



# Overview of Configuration Groups for SD-Routing Devices

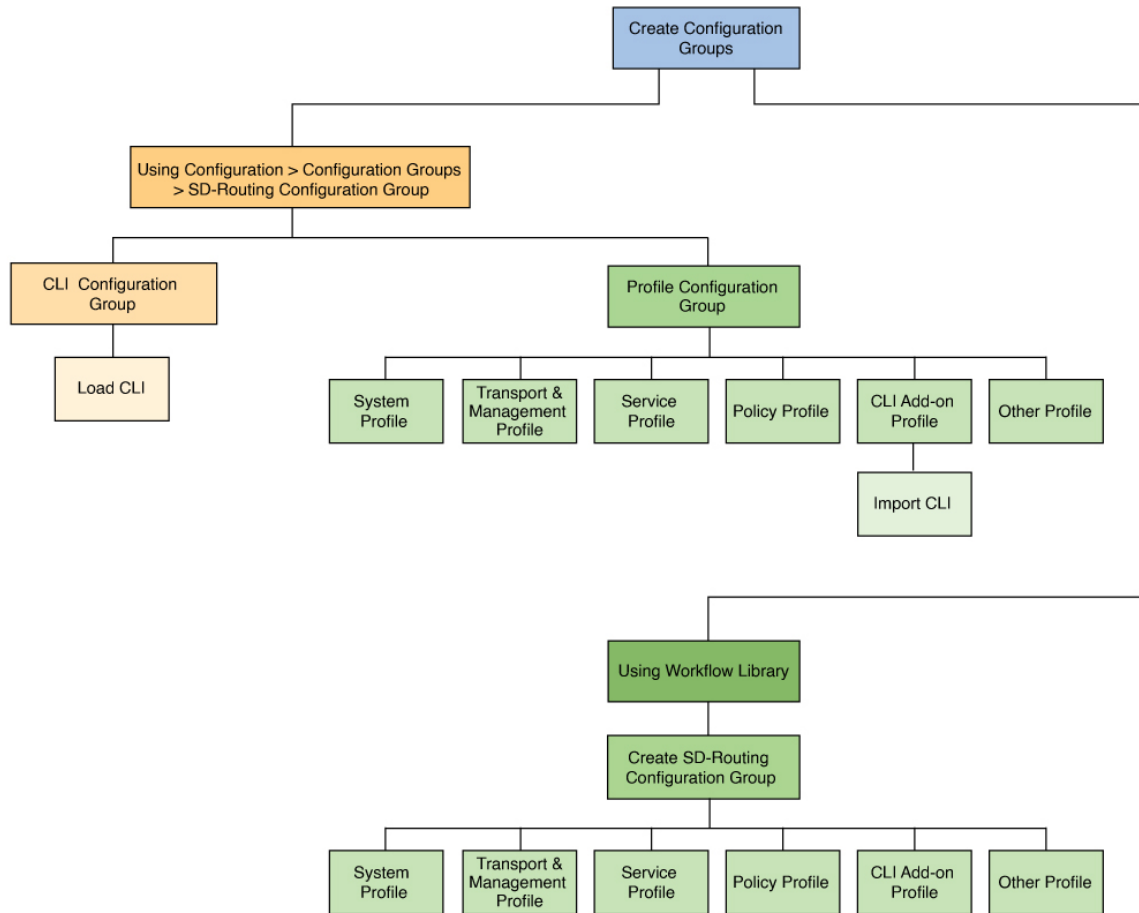
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After a device is onboarded, Cisco Catalyst SD-WAN Manager provisions the device with the required configuration. The use of configuration groups streamlines this provisioning process.

Configuration Groups in Cisco SD-WAN Manager provide a simple, reusable, and structured approach for creating and applying device specific configurations to SD-Routing devices. Configuration groups are made up of feature profiles, features and subfeatures.

