Status Code Is 202 Check Operation Occurrence Id Check Operation Notification Status is START Check Operation Notification Status is RESULT Check resource instantiated	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/InstantiateNSTaskWorkflow.robot>.

5.3.2.18.5 Scale Flow of NS lifecycle management operations

Test Purpose	
Test ID	5.3.2.21
Test title	Instantiate Flow of NS lifecycle management operations
Test objective	The objective is to test the workflow for Instantiate a NS instance
Pre-conditions	the resource is in NOT_INSTANTIATED state
Reference	Clause 6.4.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	the resource is in INSTANTIATED state
Test Case	
Check resource existence Check resource instantiated POST scale nsInstance Check HTTP Response Status Code Is 202 Check Operation Occurrence Id Check Operation Notification Status is START Check Operation Notification Status is RESULT Check resource instantiated	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/ScaleNSTaskWorkflow.robot>.

5.3.2.18.6 Terminate Flow of NS lifecycle management operations

Test Purpose	
Test ID	5.3.2.22
Test title	Terminate Flow of NS lifecycle management operations
Test objective	The objective is to test the workflow for Terminate a NS instance
Pre-conditions	the resource is in INSTANTIATED state
Reference	Clause 6.4.8 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	the resource is in NOT_INSTANTIATED state
Test Case	
Check resource existence Check resource instantiated POST Terminate NSInstance Check HTTP Response Status Code Is 202 Check Operation Occurrence Id Check Operation Notification Status is START Check Operation Notification Status is RESULT Check resource not_instantiated	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/TerminateNSTaskWorkflow.robot>.

5.3.2.18.7 Update Flow of NS lifecycle management operations

Test Purpose	
Test ID	5.3.2.23
Test title	Update Flow of NS lifecycle management operations
Test objective	The objective is to test the workflow for Update a NS instance
Pre-conditions	The resource is in INSTANTIATED state
Reference	Clause 6.4.6 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The resource is in INSTANTIATED state
Test Case	
Check resource existence Check resource instantiated POST Update NSInstance Check HTTP Response Status Code Is 202 Check Operation Occurrence Id Check Operation Notification Status is START Check Operation Notification Status is RESULT Check resource instantiated	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSLifecycleManagement-API/UpdateNSTaskWorkflow.robot>.

5.3.3 NS Fault Management interface

5.3.3.1 Alarms

5.3.3.1.1 POST Alarms - Method not implemented

Test Purpose	
Test ID	5.3.3.1.1
Test title	POST Alarms - Method not implemented
Test objective	The objective is to test that Post method is not allowed to create Fault management alarms on NFV
Pre-conditions	None
Reference	Clause 8.4.2.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	alarm not created
Test Case	
POST Alarms Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Alarms.robot>.

5.3.3.1.2 GET information about multiple alarms

Test Purpose	
Test ID	5.3.3.1.2
Test title	GET information about multiple alarms
Test objective	The objective is to retrieve information about the alarm list and perform a JSON schema and content validation of the returned alarms data structure
Pre-conditions	None
Reference	Clause 8.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Alarms Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is alarms	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Alarms.robot>.

5.3.3.1.3 GET information about multiple alarms with filters

Test Purpose	
Test ID	5.3.3.1.3
Test title	GET information about multiple alarms with filters
Test objective	The objective is to retrieve information about the alarm list and perform a JSON schema and content validation of the returned alarms data structure, and verify that the retrieved information matches the issued attribute-based filters
Pre-conditions	None
Reference	Clause 8.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Alarms With Filters Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is alarms	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Alarms.robot>.

5.3.3.1.4 GET information about multiple alarms Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	5.3.3.1.4
Test title	GET information about multiple alarms Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is to try to retrieve information about the alarm list with invalid filters and perform a JSON schema and content validation of the returned problem details data structure
Pre-conditions	None
Reference	Clause 8.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Alarms With Invalid Filters Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Alarms.robot>.

5.3.3.1.5 PUT Alarms - Method not implemented

Test Purpose	
Test ID	5.3.3.1.5
Test title	PUT Alarms - Method not implemented
Test objective	The objective is to test that PUT method is not allowed for Fault management alarms on NFV
Pre-conditions	None
Reference	Clause 8.4.2.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT Alarms Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Alarms.robot>.

5.3.3.1.6 PATCH Alarms - Method not implemented

Test Purpose	
Test ID	5.3.3.1.6
Test title	PATCH Alarms - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed for Fault management alarms on NFV
Pre-conditions	None
Reference	Clause 8.4.2.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH Alarms Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Alarms.robot>.

5.3.3.1.7 DELETE Alarms - Method not implemented

Test Purpose	
Test ID	5.3.3.1.7
Test title	DELETE Alarms - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed for Fault management alarms on NFV
Pre-conditions	None
Reference	Clause 8.4.2.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	Alarm not deleted
Test Case	
DELETE Alarms Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Alarms.robot>.

5.3.3.2 Individual Alarm

5.3.3.2.1 POST Individual Alarm - Method not implemented

Test Purpose	
Test ID	5.3.3.2.1
Test title	POST Individual Alarm - Method not implemented
Test objective	The objective is to test that POST method is not allowed for Fault management individual alarm on NFV
Pre-conditions	None
Reference	Clause 8.4.3.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	Alarm is not created
Test Case	
POST Individual Alarm Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/IndividualAlarm.robot>.

5.3.3.2.2 GET information about Individual Alarm

Test Purpose	
Test ID	5.3.3.2.2
Test title	GET information about Individual Alarm
Test objective	The objective is to retrieve information about individual alarm and perform a JSON schema and content validation of the returned alarm data structure
Pre-conditions	The related alarm exists
Reference	Clause 8.4.3.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual Alarm Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is alarm	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/IndividualAlarm.robot>.

5.3.3.2.3 GET information about Invalid Individual Alarm

Test Purpose	
Test ID	5.3.3.2.3
Test title	GET information about Invalid Individual Alarm
Test objective	The objective is to try to read an Invalid individual alarm and get 404 not found response code
Pre-conditions	The related alarm does not exist
Reference	Clause 8.4.3.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Invalid Individual Alarm Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/IndividualAlarm.robot>.

5.3.3.2.4 PUT Individual Alarm - Method not implemented

Test Purpose	
Test ID	5.3.3.2.4
Test title	PUT Individual Alarm - Method not implemented
Test objective	The objective is to test that PUT method is not allowed for Fault management individual alarm on NFV
Pre-conditions	None
Reference	Clause 8.4.3.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT Individual Alarm Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/IndividualAlarm.robot>.

5.3.3.2.5 PATCH Alarm

Test Purpose	
Test ID	5.3.3.2.5
Test title	Modify an individual alarm resource
Test objective	The objective is to Modify an individual alarm resource and perform a JSON schema and content validation of the returned alarm modifications data structure
Pre-conditions	The related alarm exists
Reference	Clause 8.4.3.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH Individual Alarm Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is alarmModifications	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/IndividualAlarm.robot>.

5.3.3.2.6 PATCH Alarm - Conflict

Test Purpose	
Test ID	5.3.3.2.6
Test title	Modify an individual alarm resource - Conflict
Test objective	The objective is to test that an individual alarm resource cannot be modified if the alarm is already in the state that is requested to be set
Pre-conditions	The related alarm exists
Reference	Clause 8.4.3.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH Individual Alarm Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/IndividualAlarm.robot>.

5.3.3.2.7 PATCH Alarm - Precondition failed

Test Purpose	
Test ID	5.3.3.2.7
Test title	Modify an individual alarm resource - Precondition failed
Test objective	The objective is to test that an individual alarm resource cannot be modified if the resource was modified by another entity
Pre-conditions	The related alarm exists
Reference	Clause 8.4.3.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	
Test Case	
PATCH Individual Alarm Conflict Check HTTP Response Status Code Is 412 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/IndividualAlarm.robot>.

5.3.3.2.8 DELETE Individual Alarm - Method not implemented

Test Purpose	
Test ID	5.3.3.2.8
Test title	DELETE Individual Alarm - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed for Fault management individual alarm on NFV
Pre-conditions	None
Reference	Clause 8.4.3.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	Alarm not deleted
Test Case	
DELETE Individual Alarm Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/IndividualAlarm.robot>.

5.3.3.3 Subscriptions

5.3.3.3.1 Create a new alarm subscription

Test Purpose	
Test ID	5.3.3.3.1
Test title	Create a new alarm subscription
Test objective	The objective is to create a new Fault management alarm subscriptions and perform a JSON schema and content validation of the returned fault management alarms subscription data structure
Pre-conditions	No subscription with the same filter and callbackUri exists
Reference	Clause 8.4.4.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
POST Subscription Check HTTP Response Status Code Is 201 Check Operation Occurrence Id Check HTTP Response Body Json Schema Is FmSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Subscriptions.robot>.

5.3.3.3.2 Create a new alarm subscription - DUPLICATION

Test Purpose	
Test ID	5.3.3.3.2
Test title	Create a new alarm subscription - DUPLICATION
Test objective	The objective is to create a new subscription with the NFV allowing duplication and perform a JSON schema and content validation of the returned fault management alarms subscription data structure.
Pre-conditions	subscription with the same filter and callbackUri exists
Reference	Clause 8.4.4.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	the NFVO allows creating a subscription resource if another subscription resource with the same filter and callbackUri already exists
Post-Conditions	None
Test Case	
Post Create subscription - DUPLICATION Check HTTP Response Status Code Is 201 Check Operation Occurrence Id Check HTTP Response Body Json Schema Is FmSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Subscriptions.robot>.

5.3.3.3.3 Create a new alarm subscription - NO DUPLICATION

Test Purpose	
Test ID	5.3.3.3.3
Test title	Create a new alarm subscription - NO DUPLICATION
Test objective	The objective is to create a new subscription with the NFV not allowing duplication and perform a JSON schema and content validation of the returned fault management alarms subscription data structure
Pre-conditions	subscription with the same filter and callbackUri exists
Reference	Clause 8.4.4.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO decides to not create a duplicate subscription resource
Post-Conditions	None
Test Case	
Post Create subscription - NO DUPLICATION Check HTTP Response Status Code Is 303 Check Operation Occurrence Id Check HTTP Response Body Json Schema Is FmSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Subscriptions.robot>.

5.3.3.3.4 Retrieve a list of alarm subscriptions

Test Purpose	
Test ID	5.3.3.3.4
Test title	Retrieve a list of alarm subscriptions
Test objective	The objective is to retrieve the list of active subscriptions and perform a JSON schema and content validation of the returned fault management alarms subscription data structure
Pre-conditions	None
Reference	Clause 8.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Subscriptions Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is FmSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Subscriptions.robot>.

5.3.3.3.5 Retrieve a list of alarm subscriptions - Filter

Test Purpose	
Test ID	5.3.3.3.5
Test title	Retrieve a list of alarm subscriptions - Filter
Test objective	The objective is to retrieve the list of active subscriptions with filter and perform a JSON schema and content validation of the returned fault management alarms subscription data structure
Pre-conditions	None
Reference	Clause 8.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Subscriptions with filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is FmSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Subscriptions.robot>.

5.3.3.3.6 GET subscriptions - Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	5.3.3.3.6
Test title	GET subscriptions - Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is to retrieve the list of active subscriptions with Invalid attribute-based filtering parameters and perform a JSON schema and content validation of the returned problem details data structure
Pre-conditions	None
Reference	Clause 8.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Subscriptions with Invalid filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Subscriptions.robot>.

5.3.3.3.7 PUT subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.3.3.7
Test title	PUT subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to for Fault management subscriptions on NFV
Pre-conditions	None
Reference	Clause 8.4.4.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Put Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Subscriptions.robot>.

5.3.3.3.8 PATCH subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.3.3.8
Test title	PATCH subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to for Fault management subscriptions on NFV
Pre-conditions	None
Reference	Clause 8.4.4.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Subscriptions.robot>.

5.3.3.3.9 DELETE subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.3.3.9
Test title	DELETE subscriptions - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to for Fault management subscriptions on NFV
Pre-conditions	None
Reference	Clause 8.4.4.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	Subscription is not deleted
Test Case	
DELETE Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/Subscriptions.robot>.

5.3.3.4 Individual Subscription

5.3.3.4.1 Post Individual Subscription - Method not implemented

Test Purpose	
Test ID	5.3.3.4.1
Test title	Post Individual Subscription - Method not implemented
Test objective	The objective is to test that POST method is not allowed for Fault management subscription on NFV
Pre-conditions	None
Reference	Clause 8.4.5.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	Subscription is not created
Test Case	
POST Individual Subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/IndividualSubscription.robot>.

5.3.3.4.2 Get Information about an individual subscription

Test Purpose	
Test ID	5.3.3.4.2
Test title	Get Information about an individual subscription
Test objective	The objective is to read an individual subscription for NFVO alarms subscribed by the client and perform a JSON schema and content validation of the returned fault management individual subscription data structure
Pre-conditions	The subscription with the given id exists
Reference	Clause 8.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual Subscription Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is FmSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/IndividualSubscription.robot>.

5.3.3.4.3 PUT an individual subscription - Method not implemented

Test Purpose	
Test ID	5.3.3.4.3
Test title	PUT an individual subscription - Method not implemented
Test objective	The objective is to test that PUT method is not allowed for Fault management subscription on NFV
Pre-conditions	None
Reference	Clause 8.4.5.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT Individual Subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/IndividualSubscription.robot>.

5.3.3.4.4 PATCH an individual subscription - Method not implemented

Test Purpose	
Test ID	5.3.3.4.4
Test title	PATCH an individual subscription - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed for Fault management subscription on NFV
Pre-conditions	None
Reference	Clause 8.4.5.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PATCH Individual Subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/IndividualSubscription.robot>.

5.3.3.4.5 DELETE an individual subscription

Test Purpose	
Test ID	5.3.3.4.5
Test title	DELETE an individual subscription
Test objective	The objective is to DELETE an individual subscription
Pre-conditions	The Subscription already exists
Reference	Clause 8.4.5.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	Subscription is not deleted
Test Case	
DELETE Individual Subscription Check HTTP Response Status Code Is 204	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/IndividualSubscription.robot>.

5.3.3.5 Notification Endpoint

5.3.3.5.1 NS Fault Alarm Notification

Test Purpose	
Test ID	5.3.3.5.1
Test title	NS Fault Alarm Notification
Test objective	The objective is to test the dispatch of NS Fault Alarm Notification when a virtualised resource within an NS instance fails, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A NS instance is instantiated, and a subscription for fault alarm notifications is available in the NFVO
Reference	Clause 8.4.6.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the fault of a virtualised resource in the NS instance (external action) Check Alarm Notification Http POST Request Body Json Schema Is alarmNotification Check Alarm Notification Http POST Request Body notificationType attribute Is alarmNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/NotificationEndpoint.robot>.

5.3.3.5.2 NS Fault Alarm Cleared Notification

Test Purpose	
Test ID	5.3.3.5.2
Test title	NS Fault Alarm Cleared Notification
Test objective	The objective is to test the dispatch of NS Fault Alarm Cleared Notification when a faulty virtualised resource within an NS instance is cleared, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A NS instance is instantiated, a virtualised resource is in faulty state, and a subscription for fault alarm cleared notifications is available in the NFVO
Reference	Clause 8.4.6.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the fault cleared of a virtualised resource in the NS instance (external action) Check Alarm cleared Notification Http POST Request Body Json Schema Is alarmClearedNotification Check Alarm cleared Notification Http POST Request Body notificationType attribute Is alarmClearedNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/NotificationEndpoint.robot>.

5.3.3.5.3 NS Fault Alarm List Rebuilt Notification

Test Purpose	
Test ID	5.3.3.5.3
Test title	NS Fault Alarm List Rebuilt Notification
Test objective	The objective is to test the dispatch of NS Fault Alarm List Rebuilt Notification when the NFVO decides to rebuild the list of its NS alarms, e.g. due to a corruption in the alarm storage, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A NS instance is instantiated, one or more virtualised resource are in faulty state, and a subscription for fault alarm list rebuilt notifications is available in the NFVO
Reference	Clause 8.4.6.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the NS fault alarm list rebuild in the NFVO (external action) Check Alarm list rebuilt Notification Http POST Request Body Json Schema Is alarmListRebuiltNotification Check Alarm list rebuilt Notification Http POST Request Body notificationType attribute Is alarmListRebuiltNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSFaultManagement-API/NotificationEndpoint.robot>.

5.3.4 NS Performance Management interface

5.3.4.1 PM Jobs Resource Endpoint

5.3.4.1.1 GET all NS Performance Monitoring Jobs

Test Purpose	
Test ID	5.3.4.1.1
Test title	GET all NS Performance Monitoring Jobs
Test objective	The objective is to test the retrieval of all the available NS performance monitoring jobs and perform a JSON schema and content validation of the collected jobs data structure
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clause 7.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET all NS Performance Monitoring Jobs Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmJobs Check HTTP Response Body PmJobs Do Not Contain reports	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/PMJobs.robot>.

5.3.4.1.2 GET NS Performance Monitoring Jobs with attribute-based filter

Test Purpose	
Test ID	5.3.4.1.2
Test title	GET all NS Performance Monitoring Jobs with attribute-based filter
Test objective	The objective is to test the retrieval of NS performance monitoring jobs using attribute-based filter, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued attribute-based filter
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clause 7.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET NS Performance Monitoring Jobs with attribute-based filter	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PmJobs	
Check HTTP Response Body PmJobs Matches the requested attribute-based filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/PMJobs.robot>.

5.3.4.1.3 GET all NS Performance Monitoring Jobs with "all_fields" attribute selector

Test Purpose	
Test ID	5.3.4.1.3
Test title	GET all NS Performance Monitoring Jobs with "all_fields" attribute selector
Test objective	The objective is to test the retrieval of all NS performance monitoring jobs "all_fields" attribute selector, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued "all_fields" selector
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clauses 4.3.3.2.1 and 7.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET NS Performance Monitoring Jobs with all_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PmJobs	
Check HTTP Response Body PmJobs Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/PMJobs.robot>.

5.3.4.1.4 GET all NS Performance Monitoring Jobs with "exclude_default" attribute selector

Test Purpose	
Test ID	5.3.4.1.4
Test title	GET all NS Performance Monitoring Jobs with "exclude_default" attribute selector
Test objective	The objective is to test the retrieval of all NS performance monitoring jobs "exclude_default" attribute selector, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued "exclude_default" selector
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clauses 4.3.3.2.1 and 7.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET NS Performance Monitoring Jobs with exclude_default attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PmJobs	
Check HTTP Response Body PmJobs Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/PMJobs.robot>.

5.3.4.1.5 GET all NS Performance Monitoring Jobs with "include" attribute selector

Test Purpose	
Test ID	5.3.4.1.5
Test title	GET all NS Performance Monitoring Jobs with "include" attribute selector
Test objective	The objective is to test the retrieval of all NS performance monitoring jobs "include" attribute selector, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued "include" selector
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clauses 4.3.3.2.1 and 7.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the use of "include" attribute selector
Post-Conditions	None
Test Case	
GET NS Performance Monitoring Jobs with include attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmJobs Check HTTP Response Body PmJobs Matches the requested include selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/PMJobs.robot>.

5.3.4.1.6 GET all NS Performance Monitoring Jobs with "exclude" attribute selector

Test Purpose	
Test ID	5.3.4.1.6
Test title	GET all NS Performance Monitoring Jobs with exclude_fields attribute selector
Test objective	The objective is to test the retrieval of all NS performance monitoring jobs "exclude" attribute selector, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued "exclude" selector
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clauses 4.3.3.2.1 and 7.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the use of "exclude" attribute selector
Post-Conditions	None
Test Case	
GET NS Performance Monitoring Jobs with exclude attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmJobs Check HTTP Response Body PmJobs Matches the requested exclude selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/PMJobs.robot>.

5.3.4.1.7 GET NS Performance Monitoring Jobs with invalid attribute-based filter

Test Purpose	
Test ID	5.3.4.1.7
Test title	GET NS Performance Monitoring Jobs with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of NS performance monitoring jobs fails when using invalid attribute-based filter, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clause 7.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET NS Performance Monitoring Jobs with invalid attribute-based filter	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/PMJobs.robot>.

5.3.4.1.8 GET NS Performance Monitoring Jobs with invalid resource endpoint

Test Purpose	
Test ID	5.3.4.1.8
Test title	GET NS Performance Monitoring Jobs with invalid resource endpoint
Test objective	The objective is to test that the retrieval of NS performance monitoring jobs fails when using invalid resource endpoint
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clause 7.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET NS Performance Monitoring Jobs with invalid resource endpoint	
Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/PMJobs.robot>.

5.3.4.1.9 Create new NS Performance Monitoring Job

Test Purpose	
Test ID	5.3.4.1.9
Test title	Create a new NS Performance Monitoring Job
Test objective	The objective is to test the creation of a new NS performance monitoring job and perform the JSON schema validation of the returned job data structure
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clause 7.4.2.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS Performance Job is successfully created on the NFVO
Test Case	
Send Post Request Create new NS Performance Monitoring Job	
Check HTTP Response Status Code Is 201	
Check HTTP Response Body Json Schema Is PmJob	
Check Postcondition PmJob Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/PMJobs.robot>.

5.3.4.1.10 PUT all NS Performance Monitoring Jobs - Method not implemented

Test Purpose	
Test ID	5.3.4.1.10
Test title	PUT all NS Performance Monitoring Jobs - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify NS Performance Monitoring Jobs
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clause 7.4.2.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for all NS Performance Monitoring Jobs Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/PMJobs.robot>.

5.3.4.1.11 PATCH all NS Performance Monitoring Jobs - Method not implemented

Test Purpose	
Test ID	5.3.4.1.11
Test title	PATCH all NS Performance Monitoring Jobs - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update NS Performance Monitoring Jobs
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clause 7.4.2.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for all NS Performance Monitoring Jobs Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/PMJobs.robot>.

5.3.4.1.12 DELETE all NS Performance Monitoring Jobs - Method not implemented

Test Purpose	
Test ID	5.3.4.1.12
Test title	DELETE all NS Performance Monitoring Jobs - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete NS Performance Monitoring Jobs
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clause 7.4.2.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS Performance Monitoring Jobs are not deleted by the failed operation
Test Case	
Send PATCH Request for all NS Performance Monitoring Jobs Check HTTP Response Status Code Is 405 Check Postcondition NS Performance Monitoring Jobs Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/PMJobs.robot>.

5.3.4.2 Individual PM Job Resource Endpoint

5.3.4.2.1 GET individual NS Performance Job

Test Purpose	
Test ID	5.3.4.2.1
Test title	Get individual NS Performance Job
Test objective	The objective is to test the retrieval of an individual NS Performance monitoring job and perform a JSON schema and content validation of the collected job data structure
Pre-conditions	A NS instance is instantiated. One or more NS Performance jobs are set in the NFVO
Reference	Clause 7.4.3.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET individual NS Performance Job Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmJob Check HTTP Response Body Pm Job Identifier matches the requested Pm Job	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualPmJob.robot>.

5.3.4.2.2 GET individual NS Performance Job with invalid resource identifier

Test Purpose	
Test ID	5.3.4.2.2
Test title	Get individual NS Performance Job with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual NS Performance monitoring job fails when using an invalid resource identifier, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A NS instance is instantiated. One or more NS Performance jobs are set in the NFVO
Reference	Clause 7.4.3.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET individual NS Performance Job with invalid resource identifier Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualPmJob.robot>.

5.3.4.2.3 DELETE Individual NS Performance Job with invalid resource identifier

Test Purpose	
Test ID	5.3.4.2.3
Test title	Delete individual NS Performance Job with invalid resource identifier
Test objective	The objective is to test that the deletion of an individual NS Performance monitoring job fails when using an invalid resource identifier
Pre-conditions	A NS instance is instantiated. One or more NS Performance jobs are set in the NFVO
Reference	Clause 7.4.3.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Delete request for individual NS Performance Job with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualPmJob.robot>.

5.3.4.2.4 POST Individual NS Performance Job - Method not implemented

Test Purpose	
Test ID	5.3.4.2.4
Test title	POST Individual NS Performance Job - method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new NS Performance Monitoring Job
Pre-conditions	A NS instance is instantiated
Reference	Clause 7.4.3.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Post request for individual NS Performance Job Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualPmJob.robot>.

5.3.4.2.5 PUT Individual NS Performance Job - Method not implemented

Test Purpose	
Test ID	5.3.4.2.5
Test title	PUT Individual NS Performance Job - method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing NS Performance Monitoring Job
Pre-conditions	A NS instance is instantiated. One or more NS Performance jobs are set in the NFVO
Reference	Clause 7.4.3.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Put request for individual NS Performance Job Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualPmJob.robot>.

5.3.4.2.6 PATCH Individual NS Performance Job - Method not implemented

Test Purpose	
Test ID	5.3.4.2.6
Test title	PATCH Individual NS Performance Job - method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing new NS Performance Monitoring Job
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clause 6.4.3.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Patch request for individual NS Performance Job Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualPmJob.robot>.

5.3.4.2.7 DELETE Individual NS Performance Job

Test Purpose	
Test ID	5.3.4.2.7
Test title	Delete Individual NS Performance Job
Test objective	The objective is to test the deletion of an individual NS Performance monitoring job
Pre-conditions	A NS instance is instantiated. One or more NS Performance jobs are set in the NFVO
Reference	Clause 7.4.3.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS Performance Job is no more available in the NFVO
Test Case	
Send Delete request for individual NS Performance Job	
Check HTTP Response Status Code Is 204	
Check Postcondition NS Pm Job is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualPmJob.robot>.

5.3.4.3 Individual Performance Report Resource Endpoint

5.3.4.3.1 Get Individual Performance Report

Test Purpose	
Test ID	5.3.4.3.1
Test title	Get Individual Performance Report
Test objective	The objective is to test the retrieval of an individual NS performance report associated to a monitoring job and perform a JSON schema validation of the collected report data structure
Pre-conditions	A NS instance is instantiated. One or more NS performance reports are set for a monitoring job in the NFVO
Reference	Clause 7.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get Individual Performance Report	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PerformanceReport	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualReport.robot>.

5.3.4.3.2 Get Individual Performance Report with invalid resource endpoint

Test Purpose	
Test ID	5.3.4.3.2
Test title	Get Individual Performance Report with invalid resource endpoint
Test objective	The objective is to test that the retrieval of an individual NS performance report associated to a monitoring job fails when using an invalid resource endpoint
Pre-conditions	A NS instance is instantiated. One or more NS performance reports are set for a monitoring job in the NFVO
Reference	Clause 7.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get Individual Performance Report with invalid resource endpoint	
Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualReport.robot>.

5.3.4.3.3 POST Individual Performance Report - Method not implemented

Test Purpose	
Test ID	5.3.4.3.3
Test title	POST Individual Performance Report - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new NS performance report within a monitoring job
Pre-conditions	A NS instance is instantiated.
Reference	Clause 7.4.4.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS performance report is not created on the NFVO
Test Case	
Send Post request for Individual Performance Report	
Check HTTP Response Status Code Is 405	
Check Postcondition NS Individual Performance Report is not Created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualReport.robot>.

5.3.4.3.4 PUT Individual Performance Report - Method not implemented

Test Purpose	
Test ID	5.3.4.3.4
Test title	PUT Individual Performance Report - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing NS performance report within a monitoring job
Pre-conditions	A NS instance is instantiated. One or more NS performance reports are set for a monitoring job in the NFVO
Reference	Clause 7.4.4.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS performance report is not modified by the operation
Test Case	
Send Put request for Individual Performance Report	
Check HTTP Response Status Code Is 405	
Check Postcondition NS Individual Performance Report is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualReport.robot>.

5.3.4.3.5 PATCH Individual Performance Report - Method not implemented

Test Purpose	
Test ID	5.3.4.3.5
Test title	PATCH Individual Performance Report - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing NS performance report within a monitoring job
Pre-conditions	A NS instance is instantiated. One or more NS performance reports are set for a monitoring job in the NFVO
Reference	Clause 7.4.4.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS performance report is not modified by the operation
Test Case	
Send Patch request for Individual Performance Report	
Check HTTP Response Status Code Is 405	
Check Postcondition NS Individual Performance Report is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualReport.robot>.

5.3.4.3.6 DELETE Individual Performance Report - Method not implemented

Test Purpose	
Test ID	5.3.4.3.6
Test title	DELETE Individual Performance Report - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete an existing NS performance report within a monitoring job
Pre-conditions	A NS instance is instantiated. One or more NS performance reports are set for a monitoring job in the NFVO
Reference	Clause 7.4.4.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS performance report is not deleted by the operation
Test Case	
Send Delete request for Individual Performance Report	
Check HTTP Response Status Code Is 405	
Check Postcondition NS Individual Performance Report Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualReport.robot>.

5.3.4.4 Thresholds Resource Endpoint

5.3.4.4.1 GET All Performance Thresholds

Test Purpose	
Test ID	5.3.4.4.1
Test title	GET All Performance Thresholds
Test objective	The objective is to test the retrieval of all the available NS performance thresholds and perform a JSON schema validation of the collected thresholds data structure
Pre-conditions	A NS instance is instantiated. One or more NS performance thresholds are set in the NFVO
Reference	Clause 7.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET all Performance Thresholds	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is Thresholds	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Thresholds.robot>.

5.3.4.4.2 GET Performance Thresholds with attribute-based filter

Test Purpose	
Test ID	5.3.4.4.2
Test title	GET Performance Thresholds with attribute-based filter
Test objective	The objective is to test the retrieval of all the available NS performance thresholds when using attribute-based filters, perform a JSON schema validation of the collected thresholds data structure, and verify that the retrieved information matches the issued attribute-based filter
Pre-conditions	A NS instance is instantiated. One or more NS performance thresholds are set in the NFVO
Reference	Clause 7.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Performance Thresholds with attribute-based filter	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is Thresholds	
Check HTTP Response Body Thresholds match the requested attribute-based filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Thresholds.robot>.

5.3.4.4.3 GET Performance Thresholds with invalid attribute-based filter

Test Purpose	
Test ID	5.3.4.4.3
Test title	GET Performance Thresholds with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of NS performance thresholds fails when using invalid attribute-based filter, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A NS instance is instantiated. One or more NS performance thresholds are set in the NFVO
Reference	Clause 7.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Performance Thresholds with invalid attribute-based filter Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Thresholds.robot>.

5.3.4.4.4 GET Performance Thresholds with invalid resource endpoint

Test Purpose	
Test ID	5.3.4.4.4
Test title	GET Performance Thresholds with invalid resource endpoint
Test objective	The objective is to test that the retrieval of NS performance thresholds fails when using invalid resource endpoint, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A NS instance is instantiated. One or more NS performance thresholds are set in the NFVO
Reference	Clause 7.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET NS performance Thresholds with invalid resource endpoint Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Thresholds.robot>.

5.3.4.4.5 Create new Performance Threshold

Test Purpose	
Test ID	5.3.4.4.5
Test title	Create new Performance Threshold
Test objective	The objective is to test the creation of a new NS performance threshold and perform the JSON schema validation of the returned threshold data structure
Pre-conditions	A NS instance is instantiated
Reference	Clause 7.4.5.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS performance Threshold is successfully created on the NFVO
Test Case	
Send Post Request Create new Performance Threshold Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is Threshold Check HTTP Response Header Contains Location Check Postcondition Threshold Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Thresholds.robot>.

5.3.4.4.6 PUT Performance Thresholds - Method not implemented

Test Purpose	
Test ID	5.3.4.4.6
Test title	PUT Performance Thresholds - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify NS performance Thresholds
Pre-conditions	A NS instance is instantiated. One or more NS performance thresholds are set in the NFVO
Reference	Clause 7.4.5.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for all Performance Thresholds Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Thresholds.robot>.

5.3.4.4.7 PATCH Performance Thresholds - Method not implemented

Test Purpose	
Test ID	5.3.4.4.7
Test title	PATCH Performance Thresholds - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify NS performance Thresholds
Pre-conditions	A NS instance is instantiated. One or more NS performance thresholds are set in the NFVO
Reference	Clause 7.4.5.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for all Performance Thresholds Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Thresholds.robot>.

5.3.4.4.8 DELETE Performance Thresholds - Method not implemented

Test Purpose	
Test ID	5.3.4.4.8
Test title	DELETE Performance Thresholds - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to update NS performance Thresholds
Pre-conditions	A NS instance is instantiated. One or more NS performance thresholds are set in the NFVO
Reference	Clause 7.4.5.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS performance thresholds are not deleted by the failed operation
Test Case	
Send DELETE Request for all Performance Thresholds Check HTTP Response Status Code Is 405 Check Postcondition Thresholds Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Thresholds.robot>.

5.3.4.5 Individual Threshold Resource Endpoint

5.3.4.5.1 GET Individual Threshold

Test Purpose	
Test ID	5.3.4.5.1
Test title	GET Individual Threshold
Test objective	The objective is to test the retrieval of an individual NS performance threshold and perform a JSON schema and content validation of the collected threshold data structure
Pre-conditions	A NS instance is instantiated. One or more NS performance thresholds are set in the NFVO
Reference	Clause 7.4.6.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET individual NS performance Threshold Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Threshold Check HTTP Response Body Threshold Identifier matches the requested Threshold	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualThreshold.robot>.

5.3.4.5.2 GET Individual Threshold with invalid resource identifier

Test Purpose	
Test ID	5.3.4.5.2
Test title	GET Individual Threshold with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual NS performance threshold fails when using an invalid resource identifier
Pre-conditions	A NS instance is instantiated. One or more NS performance jobs are set in the NFVO
Reference	Clause 7.4.6.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET individual NS performance Threshold with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualThreshold.robot>.

5.3.4.5.3 DELETE Individual Threshold with invalid resource identifier

Test Purpose	
Test ID	5.3.4.5.3
Test title	DELETE Individual Threshold with invalid resource identifier
Test objective	The objective is to test the deletion of an individual NS performance threshold
Pre-conditions	A NS instance is instantiated. One or more NS performance thresholds are set in the NFVO
Reference	Clause 7.4.6.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Delete request for individual NS performance Threshold with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualThreshold.robot>.

5.3.4.5.4 POST Individual Threshold - Method not implemented

Test Purpose	
Test ID	5.3.4.5.4
Test title	POST Individual Threshold - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new NS performance Threshold
Pre-conditions	A NS instance is instantiated
Reference	Clause 7.4.6.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS performance Threshold is not created on the NFVO
Test Case	
Send Post request for individual NS performance Threshold	
Check HTTP Response Status Code Is 405	
Check Postcondition NS performance Threshold is not Created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualThreshold.robot>.

5.3.4.5.5 PUT Individual Threshold - Method not implemented

Test Purpose	
Test ID	5.3.4.5.5
Test title	PUT Individual Threshold - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing NS performance threshold
Pre-conditions	A NS instance is instantiated. One or more NS performance thresholds are set in the NFVO
Reference	Clause 7.4.6.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS performance Threshold is not modified by the operation
Test Case	
Send Put request for individual NS performance Threshold	
Check HTTP Response Status Code Is 405	
Check Postcondition NS performance Threshold is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualThreshold.robot>.

5.3.4.5.6 PATCH Individual Threshold - Method not implemented

Test Purpose	
Test ID	5.3.4.5.6
Test title	PATCH Individual Threshold - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing NS performance threshold
Pre-conditions	A NS instance is instantiated. One or more NS performance thresholds are set in the NFVO
Reference	Clause 7.4.6.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS performance Threshold is not modified by the operation
Test Case	
Send Patch request for individual NS performance Threshold	
Check HTTP Response Status Code Is 405	
Check Postcondition NS performance Threshold is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualThreshold.robot>.

5.3.4.5.7 DELETE Individual Threshold

Test Purpose	
Test ID	5.3.4.5.7
Test title	DELETE Individual Threshold
Test objective	The objective is to test the deletion of an individual NS performance threshold
Pre-conditions	A NS instance is instantiated. One or more NS performance thresholds are set in the NFVO
Reference	Clause 7.4.6.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS performance Threshold is not available anymore in the NFVO
Test Case	
Send Delete request for individual NS performance Threshold	
Check HTTP Response Status Code Is 204	
Check Postcondition NS performance Threshold is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualThreshold.robot>.

5.3.4.6 Subscriptions Resource Endpoint

5.3.4.6.1 Get All NS Performance Subscriptions

Test Purpose	
Test ID	5.3.4.6.1
Test title	Get All NS Performance Subscriptions
Test objective	The objective is to test the retrieval of all NS Performance subscriptions and perform a JSON schema validation of the returned subscriptions data structure
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get all NS Performance Subscriptions	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PmSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Subscriptions.robot>.

5.3.4.6.2 Get NS Performance Subscriptions with attribute-based filter

Test Purpose	
Test ID	5.3.4.6.2
Test title	Get NS Performance Subscriptions with attribute-based filter
Test objective	The objective is to test the retrieval of NS Performance subscriptions using attribute-based filter, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued attribute-based filters
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get NS Performance Subscriptions with attribute-based filters	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PmSubscriptions	
Check HTTP Response Body Subscriptions Match the requested Attribute-Based Filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Subscriptions.robot>.

5.3.4.6.3 Get NS Performance Subscriptions with invalid attribute-based filter

Test Purpose	
Test ID	5.3.4.6.3
Test title	Get NS Performance Subscriptions with attribute-based filters
Test objective	The objective is to test that the retrieval of NS Performance subscriptions fails when using invalid attribute-based filters, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get NS Performance Subscriptions with invalid attribute-based filters	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Subscriptions.robot>.

5.3.4.6.4 GET NS Performance Subscription with invalid resource endpoint

Test Purpose	
Test ID	5.3.4.6.4
Test title	GET NS Performance Subscription with invalid resource endpoint
Test objective	The objective is to test that the retrieval of all NS Performance subscriptions fails when using invalid resource endpoint.
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get NS Performance Subscriptions with invalid resource endpoint	
Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Subscriptions.robot>.

5.3.4.6.5 Create new NS Performance subscription

Test Purpose	
Test ID	5.3.4.6.5
Test title	Create new NS Performance subscription
Test objective	The objective is to test the creation of a new NS Performance subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	None
Reference	Clause 7.4.7.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS Performance subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for NS Performance Subscription	
Check HTTP Response Status Code Is 201	
Check HTTP Response Body Json Schema Is PmSubscription	
Check HTTP Response Body PmSubscription Attributes Values Match the Issued Subscription	
Check Postcondition NS Performance Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Subscriptions.robot>.

5.3.4.6.6 Create duplicated NS Performance subscription with NFVO not creating duplicated subscriptions

Test Purpose	
Test ID	5.3.4.6.6
Test title	Create duplicated NS Performance subscription with NFVO not creating duplicated subscriptions
Test objective	The objective is to test the attempt of a creation of a duplicated NS Performance subscription and check that no new subscription is created by the NFVO and a link to the original subscription is returned
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.7.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO does not support the creation of duplicated subscriptions
Post-Conditions	The existing NS Performance subscription returned is available in the NFVO
Test Case	
Send Post Request for Duplicated NS Performance Subscription	
Check HTTP Response Status Code Is 303	
Check HTTP Response Body Is Empty	
Check HTTP Response Header Contains Location	
Check Postcondition Subscription Resource URI Returned in Location Header Is Available	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Subscriptions.robot>.

5.3.4.6.7 Create duplicated NS Performance subscription with NFVO creating duplicated subscriptions

Test Purpose	
Test ID	5.3.4.6.7
Test title	Create duplicated NS Performance subscription with NFVO creating duplicated subscriptions
Test objective	The objective is to test the creation of a duplicated NS Performance subscription and perform a JSON schema and content validation of the returned duplicated subscription data structure
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.7.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the creation of duplicated subscriptions
Post-Conditions	The duplicated NS Performance subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for Duplicated NS Performance Subscription	
Check HTTP Response Status Code Is 201	
Check HTTP Response Body Json Schema Is PmSubscription	
Check HTTP Response Body PmSubscription Attributes Values Match the Issued Subscription	
Check Postcondition NS Performance Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Subscriptions.robot>.

5.3.4.6.8 PUT NS Performance Subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.4.6.8
Test title	PUT NS Performance Subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify NS Performance subscriptions
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.7.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Put Request for NS Performance Subscriptions	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Subscriptions.robot>.

5.3.4.6.9 PATCH NS Performance Subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.4.6.9
Test title	PATCH NS Performance Subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update NS Performance subscriptions
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.7.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Patch Request for NS Performance Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Subscriptions.robot>.

5.3.4.6.10 DELETE NS Performance Subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.4.6.10
Test title	DELETE NS Performance Subscriptions - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete NS Performance subscriptions
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.7.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS Performance subscriptions are not deleted by the failed operation
Test Case	
Send Delete Request for NS Performance Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Subscriptions.robot>.

5.3.4.7 Individual Subscription Resource Endpoint

5.3.4.7.1 GET Individual NS Performance Subscription

Test Purpose	
Test ID	5.3.4.7.1
Test title	GET Individual NS Performance Subscription
Test objective	The objective is to test the retrieval of individual NS Performance subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.8.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get Individual NS Performance Subscription Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PkgmSubscription Check HTTP Response Body Subscription Identifier matches the requested Subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualSubscription.robot>.

5.3.4.7.2 GET Individual NS Performance Subscription with invalid resource identifier

Test Purpose	
Test ID	5.3.4.7.2
Test title	GET Individual NS Performance Subscription with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual NS Performance subscription fails when using an invalid resource identifier
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.8.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET individual NS Performance Subscription with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualSubscription.robot>.

5.3.4.7.3 DELETE Individual NS Performance Subscription with invalid resource identifier

Test Purpose	
Test ID	5.3.4.7.3
Test title	DELETE Individual NS Performance Subscription with invalid resource identifier
Test objective	The objective is to test that the deletion of an individual NS Performance subscription fails when using an invalid resource identifier
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.8.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Delete request for individual NS Performance Subscription with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualSubscription.robot>.

5.3.4.7.4 POST Individual NS Performance Subscription - Method not implemented

Test Purpose	
Test ID	5.3.4.7.4
Test title	POST Individual NS Performance Subscription - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new NS Performance Subscription
Pre-conditions	None
Reference	Clause 7.4.8.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS Performance Subscription is not created on the NFVO
Test Case	
Send Post request for individual NS Performance Subscription Check HTTP Response Status Code Is 405 Check Postcondition NS Performance Subscription is not Created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualSubscription.robot>.

5.3.4.7.5 PUT Individual NS Performance Subscription - Method not implemented

Test Purpose	
Test ID	5.3.4.7.5
Test title	PUT Individual NS Performance Subscription - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing NS Performance subscription
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.8.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS Performance subscription is not modified by the operation
Test Case	
Send Put request for individual NS Performance Subscription	
Check HTTP Response Status Code Is 405	
Check Postcondition NS Performance Subscription is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualSubscription.robot>.

5.3.4.7.6 PATCH Individual NS Performance Subscription - Method not implemented

Test Purpose	
Test ID	5.3.4.7.6
Test title	PATCH Individual NS Performance Subscription - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing NS Performance subscription
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.8.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS Performance subscription is not modified by the operation
Test Case	
Send Patch request for individual NS Performance Subscription	
Check HTTP Response Status Code Is 405	
Check Postcondition NS Performance Subscription is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualSubscription.robot>.

5.3.4.7.7 DELETE Individual NS Performance Subscription

Test Purpose	
Test ID	5.3.4.7.7
Test title	DELETE Individual NS Performance Subscription
Test objective	The objective is to test the deletion of an individual NS Performance subscription
Pre-conditions	At least one NS Performance subscription is available in the NFVO
Reference	Clause 7.4.8.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The NS Performance Subscription is not available anymore in the NFVO
Test Case	
Send Delete request for individual NS Performance Subscription	
Check HTTP Response Status Code Is 204	
Check Postcondition NS Performance Subscription is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/IndividualSubscription.robot>.

5.3.4.8 Notifications Endpoint

5.3.4.8.1 NS Performance Information Availability Notification

Test Purpose	
Test ID	5.3.4.8.1
Test title	NS Performance Information Availability Notification
Test objective	The objective is to test the dispatch of NS Performance Information Availability Notification when new NS performance information is available in the NFVO, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A NS performance job is created, and a subscription for information availability notifications is available in the NFVO
Reference	Clause 7.4.9.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the availability of NS Performance Information (external action) Check Performance Information Available Notification Http POST Request Body Json Schema Is PerformanceInformationAvailableNotification Check Performance Information Available Notification Http POST Request Body notificationType attribute Is PerformanceInformationAvailableNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Notifications.robot>.

5.3.4.8.2 NS Threshold Crossed Notification

Test Purpose	
Test ID	5.3.4.8.2
Test title	NS Threshold Crossed Notification
Test objective	The objective is to test the dispatch of NS Threshold Crossed Notification when a previously set NS performance metric threshold is crossed, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A NS performance job is created, and a threshold subscription is available in the NFVO
Reference	Clause 7.4.9.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the cross of NS Performance Threshold (external action) Check Threshold Crossed Notification Http POST Request Body Json Schema Is ThresholdCrossedNotification Check Threshold Crossed Notification Http POST Request Body notificationType attribute Is ThresholdCrossedNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/NSPerformanceManagement-API/Notifications.robot>.

5.3.5 VNF Package Management interface

5.3.5.1 VNF Packages Resource Endpoint

5.3.5.1.1 GET all VNF Packages

Test Purpose	
Test ID	5.3.5.1.1
Test title	GET all VNF Packages
Test objective	The objective is to test the retrieval of all the available VNF packages information and perform a JSON schema and content validation of the collected data structure
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET all VNF Packages Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgsInfo Check HTTP Response Body Does Not Contain softwareImages Check HTTP Response Body Does Not Contain additionalArtifacts Check HTTP Response Body Does Not Contain userDefinedData Check HTTP Response Body Does Not Contain checksum	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.5.1.2 GET VNF Packages with attribute-based filter

Test Purpose	
Test ID	5.3.5.1.2
Test title	GET VNF Packages with attribute-based filter
Test objective	The objective is to test the retrieval of VNF packages using attribute-based filter, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued attribute-based filter
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Packages with attribute-based filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgsInfo Check HTTP Response Body VnfPkgsInfo Matches the requested attribute-based filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.5.1.3 GET VNF Packages with invalid attribute-based filter

Test Purpose	
Test ID	5.3.5.1.3
Test title	GET VNF Packages with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of VNF packages fails when using invalid attribute-based filter, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Packages with invalid attribute-based filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.5.1.4 Get all VNF Packages with malformed authorization token

Test Purpose	
Test ID	5.3.5.1.4
Test title	Get all VNF Packages Information with malformed authorization token
Test objective	The objective is to test that the retrieval of VNF Packages fails when using malformed authorization token
Pre-conditions	One or more VNF Packages are onboarded in the NFVO
Reference	Clauses 4.5.3.3 and 9.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO requires the usage of access tokens for authorizing the API requests.
Post-Conditions	None
Test Case	
Get all VNF Packages with malformed authorization token Check HTTP Response Status Code Is 400	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.1.1.5 Get all VNF Packages without authorization token

Test Purpose	
Test ID	5.3.1.1.5
Test title	Get all VNF Packages without authorization token
Test objective	The objective is to test that the retrieval of VNF Packages fails when omitting the authorization token
Pre-conditions	One or more VNF Packages are onboarded in the NFVO
Reference	Clauses 4.5.3.3 and 9.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO requires the usage of access tokens for authorizing the API requests.
Post-Conditions	None
Test Case	
Get all VNF Packages without authorization token Check HTTP Response Status Code Is 401	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.5.1.6 GET VNF Packages with "all_fields" attribute selector

Test Purpose	
Test ID	5.3.5.1.6
Test title	GET VNF Packages with "all_fields" attribute selector
Test objective	The objective is to test the retrieval of VNF packages with "all_fields" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "all_fields" selector
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clauses 4.3.3.2.1 and 9.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Packages with all_fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgsInfo Check HTTP Response Body vnfPkgsInfo Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.5.1.7 GET VNF Packages with "exclude_default" attribute selector

Test Purpose	
Test ID	5.3.5.1.7
Test title	GET VNF Packages with exclude_default attribute selector
Test objective	The objective is to test the retrieval of VNF packages with "exclude_default" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "exclude_default" selector
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clauses 4.3.3.2.1 and 9.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Packages with exclude_default attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgsInfo Check HTTP Response Body vnfPkgsInfo Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.5.1.8 GET VNF Packages with "fields" attribute selector

Test Purpose	
Test ID	5.3.5.1.8
Test title	GET VNF Packages with fields attribute selector
Test objective	The objective is to test the retrieval of VNF packages with "fields" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "fields" selector
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clauses 4.3.3.2.1 and 9.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The VNFM supports the use of fields attribute selector
Post-Conditions	None
Test Case	
GET VNF Packages with fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgsInfo Check HTTP Response Body vnfPkgsInfo Matches the requested fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.5.1.9 GET VNF Packages with "exclude_fields" attribute selector

Test Purpose	
Test ID	5.3.5.1.9
Test title	GET VNF Packages with exclude_fields attribute selector
Test objective	The objective is to test the retrieval of VNF packages with "exclude_fields" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "exclude_fields" selector
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clauses 4.3.3.2.1 and 9.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The VNFM supports the use of exclude_fields attribute selector
Post-Conditions	None
Test Case	
GET VNF Packages with exclude_fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgsInfo Check HTTP Response Body vnfPkgsInfo Matches the requested exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.5.1.10 GET all VNF Packages with invalid resource endpoint

Test Purpose	
Test ID	5.3.5.1.10
Test title	GET VNF Packages with invalid resource endpoint
Test objective	The objective is to test that the retrieval of VNF packages fails when using invalid resource endpoint
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET all VNF Packages with invalid resource endpoint Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.5.1.11 Create new VNF Package Resource

Test Purpose	
Test ID	5.3.5.1.11
Test title	Create new VNF Package Resource
Test objective	The objective is to test the creation of a new VNF Package Resource and perform the JSON schema validation of the returned structure
Pre-conditions	None
Reference	Clause 9.4.2.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package Resource is successfully created on the NFVO
Test Case	
Send Post Request to create new VNF Package Resource Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is vnfPkgInfo Check HTTP Response Header Contains Location Check Postcondition VNF Package Resource Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.5.1.12 PUT all VNF Packages - Method not implemented

Test Purpose	
Test ID	5.3.5.1.12
Test title	PUT all VNF Packages - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify existing VNF Packages
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.2.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for all VNF Packages Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.5.1.13 PATCH all VNF Packages - Method not implemented

Test Purpose	
Test ID	5.3.5.1.13
Test title	PATCH all VNF Packages - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update existing VNF Packages
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.2.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for all VNF Packages Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.5.1.14 DELETE all VNF Packages - Method not implemented

Test Purpose	
Test ID	5.3.5.1.14
Test title	DELETE all VNF Packages - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete existing VNF Packages
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.2.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Packages are not deleted by the failed operation
Test Case	
Send DELETERequest for all VNF Packages Check HTTP Response Status Code Is 405 Check Postcondition VNF Packages Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackages.robot>.

