

Deploy Catalyst Center Global Manager

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Deployment Modes of Catalyst Center Global Manager VM on VMware ESXi

This section describes the deployment modes and the steps to deploy Catalyst Center Global Manager VM on ESXi 7.0 or later.

Catalyst Center Global Manager can be deployed using one of these methods:

- Configuration wizard or command-line interface (CLI).
- Web install or graphical user interface (GUI).

Catalyst Center Global Manager deployment provides these capabilities:

- Deploy Catalyst Center Global Manager on a VM (VMware ESXi/vCenter).
- Install Catalyst Center Global Manager using CLI or web install.

Create the Catalyst Center Global Manager VM

Use the **Deploy OVF Template** wizard in the VMware vSphere Web Client to deploy the OVF-formatted file.

Follow these steps to deploy your virtual machine on the VMware ESXi host or cluster where your virtual appliance will reside.

Procedure

- Step 1 Download the Catalyst Center Global Manager OVA file from the location specified by Cisco.
- **Step 2** Log in to the VMware vSphere Web Client using the applicable credentials.

The VMware vSphere Web Client page opens.

Step 3 In the navigation pane, right-click the IP address of host or cluster on which you want to deploy the OVA file and then click **Deploy OVF Template**.

The **Deploy OVF Template** wizard opens.

- **Step 4** Complete the **Deploy OVF Template** wizard:
 - a) In the **Select an OVF Template** wizard page, specify the OVA file you want to use for deployment and then click **Next**. You can either:
 - Click the **URL** radio button and enter the appropriate path and OVA filename. If you choose this option, ensure that the OVA file is stored in and shared from a web-accessible location.
 - Click the Local file radio button, click Upload Files, and then navigate to and select the appropriate OVA file.

The wizard's **Select a name and folder** page opens. By default, the filename field shows the OVA file name you are about to create. The path shows the location within the Navigator directory where the ESXi host or cluster is listed. This location corresponds to the deployment location you chose in Step 3.

b) If you want to use the default values, click **Next** and proceed to Step 4c.

Optionally, if you want to use different values such as naming the VM or selecting a different folder location in the VMware vSphere Web Client directory, do the following:

- 1. Enter a name for the virtual machine you are creating.
- 2. Specify where the virtual machine will reside.
- 3. Click Next.

The wizard's **Select a compute resource** page opens.

c) Click the ESXi host or cluster you selected for OVA deployment—this is the same one you right-clicked in Step 3. Then click **Next**.

The **Review details** page opens which lists deployment template details.

- d) Review the template details and then do one of the following:
 - To make changes, click **Back** to return to the appropriate wizard page.
 - To proceed, click Next.

The wizard's **Select storage** page appears.

- e) On the **Select storage** page, do the following:
 - 1. Click the radio button for the storage device you want to use.
 - 2. In the Select virtual disk format field, choose either the Thick Provision or Thin Provision option.

Note

Thick Provision is recommended here.

- 3. In the VM Storage Policy drop-down list, keep the Datastore Default.
- Click Next.

The wizard's **Select networks** page opens.

- f) To assign the interface that Catalyst Center Global Manager will use, on the **Select networks** indicate the interface that connects the system to the enterprise network. Do the following:
 - 1. In the VM Network drop-down list, choose the interface that connects the system to the enterprise network.

Note

This interface or IP address is used for UI or SSH access to Catalyst Center Global Manager as well as establishing connection with controllers. So connectivity to and from the controllers must be ensured through this IP.

Only one NIC is supported for Catalyst Center Global Manager VM.

2. Click Next.

The **Ready to complete** wizard page opens and displays a summary of the deployment settings you've entered.

- g) Review the settings, then do one of the following:
 - If you need to make any changes, click **Back** as needed to return to the appropriate wizard page and make the changes.
 - If the settings are correct and you want to proceed with deployment, click Finish.

The **Deploy OVF Template** wizard closes and the deployment of the Catalyst Center Global Manager begins immediately.

Important

- Deployment typically takes about 45 minutes to complete. Monitor the deployment progress in the vSphere Client's Recent Tasks tab.
- Available bandwidth, vCPUs, RAM, and hard disk space can affect the time that this process takes.
- · After the deployment tasks are completed, power on your virtual machine and configure it.

