



## **Cisco Catalyst Cellular Gateways Command Reference Guide**

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## Show Commands

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# show admin-tech

To show the detailed system info for troubleshooting purposes, use the **showadmin-tech** command in user EXEC mode.

**show admin-tech**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	This command has no default settings.
------------------------	---------------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

<b>Command History</b>	
------------------------	--

Command History	Release	Modification
	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

<b>Usage Guidelines</b>	Use the <b>show admin-tech</b> command to show the detailed system info for troubleshooting purposes.
-------------------------	---

This example shows how to view the detailed system info for troubleshooting purposes:

```
Router# show admin-tech
/opt/show_admin_tech.sh: No such file or directory
```

# show cellular 0/x/0 connection

To display the sessions information, use the **show cellular 0/x/0 connection** command in user EXEC mode.

**show cellular 0/x/0 connection**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	No default behavior or values.
------------------------	--------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

Command History	Release	Modification
	Cisco IOS XE 17.16.1a	The output for this command was modified to include APN and Cellular Link Uptime.
	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

<b>Usage Guidelines</b>	Use the <b>show cellular 0/x/0 connection</b> command to display the sessions information.
-------------------------	--

This example shows how to view the sessions information for Cisco IOS XE 17.16.1a and higher releases.

```
Router# show cellular 0/2/0 connection
Profile 1, Packet Session Status = ACTIVE
  Cellular0/2/0:
    Data Packets Transmitted = 7, Received = 5
    Data Transmitted = 700 bytes, Received = 520 bytes
    Access Point Name (APN) = broadband
    IP address = 192.0.2.29
    IPV6 address = 2001:DB8:2680:FB4:9D31:EC8B:F4C3:BEA9/64
    Scope = Global
    Primary DNS address = 192.0.2.8
    Secondary DNS address = 192.0.2.4
    Primary DNS IPV6 address = 2001:DB8:4888:0:0:0:0:8899
    Secondary DNS IPV6 address = 2001:DB8:9999:0:0:0:0:7722
    Cellular link uptime = 0 Min
```

```
Profile 2, Packet Session Status = INACTIVE
```

This example shows how to view the sessions information for Cisco IOS XE 17.15.x and lower releases.

```
Router# show cellular 0/2/0 connection
Profile 1, Packet Session Status = ACTIVE
  Cellular0/2/0:
    Data Packets Transmitted = 21641, Received = 23462
    Data Transmitted = 8952451 bytes, Received = 4603455 bytes
    Data Packets Dropped Transmit = 0, Receive = 0
    IP Address = 192.0.2.141
    IPv6 Address = 2001:DB8:ffff:ffff:ffff:ffff:ffff:ffff/ 64 Scope = Global
    Primary DNS Address = 192.0.2.34
    Secondary DNS Address = 192.0.2.210
    Primary DNS IPV6 Address = 2001:DB8:1000::2000
```

Secondary DNS IPv6 Address = 2001:DB8:1111::2222

Profile 2, Packet Session Status = INACTIVE

# show cellular 1 connections

To display active control connections from the CLI, use the **show cellular 1 connections** command in user EXEC mode.

**show cellular 1 connections**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	No default behavior or values.
------------------------	--------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

Command History	Release	Modification
	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

<b>Usage Guidelines</b>	Use the <b>show cellular 1 connections</b> command to display active control connections from the CLI.
-------------------------	--

## Example

This example shows how to view active control connections from the CLI.

```
Router# show cellular 1 connections
Profile ID = 1
-----
APN = broadband
Connectivity = Attach and Data
Session Status = Connected
IPv4 Address = 10.20.20.60
IPv4 Gateway Address = 10.19.19.60
IPv4 Primary DNS = 10.0.0.8
IPv4 Secondary DNS = 10.0.0.4
IPv6 Address = 2001:db8:ffff:ffff:ffff:ffff:ffff:ffff, IPv6 Prefix length = 64
IPv6 Gateway Address = 2001:db8:ffff:ffff:ffff:ffff:ffff:ffff, IPv6 Gateway Prefix length
= 64
IPv6 Primary DNS = 2001:db8:1000::2000
IPv6 Secondary DNS = 2001:db8:1111::2222
Tx Packets = 1009655, Rx Packets = 983984
Tx Bytes = 297251993, Rx Bytes = 211848740
Tx Drops = 0, Rx Drops = 0
Tx Overflow Count = 0, Rx Overflow Count = 0
```

# show cellular 1 hardware

To display the cellular unit hardware information, use the **show cellular 1 hardware** command in user EXEC mode.