5.3.5.2 Individual VNF Package Resource Endpoint

5.3.5.2.1 GET Individual VNF Package

Test Purpose	
Test ID	5.3.5.2.1
Test title	GET Individual VNF Package
Test objective	The objective is to test the retrieval of an individual VNF package information perform a JSON schema validation of the collected data structure
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.3.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual VNF Package Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgInfo Check HTTP Response Body vnfPkgInfo Identifier matches the requested VNF Package	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualVNFPackage.robot>.

5.3.5.2.2 GET Individual VNF Package with invalid resource identifier

Test Purpose	
Test ID	5.3.5.2.2
Test title	GET Individual VNF Package with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF package fails when using an invalid resource identifier
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.3.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual VNF Package with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualVNFPackage.robot>.

5.3.5.2.3 POST Individual VNF Package - Method not implemented

Test Purpose	
Test ID	5.3.5.2.3
Test title	POST Individual VNF Package - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create new VNF Package
Pre-conditions	None
Reference	Clause 9.4.3.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualVNFPackage.robot>.

5.3.5.2.4 PUT Individual VNF Package - Method not implemented

Test Purpose	
Test ID	5.3.5.2.4
Test title	PUT Individual VNF Package - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify a VNF Package
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.3.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualVNFPackage.robot>.

5.3.5.2.5 Disable Individual VNF Package

Test Purpose	
Test ID	5.3.5.2.5
Test title	Disable Individual VNF Package
Test objective	The objective is to test the disabling of an individual VNF Package and perform a JSON schema and content validation of the collected data structure
Pre-conditions	One or more VNF Packages are onboarded in the NFVO in ENABLED operational state
Reference	Clause 9.4.3.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package is in operational state DISABLED
Test Case	
Send PATCH to disable Individual VNF Package Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is VnfPkgInfoModification Check Postcondition VNF Package is in operational state DISABLED	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualVNFPackage.robot>.

5.3.5.2.6 Disable Individual VNF Package with conflict due to operational state DISABLED

Test Purpose	
Test ID	5.3.5.2.6
Test title	Disable Individual VNF Package with conflict due to operational state DISABLED
Test objective	The objective is to test that disabling an individual VNF Package that is already in DISABLED operational state fails and perform a JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more VNF Packages are onboarded in the NFVO in DISABLED operational state (Test ID 5.3.5.2.5)
Reference	Clause 9.4.3.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH to disable Individual VNF Package	
Check HTTP Response Status Code Is 409	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualVNFPackage.robot>.

5.3.5.2.7 Enable Individual VNF Package

Test Purpose	
Test ID	5.3.5.2.7
Test title	Enable Individual VNF Package
Test objective	The objective is to test the enabling of an individual VNF Package and perform a JSON schema and content validation of the collected data structure
Pre-conditions	One or more VNF Packages are onboarded in the NFVO in DISABLED operational state (Test ID 5.3.5.2.5)
Reference	Clause 9.4.3.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package is in operational state ENABLED
Test Case	
Send PATCH to enable Individual VNF Package	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is VnfPkgInfoModification	
Check Postcondition VNF Package is in operational state ENABLED	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualVNFPackage.robot>.

5.3.5.2.8 Enable Individual VNF Package with conflict due to operational state ENABLED

Test Purpose	
Test ID	5.3.5.2.8
Test title	Enable Individual VNF Package with conflict due to operational state ENABLED
Test objective	The objective is to test that enabling an individual VNF Package that is already in ENABLED operational state fails and perform a JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more VNF Packages are onboarded in the NFVO in ENABLED operational state (Test ID 5.3.5.2.7)
Reference	Clause 9.4.3.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH to enable Individual VNF Package	
Check HTTP Response Status Code Is 409	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualVNFPackage.robot>.

5.3.5.2.9 DELETE Individual VNF Package

Test Purpose	
Test ID	5.3.5.2.9
Test title	DELETE Individual VNF Package
Test objective	The objective is to test the deletion of an individual VNF Package
Pre-conditions	One or more VNF packages are onboarded in the NFVO in DISABLED operational state
Reference	Clause 9.4.3.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package is not available anymore in the NFVO
Test Case	
Send DELETE Request for individual VNF Package	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Package is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualVNFPackage.robot>.

5.3.5.2.10 DELETE Individual VNF Package in operational state ENABLED

Test Purpose	
Test ID	5.3.5.2.10
Test title	DELETE Individual VNF Package in operational state ENABLED
Test objective	The objective is to test that the deletion of an individual VNF Package in operational state ENABLED fails. The test also performs a JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more VNF Package are onboarded in the NFVO in ENABLED operational state (Test ID 5.3.1.2.7).
Reference	Clause 9.4.3.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package is not deleted by the failed operation
Test Case	
Send DELETE Request for Individual VNF Package in operational state ENABLED	
Check HTTP Response Status Code Is 409	
Check HTTP Response Body Json Schema Is ProblemDetails	
Check Postcondition VNF Package Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualVNFPackage.robot>.

5.3.5.2.11 DELETE Individual VNF Package used for instantiated VNF instances

Test Purpose	
Test ID	5.3.5.2.11
Test title	DELETE Individual VNF Package used for instantiated VNF instances
Test objective	The objective is to test that the deletion of an individual VNF Package that is used in instantiated VNF instances fails. The test also performs a JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more VNF instances are instantiated based on the concerned VNF package
Reference	Clause 9.4.3.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package is not deleted by the failed operation
Test Case	
Send DELETE Request for Individual VNF Package used for instantiated VNF instances	
Check HTTP Response Status Code Is 409	
Check HTTP Response Body Json Schema Is ProblemDetails	
Check Postcondition VNF Package Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualVNFPackage.robot>.

5.3.5.3 VNFD In Individual VNF Package Resource Endpoint

5.3.5.3.1 Get single file VNFD in Individual VNF Package in Plain Format

Test Purpose	
Test ID	5.3.5.3.1
Test title	Get single file VNFD in Individual VNF Package in Plain Format
Test objective	The objective is to test the retrieval of the VNFD in plain format for an individual VNF package and perform a validation that returned content is in plain format
Pre-conditions	One or more VNF packages are onboarded in the NFVO.
Reference	Clause 9.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The VNFD is implemented as a single file
Post-Conditions	None
Test Case	
Get single file VNFD in Individual VNF Package in Plain Format	
Check HTTP Response Status Code Is 200	
Check HTTP Response Header Content-Type Is text/plain	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

5.3.5.3.2 Get VNFD in Individual VNF Package in Zip Format

Test Purpose	
Test ID	5.3.5.3.2
Test title	Get VNFD in Individual VNF Package in Zip Format
Test objective	The objective is to test the retrieval of the VNFD in zip format for an individual VNF package and perform a validation that returned content is in zip format
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get VNFD in Individual VNF Package in Zip Format	
Check HTTP Response Status Code Is 200	
Check HTTP Response Header Content-Type Is application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

5.3.5.3.3 Get single file VNFD in Individual VNF Package in Plain or Zip Format

Test Purpose	
Test ID	5.3.5.3.3
Test title	Get single file VNFD in Individual VNF Package in Plain or Zip Format
Test objective	The objective is to test the retrieval of the single file VNFD for an individual VNF package when requesting Plain or Zip format to NFVO by including both formats in the request, and perform a validation that returned content is in Plain or Zip format
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The VNFD is implemented as a single file
Post-Conditions	None
Test Case	
Get single file VNFD in Individual VNF Package in Plain or Zip Format	
Check HTTP Response Status Code Is 200	
Check HTTP Response Header Content-Type Is Any of text/plain application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

5.3.5.3.4 Get multi file VNFD in Individual VNF Package in Plain or Zip Format

Test Purpose	
Test ID	5.3.5.3.4
Test title	Get multi file VNFD in Individual VNF Package in Plain or Zip Format
Test objective	The objective is to test the retrieval of the multi file VNFD for an individual VNF package when requesting Plain or Zip format to NFVO by including both formats in the request, and perform a validation that returned content is in Zip format
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The VNFD is implemented as a multi file
Post-Conditions	None
Test Case	
Get multi file VNFD in Individual VNF Package in Plain or Zip Format	
Check HTTP Response Status Code Is 200	
Check HTTP Response Header Content-Type Is application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

5.3.5.3.5 Get multi file VNFD in Individual VNF Package in Plain Format

Test Purpose	
Test ID	5.3.5.3.5
Test title	Get multi file VNFD in Individual VNF Package in Plain Format
Test objective	The objective is to test that the retrieval of the multi file VNFD for an individual VNF package fails when requesting it in Plain format, and perform a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The VNFD is implemented as a multi file
Post-Conditions	None
Test Case	
Get multi file VNFD in Individual VNF Package in Plain Format	
Check HTTP Response Status Code Is 406	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

5.3.5.3.6 Get VNFD in Individual VNF Package with invalid resource identifier

Test Purpose	
Test ID	5.3.5.3.6
Test title	Get VNFD in Individual VNF Package with invalid resource identifier
Test objective	The objective is to test that the retrieval of the VNFD for an individual VNF Package fails when using an invalid resource identifier
Pre-conditions	None
Reference	Clause 9.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get VNFD in Individual VNF Package with invalid resource identifier	
Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

5.3.5.3.7 Get VNFD in Individual VNF Package with conflict due to onboarding state

Test Purpose	
Test ID	5.3.5.3.7
Test title	Get VNFD in Individual VNF Package with conflict due to onboarding state
Test objective	The objective is to test that the retrieval of the VNFD for an individual VNF Package fails due to a conflict when the VNF Package is not in onboarding state ONBOARDED in the NFVO. The test also performs a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	The onboarding state of the VNF package for which the VNFD is requested is different from ONBOARDED
Reference	Clause 9.4.4.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get VNFD in Individual VNF Package with conflict due to onboarding state Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

5.3.5.3.8 POST VNFD in Individual VNF Package - Method not implemented

Test Purpose	
Test ID	5.3.5.3.8
Test title	POST VNFD in Individual VNF Package - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create new VNFD
Pre-conditions	None
Reference	Clause 9.4.4.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for VNFD in individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

5.3.5.3.9 PUT VNFD in Individual VNF Package - Method not implemented

Test Purpose	
Test ID	5.3.5.3.9
Test title	PUT VNFD in Individual VNF Package - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify a VNFD
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.4.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for VNFD in individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

5.3.5.3.10 PATCH VNFD in Individual VNF Package - Method not implemented

Test Purpose	
Test ID	5.3.5.3.10
Test title	PATCH VNFD in Individual VNF Package - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update a VNFD
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.4.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for VNFD in individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

5.3.5.3.11 DELETE VNFD in Individual VNF Package - Method not implemented

Test Purpose	
Test ID	5.3.5.3.11
Test title	DELETE VNFD in Individual VNF Package - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete a VNFD
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.4.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNFD is not deleted by the failed operation
Test Case	
Send DELETE Request for VNFD in individual VNF Package Check HTTP Response Status Code Is 405 Check Postcondition VNFD Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

5.3.5.4 VNF Package Content Resource Endpoint

5.3.5.4.1 GET Individual VNF Package Content

Test Purpose	
Test ID	5.3.5.4.1
Test title	GET Individual VNF Package Content
Test objective	The objective is to test the retrieval of an individual VNF package content and perform a validation that returned content is in zip format
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual VNF Package Content Check HTTP Response Status Code Is 200 Check HTTP Response Header Content-Type Is application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContent.robot>.

5.3.5.4.2 GET Individual VNF Package Content with Range Request and NFVO supporting Range Requests

Test Purpose	
Test ID	5.3.5.4.2
Test title	GET Individual VNF Package Content with Range Request and NFVO supporting Range Requests
Test objective	The objective is to test the retrieval of an individual VNF package content when using a range request to return single range of bytes from the file, with the NFVO supporting it. The test also perform a validation that returned content matches the issued range
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports range requests to return single range of bytes from the VNF package file
Post-Conditions	None
Test Case	
GET Individual VNF Package Content with Range Request Check HTTP Response Status Code Is 206 Check HTTP Response Header Content-Type Is application/zip Check HTTP Response Header Content-Range Is Present and Matches the requested range Check HTTP Response Header Content-Length Is Present and Matches the requested range length	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContent.robot>.

5.3.5.4.3 GET Individual VNF Package Content with Range Request and NFVO not supporting Range Requests

Test Purpose	
Test ID	5.3.5.4.3
Test title	GET Individual VNF Package Content with Range Request and NFVO not supporting Range Requests
Test objective	The objective is to test that the retrieval of an individual VNF package content, when using a range request to return single range of bytes from the file and the NFVO not supporting it, returns the full VNF Package file
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO does not support range requests to return single range of bytes from the VNF package file
Post-Conditions	None
Test Case	
GET Individual VNF Package Content with Range Request Check HTTP Response Status Code Is 200 Check HTTP Response Header Content-Type Is application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContent.robot>.

5.3.5.4.4 GET Individual VNF Package Content with invalid Range Request

Test Purpose	
Test ID	5.3.5.4.4
Test title	GET Individual VNF Package Content with invalid Range Request
Test objective	The objective is to test that the retrieval of an individual VNF package content fails when using a range request that does not match any available byte range in the file
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports range requests to return single range of bytes from the VNF package file
Post-Conditions	None
Test Case	
GET Individual VNF Package Content with invalid Range Request Check HTTP Response Status Code Is 416	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContent.robot>.

5.3.5.4.5 GET Individual VNF Package Content with invalid resource identifier

Test Purpose	
Test ID	5.3.5.4.5
Test title	GET Individual VNF Package Content with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF package content fails when using an invalid resource identifier
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual VNF Package Content with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContent.robot>.

5.3.5.4.6 GET Individual VNF Package Content with conflict due to onboarding state

Test Purpose	
Test ID	5.3.5.4.6
Test title	GET Individual VNF Package Content with conflict due to onboarding state
Test objective	The objective is to test that the retrieval of an individual VNF package content fails due to a conflict when the VNF Package is not in onboarding state ONBOARDED in the NFVO. The test also performs a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	The onboarding state of the VNF package for which the content is requested is different from ONBOARDED
Reference	Clause 9.4.5.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Content for VNF Package in onboarding state different from ONBOARDED Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContent.robot>.

5.3.5.4.7 POST Individual VNF Package Content - Method not implemented

Test Purpose	
Test ID	5.3.5.4.7
Test title	POST Individual VNF Package Content - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create new VNF Package content
Pre-conditions	None
Reference	Clause 9.4.5.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for individual VNF Package Content	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContent.robot>.

5.3.5.4.8 Upload VNF Package Content

Test Purpose	
Test ID	5.3.5.4.8
Test title	Upload VNF Package Content
Test objective	The objective is to test the upload of a VNF Package Content in Zip format
Pre-conditions	One or more VNF Packages are onboarded in the NFVO
Reference	Clause 9.4.5.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package content is successfully uploaded and available in the NFVO
Test Case	
Send PUT Request to upload VNF Package Content	
Check HTTP Response Status Code Is 204	
Check Postcondition VNF Package Content is uploaded and available in the NFVO	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContent.robot>.

5.3.5.4.9 Upload VNF Package Content with conflict due to onboarding state

Test Purpose	
Test ID	5.3.5.4.9
Test title	Upload VNF Package Content with conflict due to onboarding state
Test objective	The objective is to test that the upload of the VNF Package Content fails due to a conflict when the VNF Package is not in onboarding state CREATED in the NFVO. The test also performs a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	The onboarding state of the VNF Package for which the content is requested is different from CREATED
Reference	Clause 9.4.5.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request to upload VNF Package Content with conflict due to onboarding state	
Check HTTP Response Status Code Is 409	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContent.robot>.

5.3.5.4.10 PATCH Individual VNF Package Content - Method not implemented

Test Purpose	
Test ID	5.3.5.4.10
Test title	PATCH Individual VNF Package Content - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update a VNF Package content
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.5.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for individual VNF Package Content	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContent.robot>.

5.3.5.4.11 DELETE Individual VNF Package Content - Method not implemented

Test Purpose	
Test ID	5.3.5.4.11
Test title	DELETE Individual VNF Package Content - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete a VNF Package content
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.5.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package content is not deleted by the failed operation
Test Case	
Send DELETE Request for individual VNF Package Content	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Package Content Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContent.robot>.

5.3.5.5 Upload VNF Package From URI Resource Endpoint

5.3.5.5.1 Upload VNF Package Content from URI

Test Purpose	
Test ID	5.3.5.5.1
Test title	Upload VNF Package Content from URI
Test objective	The objective is to test the upload of a VNF Package Content from URI
Pre-conditions	One or more VNF Packages are in onboarding state CREATED in the NFVO
Reference	Clause 9.4.6.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request to upload VNF Package Content from URI	
Check HTTP Response Status Code Is 202	
Check HTTP Response Body is Empty	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContentViaURI.robot>.

5.3.5.5.2 Upload VNF Package Content from URI with conflict due to onboarding state

Test Purpose	
Test ID	5.3.5.5.2
Test title	Upload VNF Package Content from URI with conflict due to onboarding state
Test objective	The objective is to test that the upload of the VNF Package Content from URI fails due to a conflict when the VNF Package is not in onboarding state CREATED in the NFVO. The test also performs a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	The onboarding state of the VNF Package for which the content is requested is different from CREATED
Reference	Clause 9.4.6.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request to upload VNF Package Content from URI with conflict due to onboarding state	
Check HTTP Response Status Code Is 409	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContentViaURI.robot>.

5.3.5.5.3 GET Individual VNF Package Content from URI - Method not implemented

Test Purpose	
Test ID	5.3.5.5.3
Test title	GET Individual VNF Package Content from URI - Method not implemented
Test objective	The objective is to test that GET method is not allowed to retrieve a VNF Package content from URI
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.6.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send GET Request for individual VNF Package Content from URI	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContentViaURI.robot>.

5.3.5.5.4 PUT Individual VNF Package Content from URI - Method not implemented

Test Purpose	
Test ID	5.3.5.5.4
Test title	PUT Individual VNF Package Content from URI - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify a VNF Package content from URI
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.6.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for individual VNF Package Content from URI	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContentViaURI.robot>.

5.3.5.5.5 PATCH Individual VNF Package Content from URI - Method not implemented

Test Purpose	
Test ID	5.3.5.5.5
Test title	PATCH Individual VNF Package Content - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update a VNF Package content from URI
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.6.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for individual VNF Package Content from URI Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContentViaURI.robot>.

5.3.5.5.6 DELETE Individual VNF Package Content from URI - Method not implemented

Test Purpose	
Test ID	5.3.5.5.6
Test title	DELETE Individual VNF Package Content - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete a VNF Package content from URI
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.6.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package content is not deleted by the failed operation
Test Case	
Send DELETE Request for individual VNF Package Content from URI Check HTTP Response Status Code Is 405 Check Postcondition VNF Package Content from URI Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageContentViaURI.robot>.

5.3.5.6 Individual VNF Package Artifact Resource Endpoint

5.3.5.6.1 GET Individual VNF Package Artifact

Test Purpose	
Test ID	5.3.5.6.1
Test title	GET Individual VNF Package Artifact
Test objective	The objective is to test the retrieval of an individual VNF package artifact
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual VNF Package Artifact Check HTTP Response Status Code Is 200	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

5.3.5.6.2 GET Individual VNF Package Artifact in octet stream format

Test Purpose	
Test ID	5.3.5.6.2
Test title	GET Individual VNF Package Artifact in octet stream format
Test objective	The objective is to test the retrieval of an individual VNF package artifact when the NFVO cannot determine the artifact content type. The test performs a validation that the returned artifact in is octet-stream format
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO cannot determine the content type of the artifact
Post-Conditions	None
Test Case	
GET Individual VNF Package Artifact in octet stream format Check HTTP Response Status Code Is 200 Check HTTP Response Header Content-Type Is application/octet-stream	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

5.3.5.6.3 GET Individual VNF Package Artifact with Range Request and NFVO supporting Range Requests

Test Purpose	
Test ID	5.3.5.6.3
Test title	GET Individual VNF Package Artifact with Range Request and NFVO supporting Range Requests
Test objective	The objective is to test the retrieval of an individual VNF package artifact when using a range request to return single range of bytes from the file, with the NFVO supporting it. The test also perform a validation that returned content matches the issued range
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports range requests to return single range of bytes from the VNF package artifact
Post-Conditions	None
Test Case	
GET Individual VNF Package Artifact with Range Request Check HTTP Response Status Code Is 206 Check HTTP Response Header Content-Range Is Present and Matches the requested range Check HTTP Response Header Content-Length Is Present and Matches the requested range length	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

5.3.5.6.4 GET Individual VNF Package Artifact with Range Request and NFVO not supporting Range Requests

Test Purpose	
Test ID	5.3.5.6.4
Test title	GET Individual VNF Package Artifact with Range Request and NFVO not supporting Range Requests
Test objective	The objective is to test that the retrieval of an individual VNF package artifact, when using a range request to return single range of bytes from the file and the NFVO not supporting it, returns the full VNF Package artifact
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO does not support range requests to return single range of bytes from the VNF package artifact
Post-Conditions	None
Test Case	
GET Individual VNF Package Artifact with Range Request Check HTTP Response Status Code Is 200	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

5.3.5.6.5 GET Individual VNF Package Artifact with invalid Range Request

Test Purpose	
Test ID	5.3.5.6.5
Test title	GET Individual VNF Package Artifact with invalid Range Request
Test objective	The objective is to test that the retrieval of an individual VNF package artifact fails when using a range request that does not match any available byte range in the file
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports range requests to return single range of bytes from the VNF package artifact
Post-Conditions	None
Test Case	
GET Individual VNF Package Artifact with invalid Range Request Check HTTP Response Status Code Is 416	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

5.3.5.6.6 GET Individual VNF Package Artifact with invalid resource identifier

Test Purpose	
Test ID	5.3.5.6.6
Test title	GET Individual VNF Package Artifact with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF package artifact fails when using an invalid resource identifier
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual VNF Package Artifact with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

5.3.5.6.7 GET Individual VNF Package Artifact with conflict due to onboarding state

Test Purpose	
Test ID	5.3.5.6.7
Test title	GET Individual VNF Package Artifact with conflict due to onboarding state
Test objective	The objective is to test that the retrieval of an individual VNF package artifact fails due to a conflict when the VNF Package is not in onboarding state ONBOARDED in the NFVO. The test also performs a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	The onboarding state of the VNF package for which the content is requested is different from ONBOARDED
Reference	Clause 9.4.7.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Artifact for VNF Package in onboarding state different from ONBOARDED Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

5.3.5.6.8 POST Individual VNF Package Artifact - Method not implemented

Test Purpose	
Test ID	5.3.5.6.8
Test title	POST Individual VNF Package Artifact - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create new VNF Package artifact
Pre-conditions	None
Reference	Clause 9.4.7.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for individual VNF Package Artifact Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

5.3.5.6.9 PUT Individual VNF Package Artifact - Method not implemented

Test Purpose	
Test ID	5.3.5.6.9
Test title	PUT Individual VNF Package Artifact - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify a VNF Package artifact
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.7.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for individual VNF Package Artifact Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

5.3.5.6.10 PATCH Individual VNF Package Artifact - Method not implemented

Test Purpose	
Test ID	5.3.5.6.10
Test title	PATCH Individual VNF Package Artifact - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update a VNF Package artifact
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.7.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for individual VNF Package Artifact Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

5.3.5.6.11 DELETE Individual VNF Package Artifact - Method not implemented

Test Purpose	
Test ID	5.3.5.6.11
Test title	DELETE Individual VNF Package Artifact - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete a VNF Package artifact
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 9.4.7.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package artifact is not deleted by the failed operation
Test Case	
Send DELETE Request for individual VNF Package Artifact	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Package Artifact Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

5.3.5.7 Subscriptions Resource Endpoint

5.3.5.7.1 Get All VNF Package Subscriptions

Test Purpose	
Test ID	5.3.5.7.1
Test title	GET all VNF Package Subscriptions
Test objective	The objective is to test the retrieval of all VNF package subscriptions and perform a JSON schema validation of the returned subscriptions data structure
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.8.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get all VNF Package Subscriptions	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PkgmSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/Subscriptions.robot>.

5.3.5.7.2 Get VNF Package Subscriptions with attribute-based filter

Test Purpose	
Test ID	5.3.5.7.2
Test title	Get VNF Package Subscriptions with attribute-based filter
Test objective	The objective is to test the retrieval of VNF package subscriptions using attribute-based filter, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued attribute-based filters
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.8.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Package Subscriptions with attribute-based filters	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PkgmSubscription	
Check HTTP Response Body Subscriptions Match the requested Attribute-Based Filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/Subscriptions.robot>.

5.3.5.7.3 Get VNF Package Subscriptions with invalid attribute-based filter

Test Purpose	
Test ID	5.3.5.7.3
Test title	Get VNF Package Subscriptions with attribute-based filters
Test objective	The objective is to test that the retrieval of VNF package subscriptions fails when using invalid attribute-based filters, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.8.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Package Subscriptions with invalid attribute-based filters	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/Subscriptions.robot>.

5.3.5.7.4 GET VNF Package Subscription with invalid resource endpoint

Test Purpose	
Test ID	5.3.5.7.4
Test title	GET VNF Package Subscription with invalid resource endpoint
Test objective	The objective is to test that the retrieval of all VNF package subscriptions fails when using invalid resource endpoint
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.8.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Package Subscriptions with invalid resource endpoint	
Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/Subscriptions.robot>.

5.3.5.7.5 Create new VNF Package subscription

Test Purpose	
Test ID	5.3.5.7.5
Test title	Create new VNF Package subscription
Test objective	The objective is to test the creation of a new VNF package subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	None
Reference	Clause 9.4.8.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF package subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for VNF Package Subscription	
Check HTTP Response Status Code Is 201	
Check HTTP Response Body Json Schema Is PkgmSubscription	
Check HTTP Response Body PkgmSubscription Attributes Values Match the Issued Subscription	
Check Postcondition VNF Package Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/Subscriptions.robot>.

5.3.5.7.6 Create duplicated VNF Package subscription with NFVO not creating duplicated subscriptions

Test Purpose	
Test ID	5.3.5.7.6
Test title	Create duplicated VNF Package subscription with NFVO not creating duplicated subscriptions
Test objective	The objective is to test the attempt of a creation of a duplicated VNF package subscription and check that no new subscription is created by the NFVO and a link to the original subscription is returned
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.8.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO does not support the creation of duplicated subscriptions
Post-Conditions	The existing VNF package subscription returned is available in the NFVO
Test Case	
Send Post Request for Duplicated VNF Package Subscription Check HTTP Response Status Code Is 303 Check HTTP Response Body Is Empty Check HTTP Response Header Contains Location Check Postcondition Subscription Resource Returned in Location Header Is Available	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/Subscriptions.robot>.

5.3.5.7.7 Create duplicated VNF Package subscription with NFVO creating duplicated subscriptions

Test Purpose	
Test ID	5.3.5.7.7
Test title	Create duplicated VNF Package subscription with NFVO creating duplicated subscriptions
Test objective	The objective is to test the creation of a duplicated VNF package subscription and perform a JSON schema and content validation of the returned duplicated subscription data structure
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.8.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the creation of duplicated subscriptions
Post-Conditions	The duplicated VNF package subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for Duplicated VNF Package Subscription Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is PkgmSubscription Check HTTP Response Body PkgmSubscription Attributes Values Match the Issued Subscription Check Postcondition VNF Package Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/Subscriptions.robot>.

5.3.5.7.8 PUT VNF Package Subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.5.7.8
Test title	PUT VNF Package Subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify VNF package subscriptions
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.8.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Put Request for VNF Package Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/Subscriptions.robot>.

5.3.5.7.9 PATCH VNF Package Subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.5.7.9
Test title	PATCH VNF Package Subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update VNF package subscriptions
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.8.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Patch Request for VNF Package Subscriptions	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/Subscriptions.robot>.

5.3.5.7.10 DELETE VNF Package Subscriptions - Method not implemented

Test Purpose	
Test ID	5.3.5.7.10
Test title	DELETE VNF Package Subscriptions - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete VNF package subscriptions
Pre-conditions	At least one VNF package subscription is available in the NFVO
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF package subscriptions are not deleted by the failed operation
Test Case	
Send Delete Request for VNF Package Subscriptions	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Package Subscriptions Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/Subscriptions.robot>.

5.3.5.8 Individual Subscription Resource Endpoint

5.3.5.8.1 GET Individual VNF Package Subscription

Test Purpose	
Test ID	5.3.5.8.1
Test title	GET Individual VNF Package Subscription
Test objective	The objective is to test the retrieval of individual VNF package subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.9.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get Individual VNF Package Subscription	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PkgmSubscription	
Check HTTP Response Body Subscription Identifier matches the requested Subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualSubscription.robot>.

5.3.5.8.2 GET Individual VNF Package Subscription with invalid resource identifier

Test Purpose	
Test ID	5.3.5.8.2
Test title	GET Individual VNF Package Subscription with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF package subscription fails when using an invalid resource identifier
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.9.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET individual VNF Package Subscription with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualSubscription.robot>.

5.3.5.8.3 DELETE Individual VNF Package Subscription with invalid resource identifier

Test Purpose	
Test ID	5.3.5.8.3
Test title	DELETE Individual VNF Package Subscription with invalid resource identifier
Test objective	The objective is to test that the deletion of an individual VNF package subscription fails when using an invalid resource identifier
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.9.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Delete request for individual VNF Package Subscription with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualSubscription.robot>.

5.3.5.8.4 POST Individual VNF Package Subscription - Method not implemented

Test Purpose	
Test ID	5.3.5.8.4
Test title	POST Individual VNF Package Subscription - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new VNF Package Subscription
Pre-conditions	None
Reference	Clause 9.4.9.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Post request for individual VNF Package Subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualSubscription.robot>.

5.3.5.8.5 PUT Individual VNF Package Subscription - Method not implemented

Test Purpose	
Test ID	5.3.5.8.5
Test title	PUT Individual VNF Package Subscription - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing VNF Package subscription
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.9.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Put request for individual VNF Package Subscription	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualSubscription.robot>.

5.3.5.8.6 PATCH Individual VNF Package Subscription - Method not implemented

Test Purpose	
Test ID	5.3.5.8.6
Test title	PATCH Individual VNF Package Subscription - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing VNF Package subscription
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.9.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Patch request for individual VNF Package Subscription	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualSubscription.robot>.

5.3.5.8.7 DELETE Individual VNF Package Subscription

Test Purpose	
Test ID	5.3.5.8.7
Test title	DELETE Individual VNF Package Subscription
Test objective	The objective is to test the deletion of an individual VNF package subscription
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 9.4.9.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package Subscription is not available anymore in the NFVO
Test Case	
Send Delete request for individual VNF Package Subscription	
Check HTTP Response Status Code Is 204	
Check Postcondition VNF Package Subscription is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/IndividualSubscription.robot>.

5.3.5.9 Notifications Endpoint

5.3.5.9.1 VNF Package Onboarding Notification

Test Purpose	
Test ID	5.3.5.9.1
Test title	VNF Package Onboarding Notification
Test objective	The objective is to test the dispatch of VNF Package Onboarding notification when the VNF package onboarding operation is successfully completed, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF package subscription for onboarding notifications is available in the NFVO
Reference	Clause 9.4.10.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the completion of VNF Package Onboarding (external action) Check Onboarding Notification Http POST Request Body Json Schema Is VnfPackageOnboardingNotification Check Onboarding Notification Http POST Request Body notificationType attribute Is VnfPackageOnboardingNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/Notifications.robot>.

5.3.5.9.2 VNF Package Operational State Change Notification

Test Purpose	
Test ID	5.3.5.9.2
Test title	VNF Package Operational State Change Notification
Test objective	The objective is to test the dispatch of VNF Package Change notification when the VNF package operational state is modified, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF package subscription for change notifications is available in the NFVO
Reference	Clause 9.4.10.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the change of VNF Package Operational State (external action) Check State Change Notification Http POST Request Body Json Schema Is VnfPackageChangeNotification Check State Change Notification Http POST Request Body notificationType attribute Is VnfPackageChangeNotification Check State Change Notification Http POST Request Body changeType attribute Is OP_STATE_CHANGE	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/Notifications.robot>.

5.3.5.9.3 VNF Package Deletion Notification

Test Purpose	
Test ID	5.3.5.9.3
Test title	VNF Package Deletion Notification
Test objective	The objective is to test the dispatch of VNF Package Change notification when the VNF package is deleted on the NFVO, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF package subscription for change notifications is available in the NFVO
Reference	Clause 9.4.10.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the deletion of VNF Package (external action)	
Check Deletion Notification Http POST Request Body Json Schema Is VnfPackageChangeNotification	
Check Deletion Notification Http POST Request Body notificationType attribute Is VnfPackageChangeNotification	
Check Deletion Notification Http POST Request Body changeType attribute Is PKG_DELETE	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL005/VNFPackageManagement-API/Notifications.robot>.

6 Ve-Vnfm Reference Point

6.1 General

Based on the methodology (see clause 4), e.g. characteristics (see clause 4.5.3.2), basic behaviours of the API (see clause 4.5.3.3) and verification aspects (see clause 4.5.4), the clause 6 describes the Test Descriptions for Ve-Vnfm reference point testing. The Test Description format is described in clause 4.5.2.

6.2 Test configuration

Test configurations are described in clause 4.3. In clause 6, below test configurations shall be implemented to run the tests for APIs on Ve-Vnfm reference point, which are shown in the "Config ID" field in the Test Descriptions:

- Config_prod_VE: FUT which implements VNF/EM
- Config_prod_VNFM: FUT which implements VNFM

6.3 Test Descriptions

6.3.1 VNF Configuration Interface

6.3.1.1 Configuration Resource Endpoint

6.3.1.1.1 Set a new VNF Configuration

Test Purpose	
Test ID	6.3.1.1.1
Test title	Set a new VNF Configuration
Test objective	The objective is to test the creation of a new VNF configuration and perform a JSON schema validation of the returned configuration data structure
Pre-conditions	A VNF instance is instantiated
Reference	Clause 9.4.2.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation of HTTP Etag opaque identifiers
Post-Conditions	The configuration is successfully set in the VNF and it matches the issued configuration
Test Case	
Send VNF configuration Check HTTP Response Status Code Is 200 Check HTTP Response Header Contains Etag Check HTTP Response Body Json Schema Is vnfConfigModifications Check Postcondition VNF Is Configured	

6.3.1.1.2 Get information about a VNF configuration

Test Purpose	
Test ID	6.3.1.1.2
Test title	Get information about a VNF configuration
Test objective	The objective is to test the retrieval of an existing VNF instance configuration and perform a JSON schema validation of the collected configuration data structure
Pre-conditions	A VNF instance is instantiated. The VNF instance is already configured
Reference	Clause 9.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get VNF configuration Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfConfiguration	

6.3.1.1.3 Get information about a VNF configuration with usage of HTTP Etag

Test Purpose	
Test ID	6.3.1.1.3
Test title	Get information about a VNF configuration with usage of HTTP Etag
Test objective	The objective is to test the retrieval of an existing VNF instance configuration, check the generation by the VNF of an HTTP Etag opaque identifier, and perform a JSON schema validation of the collected configuration data structure
Pre-conditions	A VNF instance is instantiated. The VNF instance is already configured
Reference	Clause 9.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation of HTTP Etag opaque identifiers
Post-Conditions	None
Test Case	
Get VNF configuration Check HTTP Response Status Code Is 200 Check HTTP Response Header Contains Etag Check HTTP Response Body Json Schema Is vnfConfiguration	

6.3.1.1.4 Set a new VNF Configuration - HTTP Etag precondition unsuccessful

Test Purpose	
Test ID	6.3.1.1.4
Test title	Set a new VNF Configuration - HTTP Etag precondition unsuccessful
Test objective	The objective is to test the unsuccess in setting a duplication of VNF configuration identified by an already used HTTP Etag identifier. The test also checks the JSON schema of the unsuccessful operation HTTP response
Pre-conditions	A VNF instance is instantiated. The VNF instance is already configured (Test ID 6.3.1.1.1) with a given HTTP Etag identifier
Reference	Clause 9.4.2.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation of HTTP Etag opaque identifiers
Post-Conditions	The VNF configuration is not modified by the unsuccessful operation and it matches the configuration issued in Test ID 6.3.1.1.1
Test Case	
Send Duplicated VNF configuration Check HTTP Response Status Code Is 412 Check HTTP Response Body Json Schema Is ProblemDetails Check Postcondition VNF Configuration Unmodified (Implicit)	

6.3.1.1.5 POST VNF Configuration - Method not implemented

Test Purpose	
Test ID	6.3.1.1.5
Test title	POST VNF Configuration - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new VNF configuration
Pre-conditions	A VNF instance is instantiated. The VNF instance is already configured
Reference	Clause 9.4.2.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for VNF Configuration Check HTTP Response Status Code Is 405	

6.3.1.1.6 PUT VNF Configuration - Method not implemented

Test Purpose	
Test ID	6.3.1.1.6
Test title	PUT VNF Configuration - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify an existing VNF configuration
Pre-conditions	A VNF instance is instantiated. The VNF instance is already configured
Reference	Clause 9.4.2.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for VNF Configuration Check HTTP Response Status Code Is 405	

6.3.1.1.7 DELETE VNF Configuration - Method not implemented

Test Purpose	
Test ID	6.3.1.1.7
Test title	DELETE VNF Configuration - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete an existing VNF configuration
Pre-conditions	A VNF instance is instantiated. The VNF instance is already configured
Reference	Clause 9.4.2.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	The VNF configuration is not deleted by the unsuccessful operation
Test Case	
Send DELETE Request for VNF Configuration Check HTTP Response Status Code Is 405 Check Postcondition VNF Configuration Exists	

6.3.2 VNF Indicator Interface

6.3.2.1 VNF Indicators Resource Endpoint

6.3.2.1.1 Get all VNF Indicators

Test Purpose	
Test ID	6.3.2.1.1
Test title	Get all VNF Indicators
Test objective	The objective is to test the retrieval of all the available VNF indicators and perform a JSON schema validation of the collected indicators data structure
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF performance indicators are available in the VNF
Reference	Clause 8.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Get all VNF indicators Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfIndicators	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VNFIndicators.robot>.

6.3.2.1.2 Get VNF Indicators with attribute-based filter

Test Purpose	
Test ID	6.3.2.1.2
Test title	Get VNF Indicators with attribute-based filter
Test objective	The objective is to test the retrieval of VNF indicators using attribute-based filter, perform a JSON schema validation of the collected indicators data structure, and verify that the retrieved information matches the issued attribute-based filters
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF performance indicators are available in the VNF
Reference	Clause 8.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Get VNF indicators with filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfIndicators Check HTTP Response Body vnfIndicators Matches the requested attribute-based filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VNFIndicators.robot>.

6.3.2.1.3 Get VNF Indicators with invalid attribute-based filter

Test Purpose	
Test ID	6.3.2.1 3
Test title	Get VNF Indicators with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of VNF indicators fails when using invalid attribute-based filters, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF performance indicators are available in the VNF
Reference	Clause 8.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Get VNF indicators with invalid filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VNFIndicators.robot>.

6.3.2.1.4 Get all VNF Indicators with malformed authorization token

Test Purpose	
Test ID	6.3.2.1.4
Test title	Get all VNF Indicators with malformed authorization token
Test objective	The objective is to test that the retrieval of VNF indicators fails when using malformed authorization token
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF performance indicators are available in the VNF
Reference	Clauses 4.5.3.3 and 8.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators. The VNF requires the usage of access tokens for authorizing the API requests
Post-Conditions	None
Test Case	
Get all VNF indicators with malformed authorization token Check HTTP Response Status Code Is 400	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VNFIndicators.robot>.

6.3.2.1.5 Get all VNF Indicators without authorization token

Test Purpose	
Test ID	6.3.2.1.5
Test title	GET all VNF Indicators without authorization token
Test objective	The objective is to test that the retrieval of VNF indicators fails when omitting the authorization token
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF performance indicators are available in the VNF
Reference	Clauses 4.5.3.3 and 8.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators. The VNF requires the usage of access tokens for authorizing the API requests
Post-Conditions	None
Test Case	
Get all VNF indicators without authorization token Check HTTP Response Status Code Is 401	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VNFIndicators.robot>.

6.3.2.1.6 Get all VNF Indicators with expired or revoked authorization token

Test Purpose	
Test ID	6.3.2.1.6
Test title	GET all VNF Indicators with expired or revoked authorization token
Test objective	The objective is to test that the retrieval of VNF indicators fails when using an expired or revoked authorization token
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF performance indicators are available in the VNF
Reference	Clauses 4.5.3.3 and 8.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators. The VNF requires the usage of access tokens for authorizing the API requests
Post-Conditions	None
Test Case	
Get all VNF indicators with expired or revoked authorization token Check HTTP Response Status Code Is 401	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VNFIndicators.robot>.

6.3.2.1.7 Get all VNF Indicators with invalid resource endpoint

Test Purpose	
Test ID	6.3.2.1.7
Test title	GET all VNF Indicators with invalid resource endpoint
Test objective	The objective is to test that the retrieval of VNF indicators fails when using invalid resource endpoint
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF performance indicators are available in the VNF
Reference	Clause 8.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Get all VNF indicators with invalid resource endpoint Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VNFIndicators.robot>.

6.3.2.1.8 POST all VNF Indicators - Method not implemented

Test Purpose	
Test ID	6.3.2.1.8
Test title	POST all VNF Indicators - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create new VNF indicators
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF performance indicators are available in the VNF
Reference	Clause 8.4.2.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Send POST Request for all VNF indicators Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VNFIndicators.robot>.

6.3.2.1.9 PUT all VNF Indicators - Method not implemented

Test Purpose	
Test ID	6.3.2.1.9
Test title	PUT all VNF Indicators - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify VNF indicators
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF performance indicators are available in the VNF
Reference	Clause 8.4.2.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Send PUT Request for all VNF indicators Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VNFIndicators.robot>.

6.3.2.1.10 PATCH all VNF Indicators - Method not implemented

Test Purpose	
Test ID	6.3.2.1.10
Test title	PATCH all VNF Indicators - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update VNF indicators
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF performance indicators are available in the VNF
Reference	Clause 8.4.2.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Send PATCH Request for all VNF indicators Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VNFIndicators.robot>.

6.3.2.1.11 DELETE all VNF Indicators - Method not implemented

Test Purpose	
Test ID	6.3.2.1.11
Test title	DELETE all VNF Indicators - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete VNF indicators
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF performance indicators are available in the VNF
Reference	Clause 8.4.2.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	The VNF indicators are not deleted by the failed operation
Test Case	
Send DELETE Request for all VNF indicators Check HTTP Response Status Code Is 405 Check Postcondition VNF Indicators Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VNFIndicators.robot>.

6.3.2.2 VNF Indicators related to a VNF Instance Resource Endpoint

6.3.2.2.1 Get Indicators for VNF Instance

Test Purpose	
Test ID	6.3.2.2.1
Test title	Get all performance indicators for a VNF instance
Test objective	The objective is to test the retrieval of all performance indicators for a given VNF instance and perform a JSON schema validation of the returned indicators data structure
Pre-conditions	A VNF instance is instantiated. One or more measures of performance indicators are available for the given VNF instance
Reference	Clause 8.4.3.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Get all indicators for a VNF instance Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfIndicators Check HTTP Response Body Includes Requested VNF Instance ID	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

6.3.2.2.2 GET Indicators for VNF Instance with attribute-based filter

Test Purpose	
Test ID	6.3.2.2.2
Test title	Get all performance indicators for a VNF instance with attribute-based filter
Test objective	The objective is to test the retrieval of all performance indicators for a given VNF instance using attribute-based filter and perform a JSON schema validation of the returned indicators data structure
Pre-conditions	A VNF instance is instantiated. One or more measures of performance indicators are available for the given VNF instance
Reference	Clause 8.4.3.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Get all indicators for a VNF instance with filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfIndicators Check HTTP Response Body Matches Attribute-Based Filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

6.3.2.2.3 Get Indicators for VNF Instance with invalid attribute-based filter

Test Purpose	
Test ID	6.3.2.2.3
Test title	Get all performance indicators for a VNF instance with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of all performance indicators for a given VNF instance fails using invalid attribute-based filter. The test also checks the JSON schema of the unsuccessful operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more measures of performance indicators are available for the given VNF instance
Reference	Clause 8.4.3.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Get all indicators for a VNF instance with invalid filter	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

6.3.2.2.4 Get Indicators for VNF Instance with invalid resource identifier

Test Purpose	
Test ID	6.3.2.2.4
Test title	Get all performance indicators for a VNF instance with invalid resource identifier
Test objective	The objective is to test that the retrieval of all performance indicators for a given VNF instance fails when using invalid resource identifier. The test also checks the JSON schema of the unsuccessful operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more measures of performance indicators are available for the given VNF instance
Reference	Clause 8.4.3.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Get all indicators for a VNF instance with invalid resource identifier	
Check HTTP Response Status Code Is 404	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

6.3.2.2.5 POST Indicators for VNF instance - Method not implemented

Test Purpose	
Test ID	6.3.2.2.5
Test title	POST performance indicators for VNF instance - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create new performance indicators for a VNF instance
Pre-conditions	A VNF instance is instantiated
Reference	Clause 8.4.3.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Send POST Request for indicators in VNF instance	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

6.3.2.2.6 PUT Indicators for VNF instance - Method not implemented

Test Purpose	
Test ID	6.3.2.2.6
Test title	PUT performance indicators for VNF instance - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify existing performance indicators for a VNF instance
Pre-conditions	A VNF instance is instantiated. One or more measures of performance indicators are available for the given VNF instance
Reference	Clause 8.4.3.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Send PUT Request for indicators in VNF instance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

6.3.2.2.7 PATCH Indicators for VNF instance - Method not implemented

Test Purpose	
Test ID	6.3.2.2.7
Test title	PATCH performance indicators for VNF instance - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update existing performance indicators for a VNF instance
Pre-conditions	A VNF instance is instantiated. One or more measures of performance indicators are available for the given VNF instance
Reference	Clause 8.4.3.3.4 - ETSI GS NFV-SOL ETSI GS NFV-SOL 002 [2]002 v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Send PATCH Request for indicators in VNF instance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

6.3.2.2.8 DELETE Indicators for VNF instance - Method not implemented

Test Purpose	
Test ID	6.3.2.2.8
Test title	DELETE performance indicators for VNF instance - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete performance indicators for a VNF instance
Pre-conditions	A VNF instance is instantiated. One or more measures of performance indicators are available for the given VNF instance
Reference	Clause 8.4.3.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	The indicators for the VNF instance are not deleted by the unsuccessful operation
Test Case	
Send DELETE Request for indicators in VNF instance Check HTTP Response Status Code Is 405 Check Postcondition Indicators for VNF instance Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

6.3.2.3 Individual VNF Indicator Resource Endpoint

6.3.2.3.1 Get Individual Indicator for VNF Instance

Test Purpose	
Test ID	6.3.2.3.1
Test title	Get individual performance indicator for a VNF instance
Test objective	The objective is to test the retrieval of a performance indicator for a given VNF instance and perform a JSON schema validation of the returned indicator data structure
Pre-conditions	A VNF instance is instantiated. At least one measure of performance indicator is available for the given VNF instance
Reference	Clause 8.4.4.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Get Individual Indicator for a VNF instance Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfIndicator Check HTTP Response Body Includes Requested VNF Instance ID Check HTTP Response Body Includes Requested Indicator ID	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/blob/2.4.1/SOL002/VNFIndicator-API/IndividualVNFIndicator.robot>.

