

Installing Software Maintenance Update for Spring4Shell Vulnerability

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Installing Software Maintenance Update on Cisco DCNM OVA/ISO Deployment

This section provides instructions to install Software Maintenance Update (SMU) on OVA/ISO deployments in Cisco DCNM Release 11.5(4) and 11.5(4a) to address **CVE-2022-22965** issue.

This section contains the following topics:

Installing SMU on DCNM Standalone Deployment

This section provides instructions to install Software Maintenance Update (SMU) on OVA/ISO deployments in Cisco DCNM Release 11.5(4) to address **CVE-2022-22965** issue.

To apply the Software Maintenance Update (SMU) on Cisco DCNM OVA/ISO in Standalone deployment mode, perform the following steps:

Before you begin

- Take a backup of the application data using the **appmgr backup** command on the DCNM appliance.

  ```
  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 VM snapshots for all nodes. For instructions, refer to *VMware Snapshot Support* section in your Cisco DCNM Release Notes.

- Ensure that you plan for a maintenance window to install SMU.

- Ensure that Cisco DCNM 11.5(4) is up and running.

Note Only a **root** user can install the SMU on the Cisco DCNM Release 11.5(4) appliance

Procedure

Step 1 Download the SMU file.

a) Go to the following site: https://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(4).

c) Locate **DCNM 11.5(4) Maintenance Update for VMWare, KVM, Bare-metal, and Appliance servers to address CVE-2022-22965** and click Download icon.

d) Save the **dcnm-va-patch.11.5.4-p1.iso** file to your directory that is easy to find when you start to apply the maintenance update (patch).

Step 2 Unzip the **dcnm-va-patch.11.5.4-p1.iso** file and upload the file to the `/root/` folder in the DCNM node.

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 /mnt/iso** command.

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

Step 6 Mount the DCNM 11.5(4) SMU file in the `/mnt/iso` folder.

```
[root@dcnm]# mount -o loop dcnm-va-patch.11.5.4-p1.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
```

The progress is displayed on the screen. When the installation of SMU is complete, a successful message appears.

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.11.5.4-p1.iso** file from the DCNM setup.

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

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

Installing SMU on DCNM Native HA Deployment

This section provides instructions to install Software Maintenance Update (SMU) on OVA/ISO deployments in Cisco DCNM Release 11.5(4) to address **CVE-2022-22965** issue.

To apply the Software Maintenance Update (SMU) on Cisco DCNM OVA/ISO in Native HA deployment mode, perform the following steps:

Before you begin

- 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 VM snapshots for all nodes. For instructions, refer to *VMware Snapshot Support* section in your Cisco DCNM Release Notes.
- Ensure that you plan for a maintenance window to install SMU.
- Ensure that both the Cisco DCNM 11.5(4) 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 and Standby appliance. Wait until the role of the Active appliance is Active again. Apply the update on the Standby appliance, later.

  For Native HA cluster deployments, install the SMU on Active and Standby appliances, before installing SMU on the compute nodes.

Note Only a **root** user can install the SMU on the Cisco DCNM Release 11.5(4) appliance.

Procedure

Step 1 Download the SMU file.

a) Go to the following site: https://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(4).
c) Locate **DCNM 11.5(4) Maintenance Update for VMWare, KVM, Bare-metal, and Appliance servers to address CVE-2022-22965** and click Download icon.
d) Save the **`dcnm-va-patch.11.5.4-p1.iso`** file to your directory that is easy to find when you start to apply the maintenance update (patch).

Step 2 Unzip the **`dcnm-va-patch.11.5.4-p1.iso`** 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.

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

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

b) Mount the DCNM 11.5(4) SMU file on the Active node in the `/mnt/iso` folder.

```
[root@dcnm1]# mount -o loop dcnm-va-patch.11.5.4-p1.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
```

The progress is displayed on the screen. When the installation of SMU is complete, a successful message appears.

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.

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

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

b) Mount the DCNM 11.5(4) SMU file on the Standby node in the `/mnt/iso` folder.

```
[root@dcnm2]# mount -o loop dcnm-va-patch.11.5.4-p1.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
```

The progress is displayed on the screen. When the installation of SMU is complete, a successful message appears.

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@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.11.5.4-p1.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
```

Installing SMU on Cisco DCNM 11.5(4) Compute Nodes

This section provides instructions to install Software Maintenance Update (SMU) on OVA/ISO deployments in Cisco DCNM Release 11.5(4) to address **CVE-2022-22965** issue.

