



HPE NFV Director

Operations API Guide

Release 4.1

Second Edition

Notices

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Preface

About this guide

This guide explains the NFV Director Operations APIs.

Audience

This document is targeting solution architects and solution integrators.

Document history

Table 1: Document history

Edition	Date	Description
1.0	October 14 2016	First Edition

Chapter 1 Operations

1.1 Connect instances

1.1.1 Scopes

scope	trackable	retryable	rollbackable
domain	false	false	false
organization	false	false	false
tenant	false	false	false
vnf_group	false	false	false
nfvd	false	false	false

1.1.2 Request

Parameters:

input-param	condition
sourceInstance	Mandatory
targetInstance	Mandatory

JSON example

```
{
  "operation": "CONNECT",
  "type": "INSTANCE",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "sourceInstance",
      "value": "{sourceInstance}"
    },
    {
      "key": "targetInstance",
      "value": "{targetInstance}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CONNECT</operation>
  <type>INSTANCE</type>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>sourceInstance</key>
      <value>{sourceInstance}</value>
    </parameter>
    <parameter>
      <key>targetInstance</key>
      <value>{targetInstance}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.1.3 Response

JSON example

```
{  
  "code": 200,  
  "description": "Operation finished successfully",  
  "start-timestamp": "2015-07-31T07:51:46.784+0200",  
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",  
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"  
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">  
  <code>200</code>  
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.2 Connect artifacts

1.2.1 Scopes

scope	trackable	retryable	rollbackable
domain	false	false	false
organization	false	false	false
tenant	false	false	false
vnf_group	false	false	false
nfvd	false	false	false

1.2.2 Request

Parameters:

input-param	condition
status	Mandatory
relationshipType	Mandatory
childArtifactID	Mandatory
parentArtifactID	Mandatory

JSON example

```
{
  "operation": "CONNECT",
  "type": "INSTANCE",
  "subtype": "ARTIFACTS",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "status",
      "value": "{status}"
    },
    {
      "key": "relationshipType",
      "value": "{relationshipType}"
    },
    {
      "key": "childArtifactID",
      "value": "{childArtifactID}"
    },
    {
      "key": "parentArtifactID",
      "value": "{parentArtifactID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CONNECT</operation>
  <type>INSTANCE</type>
  <subtype>ARTIFACTS</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key> status </key>
      <value>{ status }</value>
    </parameter>
    <parameter>
      <key>relationshipType</key>
      <value>{relationshipType}</value>
    </parameter>
    <parameter>
      <key>childArtifactID</key>
      <value>{childArtifactID}</value>
    </parameter>
  </input-params>
</operation-request>
```



```

        <parameter>
            <key>parentArtifactID</key>
            <value>{parentArtifactID}</value>
        </parameter>
    </input-params>
</operation-request>

```

1.2.3 Response

JSON example

```

{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}

```

XML example

```

<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>

```

1.3 Connect monitor

1.3.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false

1.3.2 Request

Parameters:

input-param	condition
sourceInstance	Mandatory
sourceArtifactInstance	Mandatory
pluggedArtifactInstance	Optional
unpluggedArtifactInstance	Optional

JSON example

```
{
  "operation": "CONNECT",
  "type": "INSTANCE",
  "subtype": "MONITOR",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "sourceInstance",
      "value": "{sourceInstance}"
    },
    {
      "key": "sourceArtifactInstance",
      "value": "{sourceArtifactInstance}"
    },
    {
      "key": "pluggedArtifactInstance",
      "value": "{pluggedArtifactInstance}"
    },
    {
      "key": "unpluggedArtifactInstance",
      "value": "{unpluggedArtifactInstance}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CONNECT</operation>
  <type>INSTANCE</type>
  <subtype>MONITOR</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>sourceInstance</key>
      <value>{sourceInstance}</value>
    </parameter>
    <parameter>
      <key>sourceArtifactInstance</key>
      <value>{sourceArtifactInstance}</value>
    </parameter>
    <parameter>
      <key>pluggedArtifactInstance</key>
      <value>{pluggedArtifactInstance}</value>
    </parameter>
    <parameter>
      <key>unpluggedArtifactInstance</key>
      <value>{unpluggedArtifactInstance}</value>
    </parameter>
  </input-params>
</operation-request>
```

```
</operation-request>
```

1.3.3 Response

JSON example

```
{  
  "code": 200,  
  "description": "Operation finished successfully",  
  "start-timestamp": "2015-07-31T07:51:46.784+0200",  
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",  
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"  
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">  
  <code>200</code>  
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.4 Connect VNF end point

1.4.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false

1.4.2 Request

Parameters:

input-param	condition
sourceInstance	Mandatory
targetInstance	Mandatory

JSON example

```
{
  "operation": "CONNECT",
  "type": "INSTANCE",
  "subtype": "VNF_ENDPOINT",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "sourceInstance",
      "value": "{sourceInstance}"
    },
    {
      "key": "targetInstance",
      "value": "{targetInstance}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CONNECT</operation>
  <type>INSTANCE</type>
  <subtype>VNF_ENDPOINT</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>sourceInstance</key>
      <value>{sourceInstance}</value>
    </parameter>
    <parameter>
      <key>targetInstance</key>
      <value>{targetInstance}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.4.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.5 Create instance

1.5.1 Scopes

scope	trackable	retryable	rollbackable
domain	false	false	false
organization	false	false	false
tenant	false	false	false
vnf_group	false	false	false
nfvd	false	false	false

1.5.2 Request

Parameters:

input-param	condition
templateID	Mandatory
instanceName	Mandatory
instanceDescription	Optional
parentInstanceId	Optional

JSON example

```
{
  "operation": "CREATE",
  "type": "INSTANCE",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "templateID",
      "value": "{templateID}"
    },
    {
      "key": "instanceName",
      "value": "{ instanceName}"
    },
    {
      "key": "instanceDescription",
      "value": "{ instanceDescription }"
    },
    {
      "key": "parentInstanceId",
      "value": "{ parentInstanceId }"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CREATE</operation>
  <type>INSTANCE</type>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>templateID</key>
      <value>{templateID}</value>
    </parameter>
    <parameter>
      <key>instanceName</key>
      <value>{ instanceName }</value>
    </parameter>
    <parameter>
      <key>instanceDescription</key>
      <value>{ instanceDescription }</value>
    </parameter>
    <parameter>
      <key>parentInstanceId</key>
      <value>{ parentInstanceId }</value>
    </parameter>
  </input-params>
</operation-request>
```

