HPE NFV Director

On-Boarding Guide Operations: Undeploy of a VNF

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Second Edition

Hewlett Packard Enterprise

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Preface

About this guide

This Guide is intended to explain and guide the user through the undeployment of a VNF.

Audience

This document is targeting any user level of NFV Director: Domain users, Organization Users, Tenant Users, Group Users and Datacenter users.

For On boarding VNFs please refer to VNF On-Boarding Guide

Document history

Table 1: Document history

Edition	Date	Description
1.0	30 August 2016	First Edition

Chapter 1 Undeploy of a VNF.

From now on, and to make easier the understanding of the TLDs, we are going to explain the functionality of each set of TASK_LIST_DEFINITION:GENERIC, and the number of TASK_DEFINITION:GENERIC children of the previously mentioned TASK_LIST_DEFINITION:GENERIC.

Basically, the TASK_LIST_DEFINITION:GENERIC connect what we can consider "units of execution", those are the TASK_DEFINITION:GENERIC, that have a WORKFLOW assigned to be executed when the execution of the TLD reach them.

If you like to have a more deep knowledge about the workflows mentioned through this document please refer to the specific document.

** If in the category FIND, the attribute Path is present, the attribute FIND.ArtifactType will be the starting artifact for the Path, but the FIND.Status attribute refers to the last artifact on the Path.

FIND.ArtifactType == VIRTUAL_MACHINE.

FIND.Status== INSTANTIATED.

FIND.Path==

VIRTUAL_MACHINE>VIRTUAL_CORE<CORE<CPU<SERVER<AVAILABILITY_ZONE<REGION>COMPUTE>FLAVOR

In this example, we are looking for a FLAVOR in status INSTANTIATED, we do not expect to get a VIRTUAL_MACHINE, in status INSTANTIATED.

**If during the use of the TLDs, the "Regenerate UUIDs" option is used, the user should check the Id of the tree that brings all the elements of the TLD, this "id" is specific and it will be the same for all the tree groups in all the TLDs.

** The two modes available are "Default" and "Simulated", the second one is only available if it is configured previously, by defect, the mode that will be used is "Default".

Chapter 2 Specific Elements of the TLD Undeploy VNF

In this chapter the different elements of the specific TLD will be explained conscientiously.

2.1 TLD Undeploy PRE VNF: Undeploy PRE.

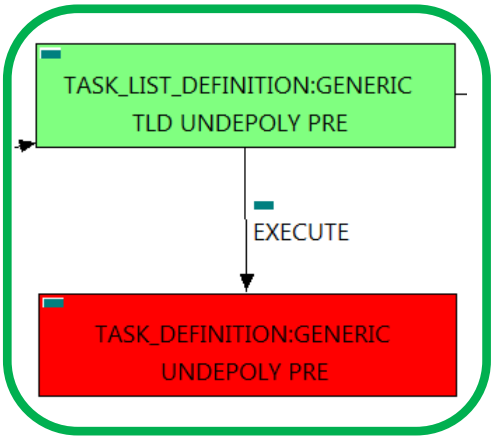


Figure 1: Undeploy Preprocessing policies

This TD is responsible of the deletion in the right order PreProcessing policies, these policies allow the user to set a number of elements that should be taken in consideration in a certain order, during the Undeploy process this policies should be taken down in the right order, in other way the Undeploy could be unsuccessful.

Targets of the TASK DEFINITION:
STATUS of the TD: ENABLED
Categories:

FIND.MainArtifact == POLICY:POSTPRE_PROCESSING.
FIND.Condition == **PROCESSING_JOB.Job_type==constant:PRE&& PROCESSING_JOB.Operation==constant:UNDEPLOY**
EXECUTE.OrderBy == ***PROCESSING_JOB.OrderBy***

In this TD there is not a workflow to be executed, the target of this TD is process in the correct order the PreProcessing policies present in the VNF, these policies should be executed in a specific order to make the changes or configurations properly, in other case an error will be launched

If the TD ends successfully, the Pre-Processing policies will have been deleted adequately.

In case of error during the execution, the TD will jump to the ROLLBACK category, If the “Behaviour_on_error” attribute its set on “ROLLBACK” the WF will start the execution of the Workflow present in the attribute with the same name in the category ROLLBACK,but in this case, we have a “STOP” as value set for behavior, so no Rollback it is going to be initiated, the execution will stop.

Due to that the value of the attribute DATA.Lock is false, when the Task Definition has finished the artifact that was used in the workflow executed will remain unlocked.

