



INSTRUCTIONS

Multitech gateway

Multitech gateway instructions for eGate

Note

These instructions were done using two **MultiTech Conduit** models: **MTCAP-LSP3-915-041A** and **MTCDD-L4N1-246A-915-US**. They should work also for other MultiTech gateway models which have the **MPower/AEP** interface.

Info needed by eGate for cloud connection

eGate needs to know the following to be able to register the gateway to the cloud:

- GatewayEUI: this should be the NODE LORA value on the gateway bottom. Consists of 16 hex symbols divided by “:” symbols.
- Frequency band: US915 for North America
- Name: descriptive name for the gateway, e.g. serial number and something about the install location.

After eGate receives this info and sets up the gateway in the cloud, you get an URI and 3 files. These are needed in the “Connecting to the cloud” section.

Hardware setup

Connect antennas to the gateway as instructed by the quick-start guide.

Connect ethernet cable to computer. Alternatively, the gateway and computer may be connected to the same local network, but this might not work. (Note that the gateway can't connect to internet if the ethernet cable is connected directly to the computer)

Plug in power cord to wall, then to the device.

Power LED should light immediately, and status LED starts blinking after a short time.

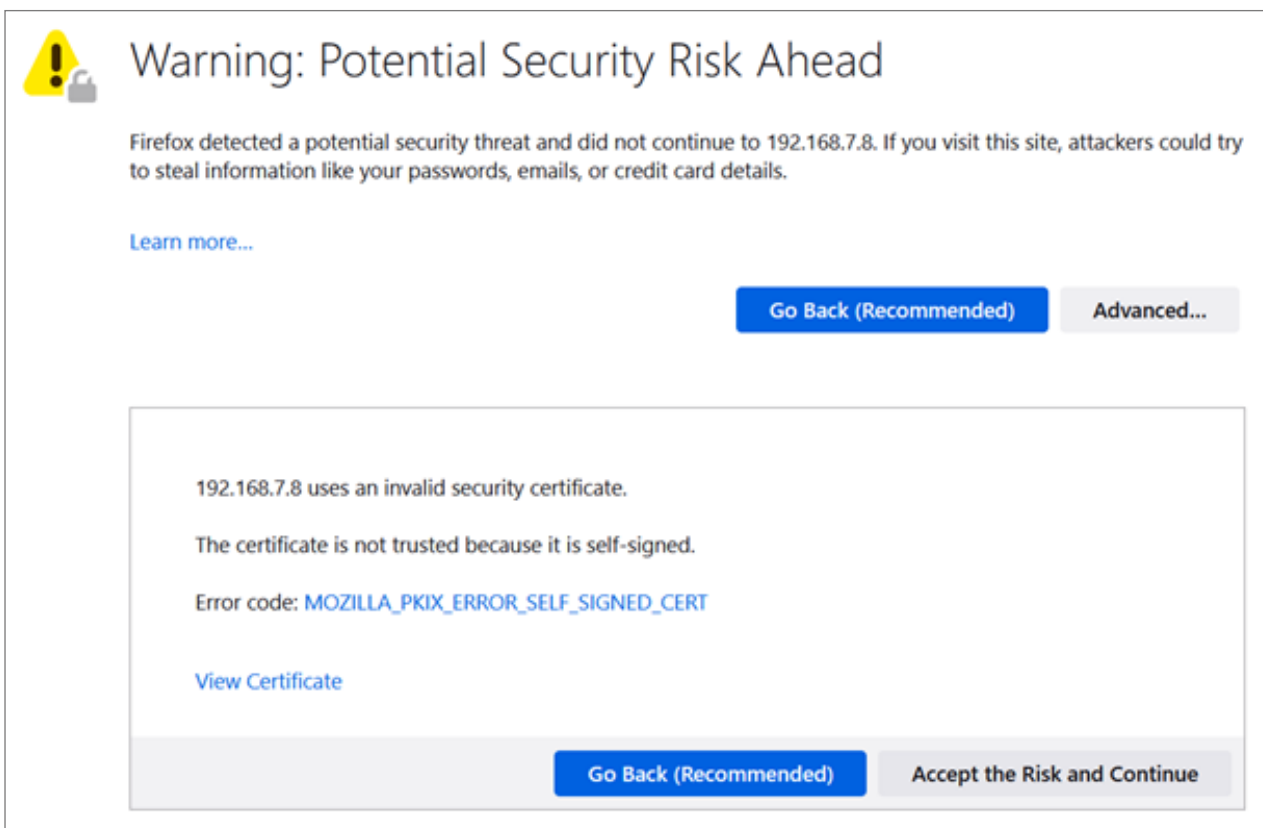
Docs

- Manual: www.multitech.com/documents/publications/user-guides/S000659.pdf
- AWS onboarding: www.multitech.com/documents/publications/marketing-guides/Onboarding_MultiTech_Gateway_Basic_Station.pdf



Connecting

Connect to MPower/AEP interface with a browser, type the default **192.168.2.1** as IP address. The browser may warn when connecting. In this case check that the IP is correct, then accept the risk and continue.