**show cellular 1 hardware**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	This command has no default settings.
------------------------	---------------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

<b>Command History</b>	
------------------------	--

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

<b>Usage Guidelines</b>	Use the <b>show cellular 1 hardware</b> command to display the cellular unit hardware information.
-------------------------	--

This example shows how to view all the cellular unit hardware information:

```
Router# show cellular 1 hardware
Modem Firmware Version = SWIX55C_01.07.19.00 000000 jenkins
Device Model ID = EM9190
International Mobile Subscriber Identity (IMSI) = 123456700002084
International Mobile Equipment Identity (IMEI) = 351735110112295
Integrated Circuit Card ID (ICCID) = 8952530076180182084
Mobile Subscriber Integrated Services Digital Network Number (MSISDN) =
Factory Serial Number (FSN) = 4H0335005303A1
Current Modem Temperature = 44 deg C
PRI SKU ID = 1104567
PRI Version = 016.010_000
Carrier = GENERIC
OEM PRI Version = 001.020
Modem Status = MODEM_STATE_DNS_ACQUIRED
```

# show cellular 1 profile

To display the cellular profile details, use the **show cellular 1 profile** command in user EXEC mode.

**show cellular 1 profile**

## Syntax Description

This command has no arguments or keywords.

## Command Default

No default behavior or values.

## Command Modes

User EXEC

## Command History

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

## Usage Guidelines

Use the **show cellular 1 profile** command to display cellular profile details.

This example shows how to view all the cellular unit profile information:

```
Router# show cellular 1 profile
PROFILE ID  APN          PDP TYPE  STATE  AUTHENTICATION  USERNAME  PASSWORD
-----
1           broadband  IPv4v6    ACTIVE none           -         -
```

# show cellular 1 radio

To display the cellular modem radio information, use the **show cellular 1 radio** command in user EXEC mode.

**show cellular 1 radio**

<b>Syntax Description</b>	This command has no arguments or keywords.				
<b>Command Default</b>	This command has no default settings.				
<b>Command Modes</b>	User EXEC				
<b>Command History</b>	<table> <tr> <th>Release</th><th>Modification</th></tr> <tr> <td>Cisco IOS XE Amsterdam 17.3.x release</td><td>This command was introduced.</td></tr> </table>	Release	Modification	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.
Release	Modification				
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.				
<b>Usage Guidelines</b>	Use the <b>show cellular 1 radio</b> command display the cellular modem radio information.				

## Example

This example shows how to view the cellular modem radio information

```
Router# show cellular 1 radio
Radio Power Mode = online
Radio Access Technology(RAT) Selected = LTE
LTE Rx Channel Number(PCC) = 0
LTE Tx Channel Number(PCC) = 0
LTE Band = 1
LTE Bandwidth = 20 MHz
Current RSSI = -25 dBm
Current RSRP = -52 dBm
Current RSRQ = -7 dB
Current SNR = 30.0 dB
Physical Cell Id = 1
Network Change Event = activated LTE
CellularGateway#
```

# show cellular 1 radio-band

To display the radio band settings, use the **show cellular 1 radio-band** command in user EXEC mode.

**show cellular 1 radio-band**

<b>Syntax Description</b>	This command has no arguments or keywords.				
<b>Command Default</b>	This command has no default settings.				
<b>Command Modes</b>	User EXEC				
<b>Command History</b>	<table> <tr> <th>Release</th><th>Modification</th></tr> <tr> <td>Cisco IOS XE Amsterdam 17.3.x release</td><td>This command was introduced.</td></tr> </table>	Release	Modification	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.
Release	Modification				
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.				
<b>Usage Guidelines</b>	Use the <b>show cellular 1 radio-band</b> command to display the radio band settings.				

## Example

This example shows how to display the radio band settings.

```
Router# show cellular 1 radio-band
LTE bands supported by modem:
1 2 3 4 5 7 8 12 13 14 17 18 19 20 25 26 28 29 30 32 34 38 39 40 41 42 46 48 66 71
LTE band Preference settings for the active sim:
1 2 3 4 5 7 8 12 13 14 17 18 19 20 25 26 28 29 30 32 34 38 39 40 41 42 46 48 66 71

NR5G bands supported by modem:
1 2 3 5 28 41 66 71 77 78 79
NR5G band Preference settings for the active sim:
1 2 3 5 28 41 66 71 77 78 79

Non-LTE bands supported by modem:

23 - WCDMA (Europe, Japan, and China) 2100 band
24 - WCDMA US PCS 1900 band
25 - WCDMA (Europe and China) DCS 1800 band
26 - WCDMA US 1700 band
27 - WCDMA US 850 band
28 - WCDMA Japan 800 band
50 - WCDMA Europe and Japan 900 band
51 - WCDMA Japan 1700 band
61 - WCDMA Japan 850 band
Non-LTE band Preference settings for the active sim:

23 - WCDMA (Europe, Japan, and China) 2100 band
24 - WCDMA US PCS 1900 band
25 - WCDMA (Europe and China) DCS 1800 band
26 - WCDMA US 1700 band
27 - WCDMA US 850 band
28 - WCDMA Japan 800 band
50 - WCDMA Europe and Japan 900 band
51 - WCDMA Japan 1700 band
```