2.2 TLD Undeploy VNF: STOP_MONITOR.

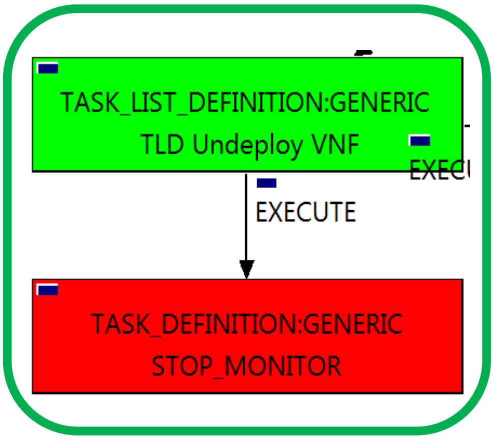


Figure 2: Stop Monitor.

The TDs that have present in the their names “Stop”, are Task Definitions responsible of the stopping of an specific artifact or element, in this case of the MONITORs, the TLD it is going to stop the MONITOR element given.

Once finished, our VNF should have the MONITOR given in status DEPLOYED, having taken in consideration all the rules for the stopping.

Targets of the TASK DEFINITION:
STATUS of the TD: ENABLED
Categories:

FIND.MainArtifact ==	MONITOR.
FIND.Condition==	**status==constant:STARTED**
SET.Running_Status ==	STARTED.
SET.Status ==	DEPLOYED.
EXECUTE.OrderBy ==	**GENERAL.order**
EXECUTE.Workflow ==	
	“WF_TS_MONITOR_STOP”
ROLLBACK.Behaviour_on_error ==	STOP
ROLLBACK.Number_of_retries ==	0
DATA.Lock ==	false

The Workflow present in EXECUTE.Workflow it is going to seek a MONITOR in Status STARTED in the DDBB, when the WF find it, it will start. This workflow stop the given MONITOR needed by the VNF to get a successful Undeploy.

In case of error during the execution, the TD will jump to the ROLLBACK category, If the “Behaviour_on_error” attribute its set on “ROLLBACK” the WF will start the execution of the Workflow present in the attribute with the same name in the category ROLLBACK,but in this case, we have a “STOP” as value set for behavior, so no Rollback it is going to be initiated, the execution will stop.

Due to that the value of the attribute DATA.Lock is false, when the Task Definition has finished the artifact that was used in the workflow executed will remain unlocked.

2.3 TLD Deactivate VM : Deactivate_VM.

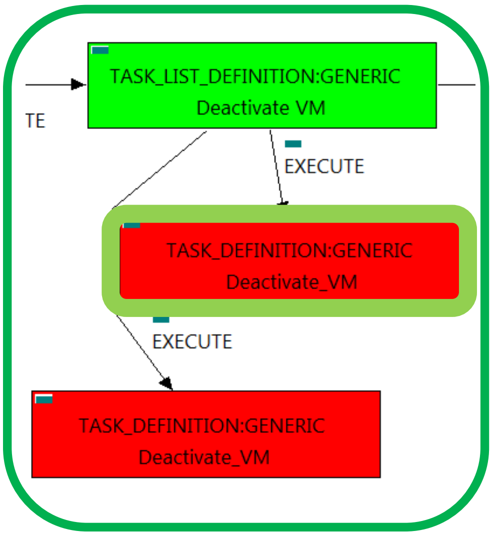


Figure 3: Deactivation of a stopped VM.

The TDs that have present in the their names “Deactivate”, are Task Definitions responsible of the deactivation in the platform targeted and the updating of the status in the platform and the DDBB, in this case, the artifact that is going to be deactivated is a “VIRTUAL_MACHINE with status “STOPPED”, this means, when this workflow finish, we will have the VIRTUAL_MACNIHE given with a new status INSTANTIATED.

Targets of the TASK DEFINITION:
STATUS of the TD: ENABLED
Categories:

FIND.MainArtifact == **VNF>VNF_COMPONENT> VIRTUAL_MACHINE@status=STOPPED.**
SET.Running_Status == ACTIVE.
SET.Status == TERMINATED.
EXECUTE.OrderBy = **GENERAL.order**
EXECUTE.Workflow == ***“WF_TS_DEACTIVATE_VM”***
ROLLBACK.Behaviour_on_error == STOP
ROLLBACK.Number_of_retries == 0
ROLLBACK.Workflow== ***“WF_TS_ACTIVATE_VM”***
DATA.Lock == false

The Workflow present in EXECUTE.Workflow attribute it is going to deactivate a “VIRTUAL_MACHINE” in Status ACTIVE in the DDBB . Once found , the WF will start the deactivation, if the deactivation it is successful we set the status of the artifact as the SET.Status attribute dictates. The attribute SET.Running_Status concern about the temporal status that the artifact it is going to maintain until the final change of status that comes from SET.Status.