6.3.2.3.2 Get Individual Indicator for VNF Instance with invalid indicator identifier

Test Purpose	
Test ID	6.3.2.3.2
Test title	Get individual performance indicator for a VNF instance with invalid indicator identifier
Test objective	The objective is to test that the retrieval of a performance indicator for a given VNF instance fails when using an invalid resource identifier. The test also checks the JSON schema of the unsuccessful operation HTTP response
Pre-conditions	A VNF instance is instantiated. At least one measure of performance indicator is available for the given VNF instance
Reference	Clause 8.4.4.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Get Individual Indicator for a VNF instance with invalid indicator identifier Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/blob/2.4.1/SOL002/VNFIndicator-API/IndividualVNFIndicator.robot>.

6.3.2.3.3 POST Individual VNF Indicator - Method not implemented

Test Purpose	
Test ID	6.3.2.3.3
Test title	POST individual performance indicator for VNF instance - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new performance indicator for a VNF instance
Pre-conditions	A VNF instance is instantiated
Reference	Clause 8.4.4.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Send POST Request for individual indicator in VNF instance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/blob/2.4.1/SOL002/VNFIndicator-API/IndividualVNFIndicator.robot>.

6.3.2.3.4 PUT Individual VNF Indicator - Method not implemented

Test Purpose	
Test ID	6.3.2.3.4
Test title	PUT individual performance indicator for VNF instance - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify an existing performance indicator for a VNF instance
Pre-conditions	A VNF instance is instantiated. At least one measure of performance indicator is available for the given VNF instance
Reference	Clause 8.4.4.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Send PUT Request for individual indicator in VNF instance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/blob/2.4.1/SOL002/VNFIndicator-API/IndividualVNFIndicator.robot>.

6.3.2.3.5 PATCH Individual VNF Indicator - Method not implemented

Test Purpose	
Test ID	6.3.2.3.5
Test title	PATCH individual performance indicator for VNF instance - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update an existing performance indicator for a VNF instance
Pre-conditions	A VNF instance is instantiated. At least one measure of performance indicator is available for the given VNF instance
Reference	Clause 8.4.4.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Send PATCH Request for individual indicator in VNF instance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/blob/2.4.1/SOL002/VNFIndicator-API/IndividualVNFIndicator.robot>.

6.3.2.3.6 DELETE Individual VNF Indicator - Method not implemented

Test Purpose	
Test ID	6.3.2.3.6
Test title	DELETE individual performance indicator indicators for VNF instance - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete an existing performance indicator for a VNF instance
Pre-conditions	A VNF instance is instantiated. At least one measure of performance indicator is available for the given VNF instance
Reference	Clause 8.4.3.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	The individual performance indicator for the VNF instance is not deleted by the unsuccessful operation
Test Case	
Send DELETE Request for individual indicator in VNF instance Check HTTP Response Status Code Is 405 Check Postcondition Indicator for VNF instance Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/blob/2.4.1/SOL002/VNFIndicator-API/IndividualVNFindicator.robot>.

6.3.2.4 Subscriptions Resource Endpoint

6.3.2.4.1 GET VNF Indicators Subscriptions

Test Purpose	
Test ID	6.3.2.4.1
Test title	GET VNF Indicators Subscriptions
Test objective	The objective is to test the retrieval of all VNF indicators subscriptions and perform a JSON schema validation of the returned subscriptions data structure
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF
Reference	Clause 8.4.5.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of indicators
Post-Conditions	None
Test Case	
Get VNF Indicators Subscriptions Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is VnfIndicatorSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

6.3.2.4.2 GET VNF Indicators Subscriptions with attribute-based filter

Test Purpose	
Test ID	6.3.2.4.2
Test title	GET VNF Indicators Subscriptions with attribute-based filter
Test objective	The objective is to test the retrieval of all VNF indicators subscriptions using attribute-based filter and perform a JSON schema and content validation of the returned subscriptions data structure
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF
Reference	Clause 8.4.5.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of indicators
Post-Conditions	None
Test Case	
Get VNF Indicators Subscriptions with filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is VnfIndicatorSubscriptions Check HTTP Response Body Subscriptions Match the requested Attribute-Based Filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

6.3.2.4.3 GET VNF Indicators Subscriptions with invalid attribute-based filter

Test Purpose	
Test ID	6.3.2.4.3
Test title	GET VNF Indicators Subscriptions with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of all VNF indicators subscriptions fails when using invalid attribute-based filter. The test also checks the JSON schema of the unsuccessful operation HTTP response
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF
Reference	Clause 8.4.5.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of indicators
Post-Conditions	None
Test Case	
Get VNF Indicators Subscriptions with invalid filter	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

6.3.2.4.4 GET VNF Indicators Subscriptions with invalid resource endpoint

Test Purpose	
Test ID	6.3.2.4.4
Test title	GET VNF Indicators Subscriptions with invalid resource endpoint
Test objective	The objective is to test that the retrieval of all VNF indicators subscriptions fails when using invalid resource endpoint
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF.
Reference	Clause 8.4.5.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of indicators
Post-Conditions	None
Test Case	
Get VNF Indicators Subscriptions with invalid resource endpoint	
Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

6.3.2.4.5 Create new VNF indicator subscription

Test Purpose	
Test ID	6.3.2.4.5
Test title	Create new VNF indicator subscription
Test objective	The objective is to test the creation of a new VNF indicator subscription perform a JSON schema and content validation of the returned subscriptions data structure
Pre-conditions	A VNF instance is instantiated
Reference	Clause 8.4.5.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of indicators
Post-Conditions	The VNF indicator subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for VNF Indicator Subscription	
Check HTTP Response Status Code Is 201	
Check HTTP Response Body Json Schema Is VnfIndicatorSubscription	
Check HTTP Response Body Matches the Subscription	
Check Postcondition VNF Indicator Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

6.3.2.4.6 PUT VNF Indicator Subscriptions - Method not implemented

Test Purpose	
Test ID	6.3.2.4.6
Test title	PUT VNF Indicator Subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify VNF indicator subscriptions
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF
Reference	Clause 8.4.5.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of indicators
Post-Conditions	None
Test Case	
Send Put Request for VNF Indicator Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

6.3.2.4.7 PATCH VNF Indicator Subscriptions - Method not implemented

Test Purpose	
Test ID	6.3.2.4.7
Test title	PATCH VNF Indicator Subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update VNF indicator subscriptions
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF
Reference	Clause 8.4.5.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of indicators
Post-Conditions	None
Test Case	
Send Patch Request for VNF Indicator Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

6.3.2.4.8 DELETE VNF Indicator Subscriptions - Method not implemented

Test Purpose	
Test ID	6.3.2.4.8
Test title	DELETE VNF Indicator Subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to delete VNF indicator subscriptions
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF
Reference	Clause 8.4.5.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of indicators
Post-Conditions	None
Test Case	
Send Delete Request for VNF Indicator Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

6.3.2.5 Individual Subscription Resource Endpoint

6.3.2.5.1 GET Individual VNF Indicator Subscription

Test Purpose	
Test ID	6.3.2.5.1
Test title	Get individual subscription to VNF performance indicators
Test objective	The objective is to test the retrieval of individual VNF performance indicator subscription and perform a JSON schema validation of the returned subscription data structure
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF
Reference	Clause 8.4.6.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Get Individual VNF Indicator Subscription Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is VnfIndicatorSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

6.3.2.5.2 GET Individual VNF Indicator Subscription with invalid resource identifier

Test Purpose	
Test ID	6.3.2.5.2
Test title	Get individual subscription to VNF performance indicators
Test objective	The objective is to test that the retrieval of individual VNF performance indicator subscription fails when using an invalid resource identifier. The test also checks the JSON schema of the unsuccessful operation HTTP response
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF
Reference	Clause 8.4.6.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
GET Individual VNF Indicator Subscription with invalid resource identifier Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

6.3.2.5.3 DELETE Individual VNF Indicator Subscription

Test Purpose	
Test ID	6.3.2.5.3
Test title	Delete individual subscription to VNF performance indicators
Test objective	The objective is to test the deletion of an individual VNF performance indicator subscription
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF
Reference	Clause 8.4.6.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	The subscription to VNF performance indicators is deleted
Test Case	
Send Delete Request for Individual VNF Indicator Subscription Check HTTP Response Status Code Is 204 Check Postcondition Individual VNF Indicator Subscription is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

6.3.2.5.4 DELETE Individual VNF Indicator Subscription with invalid resource identifier

Test Purpose	
Test ID	6.3.2.5.4
Test title	Delete individual subscription to VNF performance indicators
Test objective	The objective is to test that the deletion of an individual VNF performance indicator subscription fails when using an invalid resource identifier. The test also checks the JSON schema of the unsuccessful operation HTTP response
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF
Reference	Clause 8.4.6.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	None
Test Case	
Send Delete Request for Individual VNF Indicator Subscription with invalid resource identifier	
Check HTTP Response Status Code Is 404	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

6.3.2.5.5 PUT Individual VNF Indicator Subscription - Method not implemented

Test Purpose	
Test ID	6.3.2.5.5
Test title	PUT individual VNF indicator subscription - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify an individual VNF performance indicator subscription
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF
Reference	Clause 8.4.6.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	The individual VNF indicator subscription is not modified by the operation
Test Case	
Send Put Request for Individual VNF Indicator Subscription	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF individual subscription Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

6.3.2.5.6 PATCH Individual VNF Indicator Subscription - Method not implemented

Test Purpose	
Test ID	6.3.2.5.6
Test title	PUT individual VNF indicator subscription - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update an individual VNF performance indicator subscription
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF
Reference	Clause 8.4.6.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	The individual VNF indicator subscription is not modified by the operation
Test Case	
Send Patch Request for Individual VNF Indicator Subscription	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF individual subscription Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

6.3.2.5.7 POST Individual VNF Indicator Subscription - Method not implemented

Test Purpose	
Test ID	6.3.2.5.7
Test title	PUT individual VNF indicator subscription - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify an individual VNF performance indicator subscription
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNF
Reference	Clause 8.4.6.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	The VNF supports the generation and maintenance of performance indicators
Post-Conditions	The individual VNF indicator subscription is not created by the operation
Test Case	
Send Post Request for Individual VNF Indicator Subscription	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF individual subscription is not created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

6.3.2.6 Notification Endpoint

6.3.2.6.1 VNF Indicator Value Change Notification

Test Purpose	
Test ID	6.3.2.6.1
Test title	VNF Indicator Value Change Notification
Test objective	The objective is to test the dispatch of VNF Indicator Value Change Notification when new indicator values are available in the VNF, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF is instantiated, and a subscription for indicator value change notifications is available in the VNF
Reference	Clause 8.4.7.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNF
Applicability	None
Post-Conditions	None
Test Case	
Trigger the availability of new indicator value in the VNF (external action)	
Check Indicator Value Change Notification Http POST Request Body Json Schema Is VnfIndicatorValueChangeNotification	
Check Indicator Value Change Notification Http POST Request Body notificationType attribute Is VnfIndicatorValueChangeNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicatorNotification-API/VnfIndicatorNotification.robot>.

6.3.3 VNF Performance Management Interface

6.3.3.1 PM Jobs Resource Endpoint

6.3.3.1.1 GET all VNF Performance Monitoring Jobs

Test Purpose	
Test ID	6.3.3.1.1
Test title	GET all VNF Performance Monitoring Jobs
Test objective	The objective is to test the retrieval of all the available VNF performance monitoring jobs and perform a JSON schema and content validation of the collected jobs data structure
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET all VNF Performance Monitoring Jobs Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmJobs Check HTTP Response Body Does Not Contain reports	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PMJobs.robot>.

6.3.3.1.2 GET VNF Performance Monitoring Jobs with attribute-based filter

Test Purpose	
Test ID	6.3.3.1.2
Test title	GET all VNF Performance Monitoring Jobs with attribute-based filter
Test objective	The objective is to test the retrieval of VNF performance monitoring jobs using attribute-based filter, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued attribute-based filter
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with attribute-based filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmJobs Check HTTP Response Body Matches filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PMJobs.robot>.

6.3.3.1.3 GET all VNF Performance Monitoring Jobs with all_fields attribute selector

Test Purpose	
Test ID	6.3.3.1.3
Test title	GET all VNF Performance Monitoring Jobs with all_fields attribute selector
Test objective	The objective is to test the retrieval of all VNF performance monitoring jobs all_fields attribute selector, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued all_fields selector
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clauses 4.3.3.2.1, 6.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with all_fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmJobs Check HTTP Response Body Matches all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PMJobs.robot>.

6.3.3.1.4 GET all VNF Performance Monitoring Jobs with exclude_default attribute selector

Test Purpose	
Test ID	6.3.3.1.4
Test title	GET all VNF Performance Monitoring Jobs with exclude_default attribute selector
Test objective	The objective is to test the retrieval of all VNF performance monitoring jobs exclude_default attribute selector, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued exclude_default selector
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clauses 4.3.3.2.1 and 6.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with exclude_default attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmJobs Check HTTP Response Body Matches exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PMJobs.robot>.

6.3.3.1.5 GET all VNF Performance Monitoring Jobs with fields attribute selector

Test Purpose	
Test ID	6.3.3.1.5
Test title	GET all VNF Performance Monitoring Jobs with fields attribute selector
Test objective	The objective is to test the retrieval of all VNF performance monitoring jobs fields attribute selector, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued fields selector
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clauses 4.3.3.2.1 and 6.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM supports the use of exclude_fields attribute selector
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmJobs Check HTTP Response Body Matches fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PMJobs.robot>.

6.3.3.1.6 GET all VNF Performance Monitoring Jobs with exclude_fields attribute selector

Test Purpose	
Test ID	6.3.3.1.6
Test title	GET all VNF Performance Monitoring Jobs with exclude_fields attribute selector
Test objective	The objective is to test the retrieval of all VNF performance monitoring jobs exclude_fields attribute selector, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued exclude_fields selector
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clauses 4.3.3.2.1 and 6.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM supports the use of exclude_fields attribute selector
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with exclude_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PmJobs	
Check HTTP Response Body Matches exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PMJobs.robot>.

6.3.3.1.7 GET VNF Performance Monitoring Jobs with invalid attribute-based filter

Test Purpose	
Test ID	6.3.3.1.7
Test title	GET VNF Performance Monitoring Jobs with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of VNF performance monitoring jobs fails when using invalid attribute-based filter, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with invalid attribute-based filter	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PMJobs.robot>.

6.3.3.1.8 GET VNF Performance Monitoring Jobs with invalid resource endpoint

Test Purpose	
Test ID	6.3.3.1.8
Test title	GET VNF Performance Monitoring Jobs with invalid resource endpoint
Test objective	The objective is to test that the retrieval of VNF performance monitoring jobs fails when using invalid resource endpoint, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with invalid resource endpoint	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PMJobs.robot>.

6.3.3.1.9 Create new VNF Performance Monitoring Job

Test Purpose	
Test ID	6.3.3.1.9
Test title	Create a new VNF Performance Monitoring Job
Test objective	The objective is to test the creation of a new VNF performance monitoring job and perform the JSON schema validation of the returned job data structure
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Job is successfully created on the VNFM
Test Case	
Send Post Request Create new VNF Performance Monitoring Job	
Check HTTP Response Status Code Is 201	
Check HTTP Response Body Json Schema Is PmJob	
Check Postcondition PmJob Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PMJobs.robot>.

6.3.3.1.10 PUT all VNF Performance Monitoring Jobs - Method not implemented

Test Purpose	
Test ID	6.3.3.1.10
Test title	PUT all VNF Performance Monitoring Jobs - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify VNF Performance Monitoring Jobs
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for all VNF Performance Monitoring Jobs	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PMJobs.robot>.

6.3.3.1.11 PATCH all VNF Performance Monitoring Jobs - (Method not implemented)

Test Purpose	
Test ID	6.3.3.1.11
Test title	PATCH all VNF Performance Monitoring Jobs - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update VNF Performance Monitoring Jobs
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for all VNF Performance Monitoring Jobs	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PMJobs.robot>.

6.3.3.1.12 DELETE all VNF Performance Monitoring Jobs - Method not implemented

Test Purpose	
Test ID	6.3.3.1.12
Test title	DELETE all VNF Performance Monitoring Jobs - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to update VNF Performance Monitoring Jobs
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for all VNF Performance Monitoring Jobs Check HTTP Response Status Code Is 405 Check Postcondition VNF Performance Monitoring Jobs Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PMJobs.robot>.

6.3.3.2 Individual PM Job Resource Endpoint

6.3.3.2.1 GET individual VNF Performance Job

Test Purpose	
Test ID	6.3.3.2.1
Test title	Get individual VNF Performance Job
Test objective	The objective is to test the retrieval of an individual VNF performance monitoring job and perform a JSON schema and content validation of the collected job data structure
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.3.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET individual VNF Performance Job Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmJob Check HTTP Response Body Pm Job Identifier matches the requested Pm Job	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/blob/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualPmJob.robot>.

6.3.3.2.2 GET individual VNF Performance Job with invalid resource identifier

Test Purpose	
Test ID	6.3.3.2.2
Test title	Get individual VNF Performance Job with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF performance monitoring job fails when using an invalid resource identifier, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.3.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET individual VNF Performance Job with invalid resource identifier Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/blob/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualPmJob.robot>.

6.3.3.2.3 DELETE Individual VNF Performance Job

Test Purpose	
Test ID	6.3.3.2.3
Test title	Delete Individual VNF Performance Job
Test objective	The objective is to test the deletion of an individual VNF performance monitoring job
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.3.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Job is no more available in the VNFM
Test Case	
Send Delete request for individual VNF Performance Job	
Check HTTP Response Status Code Is 204	
Check Postcondition VNF Pm Job is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/blob/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualPmJob.robot>.

6.3.3.2.4 DELETE Individual VNF Performance Job with invalid resource identifier

Test Purpose	
Test ID	6.3.3.2.4
Test title	Delete individual VNF Performance Job with invalid resource identifier
Test objective	The objective is to test that the deletion of an individual VNF performance monitoring job fails when using an invalid resource identifier, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.3.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Delete request for individual VNF Performance Job with invalid resource identifier	
Check HTTP Response Status Code Is 404	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/blob/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualPmJob.robot>.

6.3.3.2.5 POST Individual VNF Performance Job - Method not implemented

Test Purpose	
Test ID	6.3.3.2.5
Test title	POST Individual VNF Performance Job - method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new VNF Performance Monitoring Job
Pre-conditions	A VNF instance is instantiated
Reference	Clause 6.4.3.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Job is not created on the VNFM
Test Case	
Send Post request for individual VNF Performance Job	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Job is not Created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/blob/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualPmJob.robot>.

6.3.3.2.6 PUT Individual VNF Performance Job - Method not implemented

Test Purpose	
Test ID	6.3.3.2.6
Test title	PUT Individual VNF Performance Job - method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing VNF Performance Monitoring Job
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.3.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Job is not modified by the operation
Test Case	
Send Put request for individual VNF Performance Job	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Job is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/blob/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualPmJob.robot>.

6.3.3.2.7 PATCH Individual VNF Performance Job - Method not implemented

Test Purpose	
Test ID	6.3.3.2.7
Test title	PATCH Individual VNF Performance Job - method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing new VNF Performance Monitoring Job
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.3.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Job is not modified by the operation
Test Case	
Send Patch request for individual VNF Performance Job	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Job is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/blob/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualPmJob.robot>.

6.3.3.3 Individual Performance Report Resource Endpoint

6.3.3.3.1 Get Individual Performance Report

Test Purpose	
Test ID	6.3.3.3.1
Test title	Get Individual Performance Report
Test objective	The objective is to test the retrieval of an individual VNF performance report associated to a monitoring job and perform a JSON schema validation of the collected report data structure
Pre-conditions	A VNF instance is instantiated. One or more VNF performance reports are set for a monitoring job in the VNFM
Reference	Clause 6.4.4.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get Individual Performance Report	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PerformanceReport	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualReport.robot>.

6.3.3.3.2 Get Individual Performance Report with invalid resource endpoint

Test Purpose	
Test ID	6.3.3.3.2
Test title	Get Individual Performance Report with invalid resource endpoint
Test objective	The objective is to test that the retrieval of an individual VNF performance report associated to a monitoring job fails when using an invalid resource endpoint
Pre-conditions	A VNF instance is instantiated. One or more VNF performance reports are set for a monitoring job in the VNFM
Reference	Clause 6.4.4.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get Individual Performance Report with invalid resource endpoint Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualReport.robot>.

6.3.3.3.3 POST Individual Performance Report - Method not implemented

Test Purpose	
Test ID	6.3.3.3.3
Test title	POST Individual Performance Report - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new VNF performance report within a monitoring job
Pre-conditions	A VNF instance is instantiated
Reference	Clause 6.4.4.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance report is not created on the VNFM
Test Case	
Send Post request for Individual Performance Report Check HTTP Response Status Code Is 405 Check Postcondition VNF Individual Performance Report is not Created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualReport.robot>.

6.3.3.3.4 PUT Individual Performance Report - Method not implemented

Test Purpose	
Test ID	6.3.3.3.4
Test title	PUT Individual Performance Report - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing VNF performance report within a monitoring job
Pre-conditions	A VNF instance is instantiated. One or more VNF performance reports are set for a monitoring job in the VNFM
Reference	Clause 6.4.4.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance report is not modified by the operation
Test Case	
Send Put request for Individual Performance Report Check HTTP Response Status Code Is 405 Check Postcondition VNF Individual Performance Report is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualReport.robot>.

6.3.3.3.5 PATCH Individual Performance Report - Method not implemented

Test Purpose	
Test ID	6.3.3.3.5
Test title	PATCH Individual Performance Report - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing VNF performance report within a monitoring job
Pre-conditions	A VNF instance is instantiated. One or more VNF performance reports are set for a monitoring job in the VNFM
Reference	Clause 6.4.4.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance report is not modified by the operation
Test Case	
Send Patch request for Individual Performance Report	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Individual Performance Report is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualReport.robot>.

6.3.3.3.6 DELETE Individual Performance Report - Method not implemented

Test Purpose	
Test ID	6.3.3.3.6
Test title	DELETE Individual Performance Report - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete an existing VNF performance report within a monitoring job
Pre-conditions	A VNF instance is instantiated. One or more VNF performance reports are set for a monitoring job in the VNFM
Reference	Clause 6.4.4.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance report is not deleted by the operation
Test Case	
Send Delete request for Individual Performance Report	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Individual Performance Report Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualReport.robot>.

6.3.3.4 Thresholds Resource Endpoint

6.3.3.4.1 GET All Performance Thresholds

Test Purpose	
Test ID	6.3.3.4.1
Test title	GET all VNF Performance Thresholds
Test objective	The objective is to test the retrieval of all the available VNF performance thresholds and perform a JSON schema validation of the collected thresholds data structure
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.5.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET all Performance Thresholds Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Thresholds	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Thresholds.robot>.

6.3.3.4.2 GET Performance Thresholds with attribute-based filter

Test Purpose	
Test ID	6.3.3.4.2
Test title	GET Performance Thresholds with attribute-based filter
Test objective	The objective is to test the retrieval of all the available VNF performance thresholds when using attribute-based filters, perform a JSON schema validation of the collected thresholds data structure, and verify that the retrieved information matches the issued attribute-based filter
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.5.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Performance Thresholds with attribute-based filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Thresholds Check HTTP Response Body Thresholds match the requested attribute-based filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Thresholds.robot>.

6.3.3.4.3 GET Performance Thresholds with invalid attribute-based filter

Test Purpose	
Test ID	6.3.3.4.3
Test title	GET Performance Thresholds with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of VNF performance thresholds fails when using invalid attribute-based filter, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.5.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Performance Thresholds with invalid attribute-based filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Thresholds.robot>.

6.3.3.4.4 GET Performance Thresholds with invalid resource endpoint

Test Purpose	
Test ID	6.3.3.4.4
Test title	GET Performance Thresholds with invalid resource endpoint
Test objective	The objective is to test that the retrieval of VNF performance thresholds fails when using invalid resource endpoint
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.5.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Performance Thresholds with invalid resource endpoint Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Thresholds.robot>.

6.3.3.4.5 Create new Performance Threshold

Test Purpose	
Test ID	6.3.3.4.5
Test title	Create new Performance Threshold
Test objective	The objective is to test the creation of a new VNF performance threshold and perform the JSON schema validation of the returned threshold data structure
Pre-conditions	A VNF instance is instantiated.
Reference	Clause 6.4.5.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Threshold is successfully created on the VNFM
Test Case	
Send Post Request Create new Performance Threshold Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is Threshold Check HTTP Response Header Contains Location Check Postcondition Threshold Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Thresholds.robot>.

6.3.3.4.6 PUT Performance Thresholds - Method not implemented

Test Purpose	
Test ID	6.3.3.4.6
Test title	PUT Performance Thresholds - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify VNF Performance Thresholds
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNF
Reference	Clause 6.4.5.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for all Performance Thresholds Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Thresholds.robot>.

6.3.3.4.7 PATCH Performance Thresholds - Method not implemented

Test Purpose	
Test ID	6.3.3.4.7
Test title	PATCH Performance Thresholds - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify VNF Performance Thresholds
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.5.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for all Performance Thresholds Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Thresholds.robot>.

6.3.3.4.8 DELETE Performance Thresholds – Method not implemented

Test Purpose	
Test ID	6.3.3.4.8
Test title	DELETE Performance Thresholds – Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to update VNF Performance Thresholds
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.5.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance thresholds are not deleted by the failed operation
Test Case	
Send DELETE Request for all Performance Thresholds Check HTTP Response Status Code Is 405 Check Postcondition Thresholds Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Thresholds.robot>.

6.3.3.5 Individual Threshold Resource Endpoint

6.3.3.5.1 GET Individual Threshold

Test Purpose	
Test ID	6.3.3.5.1
Test title	GET Individual Threshold
Test objective	The objective is to test the retrieval of an individual VNF performance threshold and perform a JSON schema and content validation of the collected threshold data structure
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.6.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET individual VNF Performance Threshold Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Threshold Check HTTP Response Body Threshold Identifier matches the requested Threshold	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualThreshold.robot>.

6.3.3.5.2 GET Individual Threshold with invalid resource identifier

Test Purpose	
Test ID	6.3.3.5.2
Test title	GET Individual Threshold with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF performance threshold fails when using an invalid resource identifier
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.6.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET individual VNF Performance Threshold with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualThreshold.robot>.

6.3.3.5.3 DELETE Individual Threshold

Test Purpose	
Test ID	6.3.3.5.3
Test title	DELETE Individual Threshold
Test objective	The objective is to test the deletion of an individual VNF performance threshold
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.6.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Threshold is not available anymore in the VNFM
Test Case	
Send Delete request for individual VNF Performance Threshold Check HTTP Response Status Code Is 204 Check Postcondition VNF Performance Threshold is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualThreshold.robot>.

6.3.3.5.4 DELETE Individual Threshold with invalid resource identifier

Test Purpose	
Test ID	6.3.3.5.4
Test title	DELETE Individual Threshold with invalid resource identifier
Test objective	The objective is to test the deletion of an individual VNF performance threshold
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.6.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Delete request for individual VNF Performance Threshold with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualThreshold.robot>.

6.3.3.5.5 POST Individual Threshold - Method not implemented

Test Purpose	
Test ID	6.3.3.5.5
Test title	POST Individual Threshold - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new VNF Performance Threshold
Pre-conditions	A VNF instance is instantiated
Reference	Clause 6.4.6.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Threshold is not created on the VNFM
Test Case	
Send Post request for individual VNF Performance Threshold	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Threshold is not Created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualThreshold.robot>.

6.3.3.5.6 PUT Individual Threshold - Method not implemented

Test Purpose	
Test ID	6.3.3.5.6
Test title	PUT Individual Threshold - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing VNF Performance threshold
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.6.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Threshold is not modified by the operation
Test Case	
Send Put request for individual VNF Performance Threshold	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Threshold is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualThreshold.robot>.

6.3.3.5.7 PATCH Individual Threshold - Method not implemented

Test Purpose	
Test ID	6.3.3.5.7
Test title	PATCH Individual Threshold - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing VNF Performance threshold
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.6.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Threshold is not modified by the operation
Test Case	
Send Patch request for individual VNF Performance Threshold	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Threshold is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualThreshold.robot>.

6.3.3.6 Subscriptions Resource Endpoint

6.3.3.6.1 GET all VNF Performance Subscriptions

Test Purpose	
Test ID	6.3.3.6.1
Test title	GET all VNF Performance Subscriptions
Test objective	The objective is to test the retrieval of all VNF performance subscriptions and perform a JSON schema validation of the returned subscriptions data structure
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get all VNF Performance Subscriptions Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Subscriptions.robot>.

6.3.3.6.2 GET VNF Performance Subscriptions with attribute-based filter

Test Purpose	
Test ID	6.3.3.6.2
Test title	GET VNF Performance Subscriptions with attribute-based filter
Test objective	The objective is to test the retrieval of VNF performance subscriptions using attribute-based filter, perform a JSON schema validation of the collected indicators data structure, and verify that the retrieved information matches the issued attribute-based filters
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM.
Reference	Clause 6.4.7.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Performance Subscriptions with attribute-based filters Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmSubscriptions Check HTTP Response Body Subscriptions Match the requested Attribute-Based Filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Subscriptions.robot>.

6.3.3.6.3 GET VNF Performance Management Subscriptions with invalid attribute-based filter

Test Purpose	
Test ID	6.3.3.6.3
Test title	GET VNF Performance Management Subscriptions with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of VNF performance subscriptions fails when using invalid attribute-based filters, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Performance Subscriptions with invalid attribute-based filters	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Subscriptions.robot>.

6.3.3.6.4 GET VNF Performance Subscriptions with invalid resource endpoint

Test Purpose	
Test ID	6.3.3.6.4
Test title	GET VNF Performance Subscriptions with invalid resource endpoint
Test objective	The objective is to test that the retrieval of all VNF performance subscriptions fails when using invalid resource endpoint
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Performance Subscriptions with invalid resource endpoint	
Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Subscriptions.robot>.

6.3.3.6.5 Create new VNF Performance subscription

Test Purpose	
Test ID	6.3.3.6.5
Test title	Create new VNF Performance subscription
Test objective	The objective is to test the creation of a new VNF performance subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	A VNF instance is instantiated
Reference	Clause 6.4.7.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for VNF Performance Subscription	
Check HTTP Response Status Code Is 201	
Check HTTP Response Body Json Schema Is PmSubscription	
Check HTTP Response Body PmSubscription Attributes Values Match the Issued Subscription	
Check Postcondition VNF Performance Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Subscriptions.robot>.

6.3.3.6.6 Create duplicated VNF Performance subscription with VNFM not creating duplicated subscriptions

Test Purpose	
Test ID	6.3.3.6.6
Test title	Create duplicated VNF Performance subscription with VNFM not creating duplicated subscriptions
Test objective	The objective is to test the attempt of a creation of a duplicated VNF performance subscription and check that no new subscription is created by the VNFM and a link to the original subscription is returned
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM does not support the creation of duplicated subscriptions
Post-Conditions	The existing VNF performance subscription returned is available in the VNFM
Test Case	
Send Post Request for Duplicated VNF Performance Subscription Check HTTP Response Status Code Is 303 Check HTTP Response Body Is Empty Check HTTP Response Header Contains Location Check Postcondition Subscription Resource Returned in Location Header Is Available	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Subscriptions.robot>.

6.3.3.6.7 Create duplicated VNF Performance subscription with VNFM creating duplicated subscriptions

Test Purpose	
Test ID	6.3.3.6.7
Test title	Create duplicated VNF Performance subscription with VNFM creating duplicated subscriptions
Test objective	The objective is to test the creation of a duplicated VNF performance subscription and perform a JSON schema and content validation of the returned duplicated subscription data structure
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM supports the creation of duplicated subscriptions
Post-Conditions	The duplicated VNF performance subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for Duplicated VNF Performance Subscription Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is PmSubscription Check HTTP Response Body PmSubscription Attributes Values Match the Issued Subscription Check Postcondition VNF Performance Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Subscriptions.robot>.

6.3.3.6.8 PUT VNF Performance Subscriptions - Method not implemented

Test Purpose	
Test ID	6.3.3.6.8
Test title	PUT VNF Performance Subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify VNF performance subscriptions
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Put Request for VNF Performance Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Subscriptions.robot>.

6.3.3.6.9 PATCH VNF Performance Subscriptions - Method not implemented

Test Purpose	
Test ID	6.3.3.6.9
Test title	PATCH VNF Performance Subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update VNF performance subscriptions
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Patch Request for VNF Performance Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Subscriptions.robot>.

6.3.3.6.10 DELETE VNF Performance Subscriptions - Method not implemented

Test Purpose	
Test ID	6.3.3.6.10
Test title	DELETE VNF Performance Subscriptions - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete VNF performance subscriptions
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance subscriptions are not deleted by the failed operation
Test Case	
Send Delete Request for VNF Performance Subscriptions Check HTTP Response Status Code Is 405 Check Postcondition VNF Performance Subscriptions Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/Subscriptions.robot>.

6.3.3.7 Individual Subscription Resource Endpoint

6.3.3.7.1 GET Individual VNF Performance Subscription

Test Purpose	
Test ID	6.3.3.7.1
Test title	GET Individual VNF Performance Subscription
Test objective	The objective is to test the retrieval of individual VNF performance subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.8.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get Individual VNF Performance Subscription Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmSubscription Check HTTP Response Body Subscription Identifier matches the requested Subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualSubscription.robot>.

6.3.3.7.2 GET Individual VNF Performance Subscription with invalid resource identifier

Test Purpose	
Test ID	6.3.3.7.2
Test title	GET Individual VNF Performance Subscription with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF performance subscription fails when using an invalid resource identifier
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.8.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET individual VNF Performance Subscription with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualSubscription.robot>.

6.3.3.7.3 DELETE Individual VNF Performance Subscription

Test Purpose	
Test ID	6.3.3.7.3
Test title	DELETE Individual VNF Performance Subscription
Test objective	The objective is to test the deletion of an individual VNF performance subscription
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.8.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Subscription is not available anymore in the VNFM
Test Case	
Send Delete request for individual VNF Performance Subscription Check HTTP Response Status Code Is 204 Check Postcondition VNF Performance Subscription is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualSubscription.robot>.

6.3.3.7.4 DELETE Individual VNF Performance Subscription with invalid resource identifier

Test Purpose	
Test ID	6.3.3.7.4
Test title	DELETE Individual VNF Performance Subscription with invalid resource identifier
Test objective	The objective is to test that the deletion of an individual VNF performance subscription fails when using an invalid resource identifier
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.8.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Delete request for individual VNF Performance Subscription with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualSubscription.robot>.

6.3.3.7.5 POST Individual VNF Performance Subscription - Method not implemented

Test Purpose	
Test ID	6.3.3.7.5
Test title	POST Individual VNF Performance Subscription - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new VNF Performance Subscription
Pre-conditions	A VNF instance is instantiated
Reference	Clause 6.4.8.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Subscription is not created on the VNFM
Test Case	
Send Post request for individual VNF Performance Subscription Check HTTP Response Status Code Is 405 Check Postcondition VNF Performance Subscription is not Created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualSubscription.robot>.

6.3.3.7.6 PUT Individual VNF Performance Subscription - Method not implemented

Test Purpose	
Test ID	6.3.3.7.6
Test title	PUT Individual VNF Performance Subscription - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing VNF Performance subscription
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.8.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance subscription is not modified by the operation
Test Case	
Send Put request for individual VNF Performance Threshold Check HTTP Response Status Code Is 405 Check Postcondition VNF Performance Subscription is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualSubscription.robot>.

6.3.3.7.7 PATCH Individual VNF Performance Subscription - Method not implemented

Test Purpose	
Test ID	6.3.3.7.7
Test title	PATCH Individual VNF Performance Subscription - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing VNF Performance subscription
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.8.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance subscription is not modified by the operation
Test Case	
Send Patch request for individual VNF Performance Threshold	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Subscription is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/IndividualSubscription.robot>.

6.3.3.8 Notification Endpoint

6.3.3.8.1 VNF Performance Information Availability Notification

Test Purpose	
Test ID	6.3.3.8.1
Test title	VNF Performance Information Availability Notification
Test objective	The objective is to test the dispatch of VNF Performance Information Availability Notification when new VNF performance information is available in the NFVO, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF performance job is created, and a subscription for information availability notifications is available in the VNFM
Reference	Clause 6.4.9.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the availability of VNF Performance Information (external action)	
Check Performance Information Available Notification Http POST Request Body Json Schema Is PerformanceInformationAvailableNotification	
Check Performance Information Available Notification Http POST Request Body notificationType attribute Is PerformanceInformationAvailableNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PerformanceManagementNotification.robot>.

6.3.3.8.2 VNF Threshold Crossed Notification

Test Purpose	
Test ID	6.3.3.8.2
Test title	VNF Threshold Crossed Notification
Test objective	The objective is to test the dispatch of VNF Threshold Crossed Notification when a previously set VNF performance metric threshold is crossed, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF performance job is created, and a threshold subscription is available in the VNFM.
Reference	Clause 6.4.9.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the cross of VNF Performance Threshold (external action) Check Threshold Crossed Notification Http POST Request Body Json Schema Is ThresholdCrossedNotification Check Threshold Crossed Notification Http POST Request Body notificationType attribute Is ThresholdCrossedNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFPerformanceManagement-API/PerformanceManagementNotification.robot>.

6.3.4 VNF Fault Management interface

6.3.4.1 Alarms

6.3.4.1.1 POST Alarms - Method not implemented

Test Purpose	
Test ID	6.3.4.1.1
Test title	POST Alarms - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.2.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	None
Test Case	
POST Alarms Task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Alarms.robot>.

6.3.4.1.2 GET information about multiple alarms

Test Purpose	
Test ID	6.3.4.1.2
Test title	GET information about multiple alarms
Test objective	The objective is to retrieve information about the alarm list
Pre-conditions	
Reference	Clause 7.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET Alarms Task Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is alarms	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Alarms.robot>.

6.3.4.1.3 GET information about multiple alarms with filters

Test Purpose	
Test ID	6.3.4.1.3
Test title	GET information about multiple alarms - with filters
Test objective	The objective is to retrieve information about the alarm list
Pre-conditions	
Reference	Clause 7.4.2.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET Alarms Task with filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is alarms	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Alarms.robot>.

6.3.4.1.4 GET information about multiple alarms Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	6.3.4.1.4
Test title	GET information about multiple alarms Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is to retrieve information about the alarm list
Pre-conditions	
Reference	Clause 7.4.2.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET Alarms Task with invalid filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Alarms.robot>.

6.3.4.1.5 PUT Alarms - Method not implemented

Test Purpose	
Test ID	6.3.4.1.5
Test title	PUT Alarms - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.2.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	None
Test Case	
PUT Alarms Task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Alarms.robot>.

6.3.4.1.6 PATCH Alarms - Method not implemented

Test Purpose	
Test ID	6.3.4.1.6
Test title	PATCH Alarms - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.2.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	None
Test Case	
PATCH Alarms Task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Alarms.robot>.

6.3.4.1.7 DELETE Alarms - Method not implemented

Test Purpose	
Test ID	6.3.4.1.7
Test title	DELETE Alarms - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.2.3.6 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	the alarm is not deleted
Test Case	
DELETE Alarms Task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Alarms.robot>.

6.3.4.2 Individual Alarm

6.3.4.2.1 POST Alarm - Method not implemented

Test Purpose	
Test ID	6.3.4.2.1
Test title	POST Alarm - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.3.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	None
Test Case	
POST Alarm Task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/IndividualAlarm.robot>.

6.3.4.2.2 GET information about an individual alarm

Test Purpose	
Test ID	6.3.4.2.2
Test title	GET information about an individual alarm
Test objective	The objective is to read an individual alarm.
Pre-conditions	The related alarm exists
Reference	Clause 7.4.3.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET Alarm Task Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is alarm	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/IndividualAlarm.robot>.

6.3.4.2.3 PUT Alarm - Method not implemented

Test Purpose	
Test ID	6.3.4.2.3
Test title	PUT Alarm - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.3.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	None
Test Case	
PUT Alarm Task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/IndividualAlarm.robot>.

6.3.4.2.4 PATCH Alarm

Test Purpose	
Test ID	6.3.4.2.4
Test title	PATCH Alarm
Test objective	The objective is to Modify an individual alarm resource
Pre-conditions	The related alarm exists
Reference	Clause 7.4.3.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	None
Test Case	
PATCH Alarm Task Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is alarmModifications	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/IndividualAlarm.robot>.

6.3.4.2.5 PATCH Alarm - Precondition failed

Test Purpose	
Test ID	6.3.4.2.5
Test title	PATCH Alarm - Precondition failed
Test objective	The objective is to Modify an individual alarm resource
Pre-conditions	The related alarm exists
Reference	Clause 7.4.3.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	The alarm resource is not modified
Test Case	
PATCH Alarm Task with wrong precondition Check HTTP Response Status Code Is 412 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/IndividualAlarm.robot>.

6.3.4.2.6 PATCH Alarm - Conflict

Test Purpose	
Test ID	6.3.4.2.6
Test title	PATCH Alarm - Conflict
Test objective	The objective is to Modify an individual alarm resource
Pre-conditions	The related alarm exists
Reference	Clause 7.4.3.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	The alarm resource is not modified
Test Case	
PATCH Alarm Task Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/IndividualAlarm.robot>.

6.3.4.2.7 DELETE Alarm - Method not implemented

Test Purpose	
Test ID	6.3.4.2.7
Test title	DELETE Alarm - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.3.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	Alarm not deleted
Test Case	
DELETE Alarm Task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/IndividualAlarm.robot>.

6.3.4.3 Escalate the perceived severity

6.3.4.3.1 Escalate the perceived severity

Test Purpose	
Test ID	6.3.4.3.1
Test title	Escalate the perceived severity
Test objective	To enable the consumer to escalate the perceived severity of an alarm that is represented by an individual alarm resource
Pre-conditions	The resource representing the individual alarm has been created
Reference	Clause 7.4.4.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
Post escalate severity Check HTTP Response Status Code Is 204	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/EscalatePerceivedSeverityTask.robot>.

6.3.4.3.2 GET Escalate the perceived severity - Method not implemented

Test Purpose	
Test ID	6.3.4.3.2
Test title	GET Escalate the perceived severity - Method not implemented
Test objective	to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.4.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
Get escalate severity Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/EscalatePerceivedSeverityTask.robot>.

6.3.4.3.3 PUT Escalate the perceived severity - Method not implemented

Test Purpose	
Test ID	6.3.4.3.3
Test title	PUT Escalate the perceived severity - Method not implemented
Test objective	to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.4.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
Put escalate severity Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/EscalatePerceivedSeverityTask.robot>.

6.3.4.3.4 PATCH Escalate the perceived severity - Method not implemented

Test Purpose	
Test ID	6.3.4.3.4
Test title	PATCH Escalate the perceived severity - Method not implemented
Test objective	to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.4.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
PATCH escalate severity Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/EscalatePerceivedSeverityTask.robot>.

6.3.4.3.5 DELETE Escalate the perceived severity - Method not implemented

Test Purpose	
Test ID	6.3.4.3.5
Test title	DELETE Escalate the perceived severity - Method not implemented
Test objective	To test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.4.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
Delete escalate severity Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/EscalatePerceivedSeverityTask.robot>.

6.3.4.4 Subscriptions

6.3.4.4.1 Create a new subscription

Test Purpose	
Test ID	6.3.4.4.1
Test title	Create a new subscription
Test objective	The objective is to create a new subscription
Pre-conditions	No subscription with the same filter and callbackUri exists
Reference	Clause 7.4.5.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
Post Create subscription Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is FmSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Subscriptions.robot>.

6.3.4.4.2 Create a new Subscription - DUPLICATION

Test Purpose	
Test ID	6.3.4.4.2
Test title	Create a new Subscription - DUPLICATION
Test objective	The objective is to create a duplicate subscription
Pre-conditions	Subscription with the same filter and callbackUri exists
Reference	Clause 7.4.5.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM does not allow creation of a subscription resource if another subscription resource with the same filter and callbackUri already exists
Post-Conditions	
Test Case	
Post Create subscription - DUPLICATION	
Check HTTP Response Status Code Is 201	
Check HTTP Response Body Json Schema Is FmSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Subscriptions.robot>.

6.3.4.4.3 Create a new Subscription - NO-DUPLICATION

Test Purpose	
Test ID	6.3.4.4.3
Test title	Create a new Subscription - NO-DUPLICATION
Test objective	The objective is to create a subscription in case of not allowed DUPLICATION
Pre-conditions	Subscription with the same filter and callbackUri exists
Reference	Clause 7.4.5.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	the VNFM does not allow creation of a duplicate subscription resource
Post-Conditions	
Test Case	
Post Create subscription - DUPLICATION	
Check HTTP Response Status Code Is 303	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Subscriptions.robot>.

6.3.4.4.4 GET Subscriptions

Test Purpose	
Test ID	6.3.4.4.5
Test title	GET Subscriptions
Test objective	The objective is to retrieve the list of active subscriptions
Pre-conditions	
Reference	Clause 7.4.5.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
Get subscriptions	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is FmSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Subscriptions.robot>.

6.3.4.4.5 GET Subscription - Filter

Test Purpose	
Test ID	6.3.4.4.6
Test title	GET Subscription - Filter
Test objective	The objective is to retrieve the list of active subscriptions with filter
Pre-conditions	
Reference	Clause 7.4.5.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
Get subscriptions - filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is FmSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Subscriptions.robot>.

6.3.4.4.6 GET subscriptions - Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	6.3.4.4.7
Test title	GET subscriptions - Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is to retrieve the list of active subscriptions with Invalid attribute-based filtering parameters
Pre-conditions	
Reference	Clause 7.4.5.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
Get subscriptions - invalid filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Subscriptions.robot>.

6.3.4.4.7 PUT subscriptions - Method not implemented

Test Purpose	
Test ID	6.3.4.4.8
Test title	PUT subscriptions - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.5.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
PUT subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Subscriptions.robot>.

6.3.4.4.8 PATCH subscriptions - Method not implemented

Test Purpose	
Test ID	6.3.4.4.9
Test title	PUT subscriptions - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.5.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
PATCH subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Subscriptions.robot>.

6.3.4.4.9 DELETE subscriptions - Method not implemented

Test Purpose	
Test ID	6.3.4.4.10
Test title	DELETE subscriptions - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.5.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	Subscription not deleted
Test Case	
DELETE subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/Subscriptions.robot>.

6.3.4.5 Individual Subscription

6.3.4.5.1 POST Individual Subscription - Method not implemented

Test Purpose	
Test ID	6.3.4.5.1
Test title	POST Individual Subscription - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.6.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
Post Create individual subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/IndividualSubscription.robot>.

6.3.4.5.2 GET Information about an individual subscription

Test Purpose	
Test ID	6.3.4.5.2
Test title	GET Information about an individual subscription
Test objective	The objective is to read an individual subscription for VNF alarms subscribed by the client
Pre-conditions	The subscription with the given id exists
Reference	Clause 7.4.6.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
Get individual subscription Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is FmSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/IndividualSubscription.robot>.

6.3.4.5.3 PUT an individual subscription - Method not implemented

Test Purpose	
Test ID	6.3.4.5.3
Test title	PUT an individual subscription - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.6.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
Put individual subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/IndividualSubscription.robot>.

