Mobility Commands

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

sticky	The client is anchored to the first switch that it associates.
	Note 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.
ip-address	Configures the IP address for the guest anchor controller 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:
```
Controller(config-wlan)# mobility anchor sticky
```

This example shows how to configure guest anchoring:
```
Controller(config-wlan)# mobility anchor 209.165.200.224
```

This example shows how to configure the device as an auto-anchor:
```
Controller(config-wlan)# mobility anchor
```

wireless mobility

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

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

Syntax Description

dscp *value*	Configures the Mobility intercontroller DSCP value.

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 shoes how to configure mobility intercontroller DSCP with an value of 20:

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

wireless mobility controller peer-group

To configure mobility peer groups, use the **wireless mobility controller peer-group** command, to remove the configuration, use the **no** form of this command.

wireless mobility controller peer-group *peer-group* **member IP** *ip-address***mode centralized**

Syntax Description

peer group	Name of the peer group.
member IP	Adds a peer group member.
ip-address	IP address of the peer group member to be added.
mode centralized	Configures the management mode of the peer group member as centrally managed.

Command Default The centralized mode is off.

Command Modes Global configuration

Command History

Release	Modification
Cisco IOS XE 3.7.0 E	This command was introduced.

Examples

```
Controller enable
Controller# configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Controller(config)# wireless mobility controller peer-group peer1 member ip 10.0.0.1 mode
centralized
```

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** *numbe r*| **interval** *interval*}

Syntax Description

count *number*	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.
interval *interval*	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:

```
Controller(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

ip-address	The IP address of the member controller.
public-ip *public-ip-address*	(Optional) Member controller public IP address. **Note** This command is used only when the member is behind a NAT. Only static IP NAT is supported.
group *group-name*	(Optional) Member controller group name. **Note** 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:

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

wireless mobility group name

To configure hte 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:

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

wireless mobility oracle ip

To configure mobility oracle settings, use the **wireless mobility oracle ip** command. To remove the mobility oracle settings, use the **no** form of the command.

To configure the device itself as a mobility oracle, use the **wireless mobility oracle** command.

wireless mobility oracle ip *mo-ip-address*

no wireless mobility oracle ip *mo-ip-address*

Syntax Description

mo-ip-address	IP address of the mobility oracle.

Command Default   The device is not configured as a mobility oracle by default.

Command Modes   Global Configuration.

Command History

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

Usage Guidelines

• A peer mobility controller must be configured for mobility to work.

• The mobility oracle is recommended when more than one mobility controller in a configuration is allowed a fast client join and roaming across the subdomains. The mobility oracle must be enabled on one of the mobility controllers and the remaining mobility controllers in the sub-domain must point to that mobility oracle.

Examples   This example shows how to configure the mobility oracle:

```
Controller(config)#wireless mobility oracle ip 209.165.200.225
```

show wireless mobility

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

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

Syntax Description

agent *mobility-agent-ip* **client summary**	Shows the active clients on a mobility agent.
ap-list ip-address *ip-address*	Shows the list of Cisco APs known to the mobility group.
controller client summary	Shows the active clients in the subdomain.
dtls connections	Shows the DTLS server status.
oracle summary	Displays the status of the mobility-controllers known to the mobility-oracle.
mobility oracle client summary	Shows the mobility-oracle client and status database.
statistics	Shows the statistics for the Mobility manager.
summary	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:

```
Controller (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:

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