1.5.3 Response

JSON example

```
{  
  "code": 200,  
  "description": "Operation finished successfully",  
  "start-timestamp": "2015-07-31T07:51:46.784+0200",  
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",  
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"  
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">  
  <code>200</code>  
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.6 Create datacenter

1.6.1 Scopes

scope	trackable	retryable	rollbackable
domain	false	false	false

1.6.2 Request

Parameters:

input-param	condition
templateID	Mandatory
datacenterName	Mandatory
datacenterDescription	Optional

JSON example

```
{
  "operation": "CREATE",
  "type": "INSTANCE",
  "subtype": "DATACENTER",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "templateID",
      "value": "{templateID}"
    },
    {
      "key": "datacenterName",
      "value": "{ datacenterName}"
    },
    {
      "key": "datacenterDescription",
      "value": "{ datacenterDescription}"
    },
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CREATE</operation>
  <type>INSTANCE</type>
  <subtype>DATACENTER</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>templateID</key>
      <value>{templateID}</value>
    </parameter>
    <parameter>
      <key>datacenterName</key>
      <value>{ datacenterName}</value>
    </parameter>
    <parameter>
      <key>datacenterDescription</key>
      <value>{ datacenterDescription}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.6.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
```

}

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">  
  <code>200</code>  
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```


1.7 Create domain

1.7.1 Scopes

scope	trackable	retryable	rollbackable
nfvd	false	false	false

1.7.2 Request

Parameters:

input-param	condition
templateID	Mandatory
domainName	Mandatory
domainDescription	Optional

JSON example

```
{
  "operation": "CREATE",
  "type": "INSTANCE",
  "subtype": "DOMAIN",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "templateID",
      "value": "{templateID}"
    },
    {
      "key": "domainName",
      "value": "{ domainName}"
    },
    {
      "key": "domainDescription",
      "value": "{ domainDescription}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CREATE</operation>
  <type>INSTANCE</type>
  <subtype>DOMAIN</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>templateID</key>
      <value>{templateID}</value>
    </parameter>
    <parameter>
      <key>domainName</key>
      <value>{ domainName}</value>
    </parameter>
    <parameter>
      <key>domainDescription</key>
      <value>{ domainDescription}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.7.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
}
```

```
"finish-timestamp": "2015-07-31T07:51:46.893+0200",  
"delivery-timestamp": "2015-07-31T07:51:46.789+0200"  
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">  
  <code>200</code>  
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.8 Create monitor

1.8.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false

1.8.2 Request

Parameters:

input-param	condition
templateID	Mandatory
monitorName	Mandatory
monitorDescription	Optional
parentInstanceId	Optional
vmInstanceId	Mandatory

JSON example

```
{
  "operation": "CREATE",
  "type": "INSTANCE",
  "subtype": "MONITOR",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "templateID",
      "value": "{templateID}"
    },
    {
      "key": "monitorName",
      "value": "{ monitorName}"
    },
    {
      "key": "monitorDescription",
      "value": "{ monitorDescription}"
    },
    {
      "key": "parentInstanceId",
      "value": "{ parentInstanceId }"
    },
    {
      "key": "vmInstanceId ",
      "value": "{ vmInstanceId }"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CREATE</operation>
  <type>INSTANCE</type>
  <subtype>MONITOR</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>templateID/key>
      <value>{templateID}</value>
    </parameter>
    <parameter>
      <key>monitorName</key>
      <value>{ monitorName}</value>
    </parameter>
    <parameter>
      <key>monitorDescription</key>
      <value>{ monitorDescription}</value>
    </parameter>
  </input-params>
</operation-request>
```

```

        </parameter>
        <parameter>
            <key>parentInstanceId</key>
            <value>{ parentInstanceId }</value>
        </parameter>
        <parameter>
            <key>vmInstanceId</key>
            <value>{ vmInstanceId }</value>
        </parameter>
    </input-params>
</operation-request>

```

1.8.3 Response

JSON example

```

{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}

```

XML example

```

<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>

```

1.9 Create organization

1.9.1 Scopes

scope	trackable	retryable	rollbackable
domain	true	false	false

1.9.2 Request

Parameters:

input-param	condition
templateID	Mandatory
organizationName	Mandatory
organizationDescription	Optional
dcInstanceId	Optional

JSON example

```
{
  "operation": "CREATE",
  "type": "INSTANCE",
  "subtype": "ORGANIZATION",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "templateID",
      "value": "{templateID}"
    },
    {
      "key": "organizationName",
      "value": "{ organizationName}"
    },
    {
      "key": "organizationDescription",
      "value": "{ organizationDescription}"
    },
    {
      "key": "dcInstanceId",
      "value": "{ dcInstanceId}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CREATE</operation>
  <type>INSTANCE</type>
  <subtype>ORGANIZATION</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>templateID</key>
      <value>{templateID}</value>
    </parameter>
    <parameter>
      <key>organizationName</key>
      <value>{ organizationName}</value>
    </parameter>
    <parameter>
      <key>organizationDescription</key>
      <value>{ organizationDescription}</value>
    </parameter>
    <parameter>
      <key> dcInstanceId</key>
      <value>{ dcInstanceId}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.9.3 Response

JSON example

```
{  
  "code": 200,  
  "description": "Operation finished successfully",  
  "start-timestamp": "2015-07-31T07:51:46.784+0200",  
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",  
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"  
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">  
  <code>200</code>  
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.10 Create tenant

1.10.1 Scopes

scope	trackable	retryable	rollbackable
organization	true	false	false

1.10.2 Request

Parameters:

input-param	condition
templateID	Mandatory
tenantName	Mandatory
tenantDescription	Optional
dcInstanceId	Optional