If the page won't load, you may try factory resetting the device by holding the RESET button down, e.g. with a pin, for about 40 seconds. Then wait a bit until the status LED is blinking again, then try connecting again.

Note: The web interface may be called AEP (Application Enablement Platform) or MPower, they are the same. When asked, Multitech told: "We are using MPower, used to be called AEP, in the new products so same interface as you are used to, I assume."



First time setup

- Create username and password
- Use the username+password to login
- First time setup wizard:
 - Call Home Remote Management: not enabled
 - Time: Choose correct time + date + timezone
 - Network interface configuration: leave as is
 - Cellular configuration: if not cellular model, disable every box
 - Cellular authentication: NONE
 - Remote Management: leave as is (not enabled)
 - Access configuration: leave as is
 - Finish

Note: After doing changes, generally need to click “Submit” at bottom of section, then Save and Apply from top left (will be highlighted in red when needed). Some changes require a reboot.

Setup > Network Interfaces

Click edit icon for br0 in Options column

Static IP

In eGate intranet Mask & Gateway should be as below. Pick a free IP address in range 192.168.(1..15).(1..254). x.x.7.x area has space, e.g. 192.168.7.7

The default 192.168.2.1 IP works for doing configuration, but after that it must be changed.

One or both DNS Servers must be configured so the gateway can connect to AWS.

After changing IP, you can try using Administration > Debug Options > Ping to ping some website (e.g. google.com)

IPv4 Settings	
Mode <input type="text" value="Static"/>	Gateway <input type="text" value="192.168.0.1"/>
IP Address <input type="text" value="192.168.7.7"/>	Primary DNS Server <input type="text" value="192.168.3.10"/>
Mask <input type="text" value="255.255.240.0"/>	Secondary DNS Server <input type="text" value="192.168.3.11"/>



DHCP

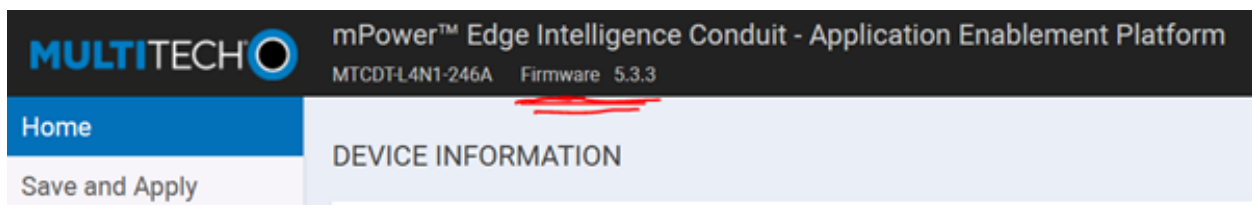
Alternately, set a static IP address for the gateway MAC address in your DHCP server, and set the Mode to DHCP

Note: After configuring the Ipv4 settings, applying them and restarting the gateway, you should be able to connect the gateway ethernet cable to local network and then use the new IP (192.168.7.7 in the above example) to connect to it. The gateway should also have internet access after this.

Administration > Firmware Upgrade:

Firmware can be upgraded here if necessary. The firmware version should be 5.3.0 or higher. Current version can be seen in the top bar as shown below.

- Firmware upgrade files available here: www.multitech.net/developer/downloads/



Connecting to the cloud

Connecting the gateway to the cloud requires the following info. The *.trust, *.crt and *.key are files related to AWS IoT platform, received from eGate (see “Info needed by eGate for cloud connection” at the start of guide). Copy all content from the file to the matching field.

The configuration is done in the LoRaWAN > Network Settings section.

- LoRa Mode: Basic station
- Credentials: CUPS
- URI: (CUPS URI from eGate)
- Station config: (default)
- Server Cert: ***cups.trust** file
- Gateway Cert: ***.crt**, or ***.cert.pem** file
- Gateway Key: ***.key** file

Misc

Timeout can be increased from 5 minutes to make it nicer to use: Administration > Access configuration > Session timeout: e.g. 30 minutes.

LoRa card upgrade: LoRa card FPGA version can be upgraded under LoRaWAN > Network Settings, but this is optional.