Upgrading the Cisco Application Services Engine

Migrating from Fabric Internal Mode (Release 1.1.2) to Fabric External Mode (Release 1.1.3)

You can use this procedure to upgrade the Cisco Application Services Engine from version 1.1.2 to 1.1.3.

Note Stateful migration is not supported. Upgrading from 1.1.2 to 1.1.3 will not preserve any app data. All apps should be re-installed after the migration.

Note Same procedure has to be performed on each service node separately

Before you begin

- You must have Cisco Application Services Engine installed and the cluster configured.

- Ensure that you have a working software image for the upgrade.

Step 1	Log in to the Cisco Application Services Engine GUI.
Step 2	Disable Cisco NIR and Cisco NIA apps on the Cisco APIC.
Step 3	Note down the Cisco Application Services Engine data network subnet and Cisco Application Services Engine connected ports.
Step 4	Clean the Service Node related configuration from Cisco APIC.

To clean the Service Engine configuration from the APIC simply POST to the `https://`*`<apic-ip>`*`/appcenter/Cisco/ServiceEngine/api/wipeClean.json` API endpoint with `DEVCOOKIE=`*`<apic-auth-token>`* in the header.

You can obtain the *`<apic-auth-token>`* by first posting to *`https://`*`<apic-ip>`*`/api/aaaLogin.xml` with your login credentials and using the value of the returned `aaaLogin` field. For more information on using the APIC API, see *Cisco APIC REST API Configuration Guide*.

Step 5   Disable and delete the Cisco Application Services Engine app.

Step 6   Configure the Bridge Domain (BD), subnet, and Endpoint Groups (EPG) for Cisco Application Services Engine connectivity in management tenant using the information from Step 3.

> **Note**   Refer to Cisco APIC Layer 3 Networking Configuration Guide for configuring EPG/L3Out.

Step 7   Create a contract between the fabric data network EPG and Cisco Application Services Engine EPG.

Step 8   Upgrade all the service nodes to Release 1.1.3.

Step 9   Start the upgrade using the **acidiag installer update** -f *iso_filepath* command.

```
node # acidiag installer update -f /tmp/apic-sn-dk9.1.1.3.iso
```

Run the command on all nodes individually. Once the command is executed successfully, reboot the service nodes.

Step 10   Clean the previous version of the deployment using the **acidiag touch setup** command.

```
node # acidiag touch setup
```

Step 11   Reboot individual nodes using the **acidiag reboot** command.

```
node # acidiag reboot
```

Step 12   Complete the first time setup on all three nodes as described in *Cisco Application Services Engine Deployment Guide*.

Step 13   Verify the version after the upgrade using the **acidiag version** command.

```
node # acidiag version
```

Step 14   Add the new site using the procedure described in Adding a Site.

Step 15   Reinstall the Cisco NIR and Cisco NIA apps and enable the sites in Cisco Application Services Engine GUI.

Upgrading Existing Release 1.1.3 to Later Releases

GUI firmware upgrades are supported starting with Release 1.1.3c. You can use the following procedure to upgrade your Application Services Engine, Release 1.1.3 to a later release or patch.

Before you begin

- We recommend using this procedure to upgrade from Release 1.1.3 to later 1.1.3 patches.

- If you are upgrading from a release prior to Release 1.1.3, follow the steps described in Migrating from Fabric Internal Mode (Release 1.1.2) to Fabric External Mode (Release 1.1.3), on page 1 instead.

- If you want to upgrade to Nexus Dashboard, Release 2.0.1:

  - Ensure you have upgraded to at least Release 1.1.3d

• Follow the procedures described in *Cisco Nexus Dashboard Deployment Guide*

Step 1   Navigate to the **Operations** component in the left navigation pane.

Step 2   Click the **Operations** > **Firmware Management**

Firmware Management tab displays the node details including the current firmware version, number of nodes, and last update made on the firmware.

Step 3   Click **images** tab and download the new image.

Step 4   Click on **Firmware Management**, then **Set an update**.

Step 5   Click on **Available Target Firmware Versions**, then select the applicable version and click **confirm**.

Step 6   Click **Install**, then click **next**.

Step 7   After the installation is complete, click **Activate** and after the activation is done, click **Complete**.

Manual Upgrade Procedure

Use this prcedure for manual uprade of the service nodes.

Step 1   Log in to the Cisco Application Services Engine server as a rescue-user.

Step 2   Copy the ISO image file into the /tmp directory on all the nodes.

Step 3   Start the upgrade using the **acidiag installer update** command.

Run the command on all nodes individually. Once the command is executed successfully, reboot the service nodes. Wait till you see the success message on all nodes, before moving to Step 4.

```
[rescue-user@node1 ~]$ acidiag installer update -f /tmp/case-dk9.1.1.3a.iso
Warning: This command will initiate node update to new version. Proceed? (y/n): y
Update in Progress ... Do not press Ctrl^C
Update succeeded, reboot your host
```

Step 4   Reboot node using **acidiag reboot** command.

Wait for each node to come up with the new version and a healthy status, before proceeding to next node.

```
[rescue-user@node1 ~]$ acidiag reboot
This command will restart this device, Proceed? (y/n): y
Connection to 172.20.6.119 closed.

[rescue-user@node1 ~]$ acidiag version
APIC-SN 1.1.3a

[rescue-user@node1 ~]$ acidiag health
All components are healthy
```

Note   Do this on nodes one after the other. More than one node should not be unavailable at any time.

Step 5   Once all nodes are up with new version and healthy, run **acidiag installer post-update** on all nodes in parallel.

```
[rescue-user@node1 ~]$ acidiag installer post-update
Warning: This command will run the post-update scripts. Proceed? (y/n): y
```

```
Update in Progress ... Do not press Ctrl^C
Post-update succeeded
```

Step 6   Upgrade is complete at this point. Use **acidiag health** to monitor the health of the cluster as services get updated to the new version.