JSON example

```
{
  "operation": "CREATE",
  "type": "INSTANCE",
  "subtype": "TENANT",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "templateID",
      "value": "{templateID}"
    },
    {
      "key": "tenantName",
      "value": "{tenantName}"
    },
    {
      "key": "tenantDescription",
      "value": "{tenantDescription}"
    },
    {
      "key": "dcInstanceId",
      "value": "{dcInstanceId}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CREATE</operation>
  <type>INSTANCE</type>
  <subtype>TENANT</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>templateID</key>
      <value>{templateID}</value>
    </parameter>
    <parameter>
      <key>tenantName</key>
      <value>{tenantName}</value>
    </parameter>
    <parameter>
      <key>tenantDescription</key>
      <value>{tenantDescription}</value>
    </parameter>
    <parameter>
      <key>dcInstanceId</key>
      <value>{dcInstanceId}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.10.3 Response

JSON example

```
{  
  "code": 200,  
  "description": "Operation finished successfully",  
  "start-timestamp": "2015-07-31T07:51:46.784+0200",  
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",  
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"  
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">  
  <code>200</code>  
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```


1.11 Create virtual link

1.11.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false

1.11.2 Request

Parameters:

input-param	condition
templateID	Mandatory
virtualLinkName	Mandatory
virtualLinkDescription	Optional

JSON example

```
{
  "operation": "CREATE",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_LINK",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "templateID",
      "value": "{templateID}"
    },
    {
      "key": "virtualLinkName",
      "value": "{ virtualLinkName}"
    },
    {
      "key": "virtualLinkDescription",
      "value": "{ virtualLinkDescription}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CREATE</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_LINK</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>templateID</key>
      <value>{templateID}</value>
    </parameter>
    <parameter>
      <key>virtualLinkName</key>
      <value>{ virtualLinkName}</value>
    </parameter>
    <parameter>
      <key>virtualLinkDescription</key>
      <value>{ virtualLinkDescription}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.11.3 Response

JSON example

```
{  
  "code": 200,  
  "description": "Operation finished successfully",  
  "start-timestamp": "2015-07-31T07:51:46.784+0200",  
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",  
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"  
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">  
  <code>200</code>  
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.12 Create virtual lun

1.12.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false

1.12.2 Request

Parameters:

input-param	condition
templateID	Mandatory
storageName	Mandatory
storageDescription	Optional
parentInstanceId	Optional
vmInstanceId	Mandatory

JSON example

```
{
  "operation": "CREATE",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_LUN",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "templateID",
      "value": "{templateID}"
    },
    {
      "key": "storageName",
      "value": "{ storageName }"
    },
    {
      "key": "storageDescription",
      "value": "{ storageDescription }"
    },
    {
      "key": "parentInstanceId",
      "value": "{ parentInstanceId }"
    },
    {
      "key": "vmInstanceId ",
      "value": "{ vmInstanceId }"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CREATE</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_LUN</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>templateID/key>
      <value>{templateID}</value>
    </parameter>
    <parameter>
      <key>storageName</key>
      <value>{ storageName }</value>
    </parameter>
  </input-params>
</operation-request>
```

```

    <parameter>
      <key>storageDescription</key>
      <value>{ storageDescription }</value>
    </parameter>
    <parameter>
      <key>parentInstanceId</key>
      <value>{ parentInstanceId }</value>
    </parameter>
    <parameter>
      <key>vmInstanceId</key>
      <value>{ vmInstanceId }</value>
    </parameter>
  </input-params>
</operation-request>

```

1.12.3 Response

JSON example

```

{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}

```

XML example

```

<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>

```

1.13 Create VNF group

1.13.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false

1.13.2 Request

Parameters:

input-param	condition
templateID	Mandatory
vnfsGroupName	Mandatory
vnfsGroupDescription	Optional
dcInstanceId	Optional

JSON example

```
{
  "operation": "CREATE",
  "type": "INSTANCE",
  "subtype": "VNF_GROUP",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "templateID",
      "value": "{templateID}"
    },
    {
      "key": "vnfsGroupName",
      "value": "{ vnfsGroupName}"
    },
    {
      "key": "vnfsGroupDescription",
      "value": "{ vnfsGroupDescription}"
    },
    {
      "key": "dcInstanceId",
      "value": "{ dcInstanceId}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CREATE</operation>
  <type>INSTANCE</type>
  <subtype>VNF_GROUP</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>templateID</key>
      <value>{templateID}</value>
    </parameter>
    <parameter>
      <key>vnfsGroupName</key>
      <value>{ vnfsGroupName}</value>
    </parameter>
    <parameter>
      <key>vnfsGroupDescription</key>
      <value>{ vnfsGroupDescription}</value>
    </parameter>
    <parameter>
      <key> dcInstanceId</key>
      <value>{ dcInstanceId}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.13.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
  <parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.14 Create VNF

1.14.1 Scopes

scope	trackable	retryable	rollbackable
vnf_group	false	false	false
nfvd	false	false	false

1.14.2 Request

Parameters:

input-param	condition
templateID	Mandatory
vnfName	Mandatory
vnfDescription	Optional

JSON example

```
{
  "operation": "CREATE",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "templateID",
      "value": "{templateID}"
    },
    {
      "key": "vnfName",
      "value": "{ vnfName}"
    },
    {
      "key": "vnfDescription",
      "value": "{ vnfDescription}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>CREATE</operation>
  <type>INSTANCE</type>
  <subtype>VNF</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>templateID</key>
      <value>{templateID}</value>
    </parameter>
    <parameter>
      <key>vnfName</key>
      <value>{ vnfName}</value>
    </parameter>
    <parameter>
      <key>vnfDescription</key>
      <value>{ vnfDescription}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.14.3 Response

JSON example

```
{
  "code": 200,
  "instanceId": "c60577ad-7881-4208-a0f5-35b7d99a6395",
}
```

```
"description": "Operation finished successfully",  
"start-timestamp": "2015-07-31T07:51:46.784+0200",  
"finish-timestamp": "2015-07-31T07:51:46.893+0200",  
"delivery-timestamp": "2015-07-31T07:51:46.789+0200"  
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">  
  <code>200</code>  
  <instanceId> c60577ad-7881-4208-a0f5-35b7d99a6395</instanceId>  
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>  
  <parameter>  
    <parameter>  
      <key>modeInstanceID</key>  
      <value>{modeInstanceID}</value>  
    </parameter>  
  </input-params>  
</operation-request>
```