This TD could launch different workflows depending on the type of the VM that it is going to be deactivated, the main kinds of our VIRTUAL_MACHINEs are HELION, and thereupon two of the WFs that could be used in this deactivation are: “WF_NFVD_DEACTIVATE_VM_HELION” and “WF_NFVD_DEACTIVATE_VM_OPENSTACK”.

In case of error during the execution, the workflow jump to the ROLLBACK category, If the “Behaviour_on_error” attribute its set on “ROLLBACK” the WF will start the execution of the Workflow present in the attribute with the same name in the category ROLLBACK, in this case it will be “WF_TS_ACTIVATE_VM”, but in this case, we have a “STOP” set as behavior, so no Rollback it is going to be initiated, so the execution it is going to end here in case of error.

Due to that the value of the attribute DATA.Lock is false, when the Task Definition has finished the artifact that was used in the workflow executed will remain unlocked.

2.4 TLD Deactivate VM : Deactivate_VM.

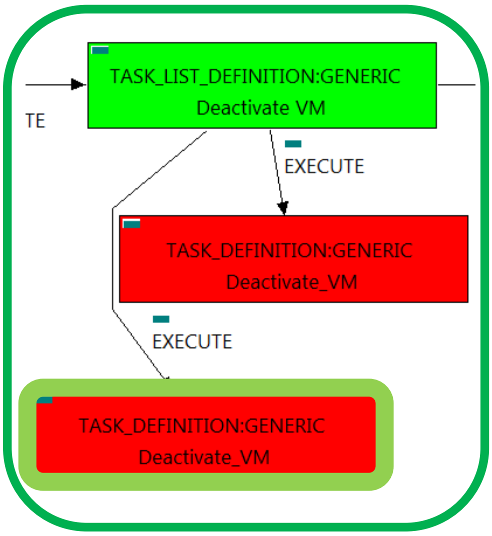


Figure 4: Deactivation of an active VM

The TDs that have present in the their names "Deactivate", are Task Definitions responsible of the deactivation in the platform targeted and the updating of the status in the platform and the DDBB, in this case, the artifact that is going to be deactivated is a "VIRTUAL_MACHINE with status "ACTIVE", this means, when this workflow finish, we will have the VIRTUAL_MACNIHE given with a new status INSTANTIATED.

Targets of the TASK DEFINITION:
STATUS of the TD: ENABLED
Categories:

FIND.MainArtifact == **VNF>VNF_COMPONENT> VIRTUAL_MACHINE@status=ACTIVE.**
SET.Running_Status == ACTIVE.
SET.Status == TERMINATED.
EXECUTE.OrderBy = **GENERAL.order**
EXECUTE.Workflow ==
"WF_TS_DEACTIVATE_VM"
ROLLBACK.Behaviour_on_error == STOP
ROLLBACK.Number_of_retries == 0
DATA.Lock == false

The Workflow present in EXECUTE.Workflow attribute it is going to deactivate a "VIRTUAL_MACHINE" in Status ACTIVE in the DDBB . Once found , the WF will start the deactivation, if the deactivation it is successful we set the status of the artifact as the SET.Status attribute dictates. The attribute SET.Running_Status concern about the temporal status that the artifact it is going to maintain until the final change of status that comes from SET.Status.

This TD could launch different workflows depending on the type of the VM that it is going to be deactivated, the main kinds of our VIRTUAL_MACHINEs are HELION, and thereupon two of the WFs that could be used in this deactivation are: "WF_NFVD_DEACTIVATE_VM_HELION" and "WF_NFVD_DEACTIVATE_VM_OPENSTACK".

In case of error during the execution, the workflow jump to the ROLLBACK category, If the "Behaviour_on_error" attribute its set on "ROLLBACK" the WF will start the execution of the Workflow present in the attribute with the same name in the category ROLLBACK, in this case it will be "WF_TS_ACTIVATE_VM", but in this case, we have a "STOP" set as behavior, so no Rollback it is going to be initiated, so the execution it is going to end here in case of error.

Due to that the value of the attribute DATA.Lock is false, when the Task Definition has finished the artifact that was used in the workflow executed will remain unlocked.

2.5 TLD Undeploy POST VNF: Undeploy POST.

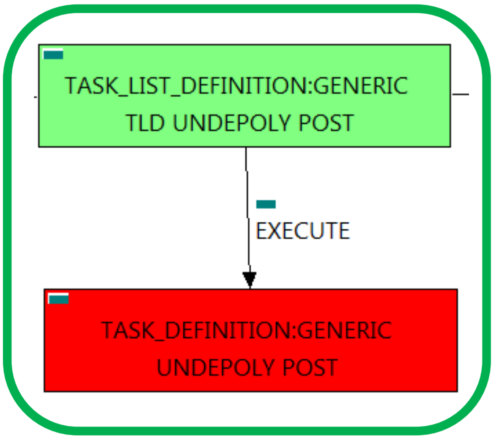


Figure 5: Undeploy Post-processing policies

This TD is responsible of the deletion in the right order Post-processing policies, these policies allow the user to set a number of elements that should be taken in consideration in a certain order after the execution of the component referenced by the policy, during the Undeploy process this policies should be taken down in the right order, in other way the Undeploy could be unsuccessful.

