Queclink @Track MT User Guide

TRACMT001

Version: 1.07

Driving Smarter IoT
www.queclink.com

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0. Revision History

Version	Date	Author	Description of Change
1.00	2024-03-25	Rayna Ren	1. Initial.
1.01	2024-04-02	Rayna Ren	1. Added chapter 2.1.3. Configuration Upgrade Locally.
1.02	2024-04-03	Rita Pan	1. Image optimization.
1.03	2024-04-03	Rayna Ren	1. Added the exception commands about send/read all.
1.04	2024-04-10 2024-04-11	Rayna Ren Rita Pan	1. Modified system requirement. 2. Image optimization.
1.05	2024-04-25	Rita Pan	1. Image optimization.
1.06	2024-09-27	Rita Pan	1. Supported importing zip package when updating configuration locally.
1.07	2024-12-09	Rita Pan	1. Added chapter 3. System Settings.

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1. Queclink @Track MT Interface

Queclink @Track MT (Manage Tool) is a PC software that can be used to configure terminal devices through UART and Bluetooth. It is easy for the backend server developers to configure the terminal with this tool, which has a user-friendly interface. The correct command messages sent to the terminal will be displayed on the Manage Tool. (These messages can also be sent by SMS or GPRS/LTE).

The administrators can also use the Manage Tool to configure the terminal before sale. But it is strongly recommended to establish the connection between a backend server and the terminal by SMS or GPRS/LTE. Please refer to ***@Track Air Interface Protocol*** for details.

Before using the Manage Tool, please install the driver **Queclink_Driver_AsrV2.0.1.0**. After that, a new COM port can be found in the PC system. Then please follow the steps below:

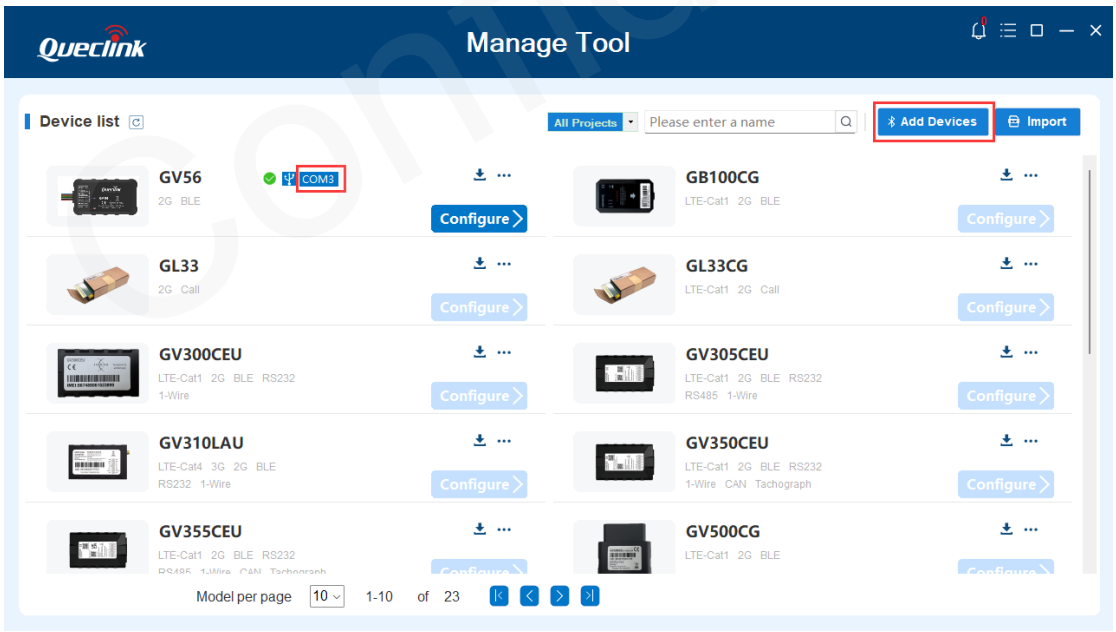
1. Connect the terminal to 12VDC power supply to power it on.
2. Connect the terminal to PC with USB data cable (Data Cable or MicroUSB Cable).
3. Run "**Queclink @Track MT Setup Vx.x.xx.exe**".

