



## Configure a Cellular Gateway

**Table 1: Feature History**

Feature Name	Release Information	Feature Description
Cellular Gateway Configuration	Cisco vManage Release 20.4.1 Cisco IOS XE Release 17.4.1a (on devices)	This feature provides templates for configuring a supported cellular gateway as an IP pass-through device. This release supports the Cisco Cellular Gateway CG418-E and CG522-E.

You can configure a supported cellular gateway as an IP pass-through device. By positioning the configured device in an area in your facility that has a strong LTE signal, the signal can be extended over an Ethernet connection to a routing infrastructure in a location with a weaker LTE signal.

To configure a cellular gateway in Cisco vManage:

1. Create a device template for the **Cisco Cellular Gateway CG418-E** device.  
See "Create a Device Template from Feature Templates" in *Systems and Interfaces Configuration Guide*.  
After you enter a description for the feature template:
  - a. From the Cisco vManage menu, choose **Configuration > Templates**.
  - b. Click **Device Templates**.



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**Note** In Cisco vManage Release 20.7.x and earlier releases, **Device Templates** is titled **Device**.

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- c. From the **Create Template** drop-down list choose **From Feature Template**.
- d. From the **Device Model** drop-down list select the type of device for which you are creating the template.
- e. Choose **Cellular Gateway > Cellular Gateway Platform > Create Template**. Then configure the Cellular Gateway Platform feature template as shown in the following table.

Table 2: Cellular Gateway Platform Template Parameters

Parameter Name	Description
Basic Configuration Tab	
Time Zone	Choose the time zone to use for the device. The device uses this time zone for clock synchronization when NTP is configured.
Management Interface	Enter the IPv4 address of the management interface for accessing the device.
Admin-Password	Enter the admin user password for logging in to the device by using an SSH client or a console port.
NTP-Servers	Configure one or more NTP servers to which the device synchronizes its clock.
Cellular Configuration Tab	
IP-Src-Violation	Choose <b>v4 only</b> , <b>v6 only</b> , or <b>v4 and v6</b> to enable the IP source violation feature for the corresponding IP address types. Choose <b>None</b> if you do not want to enable this feature.
Auto-SIM	Choose <b>On</b> to enable the auto-SIM feature. When this feature is enabled, the device automatically detects the service provider to which SIMs in the device belong and automatically loads the appropriate firmware for that provider.
Primary SIM Slot	Choose the slot that contains the primary SIM card for the device. If the device loses service to this slot, it fails over to the secondary slot.
Failover-Timer (minutes)	Enter the number of minutes that the device waits before trying to communicate with the primary SIM slot after the device detects loss of service to this slot.
Max-Retry	Enter the number of consecutive unsuccessful attempts by the device to communicate with the primary SIM before failing over to the secondary slot

- f. Choose **Cellular Gateway** > **Cellular Gateway Profile** and choose **Create Template** from the Cellular Gateway Profile drop-down list. Then configure the Cellular Gateway Profile feature template as shown in the following table.

Table 3: Cellular Gateway Profile Template Parameters

Parameter Name	Description
Basic Configuration Tab	
SIM	<p>Choose a SIM slot and configure the following options to create a profile for the SIM in that slot. This profile indicates to the service provider which of its cellular networks the SIM should attach to.</p> <ul style="list-style-type: none"> <li>• Profile ID: Enter a unique ID for the profile</li> <li>• Access Point Name: Enter the name of the access point for this profile</li> <li>• Packet Data Network Type: Choose the type of network for data services for this profile (<b>IPv4</b>, <b>IPv6</b>, or <b>IPv4v6</b>)</li> <li>• Authentication: Choose the authentication method that this profile uses for data, and enter the user name and password for this method in the Profile Username and Profile Password fields that display</li> </ul> <p>You can configure one profile for each SIM slot in the device.</p>
Add Profile	<p>Click to add an access point name (APN) profile that the cellular device uses to attach to a cellular network.</p> <p>You can add up to 16 profiles.</p>
Profile ID	<p>Enter a unique identifier for the profile.</p> <p>Valid values: Integers 1 through 16.</p>
Access Point Name	Enter a name to identify the cellular access point.
Packet Data Network Type	Choose the packet data network (PDN) type of the cellular network ( <b>IPv4</b> , <b>IPv6</b> , or <b>IPv4v6</b> ).
Authentication	Choose the authentication method that is used to attach to the cellular access point ( <b>none</b> , <b>pap</b> , <b>chap</b> , <b>pap_chap</b> ).
Profile Username	If you choose an authentication method other than <b>none</b> , enter the user name to use for authentication when attaching to the cellular access point.
Password	If you choose an authentication method other than <b>none</b> , enter the password to use for authentication when attaching to the cellular access point.

Parameter Name	Description
Add	Click to add the profile your are configuring.
Advanced Configuration Tab	
Attach Profile	Choose the profile that the device uses to connect to the cellular network.
Cellular 1/1 Profile	Choose the profile that the device uses for data connectivity over the cellular network.

2. Attach the device template to the device.

See "Attach and Detach a Device Template" in *Systems and Interfaces Configuration Guide*.