



## Service Profile

- [ACL IPv4, on page 1](#)
- [DHCP Server, on page 2](#)
- [Object Tracker, on page 3](#)
- [Object Tracker Group, on page 4](#)
- [Route Policy, on page 5](#)
- [VRF , on page 6](#)
- [IPv4/IPv6 Static Route Service , on page 9](#)

## ACL IPv4

The following table describe the options for configuring the ACL IPv4 feature.

Field	Description
<b>ACL Sequence Name</b>	Specifies the name of the ACL sequence.
<b>Standard</b>	Standard ACLs control traffic by the comparison of the source address of the IP packets to the addresses configured in the ACL.
<b>Extended</b>	Extended ACLs control traffic by the comparison of the source and destination addresses of the IP packets to the addresses configured in the ACL.
<b>Add ACL Sequence</b>	Sequential collection of permit and deny conditions that apply to an IP packet
<b>Import ACL Sequence</b>	Import an ACL sequence into the device
<b>Drop or Accept</b>	Action to perform if match exists or not.
Edit ACL Sequence	
<b>ACL Sequence Name</b>	Enter a name for the ACL Sequence.
<b>Source Address</b>	Source address of IP packets
<b>Source Address Host</b>	A single source address host

Field	Description
<b>Action Type</b>	The default value is accept
<b>Accept Actions</b>	Select log from the drop-down list to log messages about packets that are permitted or denied by a standard IP access list.

You can select the specific ACL sequence in the ACL Policy window to edit, delete or add.



**Note** You can also configure **ACL Policy** features from Transport and Service Profile configuration groups.

## DHCP Server

This feature allows an interface to be configured as a DHCP helper so that it forwards the broadcast DHCP requests that it receives from the DHCP servers.

For each parameter of the feature that has a default value, the scope is set to Default (indicated by a check mark), and the default setting or value is shown. To change the default or to enter a value, click the scope drop-down to the left of the parameter field and choose one of the following:

### Basic Configuration

Field	Description
<b>Address Pool</b>	Enter the IPv4 prefix range, in the format <b>prefix/length</b> , for the pool of addresses in the service-side network for which the router interface acts as the DHCP server.
<b>Exclude</b>	Enter one or more IP addresses to exclude from the DHCP address pool. To specify multiple individual addresses, list them separated by a comma. To specify a range of addresses, separate them with a hyphen.
<b>Lease Time(seconds)</b>	Specify how long a DHCP-assigned IP address is valid. Range: 60 through 31536000 seconds Default: 86400

### Static Lease

Field	Description
<b>Add Static Lease</b>	
<b>MAC Address</b>	Enter the MAC address of the client to which the static IP address is being assigned.
<b>IP</b>	Enter the static IP address to assign to the client.

**DHCP Options**

Field	Description
<b>Add Option Code</b>	
<b>Code</b>	Configure the option code. Range: 1-254
<b>Type</b>	Choose one of the three types: <ul style="list-style-type: none"> <li>• <b>ASCII</b>: Specify an ASCII value.</li> <li>• <b>Hex</b>: Specify a hex value.</li> <li>• <b>IP</b>: Specify IP addresses. You can specify up to eight IP addresses.</li> </ul>

**Advanced**

Field	Description
<b>Interface MTU</b>	Specify the maximum MTU size of packets on the interface. Range: 68 to 65535 bytes
<b>Domain Name</b>	Specify the domain name that the DHCP client uses to resolve hostnames.
<b>Default Gateway</b>	Enter the IP address of a default gateway in the service-side network.
<b>DNS Servers</b>	Enter one or more IP address for a DNS server in the service-side network. Separate multiple entries with a comma. You can specify up to eight addresses.
<b>TFTP Servers</b>	Enter the IP address of a TFTP server in the service-side network. You can specify one or two addresses. If two, separate them with a comma.

# Object Tracker

Use the Tracker feature to track the status of the tracker endpoints

The following table describes the options for configuring the Object Tracker feature.