1.1. System Requirements

Supported Microsoft .NET Framework 4.6 or above in system Microsoft Windows 10 or above.
Note: Make sure the version of the Bluetooth adapter for your computer is higher than 5.0.

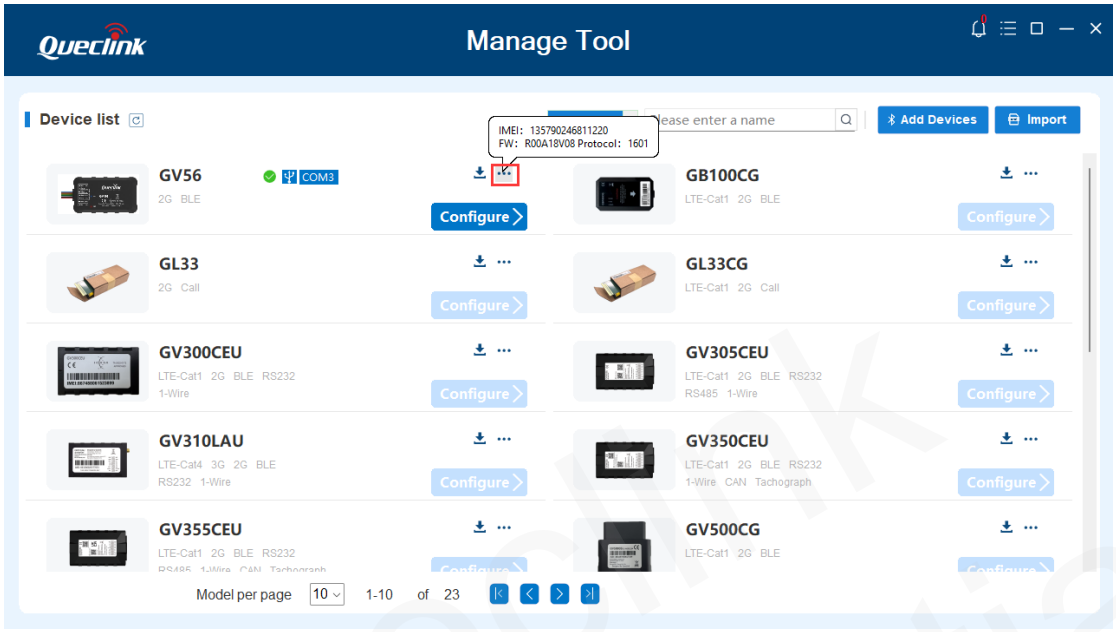
1.2. Device Setting

Queclink @Track MT supports online and offline configuration by the device list. The manage tool can be connected through COM port and Bluetooth.