Configure Catalyst Center Global Manager on ESXi virtual appliance

Before using Catalyst Center Global Manager, complete the appliance configuration workflow that meets your requirements. Complete one of the following procedures to configure Catalyst Center Global Manager on an ESXi virtual appliance on a VMware ESXi host.

Configure a virtual appliance using the maglev configuration wizard (default mode)

To quickly configure a virtual appliance with preset appliance settings, use the maglev configuration wizard by completing this procedure.



Note

The intracluster interface is preconfigured when using this wizard.

Configure the virtual appliance using these steps:

Before you begin

Before you start, gather this information for the virtual appliance:

- · Static IP address
- · Subnet mask
- Default gateway
- · DNS address
- NTP server details
- · Proxy server details

Procedure

- **Step 1** After deployment completes, power on the newly-created virtual machine:
 - a) In the vSphere Client, right-click the virtual machine.
 - b) Choose **Power > Power On**.

The virtual machine becomes operational in about 45 minutes after you power it on. The actual time depends on available bandwidth, RAM, hard disk space, and the number of vCPUs. You can monitor progress in the VMware VM Console.

- **Step 2** Launch either the remote console or web console by clicking the appropriate link.
- **Step 3** Configure the virtual machine by completing the maglev configuration wizard:
 - a) You do not need to enter any settings on the **STATIC IP CONFIGURATION** page. Click **skip>>** to continue to the next screen for CLI based installed.

The **Welcome to Maglev Configuration Wizard** window opens. Select Catalyst Center Global Manager and then hit **Enter**.

- b) Click Create Catalyst Center Global Manager Virtual Appliance.
- c) Select the Start using MKS pre manufactured cluster option.

The pre-manufactured cluster option enables faster installation but prevents customization of the cluster port.

- d) Select the manufacture cluster option. The wizard displays a series of questions about maglev configuration.
 - 1. This is the enterprise address. Its purpose is to enable Catalyst Center Global Manager to communicate with and manage your network.
 - 2. Click Next to proceed to the next screen. This is the cluster default IP address. No need to do any changes here.
- e) Enter the configuration values for **NETWORK ADAPTER #1**, and click **next>>** to validate the host networking. See the table for required network settings.

Host IP address	Enter the IP address for the Enterprise port.
Netmask	Enter the mask for your IP address.
Default Gateway IP Address	Enter the default gateway IP address to use for the port.
Static routes	If you enter a default gateway, do not configure static routes.

The wizard validates the settings after the DNS step. If you receive an error message, check your entry and correct it. Click << back to reenter if needed. The validation process takes approximately 4 to 5 minutes.

- f) You do not need to enter configuration values for **NETWORK ADAPTER #2**. The **NETWORK ADAPTER #2** is the cluster port. If you selected **pre manufactured**, these values are prepopulated and cannot be changed. If you selected advance install, enter the desired cluster interface information. Select **next>>** to proceed.
- g) In the **DNS Configuration** page, enter the IP address of the preferred DNS server and then select **next>>**. If you are entering multiple DNS servers, separate the IP addresses in the list with spaces.

Important

Configure a maximum of three DNS servers. Problems can occur if you configure more than three DNS servers for a virtual appliance.

- h) Do one of the following:
 - If you need to change any settings, select << back as needed, make the necessary changes, and then return to this wizard page.
 - If you are satisfied with the settings you entered, select **proceed>>**.
- After the network adapter configuration is complete, the wizard prompts you to enter configuration values for the NETWORK PROXY you are using.

After validation successfully completes, do one of the following:

- If your network does *not* use a proxy server to access the Internet, select **skip proxy>>** to proceed.
- If your network uses a proxy server, enter the configuration values in the **NETWORK PROXY** wizard page by referring to this table, then select **next>>**.