**Basic Settings**

Parameter Name	Description
<b>Name</b>	Name of the tracker. The name can be up to 128 alphanumeric characters. You can configure up to eight trackers.
<b>Description</b>	Enter a description for the Object Tracker
<b>Object Tracker ID</b>	Name of the object tracker

Parameter Name	Description
<b>Interface Name</b>	Enter the global or device-specific tracker interface name. For example, Gigabitethernet1 or Gigabitethernet2
<b>Interface Track Type</b>	Duration to wait for the probe to return a response before declaring that the transport interface is down. Range: 100 through 1000 milliseconds. Default: 300 milliseconds . The options are: <ul style="list-style-type: none"> <li>• Line-protocol</li> <li>• Ip-routing</li> <li>• Ipv6-routing</li> </ul>
<b>Route IP</b>	Route IP prefix of the network
<b>Route IP Mask</b>	Subnet mask of the network
<b>VRF Name</b>	VRF name to be used as the basis to track route reachability
<b>Delay Up (Seconds)</b>	Sets delay of from 0 to 180 seconds before communication of up status of the tracked object or list of objects
<b>Delay Down (Seconds)</b>	Sets delay of from 0 to 180 seconds before communication of down status of the tracked object or list of objects

## Object Tracker Group

Use this feature to configure an object tracker group. To ensure accurate tracking, add at least two object trackers before creating an object tracker group.

### Basic Settings

Parameter Name	Description
<b>Object tracker ID</b>	Enter an ID for the object tracker group. Range: 1 through 1000
<b>Object tracker</b>	Select a minimum of two previously created object trackers from the drop-down list.
<b>Reachable</b>	Choose one of the following values: <ul style="list-style-type: none"> <li>• <b>Either:</b> Ensures that the transport interface status is reported as active if either one of the associated trackers of the tracker group reports that the route is active.</li> <li>• <b>Both:</b> Ensures that the transport interface status is reported as active if both the associated trackers of the tracker group report that the route is active.</li> </ul>

Parameter Name	Description
<b>Delay Up (Seconds)</b>	Sets delay of from 0 to 180 seconds before communication of up status of the tracked object or list of objects
<b>Delay Down (Seconds)</b>	Sets delay of from 0 to 180 seconds before communication of down status of the tracked object or list of objects

## Route Policy

Use this feature to configure the policy-based routing if you want certain packets to be routed through a specific path other than the obvious shortest path.

The following table describes the options for configuring the route policy feature.

Field	Description
<b>Routing Sequence Name</b>	Specifies the name of the routing sequence.
<b>Protocol</b>	Specifies the internet protocol. The options are IPv4, IPv6, or Both.
<b>Condition</b>	Specifies the routing condition. The options are: <ul style="list-style-type: none"> <li>• Address</li> <li>• AS Path List</li> <li>• Community List</li> <li>• Extended Community List</li> <li>• BGP Local Preference</li> <li>• Metric</li> <li>• Next Hop</li> <li>• Interface</li> <li>• OSPF Tag</li> </ul>
<b>Action Type</b>	Specifies the action type. The options are: Accept or Reject.

Field	Description
<b>Accept Condition</b>	Specifies the accept condition type. The options are: <ul style="list-style-type: none"> <li>• AS Path</li> <li>• Community</li> <li>• Local Preference</li> <li>• Metric</li> <li>• Metric Type</li> <li>• Next Hop</li> <li>• Origin</li> <li>• OSPF Tag</li> <li>• Weight</li> </ul>

## VRF

### DNS

The following table describes the options for configuring the Management VRF feature.