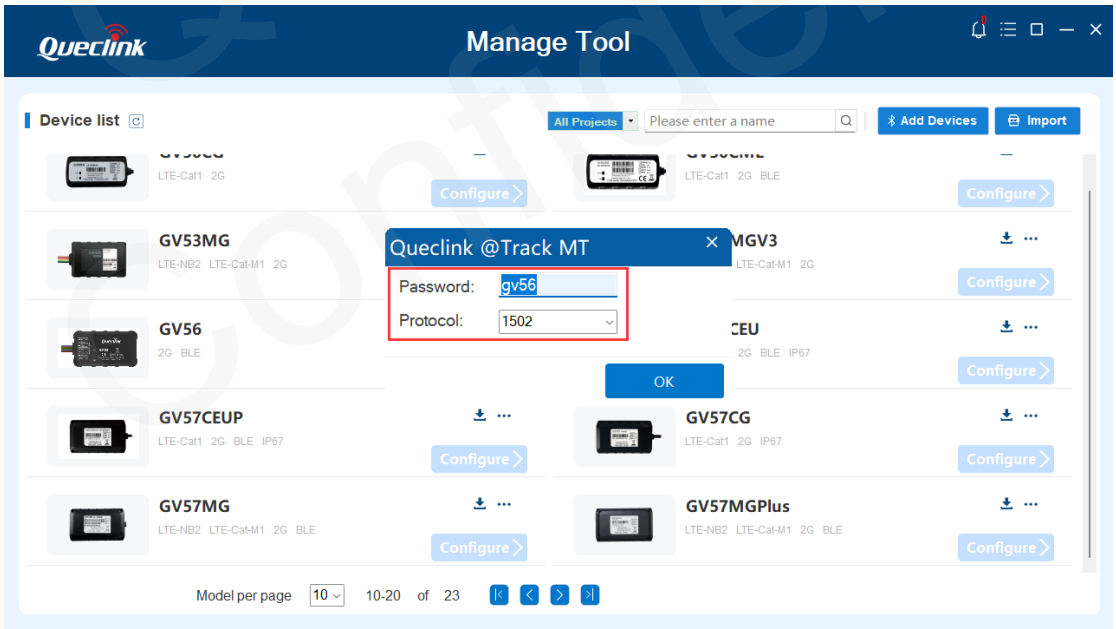
1.2.1.COM Connection

If the COM port of the device is available, open the tool and the device information will be auto-displayed in the device list, including IMEI, firmware version, protocol version and COM port.



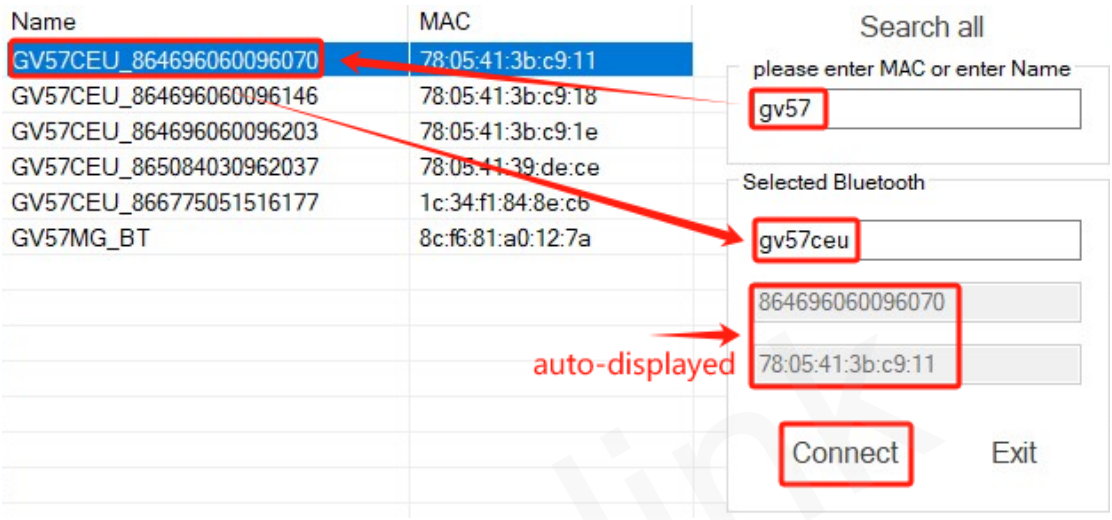
Click **Configure**, the professional setting window will be displayed.

If the device is disconnected from the manage tool, please confirm whether the password and protocol version number are correct, if not, please manually correct it. And then click **OK** to enter the professional setting window.



1.2.2.Bluetooth Connection

If the Bluetooth function (**AT+GTBTS**) of the device is available, please open the tool, and click **Add Devices**, then the "**Search all**" interface will be shown.