6.3.4.5.4 PATCH an individual subscription - Method not implemented

Test Purpose	
Test ID	6.3.4.5.4
Test title	PATCH an individual subscription - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	
Reference	Clause 7.4.6.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
Patch individual subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/IndividualSubscription.robot>.

6.3.4.5.5 DELETE an individual subscription

Test Purpose	
Test ID	6.3.4.5.5
Test title	DELETE an individual subscription
Test objective	The objective is to test that the deletion of a subscription
Pre-conditions	An existing subscription
Reference	Clause 7.4.6.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	The subscription is deleted
Test Case	
Check resource existence Delete individual subscription Check HTTP Response Status Code Is 204	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/IndividualSubscription.robot>.

6.3.4.6 Notification Endpoint

6.3.4.6.1 VNF Fault Alarm Notification

Test Purpose	
Test ID	6.3.4.6.1
Test title	VNF Fault Alarm Notification
Test objective	The objective is to test the dispatch of VNF Fault Alarm Notification when a virtualised resource within a VNF instance fails, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF instance is instantiated, and a subscription for fault alarm notifications is available in the VNFM
Reference	Clause 7.4.7.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the fault of a virtualised resource in the VNF instance (external action) Check Alarm Notification Http POST Request Body Json Schema Is alarmNotification Check Alarm Notification Http POST Request Body notificationType attribute Is alarmNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/NotificationEndpoint.robot>.

6.3.4.6.2 VNF Fault Alarm Cleared Notification

Test Purpose	
Test ID	6.3.4.6.2
Test title	VNF Fault Alarm Cleared Notification
Test objective	The objective is to test the dispatch of VNF Fault Alarm Cleared Notification when a faulty virtualised resource within a VNF instance is cleared, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF instance is instantiated, a virtualised resource is in faulty state, and a subscription for fault alarm cleared notifications is available in the VNFM
Reference	Clause 7.4.7.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the clear of a faulty virtualised resource in the VNF instance (external action) Check Alarm cleared Notification Http POST Request Body Json Schema Is alarmClearedNotification Check Alarm cleared Notification Http POST Request Body notificationType attribute Is alarmClearedNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/NotificationEndpoint.robot>.

6.3.4.6.3 VNF Fault Alarm List Rebuilt Notification

Test Purpose	
Test ID	6.3.4.6.3
Test title	VNF Fault Alarm List Rebuilt Notification
Test objective	The objective is to test the dispatch of VNF Fault Alarm List Rebuilt Notification when the VNFM decides to rebuild the list of its VNF alarms, e.g. due to a corruption in the alarm storage, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF instance is instantiated, one or more virtualised resource are in faulty state, and a subscription for fault alarm list rebuilt notifications is available in the VNFM
Reference	Clause 7.4.7.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the VNF fault alarm list rebuild in the NFVO (external action) Check Alarm list rebuilt Notification Http POST Request Body Json Schema Is alarmListRebuiltNotification Check Alarm list rebuilt Notification Http POST Request Body notificationType attribute Is alarmListRebuiltNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFFaultManagement-API/NotificationEndpoint.robot>.

6.3.5 VNF Lifecycle Management interface

6.3.5.1 VNF Instances

6.3.5.1.1 POST Create a new vnfInstance

Test Purpose	
Test ID	6.3.5.1.1
Test title	POST Create a new vnfInstance
Test objective	The objective is to create a new VNF instance resource
Pre-conditions	
Reference	Clause 5.4.2.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	VNF instance created
Test Case	
POST Create a new vnfInstance Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is vnfInstance	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VNFInstances.robot>.

6.3.5.1.2 GET information about multiple VNF instances

Test Purpose	
Test ID	6.3.5.1.2
Test title	GET information about multiple VNF instances
Test objective	The objective is to get information about multiples VNF instances
Pre-conditions	
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is vnfInstances	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VNFInstances.robot>.

6.3.5.1.3 GET information about multiple VNF instances Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	6.3.5.1.3
Test title	GET information about multiple VNF instances Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is to get information about multiples VNF instances with Invalid attribute-based filtering parameters
Pre-conditions	
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances with bad attribute	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VNFInstances.robot>.

6.3.5.1.4 GET information about multiple VNF instances Bad Request Invalid attribute selector

Test Purpose	
Test ID	6.3.5.1.4
Test title	GET information about multiple VNF instances Bad Request Invalid attribute selector
Test objective	The objective is to get informations about multiples VNF instances with Invalid attribute-based filtering parameters
Pre-conditions	
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances with bad filter	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VNFInstances.robot>.

6.3.5.1.5 GET information about multiple VNF instances with "all_fields" attribute selector

Test Purpose	
Test ID	6.3.5.1.5
Test title	GET information about multiple VNF instances with "all_fields" attribute selector
Test objective	The objective is to query information about multiple VNF instances
Pre-conditions	
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances with all_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is vnfInstances	
Check HTTP Response Body VNFInstances Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VNFInstances.robot>.

6.3.5.1.6 GET information about multiple VNF instances with "exclude_default" attribute selector

Test Purpose	
Test ID	6.3.5.1.6
Test title	GET information about multiple VNF instances with "exclude_default" attribute selector
Test objective	The objective is to query information about multiple VNF instances
Pre-conditions	
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances with exclude_default attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is vnfInstances	
Check HTTP Response Body VNFInstances Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VNFInstances.robot>.

6.3.5.1.7 GET information about multiple VNF instances with "fields" attribute selector

Test Purpose	
Test ID	6.3.5.1.7
Test title	GET information about multiple VNF instances with "fields" attribute selector
Test objective	The objective is to query information about multiple VNF instances
Pre-conditions	
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances with fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is vnfInstances	
Check HTTP Response Body VNFInstances Matches the requested fields attribute selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VNFInstances.robot>.

6.3.5.1.8 GET information about multiple VNF instances with "exclude_fields" attribute selector

Test Purpose	
Test ID	6.3.5.1.8
Test title	GET information about multiple VNF instances with "exclude_fields" attribute selector
Test objective	The objective is to query information about multiple VNF instances
Pre-conditions	
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances with exclude_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is vnfInstances	
Check HTTP Response Body VNFInstances Matches the requested exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VNFInstances.robot>.

6.3.5.1.9 PUT VNFInstances - Method not implemented

Test Purpose	
Test ID	6.3.5.1.9
Test title	PUT VNFInstances - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	
Reference	Clause 5.4.2.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
PUT multiple vnfInstances	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VNFInstances.robot>.

6.3.5.1.10 PATCH VNFInstances - Method not implemented

Test Purpose	
Test ID	6.3.5.1.10
Test title	PATCH VNFInstances - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	
Reference	Clause 5.4.2.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
PATCH multiple vnfInstances	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VNFInstances.robot>.

6.3.5.1.11 DELETE VNFInstances - Method not implemented

Test Purpose	
Test ID	6.3.5.1.11
Test title	DELETE VNFInstances - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	
Reference	Clause 5.4.2.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	VNF instance not deleted
Test Case	
DELETE multiple vnfInstances Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VNFInstances.robot>.

6.3.5.2 Individual VNFInstance

6.3.5.2.1 POST Individual VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.2.1
Test title	POST Individual VNFInstance - Method not implemented
Test objective	The objective is to test that POST method is not implemented
Pre-conditions	None
Reference	Clause 5.4.3.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
POST individual vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

6.3.5.2.2 GET Information about an individual VNF Instance

Test Purpose	
Test ID	6.3.5.2.2
Test title	GET Information about an individual VNF Instance
Test objective	The objective is to create a new VNF instance resource
Pre-conditions	None
Reference	Clause 5.4.3.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
GET individual vnfInstance Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfInstance SET etag	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

6.3.5.2.3 PUT Individual VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.2.3
Test title	PUT Individual VNFInstance - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.3.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	VNF instance not modified
Test Case	
PUT individual vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

6.3.5.2.4 PATCH Individual VNFInstance

Test Purpose	
Test ID	6.3.5.2.4
Test title	PATCH Individual VNFInstance
Test objective	This method modifies an individual VNF instance resource
Pre-conditions	None
Reference	Clause 5.4.3.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	VNF instance modified
Test Case	
PATCH individual vnfInstance Check HTTP Response Status Code Is 202 Check Operation Occurrence Id	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

6.3.5.2.5 PATCH Individual VNFInstance Precondition failed

Test Purpose	
Test ID	6.3.5.2.5
Test title	PATCH Individual VNFInstance Precondition failed
Test objective	The objective is to create a new VNF instance resource
Pre-conditions	A precondition given in an HTTP request header is not fulfilled. Typically, this is due to an ETag mismatch, indicating that the resource was modified by another entity
Reference	Clause 5.4.3.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	VNF instance not modified
Test Case	
PATCH individual vnfInstance Check HTTP Response Status Code Is 412 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

6.3.5.2.6 PATCH Individual VNFInstance Conflict

Test Purpose	
Test ID	6.3.5.2.6
Test title	PATCH Individual VNFInstance Conflict
Test objective	The objective is to create a new VNF instance resource
Pre-conditions	None
Reference	Clause 5.4.3.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	VNF instance not modified
Test Case	
PATCH individual vnfInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

6.3.5.2.7 DELETE Individual VNFInstance

Test Purpose	
Test ID	6.3.5.2.7
Test title	DELETE Individual VNFInstance
Test objective	The objective is to delete a VNF instance
Pre-conditions	None
Reference	Clause 5.4.3.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	VNF instance deleted
Test Case	
DELETE individual vnfInstance Check HTTP Response Status Code Is 204	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

6.3.5.2.8 DELETE Individual VNFInstance Conflict

Test Purpose	
Test ID	6.3.5.2.8
Test title	DELETE Individual VNFInstance
Test objective	The objective is to verify that The operation cannot be executed currently, due to a conflict with the state of the VNF instance resource
Pre-conditions	VNF instance resource is in INSTANTIATED state
Reference	Clause 5.4.3.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
DELETE individual vnfInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

6.3.5.3 Instantiate VNF Task

6.3.5.3.1 POST Instantiate a vnfInstance

Test Purpose	
Test ID	6.3.5.3.1
Test title	POST Instantiate a vnfInstance
Test objective	The objective is to instantiate a VNF instance
Pre-conditions	None
Reference	Clause 5.4.4.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
POST instantiate individual vnfInstance Check HTTP Response Status Code Is 202 Check Operation Occurrence Id	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/InstantiateVNFTask.robot>.

6.3.5.3.2 POST Instantiate a vnfInstance Conflict

Test Purpose	
Test ID	6.3.5.3.2
Test title	POST Instantiate a vnfInstance Conflict
Test objective	The objective is to verify that the instantiation of the vnf cannot be executed currently, due to a conflict with the state of the VNF instance resource
Pre-conditions	VNF instance resource is in INSTANTIATED state
Reference	Clause 5.4.4.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
POST instantiate individual vnfInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/InstantiateVNFTask.robot>.

6.3.5.3.3 GET Instantiate VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.3.3
Test title	GET Instantiate VNFInstance - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	
Reference	Clause 5.4.4.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
GET instantiate individual vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/InstantiateVNFTask.robot>.

6.3.5.3.4 PUT Instantiate VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.3.4
Test title	PUT Instantiate VNFInstance - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	
Reference	Clause 5.4.4.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	VNF instance not modified
Test Case	
PUT instantiate individual vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/InstantiateVNFTask.robot>.

6.3.5.3.5 PATCH Instantiate VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.3.5
Test title	PATCH Instantiate VNFInstance - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	
Reference	Clause 5.4.4.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	VNF instance not modified
Test Case	
PATCH instantiate individual vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/InstantiateVNFTask.robot>.

6.3.5.3.6 DELETE Instantiate VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.3.6
Test title	DELETE Instantiate VNFInstance - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	
Reference	Clause 5.4.4.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	VNF instance not deleted
Test Case	
DELETE instantiate individual vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/InstantiateVNFTask.robot>.

6.3.5.4 Scale VNF Task

6.3.5.4.1 POST Scale a vnfInstance

Test Purpose	
Test ID	6.3.5.4.1
Test title	POST Scale a vnfInstance
Test objective	The objective is to scale a VNF instance
Pre-conditions	None
Reference	Clause 5.4.5.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
POST Scale vnfInstance Check HTTP Response Status Code Is 202 Check Operation Occurrence Id	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

6.3.5.4.2 POST Scale a vnfInstance Conflict (Not-Instantiated)

Test Purpose	
Test ID	6.3.5.4.2
Test title	POST Scale a vnfInstance Conflict (Not-Instantiated)
Test objective	The objective is to verify that the operation cannot be executed currently, due to a conflict with the state of the VNF instance resource
Pre-conditions	VNF instance resource is in NOT-INSTANTIATED state
Reference	Clause 5.4.5.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
POST Scale vnfInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

6.3.5.4.3 POST Scale a vnfInstance Not Found

Test Purpose	
Test ID	6.3.5.4.3
Test title	POST Scale a vnfInstance Not Found
Test objective	The objective is to verify that the operation cannot be executed currently, due to a conflict with the state of the VNF instance resource
Pre-conditions	
Reference	Clause 5.4.5.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
POST Scale vnfInstance Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

6.3.5.4.4 GET Scale VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.4.4
Test title	GET Scale VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.5.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
GET Scale vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

6.3.5.4.5 PUT Scale VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.4.5
Test title	PUT Scale VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.5.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
PUT Scale vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

6.3.5.4.6 PATCH Scale VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.4.6
Test title	PATCH Scale VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.5.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
PATCH Scale vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

6.3.5.4.7 DELETE Scale VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.4.7
Test title	DELETE Scale VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.5.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
DELETE Scale vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

6.3.5.5 Scale a VNF to level Task

6.3.5.5.1 POST Scale a vnfInstance to level

Test Purpose	
Test ID	6.3.5.5.1
Test title	POST Scale a vnfInstance to level
Test objective	The objective is to scale a VNF instance to a target level
Pre-conditions	None
Reference	Clause 5.4.6.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
POST Scale vnfInstance to level Check HTTP Response Status Code Is 202 Check Operation Occurrence Id	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ScaleVNFToLevelTask.robot>.

6.3.5.5.2 POST Scale a vnfInstance to level Conflict (Not-Instantiated)

Test Purpose	
Test ID	6.3.5.5.2
Test title	POST Scale a vnfInstance to level Conflict (Not-Instantiated)
Test objective	The objective is to verify that the operation cannot be executed currently, due to a conflict with the state of the VNF instance resource
Pre-conditions	VNF instance resource is in NOT-INSTANTIATED state
Reference	Clause 5.4.6.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
POST Scale vnfInstance to level Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ScaleVNFToLevelTask.robot>.

6.3.5.5.3 POST Scale a vnflInstance Not Found

Test Purpose	
Test ID	6.3.5.5.3
Test title	POST Scale a vnflInstance Not Found
Test objective	The objective is to verify that the operation cannot be executed , because the VNF instance resource cannot be found
Pre-conditions	VNF instance resource is in NOT-INSTANTIATED state
Reference	Clause 5.4.6.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
POST Scale vnflInstance to level Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFlifecycleManagement-API/ScaleVNFToLevelTask.robot>.

6.3.5.5.4 GET Scale to level VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.5.4
Test title	GET Scale to level VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.6.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
GET Scale vnflInstance to level Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFlifecycleManagement-API/ScaleVNFToLevelTask.robot>.

6.3.5.5.5 PUT Scale to level VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.5.5
Test title	PUT Scale to level VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.6.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
PUT Scale vnflInstance to level Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFlifecycleManagement-API/ScaleVNFToLevelTask.robot>.

6.3.5.5.6 PATCH Scale to level VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.5.6
Test title	PATCH Scale to level VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.6.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
PATCH Scale vnfInstance to level Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ScaleVNFToLevelTask.robot>.

6.3.5.5.7 DELETEScale to level VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.5.7
Test title	DELETE Scale to level VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.6.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	
Post-Conditions	
Test Case	
DELETE Scale vnfInstance to level Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ScaleVNFToLevelTask.robot>.

6.3.5.6 Change VNF deployment flavour Task

6.3.5.6.1 POST Change deployment flavour of a vnfInstance

Test Purpose	
Test ID	6.3.5.6.1
Test title	POST Change deployment flavour of a vnfInstance
Test objective	The objective is to test that POST method trigger a change in VNF deployment flavour
Pre-conditions	None
Reference	Clause 5.4.7.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	In response header Location shall not be null
Test Case	
POST Change VNF deployment flavour Check HTTP Response Status Code Is 202 Check Operation Occurrence Id	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

6.3.5.6.2 POST Change deployment flavour of a vnflInstance Conflict (Not-Instantiated)

Test Purpose	
Test ID	6.3.5.6.2
Test title	POST Change deployment flavour of a vnflInstance Conflict (Not-Instantiated)
Test objective	The objective is to test that POST method cannot trigger a change in VNF deployment flavour because of a conflict with the state of the VNF instance resource
Pre-conditions	VNF instance resource is not in NOT-INSTANTIATED state
Reference	Clause 5.4.7.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
POST Change VNF deployment flavour Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

6.3.5.6.3 POST Change deployment flavour of a vnflInstance Not Found

Test Purpose	
Test ID	6.3.5.6.3
Test title	POST Change deployment flavour of a vnflInstance Not Found
Test objective	The objective is to test that POST method cannot trigger a change in VNF deployment flavour because the VNF instance resource is not found
Pre-conditions	VNF instance resource is not in NOT-INSTANTIATED state
Reference	Clause 5.4.7.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
POST Change VNF deployment flavour Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

6.3.5.6.4 GET Change deployment flavour VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.6.4
Test title	GET Change deployment flavour VNFInstance - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 5.4.7.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
GET Change VNF deployment flavour Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

6.3.5.6.5 PUT Change deployment flavour VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.6.5
Test title	PUT Change deployment flavour VNFInstance - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.7.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
PUT Change VNF deployment flavour Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

6.3.5.6.6 PATCH Change deployment flavour VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.6.6
Test title	PATCH Cancel operation task - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 5.4.7.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
PATCH Change VNF deployment flavour Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

6.3.5.6.7 DELETE Change deployment flavour VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.6.7
Test title	DELETE Change deployment flavour VNFInstance - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 5.4.7.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
DELETE Change VNF deployment flavour Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

6.3.5.7 Terminate VNF Task

6.3.5.7.1 POST Terminate a vnflInstance

Test Purpose	
Test ID	6.3.5.7.1
Test title	POST Terminate a vnflInstance
Test objective	The objective is to test that POST method terminate a VNF instance
Pre-conditions	None
Reference	Clause 5.4.8.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
POST Terminate VNF Check HTTP Response Status Code Is 202 Check Operation Occurrence Id	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/TerminateVNFTask.robot>.

6.3.5.7.2 POST Terminate a vnflInstance Conflict (Not-Instantiated)

Test Purpose	
Test ID	6.3.5.7.2
Test title	POST Terminate a vnflInstance Conflict (Not-Instantiated)
Test objective	The objective is to test that the operation cannot be executed currently, due to a conflict with the state of the VNF instance resource
Pre-conditions	VNF instance resource is in NOT-INSTANTIATED state
Reference	Clause 5.4.8.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
POST Terminate VNF Check HTTP Response Status Code Is 202 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/TerminateVNFTask.robot>.

6.3.5.7.3 GET Terminate VNFInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.7.3
Test title	GET Terminate VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.8.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
GET Terminate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/TerminateVNFTask.robot>.

6.3.5.7.4 PUT Terminate VNFIInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.7.4
Test title	PUT Terminate VNFIInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.8.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
PUT Terminate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/TerminateVNFTask.robot>.

6.3.5.7.5 PATCH Terminate VNFIInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.7.5
Test title	PATCH Terminate VNFIInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.8.3.4 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
PATCH Terminate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/TerminateVNFTask.robot>.

6.3.5.7.6 DELETE Terminate VNFIInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.7.6
Test title	DELETE Terminate VNFIInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.8.3.5 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
DELETE Terminate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/TerminateVNFTask.robot>.

6.3.5.8 Heal VNF Task

6.3.5.8.1 POST Heal a vnflInstance

Test Purpose	
Test ID	6.3.5.8.1
Test title	POST Heal a vnflInstance
Test objective	The objective is to test that POST method heal a VNF instance
Pre-conditions	None
Reference	Clause 5.4.9.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
POST Heal VNF Check HTTP Response Status Code Is 202 Check Operation Occurrence Id	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/HealVNFTask.robot>.

6.3.5.8.2 POST Heal a vnflInstance Conflict (Not-Instantiated)

Test Purpose	
Test ID	6.3.5.8.2
Test title	POST Heal a vnflInstance (Not-Instantiated)
Test objective	The objective is to test that the operation cannot be executed currently, due to a conflict with the state of the VNF instance resource
Pre-conditions	the VNF instance resource is in NOT-INSTANTIATED state
Reference	Clause 5.4.9.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
POST Heal VNF Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/HealVNFTask.robot>.

6.3.5.8.3 POST Heal a vnflInstance Not Found

Test Purpose	
Test ID	6.3.5.8.3
Test title	POST Heal a vnflInstance Not Found
Test objective	The objective is to test that the operation cannot be executed because the VNF instance resource is not found
Pre-conditions	the VNF instance resource is not existing
Reference	Clause 5.4.9.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
POST Heal VNF Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/HealVNFTask.robot>.

6.3.5.8.4 GET Heal VNFIInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.8.4
Test title	GET Heal a vnfiInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.9.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
GET Heal VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/HealVNFTask.robot>.

6.3.5.8.5 PUT Heal VNFIInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.8.5
Test title	PUT Heal a vnfiInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.9.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
PUT Heal VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/HealVNFTask.robot>.

6.3.5.8.6 PATCH Heal VNFIInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.8.6
Test title	PATCH Heal a vnfiInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.9.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
PATCH Heal VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/HealVNFTask.robot>.

6.3.5.8.7 DELETE Heal VNFIInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.8.7
Test title	DELETE Heal a vnfiInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.9.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
DELETE Heal VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIInstanceManagement-API/HealVNFIInstance.robot>.

6.3.5.9 Operate VNF Task

6.3.5.9.1 POST Operate a vnfiInstance

Test Purpose	
Test ID	6.3.5.9.1
Test title	POST Operate a vnfiInstance
Test objective	The objective is to test that POST method operate a VNF instance
Pre-conditions	None
Reference	Clause 5.4.10.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
POST Operate VNF Check HTTP Response Status Code Is 202 Check Operation Occurrence Id	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIInstanceManagement-API/OperateVNFIInstance.robot>.

6.3.5.9.2 POST Operate a vnfiInstance Conflict (Not-Instantiated)

Test Purpose	
Test ID	6.3.5.9.2
Test title	POST Operate a vnfiInstance Conflict (Not-Instantiated)
Test objective	The objective is to test that the operation cannot be executed currently, due to a conflict with the state of the VNF instance resource
Pre-conditions	the VNF instance resource is in NOT-INSTANTIATED state
Reference	Clause 5.4.10.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
POST Operate VNF Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIInstanceManagement-API/OperateVNFIInstanceConflict.robot>.

6.3.5.9.3 POST Operate a vnflInstance Not Found

Test Purpose	
Test ID	6.3.5.9.3
Test title	POST Operate a vnflInstance Not Found
Test objective	The objective is to test that the operation cannot be executed currently, because the resource is not existing
Pre-conditions	the VNF instance resource is in not existing
Reference	Clause 5.4.10.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
POST Operate VNF Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/OperateVNFTask.robot>.

6.3.5.9.4 GET Operate VNflInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.9.4
Test title	GET Operate VNflInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.10.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
GET Operate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/OperateVNFTask.robot>.

6.3.5.9.5 PUT Operate VNflInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.9.5
Test title	PUT Operate VNflInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.10.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
PUT Operate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/OperateVNFTask.robot>.

6.3.5.9.6 PATCH Operate VNFIInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.9.6
Test title	PATCH Operate VNFIInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.10.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
PATCH Operate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/OperateVNFTask.robot>.

6.3.5.9.7 DELETE Operate VNFIInstance - Method not implemented

Test Purpose	
Test ID	6.3.5.9.7
Test title	DELETE Operate VNFIInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.10.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
DELETE Operate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/OperateVNFTask.robot>.

6.3.5.10 Change external VNF connectivity

6.3.5.10.1 POST Change external VNF connectivity

Test Purpose	
Test ID	6.3.5.10.1
Test title	POST Change external VNF connectivity
Test objective	The objective is to test that POST method trigger a change in VNF external connectivity
Pre-conditions	None
Reference	Clause 5.4.11.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	In response header Location shall not be null
Test Case	
POST Change External VNF Connectivity Check HTTP Response Status Code Is 202 Check Operation Occurrence Id	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ChangeExternalVNFConnectivityTask.robot>.

6.3.5.10.2 GET Change external VNF connectivity - Method not implemented

Test Purpose	
Test ID	6.3.5.10.2
Test title	GET Change external VNF connectivity - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 5.4.11.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
GET Change External VNF Connectivity Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ChangeExternalVNFConnectivityTask.robot>.

6.3.5.10.3 PUT Change external VNF connectivity - Method not implemented

Test Purpose	
Test ID	6.3.5.10.3
Test title	PUT Change external VNF connectivity - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.11.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
PUT Change External VNF Connectivity Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ChangeExternalVNFConnectivityTask.robot>.

6.3.5.10.4 PATCH Change external VNF connectivity - Method not implemented

Test Purpose	
Test ID	6.3.5.10.4
Test title	PATCH Change external VNF connectivity - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 5.4.11.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
PATCH Change External VNF Connectivity Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ChangeExternalVNFConnectivityTask.robot>.

6.3.5.10.5 DELETE Change external VNF connectivity - Method not implemented

Test Purpose	
Test ID	6.3.5.10.5
Test title	DELETE Change external VNF connectivity - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 5.4.11.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
DELETE Change External VNF Connectivity Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/ChangeExternalVNFConnectivityTask.robot>.

6.3.5.11 VNF LCM OP occurrences

6.3.5.11.1 POST VNF LCM operation occurrences - Method not implemented

Test Purpose	
Test ID	6.3.5.11.1
Test title	POST VNF LCM operation Occurrences - Method not implemented
Test objective	The objective is to test that POST method is not implemented
Pre-conditions	None
Reference	Clause 5.4.12.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Post VNF LCM OP Occurrences Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>

6.3.5.11.2 GET status information about multiple VNF LCM operation occurrences

Test Purpose	
Test ID	6.3.5.11.2
Test title	GET status information about multiple VNF LCM operation occurrences
Test objective	The objective is to test that GET method retrieve Query status information about multiple VNF lifecycle management operation occurrences
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
GET VNF LCM OP Occurrences Check HTTP Response Status Code Is 202 Check HTTP Response Body Json Schema Is VnfLcmOpOccs	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

6.3.5.11.3 GET status information about multiple VNF LCM operation occurrences Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	6.3.5.11.3
Test title	GET status information about multiple VNF LCM operation occurrences Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is to test that GET method fail retrieving status information about multiple VNF lifecycle management operation occurrences because attribute is invalid
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
GET VNF LCM OP Occurrences invalid attribute Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

6.3.5.11.4 GET status information about multiple VNF LCM Operation occurrences Bad Request Invalid attribute selector

Test Purpose	
Test ID	6.3.5.11.4
Test title	GET status information about multiple VNF LCM Operation occurrences Bad Request Invalid attribute selector
Test objective	The objective is to test that GET method fail retrieving status information about multiple VNF lifecycle management operation occurrences because attribute is invalid
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
GET VNF LCM OP Occurrences invalid filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

6.3.5.11.5 GET status information about multiple VNF LCM Operation OCC with "all_fields"

Test Purpose	
Test ID	6.3.5.11.5
Test title	GET status information about multiple VNF LCM Operation OCC with "all_fields"
Test objective	The objective is to test that GET method retrieve Query status information about multiple VNF lifecycle management operation occurrences
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get VNF LCM Operation occurrences with all_fields attribute selector Check HTTP Response Status Code Is 202 Check HTTP Response Body Json Schema Is VnfLcmOpOccs Check HTTP Response Body VNF LCM occurrences Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

6.3.5.11.6 GET status information about multiple VNF LCM Operation OCC with "exclude_default"

Test Purpose	
Test ID	6.3.5.11.6
Test title	GET status information about multiple VNF LCM Operation OCC with "exclude_default"
Test objective	The objective is to test that GET method retrieve Query status information about multiple VNF lifecycle management operation occurrences
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get VNF LCM Operation occurrences with exclude_default attribute selector	
Check HTTP Response Status Code Is 202	
Check HTTP Response Body Json Schema Is VnfLcmOpOccs	
Check HTTP Response Body VNF LCM occurrences Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

6.3.5.11.7 GET status information about multiple VNF LCM Operation OCC with "fields"

Test Purpose	
Test ID	6.3.5.11.7
Test title	GET status information about multiple VNF LCM Operation OCC with "fields"
Test objective	The objective is to test that GET method retrieve Query status information about multiple VNF lifecycle management operation occurrences
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get VNF LCM Operation occurrences with fields attribute selector	
Check HTTP Response Status Code Is 202	
Check HTTP Response Body Json Schema Is VnfLcmOpOccs	
Check HTTP Response Body VNF LCM occurrences Matches the requested fields attribute selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

6.3.5.11.8 GET status information about multiple VNF LCM Operation OCC with "exclude_fields"

Test Purpose	
Test ID	6.3.5.11.8
Test title	GET status information about multiple VNF LCM Operation OCC with "exclude_fields"
Test objective	The objective is to test that GET method retrieve Query status information about multiple VNF lifecycle management operation occurrences
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get VNF LCM Operation occurrences with exclude_fields attribute selector	
Check HTTP Response Status Code Is 202	
Check HTTP Response Body Json Schema Is VnfLcmOpOccs	
Check HTTP Response Body VNF LCM occurrences Matches the requested exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

6.3.5.11.9 PUT status information about multiple VNF LCM operation occurrences - Method not implemented

Test Purpose	
Test ID	6.3.5.11.9
Test title	PUT status information about multiple VNF LCM operation occurrences - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.12.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
PUT VNF LCM OP Occurrences Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

6.3.5.11.10 PATCH status information about multiple VNF LCM operation occurrences - Method not implemented

Test Purpose	
Test ID	6.3.5.11.10
Test title	PATCH status information about multiple VNF LCM operation occurrences - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 5.4.12.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
PATCH VNF LCM OP Occurrences Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

6.3.5.11.11 DELETE status information about multiple VNF LCM operation occurrences - Method not implemented

Test Purpose	
Test ID	6.3.5.11.11
Test title	DELETE status information about multiple VNF LCM operation occurrences - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 5.4.12.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
DELETE VNF LCM OP Occurrences Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

6.3.5.12 Individual VNF LCM OP occurrence

6.3.5.12.1 Post Individual VNF LCM OP occurrences - Method not implemented

Test Purpose	
Test ID	6.3.5.12.1
Test title	Post Individual VNF LCM OP Occurrences - Method not implemented
Test objective	The objective is to test that POST method is not implemented
Pre-conditions	None
Reference	Clause 5.4.13.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Post Individual VNF LCM OP Occurrences Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFlifecycleManagement-API/IndividualVnfLcmOperationOccurence.robot>.

6.3.5.12.2 Get status information about multiple VNF instances

Test Purpose	
Test ID	6.3.5.12.2
Test title	Get status information about multiple VNF instances
Test objective	The objective is to test that this method retrieve status information about a VNF lifecycle management operation occurrence
Pre-conditions	None
Reference	Clause 5.4.13.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get multiple VNF instances Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is VnfLcmOpOcc	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFlifecycleManagement-API/IndividualVnfLcmOperationOccurence.robot>.

6.3.5.12.3 PUT status information about multiple VNF instances - Method not implemented

Test Purpose	
Test ID	6.3.5.12.3
Test title	Put Individual VNF LCM OP Occurrences - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.13.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Put multiple VNF instances Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFlifecycleManagement-API/IndividualVnfLcmOperationOccurence.robot>.

6.3.5.12.4 PATCH status information about multiple VNF instances - Method not implemented

Test Purpose	
Test ID	6.3.5.12.4
Test title	Patch Individual VNF LCM OP Occurrences - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 5.4.13.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Patch multiple VNF instances Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualVnfLcmOperationOccurence.robot>.

6.3.5.12.5 DELETE status information about multiple VNF instances - Method not implemented

Test Purpose	
Test ID	6.3.5.12.5
Test title	Delete Individual VNF LCM OP Occurrences - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 5.4.13.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Delete multiple VNF instances Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualVnfLcmOperationOccurence.robot>.

6.3.5.13 Retry operation task

6.3.5.13.1 POST Retry operation task

Test Purpose	
Test ID	6.3.5.13.1
Test title	POST Retry operation task
Test objective	The objective is to test that POST method The POST method initiates retrying a VNF lifecycle operation if that operation has experienced a temporary failure
Pre-conditions	The "VNF LCM operation occurrence" resource is in "FAILED_TEMP" state
Reference	Clause 5.4.14.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Post Retry operation Check HTTP Response Status Code Is 202 Check Operation Occurrence Id	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RetryOperationTask.robot>.

6.3.5.13.2 POST Retry operation task Conflict (Not-FAILED_TEMP)

Test Purpose	
Test ID	6.3.5.13.2
Test title	POST Retry operation task Conflict (Not-FAILED_TEMP)
Test objective	The objective is to test that the retry operation cannot be executed currently, due to a conflict with the state of the VNF instance resource. (i.e. the VNF instance resource is not in FAILED_TEMP state)
Pre-conditions	The "VNF LCM operation occurrence" resource is not in "FAILED_TEMP" state
Reference	Clause 5.4.14.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Post Retry operation Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RetryOperationTask.robot>.

6.3.5.13.3 POST Retry operation task Not Found

Test Purpose	
Test ID	6.3.5.13.3
Test title	POST Retry operation task Not Found
Test objective	The objective is to test that the retry operation cannot be executed because the operation is not supported
Pre-conditions	
Reference	Clause 5.4.14.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Post Retry operation Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RetryOperationTask.robot>.

6.3.5.13.4 GET Retry operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.13.4
Test title	GET Retry operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.9.14.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
Get Retry operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RetryOperationTask.robot>

6.3.5.13.5 PUT Retry operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.13.5
Test title	PUT Retry operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.9.14.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
Put Retry operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RetryOperationTask.robot>

6.3.5.13.6 PATCH Retry operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.13.6
Test title	PATCH Retry operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.9.14.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
Patch Retry operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RetryOperationTask.robot>.

6.3.5.13.7 DELETE Retry operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.13.7
Test title	DELETE Retry operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.9.14.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
Delete Retry operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RetryOperationTask.robot>.

6.3.5.14 Rollback operation task

6.3.5.14.1 POST Rollback operation task

Test Purpose	
Test ID	6.3.5.14.1
Test title	POST Rollback operation task
Test objective	The objective is to test that POST method The POST method initiates rollback a VNF lifecycle operation if that operation has experienced a temporary failure
Pre-conditions	the "VNF LCM operation occurrence" resource is in "FAILED_TEMP" state.
Reference	Clause 5.4.15.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Post Rollback operation Check HTTP Response Status Code Is 202 Check Operation Occurrence Id	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

6.3.5.14.2 POST Rollback operation task Conflict (Not-FAILED_TEMP)

Test Purpose	
Test ID	6.3.5.14.2
Test title	POST Rollback operation task Conflict (Not-FAILED_TEMP)
Test objective	The objective is to test that POST method The POST method initiates rollback a VNF lifecycle operation if that operation has experienced a temporary failure
Pre-conditions	the "VNF LCM operation occurrence" resource is not in "FAILED_TEMP" state.
Reference	Clause 5.4.15.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Post Rollback operation Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

6.3.5.14.3 POST Rollback operation task Not Found

Test Purpose	
Test ID	6.3.5.14.3
Test title	POST Rollback operation task Not Found
Test objective	The objective is to test that the retry operation cannot be executed because the operation is not supported
Pre-conditions	
Reference	Clause 5.4.15.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Post Rollback operation Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

6.3.5.14.4 GET Rollback operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.14.4
Test title	GET Rollback operation task - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.15.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
Get Rollback operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

6.3.5.14.5 PUT Rollback operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.14.5
Test title	PUT Rollback operation task - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.15.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
Put Rollback operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

6.3.5.14.6 PATCH Rollback operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.14.6
Test title	PATCH Rollback operation task - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.15.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
Patch Rollback operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

6.3.5.14.7 DELETE Rollback operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.14.7
Test title	DELETE Rollback operation task - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.15.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
Delete Rollback operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

6.3.5.15 Fail operation task

6.3.5.15.1 POST Fail operation task

Test Purpose	
Test ID	6.3.5.15.1
Test title	POST Fail operation task
Test objective	The objective is to test that POST method mark as "finally failed" a VNF lifecycle operation if that operation has experienced a temporary failure
Pre-conditions	The "VNF LCM operation occurrence" resource is in "FAILED_TEMP" state
Reference	Clause 5.4.16.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Post Fail operation Check HTTP Response Status Code Is 202 Check Operation Occurrence Id Check operation resource state is FINALLY_FAILED	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/FailOperationTask.robot>.

6.3.5.15.2 POST Fail operation task Conflict (Not-FAILED_TEMP)

Test Purpose	
Test ID	6.3.5.15.2
Test title	POST Fail operation task Conflict (Not-FAILED_TEMP)
Test objective	The objective is to test that POST method cannot mark as "finally failed" a VNF lifecycle operation if that operation has experienced a temporary failure
Pre-conditions	The "VNF LCM operation occurrence" resource is not in "FAILED_TEMP" state
Reference	Clause 5.4.16.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Post Fail operation Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/FailOperationTask.robot>.

6.3.5.15.3 POST Fail operation task Not Found

Test Purpose	
Test ID	6.3.5.15.3
Test title	POST Fail operation task Not Found
Test objective	The objective is to test that POST method cannot mark as "finally failed" a VNF lifecycle operation because the operation is not supported
Pre-conditions	
Reference	Clause 5.4.16.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Post Fail operation Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFlifecycleManagement-API/FailOperationTask.robot>.

6.3.5.15.4 GET Fail operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.15.4
Test title	GET Fail operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.16.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
Get Fail operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFlifecycleManagement-API/FailOperationTask.robot>.

6.3.5.15.5 PUT Fail operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.15.5
Test title	PUT Fail operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.16.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
Put Fail operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFlifecycleManagement-API/FailOperationTask.robot>.

6.3.5.15.6 PATCH Fail operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.15.6
Test title	PATCH Fail operation task - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.16.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	
Test Case	
Patch Fail operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/FailOperationTask.robot>.

6.3.5.15.7 DELETE Fail operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.15.7
Test title	DELETE Fail operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.16.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	VNF instance not deleted
Test Case	
Delete Fail operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/FailOperationTask.robot>.

6.3.5.16 Cancel operation task

6.3.5.16.1 Post Cancel operation task

Test Purpose	
Test ID	6.3.5.16.1
Test title	POST Cancel operation task
Test objective	The POST method initiates cancelling an ongoing VNF lifecycle operation while it is being executed or rolled back, i.e. the "VNF LCM operation occurrence" is either in "PROCESSING" or "ROLLING_BACK" state
Pre-conditions	The "VNF LCM operation occurrence" is either in "PROCESSING" or "ROLLING_BACK" state
Reference	Clause 5.4.17.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
POST Cancel operation task Check HTTP Response Status Code Is 202 Check operation resource state is FAILED_TEMP	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/CancelOperationTask.robot>.

6.3.5.16.2 Post Cancel operation task Conflict

Test Purpose	
Test ID	6.3.5.16.2
Test title	POST Cancel operation task
Test objective	The POST method is NOT cancelling an ongoing VNF lifecycle operation due to the fact that the VNF instance resource is not in STARTING, PROCESSING or ROLLING_BACK state
Pre-conditions	Operation is not in STARTING, PROCESSING or ROLLING_BACK state
Reference	Clause 5.4.17.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
POST Cancel operation task Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/CancelOperationTask.robot>.

6.3.5.16.3 Post Cancel operation task Not Found

Test Purpose	
Test ID	6.3.5.16.2
Test title	POST Cancel operation task
Test objective	The objective is to test that POST method cannot cancel a VNF lifecycle operation because the resource is not found
Pre-conditions	
Reference	Clause 5.4.17.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
POST Cancel operation task Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/CancelOperationTask.robot>.

6.3.5.16.4 GET Cancel operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.16.3
Test title	GET Cancel operation task - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 5.4.17.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
GET Cancel operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/CancelOperationTask.robot>.

6.3.5.16.5 PUT Cancel operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.16.3
Test title	PUT Cancel operation task - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.17.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
PUT Cancel operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/CancelOperationTask.robot>.

6.3.5.16.6 PATCH Cancel operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.16.4
Test title	PATCH Cancel operation task - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 5.4.17.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
PATCH Cancel operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/CancelOperationTask.robot>.

6.3.5.16.7 DELETE Cancel operation task - Method not implemented

Test Purpose	
Test ID	6.3.5.16.5
Test title	DELETE Cancel operation task - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 5.4.17.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
DELETE Cancel operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/CancelOperationTask.robot>.

6.3.5.17 Subscriptions

6.3.5.17.1 POST Create a new subscription

Test Purpose	
Test ID	6.3.5.17.1
Test title	POST Create a new subscription
Test objective	The POST method creates a new subscription
Pre-conditions	None
Reference	Clause 5.4.18.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	In response header Location shall not be null
	POST Cancel operation task
Test Case	
Post Create subscription Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is Subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/Subscriptions.robot>.

6.3.5.17.2 POST Create a new Subscription - DUPLICATION

Test Purpose	
Test ID	6.3.5.17.2
Test title	POST Create a new subscription - DUPLICATION
Test objective	The POST method creates a new subscription even if an existing subscription to same content exist
Pre-conditions	None
Reference	Clause 5.4.18.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	In response header Location shall not be null
	POST Cancel operation task
Test Case	
Post Create subscription - DUPLICATION Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is Subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/Subscriptions.robot>.

6.3.5.17.3 POST Create a new Subscription - NO-DUPLICATION

Test Purpose	
Test ID	6.3.5.17.3
Test title	POST Create a new subscription - NO-DUPLICATION
Test objective	The POST method creates a new subscription even if an existing subscription to same content exist
Pre-conditions	None
Reference	Clause 5.4.18.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	In response header Location shall not be null
	POST Cancel operation task
Test Case	
Post Create subscription - NO-DUPLICATION Check HTTP Response Status Code Is 303 Check Operation Occurrence Id	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/Subscriptions.robot>.

6.3.5.17.4 GET Subscriptions

Test Purpose	
Test ID	6.3.5.17.4
Test title	GET Subscriptions
Test objective	The objective is Get the list of active subscriptions
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Subscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/Subscriptions.robot>.

6.3.5.17.5 GET Subscription - Filter

Test Purpose	
Test ID	6.3.5.17.5
Test title	GET Subscriptions - Filter
Test objective	The objective is Get the list of active subscriptions using a filter
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions - filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Subscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/Subscriptions.robot>.

6.3.5.17.6 GET subscriptions - Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	6.3.5.17.6
Test title	GET subscriptions - Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is Get the list of active subscriptions using a filter
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions - invalid filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/Subscriptions.robot>.

6.3.5.17.7 GET subscriptions with all_fields attribute selector

Test Purpose	
Test ID	6.3.5.17.7
Test title	GET subscriptions with all_fields attribute selector
Test objective	The objective is Get the list of active subscriptions
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions with all_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is Subscriptions	
Check HTTP Response Body subscriptions Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/Subscriptions.robot>.

6.3.5.17.8 GET subscriptions with exclude_default attribute selector

Test Purpose	
Test ID	6.3.5.17.8
Test title	GET subscriptions with exclude_default attribute selector
Test objective	The objective is Get the list of active subscriptions
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions with exclude_default attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is Subscriptions	
Check HTTP Response Body subscriptions Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/Subscriptions.robot>.

6.3.5.17.9 GET subscriptions with fields attribute selector

Test Purpose	
Test ID	6.3.5.17.9
Test title	GET subscriptions with fields attribute selector
Test objective	The objective is Get the list of active subscriptions
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions with fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is Subscriptions	
Check HTTP Response Body subscriptions Matches the requested fields attribute selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/Subscriptions.robot>.

6.3.5.17.10 GET subscriptions with exclude_fields attribute selector

Test Purpose	
Test ID	6.3.5.17.10
Test title	GET subscriptions with exclude_fields attribute selector
Test objective	The objective is Get the list of active subscriptions
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions with exclude_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is Subscriptions	
Check HTTP Response Body subscriptions Matches the requested exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/Subscriptions.robot>.

6.3.5.17.11 PUT subscriptions - Method not implemented

Test Purpose	
Test ID	6.3.5.17.11
Test title	PUT subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.18.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
PUT subscriptions	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/Subscriptions.robot>.

6.3.5.17.12 PATCH subscriptions - Method not implemented

Test Purpose	
Test ID	6.3.5.17.12
Test title	PATCH subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 5.4.18.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
PATCH subscriptions	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/Subscriptions.robot>.

6.3.5.17.13 DELETE subscriptions - Method not implemented

Test Purpose	
Test ID	6.3.5.17.13
Test title	DELETE subscriptions - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 5.4.18.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
DELETE subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/Subscriptions.robot>.

6.3.5.18 Individual Subscription

6.3.5.18.1 POST Individual Subscription - Method not implemented

Test Purpose	
Test ID	6.3.5.18.1
Test title	POST Individual Subscription - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.19.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Post Create Individual subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualSubscription.robot>.

6.3.5.18.2 GET Individual Subscription

Test Purpose	
Test ID	6.3.5.18.2
Test title	GET Individual Subscription
Test objective	The objective is to test the Get individual subscription
Pre-conditions	None
Reference	Clause 5.4.19.3.2 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Get Individual Subscription Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualSubscription.robot>.

6.3.5.18.3 PUT an individual subscription - Method not implemented

Test Purpose	
Test ID	6.3.5.18.3
Test title	PUT Individual Subscription - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.19.3.3 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Put Individual subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualSubscription.robot>.

6.3.5.18.4 PATCH an individual subscription - Method not implemented

Test Purpose	
Test ID	6.3.5.18.4
Test title	PATCH Individual Subscription - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.19.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Patch Individual subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualSubscription.robot>.

6.3.5.18.5 DELETE an individual subscription

Test Purpose	
Test ID	6.3.5.18.5
Test title	DELETE Individual Subscription - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.19.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Delete Individual subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/IndividualSubscription.robot>.

6.3.5.19 Notification Endpoint

6.3.5.19.1 VNF LCM Operation Occurrence Start Notification

Test Purpose	
Test ID	6.3.5.19.1
Test title	VNF LCM Operation Occurrence Start Notification
Test objective	The objective is to test the dispatch of VNF LCM Operation Occurrence Start Notification when a new VNF LCM operation is started in the VNFM, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A subscription for VNF LCM Operation Occurrence notifications is available in the VNFM
Reference	Clause 5.4.20.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger a VNF LCM operation (external action) Check VNF LCM Operation Occurrence Start Notification Http POST Request Body Json Schema Is VnfLcmOperationOccurrenceNotification Check VNF LCM Operation Occurrence Start Notification Http POST Request Body notificationType attribute Is VnfLcmOperationOccurrenceNotification Check VNF LCM Operation Occurrence Start Notification Http POST Request Body notificationStatus attribute Is START	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/NotificationEndpoint.robot>.

6.3.5.19.2 VNF LCM Operation Occurrence Result Notification

Test Purpose	
Test ID	6.3.5.19.2
Test title	VNF LCM Operation Occurrence Result Notification
Test objective	The objective is to test the dispatch of VNF LCM Operation Occurrence Result Notification when a VNF LCM operation is completed in the VNFM, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	An VNF LCM operation is in progress, and a subscription for VNF LCM Operation Occurrence notifications is available in the VNFM
Reference	Clause 5.4.20.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the completion of an VNF LCM operation (external action) Check VNF LCM Operation Occurrence Result Notification Http POST Request Body Json Schema Is VnfLcmOperationOccurrenceNotification Check VNF LCM Operation Occurrence Result Notification Http POST Request Body notificationType attribute Is VnfLcmOperationOccurrenceNotification Check VNF LCM Operation Occurrence Start Notification Http POST Request Body notificationStatus attribute Is RESULT	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/NotificationEndpoint.robot>.

