Speed Test on SD-Routing Devices

This chapter includes information on how to configure the speed test on the SD-Routing devices. It contains the following sections:

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Information About Speed Test

Internet speed test: Cisco SD-WAN Manager tests the network speed. Cisco SD-WAN Manager designates the device as the client site and the iperf3 server as the remote site. You can specify the IP address (or domain name) and port number for an iperf3 server.

The speed tests measure upload speed from the source device to the selected or specified iperf3 server, and measure download speed from the iperf3 server to the source device.

Prerequisites for Speed Test

Speed testing requires the device host name of the target device. Also, you must enable Data Stream. To enable data stream go to **Settings** page and choosing **Settings** > **Data Stream**.

Run Internet Speed Test

To run a speed test, perform the following:

1. From the Cisco SD-WAN Manager menu, choose **Monitor** > **Devices**.

2. To choose a device, click the device name in the **Hostname** column.

3. Click **Troubleshooting** in the left pane.

4. In the **Connectivity** area, click **Speed Test**.

5. Specify the following:

    • **Source Interface**: From the drop-down list, choose the source interface on the local device.

    • **Destination Device**: From the drop-down list, choose **Internet**.

    • **iPerf3 Server**: (Optional) Enter the domain name or iPerf3 server's IP address in IPv4 format.

    • **Server Port Range**: (Optional) Enter the server port or a port range. For example, 5201, 5210, or 5201-5205.

6. Click **Start Test**.

    The speed test result is displayed.

Verify Speed Test

After you successfully execute the speed test, the following details are displayed on the **Speed Test** page:

  • The middle part of the right pane reports the results of the speed test.

  • The clock reports the recently obtained circuit speed results.

  • When measuring the uploading speed, packets are sent from the source device to the iPerf3 server, and the source device receives acknowledgments from the destination.

    When measuring the downloading speed, packets are sent from the iPerf3 server to the source device, and the destination device receives acknowledgments from the source.

Troubleshooting Speed Test Issues

The following table provides troubleshooting information for speed testing:

Table 1: Troubleshooting Scenarios

Error Information	Possible Root Cause
Failed to resolve iperf server address	DNS server is not configured at edge device or is unable to resolve the iperf server from the configured DNS server at edge device.
Speed test servers not reachable	The speed test server ping failed. The edge device cannot reach the server IP.
iPerf client: unable to connect stream: Resource temporarily unavailable	Unable to connect to the speed test server. Access may be blocked by access-control list (ACL) permissions.
iPerf client: unable to connect to server	The iPerf3 server is not providing the test service at the user-specified port or default port 5201.

Error Information	Possible Root Cause
Device Error: Speed test in progress	The selected source or destination device is performing a speed test and cannot start a new one.
Device error: Failed to read server configuration	The data stream configuration is missing. Workaround: Running a CLI command at the SD-Routing device and clearing the SD-Rounting control connections can fix the issue.
Speed test session has timed out	The speed test has not successfully completed in 180 seconds. This might be because the SD-Rouring device has lost the control connection to Cisco SD-WAN Manager during the speed testing.

Feature Information for Speed Test on SD-Routing Devices Using Cisco SD-WAN Manager

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to https://cfnng.cisco.com/. An account on Cisco.com is not required.

Table 2: Feature Information for Speed Test on SD-Routing Devices Using Cisco SD-WAN Manager

Feature Name	Release Information	Description
Speed Test	Cisco IOS XE 17.13.1	Cisco SD-WAN Manager allows you to measure the network speed and available bandwidth between a device and an iPerf3 server. The speed tests measure upload and download speed from the source device to the destination device.