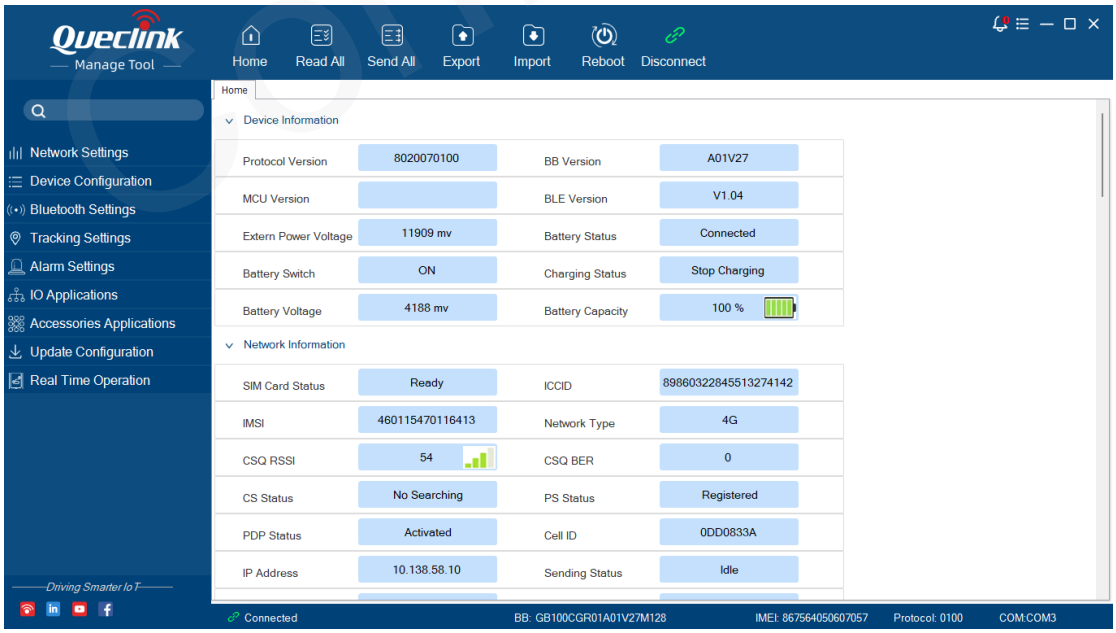
The manage tool supports searching terminals by Bluetooth MAC or Name.

Firstly, input part or all characters of Bluetooth MAC or name, the search results of all the devices can be seen in the left containing relevant characters.

Secondly, select the device to connect. The device information is auto-displayed on the right.

Thirdly, click the **Connect** button. The tool starts Bluetooth authentication and connection with the device. If the Bluetooth information is verified successfully, the device list interface will be displayed again.

Click **Configure**, then the professional setting window will be displayed.

