

## Review High Availability Cluster Deployment Scenarios

Cisco DNA Center's implementation of high availability (HA) is described in the *Cisco DNA Center High Availability Guide*. We recommend that you first review this information and then determine whether you want to deploy HA in your production environment. If you choose to do so, complete the following tasks:

- 1. Complete the deployment procedure that is appropriate for your network:
  - New HA Deployment
  - Existing HA Deployment of the Primary Node with Standard Interface Configurations
  - Existing HA Deployment of Primary Node with Nonstandard Interface Configurations
- 2. Activate High Availability on your Cisco DNA Center cluster.
- 3. See Additional HA Deployment Considerations and make any additional configurations that are necessary.
  - New HA Deployment, on page 1
  - Existing HA Deployment of the Primary Node with Standard Interface Configurations, on page 2
  - Existing HA Deployment of Primary Node with Nonstandard Interface Configurations, on page 3
  - Activate High Availability, on page 3
  - Additional HA Deployment Considerations, on page 4

### **New HA Deployment**

To install a brand new HA cluster, complete the following steps:

- **Step 1** Configure the first installed appliance as the primary node:
  - If you are configuring an appliance using the Maglev Configuration wizard, see Configure the Primary Node Using the Maglev Wizard.
  - If you are configuring an appliance using the browser-based configuration wizard, see the "Configure the Primary Node Using the Advanced Install Configuration Wizard" topic specific to your appliance:
    - 44 or 56-core appliance

- 112-core appliance
- **Step 2** Configure the second and third appliances in the cluster:
  - If you are configuring an appliance using the Maglev Configuration wizard, see Configure a Secondary Node Using the Maglev Wizard.
  - If you are configuring an appliance using the browser-based configuration wizard, see the "Configure a Secondary Node Using the Advanced Install Configuration Wizard" topic specific to your appliance:
    - 44 or 56-core appliance
    - 112-core appliance

# **Existing HA Deployment of the Primary Node with Standard Interface Configurations**

To deploy an existing HA cluster, where the primary node uses the required interface cable configurations, complete the following steps.

- **Step 1** Upgrade the primary node to Cisco DNA Center 2.3.3.
  - For information about upgrading your current release of Cisco DNA Center, see Cisco DNA Center Upgrade Guide.
- **Step 2** Confirm that you are using the required interface cable configurations on the primary node.
  - See Interface Cable Connections.
- **Step 3** Update the virtual IP address (if the virtual IP address is not yet added).
  - See Reconfigure the Appliance Using the Configuration Wizard.
- **Step 4** Configure the second and third appliances in the cluster:
  - If you are configuring appliances using the Maglev Configuration wizard, see Configure a Secondary Node Using the Maglev Wizard.
  - If you are configuring appliances using the browser-based configuration wizard, see the "Configure a Secondary Appliance Using the Advanced Install Configuration Wizard" topic specific to your appliance:
    - 44 or 56 core appliance
    - 112 core appliance
- **Step 5** Enter the following command to check the GlusterFS size:

sudo du -h /data/maglev/srv/maglev-system/glusterfs/mnt/bricks/default\_brick/ | tail -1 | awk '{print \$1}'

If the GlusterFS file system size is larger than 150 GB, complete the steps described in Existing HA Deployment of Primary Node with Nonstandard Interface Configurations.

## Existing HA Deployment of Primary Node with Nonstandard Interface Configurations

To deploy an existing HA cluster where the primary node uses nonstandard interface configurations, complete the following steps.

- **Step 1** Upgrade the primary node to Cisco DNA Center 2.3.3.
  - For information about upgrading your current release of Cisco DNA Center, see Cisco DNA Center Upgrade Guide.
- **Step 2** Create a backup of the remote repository.
  - See the "Backup and Restore" chapter in the Cisco Digital Network Architecture Center Administrator Guide.
- **Step 3** Reimage the primary node with the required interface cable configuration.
  - See Interface Cable Connections and Install the Cisco DNA Center ISO Image. Make sure that the VIP has been configured correctly on the primary node.
- **Step 4** On the primary node, install the same set of packages that you selected during the backup.
- **Step 5** Using the backup file that you created in Step 2, restore the remote repository's data.
- **Step 6** Configure the second and third appliances in the cluster.
  - If you are configuring appliances using the Maglev Configuration wizard, see Configure a Secondary Node Using the Maglev Wizard.
  - If you are configuring appliances using the browser-based configuration wizard, see the "Configure a Secondary Appliance Using the Advanced Install Configuration Wizard" topic specific to your appliance:
    - 44 or 56 core appliance
    - 112 core appliance

### **Activate High Availability**

Cisco DNA Center's implementation of HA is described in the *Cisco DNA Center High Availability Guide*. We recommend that you first review this information and then determine whether you want to deploy HA in your production environment. If you choose to do so, complete the following steps:

- 1. Click the menu icon (≡) and choose System > Settings > System Configuration > High Availability.
- 2. Click Activate High Availability.

After you click **Activate High Availability**, Cisco DNA Center enters into maintenance mode. In this mode, Cisco DNA Center is unavailable until the redistribution of services is completed. You should take this into account when scheduling an HA deployment.



Note

Cisco DNA Center goes into maintenance mode every time you restore the database, perform a system upgrade (not a package upgrade), and activate HA (as described above).

#### **Additional HA Deployment Considerations**

For an existing HA deployment, the following additional configurations must be made.



Note

For information about known HA bugs and workarounds, see "Open Bugs—HA" in the Release Notes for Cisco Digital Network Architecture Center.

#### **Telemetry**

If you enabled telemetry for a device (without enabling the VIP), complete the following steps:

- **Step 1** Use the **sudo maglev-config update** command to update the cluster VIP.
- **Step 2** Disable telemetry on the device:
  - a. From the Cisco DNA Center home page, choose **Network Telemetry** from the **Tools** area.
    - The **Network Telemetry** window appears.
  - b. Click the Site View tab.
  - **c.** Check the check box of the device on which you want to disable telemetry, and then choose **Actions** > **Disable Telemetry**.
- **Step 3** Reenable telemetry using the profile associated with the device previously.

#### **Wireless Controller**

You must update the wireless controllers in your network with the new VIP of Cisco DNA Center.