HTTPS Proxy field	Enter the URL or host name of an HTTPS network proxy used to access the Internet.	
	Note Connection from Catalyst Center Global Manager to the HTTPS proxy is supported only through HTTP in this release.	
HTTPS Proxy Username field	Enter the user name used to access the network proxy. If no proxy login is required, leave this field blank.	
HTTPS Proxy Password field	Enter the password used to access the network proxy. If no proxy login is required, leave this field blank.	

j) (Optional) Enter the virtual appliance's virtual IP address in the **MAGLEV CLUSTER DETAILS** wizard page. Enter the virtual IP address configured for the Enterprise interface.

You can also specify the fully qualified domain name (FQDN) for your virtual appliance. Catalyst Center Global Manager uses this domain name to perform these functions:

• Catalyst Center Global Manager accesses your virtual appliance's web interface and the Representational State Transfer (REST) APIs used by devices in the enterprise network it manages with this hostname.

Select **next>>** to proceed after you provide the necessary information. Correct any validation errors as you did in earlier screens.

k) Enter the configuration values for the settings provided in the wizard's **USER ACCOUNT SETTINGS** page by referring to this table, then select **next>>**.

Linux Password field	Enter and confirm the password for the maglev user.	
	Note According to the CLI password policy, your new password must differ from the last 24 passwords you have used.	
Re-enter Linux Password field	Confirm the Linux password by entering it a second time.	
Password Generation Seed field	If you do not want to create the Linux password yourself, enter a seed phrase in this field and then press Generate Password > to generate the password.	
Auto Generated Password field	(Optional) The seed phrase appears as part of a random and secure password. If desired, you can either use this password "as is", or you can further edit this auto-generated password. Press < Use Generated Password> to save the password.	

Correct any validation errors to proceed (if necessary).

Enter the configuration values for the settings provided in the wizard's NTP SERVER SETTINGS page by referring to this table, then select next>>.

NTP Servers field	Enter one or more NTP server addresses or hostnames, separated by spaces. At least one NTP address or hostname is required. For a production deployment, we recommend that you configure a minimum of three NTP servers. The Catalyst Centers and the Catalyst Center Global Manager must use a common NTP server or be synchronized within a maximum time difference of one second.
	Note For NTP, ensure port 123 (UDP) is open between Catalyst Center Global Manager and your NTP server.

NTP Authentication check box	To enable the authentication of your NTP server before it's synchronized with Catalyst Center Global Manager, check this check box and then enter the following information:
	• The NTP server's key ID. Valid values range between 1 and 4294967295 (2^32-1).
	This value corresponds to the key ID that's defined in the NTP server's key file.
	• The SHA-1 key value associated with the NTP server's key ID. This 40-character hex string resides in the NTP server's key file.
	Note
	Ensure that you enter a key ID and key value for each NTP server that you configured in the previous field.

After you provide the necessary information, correct any validation errors to proceed (if necessary).

A final message appears, stating that the wizard is ready to apply the configuration.

m) To apply the settings you've entered to the virtual appliance, select **proceed>>**.

After the configuration process completes, the virtual appliance powers on again and displays a **CONFIGURATION SUCCEEDED!** message. Then, it displays the maglev login page.



Note

It can take from 15 to 30 minutes for services to stabilize, after which you can log in to the virtual appliance GUI.

Configure a virtual appliance using the maglev configuration wizard (advanced mode)

To configure a virtual appliance using the maglev configuration wizard and to specify settings that are different from the preset appliance settings, follow this procedure.

Before you begin

Before you start, gather this information for the virtual appliance:

- · Static IP address
- · Subnet mask
- Default gateway
- · DNS address
- · NTP server details
- Proxy server details

Procedure

- **Step 1** After deployment completes, power on the newly created virtual machine:
 - a) In the vSphere Client, right-click the virtual machine.
 - b) Choose **Power > Power On**.

The virtual machine becomes operational in about 45 minutes after you power it on. The actual time depends on available bandwidth, RAM, hard disk space, and the number of vCPUs. You can monitor the progress in the vSphere Client's **Recent Tasks** tab.

- **Step 2** Click the link to open the remote console or web console.
- **Step 3** Configure the virtual machine by completing the maglev configuration wizard:
 - a) You do not need to enter any settings in the STATIC IP CONFIGURATION page in the wizard, so select skip>>.
 - b) Click Create Catalyst Center Global Manager Virtual appliance.
 - c) Select the **Start configuration of MKS in advanced mode** option.