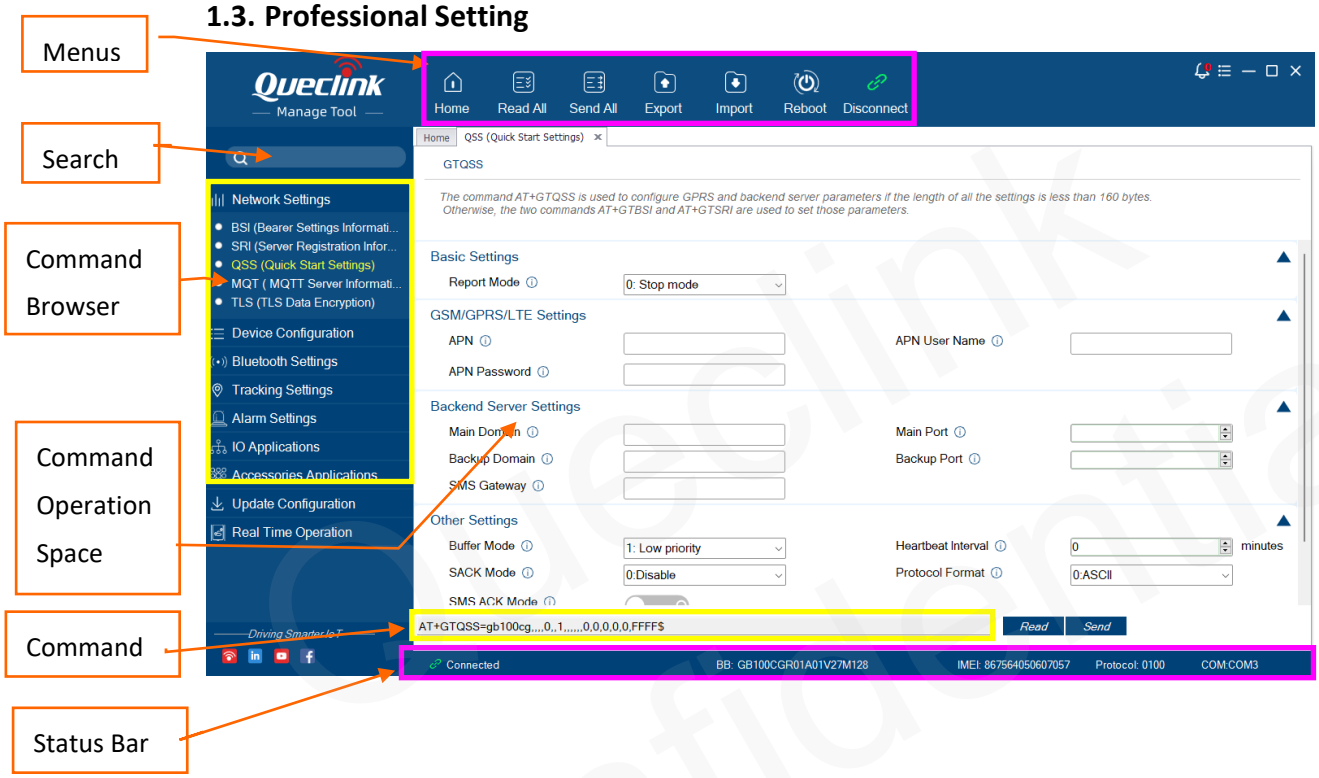


Note:

1. If the verification of Bluetooth information fails, it will not jump to the device list interface. It is recommended to check the Bluetooth status of the device or Bluetooth adapter of the tool. It is necessary to reboot the device or Bluetooth adapter for verifying successfully.

2. Click the "**Exit**" button, then the Bluetooth connection will be cancelled.

1.3. Professional Setting



1.3.1.Menus

It includes many buttons for setting the device.

[Home]: It is used to show the Device Information, Network Information, BLE Information, GNSS Information, GNSS Satellite Signal, IO Status, Motion Sensor Information and Acceleration Data Line Chart.

[Read All]: It is used to read all configurations from device.

[Send All]: It is used to send all configurations from device.

[Export]: It is used to save the configuration by the file name xx.ini.

[Import]: It is used to load the configuration by the file name xx.ini.

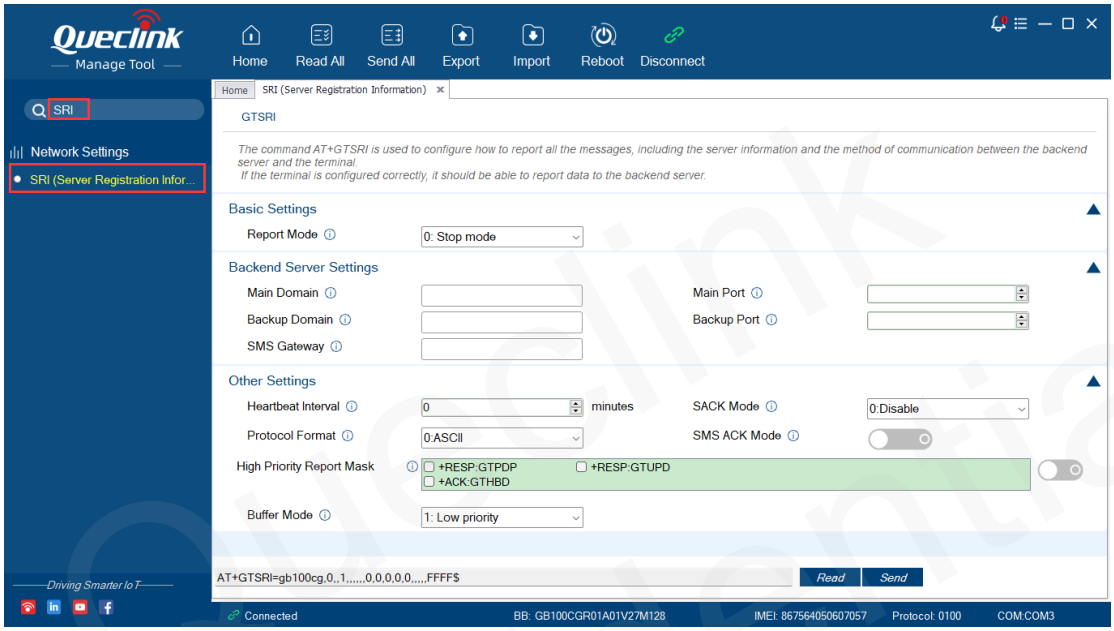
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[Reboot]: It is used to reboot the device after the device is successfully to the Manage Tool.

