Upgrading and Patching Prime Network Services Controller

This section includes the following topics:

Overview

Note

- Use the following upgrade procedure when you upgrade to a newer Prime Network Services Controller version. For Prime Network Services Controller 3.0, the only supported upgrade paths are from Cisco Virtual Network Management Center (VNMC) 2.0 or 2.1 to Prime Network Services Controller 3.0.
- If are upgrading from VNMC 2.1, the VNMC 2.1 deployment must span only one disk. If it spans more than a single disk, you cannot upgrade to Prime Network Services Controller 3.0.

The following scenarios are not supported:

- Backing up from VNMC 2.0 or 2.1 and restoring to Prime Network Services Controller 3.0.
- Exporting from VNMC 2.0 or 2.1 and importing to Prime Network Services Controller 3.0.

To upgrade from VNMC 2.0 or 2.1 to Prime Network Services Controller 3.0, perform the following tasks:

1. If you are upgrading from VNMC 2.1, ensure that the VNMC 2.1 is deployed in a single disk. The upgrade will fail if the VNMC 2.1 deployment spans more than one disk.
2. Perform a full-state backup of VNMC 2.x by using Secure Copy (SCP) protocol—See Backing Up Data, on page 2.

3 Upgrade to Prime Network Services Controller 3.0 by using the CLI **update bootflash** command—See Upgrading to Prime Network Services Controller 3.0, on page 3.

Note After you upgrade to Prime Network Services Controller 3.0, you might see the previous version in your browser. To view the upgraded version, clear the browser cache and browsing history in the browser. This note applies to all supported browsers: Internet Explorer, Mozilla Firefox, and Chrome.

Backing Up Data

You can use either of the following methods to back up data before upgrading Prime Network Services Controller:

- To use the CLI, continue with this topic.
- To use the GUI, see Backing Up Prime Network Services Controller.

We recommend that you *not* perform a backup when any of the following tasks are running on the system:

- Image import
- Migration of a VM to the cloud
- Deployment of an InterCloud Switch
- Creation of an InterCloud link

Note Temporarily disable the Cisco Security Agent (CSA) on the remote file server.

Note Do not use TFTP to back up data.

Procedure

Step 1 Using the console, log in to Prime Network Services Controller as admin.

Note We recommend that you access the CLI via the console instead of using SSH. If the SSH session should disconnect, you will not be able to access the VM.

Step 2 Enter system mode:

```
scope system
```

Step 3 Create a full-state backup file:

```
create backup scp://user@host/file fullstate enabled
```

where:

- *user* is the username.
- *host* is the system name.
- */file* is the full path and name of the backup file.

Step 4 When prompted, enter the required password.

Step 5 At the `/system/backup*` prompt, enter:

```
commit-buffer
```

Step 6 Log into the SCP server, and make sure that */file* exists and that the file size is not zero (0).

Upgrading to Prime Network Services Controller 3.0

After you back up the VNMC 2.x data, you can upgrade to Prime Network Services Controller 3.0.

Caution To save a state for recovery purposes, perform a backup before beginning the upgrade. For more information, see Backing Up Data, on page 2.

Note

- Do not use TFTP to update data.
- Do not access the GUI during the upgrade process.

Before You Begin

- Ensure that Prime Network Services Controller can access a DNS server. If a DNS server is not accessible, Prime Network Services Controller will not be able to access the Amazon Cloud Provider.
- If you are upgrading from VNMC 2.1, the VNMC 2.1 deployment must span only one disk. If it spans more than a single disk, you cannot upgrade to Prime Network Services Controller 3.0.
- Prime Network Services Controller 3.0 requires two virtual disks with the following configuration:
    - Disk 1—20 GB
    - Disk 2—200 GB

  If you do not have two disks configured, you will not be able to upgrade to 3.0.
- Ensure the VNMC 2.1 deployed using ISO images are on a single disk. If the VNMC deployment is on 2 or more disks, you will not be able to upgrade to 3.0.

Procedure

Step 1 Using the console, log in to Prime Network Services Controller as admin.

Note We recommend that you access the CLI via the console instead of using SSH. If the SSH session should disconnect, you will not be able to access the VM.

Step 2 Connect to local-mgmt:

```
connect local-mgmt
```

Step 3 (Optional) Check the current version of the Prime Network Services Controller software:

```
show version
```

Step 4 Download the Prime Network Services Controller 3.0 image from a remote file server:

```
copy scp://imageURLtoBinFile bootflash:/
```

Step 5 Upgrade to Prime Network Services Controller 3.0:

```
update bootflash:/nsc.3.0.0.XXXX.bin
```

where *nsc.3.0.0.XXXX.bin* is the image name.

Step 6 Restart the server:

```
service restart
```

Step 7 (Optional) Confirm that the Prime Network Services Controller server is operating as desired:

```
service status
```

Step 8 (Optional) Verify that the Prime Network Services Controller software version has been updated:

```
show version
```

Step 9 To confirm that Prime Network Services Controller is fully accessible after the upgrade, log in via the GUI. If your browser displays the previous version instead of the upgraded version, clear the browser cache and browsing history, and restart the browser.

Patching Prime Network Services Controller

Use the CLI to apply the patch.

Procedure

Step 1 As user admin, log into the Prime Network Services Controller system to be patched:

```
ssh admin@server-ip-address
```

Step 2 Connect to local-mgmt:

```
connect local-mgmt
```

Step 3 Update the bootflash:

```
update bootflash:/nsc.3.0.0.XXXX.bin
```

where *nsc.3.0.0.XXXX.bin* is the name of the patch file.

Step 4 Restart the Prime Network Services Controller services:

```
service restart
```

Step 5 Verify that all services are running:

```
service status
```

Step 6 To verify that the patch was applied, check the update history:

```
show update-history
```