The next wizard page opens, indicating that all preconfigured appliance settings (except for the container and cluster subnets) will be erased. You'll need to enter values for these settings.

If you choose this option, you cannot return to the default appliance setup workflow. Review this limitation before you complete the next step.

d) Select **proceed>>**.

After all of the preconfigured appliance settings have been erased, the next wizard page opens.

- e) Select **next>>**.
- f) You don't need to enter any settings in the Layer2 mode used for the services wizard page, so select next>>.
- g) Enter the configuration values for **NETWORK ADAPTER #1**, as shown in this table, then select **next>>**.

Catalyst Center Global Manager uses this interface to link the virtual appliance with your network.

Host IPv4 Address field	Enter the IP address for the Enterprise interface. This is required.
IPv4 Netmask field	Enter the netmask for the interface's IP address. This is required.
Default Gateway IPv4 Address field	Enter a default gateway IP address to use for the interface.
IPv4 Static Routes field	Enter one or more static routes in this format, separated by spaces: <pre><network>/<netmask>/<gateway>.</gateway></netmask></network></pre>
Cluster Link field	Leave this field blank. It is required on the Intracluster interface only.
LACP Mode field	Leave this field blank, it does not apply to virtual appliances.

The wizard validates the values you entered and issues an error message if any are incorrect. If you receive an error message, verify the entered value and correct it. If needed, select << back to make another change.

h) In the **DNS Configuration** page, enter the IP address of the preferred DNS server and then select **next>>**. If you are entering multiple DNS servers, separate the IP addresses in the list with spaces.

Important

Configure a maximum of three DNS servers. Problems can occur if you configure more than three DNS servers for a virtual appliance.

- i) Do one of the following:
 - If you need to change any settings, select << back as needed, make the necessary changes, and then return to this wizard page.
 - If you are satisfied with the settings you entered, select **proceed>>**.
- j) After the network adapter configuration is complete, the wizard prompts you to enter configuration values for the NETWORK PROXY you are using, as described in this table.

HTTPS Proxy field	Enter the URL or host name of an HTTPS network proxy used to access the Internet.	
	Note Connection from Catalyst Center Global Manager to the HTTPS proxy is supported only through HTTP in this release.	
HTTPS Proxy Username field	Enter the user name used to access the network proxy. If no proxy login is required, leave this field blank.	
HTTPS Proxy Password field	Enter the password used to access the network proxy. If no proxy login is required, leave this field blank.	

After validation successfully completes, do one of the following:

- If your network does not use a proxy server to access the internet, select **skip proxy>>** to proceed.
- If your network uses a proxy server, enter the configuration values in the **NETWORK PROXY** wizard page (as shown in the above table), then select **next>>**.
- k) (Optional) The wizard prompts you to enter the virtual IP address for the appliance in the **MAGLEV CLUSTER DETAILS** wizard page. Enter the virtual IP address configured for the Enterprise interface.

You can also specify the fully qualified domain name (FQDN) for your virtual appliance. Catalyst Center Global Manager uses this domain name to do the following:

• Catalyst Center Global Manager uses this hostname to access your virtual appliance's web interface and the Representational State Transfer (REST) APIs used by devices in the enterprise network that Catalyst Center Global Manager manages.

After you provide the necessary information, select **next>>** to proceed. Correct any validation errors if they occur.

l) Enter the configuration values for the settings provided in the **USER ACCOUNT SETTINGS** page in the wizard as described in this table. Then select **next>>**.

Linux Password field	Enter and confirm the password for the maglev user.	
	Note According to the CLI password policy, your new password must differ from the last 24 passwords you have used.	
Re-enter Linux Password field	Confirm the Linux password by entering it a second time.	

Password Generation Seed field	If you do not want to create the Linux password yourself, enter a seed phrase in this field and then press Generate Password > to generate the password.
Auto Generated Password field	(Optional) The seed phrase appears as part of a random and secure password. You can use this password as is or further edit this automatically generated password.
	Press < Use Generated Password> to save the password.

