

Migrate On-Premises Management Center Managed Secure Firewall Threat Defense to Cloud-delivered Firewall Management Center

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About Migrating Firewall Threat Defense to Cloud-delivered Firewall Management Center

Security Cloud Control admin users can migrate Firewall Threat Defense devices to the cloud-delivered Firewall Management Center from on-premises management centers. For supported versions, see Supported On-Premises Firewall Management Center and Firewall Threat Defense Software for Migration, on page 2.

Before initiating the migration process, it is important to upgrade the on-premises management center models to a Security Cloud Control-supported version and onboard it to Security Cloud Control. Only after this step, you can proceed with migrating the devices that are associated with the on-premises management center.

You have a 14-day evaluation period to review and assess the migration changes that are made to the Firewall Threat Defense devices before Security Cloud Control automatically commits them. During this evaluation period, if you are not satisfied with the changes, you can either undo the changes and continue managing the

device with the on-premises management center or commit the migration changes. It's important to note that after the evaluation period expires, Security Cloud Control will automatically commit the changes, and it will no longer be possible to undo them.

After migrating the devices, the cloud-delivered Firewall Management Center onboards the Firewall Threat Defense devices and imports all shared policies and associated objects, device-specific policies, and device configuration from the on-premises management center to the cloud-delivered Firewall Management Center. In addition, the devices can be found in Security Cloud Control's **Security Devices** page.



Note

Cloud-delivered Firewall Management Center handles all duplicate policy and object names that are identified during the on-premises management center migration process. This behavior is explained in detail later in this document.

User Roles

The user roles of the on-premises management center are no longer applicable in Security Cloud Control after migration. Your authorization to perform tasks on the migrated device is based on your user role in Security Cloud Control. See the Users topic to understand the on-premises management center and cloud-delivered Firewall Management Center user role mapping.

Pause Migration to Review Imported Shared Policies

Security Cloud Control provides an option that allows the migration to be paused once the shared access policies, including Access Control and NAT policies, have been prepared within the cloud-delivered Firewall Management Center. This strategic pause prevents the start of the 14-day evaluation period, ensuring the device's current state or the device's manager is affected during the review phase. This window provides an opportunity for a thorough evaluation of the staged configuration.

Upon a satisfactory review of the configuration within the planned migration window, the process can be resumed. Resuming migration will import the device-specific settings, such as routing and interfaces, and will register the Firewall Threat Defenses with the cloud-delivered Firewall Management Center. Note that this action starts the 14-day evaluation period. Post-migration, it is mandatory to execute deployment from the cloud-delivered Firewall Management Center to finalize the migration successfully.

Supported On-Premises Firewall Management Center and Firewall Threat Defense Software for Migration

Supported Virtual On-Premises Firewall Management Center and Firewall Threat Defense

This section describes the minimum software requirements for migrating Firewall Threat Defense devices from the following on-premises management center version:

- Minimum on-premises management center: 7.2
- Minimum Firewall Threat Defense: 7.0.3 or 7.2 (not supported for Version 7.1)

Supported Physical On-Premises Management Center 1000/2500/4500 Model-Managed Firewall Threat Defense

You can migrate Firewall Threat Defense devices to the Cloud-Delivered Firewall Management Center from a physical on-premises management center 1000/2500/4500 model. We support a *temporary* upgrade from Version 7.0 to Version 7.4. You can download the upgrade package here.



Note

The physical on-premises management center 1000/2500/4500, you would have migrated devices from Version 7.4, which is unsupported for general operations but serves as an interim solution until the migration is complete. To return the on-premises management center to a supported version you must remove the re-migrated devices, reimage back to Version 7.0.x, restore from backup, and re-register the devices.

Unzip (but do not untar) the upgrade package before uploading it to the on-premises management center. To upgrade to Version 7.4, see Cisco Secure Firewall Management Center Upgrade Guide, Version 6.0-7.0.

We recommend upgrading the devices to Version 7.0.x before upgrading the on-premises management center to Version 7.4.



Important

An upgrade is required because Version 7.0 on-premises management centers do not support device migration to the cloud. Version 7.4 is only supported during the device migration and evaluation process. These on-premises management centers will not run any intermediate versions. Only standalone and high availability Firewall Threat Defense devices running Version 7.0.3+ (7.0.5 recommended) are eligible for migration.

Licensing

- When the Firewall Threat Defense is migrated to the cloud, all feature licenses associated with the device
 are transferred to Security Cloud Control and released from the Firewall Management Center to the Smart
 License pool. The device reclaims the device-specific licenses during its registration with Security Cloud
 Control. You need not apply license on the device again.
- The device-specific licenses are not required if you want to keep devices in the Firewall Management Center for analytics.
- Ensure you have registered the cloud-delivered Firewall Management Center with a smart license.

Supported Features

Handling Shared Policies and Objects

When the migration process begins, the shared policies and associated objects that are associated with the Firewall Threat Defense devices are imported first and then followed by the device configuration.

The following shared policies are imported to Security Cloud Control after changing the manager on Firewall Threat Defense devices:

· Access control

- IPS
- SSL
- Prefilter
- NAT
- QoS
- Identity
- Platform settings
- Flex config
- Network analysis
- DNS
- Malware & file
- Health
- Remote Access VPN
- Site-to-Site VPN

If a policy or object in Security Cloud Control has the same name as the policy or object that is imported from the on-premises management center, Security Cloud Control takes the following actions after changing the management successfully.

Policies, Objects	Condition	Action
Access control, SSL, IPS, Prefilter, NAT, QoS, Identity, Platform settings, Network analysis, DNS, Malware & File policies.	Name of the cloud-delivered Firewall Management Center policy matches the on-premises management center policy.	The cloud-delivered Firewall Management Center policy is used instead of the imported policy from the on-premises management center.
RA VPN Default group policy DfltGrpPolicy	The default group policy DfltGrpPolicy from the on-premises management center is ignored.	The existing cloud-delivered Firewall Management Center default group policy DfltGrpPolicy is used instead.
Network, Port objects	Name and content of network and port objects in the cloud-delivered Firewall Management Center match the ones in the on-premises management center.	The existing cloud-delivered Firewall Management Center network and port objects with the same name and content are used instead of imported objects from the on-premises management center. If the object has the same name but different content, an object override is created.

Policies, Objects	Condition	Action
All other objects		The existing cloud-delivered Firewall Management Center object is used instead of the imported object from the on-premises management center.

Any Syslog alert object that is associated with the access control policy is imported into Security Cloud Control.

Migration Support for Firewall Threat Defense in a High-Availability Pair

You can migrate a device in a high-availability pair to the cloud-delivered Firewall Management Center. The device management of both active and standby devices shifts to the cloud-delivered Firewall Management Center.



Important

We strongly recommend committing the manager changes before performing any advanced operations, such as creating high-availability configurations or breaking high-availability configurations from the Firewall Management Center on the devices that are being migrated.

