



HPE NFV Director

On-Boarding Guide Operation: Undeploy Organization

Release 4.1

Second Edition



Hewlett Packard
Enterprise

Notices

Legal notice

© Copyright 2016 Hewlett Packard Enterprise Development LP

Confidential computer software. Valid license from HPE required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

The information contained herein is subject to change without notice. The only warranties for HPE products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HPE shall not be liable for technical or editorial errors or omissions contained herein.

Printed in the US

Trademarks

Linux is the registered trademark of Linus Torvalds in the U.S. and other countries.

Oracle and Java are registered trademarks of Oracle and/or its affiliates.

Adobe®, Acrobat® and PostScript® are trademarks of Adobe Systems Incorporated.

Microsoft®, Internet Explorer, Windows®, Windows Server 2007®, Windows XP®, and Windows 7® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Firefox® is a registered trademark of the Mozilla Foundation.

Google Chrome® is a trademark of Google Inc.

EnterpriseDB® is a registered trademark of EnterpriseDB.

Postgres Plus® Advanced Server is a registered U.S. trademark of EnterpriseDB.

UNIX® is a registered trademark of The Open Group.

X/Open® is a registered trademark, and the X device is a trademark of X/Open Company Ltd. in the UK and other countries.

Red Hat® is a registered trademark of the Red Hat Company.

Apache CouchDB, CouchDB, and the project logo are trademarks of The Apache Software Foundation.

Node.js project. Joyent® and Joyent's logo are registered trademarks of Joyent, Inc.

Neo4j is a trademark of Neo Technology.

Contents

Notices	1
Preface	5
About this guide.....	5
Audience.....	5
Document history.....	5
Chapter 1 Undeploy of an Organization.....	6
Chapter 2 Specific Elements of the TLD Undeploy Organization.....	7
2.1 TLD CHECK UNDEPLOY AND DEACTIVATE: Undeploy_Check.....	7
2.2 TLD CHECK UNDEPLOY AND DEACTIVATE: Getting_Macronet	8
2.3 TLD CHECK UNDEPLOY AND DEACTIVATE: Deactivate Macronet	9
2.4 TLD DEACTIVATE ENTRIES: Deactivate Enterprise.	10
2.5 TLD DEACTIVATE ENTERPRISE Profile: Deactivate Enterprise Profile.	11
2.6 TLD DEACTIVATE OO: Deactivate OO.....	12
2.7 TLD INVENTORY MACRONET DELETE: Deprovision Macronet.....	13
2.8 TLD INVENTORY ORGANIZATION DELETE: Deprovision Enterprise.....	14
2.9 TLD DELETE ORGANIZATION: Organization Delete.....	15

List of tables

Table 1: Document history.....	5
--------------------------------	---

List of figures

Figure 1: Undeploy check.....	7
Figure 2: Selecting the adequate Macronet to be deleted.	8
Figure 3: Deactivating the specific Macronet.	9
Figure 4: Deactivate Enterprise.....	10
Figure 5: Deactivate Enterprise profile.	11
Figure 6: Deactivate OO.	12
Figure 7: Deprovision Macronet.	13
Figure 8: Deprovision Enterprise.....	14
Figure 9: Organization Delete.....	15

Preface

About this guide

This Guide is intended to explain and guide the user through the undeployment of an Organization.

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 an Organization.

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 Organization.

