



# Mobility Commands

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# mobility anchor

To configure mobility sticky anchoring, use the **mobility anchor sticky** command. To disable the sticky anchoring, use the **no** form of the command.

To configure guest anchoring, use the **mobility anchor ip-address** command.

To delete the guest anchor, use the **no** form of the command.

To configure the device as an auto-anchor, use the **mobility anchor** command.

**mobility anchor** {*ip-address*| **sticky**}

**no mobility anchor** {*ip-address*| **sticky**}

## Syntax Description

<b>sticky</b>	The client is anchored to the first switch that it associates. <b>Note</b> This command is by default enabled and ensures low roaming latency. This ensures that the point of presence for the client does not change when the client joins the mobility domain and roams within the domain.
<i>ip-address</i>	Configures the IP address for the guest anchor switch to this WLAN.

## Command Default

Sticky configuration is enabled by default.

## Command Modes

WLAN Configuration

## Command History

Release	Modification
Cisco IOS XE 3.2SE	This command was introduced.
Cisco IOS XE 3.3SE	The auto-anchor configuration required the device IP address to be entered prior to the Cisco IOS XE 3.3SE release; with this release, if no IP address is given, the device itself becomes an anchor; you do not have to explicitly specify the IP address.

## Usage Guidelines

- The `wlan_id` or `guest_lan_id` must exist and be disabled.
- Auto-anchor mobility is enabled for the WLAN or wired guest LAN when you configure the first mobility anchor.
- Deleting the last anchor disables the auto-anchor mobility feature and resumes normal mobility for new associations.
- Mobility uses the following ports, that are allowed through the firewall:

- 16666
- 16667
- 16668

## Examples

This example shows how to enable the sticky mobility anchor:

```
Switch(config-wlan) # mobility anchor sticky
```

This example shows how to configure guest anchoring:

```
Switch(config-wlan) # mobility anchor 209.165.200.224
```

This example shows how to configure the device as an auto-anchor:

```
Switch(config-wlan) # mobility anchor
```

# wireless mobility

To configure the interswitch mobility manager, use the **wireless mobility** command.

**wireless mobility** {**dscp** *value*}

## Syntax Description

<b>dscp</b> <i>value</i>	Configures the Mobility interswitch DSCP value.
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## Command Default

The default DSCP value is 48.

## Command Modes

Global Configuration

## Command History

Release	Modification
Cisco IOS XE 3.2SE	This command was introduced.

## Examples

This example shows how to configure mobility interswitch DSCP with an value of 20:

```
Switch(config)# wireless mobility dscp 20
```

# wireless mobility group keepalive

To configure the mobility group parameter and keep alive its ping parameters, use the **wireless mobility group keepalive** command. To remove a mobility group parameter, use the **no** form of the command.

**wireless mobility group keepalive** {**count** *number*| **interval** *interval*}

**no wireless mobility group keepalive** {**count** *number*| **interval** *interval*}

## Syntax Description

<b>count</b> <i>number</i>	Number of times that a ping request is sent to a mobility group member before the member is considered unreachable. The range is from 3 to 20. The default is 3.
<b>interval</b> <i>interval</i>	Interval of time between each ping request sent to a mobility group member. The range is from 1 to 30 seconds. The default value is 10 seconds.

## Command Default

3 seconds for count and 10 seconds for interval.

## Command Modes

Global Configuration.

## Command History

Release	Modification
Cisco IOS XE 3.2SE	This command was introduced.

## Usage Guidelines

The default values for *interval* is ten seconds and the default for *retries* is set to three.

## Examples

This example shows how to specify the amount of time between each ping request sent to a mobility group member to 10 seconds:

```
Switch(config)# wireless mobility group keepalive count 10
```

# wireless mobility group member ip

To add or delete users from mobility group member list, use the **wireless mobility group member ip** command. To remove a member from the mobility group, use the **no** form of the command.

**wireless mobility group member ip** *ip-address* [**public-ip** *public-ip-address*] [**group** *group-name*]

**no wireless mobility group member ip** *ip-address*

## Syntax Description

<i>ip-address</i>	The IP address of the member controller.
<b>public-ip</b> <i>public-ip-address</i>	(Optional) Member controller public IP address. <b>Note</b> This command is used only when the member is behind a NAT. Only static IP NAT is supported.
<b>group</b> <i>group-name</i>	(Optional) Member controller group name. <b>Note</b> This command is used only when the member added in not in the same group as the local mobility controller.

## Command Default

None.

## Command Modes

Global Configuration.

## Command History

Release	Modification
Cisco IOS XE 3.2SE	This command was introduced.

## Usage Guidelines

The mobility group is used when there is more than one Mobility Controller (MC) in a given deployment. The mobility group can be assigned with a name or it can use the default group name. The mobility group members need to be configured on all the members of the group to roam within the group.