6.3.5.19.3 VNF Identifier Creation Notification

Test Purpose	
Test ID	6.3.5.19.3
Test title	VNF Identifier Creation Notification
Test objective	The objective is to test the dispatch of VNF Identifier Creation Notification when a new VNF instance resource is created in the VNFM, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A subscription for VNF identifier creation notifications is available in the VNFM
Reference	Clause 5.4.20.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the creation of a VNF instance resource (external action) Check VNF Identifier Creation Notification Http POST Request Body Json Schema Is VnfIdentifierCreationNotification Check VNF Identifier Creation Notification Http POST Request Body notificationType attribute Is VnfIdentifierCreationNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/NotificationEndpoint.robot>.

6.3.5.19.4 VNF Identifier Deletion Notification

Test Purpose	
Test ID	6.3.5.19.4
Test title	VNF Identifier Deletion Notification
Test objective	The objective is to test the dispatch of VNF Identifier Deletion Notification when a VNF instance resource is deleted in the VNFM, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF instance resource is created, and a subscription for VNF identifier creation notifications is available in the VNFM
Reference	Clause 6.4.18.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the deletion of a VNF instance resource (external action) Check VNF Identifier Deletion Notification Http POST Request Body Json Schema Is VnfIdentifierDeletionNotification Check VNF Identifier Deletion Notification Http POST Request Body notificationType attribute Is VnfIdentifierDeletionNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFLifecycleManagement-API/NotificationEndpoint.robot>.

7 Or-Vnfm Reference Point

7.1 General

Based on the methodology (see clause 4), e.g. characteristics (see clause 4.5.3.2), basic behaviours of the API (see clause 4.5.3.3) and verification aspects (see clause 4.5.4), the clause 7 describes the Test Descriptions for Or-Vnfm reference point testing. The Test Description format is described in clause 4.5.2.

7.2 Test configuration

Test configurations are described in clause 4.3. In clause 7, below test configurations shall be implemented to run the tests for APIs on Or-Vnfm reference point, which are shown in the "Config ID" field in the Test Descriptions.

- Config_prod_NFVO: FUT which implements NFVO
- Config_prod_VNFM: FUT which implements VNFM
- Config_prod_VNFM_GRANT: FUT which implements VNFM, and NFVO for GRANT API which are required for VNF LCM tests. See clause 4.3.5

7.3 Test Descriptions

7.3.1 VNF Lifecycle Management Interface

7.3.1.1 VnfInstances

7.3.1.1.1 POST Create a new vnfInstance

Test Purpose	
Test ID	7.3.1.1.1
Test title	POST Create a new vnfInstance
Test objective	The objective is to create a new VNF instance resource
Pre-conditions	None
Reference	Clause 5.4.2.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	VNF instance created
Test Case	
POST Create a new vnfInstance Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is vnfInstance	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/VNFInstances.robot>.

7.3.1.1.2 GET information about multiple VNF instances

Test Purpose	
Test ID	7.3.1.1.2
Test title	GET information about multiple VNF instances
Test objective	The objective is to query information about multiple VNF instances
Pre-conditions	
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfInstances	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/VNFInstances.robot>.

7.3.1.1.3 GET information about multiple VNF instances Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	7.3.1.1.3
Test title	GET information about multiple VNF instances Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is to query information about multiple VNF instances with Invalid attribute-based filtering parameters
Pre-conditions	A VNF is instantiated, a bad filter selector (filter selectors are listed in table 5.4.2.3.2-1 - ETSI GS NFV-SOL 003 [1] v2.4.1)
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances with bad attribute Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VNFInstances.robot>.

7.3.1.1.4 GET information about multiple VNF instances Bad Request Invalid attribute selector

Test Purpose	
Test ID	7.3.1.1.4
Test title	GET information about multiple VNF instances Bad Request Invalid attribute selector
Test objective	The objective is to query information about multiple VNF instances with Invalid attribute selector
Pre-conditions	A VNF is instantiated, a bad attribute selector (attribute selectors are listed in table 5.4.2.3.2-1 - ETSI GS NFV-SOL 003 [1] v2.4.1)
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances with bad filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VNFInstances.robot>.

7.3.1.1.5 GET information about multiple VNF instances with "all_fields" attribute selector

Test Purpose	
Test ID	7.3.1.1.5
Test title	GET information about multiple VNF instances with "all_fields" attribute selector
Test objective	The objective is to query information about multiple VNF instances
Pre-conditions	
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances with all_fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfInstances Check HTTP Response Body VNFInstances Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VNFInstances.robot>.

7.3.1.1.6 GET information about multiple VNF instances with "exclude_default" attribute selector

Test Purpose	
Test ID	7.3.1.1.6
Test title	GET information about multiple VNF instances with "exclude_default" attribute selector
Test objective	The objective is to query information about multiple VNF instances
Pre-conditions	
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances with exclude_default attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is vnfInstances	
Check HTTP Response Body VNFInstances Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VNFInstances.robot>.

7.3.1.1.7 GET information about multiple VNF instances with "fields" attribute selector

Test Purpose	
Test ID	7.3.1.1.7
Test title	GET information about multiple VNF instances with "fields" attribute selector
Test objective	The objective is to query information about multiple VNF instances
Pre-conditions	
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances with fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is vnfInstances	
Check HTTP Response Body VNFInstances Matches the requested fields attribute selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VNFInstances.robot>.

7.3.1.1.8 GET information about multiple VNF instances with "exclude_fields" attribute selector

Test Purpose	
Test ID	7.3.1.1.8
Test title	GET information about multiple VNF instances with "exclude_fields" attribute selector
Test objective	The objective is to query information about multiple VNF instances
Pre-conditions	
Reference	Clause 5.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET multiple vnfInstances with exclude_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is vnfInstances	
Check HTTP Response Body VNFInstances Matches the requested exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VNFInstances.robot>.

7.3.1.1.9 PUT multiples VNFInstances - Method not implemented

Test Purpose	
Test ID	7.3.1.1.5
Test title	PUT multiples VNFInstances - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	
Reference	Clause 5.4.2.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
PUT multiple vnfInstances Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VNFInstances.robot>.

7.3.1.1.10 PATCH multiples VNFInstances - Method not implemented

Test Purpose	
Test ID	7.3.1.1.6
Test title	PATCH multiples VNFInstances - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	
Reference	Clause 5.4.2.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
PATCH multiple vnfInstances Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VNFInstances.robot>.

7.3.1.1.11 DELETE VNFInstances - Method not implemented

Test Purpose	
Test ID	7.3.1.1.7
Test title	DELETE multiples VNFInstances - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	
Reference	Clause 5.4.2.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
DELETE multiple vnfInstances Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VNFInstances.robot>.

7.3.1.2 Individual VNFInstance

7.3.1.2.1 Post Individual VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.2.1
Test title	Post Individual VNFInstance - Method not implemented
Test objective	The objective is to test that POST method is not implemented
Pre-conditions	None
Reference	Clause 5.4.3.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
POST individual vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

7.3.1.2.2 Get Information about an individual VNF Instance

Test Purpose	
Test ID	7.3.1.2.2
Test title	Get Information about an individual VNF Instance
Test objective	The objective is to create a new VNF instance resource
Pre-conditions	None
Reference	Clause 5.4.3.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET individual vnfInstance Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfInstance SET etag	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

7.3.1.2.3 PUT Individual VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.2.3
Test title	PUT Individual VNFInstance - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.3.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
PUT individual vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

7.3.1.2.4 PATCH Individual VNFInstance

Test Purpose	
Test ID	7.3.1.2.4
Test title	PATCH Individual VNFInstance
Test objective	This method modifies an individual VNF instance resource
Pre-conditions	An existing VNF instance resource
Reference	Clause 5.4.3.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	VNFInstance modified
Test Case	
PATCH individual vnfInstance Check HTTP Response Status Code Is 202 Check Operation Occurrence Id existence	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

7.3.1.2.5 PATCH Individual VNFInstance Precondition failed

Test Purpose	
Test ID	7.3.1.2.5
Test title	PATCH Individual VNFInstance Precondition failed
Test objective	The objective is to create a new VNF instance resource
Pre-conditions	ETag mismatch
Reference	Clause 5.4.3.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	VNFInstance not modified
Test Case	
PATCH individual vnfInstance Check HTTP Response Status Code Is 412 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

7.3.1.2.6 PATCH Individual VNFInstance Conflict

Test Purpose	
Test ID	7.3.1.2.6
Test title	PATCH Individual VNFInstance Conflict
Test objective	The objective is to test the conflict while modifying a VNF instance resource
Pre-conditions	Another LCM operation is ongoing
Reference	Clause 5.4.3.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	VNFInstance not modified
Test Case	
PATCH individual vnfInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

7.3.1.2.7 DELETE Individual VNFInstance

Test Purpose	
Test ID	7.3.1.2.7
Test title	DELETE Individual VNFInstance
Test objective	The objective is to delete a VNF instance
Pre-conditions	The VNF instance resource is existing
Reference	Clause 5.4.3.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	VNFInstance deleted
Test Case	
DELETE individual vnfInstance Check HTTP Response Status Code Is 204	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualVNFInstance.robot>

7.3.1.2.8 DELETE Individual VNFInstance Conflict

Test Purpose	
Test ID	7.3.1.2.8
Test title	DELETE Individual VNFInstance Conflict
Test objective	The objective is to verify that the deletion cannot be executed currently, due to a conflict with the state of the VNF instance resource.
Pre-conditions	VNF instance resource is in INSTANTIATED state
Reference	Clause 5.4.3.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
DELETE individual vnfInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualVNFInstance.robot>.

7.3.1.3 Instantiate a VNF

7.3.1.3.1 Instantiate a vnfInstance

Test Purpose	
Test ID	7.3.1.3.1
Test title	Post Instantiate Individual VNFInstance
Test objective	The objective is to instantiate a VNF instance
Pre-conditions	VNF instance resource is in NOT INSTANTIATED state
Reference	Clause 5.4.4.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
POST instantiate individual vnfInstance Check HTTP Response Status Code Is 202 Check Operation Occurrence Id existence	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/InstantiateVNFTask.robot>.

7.3.1.3.2 Instantiate a vnfInstance Conflict

Test Purpose	
Test ID	7.3.1.3.2
Test title	Post Instantiate Individual VNFInstance
Test objective	The objective is to verify that the instantiation of the vnf cannot be executed currently, due to a conflict with the state of the VNF instance resource
Pre-conditions	VNF instance resource is in INSTANTIATED state
Reference	Clause 5.4.4.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
POST instantiate individual vnfInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/InstantiateVNFTask.robot>.

7.3.1.3.3 GET Instantiate VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.3.3
Test title	GET Instantiate Individual VNFInstance - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	
Reference	Clause 5.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET instantiate individual vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/InstantiateVNFTask.robot>.

7.3.1.3.4 PUT Instantiate VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.3.4
Test title	PUT Instantiate Individual VNFInstance - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	
Reference	Clause 5.4.4.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
PUT instantiate individual vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/InstantiateVNFTask.robot>.

7.3.1.3.5 PATCH Instantiate VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.3.5
Test title	PATCH Instantiate Individual VNFInstance - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	
Reference	Clause 5.4.4.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
PATCH instantiate individual vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/InstantiateVNFTask.robot>.

7.3.1.3.6 DELETE Instantiate VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.3.6
Test title	DELETE Instantiate Individual VNFInstance - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	
Reference	Clause 5.4.4.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
DELETE instantiate individual vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/InstantiateVNFTask.robot>.

7.3.1.4 Scale a vnfInstance

7.3.1.4.1 POST Scale a vnfInstance

Test Purpose	
Test ID	7.3.1.4.1
Test title	POST Scale a vnfInstance
Test objective	The objective is to scale a VNF instance
Pre-conditions	None
Reference	Clause 5.4.5.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
POST Scale vnfInstance Check HTTP Response Status Code Is 202 Check Operation Occurrence Id existence	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

7.3.1.4.2 POST Scale a vnfInstance Conflict (Not-Instantiated)

Test Purpose	
Test ID	7.3.1.4.2
Test title	POST Scale a vnfInstance Conflict (Not-Instantiated)
Test objective	The objective is to verify that the scale operation cannot be executed
Pre-conditions	VNF instance resource is in NOT-INSTANTIATED state
Reference	Clause 5.4.5.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
POST Scale vnfInstance Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

7.3.1.4.3 POST Scale a vnfInstance Not Found

Test Purpose	
Test ID	7.3.1.4.3
Test title	POST Scale a vnfInstance Not Found
Test objective	The objective is to verify that the operation cannot be executed currently, because the VNF instance resource is not found.
Pre-conditions	
Reference	Clause 5.4.5.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
POST Scale vnfInstance Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

7.3.1.4.4 GET Scale VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.4.4
Test title	GET Scale VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET Scale vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

7.3.1.4.5 PUT Scale VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.4.5
Test title	PUT Scale VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.5.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
PUT Scale vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

7.3.1.4.6 PATCH Scale VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.4.6
Test title	PATCH Scale VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.5.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
PATCH Scale vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

7.3.1.4.7 DELETE Scale VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.4.7
Test title	DELETE Scale VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.5.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
DELETE Scale vnfInstance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFTask.robot>.

7.3.1.5 Scale a vnfInstance to level

7.3.1.5.1 POST Scale a vnfInstance to level

Test Purpose	
Test ID	7.3.1.5.1
Test title	POST Scale a vnfInstance to level
Test objective	The objective is to scale a VNF instance to a target level
Pre-conditions	None
Reference	Clause 5.4.6.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
POST Scale vnfInstance to level Check HTTP Response Status Code Is 202 Check Operation Occurrence Id existence	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFToLevelTask.robot>.

7.3.1.5.2 POST Scale a vnfInstance to level Conflict (Not-Instantiated)

Test Purpose	
Test ID	7.3.1.5.2
Test title	POST Scale a vnfInstance to level Conflict (Not-Instantiated)
Test objective	The objective is to verify that the scale operation cannot be executed because the resource is not instantiated
Pre-conditions	VNF instance resource is in NOT-INSTANTIATED state
Reference	Clause 5.4.6.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
POST Scale vnfInstance to level Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFToLevelTask.robot>.

7.3.1.5.3 Scale a vnfInstance Not Found

Test Purpose	
Test ID	7.3.1.5.3
Test title	Scale a vnfInstance Not Found
Test objective	The objective is to verify that the operation cannot be executed , because the VNF instance resource cannot be found
Pre-conditions	VNF instance resource is in NOT-INSTANTIATED state
Reference	Clause 5.4.6.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
POST Scale vnfInstance to level Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFToLevelTask.robot>.

7.3.1.5.4 GET Scale to level VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.5.4
Test title	GET Scale to level VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.6.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
GET Scale vnfInstance to level Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFToLevelTask.robot>.

7.3.1.5.5 PUT Scale to level VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.5.5
Test title	PUT Scale to level VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.6.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
PUT Scale vnfInstance to level Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFToLevelTask.robot>.

7.3.1.5.6 PATCH Scale to level VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.5.6
Test title	PATCH Scale to level VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.6.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
PATCH Scale vnfInstance to level Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFToLevelTask.robot>.

7.3.1.5.7 DELETE Scale to level VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.5.7
Test title	DELETE Scale to level VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	
Reference	Clause 5.4.6.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	
Test Case	
DELETE Scale vnfInstance to level Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ScaleVNFToLevelTask.robot>.

7.3.1.6 Change deployment flavour of a vnfInstance

7.3.1.6.1 POST Change deployment flavour of a vnfInstance

Test Purpose	
Test ID	7.3.1.6.1
Test title	POST Change deployment flavour of a vnfInstance
Test objective	The objective is to test that POST method trigger a change in VNF deployment flavour
Pre-conditions	VNF instance resource is not in NOT-INSTANTIATED state
Reference	Clause 5.4.7.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	In response header Location shall not be null
Test Case	
POST Change VNF deployment flavour Check HTTP Response Status Code Is 202 Check Operation Occurrence Id existence	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

7.3.1.6.2 POST Change deployment flavour of a vnfInstance Conflict (Not-Instantiated)

Test Purpose	
Test ID	7.3.1.6.2
Test title	POST Change deployment flavour of a vnfInstance Conflict (Not-Instantiated)
Test objective	The objective is to test that POST method cannot trigger a change in VNF deployment flavour because of a conflict with the state of the VNF instance resource. (VNF instance resource is not in NOT-INSTANTIATED state)
Pre-conditions	VNF instance resource is in NOT-INSTANTIATED state
Reference	Clause 5.4.7.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
POST Change VNF deployment flavour Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

7.3.1.6.3 POST Change deployment flavour of a vnflInstance Not Found

Test Purpose	
Test ID	7.3.1.6.3
Test title	POST Change deployment flavour of a vnflInstance Not Found
Test objective	The objective is to test that POST method cannot trigger a change in VNF deployment flavour because the VNF instance resource is not found
Pre-conditions	the VNF instance resource is not existing
Reference	Clause 5.4.7.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
POST Change VNF deployment flavour Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

7.3.1.6.4 GET Change deployment flavour VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.16.4
Test title	GET Change deployment flavour VNFInstance - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 5.4.7.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Change VNF deployment flavour Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

7.3.1.6.5 PUT Change deployment flavour VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.16.5
Test title	PUT Change deployment flavour VNFInstance - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.7.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PUT Change VNF deployment flavour Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

7.3.1.6.6 PATCH Change deployment flavour VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.16.6
Test title	PATCH Change deployment flavour VNFInstance - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 5.4.7.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PATCH Change VNF deployment flavour Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

7.3.1.6.7 DELETE Change deployment flavour VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.16.7
Test title	DELETE Change deployment flavour VNFInstance - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 5.4.7.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
DELETE Change VNF deployment flavour Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ChangeVNFFlavourTask.robot>.

7.3.1.7 Terminate a vnflInstance

7.3.1.7.1 POST Terminate a vnflInstance

Test Purpose	
Test ID	7.3.1.7.1
Test title	POST Terminate a vnflInstance
Test objective	The objective is to test that POST method terminate a VNF instance
Pre-conditions	None
Reference	Clause 5.4.8.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
POST Terminate VNF Check HTTP Response Status Code Is 202 Check Operation Occurrence Id existence	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/TerminateVNFTask.robot>.

7.3.1.7.2 POST Terminate a vnflInstance Conflict (Not-Instantiated)

Test Purpose	
Test ID	7.3.1.7.2
Test title	POST Terminate a vnflInstance Conflict (Not-Instantiated)
Test objective	The objective is to test that the vnf Instance cannot be terminated
Pre-conditions	VNF instance resource is in NOT-INSTANTIATED state
Reference	Clause 5.4.8.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
POST Terminate VNF Check HTTP Response Status Code Is 202 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/TerminateVNFTask.robot>.

7.3.1.7.3 GET Terminate VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.7.3
Test title	GET Terminate VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.8.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Terminate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/TerminateVNFTask.robot>.

7.3.1.7.4 PUT Terminate VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.7.4
Test title	PUT Terminate VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.8.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PUT Terminate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/TerminateVNFTask.robot>.

7.3.1.7.5 PATCH Terminate VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.7.5
Test title	PATCH Terminate VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.8.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PATCH Terminate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/TerminateVNFTask.robot>.

7.3.1.7.6 DELETE Terminate VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.7.6
Test title	DELETE Terminate VNFInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.8.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
DELETE Terminate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/TerminateVNFTask.robot>.

7.3.1.8 Heal a vnfInstance

7.3.1.8.1 POST Heal a vnfInstance

Test Purpose	
Test ID	7.3.1.8.1
Test title	POST Heal a vnfInstance
Test objective	The objective is to test that POST method heal a VNF instance
Pre-conditions	The VNF instance resource is not in NOT-INSTANTIATED state
Reference	Clause 5.4.9.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
POST Heal VNF Check HTTP Response Status Code Is 202 Check Operation Occurrence Id existence	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/HealVNFTask.robot>.

7.3.1.8.2 POST Heal a vnflInstance Conflict (Not-Instantiated)

Test Purpose	
Test ID	7.3.1.8.2
Test title	POST Heal a vnflInstance Conflict (Not-Instantiated)
Test objective	The objective is to test that the operation cannot be executed currently, due to a conflict with the state of the VNF instance resource
Pre-conditions	The VNF instance resource is in NOT-INSTANTIATED state
Reference	Clause 5.4.9.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
POST Heal VNF Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/HealVNFTask.robot>.

7.3.1.8.3 POST Heal a vnflInstance Not Found

Test Purpose	
Test ID	7.3.1.8.3
Test title	POST Heal a vnflInstance Not Found
Test objective	The objective is to test that the operation cannot be executed because the VNF instance resource is not found
Pre-conditions	The VNF instance resource is not existing
Reference	Clause 5.4.9.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
POST Heal VNF Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/HealVNFTask.robot>.

7.3.1.8.4 GET Heal VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.8.4
Test title	GET Heal a vnflInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.9.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
GET Heal VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/HealVNFTask.robot>.

7.3.1.8.5 PUT Heal VNFIInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.8.5
Test title	PUT Heal a vnfiInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.9.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
PUT Heal VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/HealVNFTask.robot>.

7.3.1.8.6 PATCH Heal VNFIInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.8.6
Test title	PATCH Heal a vnfiInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.9.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
PATCH Heal VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/HealVNFTask.robot>.

7.3.1.8.7 DELETE Heal VNFIInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.8.7
Test title	DELETE Heal a vnfiInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.9.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
DELETE Heal VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/HealVNFTask.robot>.

7.3.1.9 Operate a vnflInstance

7.3.1.9.1 POST Operate a vnflInstance

Test Purpose	
Test ID	7.3.1.9.1
Test title	POST Operate a vnflInstance
Test objective	The objective is to test that POST method operate a VNF instance
Pre-conditions	None
Reference	Clause 5.4.10.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
POST Operate VNF Check HTTP Response Status Code Is 202 Check Operation Occurrence Id existence	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/OperateVNFTask.robot>.

7.3.1.9.2 POST Operate a vnflInstance Conflict (Not-Instantiated)

Test Purpose	
Test ID	7.3.1.9.2
Test title	POST Operate a vnflInstance Conflict (Not-Instantiated)
Test objective	The objective is to test that the operation cannot be executed currently, due to a conflict with the state of the VNF instance resource
Pre-conditions	The VNF instance resource is in NOT-INSTANTIATED state
Reference	Clause 5.4.10.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
POST Operate VNF Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/OperateVNFTask.robot>.

7.3.1.9.3 POST Operate a vnflInstance Not Found

Test Purpose	
Test ID	7.3.1.9.3
Test title	POST Operate a vnflInstance Not Found
Test objective	The objective is to test that the operation cannot be executed currently, because the resource is not existing
Pre-conditions	The VNF instance resource is in not existing
Reference	Clause 5.4.10.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
POST Operate VNF Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/OperateVNFTask.robot>.

7.3.1.9.4 GET Operate VNFIInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.9.4
Test title	GET Operate a vnfiInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.10.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
GET Operate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFI lifecycleManagement-API/OperateVNFIInstance.robot>.

7.3.1.9.5 PUT Operate VNFIInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.9.5
Test title	PUT Operate a vnfiInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.10.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
PUT Operate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFI lifecycleManagement-API/OperateVNFIInstance.robot>.

7.3.1.9.6 PATCH Operate VNFIInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.9.6
Test title	PATCH Operate a vnfiInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.10.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
PATCH Operate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFI lifecycleManagement-API/OperateVNFIInstance.robot>.

7.3.1.9.7 DELETE Operate VNFInstance - Method not implemented

Test Purpose	
Test ID	7.3.1.9.7
Test title	DELETE Operate a vnfInstance - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.10.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
DELETE Operate VNF Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/OperateVNFTask.robot>.

7.3.1.10 Change external VNF connectivity

7.3.1.10.1 POST Change external VNF connectivity

Test Purpose	
Test ID	7.3.1.10.1
Test title	POST Change external VNF connectivity
Test objective	The objective is to test that POST method trigger a change in VNF external connectivity
Pre-conditions	None
Reference	Clause 5.4.11.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	In response header Location shall not be null
Test Case	
POST Change External VNF Connectivity Check HTTP Response Status Code Is 202 Check Operation Occurrence Id existence	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ChangeExternalVNFConnectivityTask.robot>.

7.3.1.10.2 GET Change external VNF connectivity - Method not implemented

Test Purpose	
Test ID	7.3.1.10.2
Test title	GET Change external VNF connectivity - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 5.4.11.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Change External VNF Connectivity Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ChangeExternalVNFConnectivityTask.robot>.

7.3.1.10.3 PUT Change external VNF connectivity - Method not implemented

Test Purpose	
Test ID	7.3.1.10.3
Test title	PUT Change external VNF connectivity - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.11.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PUT Change External VNF Connectivity Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ChangeExternalVNFConnectivityTask.robot>.

7.3.1.10.4 PATCH Change external VNF connectivity - Method not implemented

Test Purpose	
Test ID	7.3.1.10.4
Test title	PATCH Change external VNF connectivity - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 5.4.11.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PATCH Change External VNF Connectivity Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ChangeExternalVNFConnectivityTask.robot>.

7.3.1.10.5 DELETE Change external VNF connectivity - Method not implemented

Test Purpose	
Test ID	7.3.1.10.5
Test title	DELETE Change external VNF connectivity - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 5.4.11.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
DELETE Change External VNF Connectivity Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ChangeExternalVNFConnectivityTask.robot>.

7.3.1.11 VNF LCM Operation occurrences

7.3.1.11.1 POST VNF LCM Operation occurrences - Method not implemented

Test Purpose	
Test ID	7.3.1.11.1
Test title	POST VNF LCM Operation occurrences - Method not implemented
Test objective	The objective is to test that POST method is not implemented
Pre-conditions	None
Reference	Clause 5.4.12.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Post VNF LCM Operation occurrences Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

7.3.1.11.2 GET status information about multiple VNF LCM Operation OCC

Test Purpose	
Test ID	7.3.1.11.2
Test title	GET status information about multiple VNF LCM Operation OCC
Test objective	The objective is to test that GET method retrieve Query status information about multiple VNF lifecycle management operation occurrences
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF LCM Operation occurrences Check HTTP Response Status Code Is 202 Check HTTP Response Body Jjson Schema Is VnfLcmOpOccs	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

7.3.1.11.3 GET status information about multiple VNF LCM Operation OCC Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	7.3.1.11.3
Test title	GET status information about multiple VNF LCM Operation OCC Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is to test that GET method fail retrieving status information about multiple VNF lifecycle management operation occurrences because attribute is invalid
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF LCM Operation occurrences invalid attribute Check HTTP Response Status Code Is 400 Check HTTP Response Body Jjson Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

7.3.1.11.4 GET status information about multiple VNF LCM Operation OCC Bad Request Invalid attribute selector

Test Purpose	
Test ID	7.3.1.11.4
Test title	GET status information about multiple VNF LCM Operation OCC Bad Request Invalid attribute selector
Test objective	The objective is to test that GET method fail retrieving status information about multiple VNF lifecycle management operation occurrences because attribute is invalid
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF LCM Operation occurrences invalid filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

7.3.1.11.5 GET status information about multiple VNF LCM Operation OCC with "all_fields"

Test Purpose	
Test ID	7.3.1.11.5
Test title	GET status information about multiple VNF LCM Operation OCC with "all_fields"
Test objective	The objective is to test that GET method retrieve Query status information about multiple VNF lifecycle management operation occurrences
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF LCM Operation occurrences with all_fields attribute selector Check HTTP Response Status Code Is 202 Check HTTP Response Body Json Schema Is VnfLcmOpOcocs Check HTTP Response Body VNF LCM occurrences Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

7.3.1.11.6 GET status information about multiple VNF LCM Operation OCC with "exclude_default"

Test Purpose	
Test ID	7.3.1.11.6
Test title	GET status information about multiple VNF LCM Operation OCC with "exclude_default"
Test objective	The objective is to test that GET method retrieve Query status information about multiple VNF lifecycle management operation occurrences
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF LCM Operation occurrences with exclude_default attribute selector Check HTTP Response Status Code Is 202 Check HTTP Response Body Json Schema Is VnfLcmOpOcocs Check HTTP Response Body VNF LCM occurrences Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

7.3.1.11.7 GET status information about multiple VNF LCM Operation OCC with "fields"

Test Purpose	
Test ID	7.3.1.11.7
Test title	GET status information about multiple VNF LCM Operation OCC with "fields"
Test objective	The objective is to test that GET method retrieve Query status information about multiple VNF lifecycle management operation occurrences
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF LCM Operation occurrences with fields attribute selector	
Check HTTP Response Status Code Is 202	
Check HTTP Response Body Json Schema Is VnfLcmOpOccs	
Check HTTP Response Body VNF LCM occurrences Matches the requested fields attribute selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

7.3.1.11.8 GET status information about multiple VNF LCM Operation OCC with "exclude_fields"

Test Purpose	
Test ID	7.3.1.11.8
Test title	GET status information about multiple VNF LCM Operation OCC with "exclude_fields"
Test objective	The objective is to test that GET method retrieve Query status information about multiple VNF lifecycle management operation occurrences
Pre-conditions	None
Reference	Clause 5.4.12.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF LCM Operation occurrences with exclude_fields attribute selector	
Check HTTP Response Status Code Is 202	
Check HTTP Response Body Json Schema Is VnfLcmOpOccs	
Check HTTP Response Body VNF LCM occurrences Matches the requested exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

7.3.1.11.9 PUT status information about multiple VNF LCM Operation OCC - Method not implemented

Test Purpose	
Test ID	7.3.1.11.9
Test title	PUT status information about multiple VNF LCM Operation OCC - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.12.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PUT VNF LCM Operation occurrences	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

7.3.1.11.10 PATCH status information about multiple VNF LCM Operation OCC - Method not implemented

Test Purpose	
Test ID	7.3.1.11.10
Test title	PATCH status information about multiple VNF LCM Operation OCC - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 5.4.12.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PATCH VNF LCM Operation occurrences Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

7.3.1.11.11 DELETE status information about multiple VNF LCM Operation OCC - Method not implemented

Test Purpose	
Test ID	7.3.1.11.11
Test title	DELETE status information about multiple VNF LCM Operation OCC - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 5.4.12.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
DELETE VNF LCM Operation occurrences Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/VnfLcmOperationOccurrences.robot>.

7.3.1.12 Individual VNF LCM Operation occurrence

7.3.1.12.1 Post Individual VNF LCM Operation occurrences - Method not implemented

Test Purpose	
Test ID	7.3.1.12.1
Test title	Post Individual VNF LCM Operation occurrences - Method not implemented
Test objective	The objective is to test that POST method is not implemented
Pre-conditions	None
Reference	Clause 5.4.13.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Post Individual VNF LCM Operation occurrences Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualVnfLcmOperationOccurrence.robot>.

7.3.1.12.2 Get information about multiple VNF instances

Test Purpose	
Test ID	7.3.1.12.2
Test title	Get information about multiple VNF instances
Test objective	The objective is to test that this method retrieve information about a VNF lifecycle management operation occurrence
Pre-conditions	None
Reference	Clause 5.4.13.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get multiple VNF instances Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is VnfLcmOpOcc	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/IndividualVnfLcmOperationOccurence.robot>.

7.3.1.12.3 PUT Individual VNF LCM Operation occurrences - Method not implemented

Test Purpose	
Test ID	7.3.1.12.3
Test title	PUT Individual VNF LCM Operation occurrences - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.13.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Put multiple VNF instances Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/IndividualVnfLcmOperationOccurence.robot>.

7.3.1.12.4 PATCH Individual VNF LCM Operation occurrences - Method not implemented

Test Purpose	
Test ID	7.3.1.12.4
Test title	PATCH Individual VNF LCM Operation occurrences - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 5.4.13.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Patch multiple VNF instances Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/IndividualVnfLcmOperationOccurence.robot>.

7.3.1.12.5 DELETE Individual VNF LCM Operation occurrences - Method not implemented

Test Purpose	
Test ID	7.3.1.12.5
Test title	DELETE Individual VNF LCM Operation occurrences - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 5.4.13.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Delete multiple VNF instances Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualVnfLcmOperationOccurence.robot>.

7.3.1.13 Retry operation task

7.3.1.13.1 Post Retry operation task

Test Purpose	
Test ID	7.3.1.13.1
Test title	Post Retry operation task
Test objective	The objective is to test that POST method The POST method initiates retrying a VNF lifecycle operation if the operation is in FAILED_TEMP state
Pre-conditions	the "VNF LCM operation occurrence" resource is in "FAILED_TEMP" state
Reference	Clause 5.4.14.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Post Retry operation Check HTTP Response Status Code Is 202 Check Operation Occurrence Id existence	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RetryOperationTask.robot>.

7.3.1.13.2 Post Retry operation task Conflict (Not-FAILED_TEMP)

Test Purpose	
Test ID	7.3.1.13.2
Test title	Post Retry operation task Conflict (Not-FAILED_TEMP)
Test objective	The objective is to test that the retry operation cannot be executed currently, due to a conflict with the state of the VNF instance resource. (i.e. the VNF instance resource is not in FAILED_TEMP state)
Pre-conditions	The "VNF LCM operation occurrence" resource is not in "FAILED_TEMP" state
Reference	Clause 5.4.14.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Post Retry operation Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RetryOperationTask.robot>.

7.3.1.13.3 Post Retry operation task Not Found

Test Purpose	
Test ID	7.3.1.13.3
Test title	Post Retry operation task Not Found
Test objective	The objective is to test that the retry operation cannot be executed because the operation is not supported
Pre-conditions	
Reference	Clause 5.4.14.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Post Retry operation Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RetryOperationTask.robot>.

7.3.1.13.4 GET Retry operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.13.4
Test title	GET Retry operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.14.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
Get Retry operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RetryOperationTask.robot>.

7.3.1.13.5 PUT Retry operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.13.5
Test title	PUT Retry operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.14.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
Put Retry operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RetryOperationTask.robot>.

7.3.1.13.6 PATCH Retry operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.13.6
Test title	PATCH Retry operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.14.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
Patch Retry operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RetryOperationTask.robot>.

7.3.1.13.7 DELETE Retry operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.13.7
Test title	DELETE Retry operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.14.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
Delete Retry operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RetryOperationTask.robot>.

7.3.1.14 Rollback operation task

7.3.1.14.1 Post Rollback operation task

Test Purpose	
Test ID	7.3.1.14.1
Test title	Post Rollback operation task
Test objective	The objective is to test that POST method initiates rollback on a VNF lifecycle operation
Pre-conditions	The "VNF LCM operation occurrence" resource is in "FAILED_TEMP" state
Reference	Clause 5.4.15.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Post Rollback operation Check HTTP Response Status Code Is 202 Check Operation Occurrence Id existence	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

7.3.1.14.2 POST Rollback operation task Conflict (Not-FAILED_TEMP)

Test Purpose	
Test ID	7.3.1.14.2
Test title	POST Rollback operation task Conflict (Not-FAILED_TEMP)
Test objective	The objective is to test that POST method initiates a rollback on a VNF lifecycle operation
Pre-conditions	The "VNF LCM operation occurrence" resource is not in "FAILED_TEMP" state
Reference	Clause 5.4.15.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Post Rollback operation Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

7.3.1.14.3 POST Rollback operation task Not Found

Test Purpose	
Test ID	7.3.1.14.3
Test title	POST Rollback operation task Not Found
Test objective	The objective is to test that the retry operation cannot be executed because the operation is not supported
Pre-conditions	
Reference	Clause 5.4.15.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Post Rollback operation Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

7.3.1.14.4 GET Rollback operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.14.4
Test title	GET Rollback operation task - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.15.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
Get Rollback operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

7.3.1.14.5 PUT Rollback operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.14.5
Test title	PUT Rollback operation task - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.15.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
Put Rollback operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

7.3.1.14.6 PATCH Rollback operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.14.6
Test title	PATCH Rollback operation task - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.15.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
Patch Rollback operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

7.3.1.14.7 DELETE Rollback operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.14.7
Test title	DELETE Rollback operation task - Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.15.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
Delete Rollback operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/RollbackOperationTask.robot>.

7.3.1.15 Fail operation task

7.3.1.15.1 POST Fail operation task

Test Purpose	
Test ID	7.3.1.15.1
Test title	POST Fail operation task
Test objective	The objective is to test that POST method mark as "finally failed" a VNF lifecycle operation
Pre-conditions	The "VNF LCM operation occurrence" resource is in "FAILED_TEMP" state
Reference	Clause 5.4.16.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	VNF resource state is FINALLY_FAILED
Test Case	
Post Fail operation Check HTTP Response Status Code Is 202 Check Operation Occurrence Id existence Check operation resource state is FINALLY_FAILED	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/FailOperationTask.robot>.

7.3.1.15.2 Post Fail operation task Conflict (Not-FAILED_TEMP)

Test Purpose	
Test ID	7.3.1.15.2
Test title	Post Fail operation task
Test objective	The objective is to test that POST method cannot mark as "finally failed" a VNF lifecycle operation
Pre-conditions	The "VNF LCM operation occurrence" resource is not in "FAILED_TEMP" state
Reference	Clause 5.4.16.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Post Fail operation Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/FailOperationTask.robot>.

7.3.1.15.3 Post Fail operation task Not Found

Test Purpose	
Test ID	7.3.1.15.3
Test title	Post Fail operation task
Test objective	The objective is to test that POST method cannot mark as "finally failed" a VNF lifecycle operation because the operation is not supported
Pre-conditions	
Reference	Clause 5.4.16.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Post Fail operation Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/FailOperationTask.robot>.

7.3.1.15.4 GET Fail operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.15.4
Test title	GET Fail operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.16.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
Get Fail operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/FailOperationTask.robot>.

7.3.1.15.5 PUT Fail operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.15.5
Test title	PUT Fail operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.16.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
Put Fail operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/FailOperationTask.robot>.

7.3.1.15.6 PATCH Fail operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.15.6
Test title	GET Fail operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.16.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
Patch Fail operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/FailOperationTask.robot>.

7.3.1.15.7 DELETE Fail operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.15.7
Test title	DELETE Fail operation task- Method not implemented
Test objective	The objective is to verify that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.16.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	
Test Case	
Delete Fail operation Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/FailOperationTask.robot>.

7.3.1.16 Cancel operation task

7.3.1.16.1 POST Cancel operation task

Test Purpose	
Test ID	7.3.1.16.1
Test title	POST Cancel operation task
Test objective	The POST method initiates cancelling an ongoing VNF lifecycle operation while it is being executed or rolled back, i.e. the "VNF LCM operation occurrence" is either in "PROCESSING" or "ROLLING_BACK" state
Pre-conditions	The "VNF LCM operation occurrence" is either in "PROCESSING" or "ROLLING_BACK" state
Reference	Clause 5.4.17.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	VNF instance status equal to FAILED_TEMP
Test Case	
POST Cancel operation task Check HTTP Response Status Code Is 202 Check operation resource state is FAILED_TEMP	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/CancelOperationTask.robot>.

7.3.1.16.2 POST Cancel operation task Conflict

Test Purpose	
Test ID	7.3.1.16.2
Test title	POST Cancel operation task Conflict
Test objective	The POST method is NOT cancelling an ongoing VNF lifecycle operation due to the fact that the VNF instance resource is not in STARTING, PROCESSING or ROLLING_BACK state
Pre-conditions	Operation is not in STARTING, PROCESSING or ROLLING_BACK state
Reference	Clause 5.4.17.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
POST Cancel operation task Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/CancelOperationTask.robot>.

7.3.1.16.3 POST Cancel operation task Not Found

Test Purpose	
Test ID	7.3.1.16.3
Test title	POST Cancel operation task Not Found
Test objective	The objective is to test that POST method cannot cancel a VNF lifecycle operation because the resource is not found
Pre-conditions	
Reference	Clause 5.4.17.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
POST Cancel operation task Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/CancelOperationTask.robot>.

7.3.1.16.4 GET Cancel operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.16.4
Test title	GET Cancel operation task - Method not implemented
Test objective	The objective is to test that GET method is not implemented
Pre-conditions	None
Reference	Clause 5.4.17.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Cancel operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/CancelOperationTask.robot>.

7.3.1.16.5 PUT Cancel operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.16.5
Test title	PUT Cancel operation task - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.17.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PUT Cancel operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/CancelOperationTask.robot>.

7.3.1.16.6 PATCH Cancel operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.16.6
Test title	PATCH Cancel operation task - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 5.4.17.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PATCH Cancel operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/CancelOperationTask.robot>.

7.3.1.16.7 DELETE Cancel operation task - Method not implemented

Test Purpose	
Test ID	7.3.1.16.7
Test title	DELETE Cancel operation task - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 5.4.17.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
DELETE Cancel operation task Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/CancelOperationTask.robot>.

7.3.1.17 Subscriptions

7.3.1.17.1 POST Create a new subscription

Test Purpose	
Test ID	7.3.1.17.1
Test title	POST Create a new subscription
Test objective	The POST method creates a new subscription
Pre-conditions	None
Reference	Clause 5.4.18.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	In response header Location shall not be null
Test Case	
Post Create subscription Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is Subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/Subscriptions.robot>.

7.3.1.17.2 Create a new Subscription - DUPLICATION

Test Purpose	
Test ID	7.3.1.17.2
Test title	POST Create a new subscription - DUPLICATION
Test objective	The POST method creates a duplicate subscription
Pre-conditions	None
Reference	Clause 5.4.18.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM support the creation of duplicated subscriptions
Post-Conditions	In response header Location shall not be null
Test Case	
Post Create subscription - DUPLICATION Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is Subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/Subscriptions.robot>.

7.3.1.17.3 Create a new Subscription - NO-DUPLICATION

Test Purpose	
Test ID	7.3.1.17.3
Test title	POST Create a new subscription - NO-DUPLICATION
Test objective	The POST method cannot create a duplicate subscription
Pre-conditions	None
Reference	Clause 5.4.18.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM does not support the creation of duplicated subscriptions
Post-Conditions	In response header Location shall not be null
Test Case	
Post Create subscription - NO-DUPLICATION Check HTTP Response Status Code Is 303 Check Operation Occurrence Id existence	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/Subscriptions.robot>.

7.3.1.17.4 GET Subscriptions

Test Purpose	
Test ID	7.3.1.17.4
Test title	GET Subscriptions
Test objective	The objective is Get the list of active subscriptions
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Subscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/Subscriptions.robot>.

7.3.1.17.5 GET Subscription - Filter

Test Purpose	
Test ID	7.3.1.17.5
Test title	GET Subscriptions - Filter
Test objective	The objective is Get the list of active subscriptions using a filter
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions - filter	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is Subscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/Subscriptions.robot>.

7.3.1.17.6 GET subscriptions - Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	7.3.1.17.6
Test title	GET subscriptions - Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is Get the list of active subscriptions using an invalid filter
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions - invalid filter	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/Subscriptions.robot>.

7.3.1.17.7 GET subscriptions with all_fields attribute selector

Test Purpose	
Test ID	7.3.1.17.7
Test title	GET subscriptions with all_fields attribute selector
Test objective	The objective is Get the list of active subscriptions
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions with all_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is Subscriptions	
Check HTTP Response Body subscriptions Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/Subscriptions.robot>.

7.3.1.17.8 GET subscriptions with exclude_default attribute selector

Test Purpose	
Test ID	7.3.1.17.8
Test title	GET subscriptions with exclude_default attribute selector
Test objective	The objective is Get the list of active subscriptions
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions with exclude_default attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is Subscriptions	
Check HTTP Response Body subscriptions Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/Subscriptions.robot>.

7.3.1.17.9 GET subscriptions with fields attribute selector

Test Purpose	
Test ID	7.3.1.17.9
Test title	GET subscriptions with fields attribute selector
Test objective	The objective is Get the list of active subscriptions
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions with fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is Subscriptions	
Check HTTP Response Body subscriptions Matches the requested fields attribute selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/Subscriptions.robot>.

7.3.1.17.10 GET subscriptions with exclude_fields attribute selector

Test Purpose	
Test ID	7.3.1.17.10
Test title	GET subscriptions with exclude_fields attribute selector
Test objective	The objective is Get the list of active subscriptions
Pre-conditions	None
Reference	Clause 5.4.18.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get subscriptions with exclude_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is Subscriptions	
Check HTTP Response Body subscriptions Matches the requested exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/Subscriptions.robot>.

7.3.1.17.11 PUT subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.1.17.11
Test title	PUT subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not implemented
Pre-conditions	None
Reference	Clause 5.4.18.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PUT subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/Subscriptions.robot>.

7.3.1.17.12 PATCH subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.1.17.12
Test title	PATCH subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not implemented
Pre-conditions	None
Reference	Clause 5.4.18.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	Subscription not modified
Test Case	
PATCH subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/Subscriptions.robot>.

7.3.1.17.13 DELETE subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.1.17.13
Test title	DELETE subscriptions - Method not implemented
Test objective	The objective is to test that DELETE method is not implemented
Pre-conditions	None
Reference	Clause 5.4.18.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	Subscription not deleted
Test Case	
DELETE subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/Subscriptions.robot>.

7.3.1.18 Individual Subscription

7.3.1.18.1 POST Individual Subscription - Method not implemented

Test Purpose	
Test ID	7.3.1.18.1
Test title	POST Individual Subscription - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.19.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Post Create Individual subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualSubscription.robot>.

7.3.1.18.2 GET Individual Subscription

Test Purpose	
Test ID	7.3.1.18.2
Test title	GET Individual Subscription
Test objective	The objective is to test the Get individual subscription
Pre-conditions	None
Reference	Clause 5.4.19.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get Individual Subscription Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualSubscription.robot>.

7.3.1.18.3 PUT an individual subscription - Method not implemented

Test Purpose	
Test ID	7.3.1.18.3
Test title	PUT an individual subscription - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.19.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Put Individual subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualSubscription.robot>.

7.3.1.18.4 PATCH an individual subscription - Method not implemented

Test Purpose	
Test ID	7.3.1.18.4
Test title	PATCH an individual subscription - Method not implemented
Test objective	The objective is to test that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.19.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Patch Individual subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualSubscription.robot>.

7.3.1.18.5 DELETE an individual subscription

Test Purpose	
Test ID	7.3.1.18.5
Test title	DELETE an individual subscription
Test objective	The objective is to test that the method is not implemented
Pre-conditions	None
Reference	Clause 5.4.19.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	subscription deleted from VNFM
Test Case	
Delete Individual subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/IndividualSubscription.robot>.

7.3.1.19 Cancel VNF LCM Operation

7.3.1.19.1 Cancel a VNF LCM Operation - STARTING

Test Purpose	
Test ID	7.3.1.19.1
Test title	Cancel a VNF LCM Operation - STARTING
Test objective	The objective is to test the workflow for Cancelling a VNF LCM Operation being in the STARTING state
Pre-conditions	The VNF lifecycle management operation occurrence is in STARTING state. NFVO is subscribed to VNF LCM Operation Occurrence notifications (Test ID 5.4.20.1)
Reference	Clause 5.4.17 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM
Post-Conditions	The VNF lifecycle management operation occurrence is in ROLLED_BACK state
Test Case	
Send Cancel Operation Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Cancel ROLLED_BACK Check Postcondition VNF Cancel - STARTING	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/CancelOperationWorkflow.robot>.

7.3.1.19.2 Cancel a VNF LCM Operation - PROCESSING - ROLLING_BACK

Test Purpose	
Test ID	7.3.1.19.2
Test title	Cancel a VNF LCM Operation - PROCESSING - ROLLING_BACK
Test objective	The objective is to test the workflow for Cancelling a VNF LCM Operation being either in the PROCESSING or ROLLING_BACK state
Pre-conditions	The VNF lifecycle management operation occurrence is in PROCESSING or ROLLING_BACK state. NFVO is subscribed to VNF LCM Operation Occurrence notifications
Reference	Clause 5.3.10 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM
Post-Conditions	The VNF lifecycle management operation occurrence is in FAILED_TEMP state
Test Case	
Send Cancel Operation Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Cancel FAILED_TEMP Check Postcondition VNF Cancel - PROCESSING - ROLLING_BACK	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/CancelOperationWorkflow.robot>.

7.3.1.20 Change external connectivity of VNF Workflow

Test Purpose	
Test ID	7.3.1.20
Test title	Change external connectivity of VNF Workflow
Test objective	The objective is to change the external connectivity of a VNF instance
Pre-conditions	VNF instance in INSTANTIATED state
Reference	Clause 5.4.11 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM. The VNFD supports the external connectivity change
Post-Conditions	VNF instance still in INSTANTIATED state and external connectivity of the VNF is changed
Test Case	
Send Change Ext Connectivity Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Change Ext Connectivity STARTING Check Operation Notification For Change Ext Connectivity PROCESSING Check Operation Notification For Change Ext Connectivity COMPLETED Check Postcondition VNF Change Ext Connectivity	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/ChangeExternalVNFConnectivityWorkflow.robot>.