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

2.1 TLD CHECK UNDEPLOY AND DEACTIVATE: Undeploy_Check

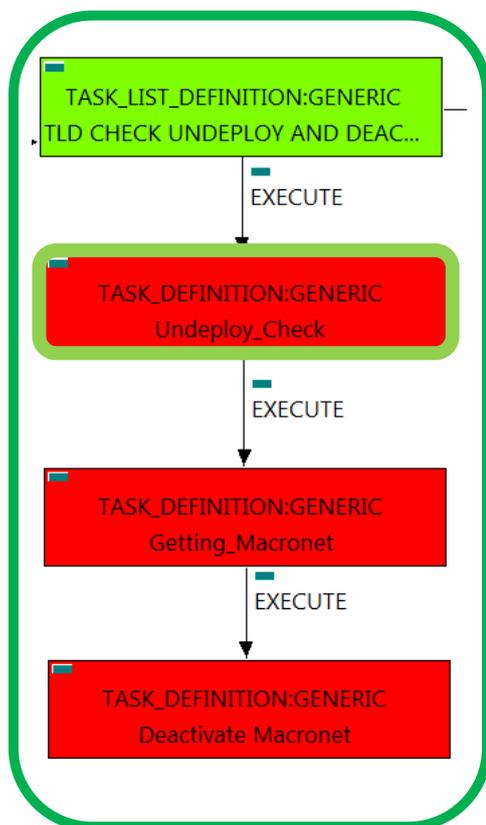


Figure 1: Undeploy check.

This TD it is going to assure the scenario in order to delete a specific Organization, this means that during the execution the TD is going to check if all the children of the Organization are still or were properly deleted before launch the undeploy of an Organization.

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

Categories:
 GENERAL.Name == Undeploy check
 FIND.Condition == **status==constant:ACTIVE**
 EXECUTE.Workflow == **"WF_TS_UNDEPLOY_CHECK_CHILDREN"**
 EXECUTE.Inactive == false
 ROLLBACK.Behaviour_on_error == ROLLBACK
 ROLLBACK.Number_of_retries == 0
 DATA.Lock == true

The Workflow present in EXECUTE.Workflow attribute it is going to seek for the children entities of the Organization, in case the TD find some the execution of the TD will fail, the goal of this TD is to guarantee that the Organization has no children and also is in the proper conditions to be set as an entity with status INSTANTIATED.

Once found, the TD would execute the WF present in EXECUTE.Workflow, in this case, the Wf is "WF_TS_UNDEPLOY_CHECK_CHILDREN", the workflow will develop the task previously explained.

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.

The attribute DATA.Lock is set with the value "true", this means once the TD ends its execution the element which is being used by the TD will be locked.

2.2 TLD CHECK UNDEPLOY AND DEACTIVATE: Getting_Macronet

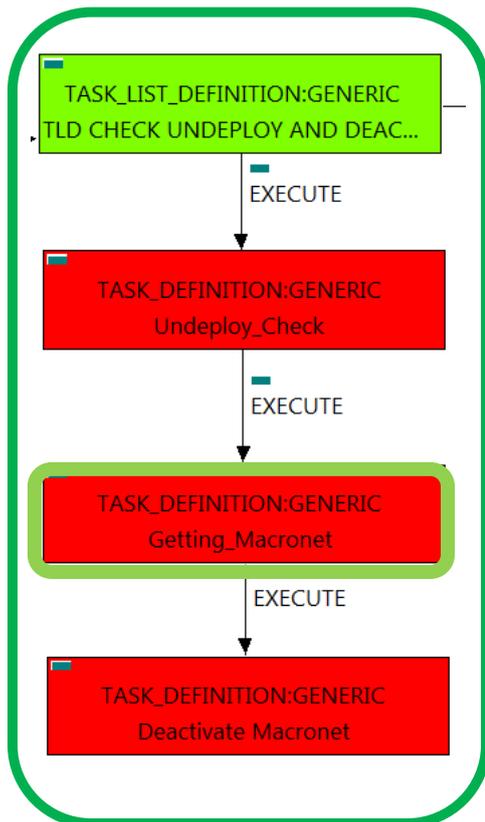


Figure 2: Selecting the adequate Macronet to be deleted.

This TD it is going to assure the selection of the correct artifact that later on will be deactivated by the workflow executed. Once finished, we will have assured that all the MACRONETs artifacts are prepared to be deleted when required.

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

Categories:

GENERAL.Name ==	Getting_Macronet
SET.Running_Status ==	ACTIVE
SET.Status ==	ACTIVE
FIND.Condition ==	GENERAL.Name==%GENERAL.Name%
EXECUTE.Inactive==	false
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 MACRONET:DCN 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.

The attribute DATA.Lock is set with the value “true”, this means once the TD ends its execution the element which is being used by the TD will be locked.