To apply the Software Maintenance Update (SMU) on compute nodes in Cisco DCNM clustered setup, perform the following steps:

Before you begin

- You must install the SMU on Cisco DCNM Servers in Native HA mode, before upgrading the DCNM compute nodes.
- If Cisco DCNM appliance is installed in VMware environment, ensure that you take VM snapshots for all nodes. For instructions, refer to *VMware Snapshot Support* section in your Cisco DCNM Release Notes.
- Ensure that you plan for a maintenance window to install SMU.
- Ensure that Cisco DCNM 11.5(4) is up and running.

Note Only a **root** user can install the SMU on the Cisco DCNM Release 11.5(4) appliance.

Procedure

Step 1 Download the SMU file.

a) Go to the following site: https://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(4).

c) Locate **DCNM 11.5(4a) Maintenance Update for VMWare, KVM, Bare-metal, and Appliance servers to address CVE-2022-22965** and click Download icon.

d) Save the **dcnm-va-patch.11.5.4-p1.iso** file to your directory that is easy to find when you start to apply the maintenance update (patch).

Step 2 Unzip the **dcnm-va-patch.11.5.4-p1.iso** file and upload the file to the `/root/` folder in all three compute nodes of the DCNM setup.

For example, let us indicate the three Compute Nodes as Compute1, Compute2, and Compute3.

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

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

```
dcnm-compute1# su
Enter the root password:
[root@dcnm-compute1]#
```

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

```
[root@dcnm-compute1]# 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 Compute1 node, install the SMU.

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

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

b) Mount the DCNM 11.5(4) SMU file on Compute1 node in the `/mnt/iso` folder.

```
[root@dcnm-compute1]# mount -o loop dcnm-va-patch.11.5.4-p1.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
```

The progress is displayed on the screen. When the installation of SMU is complete, a successful message appears.

If some services are still running, a prompt to stop the services appears. When prompted, press **y** to continue.

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

```
[root@dcnm-compute1]# appmgr status all
```

Note
Ensure that all the services are up and running on the **dcnm-compute1** node.

f) Terminate the **screen** session, by using the **exit** command.

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

g) Unmount the **dcnm-va-patch.11.5.4-p1.iso** file from the Compute1.

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

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

Step 6 Install the SMU on the other two Compute nodes also.

Follow the instructions as explained in Step Step 5, on page 7.

What to do next

After the installation is complete, each compute node joins the cluster automatically. On the Web UI, choose **Applications > Compute** to verify if the compute node appears as **Joined**.

Note If you try to install the SMU again, an error message appears stating that the patch is already applied on the Cisco DCNM/Compute.

Installing SMU on Cisco DCNM 11.5(4a) Standalone Deployment

This section provides instructions to install Software Maintenance Update (SMU) on OVA/ISO deployments in Cisco DCNM Release 11.5(4a) to address **CVE-2022-22965** issue.

To apply the Software Maintenance Update (SMU) on Cisco DCNM OVA/ISO in Standalone deployment mode, perform the following steps:

Before you begin

These instructions apply to Cisco DCNM Release 11.5(4a) release.

- Take a backup of the application data using the **appmgr backup** command on the DCNM appliance.

  ```
  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 VM snapshots for all nodes. For instructions, refer to *VMware Snapshot Support* section in your Cisco DCNM Release Notes.
- Ensure that you plan for a maintenance window to install SMU.
- Ensure that Cisco DCNM 11.5(4a) is up and running.

Note Only a **root** user can install the SMU on the Cisco DCNM Release 11.5(4a) appliance

Procedure

Step 1 Download the SMU file.

a) Go to the following site: https://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(4a).
c) Locate **DCNM 11.5(4a) Maintenance Update for VMWare, KVM, Bare-metal, and Appliance servers to address CVE-2022-22965** and click Download icon.
d) Save the **dcnm-va-patch.11.5.4a-p1.iso** file to your directory that is easy to find when you start to apply the maintenance update (patch).

Step 2 Unzip the **dcnm-va-patch.11.5.4a-p1.iso** file and upload the file to the `/root/` folder in the DCNM node.

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 /mnt/iso** command.

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

Step 6 Mount the DCNM 11.5(4a) SMU file in the `/mnt/iso` folder.

```
[root@dcnm]# mount -o loop dcnm-va-patch.11.5.4a-p1.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
```

The progress is displayed on the screen. When the installation of SMU is complete, a successful message appears.

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.11.5.4a-p1.iso** file from the DCNM setup.

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

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

Installing SMU on Cisco DCNM 11.5(4a) Native HA Deployment

This section provides instructions to install Software Maintenance Update (SMU) on OVA/ISO deployments in Cisco DCNM Release 11.5(4a) to address **CVE-2022-22965** issue.

To apply the Software Maintenance Update (SMU) on Cisco DCNM OVA/ISO in Native HA deployment mode, perform the following steps:

Before you begin

These instructions apply to Cisco DCNM Release 11.5(4a) release.

