Service Profile

ACL IPv4

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

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

Field	Description
Action Type	The default value is accept
Accept Actions	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
Address Pool	Enter the IPv4 prefix range, in the format **`prefix/length`**, for the pool of addresses in the service-side network for which the router interface acts as the DHCP server.
Exclude	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.
Lease Time(seconds)	Specify how long a DHCP-assigned IP address is valid. Range: 60 through 31536000 seconds Default: 86400

Static Lease

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

DHCP Options

Field	Description
Add Option Code	
Code	Configure the option code. Range: 1-254
Type	Choose one of the three types: • **ASCII**: Specify an ASCII value. • **Hex**: Specify a hex value. • **IP**: Specify IP addresses. You can specify up to eight IP addresses.

Advanced

Field	Description
Interface MTU	Specify the maximum MTU size of packets on the interface. Range: 68 to 65535 bytes
Domain Name	Specify the domain name that the DHCP client uses to resolve hostnames.
Default Gateway	Enter the IP address of a default gateway in the service-side network.
DNS Servers	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.
TFTP Servers	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
Name	Name of the tracker. The name can be up to 128 alphanumeric characters. You can configure up to eight trackers.
Description	Enter a description for the Object Tracker
Object Tracker ID	Name of the object tracker

Parameter Name	Description
Interface Name	Enter the global or device-specific tracker interface name. For example, Gigabitethernet1 or Gigabitethernet2
Interface Track Type	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: • Line-protocol • Ip-routing • Ipv6-routing
Route IP	Route IP prefix of the network
Route IP Mask	Subnet mask of the network
VRF Name	VRF name to be used as the basis to track route reachability
Delay Up (Seconds)	Sets delay of from 0 to 180 seconds before communication of up status of the tracked object or list of objects
Delay Down (Seconds)	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
Object tracker ID	Enter an ID for the object tracker group. Range: 1 through 1000
Object tracker	Select a minimum of two previously created object trackers from the drop-down list.
Reachable	Choose one of the following values: • **Either**: 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. • **Both**: 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.

Parameter Name	Description
Delay Up (Seconds)	Sets delay of from 0 to 180 seconds before communication of up status of the tracked object or list of objects
Delay Down (Seconds)	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
Routing Sequence Name	Specifies the name of the routing sequence.
Protocol	Specifies the internet protocol. The options are IPv4, IPv6, or Both.
Condition	Specifies the routing condition. The options are: • Address • AS Path List • Community List • Extended Community List • BGP Local Preference • Metric • Next Hop • Interface • OSPF Tag
Action Type	Specifies the action type. The options are: Accept or Reject.

Field	Description
Accept Condition	Specifies the accept condition type. The options are: • AS Path • Community • Local Preference • Metric • Metric Type • Next Hop • Origin • OSPF Tag • Weight

VRF

DNS

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

Field	Description
VRF Name	Enter a name for the VRF.
RD	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
DNS	
IP Address	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
Add New Host Mapping	
Hostname	Enter the hostname of the DNS server. The limit is 128 characters.
List of IP	Enter IP addresses to associate with the hostname. Separate the entries with commas

Route

Field	Description
Add IPv4 Static Route	
Network address	Enter the IPv4 address or prefix, in decimal four-point-dotted notation, to configure the VRF.
Subnet Mask	Enter the subnet mask for the prefix or the IP address. You can also choose a subnet mask from the drop-down list.
Gateway	Choose one of the following options to configure the Next Hop to reach the static route: • **Next Hop**: When you choose this option and click **Add** , the following fields are displayed : • **Address**: Specify the next-hop IPv4 address. • **Administrative distance**: Specify the administrative distance for the route. • **Object Tracker/Object Tracker Group**: 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. Select an object from the drop-down list. • **Null 0**: 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. • **Administrative distance:** Specify the administrative distance for the route. • **dhcp** • **Administrative distance**: Enter the administrative distance for the route. • **Interface**: Click **Add** and specify the following details: • **Interface Name**: Specify a valid interface or choose a value from the drop-down list. • **Add Next Hop**: • **Address**: Specify the next-hop IPv4 address. • **Administrative distance**: Specify the administrative distance for the route.

Field	Description
IPv6 Static Route	
Prefix	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.

Gateway	Choose one of the following options to configure the Next Hop to reach the static route:
	• **Next Hop**: Select this option and click **Add**,the following fields are displayed :
	  • **Address**: Specify the next-hop IPv4 address.
	  • **Administrative distance**: Specify the administrative distance for the route.
	• **Null 0**: 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.
	  • **Administrative distance:** Specify the administrative distance for the route.
	• **Interface**: Click **Add** and specify the following details:
	  • **Interface Name**:Specify a valid interface or choose a value from the drop-down list.
	  • **Next Hop**:
	  • **Address**: Specify the next-hop IPv4 address.
	  • **Administrative distance**: Specify the administrative distance for the route.

NAT

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

Route Leak

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

IPv4/IPv6 Static Route Service

IPv4/IPv6 Static Route

Field	Description
Add IPv4 Static Route	

Field	Description
IP Address*	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.
Subnet Mask*	Enter the subnet mask.

Gateway*	Choose one of the following options to configure the next hop to reach the static route:
	• **nextHop**: When you choose this option and click **Add Next Hop**, the following fields appear:
	  • **Address***: Enter the next-hop IPv4 address.
	  • **Administrative distance***: Enter the administrative distance for the route.
	• **dhcp**
	• **null0**: When you choose this option, the following field appears:
	  • **Administrative distance**: Enter the administrative distance for the route.

Add IPv6 Static Route	
Prefix*	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.

Next Hop/Null 0/NAT	Choose one of the following options to configure the next hop to reach the static route:
	• **Next Hop**: When you choose this option and click **Add Next Hop**, the following fields appear:
	  • **Address***: Enter the next-hop IPv6 address.
	  Administrative distance*: Enter the administrative distance for the route.
	• **Null 0**: When you choose this option, the following field appears:
	  • **NULL0***: 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.
	• **NAT**: When you choose this option, the following field appears:
	  • **IPv6 NAT**: Choose NAT64 or NAT66.