61 - WCDMA Japan 850 band

=====  
Band index reference list:

For LTE indices 1-128 correspond to bands 1-128 and NR indices 1-320 correspond to bands 1-320.

For 3G, indices 1-64 maps to the 3G bands mentioned against each above.

# show cellular 1 radio-details

To display the cellular information when the radio goes to Low Power mode, use the **show cellular 1 radio-details** command in user EXEC mode.

**show cellular 1 radio-details**

<b>Syntax Description</b>	This command has no arguments or keywords.				
<b>Command Default</b>	This command has no default settings.				
<b>Command Modes</b>	User EXEC				
<b>Command History</b>	<table> <tr> <th>Release</th><th>Modification</th></tr> <tr> <td>Cisco IOS XE Amsterdam 17.3.x release</td><td>This command was introduced.</td></tr> </table>	Release	Modification	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.
Release	Modification				
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.				
<b>Usage Guidelines</b>	Use the <b>show cellular 1 radio-details</b> command to display the carrier aggregation and other radio details.				

## Example

This example shows how to view the carrier aggregation and additional radio details.

```
Router# show cellular 1 radio-details
Carrier Aggregation Status = Disabled
LTE RX Channel Number(PCC) = 0
LTE TX Channel Number(PCC) = 0
LTE Band = 4
LTE Bandwidth = 20 MHz
PCC CA information:
-----
LTE band class = 4
E-UTRA absolute radio frequency channel number of the serving cell = 0
Bandwidth = 20 MHz
Physical Cell Id = 28
Current RSRP in 1/10 dBm as measured by L1 = -99 dBm
Current RSSI in 1/10 dBm as measured by L1 = -73 dBm
Current RSRQ in 1/10 dBm as measured by L1 = -7 dB
Measured SINR in dB = 25.2 dB
Tracking area code information for LTE = 1

5G CC information:
-----
Current ENDC RSRP in 1/10 dBm as measured by L1 = 0 dBm
Current ENDC RSRQ in 1/10 dBm as measured by L1 = 0 dB
Measured ENDC SINR in dB = 0.0 dB
```

# show cellular 1 modem-logging

To display the cellular modem logging information, use the **show cellular 1 modem-logging** command in user EXEC mode.

**show cellular 1 modem-logging**

## Syntax Description

This command has no arguments or keywords.

## Command Default

This command has no default settings.

## Command Modes

User EXEC

## Command History

### Command History

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

## Usage Guidelines

Use the **show cellular 1 modem-logging** command to obtain information like DMlogs, NAS logs, SDK logs, and driver logs running data.

## Examples

This example shows how to view all the cellular unit hardware information:

```
show cellular 1 modem-logging
modem-logging dm-logs-status not-started
```

# show cellular 1 qos

To display the cellular QoS related information, use the **show cellular 1 qos** command in user EXEC mode.

**show cellular 1 qos**

## Syntax Description

This command has no arguments or keywords.

## Command Default

This command has no default settings.

## Command Modes

User EXEC

## Command History

### Command History

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

## Usage Guidelines

The **show cellular 1 qos** command displays information about the QoS parameters for each of the QoS flow set by the network.

