

# Terminate OpenStack VNF Using VNF-LCM

Call Session Control Function

OPERATING INSTRUCTIONS

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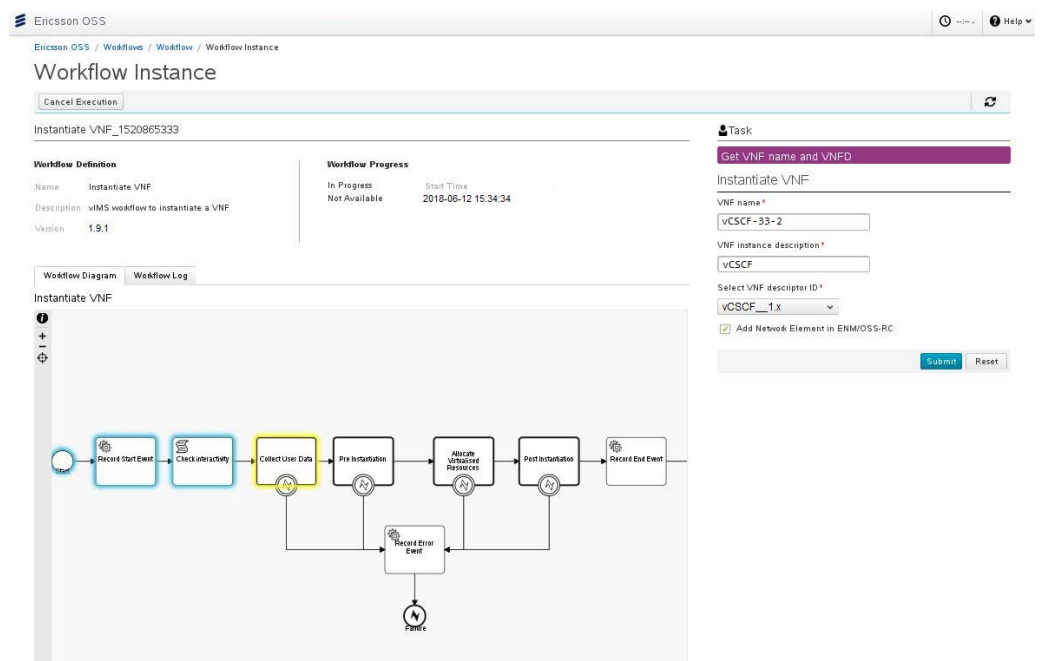




# 1 Description

This instruction describes how to terminate a Virtual Network Function (VNF) in the VNF Lifecycle Management (VNF-LCM).

The VNF-LCM procedures use workflow instances. The following figure shows an example of a workflow instance, where workflow progress can be tracked in the **Workflow Diagram** view. The boxes in the **Workflow Diagram** only represent the stages of the various procedures; operations are performed in the **Task** view.



For more information about the VNF-LCM, see [CSCF VNF Lifecycle Management](#).

## 2 Procedure

### 2.1 Terminate a VNF

#### Prerequisites

- The VNF is instantiated using the VNF-LCM or the EO.
- The following virtual and physical hardware and software are required:



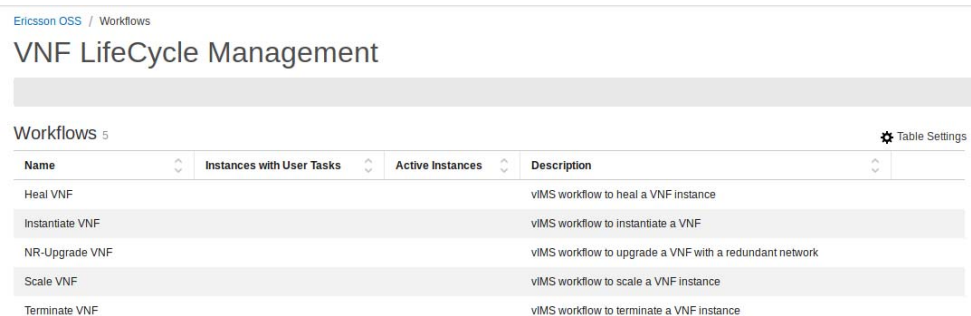
- VNF-LCM is available using either Operations Support System for Radio and Core (OSS-RC) or Ericsson Network Manager (ENM).
- The Virtual Infrastructure Manager (VIM) is configured in VNF-LCM:

The VIM configuration in VNF-LCM can be checked with the `vnflcm vim list` command. For more information on VIM configuration, see VNF Lifecycle Manager System Administrator Guide, 1543-APR 901 0578 Uen.

