

# Using Configuration Groups, Cisco Catalyst SD-WAN Manager Release 20.15 and Later

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# **Create a Configuration Group**

- 1. From the Cisco SD-WAN Manager menu, choose **Configuration** > **Configuration** Groups.
- 2. Choose the SD-WAN option from the solution drop-down list to view or create a configuration group for Cisco Catalyst SD-WAN solution.

The default solution is SD-WAN.

3. Click Create Configuration Group and configure the following:

Field	Description
Name	Enter a name for the new configuration group.
Description	Enter a description of the new configuration group.
CLI Configuration Group	Choose this option and enter CLI commands that create a configuration group.

Field	Description
Site Type	This option is available only for the SD-WAN solution type. Choose one of these site types:
	• <b>Single Router</b> : Deploy a configuration and distribute the transport side WAN and service-side LAN interface configurations to a single router.
	Default: Single router.
	• <b>Dual Router</b> : Provide a name to each of the routers. Use this option to deploy a dual-device site configuration and distribute the transport-side WAN and service side LAN interface configurations between the two devices.

- **4.** (Optional) Alternatively, you can create a configuration group by choosing one of these options from the **Create Configuration Group** drop-down list:
  - **Import from Calalog**: Choose a configuration groups from a list of configuration catalogs. For more information, see Configuration Catalog.
  - Create from Guided Workflow: The workflow guides you in creating a configuration group.
- 5. Click Create.

The Cisco SD-WAN Manager creates the configuration group with these mandatory feature profiles that you can configure:

- System profile
- Transport & Management profile
- 6. Click Add Profile to create more feature profiles.
- 7. Click the drop-down list in a feature profile to either choose an existing feature profile or create a new one by choosing the **Create New** option. When the new profiles are created, you must configure them before associating them to the configuration groups.

## **Create a CLI Based Configuration Group**

You can create a CLI based configuration group when you choose SD-WAN or SD-Routing solutions.

- 1. From the Cisco SD-WAN Manager menu, choose **Configuration** > **Configuration** Groups.
- 2. Click Create Configuration Group and choose CLI Configuration Group.
- 3. Enter a name and description for the CLI configuration group.
- 4. Click Create.
- 5. Load running configurations from reachable devices by choosing a reachable device from the Load Running config from reachable device: drop-down list.
- 6. Use Search CLI to search for particular lines of CLIs.

- 7. Click **Create Variable** and provide a name for the variable for the CLI-based configuration group.
- 8. Highlight text in the Config Preview code block and click Encrypt Type6 to encrypt the text.
- 9. Click **Import Config File** to import a config file from your local storage.
- 10. Type the configurations manually in the config preview code block and add customized configuration.
- 11. Click Save to save the configuration.
- 12. Click Done

# **Create Feature Profiles**

The feature profile tap displays previously defined feature profiles. The options that appear in a feature profile tabs depend on the solution, such as SD-WAN, SD-Routing, and so on. Choose from one of the following feature profiles by clicking the respective tab to view, add, or edit a new profile if you have selected the SD-WAN solution:

- System Profile
- Transport & Management Profile
- Service Profile
- CLI Add-On Profile
- UC Voice Profile
- Other Profile
- · Policy Profile

#### **View a Feature Profile**

- 1. From the Cisco SD-WAN Manager menu, choose **Configuration** > **Configuration Groups**.
- 2. Click the feature profile tab.

A list of available profiles appear, where you can view details such as history, description, or the number of configuration groups that share the profile.

After you select a feature, the **SHARED** menu displays the count of configuration groups that share the feature. Hover over the count to view the names of the configuration groups that share the feature.

### Add a Feature Profile

- 1. From the Cisco SD-WAN Manager menu, choose Configuration > Configuration Groups.
- 2. Click a feature profile tab and click Add New.

Alternatively, click a configuration group from the available list and choose + **Create New** from the drop-down list of a feature profile.

- **3.** Click the pencil icon that is next to a feature profile or select a feature profile from the drop-down menu to add a feature profile to edit.
- 4. Enter a name and description for the feature profile.
- 5. Click Create.

## **Edit a Feature Profile**

You can edit a feature profile from the **Configuration Groups** tab or by clicking a particular feature profile tab.