7.3.1.21 Change VNF Flavour Workflow

Test Purpose	
Test ID	7.3.1.21
Test title	Change VNF Flavour Workflow
Test objective	The objective is to test the workflow for a change flavour of an existing VNF instance
Pre-conditions	VNF instance in INSTANTIATED state . NFVO is subscribed to VNF LCM Operation Occurrence notifications
Reference	Clause 5.4.7 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	Multiple flavours are supported for the VNF (as capability in the VNFD). NFVO is able to receive notifications from VNFM
Post-Conditions	VNF instance still in INSTANTIATED state and the flavour is changed
Test Case	
Send Change VNF Flavour Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Change Flavour STARTING Check Operation Notification For Change Flavour PROCESSING Check Operation Notification For Change Flavour COMPLETED Check Postcondition VNF Flavor Changed	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/ChangeVNFFlavourWorkflow.robot>.

7.3.1.22 Create VNF Instance Resource

Test Purpose	
Test ID	7.3.1.22
Test title	Create VNF Instance workflow
Test objective	The objective is to test the workflow for the creation of a new VNF instance resource
Pre-conditions	NFVO is subscribed to VNF Identifier Creation notifications
Reference	Clause 5.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM
Post-Conditions	The VNF instance resource has been created in "NOT_INSTANTIATED" state
Test Case	
Send VNF Instance Resource create Request Check HTTP Response Status Code Is 201 Check HTTP Response Header Contains Location Check Operation Notification For VNF Instance Creation Check Postcondition VNF Instance Created status is NOT_INSTANTIATED	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/CreateVNFWorkflow.robot>.

7.3.1.23 Delete VNF Instance Resource

Test Purpose	
Test ID	7.3.1.23
Test title	Delete VNF Instance workflow
Test objective	The objective is to test the workflow for the deletion of an existing VNF instance resource
Pre-conditions	The VNF Instance resource is in NOT_INSTANTIATED state. NFVO is subscribed to VNF Identifier Creation notifications
Reference	Clause 5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM
Post-Conditions	The VNF instance resource is deleted on the VNFM
Test Case	
Send VNF Instance Resource delete Request Check HTTP Response Status Code Is 204 Check Operation Notification For VNF Instance Deletion Check Postcondition VNF Instance Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/DeleteVNFWorkflow.robot>.

7.3.1.24 Fail a VNF LCM Operation Workflow

Test Purpose	
Test ID	7.3.1.24
Test title	Fail a VNF LCM Operation Workflow
Test objective	The objective is to test the workflow for a Fail VNF LCM Operation
Pre-conditions	The VNF lifecycle management operation occurrence is in FAILED_TEMP state. NFVO is subscribed to VNF LCM Operation Occurrence notifications
Reference	Clause 5.4.16 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM
Post-Conditions	The VNF lifecycle management operation occurrence is in FAILED state
Test Case	
Send Fail Operation Request Check Operation Notification For Fail FAILED Check HTTP Response Status Code Is 200 Check Postcondition VNF Fail	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/FailOperationWorkflow.robot>.

7.3.1.25 Heal a VNF Instance

Test Purpose	
Test ID	7.3.1.25
Test title	Heal a VNF Instance
Test objective	The objective is to heal a VNF instance
Pre-conditions	VNF instance in INSTANTIATED state
Reference	Clause 5.4.9 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM. Heal a VNF instance is supported for the VNF (as capability in the VNFD)
Post-Conditions	VNF instance still in INSTANTIATED state
Test Case	
Send Heal VNF Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Heal STARTING Check Operation Notification For Heal PROCESSING Check Operation Notification For Heal COMPLETED Check Postcondition VNF Heal	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/HealVNFWorkflow.robot>.

7.3.1.26 VNF Instantiation

Test Purpose	
Test ID	7.3.1.26
Test title	VNF Instantiation workflow
Test objective	The objective is to test the workflow for the instantiation of a VNF instance
Pre-conditions	VNF instance resources is already created. NFVO is subscribed to VNF LCM Operation Occurrence notifications
Reference	Clause 5.4.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM
Post-Conditions	VNF instance in INSTANTIATED state
Test Case	
Send VNF Instantiation Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Instantiation STARTING Check Operation Notification For Instantiation PROCESSING Check Operation Notification For Instantiation COMPLETED Check Postcondition VNF Status INSTANTIATED	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/InstantiateVNFTaskWorkflow.robot>.

7.3.1.27 Modify info of a VNF Instance

Test Purpose	
Test ID	7.3.1.27
Test title	Update information about a VNF instance
Test objective	The objective is to update information about a VNF instance
Pre-conditions	VNF instance is created
Reference	Clause 5.3.6 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM. Update information of a VNF instance is supported for the VNF (as capability in the VNFD)
Post-Conditions	VNF instance info is updated
Test Case	
Send Info Modification Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Modify Info start Check Operation Notification For Modify Info result Check Postcondition VNF Modify Info	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/ModifyVNFInformationWorkflow.robot>.

7.3.1.28 Operate a VNF Instance

Test Purpose	
Test ID	7.3.1.28
Test title	Operate a VNF Instance
Test objective	The objective is to test the workflow of operational change of a VNF instance
Pre-conditions	VNF instance in INSTANTIATED state
Reference	Clause 5.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	change the operational state of a VNF instance is supported for the VNF (as capability in the VNFD)
Post-Conditions	VNF instance still in INSTANTIATED state and the operational state is changed
Test Case	
Send Change VNF Operational State Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Operate STARTING Check Operation Notification For Operate PROCESSING Check Operation Notification For Operate COMPLETED Check Postcondition VNF OPERATE	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/OperateVNFWorkflow.robot>.

7.3.1.29 Retry VNF LCM Operation

7.3.1.29.1 Retry VNF LCM Operation - Successful

Test Purpose	
Test ID	7.3.1.29.1
Test title	Retry VNF LCM Operation - Successful
Test objective	The objective is to test the workflow for a successful Retry VNF LCM Operation and the status notifications
Pre-conditions	The VNF lifecycle management operation occurrence is in FAILED_TEMP state. NFVO is subscribed to VNF LCM Operation Occurrence notifications
Reference	Clause 5.3.10 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM
Post-Conditions	The VNF lifecycle management operation occurrence is in COMPLETED state
Test Case	
Send Retry Operation Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Retry PROCESSING Check Operation Notification For Retry COMPLETED Check Postcondition VNF Retry Successful	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/RetryOperationWorkflow.robot>.

7.3.1.29.2 Retry VNF LCM Operation - Unsuccessful

Test Purpose	
Test ID	7.3.1.29.2
Test title	Retry VNF LCM Operation - Unsuccessful
Test objective	The objective is to test the workflow for an unsuccessful Retry VNF LCM Operation and the status notifications
Pre-conditions	The VNF lifecycle management operation occurrence is in FAILED_TEMP state. NFVO is subscribed to VNF LCM Operation Occurrence notifications
Reference	Clause 5.3.10 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM
Post-Conditions	The VNF lifecycle management operation occurrence is in FAILED_TEMP state
Test Case	
Send Retry Operation Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Retry PROCESSING Check Operation Notification For Retry FAILED_TEMP Check Postcondition VNF Retry Unsuccessful	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/RetryOperationWorkflow.robot>.

7.3.1.30 Rollback VNF LCM Operation

7.3.1.30.1 Rollback a VNF LCM Operation - Successful

Test Purpose	
Test ID	7.3.1.30.1
Test title	Rollback VNF LCM Operation - Successful
Test objective	The objective is to test the workflow for a Rolling Back a VNF LCM Operation and the operation is successful
Pre-conditions	The VNF lifecycle management operation occurrence is in FAILED_TEMP state. NFVO is subscribed to VNF LCM Operation Occurrence notifications
Reference	Clause 5.3.11 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM
Post-Conditions	The VNF lifecycle management operation occurrence is in ROLLED_BACK state
Test Case	
Send Roll back Operation Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Roll Back ROLLING_BACK Check Operation Notification For Roll Back ROLLED_BACK Check Postcondition VNF Roll Back Successful	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/RollBackOperationWorkflow.robot>.

7.3.1.30.2 Rollback VNF LCM Operation - Unsuccessful

Test Purpose	
Test ID	7.3.1.30.2
Test title	Rollback VNF LCM Operation - Unsuccessful
Test objective	The objective is to test the workflow for a Rollback VNF LCM Operation and the operation is not successful
Pre-conditions	The VNF lifecycle management operation occurrence is in FAILED_TEMP state. NFVO is subscribed to VNF LCM Operation Occurrence notifications
Reference	Clause 5.3.10 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM
Post-Conditions	The VNF lifecycle management operation occurrence is in FAILED_TEMP state
Test Case	
Send Roll back Operation Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Roll Back ROLLING_BACK Check Operation Notification For Roll Back FAILED_TEMP Check Postcondition VNF Roll Back UnSuccessful	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/RollBackOperationWorkflow.robot>.

7.3.1.31 VNF Instance Scale To Level

Test Purpose	
Test ID	7.3.1.31
Test title	VNF Instance Scale To Level workflow
Test objective	The objective is to test the workflow for the scale to level of a VNF instance
Pre-conditions	VNF instance in INSTANTIATED state . NFVO is subscribed to VNF LCM Operation Occurrence notifications
Reference	Clause 5.4.6 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM. Scale operation is supported for the VNF (as capability in the VNFD)
Post-Conditions	VNF instance still in INSTANTIATED state and VNF is scaled to the new level
Test Case	
Send VNF Scale To Level Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Scale STARTING Check Operation Notification For Scale PROCESSING Check Operation Notification For Scale COMPLETED Check Postcondition VNF Scaled To New Level	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/ScaleVNFToLevelWorkflow.robot>.

7.3.1.32 VNF Instance Scale Out

Test Purpose	
Test ID	7.3.1.32
Test title	VNF Instance Scale Out workflow
Test objective	The objective is to test the workflow for the scaling out a VNF instance
Pre-conditions	VNF instance in INSTANTIATED state (Test ID 5.4.4.1). NFVO is subscribed to VNF LCM Operation Occurrence notifications (Test ID 5.4.20.1)
Reference	Clause 5.4.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM. Scale operation is supported for the VNF (as capability in the VNFD)
Post-Conditions	VNF instance still in INSTANTIATED state and VNF is scaled out
Test Case	
Send VNF Scale Out Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Scale STARTING Check Operation Notification For Scale PROCESSING Check Operation Notification For Scale COMPLETED Check Postcondition VNF_SCALE_OUT	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/ScaleVNFWorkflow.robot>.

7.3.1.33 Terminate a VNF Instance

Test Purpose	
Test ID	7.3.1.33
Test title	Terminate a VNF Instance
Test objective	The objective is to terminate a VNF instance
Pre-conditions	VNF instance in INSTANTIATED state
Reference	Clause 5.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	NFVO is able to receive notifications from VNFM
Post-Conditions	VNF instance in NOT_INSTANTIATED state
Test Case	
Send Terminate VNF Request Check HTTP Response Status Code Is 202 Check HTTP Response Header Contains Location Check Operation Occurrence Id Check Operation Notification For Terminate STARTING Check Operation Notification For Terminate PROCESSING Check Operation Notification For Terminate COMPLETED Check Postcondition VNF Terminate	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleManagement-API/TerminateVNFWorkflow.robot>.

7.3.1.34 Notification Endpoint

7.3.1.34.1 VNF LCM Operation Occurrence Start Notification

Test Purpose	
Test ID	7.3.1.19.1
Test title	VNF LCM Operation Occurrence Start Notification
Test objective	The objective is to test the dispatch of VNF LCM Operation Occurrence Start Notification when a new VNF LCM operation is started in the VNFM, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A subscription for VNF LCM Operation Occurrence notifications is available in the VNFM.
Reference	Clause 5.4.20.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger a VNF LCM operation (external action) Check VNF LCM Operation Occurrence Start Notification Http POST Request Body Json Schema Is VnfLcmOperationOccurrenceNotification Check VNF LCM Operation Occurrence Start Notification Http POST Request Body notificationType attribute Is VnfLcmOperationOccurrenceNotification Check VNF LCM Operation Occurrence Start Notification Http POST Request Body notificationStatus attribute Is START	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/NotificationEndpoint.robot>.

7.3.1.34.2 VNF LCM Operation Occurrence Result Notification

Test Purpose	
Test ID	7.3.1.19.2
Test title	VNF LCM Operation Occurrence Result Notification
Test objective	The objective is to test the dispatch of VNF LCM Operation Occurrence Result Notification when a VNF LCM operation is completed in the VNFM, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF LCM operation is in progress, and a subscription for VNF LCM Operation Occurrence notifications is available in the VNFM
Reference	Clause 5.4.20.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the completion of an VNF LCM operation (external action) Check VNF LCM Operation Occurrence Result Notification Http POST Request Body Json Schema Is VnfLcmOperationOccurrenceNotification Check VNF LCM Operation Occurrence Result Notification Http POST Request Body notificationType attribute Is VnfLcmOperationOccurrenceNotification Check VNF LCM Operation Occurrence Start Notification Http POST Request Body notificationStatus attribute Is RESULT	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/NotificationEndpoint.robot>.

7.3.1.34.3 VNF Identifier Creation Notification

Test Purpose	
Test ID	7.3.1.19.3
Test title	VNF Identifier Creation Notification
Test objective	The objective is to test the dispatch of VNF Identifier Creation Notification when a new VNF instance resource is created in the VNFM, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A subscription for VNF identifier creation notifications is available in the VNFM
Reference	Clause 5.4.20.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the creation of a VNF instance resource (external action) Check VNF Identifier Creation Notification Http POST Request Body Json Schema Is VnfIdentifierCreationNotification Check VNF Identifier Creation Notification Http POST Request Body notificationType attribute Is VnfIdentifierCreationNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/NotificationEndpoint.robot>.

7.3.1.34.4 VNF Identifier Deletion Notification

Test Purpose	
Test ID	7.3.1.19.4
Test title	VNF Identifier Deletion Notification
Test objective	The objective is to test the dispatch of VNF Identifier Deletion Notification when a VNF instance resource is deleted in the VNFM, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF instance resource is created, and a subscription for VNF identifier creation notifications is available in the VNFM.
Reference	Clause 6.4.18.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the deletion of a VNF instance resource (external action) Check VNF Identifier Deletion Notification Http POST Request Body Json Schema Is VnfIdentifierDeletionNotification Check VNF Identifier Deletion Notification Http POST Request Body notificationType attribute Is VnfIdentifierDeletionNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleManagement-API/NotificationEndpoint.robot>.

7.3.2 VNF Lifecycle Operation Granting Interface

7.3.2.1 Grants

7.3.2.1.1 Requests a grant for a particular VNF lifecycle operation - Synchronous mode

Test Purpose	
Test ID	7.3.2.1.1
Test title	Requests a grant for a particular VNF lifecycle operation - Synchronous mode
Test objective	The objective is to request a grant for a particular VNF lifecycle operation and perform a JSON schema validation on the returned grant data structure
Pre-conditions	
Reference	Clause 9.4.2.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO can decide immediately what to respond to a grant request
Post-Conditions	The grant information is available to the VNFM
Test Case	
Send Request Grant Request in Synchronous mode	
Check HTTP Response Status Code Is 201	
Check Operation Occurrence Id existence	
Check HTTP Response Body Json Schema Is grant	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleOperationGranting-API/Grants.robot>.

7.3.2.1.2 Requests a grant for a particular VNF lifecycle operation - Asynchronous mode

Test Purpose	
Test ID	7.3.2.1.2
Test title	Requests a grant for a particular VNF lifecycle operation - Asynchronous mode
Test objective	The objective is to request a grant for a particular VNF lifecycle operation
Pre-conditions	
Reference	Clause 9.4.2.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO cannot decide immediately what to respond to a grant request
Post-Conditions	The grant information is available to the VNFM
Test Case	
Send Request Grant Request in Asynchronous mode	
Check HTTP Response Status Code Is 202	
Check Operation Occurrence Id existence	
Check HTTP Response Body Json Schema Is grant	
Wait for individual grant successful notification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFlifecycleOperationGranting-API/Grants.robot>.

7.3.2.1.3 Requests a grant for a particular VNF lifecycle operation - Forbidden

Test Purpose	
Test ID	7.3.2.1.3
Test title	Requests a grant for a particular VNF lifecycle operation - Forbidden
Test objective	The objective is to request a grant for a particular VNF lifecycle operation and check the content of the problem details data structure returned
Pre-conditions	The grant should not be accorded
Reference	Clause 9.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Request a new Grant Forbidden	
Check HTTP Response Status Code Is 403	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleOperationGranting-API/Grants.robot>.

7.3.2.1.4 GET Grants - Method not implemented

Test Purpose	
Test ID	7.3.2.1.4
Test title	GET Grants - Method not implemented
Test objective	The objective is to test that GET method is not allowed for Life cycle operation granting
Pre-conditions	None
Reference	Clause 9.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get Grants Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleOperationGranting-API/Grants.robot>.

7.3.2.1.5 PUT Grants - Method not implemented

Test Purpose	
Test ID	7.3.2.1.5
Test title	PUT Grants - Method not implemented
Test objective	The objective is to test that PUT method is not allowed for Life cycle operation granting
Pre-conditions	None
Reference	Clause 9.4.2.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Put Grants Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleOperationGranting-API/Grants.robot>.

7.3.2.1.6 PATCH Grants - Method not implemented

Test Purpose	
Test ID	7.3.2.1.6
Test title	PATCH Grants - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed for Life cycle operation granting
Pre-conditions	None
Reference	Clause 9.4.2.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Patch Grants Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleOperationGranting-API/Grants.robot>.

7.3.2.1.7 DELETE Grants - Method not implemented

Test Purpose	
Test ID	7.3.2.1.7
Test title	DELETE Grants - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed for Life cycle operation granting
Pre-conditions	None
Reference	Clause 9.4.2.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Delete Grants Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleOperationGranting-API/Grants.robot>.

7.3.2.2 Individual Grant

7.3.2.2.1 POST Individual Grant - Method not implemented

Test Purpose	
Test ID	7.3.2.2.1
Test title	POST Individual Grant - Method not implemented
Test objective	The objective is to test that POST method is not allowed for Life cycle operation granting
Pre-conditions	None
Reference	Clause 9.4.2.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Post individual Grant Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleOperationGranting-API/IndividualGrant.robot>.

7.3.2.2.2 GET an individual grant - Successful

Test Purpose	
Test ID	7.3.2.2.2
Test title	GET an individual grant - Successful
Test objective	The objective is to request a grant for a particular VNF lifecycle operation
Pre-conditions	The grant information is available to the VNFM
Reference	Clause 9.4.3.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get individual grant success Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is grant	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleOperationGranting-API/IndividualGrant.robot>.

7.3.2.2.3 GET an individual grant - Process ongoing

Test Purpose	
Test ID	7.3.2.2.3
Test title	GET an individual grant - Process ongoing
Test objective	The objective is to request a grant for a particular VNF lifecycle operation
Pre-conditions	The process of creating the grant is ongoing, no grant is available yet
Reference	Clause 9.4.3.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get individual grant on-going Check HTTP Response Status Code Is 202 Check HTTP Response Body Json Schema Is grant	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleOperationGranting-API/IndividualGrant.robot>.

7.3.2.2.4 GET an individual grant - grant rejected

Test Purpose	
Test ID	7.3.2.2.4
Test title	GET an individual grant - grant rejected
Test objective	The objective is to request a grant for a particular VNF lifecycle operation
Pre-conditions	
Reference	Clause 9.4.3.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The grant is rejected
Test Case	
Get individual grant rejected Check HTTP Response Status Code Is 403 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleOperationGranting-API/IndividualGrant.robot>.

7.3.2.2.5 PUT an individual grant - Method not implemented

Test Purpose	
Test ID	7.3.2.2.5
Test title	PUT an individual grant - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to for Life cycle operation granting
Pre-conditions	None
Reference	Clause 9.4.3.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
PUT individual Grant Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleOperationGranting-API/IndividualGrant.robot>.

7.3.2.2.6 PATCH an individual grant - Method not implemented

Test Purpose	
Test ID	7.3.2.2.6
Test title	PATCH an individual grant - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to for Life cycle operation granting
Pre-conditions	None
Reference	Clause 9.4.3.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Patch individual Grant Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleOperationGranting-API/IndividualGrant.robot>.

7.3.2.2.7 DELETE an individual grant - Method not implemented

Test Purpose	
Test ID	7.3.2.2.7
Test title	DELETE an individual grant - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to for Life cycle operation granting
Pre-conditions	None
Reference	Clause 9.4.3.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	grant not deleted
Test Case	
Delete individual Grant Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFLifecycleOperationGranting-API/IndividualGrant.robot>.

7.3.3 VNF Package Management Interface

7.3.3.1 VNF Packages Resource Endpoint

7.3.3.1.1 GET all VNF Packages

Test Purpose	
Test ID	7.3.3.1.1
Test title	GET all VNF Packages
Test objective	The objective is to test the retrieval of all the available VNF packages information and perform a JSON schema and content validation of the collected data structure
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET all VNF Packages Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgsInfo Check HTTP Response Body Does Not Contain softwareImages Check HTTP Response Body Does Not Contain additionalArtifacts Check HTTP Response Body Does Not Contain userDefinedData	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackages.robot>

7.3.3.1.2 GET VNF Packages with attribute-based filter

Test Purpose	
Test ID	7.3.3.1.2
Test title	GET VNF Packages with attribute-based filter
Test objective	The objective is to test the retrieval of VNF packages using attribute-based filter, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued attribute-based filter
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Packages with attribute-based filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgsInfo Check HTTP Response Body VnfPkgsInfo Matches the requested attribute-based filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackages.robot>

7.3.3.1.3 GET VNF Packages with invalid attribute-based filter

Test Purpose	
Test ID	7.3.3.1.3
Test title	GET VNF Packages with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of VNF packages fails when using invalid attribute-based filter, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Packages with invalid attribute-based filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackages.robot>

7.3.3.1.4 GET VNF Packages with "all_fields" attribute selector

Test Purpose	
Test ID	7.3.3.1.4
Test title	GET VNF Packages with "all_fields" attribute selector
Test objective	The objective is to test the retrieval of VNF packages with "all_fields" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "all_fields" selector
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clauses 4.3.3.2.1, 10.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Packages with all_fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgsInfo Check HTTP Response Body vnfPkgsInfo Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackages.robot>

7.3.3.1.5 GET VNF Packages with "exclude_default" attribute selector

Test Purpose	
Test ID	7.3.3.1.5
Test title	GET VNF Packages with "exclude_default" attribute selector
Test objective	The objective is to test the retrieval of VNF packages with "exclude_default" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "exclude_default" selector
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clauses 4.3.3.2.1, 10.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Packages with exclude_default attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgsInfo Check HTTP Response Body vnfPkgsInfo Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackages.robot>

7.3.3.1.6 GET VNF Packages with "fields" attribute selector

Test Purpose	
Test ID	7.3.3.1.6
Test title	GET VNF Packages with "fields" attribute selector
Test objective	The objective is to test the retrieval of VNF packages with "fields" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "fields" selector
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clauses 4.3.3.2.1, 10.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The VNFM supports the use of "fields" attribute selector
Post-Conditions	None
Test Case	
GET VNF Packages with fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgsInfo Check HTTP Response Body vnfPkgsInfo Matches the requested fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackages.robot>

7.3.3.1.7 GET VNF Packages with "exclude_fields" attribute selector

Test Purpose	
Test ID	7.3.3.1.7
Test title	GET VNF Packages with "exclude_fields" attribute selector
Test objective	The objective is to test the retrieval of VNF packages with "exclude_fields" attribute selector, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued "exclude_fields" selector
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clauses 4.3.3.2.1, 10.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The VNFM supports the use of "exclude_fields" attribute selector
Post-Conditions	None
Test Case	
GET VNF Packages with exclude_fields attribute selector Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgsInfo Check HTTP Response Body vnfPkgsInfo Matches the requested exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackages.robot>

7.3.3.1.8 GET all VNF Packages with invalid resource endpoint

Test Purpose	
Test ID	7.3.3.1.8
Test title	GET VNF Packages with invalid resource endpoint
Test objective	The objective is to test that the retrieval of VNF packages fails when using invalid resource endpoint
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET all VNF Packages with invalid resource endpoint Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackages.robot>

7.3.3.1.9 POST all VNF Packages - Method not implemented

Test Purpose	
Test ID	7.3.3.1.9
Test title	POST all VNF Packages - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create new VNF Packages
Pre-conditions	None
Reference	Clause 10.4.2.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for all VNF Packages Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackages.robot>

7.3.3.1.10 PUT all VNF Packages - Method not implemented

Test Purpose	
Test ID	7.3.3.1.10
Test title	PUT all VNF Packages - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify existing VNF Packages
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.2.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for all VNF Packages Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackages.robot>

7.3.3.1.11 PATCH all VNF Packages - Method not implemented

Test Purpose	
Test ID	7.3.3.1.11
Test title	PATCH all VNF Packages - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update existing VNF Packages
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.2.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for all VNF Packages Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackages.robot>

7.3.3.1.12 DELETE all VNF Packages - Method not implemented

Test Purpose	
Test ID	7.3.3.1.12
Test title	DELETE all VNF Packages - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete existing VNF Packages
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.2.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Packages are not deleted by the failed operation
Test Case	
Send DELETE Request for all VNF Packages Check HTTP Response Status Code Is 405 Check Postcondition VNF Packages Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackages.robot>

7.3.3.2 Individual VNF Package Resource Endpoint

7.3.3.2.1 GET Individual VNF Package

Test Purpose	
Test ID	7.3.3.2.1
Test title	GET Individual VNF Package
Test objective	The objective is to test the retrieval of an individual VNF package information perform a JSON schema validation of the collected data structure
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.3.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual VNF Package Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfPkgInfo Check HTTP Response Body vnfPkgInfo Identifier matches the requested VNF Package	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/IndividualVNFPackage.robot>

7.3.3.2.2 GET Individual VNF Package with invalid resource identifier

Test Purpose	
Test ID	7.3.3.2.2
Test title	GET Individual VNF Package with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF package fails when using an invalid resource identifier
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.3.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual VNF Package with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/IndividualVNFPackage.robot>

7.3.3.2.3 POST Individual VNF Package - Method not implemented

Test Purpose	
Test ID	7.3.3.2.3
Test title	POST Individual VNF Package - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create new VNF Package
Pre-conditions	None
Reference	Clause 10.4.3.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/IndividualVNFPackage.robot>

7.3.3.2.4 PUT Individual VNF Package - Method not implemented

Test Purpose	
Test ID	7.3.3.2.4
Test title	PUT Individual VNF Package - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify a VNF Package
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.3.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/IndividualVNFPackage.robot>

7.3.3.2.5 PATCH Individual VNF Package - Method not implemented

Test Purpose	
Test ID	7.3.3.2.5
Test title	PATCH Individual VNF Package - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update a VNF Package
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.3.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/IndividualVNFPackage.robot>

7.3.3.2.6 DELETE Individual VNF Package - Method not implemented

Test Purpose	
Test ID	7.3.3.2.6
Test title	DELETE Individual VNF Package - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete a VNF Package
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.3.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package is not deleted by the failed operation
Test Case	
Send DELETE Request for individual VNF Package Check HTTP Response Status Code Is 405 Check Postcondition VNF Package Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/IndividualVNFPackage.robot>

7.3.3.3 VNF Package Content Resource Endpoint

7.3.3.3.1 GET Individual VNF Package Content

Test Purpose	
Test ID	7.3.3.3.1
Test title	GET Individual VNF Package Content
Test objective	The objective is to test the retrieval of an individual VNF package content and perform a validation that returned content is in zip format
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual VNF Package Content Check HTTP Response Status Code Is 200 Check HTTP Response Header Content-Type Is application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageContent.robot>

7.3.3.3.2 GET Individual VNF Package Content with Range Request and NFVO supporting Range Requests

Test Purpose	
Test ID	7.3.3.3.2
Test title	GET Individual VNF Package Content with Range Request and NFVO supporting Range Requests
Test objective	The objective is to test the retrieval of an individual VNF package content when using a range request to return single range of bytes from the file, with the NFVO supporting it. The test also perform a validation that returned content matches the issued range
Pre-conditions	One or more VNF packages are onboarded in the NFVO.
Reference	Clause 10.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports range requests to return single range of bytes from the VNF package file
Post-Conditions	None
Test Case	
GET Individual VNF Package Content with Range Request Check HTTP Response Status Code Is 206 Check HTTP Response Header Content-Type Is application/zip Check HTTP Response Header Content-Range Is Present and Matches the requested range Check HTTP Response Header Content-Length Is Present and Matches the requested range length	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageContent.robot>

7.3.3.3.3 GET Individual VNF Package Content with Range Request and NFVO not supporting Range Requests

Test Purpose	
Test ID	7.3.3.3.3
Test title	GET Individual VNF Package Content with Range Request and NFVO not supporting Range Requests
Test objective	The objective is to test that the retrieval of an individual VNF package content, when using a range request to return single range of bytes from the file and the NFVO not supporting it, returns the full VNF Package file
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO does not support range requests to return single range of bytes from the VNF package file
Post-Conditions	None
Test Case	
GET Individual VNF Package Content with Range Request Check HTTP Response Status Code Is 200 Check HTTP Response Header Content-Type Is application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageContent.robot>

7.3.3.3.4 GET Individual VNF Package Content with invalid Range Request

Test Purpose	
Test ID	7.3.3.3.4
Test title	GET Individual VNF Package Content with invalid Range Request
Test objective	The objective is to test that the retrieval of an individual VNF package content fails when using a range request that does not match any available byte range in the file
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports range requests to return single range of bytes from the VNF package file
Post-Conditions	None
Test Case	
GET Individual VNF Package Content with invalid Range Request Check HTTP Response Status Code Is 416	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageContent.robot>

7.3.3.3.5 GET Individual VNF Package Content with invalid resource identifier

Test Purpose	
Test ID	7.3.3.3.5
Test title	GET Individual VNF Package Content with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF package content fails when using an invalid resource identifier
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual VNF Package Content with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageContent.robot>

7.3.3.3.6 GET Individual VNF Package Content with conflict due to onboarding state

Test Purpose	
Test ID	7.3.3.3.6
Test title	GET Individual VNF Package Content with conflict due to onboarding state
Test objective	The objective is to test that the retrieval of an individual VNF package content fails due to a conflict when the VNF Package is not in onboarding state ONBOARDED in the NFVO. The test also performs a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	The onboarding state of the VNF package for which the content is requested is different from ONBOARDED
Reference	Clause 10.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Content for VNF Package in onboarding state different from ONBOARDED Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageContent.robot>

7.3.3.3.7 POST Individual VNF Package Content - Method not implemented

Test Purpose	
Test ID	7.3.3.3.7
Test title	POST Individual VNF Package Content - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create new VNF Package content
Pre-conditions	None
Reference	Clause 10.4.3.5.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageContent.robot>

7.3.3.3.8 PUT Individual VNF Package Content - Method not implemented

Test Purpose	
Test ID	7.3.3.3.8
Test title	PUT Individual VNF Package Content - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify a VNF Package content
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.3.5.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageContent.robot>

7.3.3.3.9 PATCH Individual VNF Package Content - Method not implemented

Test Purpose	
Test ID	7.3.3.3.9
Test title	PATCH Individual VNF Package Content - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update a VNF Package content
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.3.5.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageContent.robot>

7.3.3.3.10 DELETE Individual VNF Package Content - Method not implemented

Test Purpose	
Test ID	7.3.3.3.10
Test title	DELETE Individual VNF Package Content - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete a VNF Package content
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.3.5.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package content is not deleted by the failed operation
Test Case	
Send DELETE Request for individual VNF Package Check HTTP Response Status Code Is 405 Check Postcondition VNF Package Content Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageContent.robot>

7.3.3.4 VNFD In Individual VNF Package Resource Endpoint

7.3.3.4.1 Get single file VNFD in Individual VNF Package in Plain Format

Test Purpose	
Test ID	7.3.3.4.1
Test title	Get single file VNFD in Individual VNF Package in Plain Format
Test objective	The objective is to test the retrieval of the VNFD in plain format for an individual VNF package and perform a validation that returned content is in plain format
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The VNFD is implemented as a single file
Post-Conditions	None
Test Case	
Get single file VNFD in Individual VNF Package in Plain Format Check HTTP Response Status Code Is 200 Check HTTP Response Header Content-Type Is text/plain	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

7.3.3.4.2 Get VNFD in Individual VNF Package in Zip Format

Test Purpose	
Test ID	7.3.3.4.2
Test title	Get VNFD in Individual VNF Package in Zip Format
Test objective	The objective is to test the retrieval of the VNFD in zip format for an individual VNF package and perform a validation that returned content is in zip format
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get VNFD in Individual VNF Package in Zip Format	
Check HTTP Response Status Code Is 200	
Check HTTP Response Header Content-Type Is application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

7.3.3.4.3 Get single file VNFD in Individual VNF Package in Plain or Zip Format

Test Purpose	
Test ID	7.3.3.4.3
Test title	Get single file VNFD in Individual VNF Package in Plain or Zip Format
Test objective	The objective is to test the retrieval of the single file VNFD for an individual VNF package when requesting Plain or Zip format to NFVO by including both formats in the request, and perform a validation that returned content is in Plain or Zip format
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The VNFD is implemented as a single file
Post-Conditions	None
Test Case	
Get single file VNFD in Individual VNF Package in Plain or Zip Format	
Check HTTP Response Status Code Is 200	
Check HTTP Response Header Content-Type Is Any of text/plain application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

7.3.3.4.4 Get multi file VNFD in Individual VNF Package in Plain or Zip Format

Test Purpose	
Test ID	7.3.3.4.4
Test title	Get multi file VNFD in Individual VNF Package in Plain or Zip Format
Test objective	The objective is to test the retrieval of the multi file VNFD for an individual VNF package when requesting Plain or Zip format to NFVO by including both formats in the request, and perform a validation that returned content is in Zip format
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The VNFD is implemented as a multi file
Post-Conditions	None
Test Case	
Get multi file VNFD in Individual VNF Package in Plain or Zip Format	
Check HTTP Response Status Code Is 200	
Check HTTP Response Header Content-Type Is application/zip	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

7.3.3.4.5 Get multi file VNFD in Individual VNF Package in Plain Format

Test Purpose	
Test ID	7.3.3.4.5
Test title	Get multi file VNFD in Individual VNF Package in Plain Format
Test objective	The objective is to test that the retrieval of the multi file VNFD for an individual VNF package fails when requesting it in Plain format, and perform a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The VNFD is implemented as a multi file
Post-Conditions	None
Test Case	
Get multi file VNFD in Individual VNF Package in Plain Format Check HTTP Response Status Code Is 406 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

7.3.3.4.6 Get VNFD in Individual VNF Package with invalid resource identifier

Test Purpose	
Test ID	7.3.3.4.6
Test title	Get VNFD in Individual VNF Package with invalid resource identifier
Test objective	The objective is to test that the retrieval of the VNFD for an individual VNF package content fails when using an invalid resource identifier
Pre-conditions	None
Reference	Clause 10.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get VNFD in Individual VNF Package with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

7.3.3.4.7 Get VNFD in Individual VNF Package Content with conflict due to onboarding state

Test Purpose	
Test ID	7.3.3.4.7
Test title	Get VNFD in Individual VNF Package Content with conflict due to onboarding state
Test objective	The objective is to test that the retrieval of the VNFD for an individual VNF package content fails due to a conflict when the VNF Package is not in onboarding state ONBOARDED in the NFVO. The test also performs a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	The onboarding state of the VNF package for which the VNFD is requested is different from ONBOARDED
Reference	Clause 10.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get VNFD in Individual VNF Package Content with conflict due to onboarding state Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

7.3.3.4.8 POST VNFD in Individual VNF Package Content - Method not implemented

Test Purpose	
Test ID	7.3.3.4.8
Test title	POST VNFD in Individual VNF Package Content - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create new VNFD
Pre-conditions	None
Reference	Clause 10.4.4.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for VNFD in individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

7.3.3.4.9 PUT VNFD in Individual VNF Package Content - Method not implemented

Test Purpose	
Test ID	7.3.3.4.9
Test title	PUT VNFD in Individual VNF Package Content - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify a VNFD
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.4.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for VNFD in individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

7.3.3.4.10 PATCH VNFD in Individual VNF Package Content - Method not implemented

Test Purpose	
Test ID	7.3.3.4.10
Test title	PATCH VNFD in Individual VNF Package Content - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update a VNFD
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.4.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for VNFD in individual VNF Package Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

7.3.3.4.11 DELETE VNFD in Individual VNF Package Content - Method not implemented

Test Purpose	
Test ID	7.3.3.4.11
Test title	DELETE VNFD in Individual VNF Package Content - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete a VNFD
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.4.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNFD is not deleted by the failed operation
Test Case	
Send DELETE Request for VNFD in individual VNF Package	
Check HTTP Response Status Code Is 405	
Check Postcondition VNFD Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFDInIndividualVNFPackage.robot>.

7.3.3.5 Individual VNF Package Artifact Resource Endpoint

7.3.3.5.1 GET Individual VNF Package Artifact

Test Purpose	
Test ID	7.3.3.5.1
Test title	GET Individual VNF Package Artifact
Test objective	The objective is to test the retrieval of an individual VNF package artifact
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.6.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual VNF Package Artifact	
Check HTTP Response Status Code Is 200	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

7.3.3.5.2 GET Individual VNF Package Artifact in octet stream format

Test Purpose	
Test ID	7.3.3.5.2
Test title	GET Individual VNF Package Artifact in octet stream format
Test objective	The objective is to test the retrieval of an individual VNF package artifact when the NFVO cannot determine the artifact content type. The test performs a validation that the returned artifact in is octet-stream format
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.6.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO cannot determine the content type of the artifact
Post-Conditions	None
Test Case	
GET Individual VNF Package Artifact in octet stream format	
Check HTTP Response Status Code Is 200	
Check HTTP Response Header Content-Type Is application/octet-stream	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

7.3.3.5.3 GET Individual VNF Package Artifact with Range Request and NFVO supporting Range Requests

Test Purpose	
Test ID	7.3.3.5.3
Test title	GET Individual VNF Package Artifact with Range Request and NFVO supporting Range Requests
Test objective	The objective is to test the retrieval of an individual VNF package artifact when using a range request to return single range of bytes from the file, with the NFVO supporting it. The test also perform a validation that returned content matches the issued range
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.6.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports range requests to return single range of bytes from the VNF package artifact
Post-Conditions	None
Test Case	
GET Individual VNF Package Artifact with Range Request Check HTTP Response Status Code Is 206 Check HTTP Response Header Content-Range Is Present and Matches the requested range Check HTTP Response Header Content-Length Is Present and Matches the requested range length	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

7.3.3.5.4 GET Individual VNF Package Artifact with Range Request and NFVO not supporting Range Requests

Test Purpose	
Test ID	7.3.3.5.4
Test title	GET Individual VNF Package Artifact with Range Request and NFVO not supporting Range Requests
Test objective	The objective is to test that the retrieval of an individual VNF package artifact, when using a range request to return single range of bytes from the file and the NFVO not supporting it, returns the full VNF Package artifact
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.6.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO does not support range requests to return single range of bytes from the VNF package artifact
Post-Conditions	None
Test Case	
GET Individual VNF Package Artifact with Range Request Check HTTP Response Status Code Is 200	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

7.3.3.5.5 GET Individual VNF Package Artifact with invalid Range Request

Test Purpose	
Test ID	7.3.3.5.5
Test title	GET Individual VNF Package Artifact with invalid Range Request
Test objective	The objective is to test that the retrieval of an individual VNF package artifact fails when using a range request that does not match any available byte range in the file
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.6.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports range requests to return single range of bytes from the VNF package artifact
Post-Conditions	None
Test Case	
GET Individual VNF Package Artifact with invalid Range Request Check HTTP Response Status Code Is 416	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

7.3.3.5.6 GET Individual VNF Package Artifact with invalid resource identifier

Test Purpose	
Test ID	7.3.3.5.6
Test title	GET Individual VNF Package Artifact with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF package artifact fails when using an invalid resource identifier
Pre-conditions	One or more VNF packages are onboarded in the NFVO.
Reference	Clause 10.4.6.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Individual VNF Package Artifact with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

7.3.3.5.7 GET Individual VNF Package Artifact with conflict due to onboarding state

Test Purpose	
Test ID	7.3.3.5.7
Test title	GET Individual VNF Package Artifact with conflict due to onboarding state
Test objective	The objective is to test that the retrieval of an individual VNF package artifact fails due to a conflict when the VNF Package is not in onboarding state ONBOARDED in the NFVO. The test also performs a validation of the JSON schema validation of the failed operation HTTP response
Pre-conditions	The onboarding state of the VNF package for which the content is requested is different from ONBOARDED
Reference	Clause 10.4.6.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET Artifact for VNF Package in onboarding state different from ONBOARDED Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

7.3.3.5.8 POST Individual VNF Package Artifact - Method not implemented

Test Purpose	
Test ID	7.3.3.5.8
Test title	POST Individual VNF Package Artifact - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create new VNF Package artifact
Pre-conditions	None
Reference	Clause 10.4.6.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for individual VNF Package Artifact Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

7.3.3.5.9 PUT Individual VNF Package Artifact - Method not implemented

Test Purpose	
Test ID	7.3.3.5.9
Test title	PUT Individual VNF Package Artifact - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify a VNF Package artifact
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.6.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for individual VNF Package Artifact	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

7.3.3.5.10 PATCH Individual VNF Package Artifact - Method not implemented

Test Purpose	
Test ID	7.3.3.5.10
Test title	PATCH Individual VNF Package Artifact - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update a VNF Package artifact
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.6.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for individual VNF Package Artifact	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

7.3.3.5.11 DELETE Individual VNF Package Artifact - Method not implemented

Test Purpose	
Test ID	7.3.3.5.11
Test title	DELETE Individual VNF Package Artifact - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete a VNF Package artifact
Pre-conditions	One or more VNF packages are onboarded in the NFVO
Reference	Clause 10.4.6.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package artifact is not deleted by the failed operation
Test Case	
Send DELETE Request for individual VNF Package Artifact	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Package Artifact Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/VNFPackageArtifacts.robot>.

7.3.3.6 Subscriptions Resource Endpoint

7.3.3.6.1 Get All VNF Package Subscriptions

Test Purpose	
Test ID	7.3.3.6.1
Test title	GET all VNF Package Subscriptions
Test objective	The objective is to test the retrieval of all VNF package subscriptions and perform a JSON schema validation of the returned subscriptions data structure
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.7.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get all VNF Package Subscriptions Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PkgmSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/Subscriptions.robot>.

7.3.3.6.2 Get VNF Package Subscriptions with attribute-based filter

Test Purpose	
Test ID	7.3.3.6.2
Test title	Get VNF Package Subscriptions with attribute-based filter
Test objective	The objective is to test the retrieval of VNF package subscriptions using attribute-based filter, perform a JSON schema validation of the collected data structure, and verify that the retrieved information matches the issued attribute-based filters
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.7.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Package Subscriptions with attribute-based filters Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PkgmSubscription Check HTTP Response Body Subscriptions Match the requested Attribute-Based Filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/Subscriptions.robot>.

7.3.3.6.3 Get VNF Package Subscriptions with invalid attribute-based filter

Test Purpose	
Test ID	7.3.3.6.3
Test title	Get VNF Package Subscriptions with attribute-based filters
Test objective	The objective is to test that the retrieval of VNF package subscriptions fails when using invalid attribute-based filters, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.7.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Package Subscriptions with invalid attribute-based filters Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/Subscriptions.robot>.

7.3.3.6.4 GET VNF Package Subscription with invalid resource endpoint

Test Purpose	
Test ID	7.3.3.6.4
Test title	GET VNF Package Subscription with invalid resource endpoint
Test objective	The objective is to test that the retrieval of all VNF package subscriptions fails when using invalid resource endpoint
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.7.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Package Subscriptions with invalid resource endpoint Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/Subscriptions.robot>.

7.3.3.6.5 Create new VNF Package subscription

Test Purpose	
Test ID	7.3.3.6.5
Test title	Create new VNF Package subscription
Test objective	The objective is to test the creation of a new VNF package subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	None
Reference	Clause 10.4.7.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF package subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for VNF Package Subscription Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is PkgmSubscription Check HTTP Response Body PkgmSubscription Attributes Values Match the Issued Subscription Check Postcondition VNF Package Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/Subscriptions.robot>.

7.3.3.6.6 Create duplicated VNF Package subscription with NFVO not creating duplicated subscriptions

Test Purpose	
Test ID	7.3.3.6.6
Test title	Create duplicated VNF Package subscription with NFVO not creating duplicated subscriptions
Test objective	The objective is to test the attempt of a creation of a duplicated VNF package subscription and check that no new subscription is created by the NFVO and a link to the original subscription is returned
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.7.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO does not support the creation of duplicated subscriptions
Post-Conditions	The existing VNF package subscription returned is available in the NFVO
Test Case	
Send Post Request for Duplicated VNF Package Subscription Check HTTP Response Status Code Is 303 Check HTTP Response Body Is Empty Check HTTP Response Header Contains Location Check Postcondition Subscription Resource Returned in Location Header Is Available	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/Subscriptions.robot>.

7.3.3.6.7 Create duplicated VNF Package subscription with NFVO creating duplicated subscriptions

Test Purpose	
Test ID	7.3.3.6.7
Test title	Create duplicated VNF Package subscription with NFVO creating duplicated subscriptions
Test objective	The objective is to test the creation of a duplicated VNF package subscription and perform a JSON schema and content validation of the returned duplicated subscription data structure
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.7.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	The NFVO supports the creation of duplicated subscriptions
Post-Conditions	The duplicated VNF package subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for Duplicated VNF Package Subscription Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is PkgmSubscription Check HTTP Response Body PkgmSubscription Attributes Values Match the Issued Subscription Check Postcondition VNF Package Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/Subscriptions.robot>.

7.3.3.6.8 PUT VNF Package Subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.3.6.8
Test title	PUT VNF Package Subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify VNF package subscriptions
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.7.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Put Request for VNF Package Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/Subscriptions.robot>.

7.3.3.6.9 PATCH VNF Package Subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.3.6.9
Test title	PATCH VNF Package Subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update VNF package subscriptions
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.7.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Patch Request for VNF Package Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/Subscriptions.robot>.

7.3.3.6.10 DELETE VNF Package Subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.3.6.10
Test title	DELETE VNF Package Subscriptions - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete VNF package subscriptions
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.7.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF package subscriptions are not deleted by the failed operation
Test Case	
Send Delete Request for VNF Package Subscriptions	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Package Subscriptions Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/Subscriptions.robot>.

7.3.3.7 Individual Subscription Resource Endpoint

7.3.3.7.1 GET Individual VNF Package Subscription

Test Purpose	
Test ID	7.3.3.7.1
Test title	GET Individual VNF Package Subscription
Test objective	The objective is to test the retrieval of individual VNF package subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.8.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Get Individual VNF Package Subscription	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PkgmSubscription	
Check HTTP Response Body Subscription Identifier matches the requested Subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/IndividualSubscription.robot>.

7.3.3.7.2 GET Individual VNF Package Subscription with invalid resource identifier

Test Purpose	
Test ID	7.3.3.7.2
Test title	GET Individual VNF Package Subscription with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF package subscription fails when using an invalid resource identifier
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.8.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
GET individual VNF Package Subscription with invalid resource identifier	
Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/IndividualSubscription.robot>.

7.3.3.7.3 DELETE Individual VNF Package Subscription with invalid resource identifier

Test Purpose	
Test ID	7.3.3.7.3
Test title	DELETE Individual VNF Package Subscription with invalid resource identifier
Test objective	The objective is to test that the deletion of an individual VNF package subscription fails when using an invalid resource identifier
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.8.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Send Delete request for individual VNF Package Subscription with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/IndividualSubscription.robot>.

7.3.3.7.4 POST Individual VNF Package Subscription - Method not implemented

Test Purpose	
Test ID	7.3.3.7.4
Test title	POST Individual VNF Package Subscription - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new VNF Package Subscription
Pre-conditions	None
Reference	Clause 10.4.8.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package Subscription is not created on the NFVO
Test Case	
Send Post request for individual VNF Package Subscription Check HTTP Response Status Code Is 405 Check Postcondition VNF Package Subscription is not Created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/IndividualSubscription.robot>.

7.3.3.7.5 PUT Individual VNF Package Subscription - Method not implemented

Test Purpose	
Test ID	7.3.3.7.5
Test title	PUT Individual VNF Package Subscription - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing VNF Package subscription
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.8.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package subscription is not modified by the operation
Test Case	
Send Put request for individual VNF Package Subscription Check HTTP Response Status Code Is 405 Check Postcondition VNF Package Subscription is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/IndividualSubscription.robot>.