After you provide the necessary information, correct any validation errors to proceed (if necessary).

m) Enter the configuration values for the settings provided in the **NTP SERVER SETTINGS** page in the wizard as described in this table, then select **next>>**.

NTP Servers field	Enter one or more NTP server addresses or hostnames, separated by spaces. At least one NTP address or hostname is required. For a production deployment, we recommend that you configure a minimum of three NTP servers. The Catalyst Centers and the Catalyst Center Global Manager are required to either use a common NTP or achieve synchronization with a maximum time difference of one second between them. Note For NTP, ensure port 123 (UDP) is open between Catalyst Center Global
	Manager and your NTP server.
NTP Authentication check box	To enable the authentication of your NTP server before it's synchronized with, check this check box and then enter the following information:
	• The NTP server's key ID. Valid values range between 1 and 4294967295 (2^32-1).
	This value corresponds to the key ID that's defined in the NTP server's key file.
	The SHA-1 key value associated with the NTP server's key ID. This 40-character hex string resides in the NTP server's key file.
	Note Ensure that you enter a key ID and key value for each NTP server that you configured in the previous field.

After you provide the necessary information, correct any validation errors to proceed (if necessary).

A final message appears, stating that the wizard is ready to apply the configuration.

n) Enter the configuration values for the settings provided in the **MAGLEV ADVANCED SETTINGS** page in the wizard, as described in this table. Then click **next>>**.

Container Subnet field	A dedicated, non-routed IP subnet that Catalyst Center Global Manager uses to manage internal services. By default, this is already set to 169.254.32.0/20 , and we recommend that you use this subnet. If you choose to enter another subnet, ensure that it does not conflict with or overlap any other subnet used by the Catalyst Center Global Manager on internal network or an external network. For more information, see the Container Subnet description in the <i>Catalyst Center Second-Generation Appliance Installation Guide's</i> "Required IP Addresses and Subnets" topic.
Cluster Subnet field	A dedicated, non-routed IP subnet that Catalyst Center Global Manager uses to manage internal cluster services. By default, this is already set to 169.254.48.0/20, and we recommend that you use this subnet. If you choose to enter another subnet, ensure that it does not conflict with or overlap any other subnet used by the Catalyst Center Global Manager internal network or an external network. For more information, see the Cluster Subnet description in the <i>Catalyst Center Second-Generation Appliance Installation Guide's</i> "Required IP Addresses and Subnets" topic.

After you provide the necessary information, correct any validation errors to proceed (if necessary).

A final message appears, stating that the wizard is ready to apply the configuration.

o) To apply the settings you've entered to the virtual appliance, select **proceed>>**.

After the configuration process completes, the virtual appliance powers on again and displays a **CONFIGURATION SUCCEEDED!** message.

It takes around 180 to 210 minutes for the virtual machine to become operational. The actual time will depend on things like available bandwidth, RAM, hard disk space, and the number of vCPUs. You can monitor the progress in the vSphere Client's **Recent Tasks** tab.

Configure a virtual appliance using the web install configuration wizard

To quickly configure a virtual appliance using preset appliance settings, use the browser-based install configuration wizard.



Important

Enter valid IPv4 addresses with matching netmasks during this procedure. Make sure addresses and their subnets do not overlap. If subnets or addresses overlap, service communication issues can occur.

Before you begin

Collect the following information before you begin:

- · Static IP address
- · Subnet mask
- Default gateway
- · DNS address

- NTP server details
- Proxy server details

Use a supported browser. For more information on supported browsers, see the Deployment requirements section.

Enable ICMP on the firewall between Catalyst Center Global Manager and the DNS servers you you plan to specify. This wizard uses Ping to verify the DNS server you specify. This ping can be blocked if there is a firewall between Catalyst Center Global Manager and the DNS server and ICMP is not enabled on that firewall. If ICMP is not enabled, you cannot complete the wizard.

Procedure

- **Step 1** After deployment completes, power on the new virtual machine:
 - a) In the vSphere Web Client, right-click the virtual machine.
 - b) Choose **Power > Power On**.