Targets of the TASK DEFINITION:
STATUS of the TD: ENABLED
Categories:

FIND.MainArtifact == POLICY:POSTPRE_PROCESSING.
FIND.Condition ==
PROCESSING_JOB.Job_type==constant:POST&&
PROCESSING_JOB.Operation==constant:UNDEPLOY
EXECUTE.OrderBy == ***PROCESSING_JOB.OrderBy***
EXECUTE.Inactive == false
DATA.Lock == false

In this TD there is not workflow to be executed, the target of this TD is process in the correct order the Post-Processing policies present in the VNF, these policies should be executed in a specific order to make the changes or configurations properly, in other case an error will be launched

If the TD ends successfully, the Pre-Processing policies will have been deleted adequately.

In case of error during the execution, the TD will jump to the ROLLBACK category, If the “Behaviour_on_error” attribute its set on “ROLLBACK” the WF will start the execution of the Workflow present in the attribute with the same name in the category ROLLBACK,but in this case, we have a “STOP” as value set for behavior, so no Rollback it is going to be initiated, the execution will stop.

Due to that the value of the attribute DATA.Lock is false, when the Task Definition has finished the artifact that was used in the workflow executed will remain unlocked.

2.6 TLD Delete vPort: delete vport.

The TDs that have present in their names “Delete”, are Task Definitions that delete an artifact or element from the DDBB or from the platforms targeted, in this case, the artifact that it is going to be delated is the VIRTUAL_PORT given.

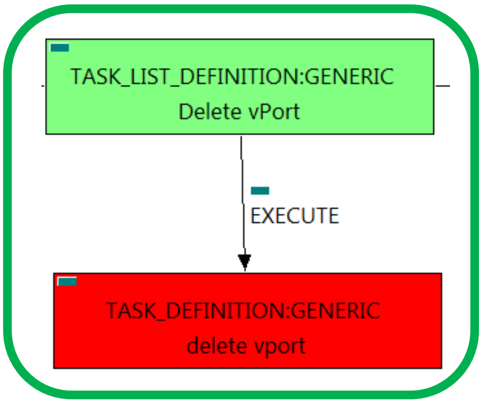


Figure 6: Delete vPort.

Targets of the TASK:DEFINITION:
STATUS of the TD: ENABLED
Categories:

FIND.MainArtifact ==
VNF>VNF_COMPONENT>
VIRTUAL_MACHINE>VIRTUAL_PORT@status=ACTIVE

SET.Running_Status ==	ACTIVE.
SET.Status ==	ENABLED.
EXECUTE.Workflow == *__“WF_TS_DEACTIVATE_PORT”__*	
EXECUTE.Inactive ==	false
ROLLBACK.Behaviour_on_error ==	STOP
ROLLBACK.Number_of_retries ==	0
DATA.Lock ==	false

The Workflow present in EXECUTE.Workflow it is going to seek a VIRTUAL_PORT in Status ACTIVE in the DDBB, when the WF find it, it will start. This workflow will start one more, this last one, it is going to be named after the VIRTUAL_PORT that the TD it is trying to delete.

In case of error during the execution, the workflow jump to the ROLLBACK category, If the “Behaviour_on_error” attribute its set on “ROLLBACK” the WF will start the execution of the Workflow present in the attribute with the same name in the category ROLLBACK, but in this case, we have a “STOP” set as behavior, so no Rollback it is going to be initiated, so the execution it is going to end here in case of error.

Due to that the value of the attribute DATA.Lock is false, when the Task Definition has finished the artifact that was used in the workflow executed will remain unlocked.

2.7 TLD DEACTIVATE BRIDGE VPORT: DEACTIVATE_PORT_GROUP.

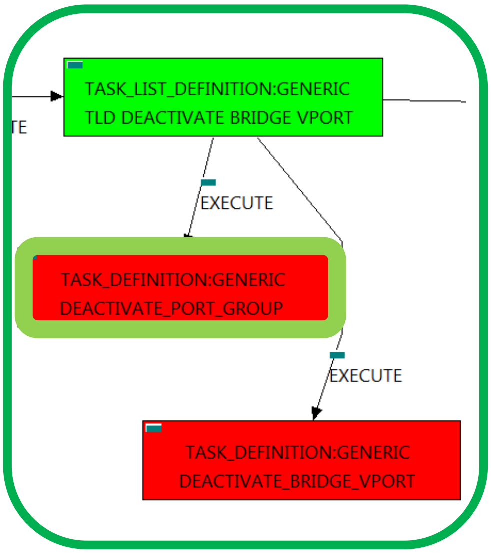


Figure 7: Deactivation of the Port Group element.

