



Installing Software Maintenance Update

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Software Maintenance Update (SMU) version 11.5(2) on Cisco DCNM 11.5(1) to use Network Insights Applications

Cisco DCNM Release 11.5(2) offers a Software Maintenance Update (SMU) that can be applied only on top of the DCNM Release 11.5(1) for the OVA/ISO/Appliance form factor. The DCNM LAN Fabric 11.5(2) release is the first release version that supports Cisco Nexus Insights, Release 5.1 or higher, with Cisco Nexus Dashboard, Release 2.0.2 or higher.

After installing Cisco DCNM, you can download and install various applications from the Cisco App Center.

To download, add, start, stop, and delete applications from the Cisco DCNM Web UI, choose **Applications** > **Catalog** > **Browse App Center**. Refer to [Installing and Deploying Applications](#) for instructions.



Note SMU version 11.5(2) is supported with Cisco DCNM Release 11.5(1) only.

Cisco DCNM allows you to upload the NI 5.1 application without the maintenance update. However, you cannot start the application. An error appears asking you to install the SMU before using the NI 5.1 applications.



Note Only a **root** user must install the SMU version 11.5(2) on Cisco DCNM Release 11.5(1).

For information about SMU version 11.5(2), refer to [Cisco DCNM Release Notes, Release 11.5\(2\)](#).

This chapter contains the following sections:

Installing SMU version 11.5(2) on Cisco DCNM 11.5(1) Standalone Deployment

To apply the Software Maintenance Update (SMU) on Cisco DCNM LAN Fabric installation in Standalone deployment mode, perform the following steps:

Before you begin

- Ensure that Cisco DCNM 11.5(1) appliance is operational.
- Take a backup of the application data using the **appmgr backup** command.

```
dcnm# appmgr backup
```

Copy the backup file to a safe location outside the DCNM server.

- If Cisco DCNM appliance is installed in VMware environment, ensure that you take a snapshot of the virtual machine. For instructions, refer to [VMware Snapshot Support for Cisco DCNM](#).
- Ensure that you plan for a maintenance window to install SMU version 11.5(2).

Procedure

Step 1

Download the SMU file.

- Go to the following site: <http://software.cisco.com/download/>.

A list of the latest release software for Cisco DCNM available for download is displayed.

- In the Latest Releases list, choose Release 11.5(2).
- Locate **DCNM 11.5(2) Maintenance Update for VMWare, KVM, Bare-metal, and Appliance servers** file, and click **Download** icon.
- Save the **dcnm-va-patch.11.5.2.iso.zip** file to your directory that is easy to find when you start to apply the SMU.

Step 2

Unzip the **dcnm-va-patch.11.5.2.iso.zip** file and upload the file to the **/root/** folder of the DCNM setup.

Step 3

Log on to the Cisco DCNM appliance using SSH as a **sysadmin** user.

Run the **su** command to enable **root** user.

```
dcnm# su
Enter the root password:
[root@dcnm]#
```

Step 4

Run the following command to create a screen session.

```
[root@dcnm]# screen
```

This creates a session which allows you to execute the commands. The commands continue to run even when the window is not visible or if you get disconnected.

Step 5

Create a folder named **iso** using the **mkdir -p /mnt/iso** command.

```
[root@dcnm]# mkdir -p /mnt/iso
```

Step 6

Mount the DCNM SMU version 11.5(2) file in the **/mnt/iso** folder.

```
[root@dcnm]# mount -o loop dcnm-va-patch.11.5.2.iso /mnt/iso
```

Step 7

Navigate to **/scripts/** directory.

```
[root@dcnm]# cd /mnt/iso/packaged-files/scripts/
```

Step 8

Run the **./inline-upgrade.sh** script.

```
[root@dcnm]# ./inline-upgrade.sh
```

Note After the SMU is installed successfully, the DCNM process restarts. This results in a momentary loss of access to the DCNM Web UI.

Step 9 Ensure the DCNM application is functional, by using the **appmgr status all** command.

```
[root@dcnm]# appmgr status all
```

Step 10 Terminate the **screen** session, by using the **exit** command.

```
[root@dcnm]# exit
```

Step 11 Unmount the **dcnm-va-patch.11.5.2.iso** file from the DCNM setup.

Note You must terminate the **screen** session before unmounting the SMU file.

```
[root@dcnm]# umount /mnt/iso
```

What to do next

Log on to the DCNM Web UI with appropriate credentials. The version shows 11.5(2) on the login screen.



Note If you try to install the maintenance update again, a note appears stating that the patch is already applied on the Cisco DCNM.

You can now start the NI 5.1 applications on the Cisco DCNM Web UI. Refer to [Installing and Deploying Applications](#) for instructions.