[Connect]: It is used to connect/disconnect/change device.

1.3.2.Search

It is used to search the command you need. For example, if you input "**SRI**", the command SRI will be shown in the "Command Operation Space".



1.3.3.Status Bar



There are system status and current status in Status Bar.

1.3.4.Command Browser

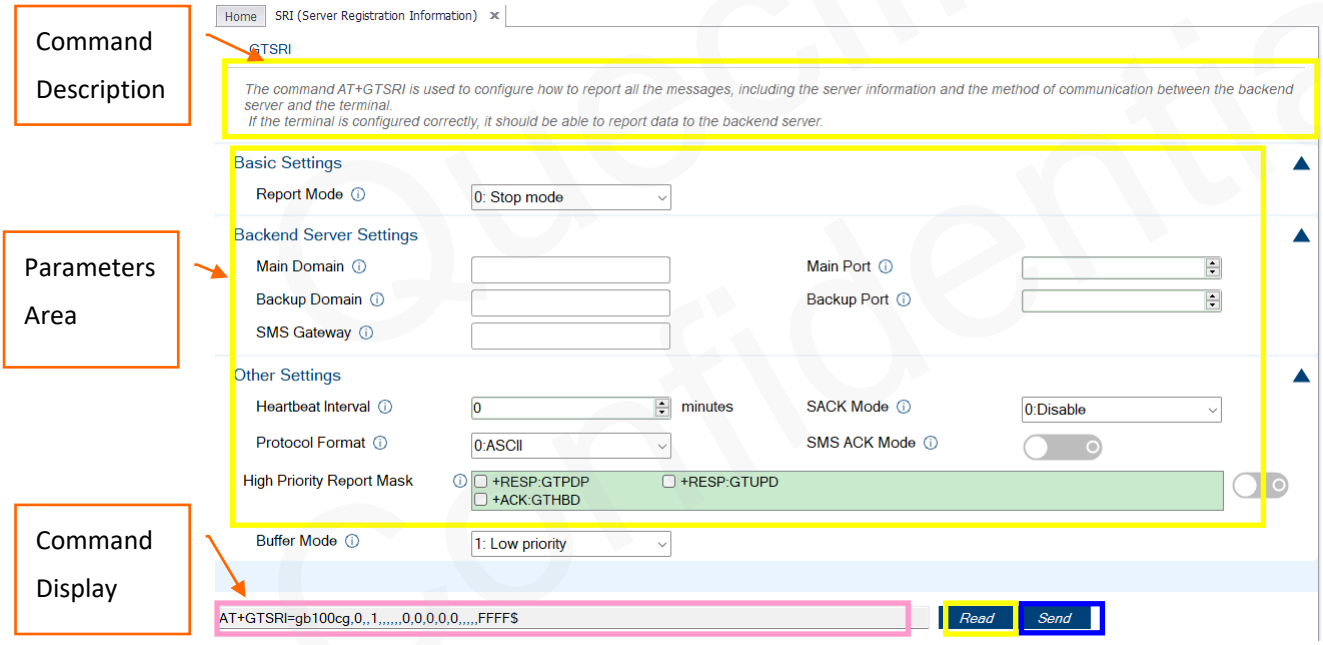
Command Browser divides all @Track protocol commands into several parts. Click Function in Command Browser, parameters of this command will be shown in Command Operation Space.

Command Browser	Commands such as
Network Settings	**AT+GTBSI/SRI…**
Device Configuration	**AT+GTCFG/DOG…**

Bluetooth Settings	**AT+GTBTS/BAS…**
Tracking Settings	**AT+GTFRI/FFC…**
Alarm Settings	**AT+GTTOW/GEO…**
IO Applications	**AT+GTDOS/DIS…**
Accessories Applications	**AT+GTURT/IDA…**
Update Configuration	**AT+GTUPC/FVR…**
Real Time Operation	**AT+GTRTO…**

1.3.5.Command Operation Space

This area is mainly used to read and set parameters of the device.



