Recover an Unbootable 5G Cellular Gateway from Hightower Prompt

Contents

Introduction

This document describes the process to recover a Cellular Gateway CG522 when, at boot up, it is stuck in the Hightower prompt.

Prerequisites

Requirements

Cisco recommends that you have basic knowledge of these topics:

- File transfer to Cellular Gateway (CG) CG522
- 5G Cellular Network Basics

Components Used

The information in this document is based on these software and hardware versions:

- Cellular Gateway CG522 with Cisco IOS® XE 17.6.6
- Cisco Industrial Router IR1100 with Cisco IOS® XE 17.9.4

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Background Information

When software upgrade process errors or power interruptions occur during critical processes on the Cisco Cellular Gateway CG522, sometimes the device boots into a prompt labeled Hightower> instead of the standard CellularGateway# prompt. In this state, the CG522 does not accept the usual commands to troubleshoot the device and it is stuck at this prompt even after a hard boot with apparently no way out. Here is the process to recover access to the device when you see this prompt.

```
Hightower>
```

Recovery Process

These are the steps to recover the CG once it is stuck in Hightower prompt:

Step 1: Connect an ethernet cable to the CG's GigabitEthernet port and the other end to a router or switch ethernet port.

Step 2: On the CG's HighTower prompt, enter these commands:

```
Hightower> setenv ipaddr 192.168.1.1
Hightower> setenv netmask 255.255.0.0
Hightower> setenv gatewayip 192.168.1.1
Hightower> setenv serverip 192.168.1.100
Hightower> saveenv
```

Step 3: Copy the **part.bin** file provided by TAC to the router or switch bootflash. In this example, a usb memory stick is used:

```
Router# copy usb0:part.bin bootflash:
```
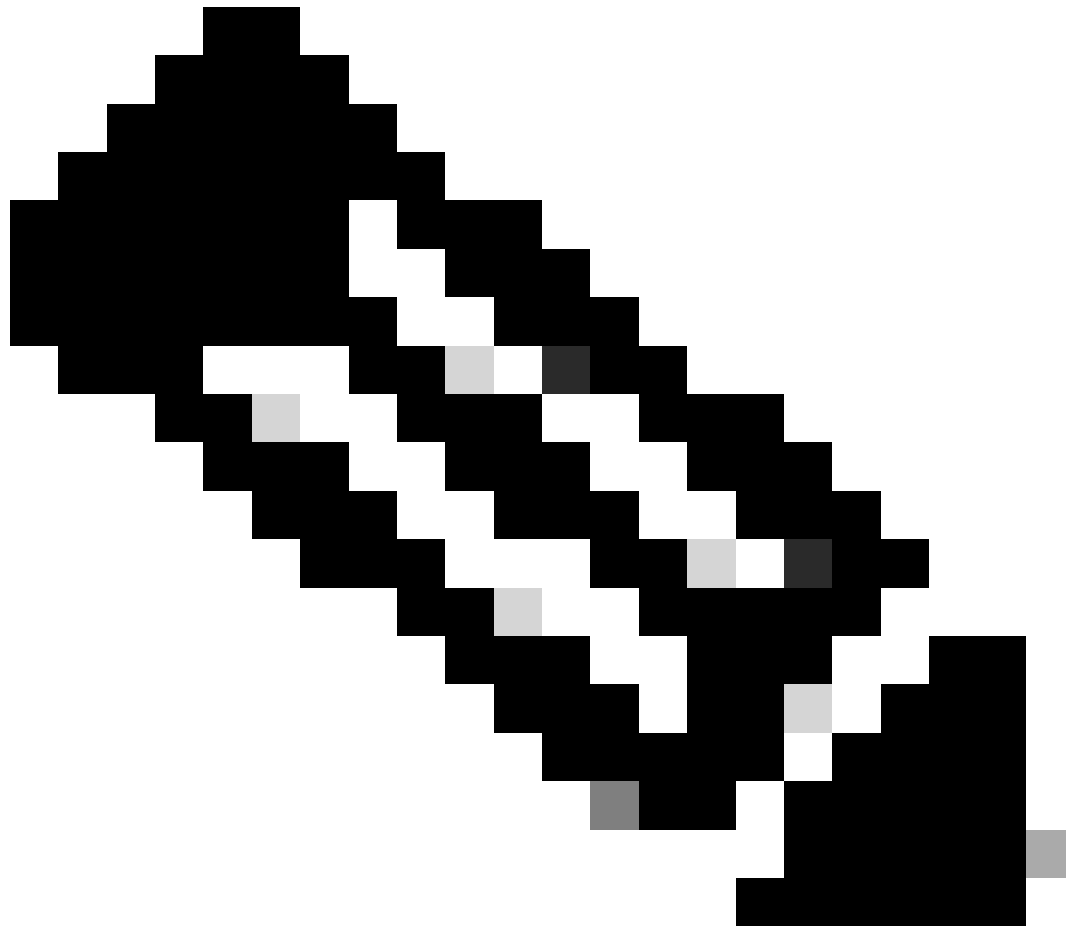
Note: You need to get assistance from TAC to get the part.bin file.

Step 4: On the router or switch, configure a **layer 3 interface** and set it as **tftp server**. Point it to the **part.bin** file:

```
Router#show ip interface brief
GigabitEthernet0/0/0 unassigned YES NVRAM up up
GigabitEthernet0/0/1 10.xxx.xxx.xxx YES NVRAM up up
GigabitEthernet0/0/2 unassigned YES NVRAM up up
GigabitEthernet0 unassigned YES NVRAM up up
Router#configure terminal
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#ip address 192.168.1.100 255.255.0.0
Router(config-if)#no shutdown
Router#write
Router#dir bootflash: | i part
34 -rw- 83644412 Mar 8 2025 11:33:16 +00:00 part.bin
Router#configure terminal
Router(config)#tftp-server bootflash:part.bin
Router(config)#exit
```

```
Router#write
```

Step 5: Check connectivity from the CG to the router/switch:

```
Hightower>ping 192.168.1.100
Using bcm47622_eth-0 device
host 192.168.1.100 is alive
```

Step 6: Copy the file from the router/switch to the CG:

```
Hightower> tftp 0x6000000 part.bin
Using mvpp2-0 device
TFTP from server 192.168.1.100; our IP address is 192.168.1.1
Filename 'part.bin'.
Load address: 0x6000000
<..... Truncated .........>
done
Bytes transferred = 83644412 (4fc4ffc hex)
```

Step 7: Boot with the new image:

```
Hightower>bootimg 0x6000000
SF: Detected s25fl256s_64k with page size 256 Bytes, erase size 64 KiB, total 32 MiB
Loading verifier image from offset 0x3873c0
Secure Boot code verifier loaded
<..... Truncated .........>
```

Verify

When the device boots up and the prompt shows CellularGateway, you know the device is recovered:

```
Username: admin
Password: -> Enter the serial number of the CG

CellularGateway#
```

As an additional verification step, make sure the CG shows the version:

```
CellularGateway# show version
Active image
Product name = Cisco Cellular Gateway
```

```
Build version = 17.09.03.0.0.1675948500..Bengaluru
Software version = 1.0.0
Build date = 2023-02-09_05.15
Build path = /san1/BUILD/workspace/Nightly_c179_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
```

At this point, it is recommended to load the desired Cisco IOS® version and configure the Cellular Gateway as needed.

Related Information

[Configure Day-Zero Cellular Gateway 522-E Deployment Guide](#)

[Troubleshoot Common Issues on CG522-E and P-5GS6-GL Modules](#)