2.3 TLD CHECK UNDEPLOY AND DEACTIVATE: Deactivate Macronet

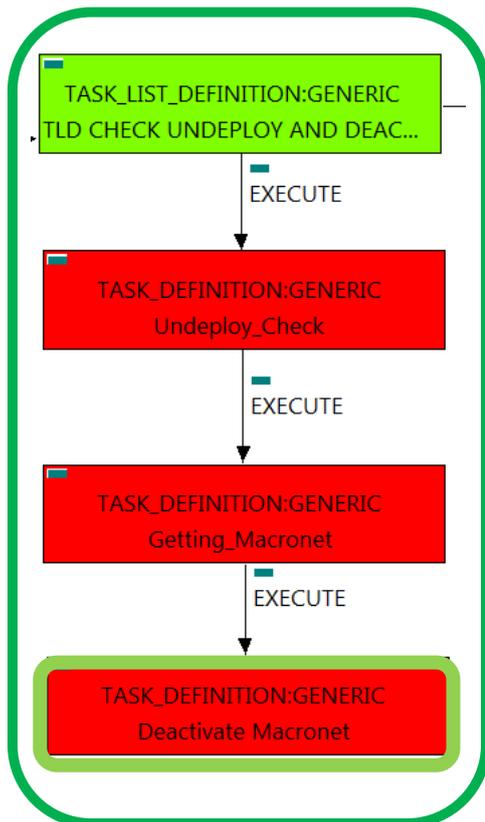


Figure 3: Deactivating the specific Macronet.

This TD it is going to deactivate our ENTERPRISE:DCN, this means, the WF implied in this TLD is going to find and deactivate an ENTERPRISE in status ACTIVE that fills the conditions present in the TD.

Once finished, we will have an ENTERPRISE:DCN deactivated 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:

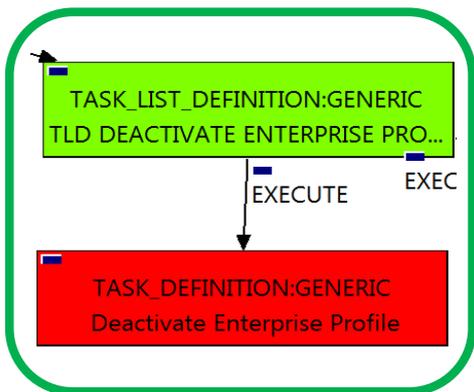
GENERAL.Name ==	Deactivate Macronet
SET.Running_Status ==	ACTIVE
SET.Status ==	INSTANTIATED.
FIND.Condition ==	GENERAL.Name==%GENERAL.Name%
EXECUTE.Workflow ==	"WF_TS_DEACTIVATE_SDN_MACRONET"
EXECUTE.Inactive==	false
ROLLBACK.Behaviour_on_error ==	STOP
ROLLBACK.Number_of_retries ==	0
DATA.Lock ==	true

The Workflow present in EXECUTE.Workflow attribute it is going to seek a MACRONET:DCN 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.

The attribute DATA.Lock is set with the value "true", this means once the TD ends its execution the element which is being used by the TD will be locked.

2.5 TLD DEACTIVATE ENTERPRISE Profile: Deactivate Enterprise Profile.



This TD it is going to deactivate our ENTERPRISE:PROFILE:DCN, this means, the WF implied in this TLD is going to find and deactivate an ENTERPRISE:PROFILE in status ACTIVE that fills the conditions present in the TD.

Once finished, we will have an ENTERPRISE:PROFILE:DCN deactivated 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.ArtifactType == ORGANIZATION
FIND.Status == ACTIVE.
FIND.Condition ==
GENERAL.Name == %GENERAL.Name%_Profile
FIND.Path ==
    
```

Figure 5: Deactivate Enterprise profile.