Performing such tasks during the evaluation period is not supported and may result in migration commit failure.

Migration Support for Firewall Management Center in a High Availability Pair

You can migrate the Firewall Threat Defense devices in a high availability from on-premises management center to the cloud.

The on-premises management center can be onboarded using the auto-onboarding of on-premises management center method or credentials method. Always onboard the active management center and not the standby.



Note

If you have already onboarded a standalone management center and later configured it as a standby, delete the standby management center and onboard the active one.

Points to Remember:

- · Auto-onboarding On-Premises Management Center Method
 - High availability break is not supported during the 14 days evaluation period. You can break high
 availability after committing the changes manually or automatically after the evaluation period.
 - High availability switchover is supported during the 14 days evaluation period.

• Onboarding On-Premises Management Center Method Using SDC

 High availability break or high availability switchover is not supported during the 14 days evaluation period. You can perform these operations after committing the changes manually or automatically after the evaluation period. • After a switchover, onboard the new active unit, which was previously in standby mode, and then start a migration job on the devices.

Migration Support for Firewall Threat Defense Cluster

Migration of the Firewall Threat Defense cluster from the on-premises management center to the cloud-delivered Firewall Management Center is supported as long as the minimum supported versions of the Firewall Threat Defense on the following platforms are met.

Secure Firewall Threat Defense Platforms	Minimum Secure Firewall Threat Defense Version for Cluster Migration	Minimum On-Premises Management Center Version for Cluster Migration
VMware, KVM	7.2.1	7.4.1
AWS, GCP	7.2.1	7.4.1
Azure	7.3	7.4.1
Secure Firewall 3100	7.2.1	7.4.1
Firepower 4100	7.0.6	7.4.1
Secure Firewall 4200	7.4	7.4.1
Firepower 9300	7.0.6	7.4.1



Important

Before migrating the Firewall Threat Defense cluster, it is important to keep in mind the following points:

- Do not attempt to migrate the Firewall Threat Defense cluster during any clustering-related operations initiated from the on-premises management center.
- After the cluster migration, it is recommended to commit the manager changes manually before carrying out any advanced operations, such as adding a node, breaking a node, or breaking a cluster from the on-premises management center on the clusters. This is because performing such tasks during the evaluation period is not supported and may result in migration commit failure.

Migration Support for Multi-instance Firewall Threat Defense Devices

You can migrate a multi-instance Firewall Threat Defense device that is part of a chassis (Secure Firewall 3100/4200). The multi-instance device gets listed as one of the devices in the **Select Devices** page, and you can choose it to proceed with the migration. This migration is supported in Firewall Threat Defense device versions 7.6 or later.

If you decide to do such a multi-instance Firewall Threat Defense device migration, it is strongly recommended that you unregister the corresponding chassis device manually from the on-premises management center and onboard it to Security Cloud Control, by navigating to the **Security Devices** page.

Unsupported Features

Migration of a Firewall Threat Defense device registered only for analytics-only with the Firewall Management Center feature is not currently supported.

The following configuration are not imported from the Firewall Management Center to Security Cloud Control as part of migration:

- Custom Widgets, Application Detectors, Correlation, SNMP and Email Alerts, Scanners, Groups, Dynamic Access Policy, Custom AMP Configuration, Users, Domains, Scheduled Deployment Tasks, ISE configuration, Scheduled GeoDB Updates, Threat Intelligence Director configuration, Dynamic Analysis Connections.
- ISE internal certificate object is not imported as part of the migration. You must export a new system certificate or a certificate and its associated private key from ISE and import it into Security Cloud Control.

Secure Firewall Recommended Rules

Migrating Firewall Threat Defense to the cloud mirates the rule recommendations that are already associated with any of the intrusion policies. However, the Cloud-Delivered Firewall Management Center does not allow the generation of new rule recommendations or auto-update the already migrated recommendations post migration. This is because the Cloud-Delivered Firewall Management Center does not support rule recommendations. See Auto Cisco Recommended Rules.

Custom Network Analysis

If the device is associated with a custom network analysis policy, you must remove all references to this policy from the on premise before migration.

- 1. Log on to the on-premises management center.
- 2. Choose Policies > Access Control.
- **3.** Click the edit icon on the access control policy you want to disassociate the custom NAP and then click the **Advanced** tab.
- 4. In the Network Analysis and Intrusion Policies area, click the edit icon.
- 5. In the **Default Network Analysis Policy** list, select a system-provided policy.
- 6. Click OK.
- 7. Click Save to save the changes and then click **Deploy** to download the changes to the device.

After migration, you can manually create the Network Analysis Policy in Security Cloud Control.

User Identity Migration Guidelines and Limitations for Firewall Threat Defense Devices

Before you migrate an on-premises Firewall Threat Defense to Cloud-Delivered Firewall Management Center, you must prepare and also deploy as soon as possible after the migration if any access control policies reference identity objects discussed in this topic. To confirm, click **Policies** > **Access Control heading** > **Access Control** and examine your access control policies and rules.

If none of your access control policies reference identity objects (in particular, users and groups), you can ignore these guidelines.

Before migrating

Before migrating, on the On-Prem Firewall Management Center, click **Integration > Other Integrations > Identity Sources** and see if you have any Cisco ISE/ISE-PIC or Passive Identity Agent identity sources defined.

- If you have Cisco ISE/ISE-PIC or Passive Identity Agent identity sources defined, create the Cisco ISE/ISE-PIC identity sources on Cloud-Delivered Firewall Management Center then migrate the device as discussed in the following paragraphs.
- If no Cisco ISE/ISE-PIC or Passive Identity Agent identity sources are defined, migrate the device as discussed in the following paragraphs.

Migrate the device

Migration is discussed in About Migrating Firewall Threat Defense to Cloud-delivered Firewall Management Center, on page 1. To avoid traffic disruption, when you migrate the device, we strongly recommend you either:

- Check the **Auto deploy to FTDs after successful migration** check box.
- Deploy policies immediately after migration is complete.

Migration Guidelines and Limitations for VPN Configuration

Keep the following in mind when you migrate a device with VPN configuration.

Migration Support for Remote Access VPN Policy

Security Cloud Control imports all remote access VPN policy settings, with the following exceptions:

- · Object overrides.
- If overrides are used in the address pool object, you must manually add them to the imported object using Security Cloud Control, after migration.
- Local users.

If the authentication server is configured to a local database for user authentication, the associated local realm object is imported into Security Cloud Control. However, you must manually add the local users

to the imported local realm object using Security Cloud Control, after migration. See Create a Realm and Realm Directory.

- Remote Access VPN load-balancing configuration.
- Remote Access VPN certificate enrollment with domain configuration.