[Command Description]: There is a short description for the related command.

[Parameters Area]: Set/read parameters of this command in this area.

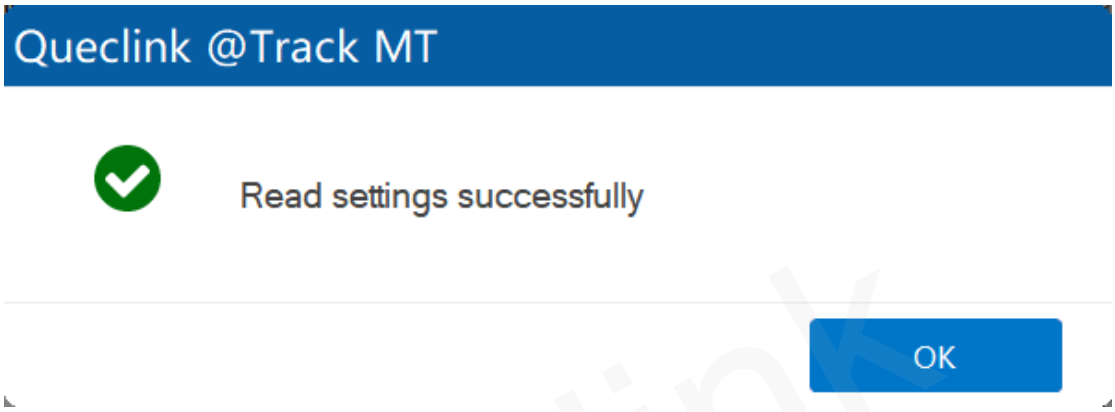
[Command Display]: Command with parameters in parameters area is displayed in this area.

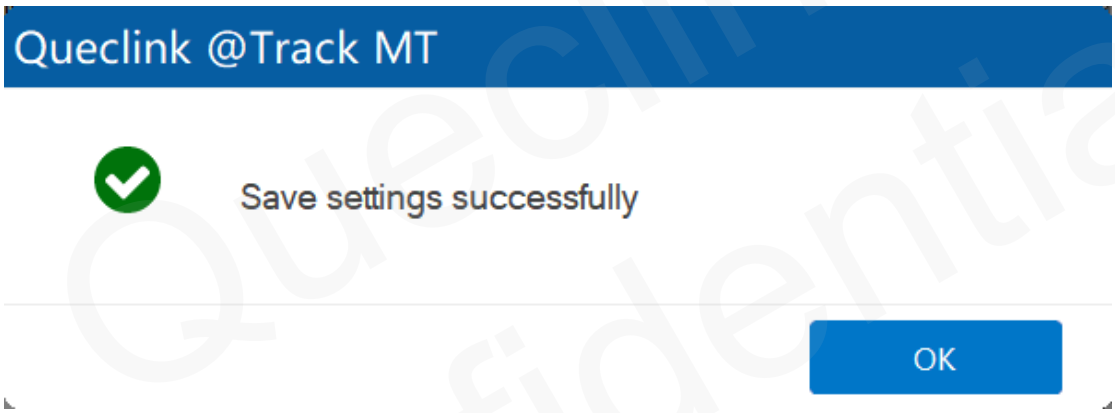
[Read]: Click this button to read this command from the device.

[Send]: Click this button to send this command to the device.