1.15 Detach Monitor

1.15.1 Scopes

Scope	trackable	retryable	rollbackable
nfvd	true	false	false
tenant	true	false	false
vnf_group	true	false	false

1.15.2 Request

Parameters:

input-param	condition
instanceId	Mandatory

JSON example

```
{
  "operation": "DETACH",
  "type": "INSTANCE",
  "subtype": "MONITOR",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "instanceId",
      "value": "{insanceId}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>DETACH</operation>
  <type>INSTANCE</type>
  <subtype>MONITOR</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.15.3 Response

JSON example

```
{
  "code": 503,
  "description": "Synchronus operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": "2015-07-31T07:50:29.323+0200",
  "finish-timestamp": "2015-07-31T07:50:29.513+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.16 Detach volume

1.16.1 Scopes

scope	trackable	retryable	rollbackable
nfvd	true	false	false
tenant	true	false	false
vnf_group	true	false	false

1.16.2 Request

Parameters:

input-param	condition
instanceId	Mandatory

JSON example

```
{
  "operation": "DETACH",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_LUN",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{insanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>DETACH</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_LUN</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.16.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully ",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": "2015-07-31T07:50:29.323+0200",
  "finish-timestamp": "2015-07-31T07:50:29.513+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.17 Disconnect VNF endpoint

1.17.1 Scopes

scope	trackable	retryable	rollbackable
tenant	false	false	false
vnf_group	false	false	false

1.17.2 Request

Parameters:

input-param	condition
sourceInstance	Mandatory
targetInstance	Mandatory, Multiple

JSON example

```
{
  "operation": "DISCONNECT",
  "type": "INSTANCE",
  "subtype": "VNF_ENDPOINT",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "sourceInstance",
      "value": "{sourceInstance}"
    },
    {
      "key": "targetInstance",
      "value": "{targetInstance}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>DISCONNECT</operation>
  <type>INSTANCE</type>
  <subtype>VNF_ENDPOINT</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>sourceInstance</key>
      <value>{ sourceInstance}</value>
    </parameter>
    <parameter>
      <key>targetInstance</key>
      <value>{ targetInstance}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.17.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully ",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": "2015-07-31T07:50:29.323+0200",
  "finish-timestamp": "2015-07-31T07:50:29.513+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
```

```
<code>200</code>  
<description>Operation finished successfully</description>  
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.18 Get virtual machine NNMi console

1.18.1 Scopes

scope	trackable	retryable	rollbackable
vnf_group	false	false	false

1.18.2 Request

Scopes:

scope	trackable	retryable	rollbackable
vnf_group	false	false	false

Parameters:

input-param	condition
vmInstance	Mandatory

JSON example

```
{
  "operation": "GET_CONSOLE",
  "type": "VIRTUAL_MACHINE",
  "subtype": "NNMI",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "vmInstance",
      "value": "{vmInstance}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>GET_CONSOLE</operation>
  <type>VIRTUAL_MACHINE</type>
  <subtype>NNMI</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>vmInstance</key>
      <value>{vmInstance}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.18.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully ",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": "2015-07-31T07:50:29.323+0200",
  "finish-timestamp": "2015-07-31T07:50:29.513+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.19 Modify artifact status

1.19.1 Scopes

scope	trackable	retryable	rollbackable
domain	false	false	false
nfvd	false	false	false
organization	false	false	false
tenant	false	false	false
vnf_group	false	false	false

1.19.2 Request

Parameters:

input-param	condition
artifactId	Mandatory
newStatus	Mandatory

JSON example

```
{
  "operation": "MODIFY",
  "type": "ARTIFACT",
  "subtype": "STATUS",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "artifactId",
      "value": "{artifactId}"
    },
    {
      "key": "newStatus",
      "value": "{newStatus}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>MODIFY</operation>
  <type>ARTIFACT</type>
  <subtype>STATUS</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>artifactId</key>
      <value>{artifactId}</value>
    </parameter>
    <parameter>
      <key>newStatus</key>
      <value>{newStatus}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.19.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully ",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": "2015-07-31T07:50:29.323+0200",
  "finish-timestamp": "2015-07-31T07:50:29.513+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.20 Modify instance status

1.20.1 Scopes

scope	trackable	retryable	rollbackable
nfvd	false	false	false

1.20.2 Request

Parameters:

input-param	condition
instanceId	Mandatory
newStatus	Mandatory

JSON example

```
{
  "operation": "MODIFY",
  "type": "INSTANCE",
  "subtype": "STATUS",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "instanceId",
      "value": "{instanceId}"
    },
    {
      "key": "newStatus",
      "value": "{newStatus}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>MODIFY</operation>
  <type>INSTANCE</type>
  <subtype>STATUS</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceId</key>
      <value>{instanceId}</value>
    </parameter>
    <parameter>
      <key>newStatus</key>
      <value>{newStatus}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.20.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully ",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": "2015-07-31T07:50:29.323+0200",
  "finish-timestamp": "2015-07-31T07:50:29.513+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
```



```
<code>200</code>  
<description>Operation finished successfully</description>  
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.21 Modify relationship status

1.21.1 Scopes

scope	trackable	retryable	rollbackable
domain	false	false	false
nfvd	false	false	false
organization	false	false	false
tenant	false	false	false
vnf_group	false	false	false

1.21.2 Request

Parameters:

input-param	condition
childArtifactId	Mandatory
parentArtifactId	Mandatory
type	Mandatory
newStatus	Mandatory

JSON example

```
{
  "operation": "MODIFY",
  "type": "RELATIONSHIP",
  "subtype": "STATUS",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "childArtifactId",
      "value": "{childArtifactId}"
    },
    {
      "key": "parentArtifactId",
      "value": "{parentArtifactId}"
    },
    {
      "key": "type",
      "value": "{type}"
    },
    {
      "key": "newStatus",
      "value": "{newStatus}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>MODIFY</operation>
  <type>RELATIONSHIP</type>
  <subtype>STATUS</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>childArtifactId</key>
      <value>{childArtifactId}</value>
    </parameter>
    <parameter>
      <key>parentArtifactId</key>
      <value>{parentArtifactId}</value>
    </parameter>
    <parameter>
      <key>type</key>
      <value>{type}</value>
    </parameter>
  </input-params>
</operation-request>
```