- No documents are required.
- No tools are required.
- The following conditions must apply:
  - The VNF-LCM is available using either the Operations Support System for Radio and Core (OSS-RC) or the Ericsson Network Manager (ENM).
  - The Call Session Control Function (CSCF) workflow software package contains more files than are described in this instruction. These unmentioned files are only used in special deployment scenarios that are outside the scope of this instruction. Only use the files that are explicitly mentioned in the instruction.

## Steps

1. In the VNF-LCM **Workflows** view, select **Terminate VNF**, and then click **Start a New Instance**.



Name	Instances with User Tasks	Active Instances	Description
Heal VNF			vIMS workflow to heal a VNF instance
Instantiate VNF			vIMS workflow to instantiate a VNF
NR-Upgrade VNF			vIMS workflow to upgrade a VNF with a redundant network
Scale VNF			vIMS workflow to scale a VNF instance
Terminate VNF			vIMS workflow to terminate a VNF instance

2. In the **Start a Workflow** view, fill out the **Instance Name** field, and then click **Submit**.
3. Select the newly created workflow from the **Instance Activity** panel.
4. In the **Workflow Instance** view, select the VNF to terminate.
5. Select the termination type (**Graceful** or **Forceful**).

Termination options:



**Graceful** The Virtual Machines (VMs) in the cluster are gracefully locked and the VNF instance gradually stops accepting new calls and registration. The VNF terminates after the expiration of the graceful termination period.

**Forceful** The VNF terminates immediately. All ongoing traffic is lost. This option must be confirmed on the next screen.

**Graceful termination timeout (sec)**

Defines after how many seconds the VNF terminates when graceful termination has been applied. Traffic is still ongoing until the VNF terminates. Defaults to -1, which means that no graceful termination period exists, that is, the VNF terminates only after all VMs stopped processing traffic.

6. Is the **Graceful** termination type selected?

Yes: Continue with the next step.

No: Proceed with Step 8.

7. Specify the **Graceful termination timeout (sec)**.

8. Click **Submit**.

The VNF instance terminates. For graceful termination, the VNF instance stops processing traffic gracefully and then terminates.

**Note:** If the EO and the VNF-LCM are in a mutually granting connection, the terminated instance disappears from the EO after a successful termination from the VNF-LCM if the instantiation was made from the EO.



## Task

Collect user data for Terminate

## Terminate VNF instance

### Termination data

Select VNF instance \*

vCSCF

Termination type:

Graceful

Graceful termination timeout (sec)

-1

Submit

Reset



### Attention!

Risk of system malfunction or traffic disturbance.

During the termination, the optional user input **Cancel LCM Hook** is available. Do not click **Submit**. This is not supported in the current release.





Task

---

OPTIONAL: Override User Input

---

OPTIONAL: Cancel LCM hook

---

This user form is a possibility to gracefully or forcefully cancel LCM hook in case of unexpectedly long execution time, faulty initial inputs or other cases. It is not mandatory, and the execution may complete without it being submitted. To keep track of progress, please use the refresh button occasionally.

Select cancellation method:

Gracefully cancel executi... ▼

Submit

Reset

## 2.2 Troubleshooting

If the workflow execution fails, inspect the relevant logs to identify the cause of the failure.

### Steps

1. Increase the log level from INFO to DEBUG. For information on how to change log level, see VNF Lifecycle Manager System Administrator Guide, 1543-APR 901 0578.
2. Inspect the following logs to identify the cause of the failure:
  - Jboss Server log: /ericsson/3pp/jboss/standalone/log/server.log
  - System log: /var/log/messages
  - Workflow log: the **Workflow Log** view in the VNF-LCM
3. If the **Workflow Log** view reports Authentication failed, repair the Secure Shell (SSH) key between the VNF-LCM and the CSCF. For more information, see Section Check SSH Key for Authentication in [CSCF Troubleshooting Guideline](#).
4. If a problem cannot be solved, consult the next level of maintenance support and provide the logs. Further actions are outside the scope of this instruction.