## Examples

This example shows how to view all the cellular QoS information:

```
show cellular 1 qos
CG522-E# % qos qosflow-list 0
QoS Id = 1434
QoS State = ENABLED
QoS Flow Type = NETWORK_INITIATED
Bearer Id = 50

Tx flow info:
Lte Qci = 5
Data Rate Max = 0
Minimum Data Rate Guaranteed = 0

Rx flow info:
Lte Qci = 5
Data Rate Max = 0
Minimum Data Rate Guaranteed = 0

Tx filter info:
IP version = IPV4
IPv4 Source Address = 209.165.200.225
IPv4 Source Address subnet mask = 255.255.255.224
IPv4 Dest Address = 209.165.200.230
IPv4 Dest Address subnet mask = 255.255.255.0
Tos value = 128
Tos mask = 192
IPv6 Source Address = ::
Source IPv6 address prefix length = 0
IPv6 Dest Address = ::
Dest IPv6 address prefix length = 0
IPv6 Label = 0
Transport Protocol = 0
Transport Port1 = 0
Transport Range1 = 0
```

```

Transport Port2 = 0
Transport Range2 = 0
Transport Port3 = 0
Transport Range3 = 0
Transport Port4 = 0
Transport Range4 = 0

Rx filter info:
IP version = IPV4
IPv4 Source Address = 209.165.201.1
IPv4 Source Address subnet mask = 255.255.255.224
IPv4 Dest Address = 209.165.201.10
IPv4 Dest Address subnet mask = 255.255.255.224
Tos value = 128
Tos mask = 192
IPv6 Source Address = ::
Source IPv6 address prefix length = 0
IPv6 Dest Address = ::
Dest IPv6 address prefix length = 0
IPv6 Label = 0
Transport Protocol = 0
Transport Port1 = 0
Transport Range1 = 0
Transport Port2 = 0
Transport Range2 = 0
Transport Port3 = 0
Transport Range3 = 0
Transport Port4 = 0
Transport Range4 = 0
qos qosflow-list 1
QoS Id = 1435
QoS State = ENABLED
QoS Flow Type = NETWORK_INITIATED
Bearer Id = 51

Tx flow info:
Lte Qci = 4
Data Rate Max = 7000
Minimum Data Rate Guaranteed = 5000

Rx flow info:
Lte Qci = 4
Data Rate Max = 7000
Minimum Data Rate Guaranteed = 5000

Tx filter info:
IP version = IPV4
IPv4 Source Address = 209.165.202.129
IPv4 Source Address subnet mask = 255.255.255.224
IPv4 Dest Address = 209.165.202.158
IPv4 Dest Address subnet mask = 255.255.225.224
Tos value = 0
Tos mask = 0
IPv6 Source Address = ::
Source IPv6 address prefix length = 0
IPv6 Dest Address = ::
Dest IPv6 address prefix length = 0
IPv6 Label = 0
Transport Protocol = 0
Transport Port1 = 0
Transport Range1 = 0
Transport Port2 = 0
Transport Range2 = 0
Transport Port3 = 0

```

```
Transport Range3 = 0
Transport Port4 = 0
Transport Range4 = 0

Rx filter info:
IP version = IPV4
IPv4 Source Address = 209.165.202.139
IPv4 Source Address subnet mask = 255.255.225.0
IPv4 Dest Address = 209.165.202.149
IPv4 Dest Address subnet mask = 255.255.255.0
Tos value = 0
Tos mask = 0
IPv6 Source Address = ::
Source IPv6 address prefix length = 0
IPv6 Dest Address = ::
Dest IPv6 address prefix length = 0
IPv6 Label = 0
Transport Protocol = 0
Transport Port1 = 0
Transport Range1 = 0
Transport Port2 = 0
Transport Range2 = 0
Transport Port3 = 0
Transport Range3 = 0
Transport Port4 = 0
Transport Range4 = 0
qos qosflow-list 2
QoS Id = 1436
QoS State = ENABLED
QoS Flow Type = NETWORK_INITIATED
Bearer Id = 0

Tx flow info:
Lte Qci = 6
Data Rate Max = 0
Minimum Data Rate Guaranteed = 0

Rx flow info:
Lte Qci = 6
Data Rate Max = 0
Minimum Data Rate Guaranteed = 0
Transport Range4 = 0
```

# show cellular 1 details

To display the detailed cellular information, use the **show cellular 1 details** command in user EXEC mode.

**show cellular 1 details**

<b>Syntax Description</b>	This command has no arguments or keywords.	
<b>Command Default</b>	This command has no default settings.	
<b>Command Modes</b>	User EXEC	
<b>Command History</b>		
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.
<b>Usage Guidelines</b>	Use the <b>show cellular 1 details</b> command to display the detailed cellular information.	

This example shows how to view the detailed cellular information:

```
Router# show cellular 1 details
Cellular Interface status = Up
Cellular Modem Status = Network-Ready
Cellular IP Address = 10.10.0.1
Cellular Default Gateway = 10.10.0.2
Cellular Subnet Mask = 255.0.0.0
Cellular Primary DNS Address = 10.10.0.3
Cellular Secondary DNS Address = 10.10.0.4
Cellular IPv6 Address = 2001:db8:ffff:ffff:ffff:ffff:ffff:ffff
Cellular IPv6 Default Gateway = 2001:db8:ffff:ffff:ffff:ffff:ffff:ffff
Cellular IPv6 Primary DNS Address = 2001:db8:1000::2000
Cellular IPv6 Secondary DNS Address = 2001:db8:1111::2222
```

# show cellular 1 firmware

To display the list of firmwares stored in the modem, use the **show cellular 1 firmware** command in user EXEC mode.

