ThingsPro® Gateway
Quick Installation Guide

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P/N: 1802000000054

Overview

Moxa's ThingsPro® Gateway is a software package designed specifically for your Industrial IoT (IIoT) applications. With ThingsPro Gateway, you do not need comprehensive Modbus or MQTT knowledge to run your IIoT applications. In just a few steps, you can easily configure and manage remote Modbus/RTU and Modbus/TCP devices for data acquisition, use MQTT communication between Moxa's IIoT gateway and your cloud database or applications, and enable wireless connectivity, especially LTE communication in your edge devices.

Model Names and Package Checklist

The ThingsPro Gateway V2.3 package includes the following items:

- ThingsPro Gateway installation SD card
- Quick installation guide (printed)
- Warranty card

ThingsPro Gateway V2.5.0 can be download from Moxa's website.

NOTE Refer to the ThingsPro datasheet or product page on the Moxa website for a list of eligible devices.

Installing ThingsPro Gateway V2.5.0 on an Eligible

Device

Ensure that your device is a ThingsPro eligible device. A list of all eligible devices is available in the ThingsPro datasheet and product page. Download the ThingsPro Gateway V2.5.0 software package on to your computer from Moxa's website:
https://www.moxa.com/support/download.aspx?type=support&id=19092

To install the software on an eligible device, do the following:

1. Log in to your device using a valid username and password.

2. Upload the installation file directly to the device or copy it to an SD card.

3. If the installation file is stored in an SD card, insert the card into the SD card slot of the device.
   For instruction on installing the SD card in the SD-card slot of your device, refer to the quick installation guide or the hardware user's manual for the device.
4. Switch the working directory to the directory in which the installation file is stored and extract the contents of the installation file to the same directory.

```
moxa@Moxa:~$ ls
thingspro_release-thingspro_v2.5_armhf_20181129-015144.frm    thingspro.sh
```

   You should see the following two files.
   - **thingspro.sh**: The installation script
   - **thingspro_release-thingspro_v2.5_armhf_20181129-015144.frm**: The ThingsPro Gateway V2.5.0 installation package
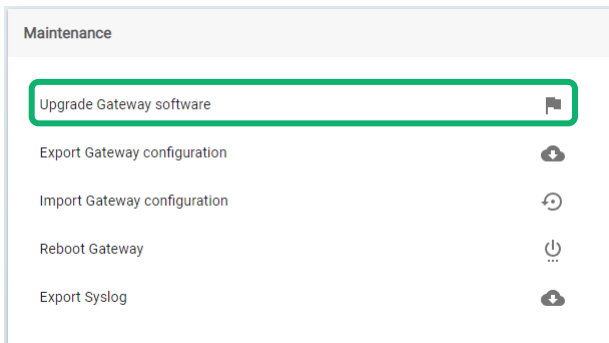
5. Run the following command on the device to install ThingsPro Gateway V2.5.0.

```
moxa@Moxa:~$ sudo bash thingspro.sh install
```

   You may check the installation log by typing the following command.

```
moxa@Moxa:~$ sudo nano /var/log/thingspro_install_20181129-030138.log
```

6. You can upgrade your existing ThingsPro 2 version using the Firmware Upgrade function on the ThingsPro Gateway or Server.

   You can use the following command to check the upgrade log.

```
moxa@Moxa:~$ sudo tail –f /var/log/upgrade.log
```

7. ThingsPro V2.5.0 includes a start/stop function.
   Use the following command to start/stop the ThingsPro Gateway services.

```
moxa@Moxa:~$ sudo mx-tp-ctl –e <n>
```

   - <n> = 0: Stop the ThingsPro Gateway
   - <n> = 1: Start the ThingsPro Gateway

If the ThingsPro Gateway services are no longer required, use the following command to remove it from the system.

```
moxa@Moxa:~$ sudo thingspro.sh uninstall
```

This command removes all ThingsPro Gateway configuration files from the system; reconfirm that you want to remove all configuration files before you run this command and only use it if you intend to completely remove ThingsPro from your device.

Installing ThingsPro Gateway V2.3 on Eligible Devices

Ensure that your device is an eligible ThingsPro device. A list of all eligible devices is available in the ThingsPro datasheet and on the product page. Use the ThingsPro Gateway Installation SD Card to carry out the following instructions.

1. Log in to your device.

2. Insert the ThingsPro Gateway Installation SD Card in the SD card slot of the device.
   For instructions on installing the SD Card in the SD-card slot of your device, refer to the quick installation guide or the hardware user's manual for the device.

3. Switch the working directory to the SD Card where the installation files are located.

```
moxa@Moxa:~$ ls -al
total 165236
drwxr-xr-x 2 moxa moxa      4096 Jan 29 16:31 .
drwxr-xr-x 4 root root      4096 Jan 29 16:31 ..
-rwxr-xr-x 1 root root       522 Jan 26 00:54 install.sh
-rwxr-xr-x 1 root root 169185130 Jan 26 00:54 thingspro_amd64_20180125-173533.frm
```

4. Install ThingsPro Gateway on your device.
   Run a command below that matches the model name of your device.

```
moxa@Moxa:~$ sudo bash install.sh uc8100-mxcloud-cg
```
```
moxa@Moxa:~$ sudo bash install.sh uc8100me-mxcloud-cg
```
```
moxa@Moxa:~$ sudo bash install.sh mc1121-mxcloud-cg
```

   Use the following command to check the installation log.

```
moxa@Moxa:~$ sudo tail -f /var/log/thingspro-install.log
```

5. To upgrade ThingsPro from v2.1 to v2.3, use the Firmware Upgrade function on the ThingsPro Gateway or Server or type the following command in the console.

```
moxa@Moxa:~$ sudo sys-upgrade thingspro_amd64_20180125-173533.frm
```

Use the following command to check the upgrade log.
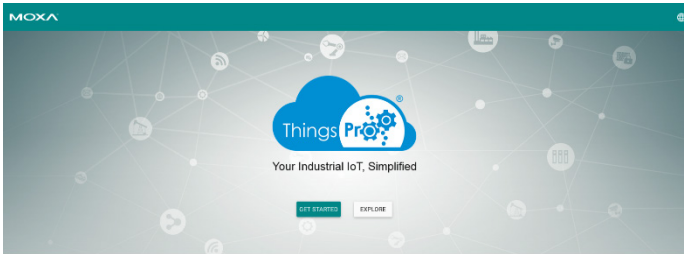
```
moxa@Moxa:~$ sudo tail -f /var/log/upgrade.log
```

> ⚠️ **WARNING**
>
> DO NOT power off the computer during the installation process because doing so may lead to firmware corruption.

6. The device will restart twice during the installation procedure.

To confirm that your device is ThingsPro-ready, connect a PC/laptop computer to LAN port 2 of the device and use the PC/laptop computer to access the address, http://192.168.4.127. If the following ThingsPro home page is displayed, the installation is successful.

Your device computer is now ThingsPro-enabled!