# Annex D: Word format presentation of the test suite for the Os-Ma-Nfvo Reference Point

## D.1 Overview

The present annex contains a tabular representation of the high-level test descriptions developed as part of ETSI GS NFV TST 010.

In order to maintain compatibility with previous versions of the deliverable, the numbering of clauses and subclauses is kept as defined in ETSI GS NFV-TST 010. Clauses D.2 to D.4 are therefore to be considered Void.

## D.5 Tabular test descriptions

### 5.3.1 NSD Management interface

#### 5.3.1.1 NSDescriptors

##### 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 onboarded 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 onboarded 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 onboarded 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 onboarded in the NFVO |
| **Reference** | clause 4.5.3.3, 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 onboarded in the NFVO |
| **Reference** | clause 4.5.3.3, 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 onboarded in the NFVO |
| **Reference** | clause 4.5.3.3, 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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\_fileds" selector |
| **Pre-conditions** | One or more Network Service Descriptors are onboarded in the NFVO |
| **Reference** | clause 4.3.3.2.1, 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 onboarded in the NFVO |
| **Reference** | clause 4.3.3.2.1, 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 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 Network Service Descriptors are onboarded in the NFVO |
| **Reference** | clause 4.3.3.2.1, 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 Network Service 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 Network Service Descriptors are onboarded in the NFVO |
| **Reference** | clause 4.3.3.2.1, 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 onboarded 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 onboarded 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 onboarded 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/NSDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

#### 5.3.1.2 IndividualNSDescriptor

##### 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 onboarded 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/IndividualNSDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 onboarded 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/IndividualNSDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 onboarded 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 GET Individual Network Service Descriptor Information  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/IndividualNSDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 onboarded 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/IndividualNSDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 failsand perform a JSON schema validation of the failed operation HTTP response |
| **Pre-conditions** | One or more Network Service Descriptors are onboarded 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/IndividualNSDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 onboarded 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/IndividualNSDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 uncorrect Http Etag identified. |
| **Pre-conditions** | One or more Network Service Descriptors are onboarded 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/IndividualNSDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 5.3.1.2.9 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 onboarded 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/IndividualNSDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 5.3.1.2.10 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 onboarded 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/IndividualNSDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 5.3.1.2.11 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/IndividualNSDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 5.3.1.2.12 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/IndividualNSDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

#### 5.3.1.3 NSDContent

##### 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 5.4.4.3.4 - 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 5.4.4.3.4 - 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 5.4.4.3.4 - 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 5.4.4.3.4 - 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 5.4.4.3.4 - 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 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 5.3.1.3.16 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 5.3.1.3.17 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/NSDContent.robot/cbe3b53/SOL005/NSDManagement-API>

#### 5.3.1.4 PNFDescriptors

##### 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/PNFDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/PNFDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/PNFDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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\_fileds" selector |
| **Pre-conditions** | One or more PNF Descriptors are onboarded in the NFVO. |
| **Reference** | clause 4.3.3.2.1, 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/PNFDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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** | clause 4.3.3.2.1, 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/PNFDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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** | clause 4.3.3.2.1, 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/PNFDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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** | clause 4.3.3.2.1, 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/PNFDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/PNFDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/PNFDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/PNFDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/PNFDescriptors.robot/cbe3b53/SOL005/NSDManagement-API>

#### 5.3.1.5 IndividualPnfDescriptor

##### 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 PnfdInfo Check HTTP Response Header Contains ETag  Check HTTP Response Body PnfdInfo Identifier matches the requested PNF Descriptor Information | |

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/IndividualPnfDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/IndividualPnfDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 PnfdInfoModification 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/IndividualPnfDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 uncorrect 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/IndividualPnfDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/IndividualPnfDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 new 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/IndividualPnfDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/IndividualPnfDescriptor.robot/cbe3b53/SOL005/NSDManagement-API>

#### 5.3.1.6 PNFDContent

##### 5.3.1.6.1 Get PNFD Content

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.1.6.1 |
| **Test title** | Get PNFD Content |
| **Test objective** | The objective is to test the retrieval of the PNFD Content in plain format and perform a validation that returned content is in plain format |
| **Pre-conditions** | One or more PNFDs 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 PNFD 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/PNFDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 5.3.1.6.2 Get PNFD Content with invalid resource identifier