Perform the following after migration to enroll the certificate with domain configuration:

- 1. In Security Cloud Control, click Security Devices.
- 2. Select the migrated FTD and in the **Device Management** on the right, click **Device Overview**.
- 3. Choose **Devices** > **Certificates**.

Perform one of the following tasks:

- If the certificates are imported in an **Error** state, click the **Refresh certificate status** icon to synchronize the certificate status with the device. The certificate status turns green.
- If the certificates are not imported, you must manually add the certificates defined in the Remote Access VPN policy that is configured in the Firewall Management Center.

Migration Support for Site-to-Site VPN Policy

After you've selected a Firewall Threat Defense device with a site-to-site VPN configuration, Security Cloud Control will automatically select all its peers from different topologies. This is because devices in the site-to-site VPN topology must be migrated together to ensure a migration to succeed.



Note

Although the migration wizard doesn't list the extranet devices that are associated with them, they will still be included automatically during the migration process.

Security Cloud Control imports all the settings of a site-to-site VPN policy, with the following exceptions:

- If object overrides are used in the network object, you must manually add them to the imported object using Security Cloud Control, after migration.
- If the authentication type is configured as "Preshared Automatic Key" in the on-premises management center, Security Cloud Control defines a new pre-shared key for the VPN postmigration deployment. The updated pre-shared key does not break existing tunnels, and the new tunnels start using the new pre-shared key.
- When the devices are moved to Security Cloud Control, and the changes have yet to be committed, the site-to-site VPN policy that is associated with those devices can be edited using the on-premises management center, however, it doesn't update the device configuration in Security Cloud Control.
- If devices are configured for SASE tunnels on Cisco Umbrella, refrain from migrating such devices.

Managing Threat Defense Events and Analytics

The events and analytics management can be retained in the on-premises management center or transferred to Security Cloud Control, where the devices must be configured to send events to Security Cloud Control.

While initiating the migration process, you are allowed to choose the manager to which the device events must be sent for analytics.



Attention

If you are migrating devices from on-premises management center 1000/2500/4500, it is not possible to use the on-premises management center for managing events due to limited availability. Therefore, you must use Security Analytics and Logging (OnPrem) or Security Analytics and Logging (SAAS) for devices to send events for analytics. See Cisco Security Analytics and Logging.

If you select the on-premises management center for analytics, Security Cloud Control becomes the manager for selected devices but retains a copy of those devices on the on-premises management center in analytics-only mode. The devices continue to send events to the on-premises management center, and Security Cloud Control manages the configuration changes.

If you select Security Cloud Control for analytics, Security Cloud Control becomes the manager for the selected devices and deletes these devices from the on-premises management center. Security Cloud Control manages both configuration changes and events and analytics management. You must configure threat defense devices to send events to the Cisco cloud. You can use either Security Services Exchange or the Secure Event Connector (SEC) to send events from the devices to the Cisco Secure Analytics and Logging (SAL) in the cloud.

If you select on-premises management center for analytics during the migration process, Security Cloud Control provides a 14-day evaluation period to modify the settings and select Security Cloud Control for analytics. After you commit the threat defense migration or the 14-day evaluation period ends, you cannot change the analytics settings, and events will continue to appear in the on-premises management center. To this settings after committing to the threat defense migration or after the 14-day evaluation period has expired, see Troubleshoot Firewall Threat Defense Migration to Cloud-Delivered Firewall Management Center, on page 22.

eStreamer Server Streaming

When you manage a Firewall Threat Defense device with Cloud-Delivered Firewall Management Center, the device supports sending only fully-qualified events (FQE) to eStreamer clients. If you have configured eStreamer clients in the on-prem Firewall Management Center, ensure that the clients support the detailed data formats used by FQE when you migrate the device management to Cloud-Delivered Firewall Management Center. Any legacy clients, security information and event management (SIEM) systems, or log management solutions that do not support the data format of FQE or lack the necessary storage to handle the larger volume of FQE data will not work when you migrate.

Before You Begin Migration

Before you begin the process, ensure that the following prerequisites are met:

- A provisioned Security Cloud Control tenant is registered with a Smart License.
- DNS Server Configuration:

The Firewall Threat Defenses must have correct DNS server configuration to resolve Cloud-Delivered Firewall Management Center hostnames. To check device connectivity with Cloud-Delivered Firewall Management Center, see Check device connectivity with Cloud-Delivered Firewall Management Center.

Network Access:

The required network access is enabled for Firewall Threat Defenses to reach Cloud-Delivered Firewall Management Center through the TCP port 8305. Note that outbound connectivity from the Firewall Threat Defenses to Cloud-Delivered Firewall Management Center is sufficient.

Firewall Threat Defense Outbound Port 443:

The Firewall Threat Defenses must have outbound port 443 open to access cloud to use Security Cloud Control event viewer.

• On-Premises Management Center Outbound Port 443:

The on-premises management center must have outbound port 443 open to access the "*.cdo.cisco.com" domain.

• The on-premises management center is onboarded to Security Cloud Control. Onboarding the on-premises management center also onboards all the Firewall Threat Defense devices registered to that on-premises management center. See Onboard an On-Prem FMC.



Note

Create a new user in the on-premises management center with Administrator role or a custom user role with "Devices" and "System" permissions for onboarding purposes.



Caution

If you onboard an on-premises management center to Security Cloud Control and simultaneously sign in to that on-premises management center with the same user name, the onboarding fails.

- For the on-premises management center 1000/2500/4500 migration:
 - Run Version 7.4 (available for these models on a temporary basis). We recommend devices be running Version 7.0.5.
 - We recommend that you create a backup of on-premises management center.

For versions on-premises management center Version 6.5 to 7.1, see the *Back up the FMC* topic in the Firepower Management Center Configuration Guide.

For on-premises management center Version 7.2 and later, see the *Back up the Management Center* topic in the Cisco Secure Firewall Management Center Administration Guide.

- The Firewall Threat Defense devices must be synchronized and not have pending changes on them. The migration fails on a device if Security Cloud Control identifies pending changes on that device.
- All peer devices in a site-to-site VPN topology must be online and have no pending deployment.
- On-Premises Management Center should allow outbound HTTP/HTTPS to upload configurations to Amazon S3.
- Security Cloud Control imports Syslog alert object used in the access control policy from the on-premises management center. If Security Cloud Control already contains an alert object with the same name but a different type (SNMP, Email), it is reused during configuration import.

The user must check whether the Syslog object name matches the existing SNMP or Email alert object in Security Cloud Control. If the name matches, you must rename the Syslog object in the on-premises management center before starting the migration process.

If you attempt to migrate firewalls with modified system defined FlexConfig text objects from an
on-premises management center to the cloud-delivered Firewall Management Center, the values of the
modified system defined FlexConfig text objects are not migrated to the cloud-delivered Firewall
Management Center, and the deployment will fail.