```

    <parameter>
      <key>newStatus</key>
      <value>{newStatus}</value>
    </parameter>
  </input-params>
</operation-request>

```

1.21.3 Response

JSON example

```

{
  "code": 200,
  "description": "Operation finished successfully ",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": "2015-07-31T07:50:29.323+0200",
  "finish-timestamp": "2015-07-31T07:50:29.513+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}

```

XML example

```

<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>

```

1.22 Delete vnf group instance

1.22.1 Scopes

Scope	trackable	retryable	rollbackable
nfvd	false	false	false
vnf_group	false	false	false

1.22.1 Request

Scopes:

Scope	trackable	retryable	rollbackable
nfvd	false	false	false
vnf_group	false	false	false

Parameters:

input-param	condition
instanceId	Mandatory

JSON example

```
{
  "operation": "DELETE",
  "type": "INSTANCE",
  "subtype": "VNF_GROUP",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "instanceId",
      "value": "{instanceId}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>DELETE</operation>
  <type>INSTANCE</type>
  <subtype>VNF_GROUP</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.22.2 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully ",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": "2015-07-31T07:50:29.323+0200",
  "finish-timestamp": "2015-07-31T07:50:29.513+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <description>Operation finished successfully</description>
```

```
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.23 Delete vnf instance

1.23.1 Scopes

Scope	trackable	retryable	rollbackable
nfvd	true	false	false
vnf_group	true	false	false

1.23.2 Request

Parameters:

input-param	condition
instanceId	Mandatory

JSON example

```
{
  "operation": "DELETE",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "instanceId",
      "value": "{instanceId}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>DELETE</operation>
  <type>INSTANCE</type>
  <subtype>VNF</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceId</key>
      <value>{instanceId}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.23.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully ",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": "2015-07-31T07:50:29.323+0200",
  "finish-timestamp": "2015-07-31T07:50:29.513+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.24 Delete tenant instance

1.24.1 Scopes

Scope	trackable	retryable	rollbackable
nfvd	false	false	false
tenant	false	false	false
vnf_group	false	false	false

1.24.2 Request

Parameters:

input-param	condition
instanceId	Mandatory

JSON example

```
{
  "operation": "DELETE",
  "type": "INSTANCE",
  "subtype": "TENANT",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "instanceId",
      "value": "{instanceId}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>DELETE</operation>
  <type>INSTANCE</type>
  <subtype>TENANT </subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceId</key>
      <value>{instanceId}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.24.3 Response

JSON example

```
{
  "code": 200,
  "description": "Synchronus operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": "2015-07-31T07:50:29.323+0200",
  "finish-timestamp": "2015-07-31T07:50:29.513+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.25 Delete organization instance

1.25.1 Scopes

Scope	trackable	retryable	rollbackable
nfvd	false	false	false
organizatino	false	false	false
tenant	false	false	false
vnf_group	false	false	false

1.25.2 Request

Parameters:

input-param	condition
instanceId	Mandatory

JSON example

```
{
  "operation": "DELETE",
  "type": "INSTANCE",
  "subtype": "ORGANIZATION",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "instanceId",
      "value": "{instanceId}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd-ext">
  <operation>DELETE</operation>
  <type>INSTANCE</type>
  <subtype>ORGANIZATION</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceId</key>
      <value>{instanceId}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.25.3 Response

JSON example

```
{
  "code": 200,
  "description": "Synchronus operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": "2015-07-31T07:50:29.323+0200",
  "finish-timestamp": "2015-07-31T07:50:29.513+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```


1.26 Apply Changes to VNF

1.26.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false

1.26.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory
resourceArtifactID	Mandatory

JSON example

```
{
  "operation": "APPLY_CHANGES",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": " instanceID",
      "value": "{instanceID}"
    },
    {
      "key": " modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": " resourceArtifactID",
      "value": "{resourceArtifactID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>APPLY_CHANGES</operation>
  <type>INSTANCE</type>
  <subtype>VNF</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{ instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{ modeInstanceID}</value>
    </parameter>
    <parameter>
      <key>resourceArtifactID</key>
      <value>{ resourceArtifactID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.26.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.27 Apply Changes to VNF FW

1.27.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	true	false
vnf_group	true	true	false

1.27.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "APPLY_CHANGES",
  "type": "INSTANCE",
  "subtype": "VNF_FW",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>APPLY_CHANGES</operation>
  <type>INSTANCE</type>
  <subtype>VNF_FW</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.27.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.28 Apply Changes to VNF LB

1.28.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	true	false
vnf_group	true	true	false

1.28.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "APPLY_CHANGES",
  "type": "INSTANCE",
  "subtype": "VNF_LB",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>APPLY_CHANGES</operation>
  <type>INSTANCE</type>
  <subtype>VNF_LB</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key> modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.28.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.29 Associate Floating IP to Virtual Port

1.29.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false

1.29.2 Request

Parameters:

input-param	condition
modeInstanceID	modeInstanceID
VirtualPortArtifactInstanceID	VirtualPortArtifactInstanceID

JSON example

```
{
  "operation": "ASSOCIATE_FLOATINGIP",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_PORT",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "VirtualPortArtifactInstanceID",
      "value": "{VirtualPortArtifactInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>ASSOCIATE_FLOATINGIP</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_PORT</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
    <parameter>
      <key>VirtualPortArtifactInstanceID</key>
      <value>{VirtualPortArtifactInstanceID}</value>
    </parameter>
    <parameter>
      <key>organizationDescription</key>
      <value>{organizationDescription}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.29.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
</operation-response>
```

<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>

1.30 Create VNF

1.30.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false

1.30.2 Request

Parameters:

input-param	condition
vnfName	Mandatory
primaryParentArtifactInstanceID	Mandatory
vnfGroupID	Mandatory
secondaryParentArtifactInstanceID	Mandatory
templateID	Mandatory
RelationshipType	Mandatory
ExtraRelationshipTypes	Mandatory