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.1.6.2 |
| **Test title** | Get PNFD Content with invalid resource identifier |
| **Test objective** | The objective is to test that the retrieval of the PNFD 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 PNFD 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/PNFDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 5.3.1.6.3 Get PNFD Content with conflict due to onboarding state

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.1.6.3 |
| **Test title** | Get PNFD Content with conflict due to onboarding state |
| **Test objective** | The objective is to test that the retrieval of the PNFD Content fails due to a conflict when the PNFD 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 PNFD for which the PNFD 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 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/PNFDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/PNFDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/PNFDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/PNFDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/PNFDContent.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/PNFDContent.robot/cbe3b53/SOL005/NSDManagement-API>

#### 5.3.1.7 Subscriptions

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 NsdmSubscriptions 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/Subscriptions.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 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/Subscriptions.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSDManagement-API>

#### 5.3.1.8 IndividualSubscription

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSDManagement-API>

#### 5.3.1.9 NSDManagementNotification

##### 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/NSDManagementNotification.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDManagementNotification.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDManagementNotification.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDManagementNotification.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDManagementNotification.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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 PndfOnboardingFailureNotification | |

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/NSDManagementNotification.robot/cbe3b53/SOL005/NSDManagement-API>

##### 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/NSDManagementNotification.robot/cbe3b53/SOL005/NSDManagement-API>

### 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/NSInstances.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NSInstances.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NSInstances.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NSInstances.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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** |  |
| **Reference** | clause 6.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1 |
| **Config ID** | Config\_prod\_NFVO |
| **Applicability** |  |
| **Post-Conditions** |  |
| **Test Case** | |
| Get NSInstances with all\_fields attribute selector  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/NSInstances.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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** |  |
| **Reference** | clause 6.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1 |
| **Config ID** | Config\_prod\_NFVO |
| **Applicability** |  |
| **Post-Conditions** |  |
| **Test Case** | |
| Get NSInstances with exclude\_default attribute selector  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/NSInstances.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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** |  |
| **Reference** | clause 6.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1 |
| **Config ID** | Config\_prod\_NFVO |
| **Applicability** |  |
| **Post-Conditions** |  |
| **Test Case** | |
| Get NSInstances with fields attribute selector  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/NSInstances.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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** |  |
| **Reference** | clause 6.4.2.3.2 - ETSI GS NFV-SOL 005 [3] v2.4.1 |
| **Config ID** | Config\_prod\_NFVO |
| **Applicability** |  |
| **Post-Conditions** |  |
| **Test Case** | |
| Get NSInstances with exclude\_fields attribute selector  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/NSInstances.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NSInstances.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NSInstances.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NSInstances.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.2 IndividualNSInstance

##### 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/IndividualNSInstance.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/IndividualNSInstance.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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** | TThe 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/IndividualNSInstance.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/IndividualNSInstance.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/IndividualNSInstance.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/IndividualNSInstance.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.3 InstantiateNSTask

##### 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/InstantiateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/InstantiateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/InstantiateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/InstantiateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/InstantiateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/InstantiateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.4 ScaleNSTask

##### 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/ScaleNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/ScaleNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/ScaleNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/ScaleNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/ScaleNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/ScaleNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.5 UpdateNSTask

##### 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/UpdateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/UpdateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/UpdateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/UpdateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/UpdateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/UpdateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.6 HealNSTask

##### 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/HealNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/HealNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/HealNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/HealNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 5.3.2.6.4 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/HealNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 5.3.2.6.4 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/HealNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.7 TerminateNSTask

##### 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/TerminateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/TerminateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/TerminateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/TerminateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/TerminateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 5.3.2.7.5 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/TerminateNSTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.8 NSLCMOccurences

##### 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/NSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 5.3.2.8.5 GET status information about multiple NS LCM occurrences with "all\_fields"

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.2.8.5 |
| **Test title** | GET status information about multiple NS LCM occurrences with "all\_fields" |
| **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 with all\_fields attribute selector  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/NSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 5.3.2.8.6 GET status information about multiple NS LCM occurrences with "exclude\_default"

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.2.8.6 |
| **Test title** | GET status information about multiple NS LCM occurrences with "exclude\_default" |
| **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 with exclude\_default attribute selector  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/NSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 5.3.2.8.7 GET status information about multiple NS LCM occurrences with "fields"