```

ORGANIZATION>RESOURCE_POOL>VIM>AUTHENTICATION>REGION>NETWORKING
<SDN_CONTROLLER>ENTERPRISE:PROFILE:DCN@status=ACTIVE,
ORGANIZATION>RESOURCE_POOL>LOCATION>VIM>AUTHENTICATION>REGION>NETWORKING
<SDN_CONTROLLER>ENTERPRISE:PROFILE:DCN@status=ACTIVE,
ORGANIZATION>RESOURCE_POOL>DATACENTER>VIM>AUTHENTICATION>REGION>NETWORKING
<SDN_CONTROLLER>ENTERPRISE:PROFILE:DCN@status=ACTIVE,
ORGANIZATION>RESOURCE_POOL>SERVER<HYPERVISOR<VIM>AUTHENTICATION>REGION>
NETWORKING<SDN_CONTROLLER>ENTERPRISE:PROFILE:DCN@status=ACTIVE
    
```

```

SET.Running_Status == ACTIVE.
SET.Status == INSTANTIATED.
EXECUTE.Workflow == "WF_TS_DEACTIVATE_SDN_PROFILE"
ROLLBACK.Behaviour_on_error == STOP
ROLLBACK.Numbre_of_retries == 0
DATA.Lock == true
    
```

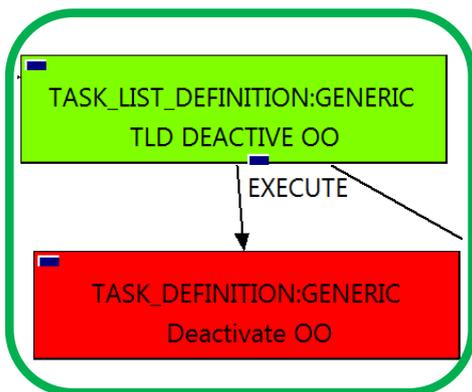
The Workflow present in EXECUTE.Workflow attribute it is going to seek an ENTERPRISE:PROFILE:DCN that match the FIND.Condition attribute with value :“ GENERAL.Name==%GENERAL.Name%_Profile” with Status ACTIVE, by the MultiplePath given by the attribute FIND.Path.

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 that was used in the workflow executed will be set as “Locked”.

2.6 TLD DEACTIVATE OO: Deactivate OO.



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, we are not going to deactivate any artifact, this TD associates the entity given with the LDAP group that it is corresponded to, to make the user’s reference clear between entities.

Targets of the TASK DEFINITION:

STATUS of the TD: ENABLED

Categories:

FIND.Condition ==	status==constant:ACTIVE
EXECUTE.Workflow==	“WF_TS_DEACTIVATE_OO_ORGANIZATION”
ROLLBACK.Behaviour_on_error ==	STOP
ROLLBACK.Numbre_of_retries ==	0
DATA.Lock ==	true

Figure 6: Deactivate OO.

The WorkFlow present in EXECUTE.Workflow it is going to seek an ORGANIZATION:GENERIC in Status ACTIVE in the DDBB, when the TD find it, it will start. This workflow it is going to query and update the entity given, in this case, Tenant, with the values needed for the correct behavior of the users with the specific entity.

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 that was used in the workflow executed will be set as “Locked”.

2.7 TLD INVENTORY MACRONET DELETE: Deprovision Macronet.

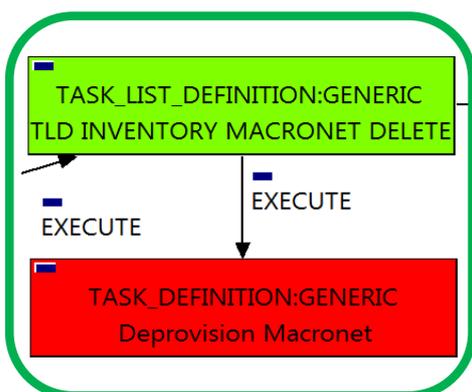


Figure 7: Deprovision Macronet.

The TDs that have present in the their names “Deprovision”, are Task Definitions responsible of the deletion in the platform targeted and in the DDBB, in this case, the artifacts that are going to be deleted are MACRONETS.

Once finished, the TD should have been deleted the MACRONETS artifacts mentioned above, this means, all MACRONETS artifact related to the ORGANIZATION given.

Targets of the TASK DEFINITION:

STATUS of the TD: ENABLED

Categories:

FIND.Condition ==	status==constant:ACTIVE
EXECUTE.Workflow==	“WF_TS_DEPROVISION_SDN_MACRONET”
ROLLBACK.Behaviour_on_error ==	STOP
ROLLBACK.Numbre_of_retries ==	0
DATA.Lock ==	true

The Workflow present in EXECUTE.Workflow attribute it is going to seek an ORGANIZATION in Status ACTIVE in the DDBB . Once found , the WF will start the deleting, if deletion is successful no MACRONET artifacts should remain related to the ORGANIZATION given. Notice that the TD is not going to change the status of the entity used for the deletion.

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 that was used in the workflow executed will be set as “Locked”.

2.8 TLD INVENTORY ORGANIZATION DELETE: Deprovision Enterprise.

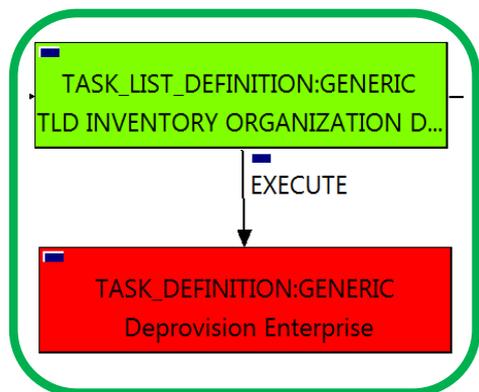


Figure 8: Deprovision Enterprise.

The TDs that have present in the their names “Deprovision”, are Task Definitions responsible of the deletion in the platform targeted and in the DDBB, in this case, the artifact that is going to be deleted is ENTERPRISE:DCN.

Once finished, the TD should have been deleted the ENTERPRISE artifact given, this means, all the relationships of the artifact and the changing of the artifact’s status to INSTANTIATED.

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

Categories:

FIND.Condition ==	status==constant:ACTIVE
SET.Status ==	INSTANTIATED.
EXECUTE.Workflow==	“WF_TS_DEPROVISION_SDN_ENTERPRISE”
ROLLBACK.Behaviour_on_error ==	STOP
ROLLBACK.Numbre_of_retries ==	0
DATA.Lock ==	true

The Workflow present in EXECUTE.Workflow attribute it is going to seek an ORGANIZATION in Status ACTIVE in the DDBB . Once found , the WF will start the deleting, if deletion is successful the ENTERPRISE artifact given should has changed its status to the status reflect in the attribute SET.Status, this would be “INSTANTIATED”.

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 that was used in the workflow executed will be set as “Locked”.

2.9 TLD DELETE ORGANIZATION: Organization Delete.

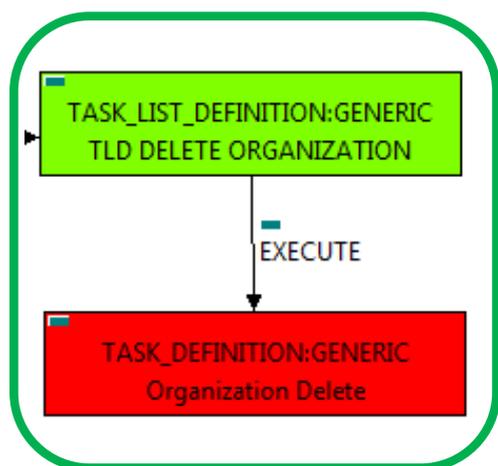


Figure 9: Organization Delete.

The TDs that have present in their names “Delete”, are Task Definitions responsible of the deletion of the artifact given, in this case, this TD it is going to delete an ORGANIZATION, 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, in other case, this elements will remain unreachable, that is not desirable.

Targets of the TASK:DEFINITION:

STATUS of the TD: ENABLED

Categories:

```

FIND.ArtifactType == ORGANIZATION.
EXECUTE.Workflow ==
    "WF_TS_DELETE_INSTANCE_TREE"
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 an ORGANIZATION 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.