JSON example

```
{
  "operation": "CREATE",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "vnfName",
      "value": "{vnfName}"
    },
    {
      "key": "vnfGroupID",
      "value": "{vnfGroupID}"
    },
    {
      "key": "secondaryParentArtifactInstanceID",
      "value": "{secondaryParentArtifactInstanceID}"
    },
    {
      "key": "templateID",
      "value": "{templateID}"
    },
    {
      "key": "RelationshipType",
      "value": "{RelationshipType}"
    },
    {
      "key": "ExtraRelationshipTypes",
      "value": "{ExtraRelationshipTypes}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>CREATE</operation>
  <type>INSTANCE</type>
  <subtype>VNF</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key> vnfName</key>
      <value>{vnfName}</value>
    </parameter>
    <parameter>
      <key> primaryParentArtifactInstanceID</key>
```

```

        <value>{primaryParentArtifactInstanceID}</value>
    </parameter>
    <parameter>
        <key>vnfGroupID</key>
        <value>{vnfGroupID}</value>
    </parameter>
    <parameter>
        <key>secondaryParentArtifactInstanceID</key>
        <value>{secondaryParentArtifactInstanceID}</value>
    </parameter>
    <parameter>
        <key>templateID</key>
        <value>{templateID}</value>
    </parameter>
    <parameter>
        <key>vnfDescription</key>
        <value>{vnfDescription}</value>
    </parameter>
    <parameter>
        <key>tenantID</key>
        <value>{tenantID}</value>
    </parameter>
</input-params>
</operation-request>

```

1.30.3 Response

JSON example

```

{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}

```

XML example

```

<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>

```


1.31 Deploy Network Services

1.31.1 Scopes

scope	trackable	retryable	rollbackable
domain	true	true	true
organization	true	true	true
tenant	true	true	true

1.31.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory
resourceArtifactId	Mandatory

JSON example

```
{
  "operation": "DEPLOY",
  "type": "INSTANCE",
  "subtype": "NETWORK_SERVICE",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "resourceArtifactID",
      "value": "{resourceArtifactID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>DEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>NETWORK_SERVICE</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key> modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
    <parameter>
      <key>resourceArtifactID</key>
      <value>{resourceArtifactID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.31.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
}
```

```
"output-params": []  
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.32 Deploy Organization

1.32.1 Scopes

scope	trackable	retryable	rollbackable
domain	true	true	true

1.32.2 Request

Parameters:

input-param	condition
modeInstanceID	Mandatory
instanceID	Mandatory

JSON example

```
{
  "operation": "DEPLOY",
  "type": "INSTANCE",
  "subtype": "ORGANIZATION",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "instanceID",
      "value": "{instanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>DEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>ORGANIZATION</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.32.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.33 Deploy Tenant

1.33.1 Scopes

scope	trackable	retryable	rollbackable
organization	true	true	true

1.33.2 Request

Parameters:

input-param	condition
modeInstanceID	Mandatory
instanceID	Mandatory

JSON example

```
{
  "operation": "DEPLOY",
  "type": "INSTANCE",
  "subtype": "TENANT",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "instanceID",
      "value": "{instanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>DEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>TENANT</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.33.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.34 Deploy Virtual Link

1.34.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	true	true

1.34.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "DEPLOY",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_LINK",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "instanceID",
      "value": "{instanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>CREATE</operation>
  <type>INSTANCE</type>
  <subtype>ORGANIZATION</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.34.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.35 Deploy VNF

1.35.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	true	true
vnf_group	true	true	true

1.35.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "DEPLOY",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "instanceID",
      "value": "{instanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>DEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>VNF</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.35.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.36 Deploy VNF Group

1.36.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	true	true

1.36.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "DEPLOY",
  "type": "INSTANCE",
  "subtype": "VNF_GROUP",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "instanceID",
      "value": "{instanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>DEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>VNF_GROUP</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.36.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.37 Deploy VNF FW

1.37.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	true	true
vnf_group	true	true	true

1.37.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory
resourceArtifactID	Mandatory

JSON example

```
{
  "operation": "DEPLOY",
  "type": "INSTANCE",
  "subtype": "VNF_FW",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "resourceArtifactID",
      "value": "{resourceArtifactID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>DEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>VNF_FW</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
    <parameter>
      <key>resourceArtifactID</key>
      <value>{resourceArtifactID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.37.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```


XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.38 Deploy VNF LB

1.38.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	true	true
vnf_group	true	true	true

1.38.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory
resourceArtifactID	Mandatory

JSON example

```
{
  "operation": "DEPLOY",
  "type": "INSTANCE",
  "subtype": "VNF_LB",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "resourceArtifactID",
      "value": "{resourceArtifactID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>DEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>VNF_LB</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
    <parameter>
      <key>resourceArtifactID</key>
      <value>{resourceArtifactID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.38.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

}

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.39 Diassociate Floating IP from Virtual Port

1.39.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false

1.39.2 Request

Parameters:

input-param	condition
VirtualPortArtifactInstanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "DISASSOCIATE_FLOATINGIP",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_PORT",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "VirtualPortArtifactInstanceID",
      "value": "{VirtualPortArtifactInstanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>DISASSOCIATE_FLOATINGIP</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_PORT</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>VirtualPortArtifactInstanceID</key>
      <value>{VirtualPortArtifactInstanceID}</value>
    </parameter>
    <parameter>
      <key> modeInstanceID</key>
      <value>{ modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.39.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.40 Async Get Console of Virtual Machine

1.40.1 Scopes

scope	trackable	retryable	rollbackable
vnf_group	false	false	false

1.40.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "GET_CONSOLE",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_MACHINE",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>GET_CONSOLE</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_MACHINE</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.40.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.41 Sync Get Console of Virtual Machine

1.41.1 Scopes

scope	trackable	retryable	rollbackable
vnf_group	false	false	false

1.41.2 Request

Parameters:

input-param	condition
modeInstanceID	Mandatory
instanceID	Mandatory

JSON example

```
{
  "operation": "GET_CONSOLE",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_MACHINE",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "instanceID",
      "value": "{instanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>GET_CONSOLE</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_MACHINE</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key> instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key> modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.41.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.42 Heal VNF