Installing SMU version 11.5(2) on Cisco DCNM 11.5(1) Native HA Deployment

To apply the Software Maintenance Update (SMU) on Cisco DCNM LAN Fabric installation in Native HA deployment mode, perform the following steps:

Before you begin

- Ensure that both the Cisco DCNM 11.5.(1) Active and Standby peers are up and running.

To apply this software maintenance update on Cisco DCNM Virtual Appliance in Native HA Mode, apply this update on the Active appliance. Wait until the role of the Active appliance is Active again. Apply the update on the Standby appliance, later.

- Check and ensure that the Active and Standby servers are operational, using the **appmgr show ha-role** command.

Example:

On the Active node:

```
dcnm1# appmgr show ha-role
Native HA enabled.
Deployed role: Active
Current role: Active
```

On the Standby node:

```
dcnm2# appmgr show ha-role
Native HA enabled.
Deployed role: Standby
Current role: Standby
```

- Take a backup of the application data using the **appmgr backup** command on both Active and Standby appliances.

```
dcnm1# appmgr backup
dcnm2# appmgr backup
```

Copy the backup file to a safe location outside the DCNM server.

- If Cisco DCNM appliance is installed in VMware environment, ensure that you take a snapshot of the virtual machine. For instructions, refer to [VMware Snapshot Support for Cisco DCNM](#).
- Ensure that you plan for a maintenance window to install SMU version 11.5(2).

Procedure

Step 1 Download the SMU file.

- Go to the following site: <http://software.cisco.com/download/>.

A list of the latest release software for Cisco DCNM available for download is displayed.

- In the Latest Releases list, choose Release 11.5(1).
- Locate **Software Maintenance Update (SMU) version 11.5(2)** file and click **Download** icon.
- Save the **dcnm-va-patch.11.5.2.iso.zip** file to your directory that is easy to find when you start to apply the SMU.

Step 2 Unzip the **dcnm-va-patch.11.5.2.iso.zip** file and upload the file to the `/root/` folder in both Active and Standby node of the DCNM setup.

Note For example, let us indicate Active and Standby appliances as **dcnm1** and **dcnm2** respectively.

Step 3 Log on to the Cisco DCNM appliance using SSH as a **sysadmin** user.

Run the **su** command to enable **root** user.

```
dcnm1# su
Enter the root password:
[root@dcnm1]#
```

```
dcnm2# su
Enter the root password:
[root@dcnm2]#
```

Step 4 Run the following command to create a screen session.

```
[root@dcnm1]# screen
[root@dcnm2]# screen
```

This creates a session which allows you to execute the commands. The commands continue to run even when the window is not visible or if you get disconnected.

Step 5 On the Active node, install the SMU version 11.5(2).

- a) Create a folder named **iso** using the **mkdir /mnt/iso** command.

```
[root@dcnm1]# mkdir -p /mnt/iso
```

- b) Mount the SMU version 11.5(2) file on the Active node in the `/mnt/iso` folder.

```
[root@dcnm1]# mount -o loop dcnm-va-patch.11.5.2.iso /mnt/iso
```

- c) Navigate to `/scripts/` directory.

```
[root@dcnm1]# cd /mnt/iso/packaged-files/scripts/
```

- d) Run the `./inline-upgrade.sh` script.

```
[root@dcnm1]# ./inline-upgrade.sh
```

Note After the SMU is installed successfully, the DCNM process restarts. This results in a momentary loss of access to the DCNM Web UI.

- e) Ensure the DCNM application is functional, by using the **appmgr status all** command.

```
[root@dcnm1]# appmgr status all
```

Note Ensure that all the services are up and running on the Cisco DCNM Active node before proceeding to apply SMU on the Standby node.

Step 6 On the Standby node, install the SMU version 11.5(2).

- a) Create a folder named **iso** using the **mkdir /mnt/iso** command.

```
[root@dcnm2]# mkdir -p /mnt/iso
```

- b) Mount the SMU version 11.5(2) file on the Standby node in the `/mnt/iso` folder.

```
[root@dcnm2]# mount -o loop dcnm-va-patch.11.5.2.iso /mnt/iso
```

- c) Navigate to `/scripts/` directory.

```
[root@dcnm2]# cd /mnt/iso/packaged-files/scripts/
```

- d) Run the `./inline-upgrade.sh` script.

```
[root@dcnm2]# ./inline-upgrade.sh --standby
```

- e) Ensure the DCNM application is functional, by using the **appmgr status all** command.

```
[root@dcnm2]# appmgr status all
```

Step 7 Terminate the **screen** session, by using the **exit** command.

```
[root@dcnm1]# exit
```

```
[root@dcnm2]# exit
```

Step 8 Unmount the `dcnm-va-patch.11.5.2.iso` file in both Active and Standby node of the DCNM setup.