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.2.8.7 |
| **Test title** | GET status information about multiple NS LCM occurrences with "fields" |
| **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 with fields attribute selector  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/NSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 5.3.2.8.8 GET status information about multiple NS LCM occurrences with "exclude\_fields"

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.2.8.8 |
| **Test title** | GET status information about multiple NS LCM occurrences with "exclude\_fields" |
| **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 with exclude\_fields attribute selector  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/NSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.9 IndividualNSLCMOccurences

##### 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/IndividualNSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/IndividualNSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/IndividualNSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/IndividualNSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/IndividualNSLCMOccurences.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.10 RetryOperationTask

##### 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/RetryOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/RetryOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/RetryOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/RetryOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/RetryOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/RetryOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/RetryOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.11 RollbackOperationTask

##### 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/RollbackOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/RollbackOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/RollbackOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/RollbackOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/RollbackOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/RollbackOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/RollbackOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.12 ContinueOperationTask

##### 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/ContinueOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/ContinueOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/ContinueOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/ContinueOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 5.3.2.13.5 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/ContinueOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 5.3.2.13.5 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/ContinueOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 5.3.2.13.5 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/ContinueOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.13 FailOperationTask

##### 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 NS 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** | |
| POST Fail operation task  Check HTTP Response Status Code Is 202 Check resource is finally failed | |

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/FailOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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 NS LCM resource 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** | |
| 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/FailOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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 NS LCM operation (i.e NS instance status not equal to FAILED\_TEMP) |
| **Pre-conditions** | NS instance status not 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** | |
| 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/FailOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/FailOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/FailOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/FailOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/FailOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.14 CancelOperationTask

##### 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/CancelOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/CancelOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/CancelOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/CancelOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/CancelOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/CancelOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/CancelOperationTask.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 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/Subscriptions.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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 retrieve 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/Subscriptions.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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 | |

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/Subscriptions.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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 | |

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/Subscriptions.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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 | |

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/Subscriptions.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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 | |

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/Subscriptions.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 5.3.2.15.7 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/Subscriptions.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 5.3.2.15.8 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/Subscriptions.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 5.3.2.15.9 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/Subscriptions.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.16 IndividualSubscription

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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** | TThe 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/IndividualSubscription.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.17 NotificationEndpoint

##### 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)  Log 1 Check NS LCM Operation Occurrence Start Notification Http POST Request Body Json Schema Is NsLcmOperationOccurrenceNotification Log 2 Check NS LCM Operation Occurrence Start Notification Http POST Request Body notificationType attribute Is NsLcmOperationOccurrenceNotification Log 3 Check NS LCM Operation Occurrence Start Notification Http POST Request Body notificationStatus attribute Is START Log 4 | |

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/NotificationEndpoint.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NotificationEndpoint.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NotificationEndpoint.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

##### 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/NotificationEndpoint.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.18 CreateNSInstanceWorkflow

##### 5.3.2.17 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\_ISTANTIATED 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/CreateNSInstanceWorkflow.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.19 DeleteNSInstanceWorkflow

##### 5.3.2.18 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/DeleteNSInstanceWorkflow.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.20 HealNSTaskWorkflow

##### 5.3.2.19 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/HealNSTaskWorkflow.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.21 InstanciateNSTaskWorkflow

##### 5.3.2.20 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/InstanciateNSTaskWorkflow.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.22 ScaleNSTaskWorkflow

##### 5.3.2.21 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/ScaleNSTaskWorkflow.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.23 TerminateNSTaskWorkflow

##### 5.3.2.22 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/TerminateNSTaskWorkflow.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

#### 5.3.2.24 UpdateNSTaskWorkflow

##### 5.3.2.23 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/UpdateNSTaskWorkflow.robot/cbe3b53/SOL005/NSLifecycleManagement-API>

### 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/Alarms.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/Alarms.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/Alarms.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/Alarms.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 5.3.3.1.5 GET information about multiple alarms with "all\_fields" attribute selector

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.3.1.5 |
| **Test title** | GET information about multiple alarms with "all\_fields" attribute selector |
| **Test objective** | The objective is to retrieve information about the alarm list |
| **Pre-conditions** |  |
| **Reference** | clause 8.4.2.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1 |
| **Config ID** | Config\_prod\_NFVO |
| **Applicability** |  |
| **Post-Conditions** |  |
| **Test Case** | |
| GET Alarms Task with all\_fields attribute selector  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/Alarms.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 5.3.3.1.6 GET information about multiple alarms with exclude\_default attribute selector