It takes around 45 minutes for the virtual machine to become operational. The actual time depends on available bandwidth, RAM, hard disk space, and the number of vCPUs. You can monitor the progress in the **Recent Tasks** tab in vSphere Client.

- **Step 2** Launch either the remote console or web console by clicking the appropriate link.
- **Step 3** Start the install configuration wizard:
 - a) In the **STATIC IP CONFIGURATION** page, do one of the following:
 - Select **skip>>** to go to the CLI-based install.
 - If you want to assign your own IP address, subnet mask, and default gateway to your virtual appliance's Enterprise interface, enter the information described in this table and then select **configure>>**.

For IPv4 deployments, this check box must be cleared.

IP Address field	Enter the static IP address that you want to use.
Netmask field	Enter the netmask for the IP address you specified in the previous field. You can enter either a netmask or CIDR address.
Default Gateway Address field	Specify the default gateway that will be used to route traffic.
Static Routes field	Leave this field blank; you cannot specify static routes in this wizard.

Note the URL listed in the **Web Installation** field. Save this information for the next step.

- b) Open the URL that was displayed in the **Static IP Configuration** page.
- c) Click the Start a Cisco Catalyst Center Global Manager radio button, then click Next.
- d) Click the Install radio button, then click Start.

The **Overview** window opens. Click > to view a summary of the tasks that the wizard will help you complete.

e) Click **Start Workflow** to start the wizard.

The Virtual Appliance Interfaces page opens.

- **Step 4** Configure your virtual appliance by completing the install configuration wizard:
 - a) Click Next.

The **DNS Configuration** page opens.

b) In the **DNS** field, enter the IP address of the preferred DNS server. To enter additional DNS servers, click the **Add** (+) icon.

Important

You can configure a maximum of three DNS servers. If you configure more than three DNS servers for an appliance, you may encounter problems.

c) Click Next.

The **Configure Proxy Server Information** page opens.

- d) Do one of the following:
 - If your network does not use a proxy server to access the internet, click the No radio button and then click Next.
 - If your network uses a proxy server to access the internet, enter the values described in this table and then click **Next**

Proxy Server field	Enter the URL or host name of an HTTPS network proxy used to access the Internet.
	Note Connection from Catalyst Center Global Manager to the HTTPS proxy is supported only via HTTP in this release.
Port field	Enter the port that your appliance used to access the network proxy.
Username field	Enter the username used to access the network proxy. If no proxy login is required, leave this field blank.
Password field	Enter the password used to access the network proxy. If no proxy login is required, leave this field blank.

The **Advanced Appliance Settings** page opens in the wizard.

e) Enter configuration values for your appliance, then click **Next**.

NTP Server Settings	
NTP Server field	Enter at least one NTP server address or hostname. To enter additional NTP server addresses or hostnames, click the Add (+) icon. For a production deployment, we recommend that you configure at least three NTP servers.

Turn on NTP Authentication check box	To enable the authentication of your NTP server before it's synchronized with Catalyst Center Global Manager, check this check box and then enter the following information:
	• The NTP server's key ID. Valid values range between 1 and 4294967295 (2^32-1).
	This value is the key ID defined in the NTP server's key file.
	The SHA-1 key value associated with the NTP server's key ID. This 40-character hex string resides in the NTP server's key file.
	Note
	Ensure that you enter a key ID and key value for each NTP server that you configured in the previous field.
Subnet Settings	
Container Subnet field	A dedicated, nonrouted IP subnet that Catalyst Center Global Manager uses to manage internal services. By default, this is already set to 169.254.32.0/20 , and you cannot enter another subnet.
Cluster Subnet field	A dedicated, nonrouted IP subnet that Catalyst Center Global Manager uses to manage internal cluster services. By default, this is already set to 169.254.48.0/20 , and you cannot enter another subnet.

The **Enter CLI Password** page opens.

f) Enter and confirm the password for the maglev user, then click **Next**.

Note

According to the CLI password policy, your new password must differ from the last 24 passwords you have used.

Use this username and password to access the CLI for troubleshooting. After you log in, the system prompts you to configure a new admin user for security.

