Review High Availability Cluster Deployment Scenarios

Cisco DNA Center's implementation of high availability (HA) is described in the Cisco Digital Network Architecture 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 Master Node with Standard Interface Configurations
   - Existing HA Deployment of Master Node with Nonstandard Interface Configurations

2. Redistribute Services among your cluster nodes.

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 Master Node with Standard Interface Configurations, on page 2
   - Existing HA Deployment of Master Node with Nonstandard Interface Configurations, on page 2
   - Redistribute Services, on page 3
   - Additional HA Deployment Considerations, on page 3

New HA Deployment

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

<table>
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<tr>
<th>Step 1</th>
<th>Configure the first installed appliance as the master node.</th>
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<tr>
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<td>See Configure the Master Node.</td>
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<tr>
<td>Step 2</td>
<td>Configure the second and third appliances in the cluster.</td>
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<tr>
<td></td>
<td>See Configure Add-On Nodes.</td>
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Existing HA Deployment of the Master Node with Standard Interface Configurations

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

**Step 1** Upgrade the master node to Cisco DNA Center 1.3.1.0.
For information about upgrading your current release of Cisco DNA Center, see Cisco Digital Network Architecture Center Upgrade Guide.

**Step 2** Confirm that you are using the required interface cable configurations on the master 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.
See Configure Add-On Nodes.

**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 Master Node with Nonstandard Interface Configurations.

Existing HA Deployment of Master Node with Nonstandard Interface Configurations

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

**Step 1** Upgrade the master node to Cisco DNA Center 1.3.1.0.
For information about upgrading your current release of Cisco DNA Center, see Cisco Digital Network Architecture 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 master 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 master node.

**Step 4**
On the master 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.

See Configure Add-On Nodes.

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## Redistribute Services

Cisco DNA Center's implementation of HA is described in the [Cisco Digital Network Architecture Center High Availability Guide](https://www.cisco.com/c/en/us/solutions/collateral/service-provider/dna-center/white_paper-c11-583164.html). 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, optimize HA operation by redistributing the services among your cluster nodes:

1. Click 🌐 and then choose **System Settings**.
   
   The **System 360** tab is displayed by default.

2. In the **Hosts** area, click **Enable Service Distribution**.

After you click **Enable Service Distribution**, 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.

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**Note**

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

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## Additional HA Deployment Considerations

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

**Note**


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## Telemetry

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

**Step 1**
Use the `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.