Configuring the TCP MSS

TCP Adjust MSS

If the client's maximum segment size (MSS) in a Transmission Control Protocol (TCP) three-way handshake is greater than the maximum transmission unit can handle, the client might experience reduced throughput and the fragmentation of packets. To avoid this problem, you can specify the MSS for all access points that are joined to the controller or for a specific access point.

When you enable this feature, the access point selects the MSS for TCP packets to and from wireless clients in its data path. If the MSS of these packets is greater than the value that you configured or greater than the default value for the CAPWAP tunnel, the access point changes the MSS to the new configured value.

In Release 8.5 and later releases, TCP Adjust MSS is enabled by default with a value of 1250. We recommend that you do not change this default value.

TCP Adjust MSS is supported only on APs that are in local mode or FlexConnect with centrally switched WLANs.

This section contains the following subsections:

Configuring TCP Adjust MSS (GUI)

Step 1 Choose **Wireless** > **Access Points** > **Global Configuration** to open the **Global Configuration** page.

Step 2 Under **TCP MSS**, check the **Global TCP Adjust MSS** check box and set the MSS for all APs that are associated with the controller.

The valid ranges are:

- For IPv4, TCP must be between 536 and 1363 bytes.
- For IPv6, TCP must be between 1220 and 1331 bytes.

Note Any TCP Adjust MSS value that is below 1220 and above 1331 will not be effective for CAPWAPv6 AP. The recommended value is 1250.

Configuring TCP Adjust MSS (CLI)

Step 1 Enable or disable the TCP Adjust MSS on a particular access point or on all access points by entering this command:

config ap tcp-mss-adjust {**enable** | **disable**} {*Cisco_AP* | *all*} *size*

where the *size* parameter is a value between 536 and 1363 bytes for IPv4 and between 1220 and 1331 for IPv6. The default value varies for different clients.

The valid ranges are:

- For IPv4, TCP must be between 536 and 1363 bytes.
- For IPv6, TCP must be between 1220 and 1331 bytes.

Note Any TCP Adjust MSS value that is below 1220 and above 1331 will not be effective for CAPWAPv6 AP. The recommended value is 1250.

Step 2 Save your changes by entering this command:

save config

Step 3 See the current TCP Adjust MSS setting for a particular access point or all access points by entering this command:

show ap tcp-mss-adjust {*Cisco_AP* | **all**}

Information similar to the following appears:

```
AP Name              TCP State  MSS Size
------------------   --------   -------
AP58AC.78DC.A810     disabled   -
APa89d.21b2.2688     enabled    1250
AP00FE.C82D.DE80     disabled   -
```