The TDs that have present in the their names "Deactivate", are Task Definitions responsible of the deactivation in the platform targeted and the updating of the status in the platform and the DDBB, in this case, the artifact that is going to be deactivated is a "PORT_GROUP:VCENTER", this means, when this workflow finish, we will have the artifact PORT_GROUP with status INSTANTIATED.

Targets of the TASK:DEFINITION:
STATUS of the TD: ENABLED
Categories:

FIND.MainArtifact ==
VNF>VNF_COMPONENT>
VIRTUAL_MACHINE>VIRTUAL_PORT<PORT_GROUP
EXECUTE.Workflow ==
"WF_TS_DEACTIVATE_PORT_GROUP_VCENTER"
ROLLBACK.Behaviour_on_error == STOP
ROLLBACK.Number_of_retries == 0
DATA.Lock == true

The Workflow present in EXECUTE.Workflow attribute it is going to seek a VIRTUAL_PORT that match the FIND.Condition attribute with value "INFO.Type=pci-sriov" with Status ACTIVE.

Once found, the WF will start the deactivation, if the deactivation it is successful we set the status of the artifact as the SET.Status attribute dictates. The attribute SET.Running_Status concern about the temporal status that the artifact it is going to maintain until the final change of status that comes from SET.Status.

In case of error during the execution, the workflow jump to the ROLLBACK category, If the "Behaviour_on_error" attribute its set on "ROLLBACK" the WF will start the execution of the Workflow present in the attribute with the same name in the category ROLLBACK, but in this case, we have a "STOP" set as behavior, so no Rollback it is going to be initiated, so the execution it is going to end here in case of error.

Due to that the value of the attribute DATA.Lock is true, when the Task Definition has finished the artifact PORT_GROUP that was used in the workflow executed will be assigned a state of "locked".

2.8 TLD DEACTIVATE BRIDGE VPORT: DEACTIVATE_BRIDGE_VPORT.

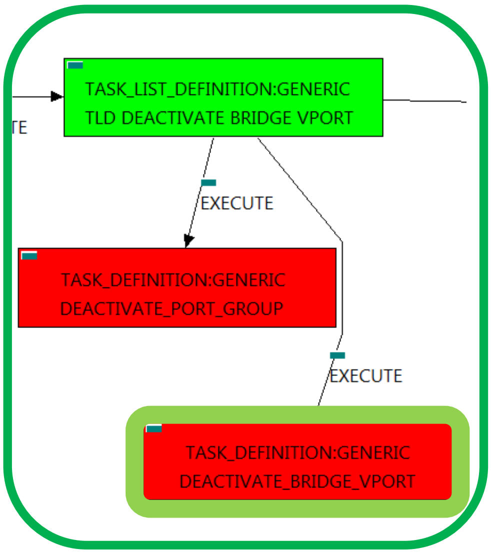


Figure 8 : Deactivation of the BRIDGE Virtual Port.

This TD it is going to deactivate our BRIDGE VPORT, this means, the WF implied in this TLD is going to find and deactivate a BRIDGE PORT in status ENABLED that fills the conditions present in the TD.

Once finished, we will have a BRIDGE PORT deactivated with status ENABLED with all the relationship needed for the correct behavior of the artifact still present, prepare to be deleted when required.

Targets of the TASK:DEFINITION:
STATUS of the TD: ENABLED
Categories:

FIND.MainArtifact == **VNF>VNF_COMPONENT> VIRTUAL_MACHINE> VIRTUAL_PORT@status=ACTIVE#INFO.Type==pci-sriov.**
SET.Running_Status == ACTIVE.
EXECUTE.Workflow ==
“WF_TS_DEACTIVATE_SDN_BRIDGE_VPORT”
ROLLBACK.Behaviour_on_error == STOP
ROLLBACK.Number_of_retries == 0
DATA.Lock == false

The Workflow present in EXECUTE.Workflow attribute it is going to seek a VIRTUAL_PORT that match the condition and path given by the attribute FIND.MainArtifact with value “VNF>VNF_COMPONENT>VIRTUAL_MACHINE>VIRTUAL_PORT@status=ACTIVE#INFO.Type==pci-sriov” with Status ACTIVE.

Once found, the WF will start the deactivation, if the deactivation it is successful we set the status of the artifact as the SET.Status attribute dictates. The attribute SET.Running_Status concern about the temporal status that the artifact it is going to maintain until the final change of status that comes from SET.Status.