1.42.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false

1.42.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory
healCause	Mandatory

JSON example

```
{
  "operation": "HEAL",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "healCause",
      "value": "{healCause}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>DEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>VNF</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
    <parameter>
      <key>healCause</key>
      <value>{healCause}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.42.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">  
  <code>200</code>  
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```


1.43 Async Migrated VM

1.43.1 Scopes

scope	trackable	retryable	rollbackable
vnf_group	true	false	false
nfvd	true	false	false

1.43.2 Request

Parameters:

input-param	condition
modeInstanceID	Mandatory
resourcePool	Mandatory
instanceID	Mandatory

JSON example

```
{
  "operation": "MIGRATED",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_MACHINE",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "resourcePool",
      "value": "{resourcePool}"
    },
    {
      "key": "instanceID",
      "value": "{instanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>MIGRATED</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_MACHINE</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
    <parameter>
      <key>resourcePool</key>
      <value>{resourcePool}</value>
    </parameter>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.43.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

}

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.44 Sync Migrated VM

1.44.1 Scopes

scope	trackable	retryable	rollbackable
vnf_group	true	false	false
nfvd	true	false	false

1.44.2 Request

Parameters:

input-param	condition
modelInstanceID	Mandatory
virtualMachineArtifactInstanceID	Mandatory

JSON example

```
{
  "operation": "MIGRATED",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_MACHINE",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "modelInstanceID",
      "value": "{modelInstanceID}"
    },
    {
      "key": "virtualMachineArtifactInstanceID",
      "value": "{virtualMachineArtifactInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>MIGRATED</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_MACHINE</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key> modelInstanceID </key>
      <value>{modelInstanceID}</value>
    </parameter>
    <parameter>
      <key>virtualMachineArtifactInstanceID</key>
      <value>{virtualMachineArtifactInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.44.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.45 Sync Live Migrate VM

1.45.1 Scopes

scope	trackable	retryable	rollbackable
vnf_group	true	false	false

1.45.2 Request

Parameters:

input-param	condition
modeInstanceID	Mandatory
instanceID	Mandatory

JSON example

```
{
  "operation": "LIVE_MIGRATE",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_MACHINE",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "instanceID",
      "value": "{instanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>LIVE_MIGRATE</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_MACHINE</subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key> instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key> modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.45.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
  <delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>
  <description>Operation finished successfully</description>
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>
</operation-response>
```

1.46 Async Live Migrate of VM

1.46.1 Scopes

scope	trackable	retryable	rollbackable
vnf_group	true	false	false

1.46.2 Request

Parameters:

input-param	condition
modeInstanceID	Mandatory
resourcePool	Mandatory
instanceID	Mandatory

JSON example

```
{
  "operation": "LIVE_MIGRATE",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_MACHINE",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "resourcePool",
      "value": "{resourcePool}"
    },
    {
      "key": "instanceID",
      "value": "{instanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>LIVE_MIGRATE</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_MACHINE</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
    <parameter>
      <key>resourcePool</key>
      <value>{resourcePool}</value>
    </parameter>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.46.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.47 Scale Down VNF

1.47.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false
nfvd	true	false	false

1.47.2 Request

Parameters:

input-param	condition
modeInstanceID	Mandatory
resourcePool	Mandatory
instanceID	Mandatory

JSON example

```
{
  "operation": "SCALE_DOWN",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    },
    {
      "key": "resourcePool",
      "value": "{resourcePool}"
    },
    {
      "key": "instanceID",
      "value": "{instanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>SCALE_DOWN</operation>
  <type>INSTANCE</type>
  <subtype>VNF</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
    <parameter>
      <key>resourcePool</key>
      <value>{resourcePool}</value>
    </parameter>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.47.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
}
```

```
"output-params": []  
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```


1.48 Sync Scale Down VNF

1.48.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false
nfvd	true	false	false

1.48.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "SCALE_DOWN",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>SCALE_DOWN</operation>
  <type>INSTANCE</type>
  <subtype>VNF </subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.48.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
```

```
<code>200</code>  
<delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
<description>Operation finished successfully</description>  
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.49 Async Scale In VNF

1.49.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false
nfvd	true	false	false

1.49.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "SCALE_IN",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>SCALE_IN</operation>
  <type>INSTANCE</type>
  <subtype>VNF </subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.49.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.50 Sync Scale In VNF

1.50.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false
nfvd	true	false	false

1.50.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "SCALE_IN",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>SCALE_IN</operation>
  <type>INSTANCE</type>
  <subtype>VNF </subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.50.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
```

```
<delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
<description>Operation finished successfully</description>  
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.51 Async Scale Out VNF

1.51.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false
nfvd	true	false	false

1.51.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "SCALE_OUT",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>SCALE_OUT</operation>
  <type>INSTANCE</type>
  <subtype>VNF </subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.51.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```


1.52 Sync Scale Out VNF

1.52.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false
nfvd	true	false	false

1.52.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "SCALE_OUT",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>SCALE_OUT</operation>
  <type>INSTANCE</type>
  <subtype>VNF </subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.52.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
```

```
<delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
<description>Operation finished successfully</description>  
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.53 Async Scale Up VNF

1.53.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false
nfvd	true	false	false

1.53.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "SCALE_UP",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>SCALE_UP</operation>
  <type>INSTANCE</type>
  <subtype>VNF </subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.53.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.54 Sync Scale Up VNF

1.54.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false
nfvd	true	false	false

1.54.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "SCALE_UP",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>SCALE_UP</operation>
  <type>INSTANCE</type>
  <subtype>VNF </subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.54.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
```

```
<delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
<description>Operation finished successfully</description>  
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.55 Async Scale In VNF_COMPONENT

1.55.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false
nfvd	true	false	false

1.55.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "SCALE_IN",
  "type": "INSTANCE",
  "subtype": "VNF_COMPONENT",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>SCALE_IN</operation>
  <type>INSTANCE</type>
  <subtype>VNF_COMPONENT </subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.55.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```


1.56 Sync Scale In VNF_COMPONENT

1.56.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false
nfvd	true	false	false

1.56.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "SCALE_IN",
  "type": "INSTANCE",
  "subtype": "VNF_COMPONENT",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>SCALE_IN</operation>
  <type>INSTANCE</type>
  <subtype>VNF_COMPONENT </subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.56.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
```

```
<delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
<description>Operation finished successfully</description>  
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.57 Async Scale Out VNF_COMPONENT

1.57.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false
nfvd	true	false	false

1.57.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "SCALE_OUT",
  "type": "INSTANCE",
  "subtype": "VNF_COMPONENT",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>SCALE_OUT</operation>
  <type>INSTANCE</type>
  <subtype>VNF_COMPONENT </subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.57.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.58 Sync Scale Out VNF_COMPONENT

1.58.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false
nfvd	true	false	false

1.58.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "SCALE_OUT",
  "type": "INSTANCE",
  "subtype": "VNF_COMPONENT",
  "communication-type": "SYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>SCALE_OUT</operation>
  <type>INSTANCE</type>
  <subtype>VNF_COMPONENT </subtype>
  <communication-type>SYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.58.3 Response

JSON example