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.3.1.6 |
| **Test title** | GET information about multiple alarms with "exclude\_default" attribute selector |
| **Test objective** | The objective is to retrieve information about the alarm list |
| **Pre-conditions** |  |
| **Reference** | clause 8.4.2.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1 |
| **Config ID** | Config\_prod\_NFVO |
| **Applicability** |  |
| **Post-Conditions** |  |
| **Test Case** | |
| GET Alarms Task with exclude\_default attribute selector  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/Alarms.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 5.3.3.1.7 GET information about multiple alarms with fields attribute selector

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.3.1.7 |
| **Test title** | GET information about multiple alarms with fields attribute selector |
| **Test objective** | The objective is to retrieve information about the alarm list |
| **Pre-conditions** |  |
| **Reference** | clause 8.4.2.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1 |
| **Config ID** | Config\_prod\_NFVO |
| **Applicability** |  |
| **Post-Conditions** |  |
| **Test Case** | |
| GET Alarms Task with fields attribute selector  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/Alarms.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 5.3.3.1.8 GET information about multiple alarms with "exclude\_fields" attribute selector

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.3.1.8 |
| **Test title** | GET information about multiple alarms with "exclude\_fields" attribute selector |
| **Test objective** | The objective is to retrieve information about the alarm list |
| **Pre-conditions** |  |
| **Reference** | clause 8.4.2.3.3 - ETSI GS NFV-SOL 005 [3] v2.4.1 |
| **Config ID** | Config\_prod\_NFVO |
| **Applicability** |  |
| **Post-Conditions** | none |
| **Test Case** | |
| GET Alarms Task with exclude\_fields attribute selector  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/Alarms.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/Alarms.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/Alarms.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/Alarms.robot/cbe3b53/SOL005/NSFaultManagement-API>

#### 5.3.3.2 IndividualAlarm

##### 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/IndividualAlarm.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/IndividualAlarm.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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 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 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/IndividualAlarm.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/IndividualAlarm.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/IndividualAlarm.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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 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 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/IndividualAlarm.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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 modifed 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/IndividualAlarm.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/IndividualAlarm.robot/cbe3b53/SOL005/NSFaultManagement-API>

#### 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/Subscriptions.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 5.3.3.3.7 GET subscriptions with "all\_fields" attribute selector

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.3.3.7 |
| **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 8.4.4.3.2 - 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 | |

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/Subscriptions.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 5.3.3.3.8 GET subscriptions with "exclude\_default" attribute selector

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.3.3.8 |
| **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 8.4.4.3.2 - 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 | |

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/Subscriptions.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 5.3.3.3.9 GET subscriptions with "fields" attribute selector

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.3.3.9 |
| **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 8.4.4.3.2 - 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 | |

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/Subscriptions.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 5.3.3.3.10 GET subscriptions with "exclude\_fields" attribute selector

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.3.3.10 |
| **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 8.4.4.3.2 - 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 | |

NOTE: Robot code can be found at <https://forge.etsi.org/rep/nfv/api-tests/raw/Subscriptions.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 5.3.3.3.11 PUT subscriptions - Method not implemented

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.3.3.11 |
| **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/Subscriptions.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 5.3.3.3.12 PATCH subscriptions - Method not implemented

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.3.3.12 |
| **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/Subscriptions.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 5.3.3.3.13 DELETE subscriptions - Method not implemented

|  |  |
| --- | --- |
| **Test Purpose** | |
| **Test ID** | 5.3.3.3.13 |
| **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/Subscriptions.robot/cbe3b53/SOL005/NSFaultManagement-API>

#### 5.3.3.4 IndividualSubscription

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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 Subsbcription 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/IndividualSubscription.robot/cbe3b53/SOL005/NSFaultManagement-API>

#### 5.3.3.5 NotificationEndpoint

##### 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/NotificationEndpoint.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/NotificationEndpoint.robot/cbe3b53/SOL005/NSFaultManagement-API>

##### 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/NotificationEndpoint.robot/cbe3b53/SOL005/NSFaultManagement-API>