Note You must terminate the **screen** session before unmounting the SMU file.

```
[root@dcnm1]# umount /mnt/iso
```

```
[root@dcnm2]# umount /mnt/iso
```

What to do next

Log on to the DCNM Web UI with appropriate credentials. The version shows 11.5(2) on the login screen.



Note If you try to install the maintenance update again, a note appears stating that the patch is already applied on the Cisco DCNM.

You can now start the NI 5.1 applications on the Cisco DCNM Web UI. Refer to [Installing and Deploying Applications](#) for instructions.

Installing SMU version 11.5(2) on Cisco DCNM 11.5(1) Compute Nodes

To apply the maintenance update to use NI 5.1 applications with Cisco DCNM LAN Fabric installation on the Compute Nodes, perform the following steps:

Before you begin

- Ensure that both the Cisco DCNM 11.5.1(1) Active and Standby peers, and all Compute nodes are operational.
- Ensure that you have installed the SMU version 11.5(2) on both Active and Standby appliances.
For instructions, refer to [Installing SMU version 11.5\(2\) on Cisco DCNM 11.5\(1\) Native HA Deployment, on page 3](#).
- Ensure that you plan for a maintenance window to install SMU version 11.5(2).

Procedure

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- Step 1** Download the SMU file.
- a) Go to the following site: <http://software.cisco.com/download/>.
A list of the latest release software for Cisco DCNM available for download is displayed.
 - b) In the Latest Releases list, choose Release 11.5(1).
 - c) Locate **Software Maintenance Update (SMU) version 11.5(2)** file and click **Download** icon.
 - d) Save the **dcnm-va-patch.11.5.2.iso.zip** file to your directory that is easy to find when you start to apply the SMU.
- Step 2** Unzip the `dcnm-va-patch.11.5.2.iso.zip` file and upload the file to the `/root/` folder on all the Compute Nodes in the DCNM setup.
- Note** For example, let us indicate the 3 compute nodes as **dcnm-compute1**, **dcnm-compute2**, and **dcnm-compute3** respectively.
- Step 3** Log on to the Cisco DCNM Compute node using SSH as a **sysadmin** user.
- Run the **su** command to enable **root** user.
- ```
dcnm-compute1# su
Enter the root password:
[root@dcnm-compute1]#
```

```
dcnm-compute2# su
Enter the root password:
[root@dcnm-compute2]#

dcnm-compute3# su
Enter the root password:
[root@dcnm-compute3]#
```

**Step 4** Run the following command to create a screen session.

```
[root@dcnm-compute1]# screen
[root@dcnm-compute2]# screen
[root@dcnm-compute3]# screen
```

This creates a session which allows you to execute the commands. The commands continue to run even when the window is not visible or if you get disconnected.

**Step 5** On Compute Node1, apply the SMU version 11.5(2).

a) Create a folder named **iso** using the **mkdir /mnt/iso** command.

```
[root@dcnm-compute1]# mkdir -p /mnt/iso
```

b) Mount the DCNM SMU version 11.5(2) file in the **/mnt/iso** folder.

```
[root@dcnm-compute1]# mount -o loop dcnm-va-patch.11.5.2.iso /mnt/iso
```

c) Navigate to **/scripts/** directory.

```
[root@dcnm-compute1]# cd /mnt/iso/packaged-files/scripts/
```

d) Run the **./inline-upgrade.sh** script.

```
[root@dcnm-compute1]# ./inline-upgrade.sh
```

**Note** After the SMU is installed successfully, the Compute node restarts.

**Step 6** Execute the instructions in [Step 5, on page 7](#) on Compute Node2 and Compute Node3 to apply the SMU version 11.5(2).

**Step 7** Terminate the **screen** session, by using the **exit** command.

```
[root@dcnm-compute1]# exit
[root@dcnm-compute2]# exit
[root@dcnm-compute3]# exit
```

**Step 8** Unmount the **dcnm-va-patch.11.5.2.iso** file on all the Compute Nodes, by using the **umount /mnt/iso** command.

**Note** You must terminate the **screen** session before unmounting the patch file.

```
[root@dcnm-compute1]# umount /mnt/iso
[root@dcnm-compute2]# umount /mnt/iso
[root@dcnm-compute3]# umount /mnt/iso
```

**What to do next**

Log on to the DCNM Web UI with appropriate credentials.

Choose **Applications > Compute**. The Compute IP status shows **Joined**.



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**Note** If you try to install the SMU again, a note appears stating that the SMU is already applied on the Cisco DCNM.

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