In case of error during the execution, the workflow jump to the ROLLBACK category, If the “Behaviour_on_error” attribute its set on “ROLLBACK” the WF will start the execution of the Workflow present in the attribute with the same name in the category ROLLBACK, but in this case, we have a “STOP” set as behavior, so no Rollback it is going to be initiated, so the execution it is going to end here in case of error.

Due to that the value of the attribute DATA.Lock is false, when the Task Definition has finished the artifact that was used in the workflow executed will remain unlocked.

2.9 TLD DEACTIVTE VLAN: DEACTIVATE_VLAN

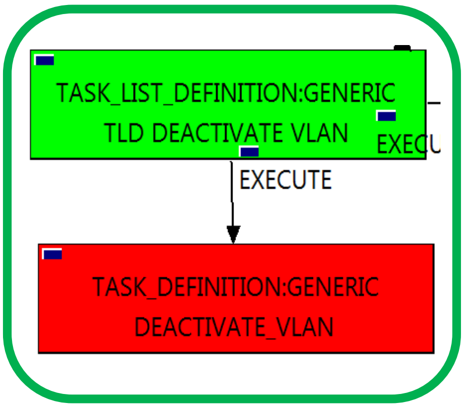


Figure 9: Deactivate vLAN.

This TD it is going to deprovision a VLAN:DCN, this means, the WF implied in this TLD is going to query the SRIOV and SWITCH VIRTUAL_PORTs that are related with our VIRTUAL_LINK:PHYSICAL to get the NETWORKS:GENERIC of type "vlan" and NETWORKS:OS related to these NETWORK "vlan" of the VL specified, in order to deprovision our VLAN:DCN.

Once finished, we will have deprovision a VLAN:DCN with all the relationship needed for the correct behavior of the artifact still present, prepare to be deleted when required.

Targets of the TASK:DEFINITION:
STATUS of the TD: ENABLED
Categories:

FIND.MainArtifact==
VNF>VNF_COMPONENT>VIRTUAL_MACHINE> VIRTUAL_PORT:GENERIC#INFO.Type=pci-sriov> VLAN@status=ACTIVE
SET.Running_Status == ACTIVE.
EXECUTE.Workflow ==
"WF_TS_DEACTIVATE_SDN_VLAN"
ROLLBACK.Behaviour_on_error == STOP
ROLLBACK.Number_of_retries == 0
DATA.Lock == false

The Workflow present in EXECUTE.Workflow attribute it is going to seek a VIRTUAL_PORT:GENERIC that match the FIND.MainArtifact attribute with value : "VNF>VNF_COMPONENT>VIRTUAL_MACHINE>VIRTUAL_PORT:GENERIC#INFO.Type=pci-sriov>VLAN@status=ACTIVE" in Status ACTIVE in the DDBB.

Once found , the WF will start the activation, if the activation it is successful we set the status of the artifact as the SET.Status attribute dictates. The attribute SET.Running_Status concern about the temporal status that the artifact it is going to maintain until the final change of status that comes from SET.Status.

In case of error during the execution, the workflow jump to the ROLLBACK category, If the "Behaviour_on_error" attribute its set on "ROLLBACK" the WF will start the execution of the Workflow present in the attribute with the same name in the category ROLLBACK, but in this case, we have a "STOP" set as behavior, so no Rollback it is going to be initiated, so the execution it is going to end here in case of error.

Due to that the value of the attribute DATA.Lock is false, when the Task Definition has finished the artifact that was used in the workflow executed will remain unlocked.

2.10 TLD DELETE VLAN: DELETE_VLAN.

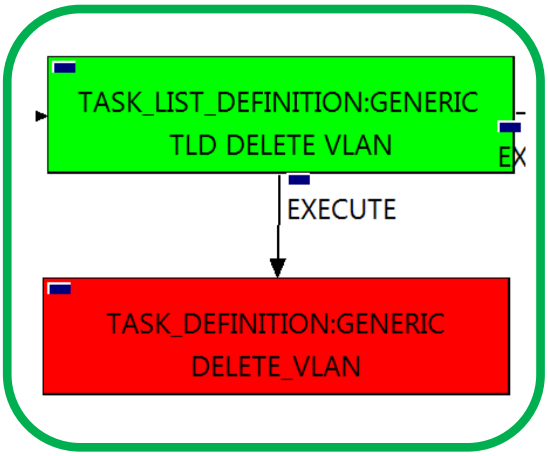


Figure 10: Delete vLAN.

This TD it is going to delete the VLAN:DCN previously deactivated, this means, the WF implied in this TLD is going to query the SRIOV and SWITCH VIRTUAL_PORTs that are related with our VIRTUAL_LINK:PHYSICAL to get the proper artifact, in order to delete our VLAN:DCN.