The wizard validates the information that you entered and notifies you if you need to change any settings before you can proceed. If the settings you entered are valid, the wizard's **Summary** page opens.

Note

To download the appliance configuration as a JSON file, click the corresponding link.

- g) Scroll to the bottom of the screen and review all of the settings that you have entered while completing the wizard. To update settings, click the corresponding **Edit** link.
- h) To complete the configuration of your Catalyst Center Global Manager virtual appliance, click **Start Configuration**.

The **Appliance Configuration in Progress** page continuously updates during the process, indicating the tasks that are currently being completed and their progress, as well as any errors that have occurred. Click the **Download** link to save a local copy of this information as a text file.

Step 5 After appliance configuration completes, the **Appliance Configuration Complete!** page opens. Then click the copy icon to copy the default admin superuser password.

Important

Catalyst Center Global Manager automatically sets this password when you complete the install configuration wizard. Ensure that you click the copy icon before you proceed. Otherwise, you will not be able to log in to Catalyst Center Global Manager for the first time.

Note

As a security measure, you'll be prompted to set up a new username and password after you log in. The default admin account will be deleted.

Configure a virtual appliance using the advanced web install configuration wizard

If you want to configure a virtual appliance using the browser-based advanced install configuration wizard and need to specify settings that are different from the preset appliance settings, complete the following procedure.



Important

Ensure that all of the IP addresses you enter while completing this procedure are valid IPv4 addresses with valid IPv4 netmasks. Also make sure that the addresses and their corresponding subnets do not overlap. If the addresses and subnets overlap, service communication issues may occur.

Procedure

- **Step 1** After deployment completes, power on the newly-created virtual machine:
 - a) In the vSphere Web Client, right-click the virtual machine.
 - b) Choose **Power > Power On**.

The virtual machine typically becomes operational in 90 to 120 minutes, depending on available bandwidth, RAM, hard disk space, and the number of vCPUs. You can monitor the progress in the vSphere Client's **Recent Tasks** tab.

- **Step 2** Launch either the remote console or web console by clicking the appropriate link.
- **Step 3** Open the advanced install configuration wizard:
 - a) In the **STATIC IP CONFIGURATION** page, do one of the following:
 - Select skip>>.
 - If you want to assign your own IP address, subnet mask, and default gateway to your virtual appliance's Enterprise
 interface, enter the information described in the table and then select configure>>.

For IPv4 deployments, this check box needs to remain unchecked.

IP Address field Enter the static IP address that you want to use.
--

Netmask field	Enter the netmask for the IP address you specified in the previous field. You can enter either a netmask or CIDR address.
Default Gateway Address field	Specify the default gateway that will be used to route traffic.
Static Routes field	Do not specify static routes with this wizard; leave the field blank.

Note the URL listed in the **Web Installation** field. You'll need this for the next step.

- b) Open the URL that was displayed in the **Static IP Configuration** page.
- c) Click the Start a Cisco Catalyst Center Global Manager radio button, then click Next.
- d) Click the Advanced Install radio button, then click Start.

The **Advanced Install Overview** window opens. Click > to view a summary of the tasks that the wizard will help you complete.

e) Click **Start Workflow** to start the wizard.

The **Virtual Appliance Interface Overview** page opens, providing a description of the four appliance interfaces that you can configure.

- **Step 4** Configure your virtual appliance by completing the advanced install configuration wizard:
 - a) Click Next.

The How would you like to set up your virtual appliance interfaces page opens

If your network resides behind a firewall, perform these actions:

- Click the **allow access to these URLs** link to view a pop-up window that lists the URLs that Catalyst Center Global Manager must be able to access.
- Click the **open these ports** link to view a pop-up window that lists the network service ports that must be available for Catalyst Center Global Manager to use.

By default, the **Enterprise Network Interface** check box is already checked. It's also prepopulated with the values you entered in the **STATIC IP CONFIGURATION** page.

- b) Do the following for each appliance interface you want to use, then click **Next**:
 - Click its check box and enter the appropriate configuration values.
 - If necessary, click its **Add/Edit Static Route** link to configure static routes. Click + as needed to configure additional routes. When you're done, click **Add**.