```
{
  "code": 200,
  "description": "Operation finished successfully",
  "start-timestamp": "2015-07-31T07:51:46.784+0200",
  "finish-timestamp": "2015-07-31T07:51:46.893+0200",
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200"
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd-ext">
  <code>200</code>
```

```
<delivery-timestamp>2015-07-31T07:50:29.328+0200</delivery-timestamp>  
<description>Operation finished successfully</description>  
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.59 Start Virtual Machine

1.59.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false

1.59.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "START",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_MACHINE",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>START</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_MACHINE </subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.59.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
```

```
<code>200</code>  
<description>Operation finished successfully</description>  
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```


1.60 Stop Virtual Machine

1.60.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	false	false
vnf_group	true	false	false

1.60.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "STOP",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_MACHINE",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>STOP</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_MACHINE </subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.60.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
```

```
<code>200</code>  
<description>Operation finished successfully</description>  
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.61 Undeploy Network Service

1.61.1 Scopes

scope	trackable	retryable	rollbackable
domain	true	true	true
organization	true	true	true
tenant	true	true	true

1.61.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "UNDEPLOY",
  "type": "INSTANCE",
  "subtype": "NETWORK_SERVICE",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>UNDEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>NETWORK_SERVICE</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.61.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">  
  <code>200</code>  
  <description>Operation finished successfully</description>  
  <finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
  <start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.62 Undeploy Organization

1.62.1 Scopes

scope	trackable	retryable	rollbackable
domain	true	true	false

1.62.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "UNDEPLOY",
  "type": "INSTANCE",
  "subtype": "ORGANIZATION",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>UNDEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>ORGANIZATION</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.62.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
```

```
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.63 Undeploy Tenant

1.63.1 Scopes

scope	trackable	retryable	rollbackable
organization	true	true	false

1.63.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "UNDEPLOY",
  "type": "INSTANCE",
  "subtype": "TENANT",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>UNDEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>TENANT</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.63.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
```

```
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```


1.64 Undeploy Virtual Link

1.64.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	true	false

1.64.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "UNDEPLOY",
  "type": "INSTANCE",
  "subtype": "VIRTUAL_LINK",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>UNDEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>VIRTUAL_LINK</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.64.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
```

```
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.65 Undeploy VNF

1.65.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	true	false
vnf_group	true	true	false

1.65.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "UNDEPLOY",
  "type": "INSTANCE",
  "subtype": "VNF",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>UNDEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>VNF</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.65.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
```

```
<code>200</code>  
<description>Operation finished successfully</description>  
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.66 Undeploy FW

1.66.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	true	false
vnf_group	true	true	false

1.66.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "UNDEPLOY",
  "type": "INSTANCE",
  "subtype": "VNF_FW",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>UNDEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>VNF_FW</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.66.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
```

```
<code>200</code>  
<description>Operation finished successfully</description>  
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```

1.67 Undeploy VNF Group

1.67.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	true	false

1.67.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "UNDEPLOY",
  "type": "INSTANCE",
  "subtype": "VNF_GROUP",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>UNDEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>VNF_GROUP</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.67.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
  <code>200</code>
  <description>Operation finished successfully</description>
```

```
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```


1.68 Undeploy LB

1.68.1 Scopes

scope	trackable	retryable	rollbackable
tenant	true	true	false
vnf_group	true	true	false

1.68.2 Request

Parameters:

input-param	condition
instanceID	Mandatory
modeInstanceID	Mandatory

JSON example

```
{
  "operation": "UNDEPLOY",
  "type": "INSTANCE",
  "subtype": "VNF_LB",
  "communication-type": "ASYNC",
  "input-params":
  [
    {
      "key": "instanceID",
      "value": "{instanceID}"
    },
    {
      "key": "modeInstanceID",
      "value": "{modeInstanceID}"
    }
  ]
}
```

XML example

```
<operation-request xmlns="http://www.hp.com/nfvd">
  <operation>UNDEPLOY</operation>
  <type>INSTANCE</type>
  <subtype>VNF_LB</subtype>
  <communication-type>ASYNC</communication-type>
  <input-params>
    <parameter>
      <key>instanceID</key>
      <value>{instanceID}</value>
    </parameter>
    <parameter>
      <key>modeInstanceID</key>
      <value>{modeInstanceID}</value>
    </parameter>
  </input-params>
</operation-request>
```

1.68.3 Response

JSON example

```
{
  "code": 503,
  "description": "Asynchronous operation successfully launched",
  "id": "c60577ad-7881-4208-a0f5-35b7d99a6395",
  "start-timestamp": null,
  "finish-timestamp": null,
  "delivery-timestamp": "2015-07-31T07:51:46.789+0200",
  "output-params": []
}
```

XML example

```
<operation-response xmlns="http://www.hp.com/nfvd">
```

```
<code>200</code>  
<description>Operation finished successfully</description>  
<finish-timestamp>2015-07-31T07:50:29.513+0200</finish-timestamp>  
<start-timestamp>2015-07-31T07:50:29.323+0200</start-timestamp>  
</operation-response>
```