To avoid this, perform these tasks before you start the migration:

- Copy the modified system defined FlexConfig text object values from the on-premises management center to cloud-delivered Firewall Management Center before migration.
- Initiate migration from on-premises management center to cloud-delivered Firewall Management Center after verifying the predefined FlexConfig text objects.

High Availability Failover Link Must Be Up

The high availability failover link should be up for a successful migration. Before initiating the migration process on Security Cloud Control, determine the health status of the failover link on the on-premises management center.

- Identify the failover interfaces of all HA pairs you want to migrate to cloud-delivered Firewall Management Center.
 - a. Choose **Devices** > **Device Management**.
 - **b.** Next to the device high-availability pair you want to edit, click **Edit** ().
 - c. Click the **High Availability** tab.
 - d. In the High Availability Link area, the Interface field shows the failover interface used in the pair.
 - e. Identify the interfaces used for failover communication if there are multiple HA pairs for migration.
- 2. Check the health status of the failover interfaces.
 - a. Choose **Devices** > **Device Management**.
 - **b.** Next to the device high-availability pair you want, click **Health Monitor**.
 - c. In the left pane, expand the high availability pair to see the Firewall Threat Defense devices.
 - **d.** Click the device indicated in the exclamation mark (**1**).
 - e. Click the **Critical** button at the top.

The **Interface Status** shows the errors associated with interfaces.

f. If the failover interface is down, the Interface 'failover_interfacename' has no link message is displayed.



Note

However, you can migrate the HA pair to cloud-delivered Firewall Management Center if you see any other data interface issues except for the failover interface.

g. Rectify the issue and click Sync from onprem fmc now to obtain the latest changes on the device.

Migrate Firewall Threat Defense to Cloud-Delivered Firewall Management Center

Procedure

- Step 1 In the navigation bar on the left, click Administration > Migration > Migrate FTD to cdFMC.
- Step 2 Click and choose On-Prem FMC-managed FTD to cdFMC.

Note

You can initiate only one migration job at one time.

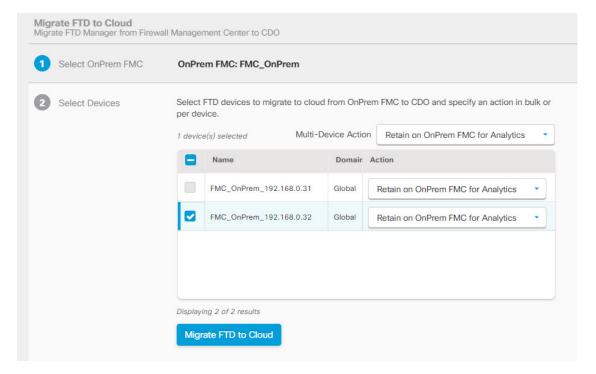
- **Step 3** In the **Select OnPrem FMC** area, perform the following:
 - **a.** You can click the **Onboard an FMC** link to onboard the on-premises management center if you have not done already. See Onboard an FMC.
 - **b.** Select the on-premises management center from the available list and click **Next**.

In the **Select Devices** step, you will see the Firewall Threat Defense devices that the selected on-premises management center manages. If a high-availability pair is set up on the on-premise on-premises management center, the high availability node will be shown instead of the active and standby devices.

The **Last Synced time** field indicates the time that is elapsed since the device configuration is synchronized into the on-premises management center. You can click **Sync from OnPrem FMC Now** to fetch the latest device changes.

- **Step 4** In the **Select Devices** step, perform the following:
 - a) Select the devices that you want to migrate.

These devices can include standalone, high-availability pairs, or clusters. If you have a high-availability pair or a cluster, select the node that represents it. Also, you can hover your mouse pointer over the cluster to view more details about the control node.



Note

- The devices running on unsupported versions are not available for selection.
- The devices that are registered for analytics only with the on-premises management center or have pending changes to be deployed are not eligible for migration.
- When you select a device that is associated with a site-to-site VPN topology, Security Cloud Control
 automatically selects its peer devices belonging to either the same topology or a different topology,
 because all devices in the site-to-site VPN topology must be migrated together for a successful
 migration to take place. The wizard does not list the extranet devices, if any. However, Security
 Cloud Control migrates extranet devices.

The **S2S VPN Topology** column indicates the number of site-to-site VPN topologies in which a selected device participates. You click the topology link to view the topologies and devices that are migrated along with the selected device. This field is not applicable to devices that are not part of the site-to-site VPN topology.

- A high availability pair is presented as a single node. You must select this node to include active and standby devices in the migration.
- b) In the **Multi-Device Action** list, you can choose a common action to apply on all devices.
- c) In the Commit Action column, you can choose one of the following actions for the selected device:
 - **Retain on OnPrem FMC for Analytics**: After the migration process is completed, the analytics management for selected Firewall Threat Defense devices is retained on the on-premises management center.
 - **Delete FTD from OnPrem FMC**: After the migration process is completed, the selected devices are removed from the on-premises management center and are available for Security Cloud Control to handle the analytics. You must configure the devices to send events to Security Cloud Control for

managing analytics. When the devices are deleted from the on-premises management center, they cannot be revoked.

Important

For the on-premises management center 1000/2500/4500, when you select devices to migrate, make sure you choose **Delete FTD from OnPrem FMC**. Note that the device is not fully deleted unless you commit the changes or 14 days pass.

Note

The actions that are specified here are committed automatically after the 14 days evaluation period or after the changes are committed manually.

Step 5 (Optional) Check the Pause migration to review imported shared policies check box.

When you enable this option, the migration process will pause after the shared access policies like Access Control and NAT policies are staged in the Cloud-Delivered Firewall Management Center. This pause ensures that the evaluation doesn't start and that the device's current state and manager remain unaffected. It gives you ample time to review the imported configuration for accuracy. After you've assessed everything, you can resume the migration during the planned migration interval, which will then kick off the 15-day evaluation period.

Step 6 Check the Auto deploy to FTDs after successful migration check box to deploy the migrated configuration automatically to the device after successfully migrating and registering the device with the Cloud-Delivered Firewall Management Center.

However, if you prefer to review and manually deploy the configuration from the Cloud-Delivered Firewall Management Center after successful migration, you can uncheck this option and proceed to the next step.

- Step 7 Click Migrate FTD to cdFMC.
- **Step 8** Click **View Migration to Cloud Progress** to see the progress.

What to do next

If you have paused the migration for review, you must manually click **Proceed Migration** to import the remaining configuration. See Proceed Migration Process, on page 17.

You can view the overall and individual status of migration jobs and generate a report when a job is completed successfully. See View a Firewall Threat Defense Migration Job, on page 15.

View a Firewall Threat Defense Migration Job

The migration dashboard provides the status of all migration jobs initiated from the Security Cloud Control. You can expand a specific job to see the status of individual devices associated with that tenant. This helps you keep track of the progress of your migration and identify issues, if any, that need to be addressed.

