Policy Object Profile

A Cisco Catalyst SD-WAN policy is made up of at least one list, a policy definition, and an application. The list identifies values, the policy definition defines actions, and the application defines where the policy is applied. The policy object profile has lists such as AS path, class map, data prefix, mirror, policer, and so on.

Starting from Cisco IOS XE Catalyst SD-WAN Release 17.15.1a, when the policy objects are more than 50, the list is paginated to ease the configuration of policy object profiles.

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AS Path

1. Choose the **AS Path** policy object from the **Select Policy Object** drop-down list.
2. Enter the AS Path list name in the **AS Path List Name** field.
3. In the **Add AS Path** field, enter the AS path number.
4. Click **Save**.

The following table describe the options for configuring the class map.

Field	Description
AS Path List Name	Enter a name for the class map list.
Add AS Path	Specifies the AS path number. The range is 1 to 65535.

Class Map

1. Choose the **Class Map** policy object from the **Select Policy Object** drop-down list.
2. Enter the class map name in the **Class** field.
3. In the **Select a Queue** drop-down list, choose the required queue.
4. Click **Save**.

The following table describe the options for configuring the class map.

Field	Description
Class	Enter a name for the class map list.
Queue	Specifies the queue number.

Data Prefix

1. Choose the **Data Prefix** policy object from the **Select Policy Object** drop-down list.
2. Enter the **Data Prefix List Name**.
3. In the **Internet Protocol** field, click **IPv4** or **IPv6**.
4. Click **Save**.

The following table describe the options for configuring the data prefix.

Field	Description
Prefix List Name	Enter a name for the prefix list.
Internet Protocol	Specifies the internet protocol. The options are IPv4 and IPv6.

Prefix

1. Choose the **Prefix** policy object from the **Select Policy Object** drop-down list.
2. Enter the **Prefix List Name**.
3. In the **Internet Protocol** field, click **IPv4** or **IPv6**.
4. Under **Add Prefix**, enter the prefix for the list. Optionally, click the **Choose a file** link to import a prefix list.
5. Click **Save**.

The following table describe the options for configuring the prefix.

Table 1: Prefix List

Field	Description
Prefix List Name	Enter a name for the prefix list.
Internet Protocol	Specifies the internet protocol. The options are IPv4 and IPv6.

Expanded Community

1. Choose the **Expanded Community** policy object from the **Select Policy Object** drop-down list.
2. Enter the **Expanded Community List Name**.
3. In the **Add Expanded Community** field, enter the community details. The format example is given in the field.
4. Click **Save**.

The following table describe the options for configuring the expanded community.

Field	Description
Expanded Community List Name	Enter a name for the community list.
Add Expanded Community	Specifies the expanded community.

Extended Community

1. Choose the **Extended Community** policy object from the **Select Policy Object** drop-down list.
2. Enter the **Extended Community List Name**.
3. In the **Add Extended Community** field, enter the community details. The format example is given in the field.
4. Click **Save**.

The following table describe the options for configuring the extended community.

Field	Description
Extended Community List Name	Enter a name for the community list.

Field	Description
Add Extended Community	Specifies the extended community. The format is as follows: • **rt** (*aa*:*nn* | *ip-address*): Route target community, which is one or more routers that can receive a set of routes carried by BGP. Specify this as the AS number and network number, where each number is a 2-byte value with a range from 1 to 65535, or as an IP address. • **soo** (*aa*:*nn* | *ip-address*): Route origin community, which is one or more routers that can inject a set of routes into BGP. Specify this as the AS number and network number, where each number is a 2-byte value with a range from 1 to 65535, or as an IP address. To configure multiple extended BGP communities in a single list, include multiple **community** options, specifying one community in each option.

Mirror

1. Choose the **Mirror** policy object from the **Select Policy Object** drop-down list.
2. Enter the **Mirror List Name**.
3. In the **Remote Destination IP** field, enter the IP address of the destination for which to mirror the packets.
4. In the **Source IP** field, enter the IP address of the source of the packets to mirror.
5. Click **Save**.

Note To configure mirroring parameters, define the remote destination to which to mirror the packets, and define the source of the packets. Mirroring applies to unicast traffic only. It does not apply to multicast traffic.

The following table describe the options for configuring the mirror.

Field	Description
Mirror List Name	Enter a name for the mirror list.
Remote Destination IP	Specifies the IP address of the remote destination.
Source IP	Specifies the IP address of the source.

Policer

1. Choose the **Policer** policy object from the **Select Policy Object** drop-down list.
2. Enter the **Policer List Name**.

3. In the **Burst (bytes)** field.
4. In the **Exceed** drop-down list, choose the action **Drop** or **Remark**.
5. Enter the **Rate (bps)**
6. Click **Save**.

The following table describe the options for configuring the policer.

Field	Description
Policer List Name	Enter a name for the policer list.
Burst (bytes)	Specifies the maximum traffic burst size. Range is from 15000 to 10000000.
Exceed	Specifies an action to take when the burst size or traffic rate is exceeded. The options are: **Drop**—Sets the packet loss priority (PLP) to low. **Remark**—Sets the PLP to high. The default option is **Drop**.
Rate	Specifies the maximum traffic rate. It can be a value from 8 through 2^{64} bps (8 through 100000000000).

Standard Community

1. Choose the **Standard Community** policy object from the **Select Policy Object** drop-down list.
2. Enter the **Standard Community List Name**.
3. In the **Add Standard Community** field, enter the community details. The format example is given in the field.
4. Click **Save**.

The following table describe the options for configuring the standard community.

Field	Description
Expanded Community List Name	Enter a name for the community list.

Field	Description
Add Expanded Community	Specifies the standard community. the options are: • *aa*:*nn*: Autonomous System (AS) number and network number. Each number is a 2-byte value with a range from 1 to 65535. • **internet**: Routes in this community are advertised to the Internet community. This community comprises all BGP-speaking networking devices. • **local-as**: Routes in this community are not advertised outside the local AS number. • **no-advertise**: Attaches the NO_ADVERTISE community to routes. Routes in this community are not advertised to other BGP peers. • **no-export**: Attaches the NO_EXPORT community to routes. Routes in this community are not advertised outside the local AS or outside a BGP confederation boundary. To configure multiple BGP communities in a single list, include multiple **community** options, specifying one community in each option.

VPN

1. Choose the **VPN** policy object from the **Select Policy Object** drop-down list.
2. Enter the **VPN List Name** and the **Add VPN**fields based on the hints.
3. Click **Save**.

The following table describe the options for configuring the VPN object.

Field	Description
VPN List Name	Enter a name for the VPN list.
Add VPN	Enter the VPN number. The number can be 100 or 200 separated by commas or 1000—2000 range.