7.3.3.7.6 PATCH Individual VNF Package Subscription - Method not implemented

Test Purpose	
Test ID	7.3.3.7.6
Test title	PATCH Individual VNF Package Subscription - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing VNF Package subscription
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.8.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package subscription is not modified by the operation
Test Case	
Send Patch request for individual VNF Package Subscription	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Package Subscription is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/IndividualSubscription.robot>.

7.3.3.7.7 DELETE Individual VNF Package Subscription

Test Purpose	
Test ID	7.3.3.7.7
Test title	DELETE Individual VNF Package Subscription
Test objective	The objective is to test the deletion of an individual VNF package subscription
Pre-conditions	At least one VNF package subscription is available in the NFVO
Reference	Clause 10.4.8.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	The VNF Package Subscription is not available anymore in the NFVO
Test Case	
Send Delete request for individual VNF Package Subscription	
Check HTTP Response Status Code Is 204	
Check Postcondition VNF Package Subscription is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/IndividualSubscription.robot>.

7.3.3.8 Notification Endpoint

7.3.3.8.1 VNF Package Onboarding Notification

Test Purpose	
Test ID	7.3.3.8.1
Test title	VNF Package Onboarding Notification
Test objective	The objective is to test the dispatch of VNF Package Onboarding notification when the VNF package onboarding operation is successfully completed, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF package subscription for onboarding notifications is available in the NFVO
Reference	Clause 10.4.9.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the completion of VNF Package Onboarding (external action)	
Check Onboarding Notification Http POST Request Body Json Schema Is VnfPackageOnboardingNotification	
Check Onboarding Notification Http POST Request Body notificationType attribute Is VnfPackageOnboardingNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/PackageManagementNotification.robot>.

7.3.3.8.2 VNF Package Operational State Change Notification

Test Purpose	
Test ID	7.3.3.8.2
Test title	VNF Package Operational State Change Notification
Test objective	The objective is to test the dispatch of VNF Package Change notification when the VNF package operational state is modified, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF package subscription for change notifications is available in the NFVO
Reference	Clause 10.4.9.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the change of VNF Package Operational State (external action)	
Check State Change Notification Http POST Request Body Json Schema Is VnfPackageChangeNotification	
Check State Change Notification Http POST Request Body notificationType attribute Is VnfPackageChangeNotification	
Check State Change Notification Http POST Request Body changeType attribute Is OP_STATE_CHANGE	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/PackageManagementNotification.robot>.

7.3.3.8.3 VNF Package Deletion Notification

Test Purpose	
Test ID	7.3.3.8.3
Test title	VNF Package Deletion Notification
Test objective	The objective is to test the dispatch of VNF Package Change notification when the VNF package is deleted on the NFVO, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF package subscription for change notifications is available in the NFVO
Reference	Clause 10.4.9.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_NFVO
Applicability	None
Post-Conditions	None
Test Case	
Trigger the deletion of VNF Package (external action)	
Check Deletion Notification Http POST Request Body Json Schema Is VnfPackageChangeNotification	
Check Deletion Notification Http POST Request Body notificationType attribute Is VnfPackageChangeNotification	
Check Deletion Notification Http POST Request Body changeType attribute Is PKG_DELETE	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPackageManagement-API/PackageManagementNotification.robot>.

7.3.4 VNF Performance Management Interface

7.3.4.1 PM Jobs Resource Endpoint

7.3.4.1.1 GET all VNF Performance Monitoring Jobs

Test Purpose	
Test ID	7.3.4.1.1
Test title	GET all VNF Performance Monitoring Jobs
Test objective	The objective is to test the retrieval of all the available VNF performance monitoring jobs and perform a JSON schema and content validation of the collected jobs data structure
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET all VNF Performance Monitoring Jobs Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmJobs Check HTTP Response Body Does Not Contain reports	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PMJobs.robot>.

7.3.4.1.2 GET VNF Performance Monitoring Jobs with attribute-based filter

Test Purpose	
Test ID	7.3.4.1.2
Test title	GET all VNF Performance Monitoring Jobs with attribute-based filter
Test objective	The objective is to test the retrieval of VNF performance monitoring jobs using attribute-based filter, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued attribute-based filter
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with attribute-based filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmJobs Check HTTP Response Body PmJobs Matches the requested attribute-based filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PMJobs.robot>.

7.3.4.1.3 GET all VNF Performance Monitoring Jobs with all_fields attribute selector

Test Purpose	
Test ID	7.3.4.1.3
Test title	GET all VNF Performance Monitoring Jobs with all_fields attribute selector
Test objective	The objective is to test the retrieval of all VNF performance monitoring jobs all_fields attribute selector, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued all_fields selector
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clauses 4.3.3.2.1 and 6.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with all_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PmJobs	
Check HTTP Response Body PmJobs Matches the requested all_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PMJobs.robot>.

7.3.4.1.4 GET all VNF Performance Monitoring Jobs with exclude_default attribute selector

Test Purpose	
Test ID	7.3.4.1.4
Test title	GET all VNF Performance Monitoring Jobs with exclude_default attribute selector
Test objective	The objective is to test the retrieval of all VNF performance monitoring jobs exclude_default attribute selector, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued exclude_default selector
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clauses 4.3.3.2.1 and 6.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with exclude_default attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PmJobs	
Check HTTP Response Body PmJobs Matches the requested exclude_default selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PMJobs.robot>.

7.3.4.1.5 GET all VNF Performance Monitoring Jobs with fields attribute selector

Test Purpose	
Test ID	7.3.4.1.5
Test title	GET all VNF Performance Monitoring Jobs with fields attribute selector
Test objective	The objective is to test the retrieval of all VNF performance monitoring jobs fields attribute selector, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued fields selector
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clauses 4.3.3.2.1 and 6.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM supports the use of exclude_fields attribute selector
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PmJobs	
Check HTTP Response Body PmJobs Matches the requested fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PMJobs.robot>.

7.3.4.1.6 GET all VNF Performance Monitoring Jobs with exclude_fields attribute selector

Test Purpose	
Test ID	7.3.4.1.6
Test title	GET all VNF Performance Monitoring Jobs with exclude_fields attribute selector
Test objective	The objective is to test the retrieval of all VNF performance monitoring jobs exclude_fields attribute selector, perform a JSON schema validation of the collected jobs data structure, and verify that the retrieved information matches the issued exclude_fields selector
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clauses 4.3.3.2.1 and 6.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM supports the use of exclude_fields attribute selector
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with exclude_fields attribute selector	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PmJobs	
Check HTTP Response Body PmJobs Matches the requested exclude_fields selector	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PMJobs.robot>.

7.3.4.1.7 GET VNF Performance Monitoring Jobs with invalid attribute-based filter

Test Purpose	
Test ID	7.3.4.1.7
Test title	GET VNF Performance Monitoring Jobs with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of VNF performance monitoring jobs fails when using invalid attribute-based filter, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with invalid attribute-based filter	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PMJobs.robot>.

7.3.4.1.8 GET VNF Performance Monitoring Jobs with invalid resource endpoint

Test Purpose	
Test ID	7.3.4.1.8
Test title	GET VNF Performance Monitoring Jobs with invalid resource endpoint
Test objective	The objective is to test that the retrieval of VNF performance monitoring jobs fails when using invalid resource endpoint
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Performance Monitoring Jobs with invalid resource endpoint	
Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PMJobs.robot>.

7.3.4.1.9 Create new VNF Performance Monitoring Job

Test Purpose	
Test ID	7.3.4.1.9
Test title	Create a new VNF Performance Monitoring Job
Test objective	The objective is to test the creation of a new VNF performance monitoring job and perform the JSON schema validation of the returned job data structure
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Job is successfully created on the VNFM
Test Case	
Send Post Request Create new VNF Performance Monitoring Job	
Check HTTP Response Status Code Is 201	
Check HTTP Response Body Json Schema Is PmJob	
Check Postcondition PmJob Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PMJobs.robot>.

7.3.4.1.10 PUT all VNF Performance Monitoring Jobs - Method not implemented

Test Purpose	
Test ID	7.3.4.1.10
Test title	PUT all VNF Performance Monitoring Jobs - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify VNF Performance Monitoring Jobs
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for all VNF Performance Monitoring Jobs	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PMJobs.robot>.

7.3.4.1.11 PATCH all VNF Performance Monitoring Jobs - (Method not implemented)

Test Purpose	
Test ID	7.3.4.1.11
Test title	PATCH all VNF Performance Monitoring Jobs - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update VNF Performance Monitoring Jobs
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for all VNF Performance Monitoring Jobs	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PMJobs.robot>.

7.3.4.1.12 DELETE all VNF Performance Monitoring Jobs - Method not implemented

Test Purpose	
Test ID	7.3.4.1.12
Test title	DELETE all VNF Performance Monitoring Jobs - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to update VNF Performance Monitoring Jobs
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNF
Reference	Clause 6.4.2.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VE
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for all VNF Performance Monitoring Jobs Check HTTP Response Status Code Is 405 Check Postcondition VNF Performance Monitoring Jobs Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PMJobs.robot>.

7.3.4.2 Individual Pm Job Resource Endpoint

7.3.4.2.1 GET individual VNF Performance Job

Test Purpose	
Test ID	7.3.4.2.1
Test title	Get individual VNF Performance Job
Test objective	The objective is to test the retrieval of an individual VNF performance monitoring job and perform a JSON schema and content validation of the collected job data structure
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.3.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET individual VNF Performance Job Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmJob Check HTTP Response Body Pm Job Identifier matches the requested Pm Job	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualPmJob.robot>.

7.3.4.2.2 GET individual VNF Performance Job with invalid resource identifier

Test Purpose	
Test ID	7.3.4.2.2
Test title	Get individual VNF Performance Job with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF performance monitoring job fails when using an invalid resource identifier, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.3.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET individual VNF Performance Job with invalid resource identifier Check HTTP Response Status Code Is 404 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualPmJob.robot>.

7.3.4.2.3 DELETE Individual VNF Performance Job

Test Purpose	
Test ID	7.3.4.2.3
Test title	Delete Individual VNF Performance Job
Test objective	The objective is to test the deletion of an individual VNF performance monitoring job
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.3.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Job is no more available in the VNFM
Test Case	
Send Delete request for individual VNF Performance Job	
Check HTTP Response Status Code Is 204	
Check Postcondition VNF Pm Job is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualPmJob.robot>.

7.3.4.2.4 DELETE Individual VNF Performance Job with invalid resource identifier

Test Purpose	
Test ID	7.3.4.2.4
Test title	Delete individual VNF Performance Job with invalid resource identifier
Test objective	The objective is to test that the deletion of an individual VNF performance monitoring job fails when using an invalid resource identifier
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.3.3.5 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Delete request for individual VNF Performance Job with invalid resource identifier	
Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualPmJob.robot>.

7.3.4.2.5 POST Individual VNF Performance Job - Method not implemented

Test Purpose	
Test ID	7.3.4.2.5
Test title	POST Individual VNF Performance Job - method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new VNF Performance Monitoring Job
Pre-conditions	A VNF instance is instantiated
Reference	Clause 6.4.3.3.1 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Job is not created on the VNFM
Test Case	
Send Post request for individual VNF Performance Job	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Job is not Created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualPmJob.robot>.

7.3.4.2.6 PUT Individual VNF Performance Job - Method not implemented

Test Purpose	
Test ID	7.3.4.2.6
Test title	PUT Individual VNF Performance Job - method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing VNF Performance Monitoring Job
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.3.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Job is not modified by the operation
Test Case	
Send Put request for individual VNF Performance Job	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Job is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualPmJob.robot>.

7.3.4.2.7 PATCH Individual VNF Performance Job - Method not implemented

Test Purpose	
Test ID	7.3.4.2.7
Test title	PATCH Individual VNF Performance Job - method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing new VNF Performance Monitoring Job
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.3.3.4 - ETSI GS NFV-SOL 002 [2] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Job is not modified by the operation
Test Case	
Send Patch request for individual VNF Performance Job	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Job is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualPmJob.robot>.

7.3.4.3 Individual Performance Report Resource Endpoint

7.3.4.3.1 Get Individual Performance Report

Test Purpose	
Test ID	7.3.4.3.1
Test title	Get Individual Performance Report
Test objective	The objective is to test the retrieval of an individual VNF performance report associated to a monitoring job and perform a JSON schema validation of the collected report data structure
Pre-conditions	A VNF instance is instantiated. One or more VNF performance reports are set for a monitoring job in the VNFM
Reference	Clause 6.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get Individual Performance Report	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is PerformanceReport	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualReport.robot>.

7.3.4.3.2 Get Individual Performance Report with invalid resource endpoint

Test Purpose	
Test ID	7.3.4.3.2
Test title	Get Individual Performance Report with invalid resource endpoint
Test objective	The objective is to test that the retrieval of an individual VNF performance report associated to a monitoring job fails when using an invalid resource endpoint
Pre-conditions	A VNF instance is instantiated. One or more VNF performance reports are set for a monitoring job in the VNFM
Reference	Clause 6.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get Individual Performance Report with invalid resource endpoint Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualReport.robot>.

7.3.4.3.3 POST Individual Performance Report - Method not implemented

Test Purpose	
Test ID	7.3.4.3.3
Test title	POST Individual Performance Report - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new VNF performance report within a monitoring job
Pre-conditions	A VNF instance is instantiated
Reference	Clause 6.4.4.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance report is not created on the VNFM
Test Case	
Send Post request for Individual Performance Report Check HTTP Response Status Code Is 405 Check Postcondition VNF Individual Performance Report is not Created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualReport.robot>.

7.3.4.3.4 PUT Individual Performance Report - Method not implemented

Test Purpose	
Test ID	7.3.4.3.4
Test title	PUT Individual Performance Report - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing VNF performance report within a monitoring job
Pre-conditions	A VNF instance is instantiated. One or more VNF performance reports are set for a monitoring job in the VNFM
Reference	Clause 6.4.4.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance report is not modified by the operation
Test Case	
Send Put request for Individual Performance Report Check HTTP Response Status Code Is 405 Check Postcondition VNF Individual Performance Report is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualReport.robot>.

7.3.4.3.5 PATCH Individual Performance Report - Method not implemented

Test Purpose	
Test ID	7.3.4.3.5
Test title	PATCH Individual Performance Report - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing VNF performance report within a monitoring job
Pre-conditions	A VNF instance is instantiated. One or more VNF performance reports are set for a monitoring job in the VNFM
Reference	Clause 6.4.4.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance report is not modified by the operation
Test Case	
Send Patch request for Individual Performance Report	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Individual Performance Report is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualReport.robot>.

7.3.4.3.6 DELETE Individual Performance Report - Method not implemented

Test Purpose	
Test ID	7.3.4.3.6
Test title	DELETE Individual Performance Report - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete an existing VNF performance report within a monitoring job
Pre-conditions	A VNF instance is instantiated. One or more VNF performance reports are set for a monitoring job in the VNFM
Reference	Clause 6.4.4.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance report is not deleted by the operation
Test Case	
Send Delete request for Individual Performance Report	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Individual Performance Report Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualReport.robot>.

7.3.4.4 Thresholds Resource Endpoint

7.3.4.4.1 GET All Performance Thresholds

Test Purpose	
Test ID	7.3.4.4.1
Test title	GET All Performance Thresholds
Test objective	The objective is to test the retrieval of all the available VNF performance thresholds and perform a JSON schema validation of the collected thresholds data structure
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET all Performance Thresholds Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Thresholds	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Thresholds.robot>.

7.3.4.4.2 GET Performance Thresholds with attribute-based filter

Test Purpose	
Test ID	7.3.4.4.2
Test title	GET Performance Thresholds with attribute-based filter
Test objective	The objective is to test the retrieval of all the available VNF performance thresholds when using attribute-based filters, perform a JSON schema validation of the collected thresholds data structure, and verify that the retrieved information matches the issued attribute-based filter
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Performance Thresholds with attribute-based filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Thresholds Check HTTP Response Body Thresholds match the requested attribute-based filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Thresholds.robot>.

7.3.4.4.3 GET Performance Thresholds with invalid attribute-based filter

Test Purpose	
Test ID	7.3.4.4.3
Test title	GET Performance Thresholds with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of VNF performance thresholds fails when using invalid attribute-based filter, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Performance Thresholds with invalid attribute-based filter Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Thresholds.robot>.

7.3.4.4.4 GET Performance Thresholds with invalid resource endpoint

Test Purpose	
Test ID	7.3.4.4.4
Test title	GET Performance Thresholds with invalid resource endpoint
Test objective	The objective is to test that the retrieval of VNF performance thresholds fails when using invalid resource endpoint, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET VNF Performance Thresholds with invalid resource endpoint Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Thresholds.robot>.

7.3.4.4.5 Create new Performance Threshold

Test Purpose	
Test ID	7.3.4.4.5
Test title	Create new Performance Threshold
Test objective	The objective is to test the creation of a new VNF performance threshold and perform the JSON schema validation of the returned threshold data structure
Pre-conditions	A VNF instance is instantiated
Reference	Clause 6.4.5.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Threshold is successfully created on the VNFM
Test Case	
Send Post Request Create new Performance Threshold Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is Threshold Check HTTP Response Header Contains Location Check Postcondition Threshold Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Thresholds.robot>.

7.3.4.4.6 PUT Performance Thresholds - Method not implemented

Test Purpose	
Test ID	7.3.4.4.6
Test title	PUT Performance Thresholds - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify VNF Performance Thresholds
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNF
Reference	Clause 6.4.5.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for all Performance Thresholds Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Thresholds.robot>.

7.3.4.4.7 PATCH Performance Thresholds - Method not implemented

Test Purpose	
Test ID	7.3.4.4.7
Test title	PATCH Performance Thresholds - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify VNF Performance Thresholds
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.5.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for all Performance Thresholds Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Thresholds.robot>.

7.3.4.4.8 DELETE Performance Thresholds - Method not implemented

Test Purpose	
Test ID	7.3.4.4.8
Test title	DELETE Performance Thresholds - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to update VNF Performance Thresholds
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.5.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance thresholds are not deleted by the failed operation
Test Case	
Send DELETE Request for all Performance Thresholds Check HTTP Response Status Code Is 405 Check Postcondition Thresholds Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Thresholds.robot>.

7.3.4.5 Individual Threshold Resource Endpoint

7.3.4.5.1 GET Individual Threshold

Test Purpose	
Test ID	7.3.4.5.1
Test title	GET Individual Threshold
Test objective	The objective is to test the retrieval of an individual VNF performance threshold and perform a JSON schema and content validation of the collected threshold data structure
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.6.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET individual VNF Performance Threshold Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Threshold Check HTTP Response Body Threshold Identifier matches the requested Threshold	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualThreshold.robot>.

7.3.4.5.2 GET Individual Threshold with invalid resource identifier

Test Purpose	
Test ID	7.3.4.5.2
Test title	GET Individual Threshold with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF performance threshold fails when using an invalid resource identifier
Pre-conditions	A VNF instance is instantiated. One or more VNF performance jobs are set in the VNFM
Reference	Clause 6.4.6.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET individual VNF Performance Threshold with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualThreshold.robot>.

7.3.4.5.3 DELETE Individual Threshold

Test Purpose	
Test ID	7.3.4.5.3
Test title	DELETE Individual Threshold
Test objective	The objective is to test the deletion of an individual VNF performance threshold
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.6.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Threshold is not available anymore in the VNFM
Test Case	
Send Delete request for individual VNF Performance Threshold Check HTTP Response Status Code Is 204 Check Postcondition VNF Performance Threshold is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualThreshold.robot>.

7.3.4.5.4 DELETE Individual Threshold with invalid resource identifier

Test Purpose	
Test ID	7.3.4.5.4
Test title	DELETE Individual Threshold with invalid resource identifier
Test objective	The objective is to test the deletion of an individual VNF performance threshold
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.6.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Delete request for individual VNF Performance Threshold with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualThreshold.robot>.

7.3.4.5.5 POST Individual Threshold - Method not implemented

Test Purpose	
Test ID	7.3.4.5.5
Test title	POST Individual Threshold - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new VNF Performance Threshold
Pre-conditions	A VNF instance is instantiated
Reference	Clause 6.4.6.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Threshold is not created on the VNFM
Test Case	
Send Post request for individual VNF Performance Threshold	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Threshold is not Created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualThreshold.robot>.

7.3.4.5.6 PUT Individual Threshold - Method not implemented

Test Purpose	
Test ID	7.3.4.5.6
Test title	PUT Individual Threshold - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing VNF Performance threshold
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.6.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Threshold is not modified by the operation
Test Case	
Send Put request for individual VNF Performance Threshold	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Threshold is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualThreshold.robot>.

7.3.4.5.7 PATCH Individual Threshold - Method not implemented

Test Purpose	
Test ID	7.3.4.5.7
Test title	PATCH Individual Threshold - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing VNF Performance threshold
Pre-conditions	A VNF instance is instantiated. One or more VNF performance thresholds are set in the VNFM
Reference	Clause 6.4.6.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Threshold is not modified by the operation
Test Case	
Send Patch request for individual VNF Performance Threshold	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Threshold is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualThreshold.robot>.

7.3.4.6 Subscriptions

7.3.4.6.1 GET all VNF Performance Subscriptions

Test Purpose	
Test ID	7.3.4.6.1
Test title	GET all VNF Performance Subscriptions
Test objective	The objective is to test the retrieval of all VNF performance subscriptions and perform a JSON schema validation of the returned subscriptions data structure
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get all VNF Performance Subscriptions Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Subscriptions.robot>.

7.3.4.6.2 GET VNF Performance Subscriptions with attribute-based filter

Test Purpose	
Test ID	7.3.4.6.2
Test title	GET VNF Performance Subscriptions with attribute-based filter
Test objective	The objective is to test the retrieval of VNF performance subscriptions using attribute-based filter, perform a JSON schema validation of the collected indicators data structure, and verify that the retrieved information matches the issued attribute-based filters
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Performance Subscriptions with attribute-based filters Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmSubscriptions Check HTTP Response Body Subscriptions Match the requested Attribute-Based Filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Subscriptions.robot>.

7.3.4.6.3 GET VNF Performance Management Subscriptions with invalid attribute-based filter

Test Purpose	
Test ID	7.3.4.6.3
Test title	GET VNF Performance Management Subscriptions with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of VNF performance subscriptions fails when using invalid attribute-based filters, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM.
Reference	Clause 6.4.7.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Performance Subscriptions with invalid attribute-based filters	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Subscriptions.robot>.

7.3.4.6.4 GET VNF Performance Subscriptions with invalid resource endpoint

Test Purpose	
Test ID	7.3.4.6.4
Test title	GET VNF Performance Subscriptions with invalid resource endpoint
Test objective	The objective is to test that the retrieval of all VNF performance subscriptions fails when using invalid resource endpoint
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Performance Subscriptions with invalid resource endpoint	
Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Subscriptions.robot>.

7.3.4.6.5 Create new VNF Performance subscription

Test Purpose	
Test ID	7.3.4.6.5
Test title	Create new VNF Performance subscription
Test objective	The objective is to test the creation of a new VNF performance subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	A VNF instance is instantiated
Reference	Clause 6.4.7.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for VNF Performance Subscription	
Check HTTP Response Status Code Is 201	
Check HTTP Response Body Json Schema Is PmSubscription	
Check HTTP Response Body PmSubscription Attributes Values Match the Issued Subscription	
Check Postcondition VNF Performance Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Subscriptions.robot>.

7.3.4.6.6 Create duplicated VNF Performance subscription with VNFM not creating duplicated subscriptions

Test Purpose	
Test ID	7.3.4.6.6
Test title	Create new VNF Performance subscription
Test objective	The objective is to test the attempt of a creation of a duplicated VNF performance subscription and check that no new subscription is created by the VNFM and a link to the original subscription is returned
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM does not support the creation of duplicated subscriptions
Post-Conditions	The existing VNF performance subscription returned is available in the VNFM
Test Case	
Send Post Request for Duplicated VNF Performance Subscription	
Check HTTP Response Status Code Is 303	
Check HTTP Response Body Is Empty	
Check HTTP Response Header Contains Location	
Check Postcondition Subscription Resource Returned in Location Header Is Available	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Subscriptions.robot>.

7.3.4.6.7 Create duplicated VNF Performance subscription with VNFM creating duplicated subscriptions

Test Purpose	
Test ID	7.3.4.6.7
Test title	Create new VNF Performance subscription
Test objective	The objective is to test the creation of a duplicated VNF performance subscription and perform a JSON schema and content validation of the returned duplicated subscription data structure
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM supports the creation of duplicated subscriptions
Post-Conditions	The duplicated VNF performance subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for Duplicated VNF Performance Subscription	
Check HTTP Response Status Code Is 201	
Check HTTP Response Body Json Schema Is PmSubscription	
Check HTTP Response Body PmSubscription Attributes Values Match the Issued Subscription	
Check Postcondition VNF Performance Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Subscriptions.robot>.

7.3.4.6.8 PUT VNF Performance Subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.4.6.8
Test title	PUT VNF Performance Subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify VNF performance subscriptions
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Put Request for VNF Performance Subscriptions	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Subscriptions.robot>.

7.3.4.6.9 PATCH VNF Performance Subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.4.6.9
Test title	PATCH VNF Performance Subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update VNF performance subscriptions
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Patch Request for VNF Performance Subscriptions	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Subscriptions.robot>.

7.3.4.6.10 DELETE VNF Performance Subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.4.6.10
Test title	DELETE VNF Performance Subscriptions - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete VNF performance subscriptions
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.7.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF performance thresholds are not deleted by the failed operation
Test Case	
Send Delete Request for VNF Performance Subscriptions	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Subscriptions Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/Subscriptions.robot>.

7.3.4.7 Individual Subscription Resource Endpoint

7.3.4.7.1 GET Individual VNF Performance Subscription

Test Purpose	
Test ID	7.3.4.7.1
Test title	GET Individual VNF Performance Subscription
Test objective	The objective is to test the retrieval of individual VNF performance subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.8.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get Individual VNF Performance Subscription Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is PmSubscription Check HTTP Response Body Subscription Identifier matches the requested Subscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualSubscription.robot>.

7.3.4.7.2 GET Individual VNF Performance Subscription with invalid resource identifier

Test Purpose	
Test ID	7.3.4.7.2
Test title	GET Individual VNF Performance Subscription with invalid resource identifier
Test objective	The objective is to test that the retrieval of an individual VNF performance subscription fails when using an invalid resource identifier
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.8.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET individual VNF Performance Subscription with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualSubscription.robot>.

7.3.4.7.3 DELETE Individual VNF Performance Subscription

Test Purpose	
Test ID	7.3.4.7.3
Test title	DELETE Individual VNF Performance Subscription
Test objective	The objective is to test the deletion of an individual VNF performance subscription
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.8.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Subscription is not available anymore in the VNFM
Test Case	
Send Delete request for individual VNF Performance Subscription Check HTTP Response Status Code Is 204 Check Postcondition VNF Performance Subscription is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualSubscription.robot>.

7.3.4.7.4 DELETE Individual VNF Performance Subscription with invalid resource identifier

Test Purpose	
Test ID	7.3.4.7.4
Test title	DELETE Individual VNF Performance Subscription with invalid resource identifier
Test objective	The objective is to test that the deletion of an individual VNF performance subscription fails when using an invalid resource identifier
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.8.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Delete request for individual VNF Performance Subscription with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualSubscription.robot>.

7.3.4.7.5 POST Individual VNF Performance Subscription - Method not implemented

Test Purpose	
Test ID	7.3.4.7.5
Test title	POST Individual VNF Performance Subscription - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new VNF Performance Subscription
Pre-conditions	A VNF instance is instantiated
Reference	Clause 6.4.8.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance Subscription is not created on the VNFM
Test Case	
Send Post request for individual VNF Performance Subscription Check HTTP Response Status Code Is 405 Check Postcondition VNF Performance Subscription is not Created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualSubscription.robot>.

7.3.4.7.6 PUT Individual VNF Performance Subscription - Method not implemented

Test Purpose	
Test ID	7.3.4.7.6
Test title	PUT Individual VNF Performance Subscription - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing VNF Performance subscription
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.8.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance subscription is not modified by the operation
Test Case	
Send Put request for individual VNF Performance Threshold Check HTTP Response Status Code Is 405 Check Postcondition VNF Performance Subscription is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualSubscription.robot>.

7.3.4.7.7 PATCH Individual VNF Performance Subscription - Method not implemented

Test Purpose	
Test ID	7.3.4.7.7
Test title	PATCH Individual VNF Performance Subscription - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing VNF Performance subscription
Pre-conditions	A VNF instance is instantiated. At least one VNF performance subscription is available in the VNFM
Reference	Clause 6.4.8.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF Performance subscription is not modified by the operation
Test Case	
Send Patch request for individual VNF Performance Threshold	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Performance Subscription is Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/IndividualSubscription.robot>.

7.3.4.8 Notification Endpoint

7.3.4.8.1 VNF Performance Information Availability Notification

Test Purpose	
Test ID	7.3.4.8.1
Test title	VNF Performance Information Availability Notification
Test objective	The objective is to test the dispatch of VNF Performance Information Availability Notification when new VNF performance information is available in the NFVO, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF performance job is created, and a subscription for information availability notifications is available in the VNFM
Reference	Clause 6.4.9.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the availability of VNF Performance Information (external action)	
Check Performance Information Available Notification Http POST Request Body Json Schema Is PerformanceInformationAvailableNotification	
Check Performance Information Available Notification Http POST Request Body notificationType attribute Is PerformanceInformationAvailableNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PerformanceManagementNotification.robot>.

7.3.4.8.2 VNF Threshold Crossed Notification

Test Purpose	
Test ID	7.3.4.8.2
Test title	VNF Threshold Crossed Notification
Test objective	The objective is to test the dispatch of VNF Threshold Crossed Notification when a previously set VNF performance metric threshold is crossed, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF performance job is created, and a threshold subscription is available in the VNFM
Reference	Clause 6.4.9.3.1 - ETSI GS NFV-SOL 005 [3] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the cross of VNF Performance Threshold (external action) Check Threshold Crossed Notification Http POST Request Body Json Schema Is ThresholdCrossedNotification Check Threshold Crossed Notification Http POST Request Body notificationType attribute Is ThresholdCrossedNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFPerformanceManagement-API/PerformanceManagementNotification.robot>.

7.3.5 VNF Fault Management interface

7.3.5.1 Alarms

7.3.5.1.1 POST Alarms - Method not implemented

Test Purpose	
Test ID	7.3.5.1.1
Test title	POST Alarms - Method not implemented
Test objective	The objective is to test that Post method is not allowed to create Fault management alarms on VNF
Pre-conditions	None
Reference	Clause 7.4.2.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send POST request for fault management Alarms Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Alarms.robot>.

7.3.5.1.2 Get information about multiple alarms

Test Purpose	
Test ID	7.3.5.1.2
Test title	Get information about multiple alarms
Test objective	The objective is to retrieve information about the alarm list and perform a JSON schema and content validation of the returned alarms data structure
Pre-conditions	None
Reference	Clause 7.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Fault Management Alarms Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Alarms	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Alarms.robot>.

7.3.5.1.3 Get information about multiple alarms with filters

Test Purpose	
Test ID	7.3.5.1.3
Test title	Get information about multiple alarms with filters
Test objective	The objective is to retrieve information about the alarm list and perform a JSON schema and content validation of the returned alarms data structure, and verify that the retrieved information matches the issued attribute-based filters
Pre-conditions	None
Reference	Clause 7.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Fault Management Alarms With Filters Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is Alarms	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Alarms.robot>.

7.3.5.1.4 Get information about multiple alarms Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	7.3.5.1.4
Test title	The objective is to try to retrieve information about the alarm list and perform a JSON schema and content validation of the returned problem details data structure, and verify that the retrieved information matches the issued attribute-based filters
Test objective	The objective is to retrieve information about the alarm list
Pre-conditions	None
Reference	Clause 7.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	
Post-Conditions	None
Test Case	
GET Fault Management Alarms With Invalid Filters Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Alarms.robot>.

7.3.5.1.5 PUT Alarms - Method not implemented

Test Purpose	
Test ID	7.3.5.1.5
Test title	PUT Alarms - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to for Fault management alarms on VNF
Pre-conditions	None
Reference	Clause 7.4.2.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PUT Fault management Alarms Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Alarms.robot>.

7.3.5.1.6 PATCH Alarms - Method not implemented

Test Purpose	
Test ID	7.3.5.1.6
Test title	PATCH Alarms - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to for Fault management alarms on VNF
Pre-conditions	None
Reference	Clause 7.4.2.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PATCH Fault management Alarms Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Alarms.robot>.

7.3.5.1.7 DELETE Alarms - Method not implemented

Test Purpose	
Test ID	7.3.5.1.7
Test title	POST Alarms - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed for Fault management alarms on VNF
Pre-conditions	None
Reference	Clause 7.4.2.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
DELETE Fault management Alarms Check HTTP Response Status Code Is 405 Check Postcondition VNF fault management alarms Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Alarms.robot>.

7.3.5.2 Individual Alarm

7.3.5.2.1 POST Alarm - Method not implemented

Test Purpose	
Test ID	7.3.5.2.1
Test title	POST Alarm - Method not implemented
Test objective	The objective is to test that Post method is not allowed to create Fault management individual alarm on VNF
Pre-conditions	None
Reference	Clause 7.4.3.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send POST request for fault management Individual Alarm Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/IndividualAlarm.robot>.

7.3.5.2.2 Get information about an fault management individual alarm

Test Purpose	
Test ID	7.3.5.2.2
Test title	Get information about an fault management individual alarm
Test objective	The objective is to retrieve information about an individual alarm and perform a JSON schema and content validation of the returned alarm data structure
Pre-conditions	The related alarm exists
Reference	Clause 7.4.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Fault Management Individual Alarm Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is alarm	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/IndividualAlarm.robot>.

7.3.5.2.3 PUT Alarm - Method not implemented

Test Purpose	
Test ID	7.3.5.2.3
Test title	PUT Alarm - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to for Fault management individual alarm on VNF
Pre-conditions	The related alarm exists
Reference	Clause 7.4.3.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PUT Fault Management Individual Alarm Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/IndividualAlarm.robot>.

7.3.5.2.4 PATCH Fault Management Individual Alarm

Test Purpose	
Test ID	7.3.5.2.4
Test title	PATCH Fault Management Individual Alarm
Test objective	The objective is to Modify an individual alarm resource and perform a JSON schema and content validation of the returned alarm data structure
Pre-conditions	The related alarm exists
Reference	Clause 7.4.3.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Check Postcondition VNF fault management individual alarm Exists PATCH Fault Management Individual Alarm Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is alarmModification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/IndividualAlarm.robot>.

7.3.5.2.5 Modify an individual alarm resource - Precondition failed

Test Purpose	
Test ID	7.3.5.2.5
Test title	Modify an individual alarm resource - Precondition failed
Test objective	The objective is to test that an individual alarm resource cannot be modified if the alarm is already in the state that is requested to be set
Pre-conditions	The related alarm exists
Reference	Clause 7.4.3.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Check Postcondition VNF fault management individual alarm Exists PATCH Fault Management Individual Alarm - precondition failed Check HTTP Response Status Code Is 409 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/IndividualAlarm.robot>.

7.3.5.2.6 Modify an individual alarm resource - Conflict

Test Purpose	
Test ID	7.3.5.2.6
Test title	Modify an individual alarm resource - Conflict
Test objective	The objective is to test that an individual alarm resource cannot be modified if the resource was modified by another entity
Pre-conditions	The related alarm exists
Reference	Clause 7.4.3.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Depends On Test PATCH Fault Management Individual Alarm Check Postcondition VNF fault management individual alarm Exists PATCH Fault Management Individual Alarm Conflict Check HTTP Response Status Code Is 412 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/IndividualAlarm.robot>.

7.3.5.2.7 DELETE Alarm - Method not implemented

Test Purpose	
Test ID	7.3.5.2.7
Test title	DELETE Alarm - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to for Fault management individual alarm on VNF
Pre-conditions	None
Reference	Clause 7.4.3.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The individual alarm still exists
Test Case	
DELETE Fault Management Individual Alarm Check HTTP Response Status Code Is 405 Check Postcondition VNF fault management individual alarm Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/IndividualAlarm.robot>.

7.3.5.3 Subscriptions

7.3.5.3.1 Create a new Fault Management alarm subscription

Test Purpose	
Test ID	7.3.5.3.1
Test title	Create a new Fault Management alarm subscription
Test objective	The objective is to create a new Fault management alarm subscriptions and perform a JSON schema and content validation of the returned fault management alarms subscription data structure
Pre-conditions	No subscription with the same filter and callbackUri exists
Reference	Clause 7.4.4.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	subscription is created
Test Case	
POST Subscription Check HTTP Response Status Code Is 201 Check Operation Occurrence Id Check HTTP Response Body Json Schema Is FmSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Subscriptions.robot>.

7.3.5.3.2 Create a new alarm subscription - DUPLICATION

Test Purpose	
Test ID	7.3.5.3.2
Test title	Create a new alarm subscription - DUPLICATION
Test objective	The objective is to create a new subscription with the VNF allowing duplication and perform a JSON schema and content validation of the returned fault management alarms subscription data structure
Pre-conditions	Subscription with the same filter and callbackUri exists
Reference	Clause 7.4.4.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The NFVO allows creating a subscription resource if another subscription resource with the same filter and callbackUri already exists
Post-Conditions	Duplicated subscription is created
Test Case	
POST Subscription Duplication permitted Check HTTP Response Status Code Is 201 Check Operation Occurrence Id Check HTTP Response Body Json Schema Is FmSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Subscriptions.robot>.

7.3.5.3.3 Create a new alarm subscription - NO DUPLICATION

Test Purpose	
Test ID	7.3.5.3.3
Test title	Create a new alarm subscription - NO DUPLICATION
Test objective	The objective is to create a new subscription with the VNF not allowing duplication and perform a JSON schema and content validation of the returned fault management alarms subscription data structure
Pre-conditions	Subscription with the same filter and callbackUri exists
Reference	Clause 7.4.4.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The NFVO decides to not create a duplicate subscription resource
Post-Conditions	Duplicated subscription is not created
Test Case	
POST Subscription Duplication not permitted Check HTTP Response Status Code Is 303 Check Operation Occurrence Id Check HTTP Response Body Json Schema Is FmSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Subscriptions.robot>.

7.3.5.3.4 Retrieve a list of alarm subscriptions

Test Purpose	
Test ID	7.3.5.3.4
Test title	Retrieve a list of alarm subscriptions
Test objective	The objective is to retrieve the list of active subscriptions and perform a JSON schema and content validation of the returned fault management alarms subscription data structure
Pre-conditions	None
Reference	Clause 7.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Subscriptions Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is FmSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Subscriptions.robot>.

7.3.5.3.5 Retrieve a list of alarm subscriptions with filter

Test Purpose	
Test ID	7.3.5.3.5
Test title	Retrieve a list of alarm subscriptions with filter
Test objective	The objective is to retrieve the list of active subscriptions with filter and perform a JSON schema and content validation of the returned fault management alarms subscription data structure
Pre-conditions	None
Reference	Clause 7.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Subscriptions with filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is FmSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Subscriptions.robot>.

7.3.5.3.6 GET subscriptions - Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	7.3.5.3.6
Test title	GET subscriptions - Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is to retrieve the list of active subscriptions with Invalid attribute-based filtering parameters and perform a JSON schema and content validation of the returned problem details data structure
Pre-conditions	None
Reference	Clause 7.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Subscriptions with Invalid filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Subscriptions.robot>.

7.3.5.3.7 PUT subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.5.3.7
Test title	PUT subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to for Fault management subscriptions on VNF
Pre-conditions	None
Reference	Clause 7.4.4.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Put Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Subscriptions.robot>.

7.3.5.3.8 PATCH subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.5.3.8
Test title	PATCH subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to for Fault management subscriptions on VNF
Pre-conditions	None
Reference	Clause 7.4.4.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PATCH Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Subscriptions.robot>.

7.3.5.3.9 DELETE subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.5.3.9
Test title	DELETE subscriptions - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to for Fault management subscriptions on VNF
Pre-conditions	None
Reference	Clause 7.4.4.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	Subscription is not deleted
Test Case	
DELETE Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/Subscriptions.robot>.

7.3.5.4 Individual Subscription

7.3.5.4.1 Post Individual Subscription - Method not implemented

Test Purpose	
Test ID	7.3.5.4.1
Test title	Post Individual Subscription - Method not implemented
Test objective	The objective is to test that POST method is not allowed for Fault management subscription on VNF
Pre-conditions	None
Reference	Clause 7.4.5.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	Subscription is not created
Test Case	
POST Individual Subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/IndividualSubscription.robot>.

7.3.5.4.2 Get Information about an individual subscription

Test Purpose	
Test ID	7.3.5.4.2
Test title	Get Information about an individual subscription
Test objective	The objective is to read an individual subscription for NFVO alarms subscribed by the client and perform a JSON schema and content validation of the returned fault management individual subscription data structure
Pre-conditions	The subscription with the given id exists
Reference	Clause 7.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Individual Subscription Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is FmSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/IndividualSubscription.robot>.

7.3.5.4.3 PUT an individual subscription - Method not implemented

Test Purpose	
Test ID	7.3.5.4.3
Test title	PUT an individual subscription - Method not implemented
Test objective	The objective is to test that PUT method is not allowed for Fault management individual subscription on VNF
Pre-conditions	None
Reference	Clause 7.4.5.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PUT Individual Subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/IndividualSubscription.robot>.

7.3.5.4.4 PATCH an individual subscription - Method not implemented

Test Purpose	
Test ID	7.3.5.4.4
Test title	PATCH an individual subscription - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed for Fault management individual subscription on VNF
Pre-conditions	None
Reference	Clause 7.4.5.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
PATCH Individual Subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/IndividualSubscription.robot>.

7.3.5.4.5 DELETE an individual subscription

Test Purpose	
Test ID	7.3.5.4.5
Test title	DELETE an individual subscription
Test objective	The objective is to test that DELETE method removes individual subscription on VNF
Pre-conditions	The Subscription already exists
Reference	Clause 7.4.5.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	Subscription is not deleted
Test Case	
DELETE Individual Subscription Check HTTP Response Status Code Is 204 Check Individual Subscription deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/IndividualSubscription.robot>.

7.3.5.5 Notification Endpoint

7.3.5.5.1 VNF Fault Alarm Notification

Test Purpose	
Test ID	7.3.5.5.1
Test title	VNF Fault Alarm Notification
Test objective	The objective is to test the dispatch of VNF Fault Alarm Notification when a virtualised resource within an VNF instance fails, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF instance is instantiated, and a subscription for fault alarm notifications is available in the VNFM
Reference	Clause 7.4.6.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the fault of a virtualised resource in the VNF instance (external action)	
Check Alarm Notification Http POST Request Body Json Schema Is alarmNotification	
Check Alarm Notification Http POST Request Body notificationType attribute Is alarmNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/NotificationEndpoint.robot>.

7.3.5.5.2 VNF Fault Alarm Cleared Notification

Test Purpose	
Test ID	7.3.5.5.2
Test title	VNF Fault Alarm Cleared Notification
Test objective	The objective is to test the dispatch of VNF Fault Alarm Cleared Notification when a faulty virtualised resource within an VNF instance is cleared, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF instance is instantiated, a virtualised resource is in faulty state, and a subscription for fault alarm cleared notifications is available in the VNFM
Reference	Clause 7.4.6.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the clear of a faulty virtualised resource in the VNF instance (external action)	
Check Alarm cleared Notification Http POST Request Body Json Schema Is alarmClearedNotification	
Check Alarm cleared Notification Http POST Request Body notificationType attribute Is alarmClearedNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/NotificationEndpoint.robot>.

7.3.5.5.3 VNF Fault Alarm List Rebuilt Notification

Test Purpose	
Test ID	7.3.5.5.3
Test title	VNF Fault Alarm List Rebuilt Notification
Test objective	The objective is to test the dispatch of VNF Fault Alarm List Rebuilt Notification when the VNFM decides to rebuild the list of its VNF alarms, e.g. due to a corruption in the alarm storage, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF instance is instantiated, one or more virtualised resource are in faulty state, and a subscription for fault alarm list rebuilt notifications is available in the VNFM
Reference	Clause 7.4.6.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the VNF fault alarm list rebuild in the NFVO (external action) Check Alarm list rebuilt Notification Http POST Request Body Json Schema Is alarmListRebuiltNotification Check Alarm list rebuilt Notification Http POST Request Body notificationType attribute Is alarmListRebuiltNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFFaultManagement-API/NotificationEndpoint.robot>.

7.3.6 VNF Indicator Interface

7.3.6.1 VNF Indicators Resource Endpoint

7.3.6.1.1 Get all VNF Indicators

Test Purpose	
Test ID	7.3.6.1.1
Test title	Get all VNF Indicators
Test objective	The objective is to test the retrieval of all the available VNF indicators and perform a JSON schema validation of the collected indicators data structure
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM
Reference	Clause 8.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get all VNF indicators Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfIndicators	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VNFIndicators.robot>.

7.3.6.1.2 Get VNF Indicators with attribute-based filter

Test Purpose	
Test ID	7.3.6.1.2
Test title	Get VNF Indicators with attribute-based filter
Test objective	The objective is to test the retrieval of VNF indicators using attribute-based filter, perform a JSON schema validation of the collected indicators data structure, and verify that the retrieved information matches the issued attribute-based filters
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM
Reference	Clause 8.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF indicators with filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfIndicators Check HTTP Response Body vnfIndicators Matches the requested attribute-based filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VNFIndicators.robot>.

7.3.6.1.3 Get VNF Indicators with invalid attribute-based filter

Test Purpose	
Test ID	7.3.6.1.3
Test title	Get VNF Indicators with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of VNF indicators fails when using invalid attribute-based filters, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM
Reference	Clause 8.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF indicators with invalid filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VNFIndicators.robot>.

7.3.6.1.4 Get all VNF Indicators with malformed authorization token

Test Purpose	
Test ID	7.3.6.1.4
Test title	Get all VNF Indicators with malformed authorization token
Test objective	The objective is to test that the retrieval of VNF indicators fails when using malformed authorization token
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM
Reference	Clauses 4.5.3.3, 8.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM requires the usage of access tokens for authorizing the API requests
Post-Conditions	None
Test Case	
Get all VNF indicators with malformed authorization token Check HTTP Response Status Code Is 400	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VNFIndicators.robot>.

7.3.6.1.5 Get all VNF Indicators without authorization token

Test Purpose	
Test ID	7.3.6.1.5
Test title	Get all VNF Indicators without authorization token
Test objective	The objective is to test that the retrieval of VNF indicators fails when omitting the authorization token
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM
Reference	Clauses 4.5.3.3, 8.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNF requires the usage of access tokens for authorizing the API requests
Post-Conditions	None
Test Case	
Get all VNF indicators without authorization token Check HTTP Response Status Code Is 401	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VNFIndicators.robot>.

7.3.6.1.6 GET all VNF Indicators with expired or revoked authorization token

Test Purpose	
Test ID	7.3.6.1.6
Test title	GET all VNF Indicators with expired or revoked authorization token
Test objective	The objective is to test that the retrieval of VNF indicators fails when using expired or revoked authorization token
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM
Reference	Clauses 4.5.3.3, 8.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNF requires the usage of access tokens for authorizing the API requests
Post-Conditions	None
Test Case	
Get all VNF indicators with expired or revoked authorization token Check HTTP Response Status Code Is 401	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VNFIndicators.robot>.

7.3.6.1.7 Get all VNF Indicators with invalid resource endpoint

Test Purpose	
Test ID	7.3.6.1.7
Test title	Get all VNF Indicators with invalid resource endpoint
Test objective	The objective is to test that the retrieval of VNF indicators fails when using invalid resource endpoint
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM
Reference	Clause 8.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get all VNF indicators with invalid resource endpoint Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VNFIndicators.robot>.

7.3.6.1.8 POST all VNF Indicators - Method not implemented

Test Purpose	
Test ID	7.3.6.1.8
Test title	POST all VNF Indicators - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create new VNF indicators
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM
Reference	Clause 8.4.2.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for all VNF indicators Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VNFIndicators.robot>.

7.3.6.1.9 PUT all VNF Indicators - Method not implemented

Test Purpose	
Test ID	7.3.6.1.9
Test title	PUT all VNF Indicators - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify VNF indicators
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM
Reference	Clause 8.4.2.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for all VNF indicators Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VNFIndicators.robot>.

7.3.6.1.10 PATCH all VNF Indicators - Method not implemented

Test Purpose	
Test ID	7.3.6.1.10
Test title	PATCH all VNF Indicators - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update VNF indicators
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNF
Reference	Clause 8.4.2.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for all VNF indicators Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VNFIndicators.robot>.