If you have set up alerts for device workflows, click the notifications icon to see the alerts that have been triggered during the migration process. Additionally, if you have opted to receive email notifications from Security Cloud Control, you will also receive an email notification regarding alerts, if any.

About the 14-day Evaluation Period

When a migration job is successful, you have 14 days to test and assess migration changes using cloud-delivered Firewall Management Center. If you are convinced about the migration changes, we recommend that you commit the devices manually, and not wait for Security Cloud Control to automatically commit the migration changes. See Commit Migration Changes Manually.

Note that for the on-premises management center 1000/2500/4500, you would have migrated devices from Version 7.4, which is unsupported for general operations. To return the on-premises management center to a supported version you must remove the re-migrated devices, reimage back to Version 7.0.x, restore from backup, and re-register the devices.



Note

- You cannot revoke the actions that are specified in the migration commit window after committing the changes.
- You can cancel the migration during the evaluation period and return the device to the on-premises management center.
- You cannot delete a device from either the on-premises management center or cloud-delivered Firewall Management Center during the evaluation period.



Important

Changes can be made and deployed to the device using Security Cloud Control during the evaluation period. If you switch device management back to the on-premises management center, Security Cloud Control-specific changes made during the evaluation period is not saved on the device once it is reverted to the source Security Cloud Control tenant. You must deploy the changes from the on-premises management center to the device after reverting the device's manager.

- Name: Represents the job name that shows the on-premises management center name and the date and time when the job was initiated.
- Number of FTDs: Shows the total number of devices that are being migrated to the cloud.
- Status: Shows the status of the job. Expand the job to see the status of individual devices.

When a job is completed successfully, the **FTD Migration job is successful message** appears in the **Status** column. You can click the tooltip to see the number of days remaining for evaluating the manager.

You can click Commit Migration Changes to commit the changes manually before the 14 days evaluation period ends.

• Last Update: Shows the date and time that are updated only when a change is made to the device.



- Actions: Click to execute the following actions:
 - Workflows: Takes you to the Workflows to monitor the job.
 - **Download Report**: Allows you to generate and download a report of every job that is completed successfully. See Generate a Firewall Threat Defense Migration Report, on page 20.

- Commit Manager Changes: Allows you to apply the changes manually to devices before the evaluation period ends. See Commit Migration Changes Manually to Cloud-delivered Firewall Management Center, on page 17.
- **Remove Migration Job**: Allows you to remove a completed job. Link is available only for completed jobs. See Delete a Migration Job, on page 21.

After a successful migration, Security Cloud Control deploys the configuration to the device. If the system identifies errors or warnings in the changes to be deployed, it displays them in the **Validation Messages** window. To view complete details, click the arrow icon before the warnings or errors. If the deployment fails, see the *Best Practices for Deploying Configuration Changes* section of Firepower Management Center Device Configuration Guide X.Y.

Configure Relam Sequence for Identity Policy

If the device contains an identity policy with a Realm or ISE configuration, configure your device as a proxy for Security Cloud Control to communicate with the identity source. The identity policies don't function if Security Cloud Control fails to connect to the Identity Realms.

A tooltip appears in the **Status** column for a device that requires additional configuration.



- 1. Click the tooltip icon and then click **Learn more**.
- 2. In the Configure Proxy window, click Configure my realms.

To add a proxy sequence, see the *Create a Proxy Sequence* section in the Firepower Management Center Device Configuration Guide, 7.2.

Proceed Migration Process

If the **Pause migration to review imported shared policies** option was checked during the migration setup, the migration process will pause after the shared access policies were staged in the Cloud-Delivered Firewall Management Center. After you've reviewed the staged configurations, you must manually instruct Security Cloud Control to resume the migration, which will then import device-specific configurations such as routing and interfaces, as well as register the Firewall Threat Defense with the Cloud-Delivered Firewall Management Center. Completion of the migration triggers a 14-day evaluation period.

To proceed, go to the migration job page and click **Proceed with migration** for the relevant job.

Remember that deployment from the Cloud-Delivered Firewall Management Center must be done after a successful migration.

Commit Migration Changes Manually to Cloud-delivered Firewall Management Center

We recommend that you commit migration changes manually if you are convinced with your changes and not waiting for Security Cloud Control to auto commit changes. The **Commit Migration Changes** window shows the remaining days to commit the migration to Cloud-Delivered Firewall Management Center or revert

the device to on-premises management center. During the evaluation period, you can modify the actions for selected threat defense devices before committing the changes. Once the changes are committed, you can't revoke the actions.



Note

The commit manager changes actions are disabled in the following conditions:

- The 14-day evaluation period has passed.
- The Firewall Threat Defense devices have either been reverted to the on-premises management center or deleted from on-premises management center, in which case, no further actions can be taken.

Procedure

- **Step 1** In the migration jobs page, click the under the **Actions** column of a completed job.
- **Step 2** Click **Commit Migration Changes**. (This link is available only after a job is completed successfully.)
- **Step 3** Select a device and in the **Commit Actions** list, choose one of the following actions:
 - **Retain on OnPrem FMC for Analytics**: After committing the changes, analytics management for selected Firewall Threat Defense devices is retained on the management center.
 - **Delete**Firewall Threat Defense **from OnPrem FMC**: After committing the changes, the selected devices are removed from the on-premises management center and are available for Security Cloud Control to handle the analytics. You must configure the Firewall Threat Defense to send events to Security Cloud Control for managing analytics. After the Firewall Threat Defense devices are deleted from the on-premises management center, they cannot be revoked.

Note

If you want to revert the device management to on-premises management center, refer to Revert the Firewall Threat Defense Management to On-Premises Firewall Management Center, on page 18.

Step 4 Click **Commit** executes your specified actions immediately without further confirmation.

On the migration jobs screen, you can expand the job to check the progress of the actions specified.

The migrated devices appear on Security Cloud Control's **Security Devices** page. These devices can be managed using the Cloud-Delivered Firewall Management Center portal that is linked to Security Cloud Control. Ensure you deploy the changes to the devices from Cloud-Delivered Firewall Management Center.

Revert the Firewall Threat Defense Management to On-Premises Firewall Management Center

You can revert the device management to the on-premises management center during the evaluation period. This means that the devices will no longer be managed through the Security Cloud Control platform. However, it is important to note that any changes made during the migration process in the Security Cloud Control will not be reflected in the on-premises management center after reverting Firewall Threat Defense management.



Note

When the Firewall Threat Defense management has been returned to the on-premises management center, you can begin the migration job again to switch the Firewall Threat Defense management to Security Cloud Control.

Procedure

- **Step 1** In the migration jobs page, click the under the **Actions** column of a completed job.
- Step 2 Click Commit Migration Changes. (This link is available only after a job is completed successfully.)
- Step 3 Select a device and in the Commit Actions list, choose Revert Manager to OnPrem FMC.
- **Step 4** Click **Commit** executes your specified actions immediately without further confirmation.
- **Step 5** Deploy the changes to the device from the on-premises management center.