## Examples

This example shows how to add a member in a mobility group:

```
Switch(config)# mobility group member ip 10.104.171.101 group TestDocGroup
```

## wireless mobility group name

To configure the mobility domain name, use the **wireless mobility group name** command. To remove the mobility domain name, use the **no** form of the command.

**Note**

If you are configuring the mobility group in a network where network address translation (NAT) is enabled, enter the IP address that is sent to the controller from the NAT device rather than the controller's management interface IP address. Otherwise, mobility will fail among controllers in the mobility group.

**wireless mobility group name** *domain-name*

**no wireless mobility group name**

**Syntax Description**

*domain-name*

Creates a mobility group by entering this command. The domain name can be up to 31 case-sensitive characters.

**Command Default**

Default.

**Command Modes**

Global Configuration.

**Command History****Release****Modification**

Cisco IOS XE 3.2SE

This command was introduced.

**Examples**

This example shows how to configure a mobility domain name lab1:

```
Switch(config)# mobility group domain lab1
```

# wireless mobility load-balance

This command is used to load-balance the mobile clients on a mobility anchor (MA) from a switch peer group (SPG) that is least loaded and is chosen to act as the point of presence for the mobile client.

To configure the mobility load-balance status, use the **wireless mobility load-balance** command.

To disable the mobility load-balance, use the **no wirelessmobility load-balance** form of the command.

To configure the client load on the switch where mobility load-balance is turned on, use the **no wirelessmobility load-balance threshold** form of the command.

**wireless mobility load-balance** [**threshold** *threshold* ]

**[no]wireless mobility load-balance** [**threshold**]

**[no]wireless mobility load-balance**

## Syntax Description

<b>threshold</b> <i>threshold</i>	Configures the threshold for the number of clients that can be anchored locally.
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## Command Default

Load balance enabled and set at a value of 1000.

## Command Modes

Global Configuration.

## Command History

Release	Modification
Cisco IOS XE 3.2SE	This command was introduced.

## Usage Guidelines

- This command is only supported on a mobility agent.
- By default, the threshold can accommodate more than fifty percent of the total clients on the node. Any client joining the switch after the reaching the configured threshold value is automatically anchored to the least loaded switch within the same switch peer group.

## Examples

This example shows how to configure the mobility load-balance status with a threshold set at 150.

```
Switch(config)# wireless mobility load-balance threshold 150
```



# show wireless mobility

To view the wireless mobility summary, use the **show wireless mobility** command.

**show wireless mobility** {**load-balance summary** **agent** *mobility-agent-ip* **client summary** | **ap-list** *ip-address ip-address* | **controller client summary** | **dtls connections** | **statistics summary**}

## Syntax Description

<b>load-balance summary</b>	Shows the mobility load-balance properties.
<b>agent</b> <i>mobility-agent-ip</i> <b>client summary</b>	Shows the active clients on a mobility agent.
<b>ap-list</b> <i>ip-address ip-address</i>	Shows the list of Cisco APs known to the mobility group.
<b>controller client summary</b>	Shows the active clients in the subdomain.
<b>dtls connections</b>	Shows the DTLS server status.
<b>statistics</b>	Shows the statistics for the Mobility manager.
<b>summary</b>	Shows the summary of the mobility manager.

## Command Default

None

## Command Modes

Global Configuration

## Command History

Release	Modification
Cisco IOS XE 3.2SE	This command was introduced.

## Examples

This example shows how to display a summary of the mobility manager:

Switch (config) # **show wireless mobility ap-list**

AP name	AP radio MAC	Controller IP	Learnt from
TSIM_AP-101	0000.2000.6600	9.9.9.2	Self
TSIM_AP-102	0000.2000.6700	9.9.9.2	Self
TSIM_AP-103	0000.2000.6800	9.9.9.2	Self
TSIM_AP-400	0000.2001.9100	9.9.9.2	Self
TSIM_AP-402	0000.2001.9300	9.9.9.2	Self
TSIM_AP-403	0000.2001.9400	9.9.9.2	Self
TSIM_AP-406	0000.2001.9700	9.9.9.2	Self
TSIM_AP-407	0000.2001.9800	9.9.9.2	Self
TSIM_AP-409	0000.2001.9a00	9.9.9.2	Self

# clear wireless mobility statistics

To clear wireless statistics, use the **clear wireless mobility statistics** command.

**clear wireless mobility statistics**

## Command Default

None

## Command Modes

Privileged EXEC

## Command History

Release	Modification
Cisco IOS XE 3.2SE	This command was introduced.

## Usage Guidelines

You can clear all the information by using the **clear wireless mobility statistics** command.

## Examples

This example shows how to clear wireless mobility statistics:

```
Switch (config)# clear wireless mobility statistics
```