Traceroute Configuration on Sx500 Series Stackable Switches

Objective

Traceroute discovers the IP routes along which packets are forwarded. To do this, Traceroute sends an IP packet to the target host and back to the switch. Traceroute allows the user to view each hop between the switch and the target host as well as the round-trip time to each stop. Also, Tracroute allows the user to measure the transit delay of the packets which are traversing through the network.

In a real time scenario, a Traceroute can be used if the user is having some connectivity problems and the user needs to find whether the packets are delivered to the destination or not. Traceroute can exactly point out where the packets are dropped if such a problem exists.

This document explains how to configure a Traceroute on Sx500 Series Stackable Switches.

Applicable Devices

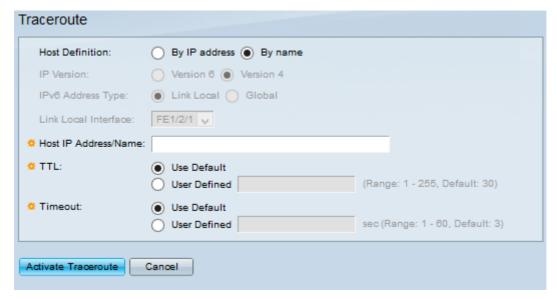
Sx500 Series Stackable Switches

Software Version

• 1.3.0.62

Traceroute Configuration

Step 1. Log in to the web configuration utility and choose **Administration > Traceroute**. The *Traceroute* page opens:



Traceroute		
Host Definition:	By IP address By name	
IP Version:	Version 6 Version 4	
IPv6 Address Type:	Clink Local Clobal	
Link Local Interface:	None 🔻	
# Host IP Address/Nam	e:	
♥ TTL:	Use DefaultUser Defined	(Range: 1 - 255, Default: 30)
Timeout:	Use DefaultUser Defined	sec (Range: 1 - 60, Default: 3)
Activate Traceroute	Cancel	

Step 2. Click a radio button in the Host Definition field.

- By IP Address This option searches for the host via a host name.
- By Name This option searches for the host via an IP address.

Timesaver: If By name is clicked skip to <u>Step 6</u>.

Host Definition:	■ By IP address ○ By name	
IP Version:	 Version 6 C Version 4 	
IPv6 Address Type:	€ Link Local € Global	
Link Local Interface:	FE1/2/1 ▼	
Host IP Address/Name	fe80::acbe:ef5a:f310:c8ab	
O TTL:	C Use Default	
	User Defined 25	(Range: 1 - 255, Default: 30)
Timeout:	C Use Default	
	€ User Defined 10	sec (Range: 1 - 60, Default: 3)

Step 3. If the host is identified by IP address, click the desired type of address either IPv4 or IPv6 to indicate that the IP address will be entered in the chosen format.

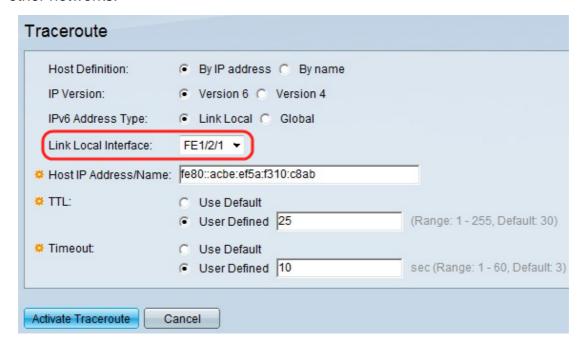
Note: IP version 6 is available only when IPv6 is configured on the switch. Refer to the article *IPv6 Interface Configuration on Sx500 Series Stackable Switches*.

Timesaver: If IPv4 is clicked skip to <u>Step 6</u>.

Host Definition:	● By IP address ← By name	
IP Version:	Version 6	
IPv6 Address Type:	€ Link Local	
Link Local Interface:	FE1/2/1 ▼	
Host IP Address/Name:	fe80::acbe:ef5a:f310:c8ab	
TTL:	C Use Default	
	User Defined 25	(Range: 1 - 255, Default: 30)
Timeout:	C Use Default	
	 User Defined 10 	sec (Range: 1 - 60, Default: 3)

Step 4. Click the type of IPv6 address from IPv6 Address Type. The options are:

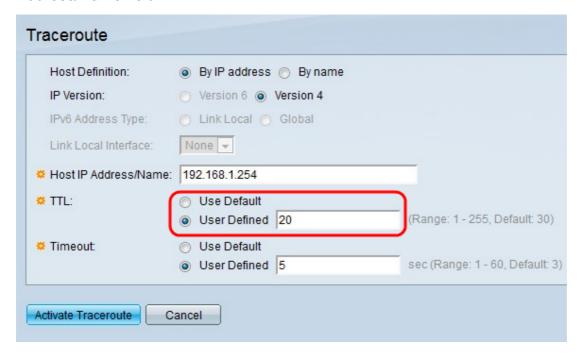
- Link Local The IPv6 address identifies hosts on a single network link. It is used only in the local network and is not routable from the WAN.
- Global The IPv6 address is a global Unicast IPv6 type that is visible and reachable from other networks.



Step 5. If Link Local is chosen for the IPv6 address type, choose the interface where traffic for that address is received from the Link Local Interface drop-down list.

Host Definition:	By IP addressBy name	
IP Version:	Version 6 Version 4	
IPv6 Address Type:	Clink Local Clobal	
Link Local Interface:	None -	
Host IP Address/Name	e: 192.168.1.254	
TTL:	Use DefaultUser Defined 20	(Range: 1 - 255, Default: 30)
Timeout:	Use Default	
	User Defined	sec (Range: 1 - 60, Default: 3)

<u>Step</u> 6. Enter the IPv6/IPv4 address or host name of the device in the Host IP Address/Name field.



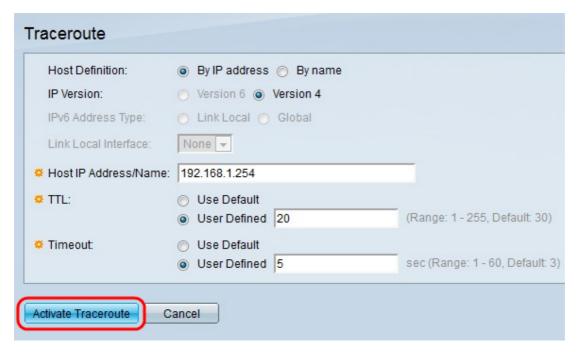
Step 7. Click the desired radio button in the Time To Live (TTL) field. This is used to prevent a case where the sent frame goes into an endless loop. The Traceroute command terminates when the destination is reached or when this value is reached.

- Use Default The default 30 hops is used.
- User Defined Enter the maximum number of hops permitted in the TTL field.

Traceroute		
Host Definition:	By IP address By name	
IP Version:	Version 6 Version 4	
IPv6 Address Type:	C Link Local C Global	
Link Local Interface:	None 🔻	
# Host IP Address/Nam	e: 192.168.1.254	
♥ TTL:	Use DefaultUser Defined 20	(Range: 1 - 255, Default: 30)
Timeout:	Use Default User Defined 5	sec (Range: 1 - 60, Default: 3)
Activate Traceroute	Cancel	

Step 8. Click the desired radio button in the Timeout field.

- Use Default The default 3 seconds is used.
- User Defined Enter the amount of time that the system waits for a frame to return before it is considered lost.



Step 9. Click **Activate Traceroute**.