### 5.3.4 NS Performance Management interface

#### 5.3.4.1 PMJobs

##### 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/PMJobs.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/PMJobs.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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\_fileds" selector |
| **Pre-conditions** | A NS instance is instantiated. One or more NS performance jobs are set in the NFVO. |
| **Reference** | clause 4.3.3.2.1, 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/PMJobs.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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** | clause 4.3.3.2.1, 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/PMJobs.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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** | clause 4.3.3.2.1, 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/PMJobs.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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** | clause 4.3.3.2.1, 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/PMJobs.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/PMJobs.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/PMJobs.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/PMJobs.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/PMJobs.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/PMJobs.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/PMJobs.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

#### 5.3.4.2 IndividualPmJob

##### 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/IndividualPmJob.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualPmJob.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualPmJob.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualPmJob.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualPmJob.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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 005 [3] 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/IndividualPmJob.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualPmJob.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

#### 5.3.4.3 IndividualReport

##### 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/IndividualReport.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualReport.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualReport.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualReport.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualReport.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualReport.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

#### 5.3.4.4 Thresholds

##### 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/Thresholds.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/Thresholds.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/Thresholds.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/Thresholds.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/Thresholds.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/Thresholds.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/Thresholds.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/Thresholds.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

#### 5.3.4.5 IndividualThreshold

##### 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/IndividualThreshold.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualThreshold.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualThreshold.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualThreshold.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualThreshold.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualThreshold.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/IndividualThreshold.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

#### 5.3.4.8 Notifications

##### 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/Notifications.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

##### 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/Notifications.robot/cbe3b53/SOL005/NSPerformanceManagement-API>

### 5.3.5 VNF Package Management interface

#### 5.3.5.1 VNFPackages

##### 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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** | clause 4.5.3.3, 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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** | clause 4.5.3.3, 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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\_fileds" selector |
| **Pre-conditions** | One or more VNF packages are onboarded in the NFVO. |
| **Reference** | clause 4.3.3.2.1, 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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** | clause 4.3.3.2.1, 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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** | clause 4.3.3.2.1, 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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** | clause 4.3.3.2.1, 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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 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/VNFPackages.robot/cbe3b53/SOL005/VNFPackageManagement-API>

#### 5.3.5.2 IndividualVNFPackage

##### 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/IndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

#### 5.3.5.3 VNFDInIndividualVNFPackage

##### 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/VNFDInIndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFDInIndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFDInIndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFDInIndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFDInIndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFDInIndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFDInIndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFDInIndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFDInIndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFDInIndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFDInIndividualVNFPackage.robot/cbe3b53/SOL005/VNFPackageManagement-API>

#### 5.3.5.4 VNFPackageContent

##### 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/VNFPackageContent.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContent.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContent.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContent.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContent.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContent.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContent.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContent.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContent.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContent.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContent.robot/cbe3b53/SOL005/VNFPackageManagement-API>

#### 5.3.5.5 VNFPackageContentViaURI

##### 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/VNFPackageContentViaURI.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContentViaURI.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContentViaURI.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContentViaURI.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContentViaURI.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageContentViaURI.robot/cbe3b53/SOL005/VNFPackageManagement-API>

#### 5.3.5.6 VNFPackageArtifacts

##### 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/VNFPackageArtifacts.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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 artifcat 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/VNFPackageArtifacts.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageArtifacts.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageArtifacts.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageArtifacts.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageArtifacts.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageArtifacts.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageArtifacts.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageArtifacts.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageArtifacts.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/VNFPackageArtifacts.robot/cbe3b53/SOL005/VNFPackageManagement-API>

#### 5.3.5.7 Subscriptions

##### 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/Subscriptions.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/Subscriptions.robot/cbe3b53/SOL005/VNFPackageManagement-API>

#### 5.3.5.8 IndividualSubscription

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/IndividualSubscription.robot/cbe3b53/SOL005/VNFPackageManagement-API>

#### 5.3.5.9 Notifications

##### 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/Notifications.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/Notifications.robot/cbe3b53/SOL005/VNFPackageManagement-API>

##### 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/Notifications.robot/cbe3b53/SOL005/VNFPackageManagement-API>