Field	Description
<b>VRF Name</b>	Enter a name for the VRF.
<b>RD</b>	Specify a route distinguisher for the VRF or use the system default. A route distinguisher helps distinguish the distinct virtual private network routes of customers who connect to the provide
<b>DNS</b>	
<b>IP Address</b>	Enter the IP address of the primary DNS server in this VRF This IP address is used for resolving the Cisco SD-WAN Validator hostname

### Host Mapping

Field	Description
<b>Add New Host Mapping</b>	
<b>Hostname</b>	Enter the hostname of the DNS server. The limit is 128 characters.
<b>List of IP</b>	Enter IP addresses to associate with the hostname. Separate the entries with commas

**Route**

Field	Description
<b>Add IPv4 Static Route</b>	
<b>Network address</b>	Enter the IPv4 address or prefix, in decimal four-point-dotted notation, to configure the VRF.
<b>Subnet Mask</b>	Enter the subnet mask for the prefix or the IP address. You can also choose a subnet mask from the drop-down list.
<b>Gateway</b>	<p>Choose one of the following options to configure the Next Hop to reach the static route:</p> <ul style="list-style-type: none"> <li>• <b>Next Hop:</b> When you choose this option and click <b>Add</b>, the following fields are displayed : <ul style="list-style-type: none"> <li>• <b>Address:</b> Specify the next-hop IPv4 address.</li> <li>• <b>Administrative distance:</b> Specify the administrative distance for the route.</li> <li>• <b>Object Tracker/Object Tracker Group:</b> <p>Object tracking is a mechanism for tracking an object to take any client action on another object as configured by the client. You can identify each tracked object by a unique name that is specified by the track parameter.</p> <p>Select an object from the drop-down list.</p> </li> </ul> </li> <li>• <b>Null 0:</b> Enable this option to set the next hop to be the null interface. All packets sent to this interface are dropped without sending any ICMP messages. <ul style="list-style-type: none"> <li>• <b>Administrative distance:</b> Specify the administrative distance for the route.</li> </ul> </li> <li>• <b>dhcp</b> <ul style="list-style-type: none"> <li>• <b>Administrative distance:</b> Enter the administrative distance for the route.</li> </ul> </li> <li>• <b>Interface:</b> Click <b>Add</b> and specify the following details: <ul style="list-style-type: none"> <li>• <b>Interface Name:</b> Specify a valid interface or choose a value from the drop-down list.</li> <li>• <b>Add Next Hop:</b> <ul style="list-style-type: none"> <li>• <b>Address:</b> Specify the next-hop IPv4 address.</li> <li>• <b>Administrative distance:</b> Specify the administrative distance for the route.</li> </ul> </li> </ul> </li> </ul>

Field	Description
<b>IPv6 Static Route</b>	
<b>Prefix</b>	Enter the IPv6 address or prefix, in decimal four-point-dotted notation, and the prefix length of the IPv6 static route to configure in the VRF.
<b>Gateway</b>	<p>Choose one of the following options to configure the Next Hop to reach the static route:</p> <ul style="list-style-type: none"> <li>• <b>Next Hop:</b> Select this option and click <b>Add</b>, the following fields are displayed : <ul style="list-style-type: none"> <li>• <b>Address:</b> Specify the next-hop IPv4 address.</li> <li>• <b>Administrative distance:</b> Specify the administrative distance for the route.</li> </ul> </li> <li>• <b>Null 0:</b> Enable this option to set the next hop to be the null interface. All packets sent to this interface are dropped without sending any ICMP messages. <ul style="list-style-type: none"> <li>• <b>Administrative distance:</b> Specify the administrative distance for the route.</li> </ul> </li> <li>• <b>Interface:</b> Click <b>Add</b> and specify the following details: <ul style="list-style-type: none"> <li>• <b>Interface Name:</b> Specify a valid interface or choose a value from the drop-down list.</li> <li>• <b>Next Hop:</b></li> <li>• <b>Address:</b> Specify the next-hop IPv4 address.</li> <li>• <b>Administrative distance:</b> Specify the administrative distance for the route.</li> </ul> </li> </ul>

## NAT

<b>NAT</b>	
<b>NAT Enable</b>	Use the toggle button to enable NAT
<b>Add NAT Interfaces</b>	Add interfaces that are facing the Internet and the internal servers
<b>Static NAT</b>	Add a static NAT mapping
<b>Static NAT Subnet</b>	Define the subnet for the NAT mapping
<b>NAT Port Forward</b>	Define NAT port forwarding rules
<b>Dynamic NAT</b>	Define Dynamic NAT rules.