**show cellular 1 firmware**

---

**Syntax Description**

This command has no arguments or keywords.

---

**Command Default**

This command has no default settings.

---

**Command Modes**

User EXEC

---

**Command History**

---

**Command History**

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

---

**Usage Guidelines**

Use the **show cellular 1 firmware** command to display the list of firmwares stored in the modem.

This example shows how to view the list of firmwares stored in the modem:

```
Router# show cellular 1 firmware
Firmware Activation Mode = AUTO
INDEX  CARRIER  FW VERSION          PRI VERSION  STATUS
-----
1      GENERIC  01.07.19.00_GEN     016.010_000  ACTIVE
2      GENERIC2  01.07.19.00_GEN2    012.012_000  INACTIVE
```

# show cellular 1 network

To display the cellular network information, use the **show cellular 1 network** command in user EXEC mode.

**show cellular 1 network**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	This command has no default settings.
------------------------	---------------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

<b>Command History</b>	
------------------------	--

Command History	Release	Modification
	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

<b>Usage Guidelines</b>	Use the <b>show cellular 1 network</b> command to display the cellular network information.
-------------------------	---

This example shows how to view the cellular network information:

```
CellularGateway# show cellular 1 network
Current System Time = Fri Jan 21 22:54:17 2023
Current Service Status = Normal
Current Service = Packet switched
Current Roaming Status = Home
Network Selection Mode = Automatic
Network = 123 456
Mobile Country Code (MCC) = 123
Mobile Network Code (MNC) = 456
Packet Switch domain(PS) state = Attached
EMM State = Registered
EMM Sub state = Normal-Service
RRC Connection State = RRC Connected
Tracking Area Code (TAC) = 1
Cell ID = 7169
Network MTU = 1500
```

# show cellular 1 sim

To display the cellular modem SIM information, use the **show cellular 1 sim** command in user EXEC mode.

**show cellular 1 sim**

---

**Syntax Description**

This command has no arguments or keywords.

---

**Command Default**

This command has no default settings.

---

**Command Modes**

User EXEC

---

**Command History**

---

**Command History**

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

---

**Usage Guidelines**

Use the **show cellular 1 sim** command to display the cellular modem SIM information.

This example shows how to view the cellular modem SIM information:

```
Router# show cellular 1 sim
Cellular Dual SIM details:
SIM 0 = Present
SIM 1 = Not Present
Active SIM = 0
```

To display control connections information, use the **show control connections** command in user EXEC mode.

**show control connections**

This example shows how to view the control connections information:

```
Router# show control connections
```

										PEER
CONTROLLER				PEER						
PEER	PEER	PEER		SITE	DOMAIN	PEER				PRIV
PEER					PUB					
GROUP										
TYPE	PROT	SYSTEM	IP	ID	ID	PRIVATE	IP			PORT
	PUBLIC	IP						LOCAL	COLOR	
PROXY	STATE	UPTIME		ID		PORT	ORGANIZATION			
vmanage	dtls	10.160.200.22	200		0	10.0.12.22				12646
10.0.12.22						12646		private1		No
up	0:20:35:38	0								

## show gw-system:dhcp info

To display DHCP related information, use the **show gw-system: dhcp info** command in user EXEC mode.

**show gw-system: dhcp info**

---

**Syntax Description**

This command has no arguments or keywords.

---

**Command Default**

This command has no default settings.

---

**Command Modes**

User EXEC

---

**Command History**

---

**Command History**

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

---

**Usage Guidelines**

Use the **show gw-system: dhcp info** command to display DHCP related information.

This example shows how to view the DHCP related information:

```
Router# show gw-system:dhcp info
IPv4 DHCP Client IP Address = 10.20.21.81
Client MAC Address          = 2001:db8:1111::2222
Lease Expires In (Sec)      = 90
IPv4 Primary DNS Address    = 10.11.0.8
IPv4 Secondary DNS Address  = 10.8.4.4
IPv6 SLAAC Prefix           = ::
IPv6 Primary DNS Address    = ::
IPv6 Secondary DNS Address  = ::
```

# show gw-system:interface brief

To display the interface information, use the **show gw-system: interface brief** command in user EXEC mode.