- 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 VM snapshots for all nodes. For instructions, refer to *VMware Snapshot Support* section in your Cisco DCNM Release Notes.

- Ensure that you plan for a maintenance window to install SMU.

- Ensure that both the Cisco DCNM 11.5(4a) 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 and Standby appliance. Wait until the role of the Active appliance is Active again. Apply the update on the Standby appliance, later.

  For Native HA cluster deployments, install the SMU on Active and Standby appliances, before installing SMU on the compute nodes.

Note Only a **root** user can install the SMU on the Cisco DCNM Release 11.5(4a) appliance.

Procedure

Step 1 Download the SMU file.

a) Go to the following site: https://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(4a).

c) Locate **DCNM 11.5(4a) Maintenance Update for VMWare, KVM, Bare-metal, and Appliance servers to address CVE-2022-22965** and click Download icon.

d) Save the **dcnm-va-patch.11.5.4a-p1.iso** file to your directory that is easy to find when you start to apply the maintenance update (patch).

Step 2 Unzip the **dcnm-va-patch.11.5.4a-p1.iso** 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.

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

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

b) Mount the DCNM 11.5(4a) SMU file on the Active node in the `/mnt/iso` folder.

```
[root@dcnm1]# mount -o loop dcnm-va-patch.11.5.4a-p1.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
```

The progress is displayed on the screen. When the installation of SMU is complete, a successful message appears.

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.

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

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

b) Mount the DCNM 11.5(4a) SMU file on the Standby node in the `/mnt/iso` folder.

```
[root@dcnm2]# mount -o loop dcnm-va-patch.11.5.4a-p1.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
```

The progress is displayed on the screen. When the installation of SMU is complete, a successful message appears.

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@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.11.5.4a-p1.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
```

Installing SMU on Cisco DCNM 11.5(4a) Compute Nodes

This section provides instructions to install Software Maintenance Update (SMUP on OVA/ISO deployments in Cisco DCNM Release 11.5(4a) to address **CVE-2022-22965** issue.

To apply the Software Maintenance Update (SMU) on compute nodes in Cisco DCNM clustered setup, perform the following steps:

Before you begin

- You must install the SMU on Cisco DCNM Servers in Native HA mode, before upgrading the DCNM compute nodes.
- If Cisco DCNM appliance is installed in VMware environment, ensure that you take VM snapshots for all nodes. For instructions, refer to *VMware Snapshot Support* section in your Cisco DCNM Release Notes.
- Ensure that you plan for a maintenance window to install SMU.
- Ensure that Cisco DCNM 11.5(4a) is up and running.



Note Only a **root** user can install the SMU on the Cisco DCNM Release 11.5(4a) appliance.

Procedure

Step 1 Download the SMU file.

a) Go to the following site: https://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(4a).

c) Locate **DCNM 11.5(4a) Maintenance Update for VMWare, KVM, Bare-metal, and Appliance servers to address CVE-2022-22965** and click Download icon.

d) Save the **`dcnm-va-patch.11.5.4a-p1.iso`** file to your directory that is easy to find when you start to apply the maintenance update (patch).

Step 2 Unzip the **`dcnm-va-patch.11.5.4a-p1.iso`** file and upload the file to the `/root/` folder in all three compute nodes of the DCNM setup.

For example, let us indicate the three Compute Nodes as Compute1, Compute2, and Compute3.

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

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

```
dcnm-compute1# su
Enter the root password:
[root@dcnm-compute1]#
```

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

```
[root@dcnm-compute1]# 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 Compute1 node, install the SMU.

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

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

b) Mount the DCNM 11.5(4a) SMU file on Compute1 node in the `/mnt/iso` folder.

```
[root@dcnm-compute1]# mount -o loop dcnm-va-patch.11.5.4a-p1.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
```

The progress is displayed on the screen. When the installation of SMU is complete, a successful message appears.

If some services are still running, a prompt to stop the services appears. When prompted, press **y** to continue.

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

```
[root@dcnm-compute1]# appmgr status all
```

Note
Ensure that all the services are up and running on the **dcnm-compute1** node.

f) Terminate the **screen** session, by using the **exit** command.

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

g) Unmount the **dcnm-va-patch.11.5.4a-p1.iso** file from the Compute1.

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

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

Step 6 Install the SMU on the other two Compute nodes also.

Follow the instructions as explained in Step #unique_122 unique_122_Connect_42_compute1-smu.

What to do next

After the installation is complete, each compute node joins the cluster automatically. On the Web UI, choose **Applications** > **Compute** to verify if the compute node appears as **Joined**.



Note If you try to install the SMU again, an error message appears stating that the patch is already applied on the Cisco DCNM/Compute.