**Route Leak**

<b>Route leak from Global VRF</b>	
<b>Route Protocol</b>	Choose a protocol from the available options to leak routes from global VRF to the service VRF that you are configuring.
<b>Select Route Policy</b>	Choose a route policy from the drop-down list.
<b>Redistribution (in VRF)</b>	
<b>Protocol</b>	Choose a protocol from the available options to redistribute the leaked routes.
<b>Select Route Policy</b>	Choose a route policy from the drop-down list.
<b>Route leak to Global VRF</b>	
<b>Route Protocol</b>	Choose a protocol from the available options to leak routes from the service VRF that you are configuring to the global VRF.
<b>Select Route Policy</b>	Choose a route policy from the drop-down list.
<b>Redistribution (in global VRF)</b>	
<b>Protocol</b>	Choose a protocol from the available options to redistribute the leaked routes.
<b>Select Route Policy</b>	Enter the name of the route policy.
<b>Route leak from other Service VRF(s)</b>	
<b>Source VRF</b>	Enter a value of the source VRF.
<b>Route Protocol</b>	Choose a protocol from the available options to leak routes from the source service VRF to the service VRF that you are configuring.
<b>Select Route Policy</b>	Choose a route policy from the drop-down list.
<b>Redistribution (in Service VRF)</b>	
<b>Protocol</b>	Choose a protocol from the available options to redistribute the leaked routes.
<b>Select Route Policy</b>	Choose a route policy from the drop-down list.

## IPv4/IPv6 Static Route Service

**IPv4/IPv6 Static Route**

<b>Field</b>	<b>Description</b>
<b>Add IPv4 Static Route</b>	

Field	Description
<b>IP Address*</b>	Enter the IPv4 address or prefix, in decimal four-point-dotted notation, and the prefix length of the IPv4 static route to configure in the VPN.
<b>Subnet Mask*</b>	Enter the subnet mask.
<b>Gateway*</b>	<p>Choose one of the following options to configure the next hop to reach the static route:</p> <ul style="list-style-type: none"> <li>• <b>nextHop</b>: When you choose this option and click <b>Add Next Hop</b>, the following fields appear: <ul style="list-style-type: none"> <li>• <b>Address*</b>: Enter the next-hop IPv4 address.</li> <li>• <b>Administrative distance*</b>: Enter the administrative distance for the route.</li> </ul> </li> <li>• <b>dhcp</b></li> <li>• <b>null0</b>: When you choose this option, the following field appears: <ul style="list-style-type: none"> <li>• <b>Administrative distance</b>: Enter the administrative distance for the route.</li> </ul> </li> </ul>
<b>Add IPv6 Static Route</b>	
<b>Prefix*</b>	Enter the IPv6 address or prefix, in decimal four-point-dotted notation, and the prefix length of the IPv6 static route to configure in the VPN.
<b>Next Hop/Null 0/NAT</b>	<p>Choose one of the following options to configure the next hop to reach the static route:</p> <ul style="list-style-type: none"> <li>• <b>Next Hop</b>: When you choose this option and click <b>Add Next Hop</b>, the following fields appear: <ul style="list-style-type: none"> <li>• <b>Address*</b>: Enter the next-hop IPv6 address.</li> <li>• <b>Administrative distance*</b>: Enter the administrative distance for the route.</li> </ul> </li> <li>• <b>Null 0</b>: When you choose this option, the following field appears: <ul style="list-style-type: none"> <li>• <b>NULL0*</b>: Enable this option to set the next hop to be the null interface. All packets sent to this interface are dropped without sending any ICMP messages.</li> </ul> </li> <li>• <b>NAT</b>: When you choose this option, the following field appears: <ul style="list-style-type: none"> <li>• <b>IPv6 NAT</b>: Choose NAT64 or NAT66.</li> </ul> </li> </ul>