View Migrated Devices

The migrated devices appear on the **Security Devices** page in Security Cloud Control. You can cross-launch and configure the required feature on the Cloud-Delivered Firewall Management Center.

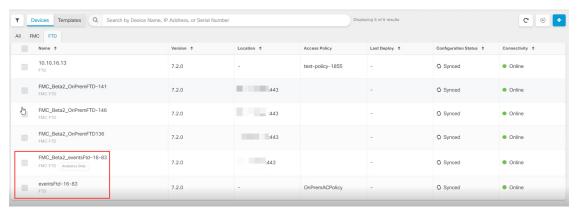


Note

The devices on the Cloud-Delivered Firewall Management Center device listing page may show No-IP instead of the device's management IP address. Because the device registration uses the NAT ID, the device initiates the process, and therefore, the management IPs aren't discovered or used for the connection. Note that this applies to newly onboarded devices and devices migrated from the on-premises management center.

Analytics Only Firewall Threat Defense Device Example

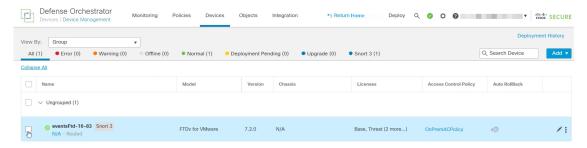
Security Cloud Control creates two instances of the same device that is configured to retain on the Firewall Management Center for analytics.



The device instance with **FMC FTD** and **Analytics Only** labels shows that the Firewall Management Center handles the analytics. The device instance with the **FTD** label indicates that Security Cloud Control manages its configuration.

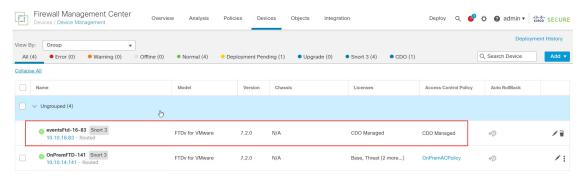
You can manage the configuration of the device using Security Cloud Control. To see the device in the Cloud-Delivered Firewall Management Center, do the following:

Select the device having **FTD** label and in the **Management** pane on the right, click **Device Summary**.



You can view the events from the device in the Firewall Management Center. To see the events, do the following:

- Select the device having FMC FTD and Analytics Only labels and on the right, click the Manage Devices link
- 2. Log on to the on premise Firewall Management Center.
- 3. Choose Device > Device Management.



You can't select this device as Security Cloud Control manages the configuration. The Firewall Management Center shows the **Security Cloud Control Managed** label for this device.

To see the live events in the Firewall Management Center, click **Analysis** > **Events**.

Generate a Firewall Threat Defense Migration Report

When a migration job is successful, you can generate and download a report in PDF format to analyze every parameter imported from the on-premises management center to cloud-delivered Firewall Management Center. The report provides details of each device associated with the job. Details include information about devices, values of shared policies, objects, routing details, interfaces, network settings, and more.

On the migration jobs page, click the under the **Actions** column of a completed job and then click **Download Report.** You must download a report within a year of the job being triggered.

Delete a Migration Job

If you have completed a migration job and no longer need it to be displayed on the migration page, you can easily remove it by deleting it. This cleans up the migration page and make it easier to navigate.



Attention

If you want to delete a migration job during the evaluation period, you must first commit the migration changes or revert the manager to the on-prem management center. Failing to do so may result in an inconsistent state of the on-prem management center, which could be unrecoverable. See Commit Migration Changes Manually.

If you don't have access to your on-premises management center or if it is no longer available and you are blocked from performing a commit or revert, you can delete the job.

Procedure

- **Step 1** Click Administration > Migration > Migrate FTD to cdFMC.
- Step 2 Click the under the Actions column and then click Remove Migration Job.
- Step 3 Click Delete to confirm your action.

Enable Notification Settings

You can subscribe to get email notifications from Security Cloud Control whenever a device associated with your tenant experiences a specific action when migrating a Firewall Threat Defense device to Security Cloud Control.

Security Cloud Control sends an email if you enable to receive a notification for the following states during migration:

- Failed: When a migration job fails.
- Started: When a migration job is initiated.
- **Succeeded**: When a migration job is completed successfully.
- Commit Pending: When the manager changes have to be committed.

To enable notification settings, see Notification Settings.

Troubleshoot Firewall Threat Defense Migration to Cloud-Delivered Firewall Management Center

This section details how to troubleshoot specific errors that may occur when migrating Firewall Threat Defense devices to cloud-delivered Firewall Management Center.

Configuration export from On-Premises Firewall Management Center failed

Cause:

- Disk space is full or nearly full, preventing the export process from being completed.
- Concurrent operations such as device upgrade, upgrade revert, moving a device between domains, device
 import and export, device template import and export, or policy analysis are running in on-premises
 management center.
- Connectivity issues exist between the on-premises management center and Security Cloud Control.

Workaround:

- 1. Perform these actions according to your requirements:
 - Ensure that at least 10% of disk space is available to accommodate the creation of necessary export files
 - Ensure that no parallel operations are running during the migration.
 - Ensure that the network connection between on-premises management center and Security Cloud Control is stable and reliable.
- **2.** Retry the migration.
- **3.** If the issue persists, contact Cisco TAC.

Failed to initiate import in Security Cloud Control

Cause:

Import can fail if:

- Disk space is full or nearly full, preventing the import process from being completed.
- Concurrent operations such as device upgrade, upgrade revert, moving a device between domains, device import and export, device template import and export, or policy analysis are running in Cloud-Delivered Firewall Management Center.

- 1. Ensure that no other operations are running during import and retry migration.
- 2. If the issue persists, contact Cisco TAC.

Failed to retrieve the most recent device information from On-Premises Firewall Management Center

Cause:

- Network connectivity issues.
- DNS settings.
- · Device synchronization issues.

Workaround:

- **1.** Perform these actions according to your requirements:
 - Ensure that the network connection between Security Cloud Control and on-premises management center is stable.
 - Ensure that DNS settings for resolving Firewall Management Center hostnames are correct.
 - Ensure network access for Firewall Threat Defense devices through TCP ports 8305 and 443.
 - Ensure outbound connectivity to port 443 to Security Cloud Control and Cloud-Delivered Firewall Management Center hosts.
 - Ensure that the devices are synchronized without any pending changes.
- 2. Retry migration.
- **3.** If the issue persists, contact Cisco TAC.

Failed to select Security Cloud Control as the manager for events and analytics

Cause:

Selected on-premises management center for analytics during Firewall Threat Defense migration and committed it or the Security Cloud Control automatically committed it after the 14-day evaluation period.

