UAS Upgrade and Redeployment Operations

This chapter describes the following topics:

Overview

Activation and deactivation procedures provide a mechanism for starting/stopping your deployment in order to implement configuration changes, upgrade or redeploy UAS components (e.g. AutoIT or AutoDeploy), and/or to recover from certain errors that may occur.

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Important The information provided for activations and deactivations in these sections pertain only to Ultra M solutions based on the Hyper-Converged architecture that were deployed through UAS.

Upgrading/Redeploying AutoVNF (Including VNFM)

AutoVNF VMs can be upgraded or redeployed to incorporate different software releases than the one currently deployed. This process includes and applies to VNFM as well.

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Important The information provided in this section pertains only to Ultra M solutions based on the Hyper-Converged architecture that were deployed through UAS.

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Caution This operation also requires bringing down the VNF associated with the AutoVNF instance.

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Caution Upgrade/redeployment operations are disruptive as they involve terminating VMs for the various components that comprise the deployment. When upgrading UAS software roles, all related data is lost. As such, it is strongly recommended that you backup all files related to the deployment including configuration files, logs, and images before performing the upgrade or redeployment. Refer to Backing Up Deployment Information for more information.

To upgrade or redeploy the AutoVNF and VNFM components:

1. Deactivate the VNF rack and VNF descriptor configuration file.

   deactivate nsd *<nsd-name>*

2. Modify the VNF package descriptor within your VNF rack and VNF descriptor configuration file to refer to the desired USP ISO.

   ```
   <--- SNIP --->
   vnf-packaged <vnf-pkg-name>
    location          <URL/package-name>
    validate-signature true
    configuration <day0_dayN_cfg_identifier>
     external-url <URL/day0_dayN_cfg_name>
    !
   !
   <--- SNIP --->
   ```

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Important The VNF package name and version must be different than the previously deployed VNF package version. If the versions are identical, no actions will be taken.

For example, if you previously deployed a configuration with the following parameters:

```
<--- SNIP --->
vnf-packaged vnf-pkg1
 location home/ubuntu/6_0-1234/isos/usp-6_0-1234.iso
 validate-signature true
 configuration staros
  external-url /root/system.cfg
 !
!
<--- SNIP --->
```

Your upgrade configuration would have to specify a different name for "vnf-package" and a different ISO name in "package-location". For example:

```
<--- SNIP --->
vnf-packaged vnf-pkg2
 location home/ubuntu/6_0-1342/isos/usp-6_0-1342.iso
 validate-signature true
 configuration staros
  external-url /root/system.cfg
 !
!
<--- SNIP --->
```

3. Modify the VNF package descriptor identifier at the NSD-level of your VNF rack and VNF descriptor configuration to reference the new VNF package.

```
nsd <nsd_name>
...
 vnf-package <vnf-pkg-name>
<--- SNIP --->
```

4. *Optional.* Modify the VNF package descriptor identifier at the VDU-levels (e.g. VNFM, UEM, CF, SF, AutoVNF) of your VNF rack and VNF descriptor configuration to reference the new VNF package.

```
<--- SNIP --->
vdu <vdu_name>
...
   image vnf-package <vnf-pkg-name>
<--- SNIP --->
```

5. Load the modified configuration.

a. Login to the ConfD CLI as the admin user.

```
confd_cli -u admin -C
```

b. Enter the ConfD configuration mode.

```
config
```

c. Load the VNF rack and VNF descriptor configuration file to provide the deployment artifacts to the VIM.

```
load replace <your_ad_file_name>.cfg
```

```
commit
```

```
end
```

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Important The **load replace** command replaces the config file with the new config file.

6. Activate the VNF rack and VNF descriptor configuration.

```
activate nsd <nsd_name>
```

7. Verify that all the deployed resources have been added to the VIM once the activation process is complete.

8. Confirm that the software functions are running the desired version. Refer to the following sections for more information:

- Determining the Running AutoDeploy Version

- Monitoring VNF Operations -execute the **show version verbose** command through the VNF's Control Function

Upgrading/Redeploying AutoDeploy

AutoDeploy VMs can be upgraded or redeployed to incorporate different software releases than the one currently deployed.

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> **Caution**   Redeploying AutoDeploy also requires bringing down AutoVNF and the related VNF.

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> **Caution**   Upgrade/redeployment operations are disruptive as they involve terminating VMs for the various components that comprise the deployment. When upgrading UAS software roles, all related data is lost. As such, it is strongly recommended that you backup all files related to the deployment including configuration files, logs, and images before performing the upgrade or redeployment. Refer to Backing Up Deployment Information for more information.

To upgrade or redeploy the AutoDeploy components:

1. Deactivate your deployment using the information and instructions in Deactivating the USP Deployment, if you have not already done so.

2. Terminate the AutoDeploy VM using the information and instructions in Terminating the AutoDeploy VM.

3. Redeploy the system using the information and instructions in Pre-VNF Installation Verification.