Once finished, we will have deleted a VLAN:DCN with all the its relationship.

Targets of the TASK:DEFINITION:

STATUS of the TD: ENABLED

Categories:

FIND.MainArtifact == **VNF>VNF_COMPONENT>VIRTUAL_MACHINE> VIRTUAL_PORT:GENERIC#INFO.Type=pci-sriov> VLAN@status=ACTIVE.**
SET.Running_Status == ACTIVE.
EXECUTE.Workflow == ***"WF_TS_DEPROVISION_SDN_VLAN"***
ROLLBACK.Behaviour_on_error == STOP
ROLLBACK.Number_of_retries == 0
DATA.Lock == false

The Workflow present in EXECUTE.Workflow attribute it is going to seek a VIRTUAL_PORT:GENERIC that match the FIND.MainArtifact attribute with value "VNF>VNF_COMPONENT>VIRTUAL_MACHINE>VIRTUAL_PORT:GENERIC#INFO.Type=pci-sriov>VLAN@status=ACTIVE" in Status ENABLED in the DDBB.

Once found , the WF will start the deleting, if the deletion it is successful we set the status of the artifact as the SET.Status attribute dictates. The attribute SET.Running_Status concern about the temporal status that the artifact it is going to maintain until the final change of status that comes from SET.Status.

In case of error during the execution, the workflow jump to the ROLLBACK category, If the "Behaviour_on_error" attribute its set on "ROLLBACK" the WF will start the execution of the Workflow present in the attribute with the same name in the category ROLLBACK, but in this case, we have a "STOP" set as behavior, so no Rollback it is going to be initiated, so the execution it is going to end here in case of error.

Due to that the value of the attribute DATA.Lock is false, when the Task Definition has finished the artifact that was used in the workflow executed will remain unlocked.

2.11 TLD Undeploy Monitor, Volume: UNDEPLOY_MONITOR

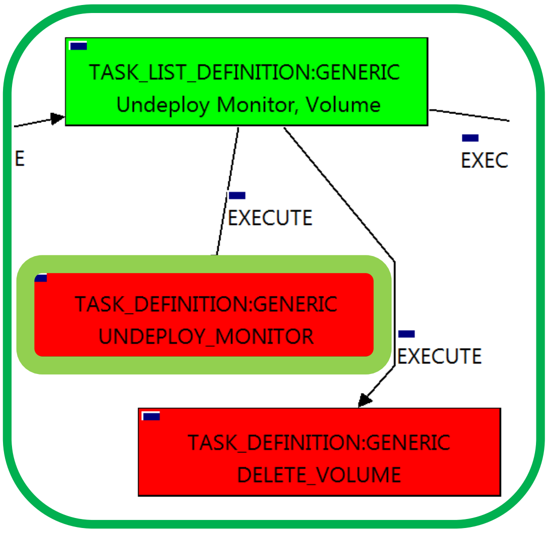


Figure 11: Undeploy Monitor

The TDs that have present in the their names “Deploy” are Task Definitions responsible of the deployment in the platform targeted and the updating of the status in the platform and the DDBB , these deployments are slightly different to the ones we launch for our entities, as a rule, they are small components as the MONITORs. In this case, the artifact that is going to be deployed is a “MONITOR”, this means, when this workflow finish, we will have a MONITOR deployed with status DEPLOYED.

Targets of the TASK:DEFINITION:
STATUS of the TD: ENABLED
Categories:

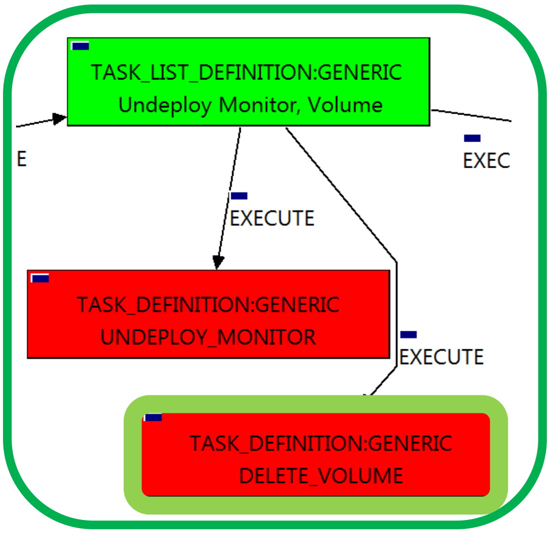
FIND.ArtifactType ==	MONITOR.
FIND.Condition ==	**status==constant:DEPLOYED**
SET.Running_Status ==	DEPLOYED.
SET.Status ==	INSTANTIATED
EXECUTE.Workflow ==	***“WF_TS_MONITOR_UNDEPLOY”***
ROLLBACK.Behaviour_on_error ==	STOP
ROLLBACK.Number_of_retries ==	0
DATA.Lock ==	false

The Workflow present in EXECUTE.Workflow attribute it is going to seek a MONITOR in Status DEPLOYED in the DDBB . Once found , the WF will start the deployment, if the deployment is successful we set the status of the artifact as the SET.Status attribute dictates. The attribute SET.Running_Status concern about the temporal status that the artifact it is going to maintain until the final change of status that comes from SET.Status.

