Upgrading the Cisco Prime NSC

This chapter contains the following sections:

Complete Upgrade Procedure

For information on the migration of Cisco Nexus 1000V with VSG to Cisco Nexus 1000VE with VSG, see the *Cisco Nexus 1000VE Installation Guide, Release 5.2(1)SV5(1.1)*

Information About Cisco Prime NSC Upgrades

When you upgrade the Cisco PNSC software, all current command-line interface (CLI) and graphical user interface (GUI) sessions are interrupted, which means that you must restart any CLI or GUI sessions.

PNSC Upgrade Matrix and Path

Migration of Nexus 1000V to Nexus 1000VE includes upgrading PNSC to version 3.5.1a. The following table lists the compatibility information for the PNSC upgrade.

Table 1: Cisco VNMC/PNSC Upgrade Path

Initial Version	Intermediate State(s)	Final Version
3.4.2c	NA	3.5.1a
3.4.2d	NA	3.5.1a

Note For detailed information about Upgrading PNSC, see Upgrading Prime Network Services Controller.

Upgrade Procedure for Cisco PNSC Release 3.4.2d to Release 3.5.1

Upgrading Cisco Prime NSC 3.4.2d to Cisco Prime NSC 3.5.1a

Before you begin

- You are logged in to the CLI in EXEC mode.
- You have backed up the new software files to a remote server and have verified that the backup file was created on the remote server.
- You must have the Cisco PNSC Release 3.5.1 downloaded.

SUMMARY STEPS

1. nsc# **connect local-mgmt**
2. (Optional) nsc (local-mgmt)# **show version**
3. (Optional) nsc (local-mgmt)# **copy scp://user@***example-server-ip/example-dir/filename* **bootflash:/**
4. nsc (local-mgmt)# **dir bootflash:/**
5. nsc (local-mgmt)# **update bootflash:/***filename*
6. (Optional) nsc (local-mgmt)# **service status**
7. (Optional) nsc (local-mgmt)# **show version**

DETAILED STEPS

	Command or Action	Purpose
Step 1	nsc# **connect local-mgmt**	Places you in local management mode.
Step 2	(Optional) nsc (local-mgmt)# **show version**	Displays the version information for the Cisco PNSC software.
Step 3	(Optional) nsc (local-mgmt)# **copy scp://user@***example-server-ip/example-dir/filename* **bootflash:/**	Copies the Cisco PNSC software file to the VM.
Step 4	nsc (local-mgmt)# **dir bootflash:/**	Verifies that the desired file is copied in the directory.
Step 5	nsc (local-mgmt)# **update bootflash:/***filename*	Begins the update of the Cisco PNSC software.
Step 6	(Optional) nsc (local-mgmt)# **service status**	Allows you to verify that the server is operating as desired.
Step 7	(Optional) nsc (local-mgmt)# **show version**	Allows you to verify that the Cisco PNSC software version is updated.

	Command or Action	Purpose
		Note After you upgrade to Cisco PNSC Release 3.5.1, you might see the previous version of Cisco PNSC 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. **Note** For detailed information about Upgrading PNSC, see Upgrading Prime Network Services Controller.

Configuration Example

The following example shows how to connect to the local-mgmt mode:

```
nsc# connect local-mgmt
Cisco Prime Network Services Controller
TAC support: http://www.cisco.com/tac
Copyright (c) 2002-2018, Cisco Systems, Inc. All rights reserved.
The copyrights to certain works contained in this software are
owned by other third parties and used and distributed under
license. Certain components of this software are licensed under
the GNU General Public License (GPL) version 2.0 or the GNU
Lesser General Public License (LGPL) Version 2.1. A copy of each
such license is available at
http://www.opensource.org/licenses/gpl-2.0.php and
http://www.opensource.org/licenses/lgpl-2.1.php
```

The following example shows how to display version information for the Cisco PNSC:

```
nsc(local-mgmt)# show version

Name Package Version GUI
---- ------- ------- ----
core Base System 3.4(2b) 3.4(2b) service-reg
Service Registry 3.4(2b) 3.4(2b) policy-mgr
Policy Manager 3.4(2b) 3.4(2b) resource-mgr
Resource Manager 3.4(2b) 3.4(2b) vm-mgr
VM manager 3.4(2b) none vsm-service
VSM Service 3.4(2d) none cloudprovider-mgr
Cloud Provider Mgr 3.4(2d) none
localhost(local-mgmt)#
```

The following example shows how to copy the Cisco PNSC software to the VM:

```
nsc(local-mgmt)# copy scp://<user@example-server-ip>/example1-dir/nsc.3.5.1.bin bootflash:/
Enter password:
100%  143MB  11.9MB/s   00:12
```

The following example shows how to see the directory information for Cisco PNSC:

```
nsc(local-mgmt)# dir bootflash:/

    1.1G Dec 05 00:57 nsc.3.5.1.bin

Usage for bootflash://
```

```
             6359716 KB used
            10889320 KB free
            18187836 KB total
```

The following example shows how to start the update for the Cisco PNSC:

```
nsc(local-mgmt)# update bootflash:/nsc.3.5.1.bin
It is recommended that you perform a full-state backup before updating any VNMC component.
  Press enter to continue or Ctrl-c to exit.
```

The following example shows how to display the updated version for the Cisco PNSC:

```
nsc(local-mgmt)# show version

Name                Package             Version        GUI
---- ------- ------- ----
core                Base System         3.5.1        3.5.1
service-reg         Service Registry    3.5.1        3.5.1
policy-mgr          Policy Manager      3.5.1        3.5.1
resource-mgr        Resource Manager    3.5.1        3.5.1
vm-mgr              VM manager          3.5.1        none
cloudprovider-mgr   Cloud Provider Mgr  3.5.1        none
```

What to do next

After the migration from Cisco Prime NSC 3.4.2d to Cisco Prime NSC 3.5.1a, VM names are not displayed under PNSC and as a result there is traffic drop for rules with VM name information.

Follow the below workaround to overcome the issue:

1. Upgrade from existing PNSC 3.4.2c/d with PNSC 3.5.1a VSM and VSG.
2. Register Policy Agent (PA) of PNSC 3.5.1a VSM and VSG to PNSC 3.4.2c/d.
3. Create Firewall object for PNSC 3.5.1a VSG with different data IP (to be later configured on PNSC 3.5.1a VSM) on PNSC 3.4.2c/d.
4. Migrate to PNSC 3.5.1a VSG with data IP (to be provided in the migration config text field).
5. After migration is complete, PNSC 3.4.2c/d is now attached to PNSC 3.5.1a VSM and VSG. This leads to VM Info loss in PNSC.
6. Upgrade PNSC 3.4.2 c/d to PNSC 3.5.1a . The VM Info gets populated on PNSC.
7. Re-register PNSC 3.5.1a VSM and VSG Policy Agent (PA) and the traffic is restored.