#### Edit a Feature from the Configuration Groups Tab

- 1. From the Cisco SD-WAN Manager menu, choose **Configuration** > **Configuration Groups**.
- 2. Click the Configuration Groups tab.
- 3. Click a configuration group from the available list.
- 4. Click the pencil icon that is next to a feature profile and edit the feature.
- 5. If you have created a configuration group for dual router type, you can apply the configuration to all or individual routers by choosing one of the options: All, EdgeDevice\_01 or EdgeDevice\_02.
- 6. Click Save.
- 7. If you have created a configuration group for dual router type, choose one of these options:
  - Save on Both Devices
  - Save on EdgeDevice\_01
  - Save on EdgeDevice\_02

#### Edit a Feature from the Feature Profile Tab

- **1.** Click a feature profile tab.
- 2. Click the icon under the Actions column for a feature profile.
- 3. Click Edit.
- 4. Click the pencil icon that is next to a feature and edit the feature.
- 5. If you have created a configuration group for dual router type, you can apply the configuration to all or individual routers by choosing one of the options: All, EdgeDevice\_01 or EdgeDevice\_02.
- 6. Click Save.
- 7. If you have created a configuration group for dual router type, choose one of these options:
  - Save on Both Devices
  - Save on EdgeDevice\_01
  - Save on EdgeDevice\_02

## Add a Feature to a Feature Profile

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- 1. From the Cisco SD-WAN Manager menu, choose **Configuration** > **Configuration Groups**.
- 2. Add a feature in one of these two methods:
  - a. From the Configuration Groups tab:
    - 1. Click a configuration group from the available list.
    - 2. Click the pencil icon that is next to a feature profile or choose a feature profile from the drop-down menu to add a feature profile to edit.
    - Click + Add New Feature and choose additional features from the Add Features pane to add to the feature profile.
  - **b.** From the available feature profiles:
    - **1.** Choose a feature profile tab.
    - 2. Click the icon under the Actions column for that feature profile.
    - 3. Click Edit.
    - Click + Add New Feature and choose additional features from the Add Features pane to add to the feature profile.
- 3. In the Name field, enter a name for the feature.

The name can be up to 128 characters and can contain only alphanumeric characters.

4. In the **Description** field, enter a description of the feature.

The description can be up to 2048 characters and can contain only alphanumeric characters and spaces.

5. Configure the options as needed.

Some parameters have a scope drop-down list that enables you to choose **Global**, **Device Specific**, or **Default** for the parameter value. Choose one of the following options, as described in this table:

Parameter Scope	Scope Description
Global	Enter a value for the parameter to apply the value to all devices.
	Examples of parameters that you might apply globally to a group of devices are DNS server, syslog server, and interface MTUs.

Parameter Scope	Scope Description
Device Specific	Use a device-specific value for the parameter.
	Choose <b>Device Specific</b> to provide a value for the key in the field. The key is a unique string that helps identify the parameter. To change the default key, enter a new string in the field.
	(Optional) Click the menu icon adjacent to the text box and provide a default value and a description. Cisco SD-WAN Manager applies the default value of the parameter to the device while deploying the configuration group.
	Examples of device-specific parameters are system IP address, host name, GPS location, and site ID.
Default	The default value is shown for parameters that have a default setting.

6. Click Save.

#### Add a Subfeature

1. Select a feature to edit and click the + icon to add subfeatures, where applicable.

The Add Feature pane appears with a list of applicable subfeatures that you can add.

2. Choose a feature to add to the profile.

Cisco SD-WAN Manager adds the feature to the profile and represents it as a tree structure.

3. Configure the subfeature by choosing + Add New from the drop-down menu and click Save.

The subfeature appears as a child under the parent feature. For example, Ethernet Interface is a subfeature of Transport VPN and Object Tracker and Object Tracker Group are subfeatures of the Service VPN feature.



**Note** Some subfeatures that you configure such as Route Policy or Object Tracker don't appear in the tree structure after creation. This is because these subfeatures apply to certain features during configuration and are available in the context of those features in a configuration group. For example, the ACL IPV4 subfeature is available in the ACL drop-down list for ACL IPv4 ingress or ACL IPv4 egress parameters in the Ethernet Interface feature.

You can view these subfeatures by clicking the **Manage All Features** icon adjacent to the + **Add New Feature** menu.

# Add Devices to a Configuration Group

After creating a configuration group, you can add devices to the group in one of these ways:

- Add the devices manually.
- Use rules to automatically add devices to the group.

## Add Devices to a Configuration Group Manually

- 1. From the Cisco SD-WAN Manager menu, choose Configuration > Configuration Groups.
- 2. Click a configuration group from the available list.
- 3. Click the + Add option adjacent to Associated in the Deployment area.
- Click Associated Devices, and then click Add Devices. The Add Devices to Configuration workflow starts.
- 5. Follow the instructions provided in the workflow.

The selected devices are listed in the Devices table.

## Add Devices to a Configuration Group Using Rules

#### **Before You Begin**

Ensure that you have added tags to devices. For more information about tagging, see Device Tagging.

#### Add Devices to a Configuration Group Using Rules

- 1. From the Cisco SD-WAN Manager menu, choose Configuration > Configuration Groups.
- 2. Click a configuration group from the available list.
- 3. Click the + Add option adjacent to Associated in the Deployment area.

#### 4. Click Add and Edit Rules.

The Automated Rules sidebar is displayed.