In case of error during the execution, the workflow jump to the ROLLBACK category, If the “Behaviour_on_error” attribute its set on “ROLLBACK” the WF will start the execution of the Workflow present in the attribute with the same name in the category ROLLBACK, but in this case, we have a “STOP” set as behavior, so no Rollback it is going to be initiated, so the execution it is going to end here in case of error.

Due to that the value of the attribute DATA.Lock is false, when the Task Definition has finished the artifact that was used in the workflow executed will remain unlocked.

2.12 TLD Undeploy Monitor, Volume: DELETE_VOLUME



The TDs that have present in the their names "Delete", are Task Definitions responsible of the deletion of an artifact in the platform targeted and the updating of the status in the platform and the DDBB, in this case, the artifact that is going to be deleted is a "VOLUME", this means, when this workflow finish, we are going to have a volume less.

Targets of the TASK:DEFINITION:
STATUS of the TD: ENABLED
Categories:

FIND.MainArtifact ==
VNF>VNF_COMPONENT>
VIRTUAL_MACHINE>VIRTUAL_LUN.
EXECUTE.Workflow ==
"WF_TS_DELETE_VOLUME"
ROLLBACK.Behaviour_on_error == CONTINUE
ROLLBACK.Number_of_retries == 0
DATA.Lock == false

Figure 12: Delete Volume.

The Workflow present in EXECUTE.Workflow attribute it is going to seek a VIRTUAL_LUN in the DDBB . Once found , the WF will start the deleting, if the deletion it is successful we set the status of the artifact as the SET.Status attribute dictates. The attribute SET.Running_Status concern about the temporal status that the artifact it is going to maintain until the final change of status that comes from SET.Status.

In case of error during the execution, the workflow jump to the ROLLBACK category, If the "Behaviour_on_error" attribute its set on "ROLLBACK" the WF will start the execution of the Workflow present in the attribute with the same name in the category ROLLBACK, in this case the behavior is set as CONTINUE, this means, that the execution is going to continue no matter which error could be.

Due to that the value of the attribute DATA.Lock is false, when the Task Definition has finished the artifact that was used in the workflow executed will remain unlocked.

2.13 TLD VNF Inventory Delete: DELETE_INVENTORY.

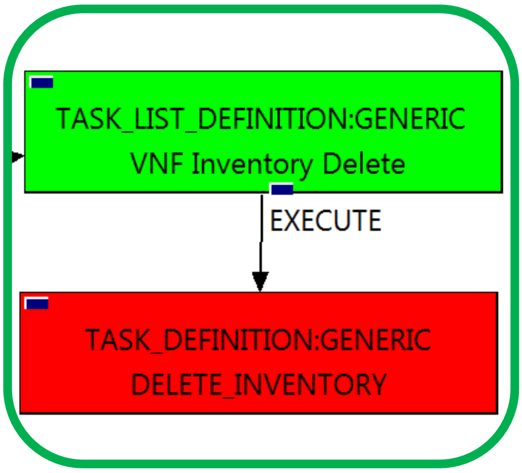


Figure 13: Delete Inventory.

The TDs that have present in their names "Delete Inventory", are Task Definitions responsible of the deletion of the artifact given, in this case, this TD it is going to delete a VNF, notice the workflow used in this TD, "WF_TS_DELETE_INSTANCE_TREE", all the components and elements below the entity that it is going to be deleted , are going to be eliminated as well.

Targets of the TASK:DEFINITION:
STATUS of the TD: ENABLED
Categories:

EXECUTE.Workflow ==
"WF_TS_DELETE_INSTANCE_TREE"
ROLLBACK.Behaviour_on_error == STOP
ROLLBACK.Number_of_retries == 0

The Workflow present in EXECUTE.Workflow attribute it is going to seek a VNF in the DDBB . Once found , the WF will start the deleting.

In case of error during the execution, the workflow jump to the ROLLBACK category, If the "Behaviour_on_error" attribute its set on "ROLLBACK" the WF will start the execution of the Workflow present in the attribute with the same name in the category ROLLBACK, but in this case, we have a "STOP" set as behavior, so no Rollback it is going to be initiated, so the execution it is going to end here in case of error.