**show gw-system: interface brief**

**Syntax Description** This command has no arguments or keywords.

**Command Default** This command has no default settings.

**Command Modes** User EXEC

## Command History

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

**Usage Guidelines** Use the **show gw-system: interface brief** command to display the interface information.

This example shows how to view the interface information:

```
Router# show gw-system:interface brief
```

		IP		ADMIN	OPER	
MEDIA						
PORT	INTERFACE	ADDRESS	SUBNET MASK	STATUS	STATUS	DESCRIPTION
TYPE						
0/0	GigabitEthernet	209.165.200.225	255.255.255.224	UP	DOWN	Gigabit Ethernet Interface -

  

		IP		ADMIN	OPER		MEDIA
PORT	INTERFACE	ADDRESS	SUBNET MASK	STATUS	STATUS	DESCRIPTION	TYPE
1/0	Cellular	10.0.0.1	255.0.0.0	UP	DOWN	Cellular Interface -	

## show gw-system:ntp status

To display the Network Time Protocol (NTP) information, use the **show gw-system: ntp status** command in user EXEC mode.

**show gw-system: ntp status**

---

**Syntax Description**

This command has no arguments or keywords.

---

**Command Default**

This command has no default settings.

---

**Command Modes**

User EXEC

---

**Command History**

---

**Command History**

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

---

**Usage Guidelines**

Use the **show gw-system: ntp status** command to display the NTP information.

This example shows how to view the NTP information:

```
Router# show gw-system:ntp status
Clock is not synchronized, stratum 16, reference is .
frequency is +0.000 Hz, precision is -22
reference time is (no time),
clock offset is +0.000000 msec, root delay is 0.000 msec
root dispersion is 0.000
```

# show gw-system:system partition

To display the software version of partitions, use the **show gw-system: system partition** command in user EXEC mode.

**show gw-system: system partition**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	This command has no default settings.
------------------------	---------------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

<b>Command History</b>	
------------------------	--

Command History	Release	Modification
	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

<b>Usage Guidelines</b>	Use the <b>show gw-system: system partition</b> command to display the software version of partitions.
-------------------------	--

This example shows how to view the software version of partitions:

```
Router# show gw-system:system partition
Primary Image
Partition      = image2
File name      = cg-ipservices-17.12.01.2023-05-15_07.57_aut.bin
Version        = 17.12.01.0.230135.1684159528..Bengaluru
Build Date     = Mon May 15 14:05:28 2023
Install Date   = Sun May 14 17:51:14 2023
Boot Status    = Boot Successful.

Backup Image
Partition      = image1
File name      = cg-ipservices-17.12.01.2023-04-25_07.57_aut.bin
Version        = 17.12.01.0.230115.1682431692..Bengaluru
Build date     = Tue Apr 25 14:08:12 2023
Install Date   = Tue Apr 25 16:16:18 2023
Boot Status    = Boot Successful.
```

# show gw-system:system status

To display the system status information, use the **show gw-system: system status** command in user EXEC mode.

**show gw-system: system status**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	This command has no default settings.
------------------------	---------------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

<b>Command History</b>
------------------------

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

<b>Usage Guidelines</b>	Use the <b>show gw-system: system status</b> command to display the system status information, such as, RAM, storage, temperature, power source, and so on.
-------------------------	---

This example shows how to view the system status information:

```
Router# show gw-system:system status
SYSTEM INFO
Platform PID                = CG522-E
Product Serial Number       = FGL2443L0UR

System Up Time               = up 20 days
Current Time                 = Sun Jun  4 21:06:08 UTC 2023
Current CPU Usage            = 5%

RAM
Total Memory in KBytes      = 993852
Memory Used in KBytes       = 688960
Memory Free in KBytes       = 304892

STORAGE
Disk type                    = Bootflash
Disk Size in KBytes          = 999320
Disk Used in KBytes          = 2768
Disk Available in KBytes     = 927740
Disk Used Percentage         = 0%

TEMPERATURE
Ambient temperature          = 52 deg C

Power source                  = AC
```

# show led status

To display LED status, use the **show led status** command in user EXEC mode.

**show led status**

## Syntax Description

This command has no arguments or keywords.

## Command Default

This command has no default settings.

## Command Modes

User EXEC

## Command History

### Command History

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

## Usage Guidelines

Use the **show led status** command to display LED status.

This example shows how to view LED status:

```
Router# show led status
      LED      LED
LED LABEL  COLOR  STATE
-----
LED 5G      BLUE  SOLID
LED 4G      OFF   OFF
```

# show license udi

To show the values for Universal Device Identifier (UDI), product ID (PID) and Serial Number (SN), use the **show license udi** command in user EXEC mode.

**show license udi**

---

**Syntax Description**

This command has no arguments or keywords.

---

**Command Default**

This command has no default settings.

---

**Command Modes**

User EXEC

---

**Command History**

---

**Command History**

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

---

**Usage Guidelines**

Use the **show license udi** command to show the values for Universal Device Identifier (UDI), product ID (PID) and Serial Number (SN).