- **Configuration Group:** A configuration group is a logical grouping of features or configurations that can be applied to one or more devices in the network managed by Cisco SD-WAN Manager. You can define and customize this grouping based on your business needs.
- **Feature Profile:** A feature profile is a flexible building block of configurations that can be reused across different configuration groups. You can create profiles based on features that are required, recommended, or uniquely used, and then put together the profiles to complete a device configuration.
- **Feature:** A feature profile consists of features. Features are the individual capabilities you want to share across different configuration groups.

Cisco Catalyst SD-WAN Manager provides multiple ways to create configuration groups.



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## Prerequisites for Configuration Groups

To use configuration groups, the minimum software version for Cisco SD-Routing devices is Cisco IOS XE Release 17.13.1a

# Supported Devices for Configuration Groups

Configuration Group provisioning is supported on the following platforms.

- Cisco Catalyst 8000V Series Edge Platforms, Cisco Catalyst 8200 Series Edge Platforms, Cisco Catalyst 8300 Series Edge Platforms, Cisco Catalyst 8500 Series Edge Platforms
- Cisco 1000 Series Integrated Services Routers. However, ISR1100-4G/6G and ISR1100X-4G/6G do not support SD-Routing mode.
- Cisco Catalyst IR1100 Rugged Series Routers

## Create SD-Routing Configuration Groups Using Configuration Group Menu

The **Configuration Group** menu in Cisco Catalyst SD-WAN Manager provides building blocks to assemble configurations for SD-Routing devices. The preferred method varies based on whether the device is an existing device or a new one.

- For existing devices, create configuration groups using [Create Configuration Groups Using CLI Configuration Group](#).
- For new devices, create configuration groups using [Create Configuration Groups Using Profile Configuration Group](#).

## Create Configuration Groups Using CLI Configuration Group

The **Configuration Groups** menu on Cisco Catalyst SD-WAN Manager provides a user friendly method to create configuration groups for SD-Routing devices. After onboarding existing SD-Routing devices into Cisco SD-WAN Manager, use the **CLI Configuration Group** to load the device's running configurations, modify and deploy the configurations to these devices.

To create a CLI configuration group for SD-Routing devices, perform the outlined procedure.

### Before you begin

- Ensure that the onboarded device is reachable on Cisco SD-WAN Manager.
- Ensure that you have an understanding of the configurations needed for your deployment.

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- Step 1** From Cisco SD-WAN Manager main menu, go to **Configuration > Configuration Groups** and select **Solution** as SD-Routing.
- Step 2** Click **Create Configuration Group**.
- Step 3** Add a name and description, select the **CLI Configuration Group** and click **Create**.
- Step 4** On the **CLI** pane, select a reachable device and load the running configuration. If your device has configurations that do not have associated yang models, a prompt indicates that.

**Tip** You can view these configurations next to the device in the **Configuration > WAN Edge List**. Select the device and click the **Action** button to see the unsupported configurations.

**Step 5** Click **Yes** to save the running configurations.

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#### What to do next

[Associate and Deploy the Configuration Group to an SD-Routing Device, on page 5](#)

## Create Configuration Groups Using Profile Configuration Group

The **Configuration Groups** menu on Cisco Catalyst SD-WAN Manager provides a user friendly method to create configuration groups for SD-Routing devices. The building blocks: feature profiles, features and subfeatures can be quickly assembled to create the configuration group and deployed to provision the SD-Routing devices.

To create a profile based configuration group for SD-Routing devices, perform the outlined procedure.

#### Before you begin

Ensure that you have an understanding of the configurations needed for your deployment.

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**Step 1** From Cisco SD-WAN Manager main menu, go to **Configuration > Configuration Groups** and select **Solution** as SD-Routing.

**Step 2** Click **Create Configuration Group**.

**Step 3** Add a name and description, and click **Create**.

**Step 4** Create a **System Profile**, **Transport&Management Profile**, **Service Profile** and add features to these profiles. To know how to add features and subfeatures, refer to [Add a Feature and Subfeatures to a Feature Profile, on page 4](#).

