



Deploying the Cisco Application Services Engine in Fabric Internal Mode

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Prerequisites

- You have access to the Cisco APIC, Release 4.1 or later.
- You have the IP addresses, subnet mask, and gateway information for the Cisco Application Services Engine appliance.
- Cisco Application Services Engine is deployed as a cluster, using the In-band management interface to access the management network of the Cisco ACI fabric. Make sure that the In-Band IP address configuration is completed before setting up the Cisco Application Services Engine app.



Note See the [Cisco APIC and Static Management Access](#) for information on network connectivity.

- The Cisco APIC on the Cisco Application Services Engine allows smaller subnets. However, it is recommended to use /16 subnets.
- You have the IP addresses of the primary and secondary DNS server.
- You have the IP addresses of the primary and secondary NTP server.

Workflow for Setting Up the Cisco Application Services Engine App

Use this procedure to deploy and set up the Cisco Application Services Engine app from the Cisco Data Center App Center.

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 - Step 2 [Configuring the Cisco Application Services Engine Cluster](#)
 - Step 3 [Registering the Service Node](#)
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Adding Cisco Application Services Engine to Cisco APIC

Use this procedure to download the Cisco Application Services Engine app from the Cisco DC App Center and add it to Cisco APIC.

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- Step 1** Log in to the [Cisco DC App Center](#) as an end user.
The **Introducing the Cisco App Center** banner appears.
 - Step 2** On the **Introducing the Cisco App Center** banner, click **Browse apps** to view the available apps.
The apps available for download are displayed in the **All** window.
 - Step 3** Search for the Cisco Application Services Engine app and click **Download**.
 - Step 4** Review the license agreement and click **Agree and download**.
The Cisco Application Services Engine app is downloaded to your local machine.
 - Step 5** Log in to the Cisco APIC as an admin user.
 - Step 6** On the menu bar, choose **Apps**, then click **All Apps**. Click the + icon to add an app.
 - Step 7** Click **Browse** and locate the Cisco Application Services Engine app.
 - Step 8** Click **Submit** to upload the app.
After the Cisco Application Services Engine app is uploaded, the thumbnail of the app is displayed under the **All Apps** tab.
 - Step 9** Click **Install** to install the Cisco Application Services Engine app. You can also select **Install** from the **Actions** drop-down list to install the Cisco Application Services Engine app.
Once the Cisco Application Services Engine is installed, it is displayed on the **Apps** tab.
 - Step 10** To launch Cisco Application Services Engine, select the app from the **Apps** tab.
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Configuring the Cisco Application Services Engine Cluster

Use this procedure to set up the Cisco Application Services Engine cluster.

Before you begin

You have added the Cisco Application Services Engine app to the Cisco APIC.

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- Step 1** Log in to the Cisco APIC as an admin user.

- Step 2** To launch , select the app from the **Apps** tab.
Cisco Application Services Engine
- Step 3** Click **Enable**.
- Step 4** Click **Open** tab on the thumbnail.
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The **Welcome to Service Engine** window appears. Click **Begin Set Up** tab. Proceed in the following order:
- The **In-Band IP Configuration** is marked with a green check mark. If not, ensure that the In-Band IP address configuration is completed before setting up the Cisco Application Services Engine app.
 - Click **Begin** set up the cluster configuration.
- Step 5** In the **Cluster Configuration** page, enter a name for the cluster, following the standard host name conventions. Do not use special characters or spaces in the cluster name.
- Step 6** Enter the **In-Band Management Subnet** and associate **APIC In-Band EPG** from the drop-down list.
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- Step 7** Enter the **App Subnet** and **Service Subnet** IP addresses.
We recommend to use /16 app subnet.
- Step 8** Enter the **VLAN** range. The default range is 100-200. Do not include the infra VLAN.
- Step 9** Click **Next**.
- Step 10** Enter the **NTP Servers** hostname or the IP address.
- Step 11** Enter the **DNS** domain name and DNS provider.
More than one NTP server and DNS provider can be added.
- Step 12** Click **Save and Finish**.
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Registering the Service Node

Use this procedure to register the service node.

Before you begin

- You have configured the Cisco Application Services Engine cluster.

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- Step 1** Click **Begin** to set up the **Service Node Registration**.
- Step 2** If the service nodes are detected, perform the following action:
- Select a service node and click **Register**.
 - The **Name** and the **Serial Number** of the appliance are auto populated.
- Step 3** If the service nodes are not detected, perform the following action:
- From the **Actions** drop-down list, click **Register new node**.
 - Enter the **Name** and the **Serial Number** of the appliance.

- Step 4** Enter the **In-Band Management**. This should be the same as the cluster's In-Band subnet.
- Step 5** Enter the **Out-of-Band Management** and **Out-of-Band Gateway** IP addresses for each service node.
- Step 6** Click **Save**.
- Step 7** Repeat steps 1- 5 for each service node.
- Step 8** Click **Dashboard** to return to the app page.

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The dashboard shows the cluster configuration and registered service nodes. The **Operational State** of the service nodes should be **Active**.