Workaround:

- 1. Log in to the on-premises management center and remove the Firewall Threat Defense device from the on-premises management center.
- 2. Enable the Firewall Threat Defense device to send events to Security Analytics and Logging (SaaS) directly. For more information, see Send Cloud-delivered Firewall Management Center-Managed Event Logs to SAL (SaaS) Using a Direct Connection.
- **3.** Verify if the SSE Connector is running in the Firewall Threat Defense device. To verify, access Firewall Threat DefenseCLI and do the following:

```
# more /ngfw/etc/sf/connector.properties
registration_interval=180
connector_port=8989
connector fqdn=api-sse.cisco.com
```

4. Verify the connectivity between Firewall Threat Defense and the SSE portal. The following URLs need to be allowed as IPs can change:

- api.apj.sse.itd.cisco.com (primary SSE cloud API endpoint)
- est.sco.cisco.com (common endpoint across geographies)
- mx.apj.sse.itd.cisco.com
- dex.apj.sse.itd.cisco.com (for customer success services)
- eventing-ingest.apj.sse.itd.cisco.com (for Cisco XDR and Security Cloud Control services)
- registration.apj.sse.itd.cisco.com (enables Firewall Threat Defense device registration to the regional Cisco cloud)
- **5.** access Firewall Threat Defense CLI and perform a CURL request to validate tenant details using the following command:

root@firepower:/home/admin# curl localhost:8989/v1/contexts/default/tenant

6. Verify that the event logs are appearing in Security Cloud Control.

Failed to import configuration from On-Premises Firewall Management Center

Cause:

The On-Premises Firewall Management Center configuration may include policies or object configurations that are unsupported or are conflicting, leading to migration failure.

Workaround:

- 1. Check the On-Premises Firewall Management Center configuration for unsupported policies or object configurations to ensure compatibility.
- 2. Retry migration.
- **3.** If the issue persists, contact Cisco TAC.

Failed to complete device discovery

Cause:

Conflicts or unhandled scenarios exist in the device configuration or within Security Cloud Control's internal operations, such as incompatible settings or unsupported conditions that Security Cloud Control does not support.

- **1.** Perform these actions according to your requirements:
 - Inspect the device configuration in On-Premises Firewall Management Center for incompatible settings or unsupported scenarios that Security Cloud Control does not support and make necessary updates.
 - Check system logs for errors and confirm that both the On-Premises Firewall Management Center and the device are functioning properly.
- 2. Retry migration.
- **3.** If the issue persists, contact Cisco TAC.

Failed to connect the device to Security Cloud Control

Cause:

Possible causes include the device being powered off, network connectivity issues, or a firewall blocking the necessary ports.

Workaround:

- 1. Perform these actions according to your requirements:
 - Confirm that the device is powered on, and network connection is stable. Look for Firewall issues, blocked ports, and incorrect cabling.
 - Ensure that your device has the correct DNS server configuration for resolving Security Cloud Control hostnames.
- 2. Retry migration.
- **3.** If the issue persists, contact Cisco TAC.

Failed to register the device, causing the manager to revert to On-Premises Firewall Management Center

Cause:

The device failed to register with Cloud-Delivered Firewall Management Center during migration, causing the system to revert the device manager to On-Premises Firewall Management Center. This may be because of connectivity issues.

Workaround:

- 1. Perform these actions according to your requirements:
 - Verify DNS settings for resolving Security Cloud Control hostnames.
 - Ensure that network access is enabled for TCP port 8305, allowing the Firewall Threat Defense devices to connect to the Cloud-Delivered Firewall Management Center.
 - Allow outbound HTTPS connections on Firewall Threat Defense devices to reach the Cloud-Delivered Firewall Management Center and upload configurations to Security Cloud Control.
- 2. Retry migration.
- **3.** If the issue persists, contact Cisco TAC.

Failed to unregister the device due to an ongoing deployment

Cause

Migration failed because a deployment is in progress on the device.

- 1. Perform these actions according to your requirements:
 - Wait for the ongoing deployment to finish.
 - Confirm that the device is stable, with no pending tasks.

- 2. Retry migration.
- **3.** If the issue persists, contact Cisco TAC for support.

Report generation failed after successful FTD migration to Cloud-Delivered Firewall Management Center

Cause:

The report generation failure may be because of temporary system glitches.

Workaround:

- Generate the report after some time to overcome the temporary system issues that might have caused the initial failure.
- If the issue persists, contact Cisco TAC.

Failed to initiate FTD migration to Cloud-Delivered Firewall Management Center

Cause:

- Ongoing migration in the source manager.
- Unsupported device version.
- Incorrect DNS and network configuration.

Workaround:

- 1. Perform these actions according to your requirements:
 - Confirm that no other migration jobs are active in the same source manager.
 - Verify that the devices are on supported versions, have no pending changes to be deployed, and are
 active.
 - Ensure that the DNS settings are correct, and network access is available to communicate with Cloud-Delivered Firewall Management Center.
- **2.** If the issue persists, contact Cisco TAC.

Failed to deploy changes from Security Cloud Control

Cause:

Device migration to Cloud-Delivered Firewall Management Center failed during deployment.

- **1.** Perform these actions according to your requirements:
 - Attempt the deployment again from the **Deployment** page on Cloud-Delivered Firewall Management Center.
 - Check for out-of-band changes, which are changes made directly in the device, and not through Security Cloud Control. If out-of-band changes exist, they may interfere with the deployment. Use Security Cloud Control's **Check for changes** functionality to identify and address out-of-band changes.

- Ensure that all the configurations are supported and do not conflict with the current device settings.
- Verify that the device is onboarded and reachable by both the Security Cloud Control and management center, with the necessary internet access and communication capabilities.
- 2. If the issue persists, contact Cisco TAC.

Failed to commit FTD migration to Cloud-Delivered Firewall Management Center

Cause:

- The 14-day evaluation period has expired.
- Firewall Threat Defense devices have been reverted to or deleted from the On-Premises Firewall Management Center, preventing further actions.

Workaround:

- 1. Try committing again to address any transient network or device issues.
- **2.** If the issue persists, contact Cisco TAC.

Failed to retain device on On-Premises Firewall Management Center for Analytics

Cause:

If your source manager is an On-Premises Firewall Management Center 1000/2500/4500, it cannot support retaining for Analytics because of the limited resources.

Workaround:

- 1. Ensure that the **Retain on On-Prem FMC for Analytics** option is selected during the migration process.
- **2.** If the issue persists, contact Cisco TAC.

Failed to revert the device manager to On-Premises Firewall Management Center

Cause:

- The device cannot be reverted if the 14-day evaluation period has expired.
- Firewall Threat Defense devices have been reverted to or deleted from the On-Premises Firewall Management Center, preventing further actions.