**Tip** You can automate creating the SD-Routing configuration group with the above profiles, from the [Create SD-Routing Configuration Groups Using the Workflow Library](#)

**Step 5** Create a **CLI Add-on Profile** to add device configurations that are not available through other configuration group features. You can add these commands in the **CLI Configuration** area or click **Import Config File** to import and save the configurations.

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#### What to do next

[Associate and Deploy the Configuration Group to an SD-Routing Device, on page 5](#)

## Add a Feature and Subfeatures to a Feature Profile

#### Before you begin

You should have created a configuration group earlier.

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- Step 1** From the Cisco Catalyst SD-WAN Manager, select the SD-Routing configuration group and click ... to edit.
  - Step 2** Click a feature profile and open it.
  - Step 3** Click **Add New Feature** and choose a feature from the drop-down list.
  - Step 4** Enter a name for the feature. The name can be up to 128 characters and can contain only alphanumeric characters.
  - Step 5** Enter a description of the feature. The description can be up to 2048 characters and can contain only alphanumeric characters and spaces.
  - Step 6** Configure the options as needed. Some parameter have a scope drop-down list that enables you to choose Global, Device Specific, or Default for the parameter value. Select your preference as described in the table.
  - Step 7** Add subfeatures as required.
  - Step 8** Click **Save** to add the feature to the Feature profile.
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### What to do next

[Associate and Deploy the Configuration Group to an SD-Routing Device, on page 5](#)

## Associate and Deploy the Configuration Group to an SD-Routing Device

This task involves reviewing configurations in the configuration group, associating the device with a configuration group, and provisioning one or more SD-Routing devices.

### Before you begin

Ensure that the selected configuration group is an SD-Routing configuration group.

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- Step 1** From Cisco SD-WAN Manager, select the **Configuration Group** created earlier.
  - Step 2** Click + **Add** and select the devices from the list. Click **Save** to attach the configuration group to the selected devices.
  - Step 3** To provision the configuration changes, click **Deploy**.
  - Step 4** Select the device on which you want to provision the configuration changes. Click **Next**.
  - Step 5** For each device, review or update variables based on the configurations. Click **Next**.
  - Step 6** If you want to review device configuration changes, click **Preview CLI**.  
For any incorrect device configuration, an error message on the top left of the screen highlights the issue.
    - a) Go back to the configuration group, identify the invalid configuration and correct it.
    - b) On the **Deploy Configuration Group** workflow, click **Deploy** to provision the configuration changes on the device and review the changes again.
    - c) Select the device to review the configuration changes on the **CLI** pane either inline or side by side. The configurations that are removed are highlighted in red and the new configuration is highlighted in green.
    - d) Go back and continue with the deployment.
  - Step 7** View deployment status to ensure that the logs indicate a successful device provisioning.
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# Create SD-Routing Configuration Groups Using the Workflow Library

The **Create SD-Routing Config** workflow available in the **Workflow Library** is a simplified workflow that guides you in creating a configuration group for SD-Routing devices. This is an alternative way to quickly create a configuration group.

## Before you begin

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- Step 1** From Cisco SD-WAN Manager menu, choose **Workflows > Workflow Library > Create SD-Routing Config**.
  - Step 2** Enter a name and optionally a description and click to create a SD-Routing config group.
  - Step 3** Select the configuration group and add any additional profiles that you need. For more information refer to [Create Configuration Groups Using Profile Configuration Group, on page 4](#)
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## What to do next

[Associate and Deploy the Configuration Group to an SD-Routing Device, on page 5](#)

# Deploy SD-Routing Devices Using the Deploy Configuration Group Workflow

## Before you begin

You should have created an SD-Routing Configuration Group and associated one or more devices with the configuration group.

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- Step 1** From the Cisco SD-WAN Manager menu, choose **Workflows > Workflow Library**.
  - Step 2** Start the **Deploy Configuration Group** workflow.
  - Step 3** Follow the instructions provided in the workflow.
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