7.3.6.1.11 DELETE all VNF Indicators - Method not implemented

Test Purpose	
Test ID	7.3.6.1.11
Test title	DELETE all VNF Indicators - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete VNF indicators
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNF
Reference	Clause 8.4.2.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF indicators are not deleted by the unsuccessful operation
Test Case	
Send DELETE Request for all VNF indicators	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF Indicators Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VNFIndicators.robot>.

7.3.6.2 VNF Indicators Related to a VNF Instance Resource Endpoint

7.3.6.2.1 Get Indicators for VNF Instance

Test Purpose	
Test ID	7.3.6.2.1
Test title	Get Indicators for VNF Instance
Test objective	The objective is to test the retrieval of all indicators for a given VNF instance and perform a JSON schema validation of the returned indicators data structure
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM for the given VNF instance
Reference	Clause 8.4.3.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get all indicators for a VNF instance	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is vnfIndicators	
Check HTTP Response Body Includes Requested VNF Instances ID	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

7.3.6.2.2 GET Indicators for VNF Instance with attribute-based filter

Test Purpose	
Test ID	7.3.6.2.2
Test title	GET Indicators for VNF Instance with attribute-based filter
Test objective	The objective is to test the retrieval of all indicators for a given VNF instance using attribute-based filter and perform a JSON schema validation of the returned indicators data structure
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM for the given VNF instance
Reference	Clause 8.4.3.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get all indicators for a VNF instance with filter	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is vnfIndicators	
Check HTTP Response Body vnfIndicators Matches the requested attribute-based filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

7.3.6.2.3 Get Indicators for VNF Instance with invalid attribute-based filter

Test Purpose	
Test ID	7.3.6.2.3
Test title	Get Indicators for VNF Instance with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of all indicators for a given VNF instance fails using invalid attribute-based filter. The test also checks the JSON schema of the unsuccessful operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM for the given VNF instance
Reference	Clause 8.4.3.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get all indicators for a VNF instance with invalid filter	
Check HTTP Response Status Code Is 400	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

7.3.6.2.4 Get Indicators for VNF Instance with invalid resource identifier

Test Purpose	
Test ID	7.3.6.2.4
Test title	Get Indicators for VNF Instance with invalid resource identifier
Test objective	The objective is to test that the retrieval of all indicators for a given VNF instance fails when using invalid resource identifier. The test also checks the JSON schema of the unsuccessful operation HTTP response
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM for the given VNF instance
Reference	Clause 8.4.3.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get all indicators for a VNF instance with invalid resource identifier	
Check HTTP Response Status Code Is 404	
Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

7.3.6.2.5 POST Indicators for VNF instance - Method not implemented

Test Purpose	
Test ID	7.3.6.2.5
Test title	POST Indicators for VNF instance - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create new indicators for a VNF instance
Pre-conditions	A VNF instance is instantiated
Reference	Clause 8.4.3.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for indicators in VNF instance	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

7.3.6.2.6 PUT Indicators for VNF instance - Method not implemented

Test Purpose	
Test ID	7.3.6.2.6
Test title	PUT Indicators for VNF instance - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify existing indicators for a VNF instance
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM for the given VNF instance
Reference	Clause 8.4.3.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for indicators in VNF instance	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

7.3.6.2.7 PATCH Indicators for VNF instance - Method not implemented

Test Purpose	
Test ID	7.3.6.2.7
Test title	PATCH Indicators for VNF instance - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update existing indicators for a VNF instance
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM for the given VNF instance
Reference	Clause 8.4.3.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for indicators in VNF instance	
Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

7.3.6.2.8 DELETE Indicators for VNF instance - Method not implemented

Test Purpose	
Test ID	7.3.6.2.8
Test title	DELETE Indicators for VNF instance - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete indicators for a VNF instance
Pre-conditions	A VNF instance is instantiated. One or more measures of VNF indicators are available in the VNFM for the given VNF instance
Reference	Clause 8.4.3.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The indicators for the VNF instance are not deleted by the unsuccessful operation
Test Case	
Send DELETE Request for indicators in VNF instance	
Check HTTP Response Status Code Is 405	
Check Postcondition Indicators for VNF instance Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/VnfIndicatorsInVnfInstanceId.robot>.

7.3.6.3 Individual VNF Indicator Resource Endpoint

7.3.6.3.1 Get Individual Indicator for VNF Instance

Test Purpose	
Test ID	7.3.6.3.1
Test title	Get Individual Indicator for VNF Instance
Test objective	The objective is to test the retrieval of an indicator for a given VNF instance and perform a JSON schema validation of the returned indicator data structure
Pre-conditions	A VNF instance is instantiated. At least one measure of VNF indicator is available in the VNFM
Reference	Clause 8.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get Individual Indicator for a VNF instance Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is vnfIndicator Check HTTP Response Body Includes Requested VNF Instance ID Check HTTP Response Body Includes Requested Indicator ID	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/IndividualVNFIndicator.robot>.

7.3.6.3.2 Get Individual Indicator for VNF Instance with invalid indicator identifier

Test Purpose	
Test ID	7.3.6.3.2
Test title	Get Individual Indicator for VNF Instance with invalid indicator identifier
Test objective	The objective is to test that the retrieval of an indicator for a given VNF instance fails when using an invalid resource identifier. The test also checks the JSON schema of the unsuccessful operation HTTP response
Pre-conditions	A VNF instance is instantiated. At least one measure of VNF indicator is available in the VNFM.
Reference	Clause 8.4.4.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get Individual Indicator for a VNF instance with invalid indicator identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/IndividualVNFIndicator.robot>.

7.3.6.3.3 POST Individual VNF Indicator for VNF Instance - Method not implemented

Test Purpose	
Test ID	7.3.6.3.3
Test title	POST Individual VNF Indicator for VNF Instance - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new VNF indicator in the VNFM
Pre-conditions	A VNF instance is instantiated
Reference	Clause 8.4.4.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send POST Request for individual indicator in VNF instance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/IndividualVNFIndicator.robot>.

7.3.6.3.4 PUT Individual VNF Indicator for VNF Instance - Method not implemented

Test Purpose	
Test ID	7.3.6.3.4
Test title	PUT Individual VNF Indicator for VNF Instance - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify an existing indicator for a VNF instance
Pre-conditions	A VNF instance is instantiated. At least one measure of VNF indicator is available in the VNFM
Reference	Clause 8.4.4.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send PUT Request for individual indicator in VNF instance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/IndividualVNFIndicator.robot>.

7.3.6.3.5 PATCH Individual VNF Indicator for VNF Instance - Method not implemented

Test Purpose	
Test ID	7.3.6.3.5
Test title	PATCH Individual VNF Indicator for VNF Instance - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update an existing indicator for a VNF instance
Pre-conditions	A VNF instance is instantiated. At least one measure of VNF indicator is available for the given VNF instance.
Reference	Clause 8.4.4.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send PATCH Request for individual indicator in VNF instance Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/IndividualVNFIndicator.robot>.

7.3.6.3.6 DELETE Individual VNF Indicator for VNF Instance - Method not implemented

Test Purpose	
Test ID	7.3.6.3.6
Test title	DELETE Individual VNF Indicator for VNF Instance - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete an existing indicator for a VNF instance
Pre-conditions	A VNF instance is instantiated. At least one measure of VNF indicator is available in the VNFM
Reference	Clause 8.4.3.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The individual indicator for the VNF instance is not deleted by the unsuccessful operation
Test Case	
Send DELETE Request for individual indicator in VNF instance Check HTTP Response Status Code Is 405 Check Postcondition Indicator for VNF instance Exist	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VNFIndicator-API/IndividualVNFIndicator.robot>.

7.3.6.4 Subscriptions Resource Endpoint

7.3.6.4.1 GET All VNF Indicator Subscriptions

Test Purpose	
Test ID	7.3.6.4.1
Test title	GET All VNF Indicator Subscriptions
Test objective	The objective is to test the retrieval of all VNF indicator subscriptions and perform a JSON schema validation of the returned subscriptions data structure
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get All VNF Indicators Subscriptions Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is VnfIndicatorSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

7.3.6.4.2 GET VNF Indicator Subscriptions with attribute-based filter

Test Purpose	
Test ID	7.3.6.4.2
Test title	GET VNF Indicator Subscriptions with attribute-based filter
Test objective	The objective is to test the retrieval of VNF indicator subscriptions using attribute-based filter, perform a JSON schema validation of the collected indicators data structure, and verify that the retrieved information matches the issued attribute-based filters
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Indicators Subscriptions with filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is VnfIndicatorSubscriptions Check HTTP Response Body Subscriptions Match the requested Attribute-Based Filter	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

7.3.6.4.3 GET VNF Indicator Subscriptions with invalid attribute-based filter

Test Purpose	
Test ID	7.3.6.4.3
Test title	GET VNF Indicator Subscriptions with invalid attribute-based filter
Test objective	The objective is to test that the retrieval of VNF indicator subscriptions fails when using invalid attribute-based filters, and perform the JSON schema validation of the failed operation HTTP response
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Indicators Subscriptions with invalid filter Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

7.3.6.4.4 GET VNF Indicator Subscriptions with invalid resource endpoint

Test Purpose	
Test ID	7.3.6.4.4
Test title	GET VNF Indicator Subscriptions with invalid resource endpoint
Test objective	The objective is to test that the retrieval of all VNF indicator subscriptions fails when using invalid resource endpoint
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.5.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get VNF Indicators Subscriptions with invalid resource endpoint Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

7.3.6.4.5 Create new VNF indicator subscription

Test Purpose	
Test ID	7.3.6.4.5
Test title	Create new VNF indicator subscription
Test objective	The objective is to test the creation of a new VNF indicator subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	A VNF instance is instantiated
Reference	Clause 8.4.5.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF indicator subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for VNF Indicator Subscription Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is VnfIndicatorSubscription Check HTTP Response Body Matches the Subscription Check Postcondition VNF Indicator Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

7.3.6.4.6 Create duplicated VNF indicator subscription with VNFM not creating duplicated subscriptions

Test Purpose	
Test ID	7.3.6.4.6
Test title	Create duplicated VNF indicator subscription with VNFM not creating duplicated subscriptions
Test objective	The objective is to test the attempt of a creation of a duplicated VNF indicator subscription and check that no new subscription is created by the VNFM and a link to the original subscription is returned
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.5.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM does not support the creation of duplicated subscriptions
Post-Conditions	The existing VNF indicator subscription returned is available in the VNFM
Test Case	
Send Post Request for Duplicated VNF indicator Subscription Check HTTP Response Status Code Is 303 Check HTTP Response Body Is Empty Check HTTP Response Header Contains Location Check Postcondition Subscription Resource Returned in Location Header Is Available	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

7.3.6.4.7 Create duplicated VNF indicator subscription with VNFM creating duplicated subscriptions

Test Purpose	
Test ID	7.3.6.4.7
Test title	Create duplicated VNF indicator subscription with VNFM creating duplicated subscriptions
Test objective	The objective is to test the creation of a duplicated VNF indicator subscription and perform a JSON schema and content validation of the returned duplicated subscription data structure
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.5.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM supports the creation of duplicated subscriptions
Post-Conditions	The duplicated VNF indicator subscription is successfully set and it matches the issued subscription
Test Case	
Send Post Request for Duplicated VNF indicator Subscription Check HTTP Response Status Code Is 201 Check HTTP Response Body Json Schema Is PmSubscription Check HTTP Response Body Matches the Subscription Check Postcondition VNF indicator Subscription Is Set	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

7.3.6.4.8 PUT VNF Indicator Subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.6.4.8
Test title	PUT VNF Indicator Subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify VNF indicator subscriptions
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.5.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Put Request for VNF Indicator Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

7.3.6.4.9 PATCH VNF Indicator Subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.6.4.9
Test title	PATCH VNF Indicator Subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update VNF indicator subscriptions
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.5.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Patch Request for VNF Indicator Subscriptions Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

7.3.6.4.10 DELETE VNF Indicator Subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.6.4.10
Test title	DELETE VNF Indicator Subscriptions - Method not implemented
Test objective	The objective is to test that DELETE method is not allowed to delete VNF indicators subscriptions
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.5.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The VNF indicator subscriptions are not deleted by the failed operation
Test Case	
Send Delete Request for VNF Indicator Subscriptions Check HTTP Response Status Code Is 405 Check Postcondition VNF Indicator Subscriptions Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/Subscriptions.robot>.

7.3.6.5 Individual Subscription Resource Endpoint

7.3.6.5.1 GET Individual VNF Indicator Subscription

Test Purpose	
Test ID	7.3.6.5.1
Test title	GET Individual VNF Indicator Subscription
Test objective	The objective is to test the retrieval of individual VNF indicator subscription and perform a JSON schema validation of the returned subscription data structure
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.6.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get Individual VNF Indicator Subscription Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is VnfIndicatorSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

7.3.6.5.2 GET Individual VNF Indicator Subscription with invalid resource identifier

Test Purpose	
Test ID	7.3.6.5.2
Test title	GET Individual VNF Indicator Subscription with invalid resource identifier
Test objective	The objective is to test that the retrieval of individual VNF indicator subscription fails when using an invalid resource identifier
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.6.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Individual VNF Indicator Subscription with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

7.3.6.5.3 DELETE Individual VNF Indicator Subscription

Test Purpose	
Test ID	7.3.6.5.3
Test title	DELETE Individual VNF Indicator Subscription
Test objective	The objective is to test the deletion of an individual VNF indicator subscription
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.6.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The subscription to VNF indicators is deleted
Test Case	
Send Delete Request for Individual VNF Indicator Subscription Check HTTP Response Status Code Is 204 Check Postcondition Individual VNF Indicator Subscription is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

7.3.6.5.4 DELETE Individual VNF Indicator Subscription with invalid resource identifier

Test Purpose	
Test ID	7.3.6.5.4
Test title	DELETE Individual VNF Indicator Subscription with invalid resource identifier
Test objective	The objective is to test that the deletion of an individual VNF indicator subscription fails when using an invalid resource identifier
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.6.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Delete Request for Individual VNF Indicator Subscription with invalid resource identifier Check HTTP Response Status Code Is 404	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

7.3.6.5.5 PUT Individual VNF Indicator Subscription - Method not implemented

Test Purpose	
Test ID	7.3.6.5.5
Test title	PUT Individual VNF Indicator Subscription - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to modify an individual VNF indicator subscription
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.6.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The individual VNF indicator subscription is not modified by the operation
Test Case	
Send Put Request for Individual VNF Indicator Subscription	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF indicator subscription Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

7.3.6.5.6 PATCH Individual VNF Indicator Subscription - Method not implemented

Test Purpose	
Test ID	7.3.6.5.6
Test title	PATCH Individual VNF Indicator Subscription - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to update an individual VNF indicator subscription
Pre-conditions	A VNF instance is instantiated. At least one VNF indicator subscription is available in the VNFM
Reference	Clause 8.4.6.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The individual VNF indicator subscription is not modified by the operation
Test Case	
Send Patch Request for Individual VNF Indicator Subscription	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF indicator subscription Unmodified (Implicit)	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

7.3.6.5.7 POST Individual VNF Indicator Subscription - Method not implemented

Test Purpose	
Test ID	7.3.6.5.7
Test title	POST Individual VNF Indicator Subscription - Method not implemented
Test objective	The objective is to test that POST method is not allowed to create a new VNF indicator subscription
Pre-conditions	A VNF instance is instantiated
Reference	Clause 8.4.6.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	The individual VNF indicator subscription is not created by the operation
Test Case	
Send Post Request for Individual VNF Indicator Subscription	
Check HTTP Response Status Code Is 405	
Check Postcondition VNF indicator subscription is not created	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL002/VNFIndicator-API/IndividualSubscription.robot>.

7.3.6.6 Notification Endpoint

7.3.6.6.1 VNF Indicator Value Change Notification

Test Purpose	
Test ID	7.3.6.6.1
Test title	VNF Indicator Value Change Notification
Test objective	The objective is to test the dispatch of VNF Indicator Value Change Notification when new indicator values are available in the VNFM, and perform a JSON schema and content validation of the delivered notification. The action that triggers the notification under test is an explicit test step, but it is not performed by the test system
Pre-conditions	A VNF is instantiated, and a subscription for indicator value change notifications is available in the VNFM
Reference	Clause 8.4.7.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Trigger the availability of new indicator value in the VNFM (external action) Check Indicator Value Change Notification Http POST Request Body Json Schema Is VnfIndicatorValueChangeNotification Check Indicator Value Change Notification Http POST Request Body notificationType attribute Is VnfIndicatorValueChangeNotification	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VnfIndicator-API/VnfIndicatorNotification.robot>.

7.3.7 Virtualised Resources Quota Available Notification interface

7.3.7.1 Subscriptions

7.3.7.1.1 Create new Virtualised Resources Quota Available Notification subscription

Test Purpose	
Test ID	7.3.7.1.1
Test title	Create new Virtualised Resources Quota Available Notification subscription
Test objective	The objective is to create a new Virtualised Resources Quota Available Notification subscription and perform a JSON schema and content validation of the returned subscription data structure
Pre-conditions	No subscription with the same filter and callbackUri exists
Reference	Clause 11.4.2.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Post request for new Virtualised Resources Quota Available Notification subscription Check HTTP Response Status Code Is 201 Check HTTP Response Header Contains Location Check HTTP Response Body Json Schema Is VrQuotaAvailSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/Subscriptions.robot>.

7.3.7.1.2 Create new Virtualised Resources Quota Available Notification subscription - DUPLICATION

Test Purpose	
Test ID	7.3.7.1.2
Test title	Create new Virtualised Resources Quota Available Notification subscription - DUPLICATION
Test objective	The objective is to create a new Virtualised Resources Quota Available Notification subscription and perform a JSON schema and content validation of the returned duplicated subscription data structure
Pre-conditions	Subscription with the same filter and callbackUri exists
Reference	Clause 11.4.2.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM allows creating a subscription resource if another subscription resource with the same filter and callbackUri already exists
Post-Conditions	None
Test Case	
Send Post request for new Virtualised Resources Quota Available Notification subscription - DUPLICATION	
Check HTTP Response Status Code Is 201	
Check HTTP Response Header Contains Location	
Check HTTP Response Body Json Schema Is VrQuotaAvailSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/Subscriptions.robot>.

7.3.7.1.3 Create new Virtualised Resources Quota Available Notification subscription - NO-DUPLICATION

Test Purpose	
Test ID	7.3.7.1.3
Test title	Create new Virtualised Resources Quota Available Notification subscription - NO-DUPLICATION
Test objective	The objective is to create a duplicated Virtualised Resources Quota Available Notification subscription and verify that the VNF does not allow duplication
Pre-conditions	Subscription with the same filter and callbackUri exists
Reference	Clause 11.4.2.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	The VNFM decides to not create a duplicate subscription resource
Post-Conditions	None
Test Case	
Send Post request for new Virtualised Resources Quota Available Notification subscription - NO-DUPLICATION	
Check HTTP Response Status Code Is 303	
Check HTTP Response Header Contains Location	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/Subscriptions.robot>.

7.3.7.1.4 GET Virtualised Resources Quota Available Notification Subscriptions

Test Purpose	
Test ID	7.3.7.1.4
Test title	GET Virtualised Resources Quota Available Notification Subscriptions
Test objective	The objective is to retrieve the list of active Virtualised Resources Quota Available Notification subscriptions and perform a JSON schema and content validation of the returned subscriptions data structure
Pre-conditions	None
Reference	Clause 11.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Virtualised Resources Quota Available Notification Subscriptions	
Check HTTP Response Status Code Is 200	
Check HTTP Response Body Json Schema Is subscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/Subscriptions.robot>.

7.3.7.1.5 GET Virtualised Resources Quota Available Notification Subscriptions with attribute-based Filter

Test Purpose	
Test ID	7.3.7.1.5
Test title	GET Virtualised Resources Quota Available Notification Subscriptions with attribute-based Filter
Test objective	The objective is to retrieve the list of active Virtualised Resources Quota Available Notification subscriptions and perform a JSON schema and content validation of the returned subscriptions data structure, and verify that the retrieved information matches the issued attribute-based filters
Pre-conditions	None
Reference	Clause 11.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
GET Virtualised Resources Quota Available Notification Subscriptions with Filter Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is VrQuotaAvailSubscriptions	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/Subscriptions.robot>.

7.3.7.1.6 GET Virtualised Resources Quota Available Notification subscriptions - Bad Request Invalid attribute-based filtering parameters

Test Purpose	
Test ID	7.3.7.1.6
Test title	GET Virtualised Resources Quota Available Notification subscriptions - Bad Request Invalid attribute-based filtering parameters
Test objective	The objective is to retrieve the list of active Virtualised Resources Quota Available Notification subscriptions with invalid attribute-based filtering parameters, and verify that problem details are returned
Pre-conditions	None
Reference	Clause 11.4.2.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get Virtualised Resources Quota Available Notification subscriptions with Bad Request Invalid attribute-based filtering parameters Check HTTP Response Status Code Is 400 Check HTTP Response Body Json Schema Is ProblemDetails	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/Subscriptions.robot>.

7.3.7.1.7 PUT Virtualised Resources Quota Available Notification subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.7.1.7
Test title	PUT Virtualised Resources Quota Available Notification subscriptions - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update existing Virtualised Resources Quota Available Notification subscriptions instance on VNF
Pre-conditions	A VNF instance is instantiated
Reference	Clause 11.4.2.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Put request for Virtualised Resources Quota Available Notification subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/Subscriptions.robot>.

7.3.7.1.8 PATCH Virtualised Resources Quota Available Notification subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.7.1.8
Test title	PATCH Virtualised Resources Quota Available Notification subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify Virtualised Resources Quota Available Notification subscriptions instance on VNF
Pre-conditions	A VNF instance is instantiated
Reference	Clause 11.4.2.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Patch request for Virtualised Resources Quota Available Notification subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/Subscriptions.robot>

7.3.7.1.9 DELETE Virtualised Resources Quota Available Notification subscriptions - Method not implemented

Test Purpose	
Test ID	7.3.7.1.9
Test title	DELETE Virtualised Resources Quota Available Notification subscriptions - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to delete Virtualised Resources Quota Available Notification subscriptions instance on VNF
Pre-conditions	A VNF instance is instantiated
Reference	Clause 11.4.2.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Delete request for Virtualised Resources Quota Available Notification subscription Check HTTP Response Status Code Is 405 Check Postcondition VNF Virtualised Resources Quota Available Notification Subscriptions Exists	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/Subscriptions.robot>.

7.3.7.2 Individual Subscription

7.3.7.2.1 Create new Virtualised Resources Quota Available Notification individual subscription

Test Purpose	
Test ID	7.3.7.2.1
Test title	Create new Virtualised Resources Quota Available Notification individual subscription
Test objective	The objective is to test that POST method is not allowed to create a new Virtualised Resources Quota Available Notification individual subscription instance on VNF
Pre-conditions	A VNF instance is instantiated
Reference	Clause 11.4.3.3.1 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Send Post request for Virtualised Resources Quota Available Notification Individual Subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/IndividualSubscription.robot>.

7.3.7.2.2 Get Information about an individual subscription

Test Purpose	
Test ID	7.3.7.2.2
Test title	Get Information about an individual subscription
Test objective	The objective is to read an individual Virtualised Resources Quota Available Notification subscription subscribed by the client and perform a JSON schema and content validation of the returned individual subscription data structure
Pre-conditions	The subscription with the given id exists
Reference	Clause 11.4.3.3.2 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Get Virtualised Resources Quota Available Notification individual subscription Check HTTP Response Status Code Is 200 Check HTTP Response Body Json Schema Is VrQuotaAvailSubscription	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/IndividualSubscription.robot>.

7.3.7.2.3 PUT an individual subscription - Method not implemented

Test Purpose	
Test ID	7.3.7.2.3
Test title	PUT an individual subscription - Method not implemented
Test objective	The objective is to test that PUT method is not allowed to update an existing Virtualised Resources Quota Available Notification individual subscription instance on VNF
Pre-conditions	A VNF instance is instantiated
Reference	Clause 11.4.3.3.3 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Put Virtualised Resources Quota Available Notification individual Subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/IndividualSubscription.robot>.

7.3.7.2.4 PATCH an individual subscription - Method not implemented

Test Purpose	
Test ID	7.3.7.2.4
Test title	PATCH an individual subscription - Method not implemented
Test objective	The objective is to test that PATCH method is not allowed to modify an existing Virtualised Resources Quota Available Notification individual subscription instance on VNF
Pre-conditions	A VNF instance is instantiated
Reference	Clause 11.4.3.3.4 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Patch Virtualised Resources Quota Available Notification individual subscription Check HTTP Response Status Code Is 405	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/IndividualSubscription.robot>.

7.3.7.2.5 DELETE an individual subscription

Test Purpose	
Test ID	7.3.7.2.5
Test title	DELETE an individual subscription
Test objective	The objective is to test that Delete method is allowed to remove an existing Virtualised Resources Quota Available Notification individual subscription instance on VNF
Pre-conditions	The subscription with the given id exists
Reference	Clause 11.4.3.3.5 - ETSI GS NFV-SOL 003 [1] v2.4.1
Config ID	Config_prod_VNFM
Applicability	None
Post-Conditions	None
Test Case	
Delete Virtualised Resources Quota Available Notification individual subscription Check HTTP Response Status Code Is 204 Check Postcondition VNF Virtualised Resources Quota Available Notification individual Subscriptions is Deleted	

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/2.4.1/SOL003/VirtualisedResourcesQuotaAvailableNotification-API/IndividualSubscription.robot>.

Annex A (informative): Known Issues

Table A.1 lists Test Descriptions that have known issues that could impact the understanding or the execution of the test.

Table A.1: Known issues

Clause IDs	Issue Description
5.3.1.1.2, 5.3.1.4.2, 5.3.1.7.2, 5.3.4.1.2, 5.3.4.4.2, 5.3.4.6.2, 5.3.5.1.2, 5.3.5.7.2, 6.3.2.1.2, 6.3.2.2.1, 6.3.2.2.2, 6.3.2.4.2, 6.3.3.1.2, 6.3.3.4.2, 6.3.3.6.2, 7.3.3.1.2, 7.3.3.6.2, 7.3.4.1.2, 7.3.3.4.2, 7.3.4.6.2, 7.3.6.1.2, 7.3.6.2.2, 7.3.6.4.2	Test to check if response body matches the requested attribute-based filter is not supported in the Robot code.
5.3.1.3.11 and 5.3.1.3.12	Post-condition checks are missing since these tests are for asynchronous mode APIs.
5.3.1.6.4 and 5.3.1.6.5	There is a mismatch between the Clause number and the Test ID.
5.3.2.1.5, 5.3.2.1.6, 5.3.2.1.7 and 5.3.2.1.8	"Check HTTP Response Body Json Schema Is FmSubscriptions" is not correct.
5.3.2.12.5 to 5.3.2.12.7	There is a mismatch between the Clause numbers and the Test IDs. There are duplicate Test IDs.
5.3.2.15.11, 5.3.2.15.12 and 5.3.2.15.13	These Clause numbers have mismatches with their test IDs. Also, the test IDs contained in these Clauses are duplicates.
5.3.2.18	All TD IDs under this Clause have mismatches with the Clause numbers.
5.3.2.1.5, 5.3.2.1.6, 5.3.2.1.7 and 5.3.2.1.8	"Check HTTP Response Body Json Schema Is FmSubscriptions" is not correct.
5.3.3.3.2 and 5.3.3.3.3	Target status code to check is not correct.
6.3.2.2.1	"Check HTTP Response Body Includes Requested VNF Instance ID" is not supported in the Robot code.
6.3.2.2.8	"Check Postcondition Indicators for VNF instance Exist" is not supported in the Robot code.
6.3.2.3.1	"Check HTTP Response Body Includes Requested Indicator ID" is not supported in the Robot code.
5.3.2.18	Post condition should be indicated: "Resource should be deleted" and should have test step to test this post condition.
6.3.4.2.5	The objective should read: "The objective is to attempt to Modify an individual alarm resource, where the precondition was not met."
6.3.4.4.1	Should have post condition: "Resource created successfully". Should have extra test step to check newly created resource.
6.3.5.2.2	"Set Etag" should not be a test step.
6.3.5.2.5	Pre-condition should be Test ID 6.3.5.2.2.
6.3.5.11.11	A post condition should be included: "Verify that resources are not deleted".
6.3.5.17.2	Applicability should indicate "SUT should support duplication of subscription creation".
6.3.5.17.3	Applicability should indicate "SUT should not support duplication of subscription creation".
6.3.5.17.13	Post-condition should indicate "check that resources are not deleted).
7.3.1.1.8 to 7.3.1.1.11	There is a mismatch between the Clause numbers and the Test IDs. They normally should match. As a result, there are duplicate Test IDs.

Clause IDs	Issue Description
7.3.1.1.11, 7.3.1.2.8, 7.3.1.4.7, 7.3.1.5.7	Post-condition should be that the resources are not deleted. There should also be a last test step for each to verify that the resources are not deleted.
7.3.1.2.2	"Set Etag" should not be a test step.
7.3.1.2.5	Precondition should be Test ID 7.3.1.2.2.
7.3.1.4.1 and 7.3.1.5.1	Missing pre-condition: there should be a VNF instantiated before scaling.
7.3.1.7.1	Missing pre-condition: resource state should be INSTANTIATED.
7.3.2.1.3	Pre-condition should be "None".
7.3.2.1.7	The post condition should read "resources are not deleted" and a test step should be added to check for it.
7.3.5.3.1	A test step should be present to check that a new subscription was created.
7.3.5.3.2	A test step should be present to check that subscription was not duplicated.
7.3.5.3.3	A test step should be present to check that a new subscription was created.
7.3.6.2.1	"Check HTTP Response Body Includes Requested VNF Instances ID" is not supported in the Robot code.
7.3.6.2.8	"Check Postcondition Indicators for VNF instance Exist" is not supported in the Robot code.

Annex B (informative): Workflow Test Descriptions

Table B.1 contains the exhaustive list of Test Descriptions that are workflows, as defined in clause 4.5.3.4.

Table B.1: List of workflow Test Descriptions

Test ID	Test Title
5.3.2.17	NS Instance Creation
5.3.2.18	NS Instance Deletion
5.3.2.18.3	Heal Flow of NS lifecycle management operations
5.3.2.18.4	Instantiate Flow of NS lifecycle management operations
5.3.2.18.5	Scale Flow of NS lifecycle management operations
5.3.2.18.6	Terminate Flow of NS lifecycle management operations
5.3.2.18.7	Update Flow of NS lifecycle management operations
7.3.1.19.1	Cancel a VNF LCM Operation - STARTING
7.3.1.19.2	Cancel a VNF LCM Operation - PROCESSING - ROLLING_BACK
7.3.1.20	Change external connectivity of VNF Workflow
7.3.1.21	Change VNF Flavour Workflow
7.3.1.22	Create VNF Instance Resource
7.3.1.23	Delete VNF Instance Resource
7.3.1.24	Fail a VNF LCM Operation Workflow
7.3.1.25	Heal a VNF Instance
7.3.1.26	VNF Instantiation
7.3.1.27	Modify info of a VNF Instance
7.3.1.28	Operate a VNF Instance
7.3.1.29.1	Retry VNF LCM Operation - Successful
7.3.1.29.2	Retry VNF LCM Operation - Unsuccessful
7.3.1.30.1	Rollback a VNF LCM Operation - Successful
7.3.1.30.2	Rollback VNF LCM Operation - Unsuccessful
7.3.1.31	VNF Instance Scale To Level
7.3.1.32	VNF Instance Scale Out
7.3.1.33	Terminate a VNF Instance

Annex C (informative): Change History

Version	Date	Information about changes
0.0.1		Skeleton
0.0.2	Apr 8 2018	NFVTST(18)000021r2: TST010 - Scope and inputs for the methodology
0.0.3	July 11, 2018	NFVTST(18)000059r1: Test configuration introduction
0.0.4	Nov 9, 2018	NFVTST(18)000106r1 - TST010 -Test Language Selection NFVTST(18)000124r3 - TST010 Clarify Asynchronous API of Or-Vnfm reference point NFVTST(18)000134 - TST010 Clarify linked resources of Or-Vnfm reference point
0.0.5	Nov 21 2018	NFVTST(18)000084r1 - TST010 Add verification
0.0.6	Nov 27 2018	NFVTST(18)000129r4 – TST010 Test Descriptions NFVTST(18)000142r1 – TST010 Scope of the tests
0.0.7	Dec 17 2018	NFVTST(18)000167r4 - TST010 4.5.1 Addition of the ConfigID and Applicability in the entries of the Test Descriptions NFVTST(18)000168r4 - TST010 7.1.1 Or-Vnfm Addition of the 3 general characteristics of the reference point NFVTST(18)000169r3 - TST010 7.1.2 Or-Vnfm Basic behaviours of the API and Verification
0.0.8	Feb 1, 2019	NFVTST(19)000007r1 - TST010 6. Ve-Vnfm Ref point General Characteristics NFVTST(19)000008r1 - TST010 7.1.2 Or-Vnfm Figure update on the Basic behaviours of the API and Verification NFVTST(19)000012r3 - TST010 5.Os-Ma-Nfvo Ref point General Characteristics
0.0.9	Feb 12, 2019	NFVTST(19)000025r2 - TST010 5. Os-Ma-Nfvo Reference Point Basic behaviours and Verification NFVTST(19)000017r2 - TST010 6. Ve-Vnfm Reference Point Basic behaviours and Verification NFVTST(19)000022r1 - TST010 7.1.2 Descriptions of the verification steps for event triggered notifications, periodically notifications and query/fetch package
0.0.10	Feb 26, 2019	NFVTST(19)000059r2 - TST 010 - Updates to the generic Test Description (sect 4.5.1) NFVTST(19)000062 - TST010 V0.0.9 (2019-02) Proposed editorial changes NFVTST(19)000043r1 - TST010 Editorial enhancement and clean up NFVTST(19)000036r3 - TST010 - 6 VNF Configuration Interface Test Descriptions NFVTST(19)000044r1 - TST010 Aggregation of the general characteristics and basic behaviours from clauses 5, 6, 7 to clause 4 NFVTST(19)000045 - TST010 Aggregation of the verification aspects from clauses 5, 6, 7 to clause 4

0.0.11	<p>NFVTST(19)000037r4 - TST010 - 6.3.2 and 6.3.2.1 SOL002 VNF Indicators Interface - Indicators resource Test Descriptions</p> <p>NFVTST(19)000069r2 - TST010 - 6.3.2.3 Individual VNF Indicator Test Descriptions</p> <p>NFVTST(19)000070r2 - TST010 - 6.3.2.2 VNF Indicators in VNF Instance Test Descriptions</p> <p>NFVTST(19)000075r1 - TST010 - 6.3.2.4 SOL002 VNF Indicator Subscriptions Test Descriptions</p> <p>NFVTST(19)000076r1 - TST010 - 6.3.2.5 VNF Indicator Individual Subscription Test Descriptions</p> <p>NFVTST(19)000077r1 - TST010 - 6.3.3 and 6.3.3.1 SOL002 VNF Performance Jobs Test Descriptions</p> <p>NFVTST(19)000080r1 - TST010 - 6.3.3.2 SOL002 Individual VNF Performance Job Test Descriptions</p> <p>NFVTST(19)000082r1 - TST010 4.5.2 TD enhancements including Applicability</p> <p>NFVTST(19)000083r2 - TST010 - 6.3.3.3 SOL002 Individual Performance Report Test Descriptions</p> <p>NFVTST(19)000084r2 - TST010 - 6.3.3.4 SOL002 VNF Performance Thresholds Test Descriptions</p> <p>NFVTST(19)000085r1 - TST010 - 6.3.3.5 SOL002 Individual Threshold Test Descriptions</p> <p>NFVTST(19)000088 - TST010 - 7.3.4 and 7.3.4.1 SOL003 VNF Performance Jobs Test Descriptions</p> <p>NFVTST(19)000089 - TST010 - 7.3.4.2 SOL003 Individual VNF Performance Job Test Descriptions</p> <p>NFVTST(19)000090 - TST010 - 7.3.4.3 SOL003 Individual Performance Report Test Descriptions</p> <p>NFVTST(19)000091 - TST010 - 7.3.4.4 SOL003 VNF Performance Thresholds Test Descriptions</p> <p>NFVTST(19)000092 - TST010 - 7.3.4.5 SOL003 Individual Threshold Test Descriptions</p> <p>NFVTST(19)000094r2 - TST010 - 6.3.3.6 SOL002 VNF Performance Subscriptions Test Descriptions</p> <p>NFVTST(19)000095 - TST010 - 6.3.3.7 SOL002 VNF Performance Individual Subscription Test Descriptions</p> <p>NFVTST(19)000096r2 - TST010 - 7.3.4.6 SOL003 VNF Performance Subscriptions Test Descriptions</p> <p>NFVTST(19)000097 - TST010 - 7.3.4.7 SOL003 VNF Performance Individual Subscription Test Descriptions</p> <p>NFVTST(19)000099 - TST010 - 7.3.6 and 7.3.6.1 SOL003 VNF Indicators Test Descriptions</p> <p>NFVTST(19)000100 - TST010 - 7.3.6.2 SOL003 VNF Indicators in VNF Instance Test Descriptions</p> <p>NFVTST(19)000101 - TST010 - 7.3.6.3 SOL003 Individual VNF Indicator Test Descriptions</p> <p>NFVTST(19)000102 - TST010 - 7.3.6.4 SOL003 VNF Indicator Subscriptions Test Descriptions</p> <p>NFVTST(19)000103 - TST010 - 7.3.6.5 SOL003 Individual VNF Indicator Subscription Test Descriptions</p> <p>NFVTST(19)000116 - TST010 Editorial enhancement on claus4</p> <p>NFVTST(19)000117r1 - TST010 4.3.1 option C consideration and editorial enhancements</p> <p>NFVTST(19)000118r1 - TST010 4.5.3.2 Comment resolutions on General characteristics</p> <p>NFVTST(19)000119r1 - TST010 4.5.3.3 Comment resolutions on Basic behaviours of the API</p> <p>NFVTST(19)000120r2 - TST010 4.5.4 Comment resolutions on Verification</p> <p>NFVTST(19)000128r1 - TST010 - 7.3.3.1 SOL003 VNF Packages Test Descriptions</p> <p>NFVTST(19)000129r1 - TST010 - 7.3.3.2 SOL003 Individual VNF Package Test Descriptions</p> <p>NFVTST(19)000130 - TST010 - 7.3.3.3 SOL003 VNF Package Content Test Descriptions</p> <p>NFVTST(19)000136r1 - TST 010 - Add configuration Config_prod_VNFM_GRANT</p> <p>NFVTST(19)000140r1 - TST010 - 7.3.3.4 SOL003 VNFD in VNF Packages Test Descriptions</p> <p>NFVTST(19)000141 - TST010 - 7.3.3.5 SOL003 VNF Package Artifact Test Descriptions</p>
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Version	Date	Information about changes
		<p>NFVTST(19)000142 - TST010 - 7.3.3.6 SOL003 VNF Package Subscriptions Test Descriptions</p> <p>NFVTST(19)000143 - TST010 - 7.3.3.7 SOL003 VNF Package Individual Subscription Test Descriptions</p> <p>NFVTST(19)000145r1 - TST010 - 5.3.1.1 ETSI GS NFV-SOL 005 Network Service Descriptors Test Descriptions</p> <p>NFVTST(19)000146 - TST010 - 5.3.1.2 SOL 005 Individual NS Descriptor Test Descriptions</p> <p>NFVTST(19)000147r1 - TST010 - 5.3.1.3 SOL 005 NSD Content Test Descriptions</p> <p>NFVTST(19)000148r1 - TST010 - 5.3.1.4 SOL 005 PNF Descriptors Test Descriptions</p> <p>NFVTST(19)000149r1 - TST010 - 5.3.1.5 SOL 005 Individual PNF Descriptor Test Descriptions</p> <p>NFVTST(19)000150 - TST010 - 5.3.1.6 SOL 005 PNFD ContentTest Descriptions</p> <p>NFVTST(19)000151r1 - TST010 - 5.3.1.7 SOL 005 NSD Management Subscriptions Test Descriptions</p> <p>NFVTST(19)000153 - TST010 - 7.3.5.1 SOL003 Fault Management Alarms Test Descriptions</p> <p>NFVTST(19)000154 - TST010 - 7.3.5.2 SOL003 Fault Management Individual Alarm Test Descriptions</p> <p>NFVTST(19)000155 - TST010 - 5.3.1.8 SOL 005 NSD Management Individual Subscription Test Descriptions</p> <p>NFVTST(19)000156r1 - TST010 - 5.3.4.1 SOL 005 PM Jobs Test Descriptions</p> <p>NFVTST(19)000157r1 - TST010 - 5.3.4.2 SOL 005 Individual Pm Job Test Descriptions</p> <p>NFVTST(19)000158 - TST010 - 5.3.4.3 SOL 005 Individual Performance Report Test Descriptions</p> <p>NFVTST(19)000159 - TST010 - 5.3.4.4 SOL 005 Thresholds Test Descriptions</p> <p>NFVTST(19)000160 - TST010 - 5.3.4.5 SOL 005 Individual Threshold Test Descriptions</p> <p>NFVTST(19)000161 - TST010 - 5.3.4.6 SOL 005 Subscriptions Test Descriptions</p> <p>NFVTST(19)000162 - TST010 - 5.3.4.7 SOL 005 Individual Subscription Test Descriptions</p> <p>NFVTST(19)000172 - TST010 - 5.3.5.1 SOL 005 VNF Packages Test Descriptions</p> <p>NFVTST(19)000173r1 - TST010 - 5.3.5.2 SOL 005 Individual VNF Package Test Descriptions</p> <p>NFVTST(19)000174 - TST010 - 5.3.5.3 VNFD in Individual VNF Package Test Descriptions</p> <p>NFVTST(19)000175r1 - TST010 - 5.4.5.4 SOL 005 VNF Content Package Test Descriptions</p> <p>NFVTST(19)000176r2 - TST010 - 5.3.5.5 SOL 005 Upload VNF Package from URI Test Descriptions</p> <p>NFVTST(19)000177 - TST010 - 5.3.5.6 SOL 005 Individual VNF Package Artifact Test Descriptions</p> <p>NFVTST(19)000178 - TST010 - 5.3.5.7 SOL 005 Subscriptions Resource Endpoint</p> <p>NFVTST(19)000179r2 - TST010 - 5.3.5.8 SOL 005 Individual Subscription Test Descriptions</p> <p>NFVTST(19)000180 - TST010 Deletion of Executive Summary</p> <p>NFVTST(19)000199r1 - TST010 - 5.3.1.9 SOL 005 Notifications Test Descriptions</p> <p>NFVTST(19)000200r1 - TST010 - 5.3.4.8 SOL 005 Notifications Test Descriptions</p> <p>NFVTST(19)000201r1 - TST010 - 5.3.5.9 SOL 005 Notifications Test Descriptions</p> <p>NFVTST(19)000202 - TST010 - 5.3.2.13 SOL 005 Fail operation task Test Descriptions</p> <p>NFVTST(19)000203r1 - TST010 - 5.3.3.5 SOL 005 Notifications Test Descriptions</p> <p>NFVTST(19)000204r1 - TST010 - 6.3.3.8 SOL002 Notification Test Descriptions</p> <p>NFVTST(19)000205r1 - TST010 - 6.3.4.6 SOL002 Notifications Test Descriptions</p> <p>NFVTST(19)000206r1 - TST010 - 7.3.4.8 SOL003 Notification Test Descriptions</p> <p>NFVTST(19)000207r1 - TST010 - 7.3.3.8 SOL003 Notification Test Descriptions</p> <p>NFVTST(19)000208r1 - TST010 - 7.3.5.5 SOL003 Notification Test Descriptions</p> <p>NFVTST(19)000209r1 - TST010 - 6.3.2.6 SOL002 Notification Test Descriptions</p> <p>NFVTST(19)000210r1 - TST010 - 7.3.6.6 SOL003 Notification Test Descriptions</p> <p>NFVTST(19)000211r1 - TST010 - 6.3.5.19 SOL002 Notification Endpoint Test Descriptions</p> <p>NFVTST(19)000212r1 - TST010 - 7.3.1.19 SOL003 Notification Endpoint Test Descriptions</p> <p>NFVTST(19)000213r1 - TST010 - 5.3.2.17 SOL 005 Notification Endpoint Test Descriptions</p>

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0.0.12	Nov 9 2019	NFVTST(19)000109r3 - TST010 - 7.3.7.1 R3 on SOL003 VRQAN Subscriptions Test Descriptions NFVTST(19)000110r1 - TST010 - 7.3.7.2 SOL003 VRQAN Individual Subscription Test Descriptions NFVTST(19)000163r1 - TST010 - 7.3.5.3 SOL003 Fault Management Subscriptions Test Descriptions NFVTST(19)000164r1 - TST010 - 7.3.5.4 SOL003 Fault Management individual Subscription Test Descriptions NFVTST(19)000165r1 - TST010 - 5.3.3.1 SOL 005 Fault Management Alarms Test Descriptions NFVTST(19)000166r1 - TST010 - 5.3.3.2 SOL 005 Fault Management individual Alarm Test Descriptions NFVTST(19)000167r1 - TST010 - 5.3.3.3 SOL 005 Fault Management subscriptions Test Descriptions NFVTST(19)000168r1 - TST010 - 5.3.3.4 SOL 005 Fault Management individual subscription Test Descriptions NFVTST(19)000169r1 - TST010 - 7.3.2.1 SOL 003 LCOG Grants Test Descriptions NFVTST(19)000170r1 - TST010 - 7.3.2.2 SOL 003 LCOG individual Grant Test Descriptions NFVTST(19)000181r1 - TST010 Introduction and 1_Scope NFVTST(19)000215r2 - TST010 - 5.3.2.1/2/3/4/5 SOL 005 NS LCM NFVTST(19)000216r1 - TST010 - 5.3.2.6/7/8/9/10 SOL 005 NS LCM NFVTST(19)000217r2 - TST010 - 5.3.2.11/12/13/14/15 SOL 005 NS LCM NFVTST(19)000218r1 - TST010 - 5.3.2.16 SOL 005 Individual Subscription NFVTST(19)000221r2 - TST010 - 7.3.1.6/7/8/9/10 SOL003 VNF LCM NFVTST(19)000222r3 - TST010 - 7.3.1.11/12/13/14/15 SOL003 VNF LCM NFVTST(19)000223r2 - TST010 - 7.3.1.16/17/18 SOL003 VNF LCM NFVTST(19)000225r2 - TST010 - 6.3.5.1/2/3/4/5 SOL002 VNF LCM NFVTST(19)000226r3 - TST010 - 6.3.5.6/7/8/9/10 SOL002 VNF LCM NFVTST(19)000227r3 - TST010 - 6.3.5.11/12/13/14/15 SOL002 VNF LCM NFVTST(19)000228r2 - TST010 - 6.3.5.16/17/18 SOL003 VNF LCM NFVTST(19)000229 - TST010 - 5.3.2.17/18/19/20/21/22/23 SOL 005 Workflows NFVTST(19)000230r2 - TST010 - 6.3.4.1/2/3/4/5 SOL002 VNF Fault Management NFVTST(19)000238 - TST010 - 5.3.1.8 SOL 005 NSD Management Individual Subscription Test Descriptions NFVTST(19)000245 - TST010 5.1_5.2_6.1_6.2_7.1_7.2 Reference point General and Test configuration NFVTST(19)000246r2 - TST010 workflow test handling NFVTST(19)000262r1 - TST010 Annex A Known Issues
0.0.13	Nov 20, 2019	NFVTST(19)000219r3 - TST010 - 7.3.1.1/2/3/4/5 SOL003 VNF LCM NFVTST(19)000266r1 - TST010 - Annex B Workflow Tests NFVTST(19)000267r2 - TST010 Annex A Known Issues Additions NFVTST(19)000231 - TST010 - 7.3.1.19/20/21/22/23/24/25/26/27/28/29/30/31/32/33 SOL003 Workflows NFVTST(19)000297r1 - TST010 – 4.5.3.3.4 TBD resolution NFVTST(19)000305 - TST010 – 4.5.2 Test Purpose expressions NFVTST(19)000306 - TST010 – 4.5.3.4 LCM workflow correction NFVTST(19)000307 - TST010 – Annex A additional known issues NFVTST(19)000308 - TST010 – Editorial corrections NFVTST(19)000309 - TST010 – 4.5.3.3.2, 4.5.4.3 FFS on multiple notification test Editorials per review as documented in NFVTST(20)000008 – Report TST#133

History

Document history		
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