- 1. Perform these actions according to your requirements:
 - Try committing the changes again to address the temporary server or network issues.
 - If changes have occurred in the high availability configuration after migration, reset the devices to their original migration state before attempting to commit.
- 2. If the issue persists, contact Cisco TAC.

Failed to configure Security Cloud Control as the configuration manager

Cause:

The device already has a configuration manager.

Workaround:

- 1. If another configuration manager is present, remove it manually and retry the migration.
- **2.** If the issue persists, contact Cisco TAC.

Failed to commit migration; the device is ineligible

Cause:

- The device has pending changes that have to be deployed.
- The device to be migrated is part of FTD high availability (HA), but the current state is invalid, for example, it is in Active/Active state.
- The device to be migrated is connected in Analytics-only mode.
- Cluster migration is supported only for FTDs version 7.4 and above.
- Migration for chassis and MI FTDs on models 3100/4200 is currently not supported.

Workaround:

- **1.** Perform these actions according to your requirements:
 - Verify that the device is up to date with On-Premises Firewall Management Center, then retry migration.
 - Ensure all pending changes on the devices are deployed.
 - Confirm that the Firewall Threat Defense device is in a valid state, such as Active/Standby. If the
 status isn't correctly reflected in On-Premises Firewall Management Center, use the Force refresh
 node status option on the device listing page to update the correct status on management center.
- 2. If the issue persists, contact Cisco TAC.

Failed to import site-to-site VPN policies from On-Premises Firewall Management Center

Cause:

The failure may be due to various factors, such as VPN policy configuration or network connectivity issues.

- **1.** Perform these actions according to your requirements:
 - Verify your site-to-site VPN policies in On-Premises Firewall Management Center to ensure there
 are no configuration errors. If object overrides are used within network objects, manually add these
 overrides to Security Cloud Control after migration.
 - Ensure that both the On-Premises Firewall Management Center and the targeted device have stable and reliable network connections to Security Cloud Control.

- If the authentication type is set as **Pre-shared Automatic Key** in On-Premises Firewall Management Center, Security Cloud Control generates a new pre-shared key for the VPN post-migration deployment without disrupting existing tunnels.
- 2. Retry migration.
- **3.** If the issue persists, contact Cisco TAC.

Failed to migrate as all devices within the topology need to be migrated simultaneously

Cause:

Migrating multiple devices, particularly those within the same network topology, requires synchronizing their migrations to avoid inconsistencies and potential errors. All devices should be migrated within the same timeframe.

Workaround:

- 1. Perform these actions according to your requirements:
 - Devices registered for Analytics -only with the On-Premises Firewall Management Center or those with pending changes are not eligible for migration.
 - When selecting a device associated with a site-to-site VPN topology, Security Cloud Control
 automatically selects peer devices from the same or different topology, as all devices in the topology
 must be migrated together for success. Extranet devices, if any, are not listed by the wizard.
 - The **S2S VPN Topology** column shows the number of site-to-site VPN topologies a device is part of. Click the topology link to view the topologies and devices migrating with the selected device. This field does not apply to devices outside the site-to-site VPN topology.
 - A high-availability pair is shown as a single node. Select this node to include both active and standby devices in the migration.
- 2. If the issue persists, contact Cisco TAC.

HTTP status code 201 (created) found in On-Premises Firewall Management Center response

Cause:

The Secure Device Connector (SDC) version is not compatible.

- 1. Ensure that the SDC is upgraded to version 202205191350 or later.
 - In the left pane, click Administration > Integrations > Secure ConnectorsAdministration > Secure Connectors.
 - Click the SDC to view the existing version in the **Details** pane on the right.
 - Update your Secure Device Connector.

Verify Firewall Threat Defense Connectivity with Cloud-delivered Firewall Management Center

This section provides the commands to determine the Firewall Threat Defense connectivity with the cloud-delivered Firewall Management Center.

Check internet connectivity on the device

Execute the **ping system** < any OpenDNS server address> command to check whether the device can reach the internet.

- 1. Connect to the CLI of the device, either from the console port or using SSH.
- 2. Log in with the Admin username and password.
- **3.** Enter **ping system** < *OpenDNS IPAddress*>.

```
ping system 208.67.222.222
PING 208.67.222.222 (208.67.222.222) 56(84) bytes of data.
64 bytes from 208.67.222.222: icmp_seq=1 ttl=48 time=22.10 ms
64 bytes from 208.67.222.222: icmp_seq=2 ttl=48 time=22.10 ms
64 bytes from 208.67.222.222: icmp_seq=3 ttl=48 time=22.8 ms
64 bytes from 208.67.222.222: icmp_seq=4 ttl=48 time=22.6 ms
^C
--- 208.67.222.222 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 7ms
rtt min/avg/max/mdev = 22.588/22.841/22.995/0.223 ms
```

The above example shows that the device can connect to the internet using the OpenDNS Server IP address. Also, the number of packets transmitted is the same as received, indicating that internet connectivity is available on the device. This shows that the device can reach the internet.

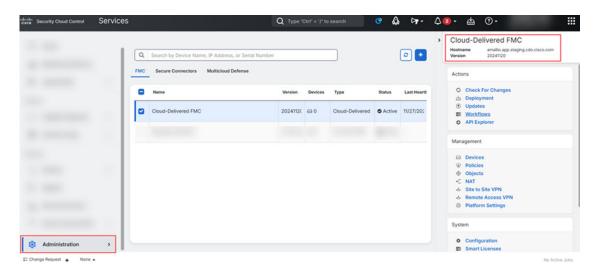


Note

If your results don't match, check the internet connection manually.

Check device connectivity with Cloud-delivered Firewall Management Center

- 1. Obtain the host name of the cloud-delivered Firewall Management Center.
 - a. In the Security Cloud Control left pane, click **Administration > Integrations > Firewall Management Center**.
 - **b.** Choose **Cloud-Delivered FMC** to see the cloud-delivered Firewall Management Center details on the right pane.
 - c. In the **Hostname** field, copy only the hostname shown in the following example image.



In the above figure, the highlighted text is the hostname (Security Cloud Control-acc10.app.us.Security Cloud Control.cisco.com) of the FMC to be copied.

- 2. Connect to the CLI of the device, either from the console port or using SSH.
- **3.** Enter **ping system** < hostname of the FMC>.

```
ping system cdo-acc10.app.us.cdo.cisco.com
PING cdo-acc10.app.us.cdo.cisco.com (54.187.125.161) 56(84) bytes of data.
^C
--- cdo-acc10.app.us.cdo.cisco.com ping statistics ---
2 packets transmitted, 0 received, 100% packet loss, time 64ms
```

In the above example, the hostname is resolved with the IP address, indicating your connection is successful. Ignore the "100% packet loss" message shown in the response.



Note

If you can't connect to the host, you can rectify the DNS configuration in the CLI using **configure network dns** < address>.

Verify Firewall Threat Defense Connectivity with Cloud-delivered Firewall Management Center