The **DNS Configuration** screen opens.

c) Enter the IP address of the preferred DNS server, then click Next. To enter additional DNS servers, click the Add (+) icon.

Important

- For each node in your cluster, configure a maximum of three DNS servers. If you configure more than three DNS servers for an appliance, you may encounter problems.
- For NTP, ensure port 123 (UDP) is open between Catalyst Center Global Manager and your NTP server.

The **Configure Proxy Server Information** screen opens.

- d) Do one of the following and then click **Next**:
 - If your network does *not* use a proxy server to access the internet, click the **No** radio button.
 - If your network does use a proxy server to access the internet, enter the values described in the table:

Proxy Server field	Enter the URL or host name of an HTTPS network proxy used to access the Internet.
	Note Connection from Catalyst Center Global Manager to the HTTPS proxy is supported only via HTTP in this release.
Port field	Enter the port your appliance uses to access the network proxy.
Username field	Enter the user name used to access the network proxy. If no proxy login is required, leave this field blank.
Password field	Enter the password used to access the network proxy. If no proxy login is required, leave this field blank.

The wizard validates the information you have entered and notifies you of any settings that need to be changed before you can proceed with the wizard. If the settings you have entered are valid and the port is up, the wizard's **Advanced Appliance Settings** screen opens.

e) Enter configuration values for your appliance, then click Next.

NTP Server Settings	
NTP Server field	Enter at least one NTP server address or hostname. To enter additional NTP server addresses or hostnames, click the Add (+) icon.
	For a production deployment, Cisco recommends that you configure a minimum of three NTP servers.
Turn On NTP Authentication check box	To enable the authentication of your NTP server before it's synchronized with Catalyst Center Global Manager, check this check box and then enter the following information:
	• The NTP server's key ID. Valid values range between 1 and 4294967295 (2^32-1).
	This value corresponds to the key ID that's defined in the NTP server's key file.
	• The SHA-1 key value associated with the NTP server's key ID. This 40-character hex string resides in the NTP server's key file.
	Note Ensure that you enter a key ID and key value for each NTP server that you configured in the previous field.

Container Subnet field	A dedicated, non-routed IP subnet that Catalyst Center Global Manager uses to manage internal services. By default, this is already set to 169.254.32.0/20 , and we recommend that you use this subnet.
Cluster Subnet field	A dedicated, non-routed IP subnet that Catalyst Center Global Manager uses to manage internal cluster services. By default, this is already set to 169.254.48.0/20 , and we recommend that you use this subnet.

The **Enter CLI Password** page opens.

f) Enter and confirm the password for the maglev user, then click Next.

Note

According to the CLI password policy, your new password must differ from the last 24 passwords you have used.

The wizard validates the information you have entered and notifies you of any settings that need to be changed before you can proceed with the wizard. If the settings you have entered are valid, the wizard's **Summary** page opens.

Note

To download the appliance configuration as a JSON file, click the corresponding link.

- g) Scroll to the bottom of the screen and review all the settings that you entered while completing the wizard. If necessary, click the appropriate **Edit** link to open the wizard screen in which you want to make updates.
- h) To complete the configuration of your Catalyst Center Global Manager virtual appliance, click **Start Configuration**.

The **Appliance Configuration in Progress** page continuously updates during the process, indicating the tasks that are currently being completed and their progress, as well as any errors that have occurred. To save a local copy of this information as a text file, click the **Download** link.

The virtual machine typically becomes operational in 180 to 210 minutes, depending on available bandwidth, RAM, hard disk space, and the number of vCPUs. You can monitor the progress in the vSphere Client's **Recent Tasks** tab.

Step 5 After appliance configuration completes, the **Appliance Configuration Complete!** page opens. Then click the copy icon to copy the default admin superuser password.

It can take from 15 to 30 minutes for services to be stabilized before you can log in to the GUI.

Important

Catalyst Center Global Manager automatically sets this password when you complete the Install configuration wizard. Ensure that you click the copy icon before you proceed. Otherwise, you cannot log in to Catalyst Center Global Manager for the first time.