



Cellular Commands

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lte gps (cellular)

To configure Global Positioning System (GPS) parameters for a cellular router, use the **lte gps** command in cellular configuration mode. To delete the GPS configuration parameters, use the no form of this command.

```
lte gps { mode { ms-based | standalone } [ enable ] [ nmea [ ip udp ipv4-address ] ] | enable [ mode { ms-based | standalone } ] [ nmea [ ip udp ipv4-address ] ] | nmea [ ip udp source-ip-address destination-ip-address port ] }
```

no lte gps

Syntax Description	lte gps	Enables GPS on the LTE PIM module in the 0/x/0 section of the controller cellular configuration.
	mode	Specifies the mode. <ul style="list-style-type: none"> • ms-based: Use mobile station-based assistance, also called assisted GPS mode, when determining position. In this mode, a network data session is used to obtain the GPS satellite locations, resulting in a faster fix of location coordinates. • standalone: Use satellite information when determining position. <p>Note The standalone parameter is currently not supported for geofencing.</p>
	ms-based	Enables ms-based assistance. <p>Note We recommend using ms-based mode with a SIM card plugged in and a GPS antenna connected to the LTE pluggable module GPS port.</p> <p>For more information, see Cisco 4G Indoor/Outdoor Active GPS Antenna (GPS-ACT-ANTM-SMA).</p>

standalone	Enables standalone mode. If there is no SIM card inserted, you can use standalone mode. Note The standalone parameter is currently not supported for geofencing.
enable	Enables the GPS features. Use this command to enable the GPS feature if GPS has been disabled for any reason.
nmea	Enables the use of National Marine Electronics Association (NMEA) streams to Cisco IOS applications for listening to the specified port on the destination address.
ip	(Optional) Enables the redirection of GPS NMEA streams to the destination IP address. Note This parameter is not used for configuring geofencing.
udp source-ip-address destination-ip-address port	(Optional) Enables the redirection of GPS NMEA streams to the source and destination IP address and port. Note This parameter is not used for configuring geofencing.

Command Modes

controller Cellular 0/x/0 (config-Cellular-0/x/0)

Command History

Release	Modification
Cisco IOS XE Catalyst SD-WAN Release 17.6.1a	Command qualified for use in Cisco SD-WAN Manager CLI templates.

Usage Guidelines

If multiple LTE pluggable module slots are present in the platform chassis, we recommend that you configure GPS on only one of the LTE pluggable module slots and use the slot for GPS coverage.

Examples

The following example enables GPS on the LTE PIM module:

```
Device(config)# controller Cellular 0/2/0
Device(config-Cellular-0/2/0)# lte gps enable
```

The following example sets ms-based assistance on the LTE PIM module:

```
Device(config-Cellular-0/2/0)# lte gps mode ms-based
```

The following example configures nmea on the LTE PIM module:

```
Device(config-Cellular-0/2/0)# lte gps nmea
```

lte sim

To configure Subscriber Identity Module (SIM) parameters for a cellular router, use the **lte sim** command in cellular configuration mode. To delete the SIM configuration parameters, use the no form of this command.

lte sim [**attach-profile** *attach-profile* **data-profile** *data-profile* **slot** *slot*]

no lte sim**Syntax Description**

lte sim	Enables SIM on the LTE cellular module in the 0/x/0 section of the controller cellular configuration.
attach-profile	Attaches the profile on the LTE PIM module in the 0/x/0 section of the controller cellular configuration.
data-profile	Default profile on the LTE PIM module in the 0/x/0 section of the controller cellular configuration.
slot	SIM slot that contains the SIM to configure. Valid values are 0 (primary SIM card) and 1 (secondary SIM card).

Command Modes

controller Cellular 0/x/0 (config-Cellular-0/x/0)

Release	Modification
Cisco IOS XE Catalyst SD-WAN Release 17.6.1a	Command qualified for use in Cisco SD-WAN Manager CLI templates.

Usage Guidelines

Dual Subscriber Identity Module (SIM) provides reliability and multihoming capabilities over LTE and HSPA-based networks. With two LTE modems, the IR829 enables concurrent connectivity to two cellular networks for high reliability, enhanced data throughputs, load balancing and differentiated services.

Example

The following example enables SIM on the LTE SIM module:

Examples

```
Device(config)# controller Cellular 0/2/0
Device(config-Cellular-0/2/0)# lte sim enable
Device(config-Cellular-0/2/0)# lte sim attach-profile 1 data-profile 1 slot 0
```

profile id

To create a data profile for a device, use the **profile id** command in cellular configuration mode. To set the command to the default state, use the **no** form of this command.

profile id *id* **apn name** [**authentication** *auth_type* **username** *username* **password** *password*] [**pdn-type** *pdn_type*] [**slot** *slot_number*]

no profile id *id*

Syntax Description

<i>id</i>	Identification number of the data profile. Valid values are from 1 to 16.
apn name	Name of the access point network of the service provider.

authentication <i>auth_type</i>	Authentication type used for APN access. Valid values are: <ul style="list-style-type: none"> • chap: Use CHAP authentication only. • pap: Use PAP authentication only. • pap_chap: Use PAP or CHAP authentication.
username <i>username</i>	Username provided by the service provider for APN access authentication. Required if the authentication type is chap , pap , or pap_chap , otherwise not used.
password <i>password</i>	Password provided by the service provider for APN access authentication. Required if the authentication type is chap , pap , or pap_chap , otherwise not used.
pdn-type <i>pdn_type</i>	Type of packet data matching used for APN access. Valid values are: <ul style="list-style-type: none"> • ipv4: IPv4 type bearer. • ipv4v6: IPV4V6 type bearer. • ipv6: IPv6 type bearer.
slot-number <i>slot_number</i>	SIM slot that contains the SIM to configure. Valid values are 0 (primary SIM card) and 1 (secondary SIM card).

Command Default

By default, when the Auto SIM feature is enabled on a modem, a data profile is selected based on the modem firmware.

Command Modes

Controller cellular configuration (controller-cellular)

Command History

Release	Modification
Cisco SD-WAN Release 20.8.1	This command was introduced.

Usage Guidelines

If a device contains two SIM cards, you can create a separate data profile for each SIM card.

Examples

The following example shows how to configure a data profile for the primary SIM card in a device:

```
controller Cellular 0/1/0
  profile id 6 apn test authentication chap username admin password my_password pdn-type
  ipv4 slot 0
```

lte gps constellation

To configure the Global Navigation Satellite System (GNSS) constellations on a Cisco IOS XE Catalyst SD-WAN device, use the **lte gps constellation** command in cellular configuration mode. To disable the GNSS settings, use the **no** form of this command.

lte gps constellation { **beidou** | **galileo** | **glonass** | **gps** | **gnss** }

no lte gps constellation

beidou	Enable beidou as an active constellation.
galileo	Enable galileo as an active constellation.
glonass	Enable glonass as an active constellation.
gps	Enable gps as an active constellation.
gnss	Choose gnss to enable multiple GNSS constellations.

Command Default No default behavior or values.

Command Modes Controller cellular configuration (controller-cellular)

Command History	Release	Modification
	Cisco IOS XE Catalyst SD-WAN Release 17.15.1a	Command qualified for use in Cisco Catalyst SD-WAN Manager CLI templates.

Examples

The following example shows how to configure GNSS constellation on a Cisco IOS XE Catalyst SD-WAN device:

```
Device(config)# controller cellular 0/1/0
Device(config-controller)# lte gps constellation gps
```