- 5. In the **Rules** section, choose values for the following options:
  - Rule Conditions: Choose one of the two rules and configure the conditions: Match All or Match Any.
  - Choose one of these operators:
    - Equals
    - Not equals
    - Contains
    - Not contains
    - Starts with
    - End with



Note

You cannot create a new rule if it conflicts with an existing rule.

6. Click Apply.

Based on the rule, a list of devices that will be added to or removed from the configuration group appears.

7. Click Confirm to apply the changes.

# **Remove Devices from a Configuration Group**

If a device is automatically added to a configuration group based on a tag rule, you cannot remove the device from the group using the above method. To do this, you must edit the tag rule or delete the rule. For complete information on adding or editing a tag rule, see Add Devices to a Configuration Group Using Rules.

You can remove a Cisco Catalyst 8000V device from a configuration group only after deploying the device. Manually issue the command **request platform software sdwan** *is-vmanaged disable* in the device CLI to completely dissociate the Cisco Catalyst 8000V device from a configuration group.

- 1. From the Cisco SD-WAN Manager menu, choose **Configuration** > **Configuration Groups**.
- 2. Click a configuration group from the available list.
- **3.** Click the pencil icon (with the count of associated devices) adjacent to **Associated** in the **Deployment** area.
- 4. In the **Devices** table, choose the devices to remove from the configuration group.
- 5. Click Save.

# **Deploy a Configuration Group**

The option to deploy a configuration group is available only after you:

- create the mandatory features such as System Profile and Transport & Management Profile.
  For more information about creating profiles, see Add a Feature Profile.
- 2. configure and add features to the mandatory profiles, and
- 3. associate devices to the configuration group.

To deploy a configuration group:

- 1. From the Cisco SD-WAN Manager menu, choose Configuration > Configuration Groups.
- 2. Click the Configuration Groups tab.
- **3.** Click a configuration group from the available options.
- 4. Click the Add option next to Associated under Deployment.
- 5. Choose the devices to associate to the configuration group and click **Save**.
- 6. Click **Deploy** and follow the instructions in the Deploy Configuration Group workflow.

# **Edit a Configuration Group**

- 1. From the Cisco SD-WAN Manager menu, choose Configuration > Configuration Groups.
- 2. Click the ellipsis icon adjacent to the configuration group name and choose **Edit** to edit the name and description of the configuration group, or in case of dual routers, to edit the tags of the routers.

Alternatively, click a configuration group to expand it and click the pencil icon to edit.

You can edit the various settings of a configuration group, such as adding or editing feature profiles, devices, or associating and deploying devices to a configuration group by clicking a configuration group.

# View Configuration Groups

From the Cisco SD-WAN Manager menu, choose **Configuration** > **Configuration** Groups and use one of the filters to view certain cofiguration groups based on these categories:

- Last Updated: Choose a time range from the drop-down list to view configuration groups that are updated within that time range.
- Status: Choose one or more of these categories from the drop-down list
  - All Devices in Sync: Displays configuration groups with all the devices in sync.
  - Has Out of Sync Devices: Displays configuration groups with devices that are out of sync.
  - No Devices Associated: Displays configuration groups without any associated devices.

# **Copy a Configuration Group**

- 1. From the Cisco SD-WAN Manager menu, choose Configuration > Configuration Groups.
- 2. Click the ellipsis icon adjacent to the configuration group name and choose Copy.
- 3. In the Copy Configuration Group dialog box, enter these:

Field	Description
Name	Enter a name for the new configuration group.
Description	Enter a description for the new configuration group.

4. Click Create.

Cisco SD-WAN Manager creates the new configuration group.

# Import a Configuration Group

- 1. From the Cisco SD-WAN Manager menu, choose Configuration > Configuration Groups.
- 2. Click Import.
- 3. Choose a tar.gz file from your local storage to import to Cisco SD-WAN Manager.
- 4. Click Open.
- 5. The Device Group page displays the import status.
- 6. Click the logs icon in the Action column to view the logs of the import.

# **Export a Configuration Group**

- 1. From the Cisco SD-WAN Manager menu, choose Configuration > Configuration Groups.
- 2. Click Export and click the Configuration Group tab.
- 3. Choose one or more configuration groups to export.

You can choose multiple configuration groups, policy groups, and topologies and export them as a single tar.gz file.

- 4. Click Export.
- 5. Based on your selection, Cisco SD-WAN Manager downloads the configuration group to your local storage as a tar.gz file.

# **Delete a Configuration Group**

Before deleting a configuration group, ensure that there are no devices associated with that configuration group. For more information about removing devices from a configuration group, see Remove Devices from a Configuration Group.

- 1. From the Cisco SD-WAN Manager menu, choose Configuration > Configuration Groups.
- 2. Click the ellipsis icon adjacent to the configuration group name and choose **Delete**.
- 3. In the confirmation dialog box, click Yes.