This example shows how to display the license udi information:

```
Router# show license udi
UDI: PID:CG522-E,SN:FGL2443L0UR
```

# show software

To display the software versions, use the **show software** command in user EXEC mode.

**show software**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	This command has no default settings.
------------------------	---------------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

<b>Command History</b>	
------------------------	--

<b>Command History</b>	<table border="1"> <tr> <th>Release</th> <th>Modification</th> </tr> <tr> <td>Cisco IOS XE Amsterdam 17.3.x release</td> <td>This command was introduced.</td> </tr> </table>	Release	Modification	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.
Release	Modification				
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.				

<b>Usage Guidelines</b>	Use the <b>show gw-system: system partition</b> command to display the software versions.
-------------------------	---

This example shows how to view the software versions:

```
Router# show software
software 17.12.01.0.230115.1682431692..Bengaluru
  active      false
  default     false
  previous    true
  confirmed   true
  timestamp   2023-05-15T07:42:22-00:00
software 17.12.01.0.230135.1684159528..Bengaluru
  active      true
  default     true
  previous    false
  confirmed   true
  timestamp   2023-05-15T07:42:22-00:00
```

# show version

To display software version of the Cellular Gateway device, use the **show version** command in user EXEC mode.

**show version**

---

**Syntax Description**

This command has no arguments or keywords.

---

**Command Default**

This command has no default settings.

---

**Command Modes**

User EXEC

---

**Command History**

---

**Command History**

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

---

**Usage Guidelines**

Use the **show version** command to display software version of the Cellular Gateway device.

This example shows how to view the software version of the Cellular Gateway device:

```
Router# show version
Active image
Product name       = Cisco Cellular Gateway
Build version      = 17.12.01.0.230135.1684159528..Bengaluru
Software version   = 1.0.0
Build date         = 2023-05-15_07.05
Build path         = /san1/BUILD/workspace/Nightly_c1712_throttle-eio/base/build_eio
Built by           = aut
Firmware info
Uboot version      = 2018.03-7.1.0-cwan-0.0.16
Uboot date         = 10/06/2020
Last reboot reason = Admin Reload
```





## Configuration Commands

---

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- [gw-action:request file list](#), on page 33
- [gw-action:request ping](#), on page 34
- [gw-action:request software](#), on page 35
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- [cellular 1 profile-reset](#), on page 38
- [crash-action](#), on page 39

## gw-action:request admin-tech

To create admin tech logs file which is required for customer support, use the **gw-action:request admin-tech** command in user EXEC mode.

**gw-action : request admin-tech**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	This command has no default settings.
------------------------	---------------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

### Command History

Command History	Release	Modification
	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

<b>Usage Guidelines</b>	Use the <b>gw-action:request admin-tech</b> command to create admin tech logs file that is used for troubleshooting purposes for customer support.
-------------------------	--

### Examples

```
CG522-E# gw-action:request admin-tech
Log
Creating support bundle, please wait...
Support file CG522-E.support.user.20230120.114157.tgz created in /flash
```

# gw-action:request file list

To display the files listed on the specified location, use the **gw-action:request file list** command in the user EXEC mode.

**gw-action: request file list**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	This command has no default settings.
------------------------	---------------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

## Command History

Command History	Release	Modification
	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

## Usage Guidelines

### Examples

This example shows how to view all the file related actions that you can perform:

```
gw-action:request file list
-rw-r--r-- 59906252 Sep 22 18:44 CG522-E.support.20220922.184252.tgz
-rw-r--r-- 199807 Jan 20 11:42 CG522-E.support.user.20230120.114157.tgz
drwxrwxrwx 4096 Jan 17 21:02 DL-SW-IMAGES
-rw-r--r-- 1761 Nov 5 15:55 cacert.pem
d----- 4096 Aug 21 2021 fw_upgrade_sysinfo
-rw-r--r-- 0 Mar 18 2022 issue.pcap
drwx----- 16384 Oct 1 2021 lost+found
-rw-r--r-- 1761 Oct 1 2021 old_cacert.pem
drwxr-xr-x 4096 Jan 20 11:41 storage
-rw-r--r-- 175 Jan 20 11:39 sw_script_upg_confirm.log
-rw-r--r-- 7626 Jan 17 21:03 sw_script_upgrade_task.log
drwxr-xr-x 4096 Oct 1 2021 tmp
```

# gw-action:request ping

To display the IPv4 and IPv6 ping information, use the **gw-action:request ping** command in user EXEC mode.

**gw-action: request ping**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	This command has no default settings.
------------------------	---------------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

<b>Command History</b>	
------------------------	--

Command History	Release	Modification
	Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

<b>Usage Guidelines</b>
-------------------------

<b>Examples</b>
-----------------

This example shows the ping information for the IPv4 and IPv6 addresses:

**gw-action:request ping 192.0.2.12**

Success :192.0.2.12 (192.0.2.12): 56 data bytes

192.0.2.12 ping statistics

5 packets transmitted, 5 packets received, 0% packet loss round trip min/avg/max = 43.438/51.709/56.303 ms

**gw-action:request ping 2001:DB8::1**

Success :2001:DB8::1 (2001:DB8::1): 56 data bytes

2001:DB8::1 ping statistics

5 packets transmitted, 5 packets received, 0% packet loss round trip min/avg/max = 32.468/40.010/49.135 ms

# gw-action:request software

To display all the software related information, use the **gw-action:request software** command in user EXEC mode.

**gw-action: request software**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	This command has no default settings.
------------------------	---------------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

<b>Command History</b>
------------------------

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

<b>Usage Guidelines</b>
-------------------------

<b>Examples</b>
-----------------

This example shows all the software image related operations:

**gw-action:request software**

Possible completions:

activate	Activate software image
download	Download software image or other file to the device
install	Install software image
upgrade	Download, Install and Activate software

# gw-action:request system reboot

To perform the system reboot, use the **gw-action: request system reboot** command in user EXEC mode.

**gw-action: request system reboot**

## Syntax Description

This command has no arguments or keywords.

## Command Default

This command has no default settings.

## Command Modes

User EXEC

## Command History

### Command History

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

## Usage Guidelines

Use the **gw-action: request system reboot** command to perform the system reboot.

This example shows how to perform the system reboot:

```
Router# gw-action:request system reboot
```

# request root-cert-chain install

To install the root certificate chain, use the **request root-cert-chain install** command in user EXEC mode.

**request root-cert-chain install**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	This command has no default settings.
------------------------	---------------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

<b>Command History</b>
------------------------

Release	Modification
Cisco IOS XE Amsterdam 17.3.x release	This command was introduced.

<b>Usage Guidelines</b>	Use the <b>request root-cert-chain install</b> command to install the root certificate chain.
-------------------------	---

This example shows how to install the root certificate chain:

```
Router# request root-cert-chain install /flash/cacert.pem
Root CA certificate chain install script called:
/usr/bin/vconfd_script_upload_root_ca_cert_chain.sh -cli path /flash/cacert.pem
Uploading root-ca-cert-chain via VPN 0 true
sh: //AP_PLATFORM_DESCR: unknown operand
Copying ... /flash/cacert.pem via VPN 0 true
Installing the new root certificate chain true
Successfully installed the root certificate chain true
```

# cellular 1 profile-reset

To restore the default profile settings on a device, use the **cellular1profile-reset** command in user EXEC mode.

**cellular 1 profile-reset**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	No default behavior or values.
------------------------	--------------------------------

<b>Command Modes</b>	User EXEC
----------------------	-----------

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	Cisco IOS XE 17.18.1a	This command was introduced.

<b>Usage Guidelines</b>	The cellular reset profile command can be used to completely clear the cellular network settings associated with a specific profile and restore the settings to factory default.
-------------------------	--

## Example

```
CellularGateway# cellular 1 profile-reset
```

# crash-action

To set the crash action on the modem upon a crash. The device can be configured to auto collect the crash dump data or to boot-and-hold mode.

**crash-action** ?

<b>Syntax Description</b>	<b>crash-action</b>	Specify the action the device should take when a modem crash is detected.
	<i>auto-collect</i>	Device remains in a crash state, auto collects crash dump data and resets the device.
	<i>boot-and-hold</i>	Device remains in crash state.
<b>Command Modes</b>	User EXEC	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	Cisco IOS XE 17.18.1a	This command was introduced.
<b>Usage Guidelines</b>	If the modem corresponding to the cellular interface crashes, the modem will reset itself and come back up. However, to debug the cause of the crash, a full crash dump can be captured on the modem.	

## Example

An example to configure crash action to auto-collect on modem:

```
CellularGateway(config)# controller cellular 1
CellularGateway(config-cellular-1)# crash-action ?
Possible completions:
  auto-collect      auto collect crash dump and reset modem
  boot-and-hold     Remain in modem crash state
CellularGateway(config-cellular-1)# crash-action auto-collect
CellularGateway(config-cellular-1)#
CellularGateway(config-cellular-1)# end
CellularGateway#
CellularGateway# show running-config controller cellular 1
controller cellular 1
    crash-action auto-collect
exit
```

 **crash-action**