1.4. Operation Result Interface

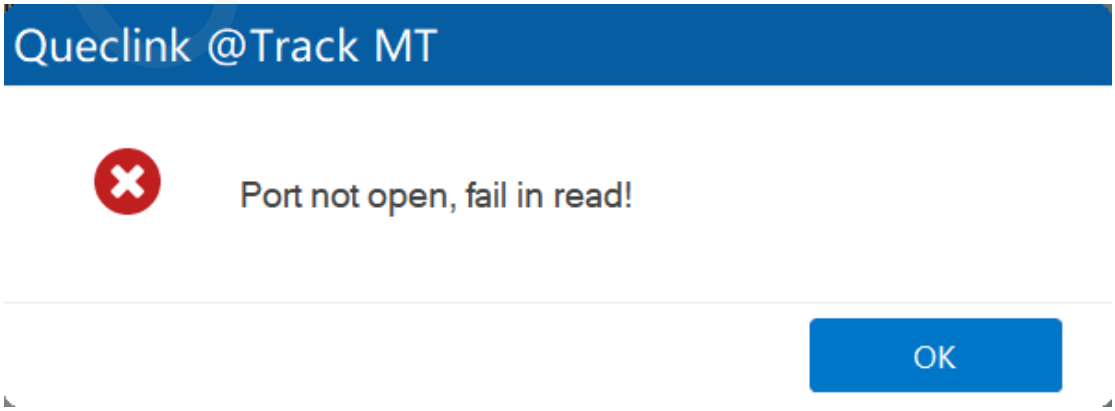
1.4.1.Operation Successful Interface





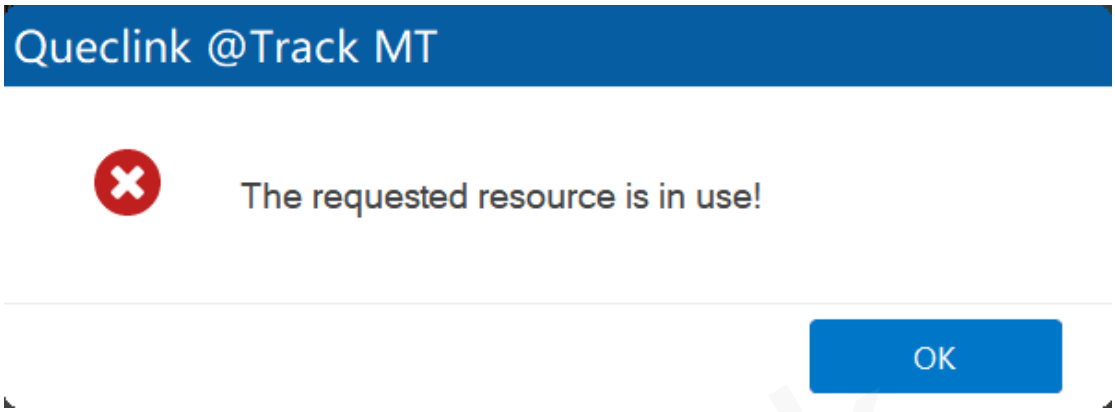
1.4.2.Operation Failed Interface

There should be disconnected with COM port if the failure reason is port not open.

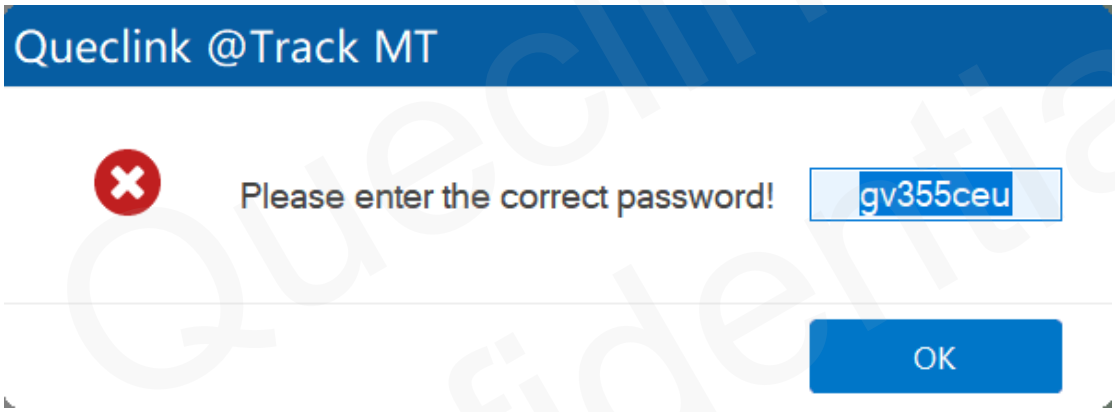


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There should be COM port that is occupied. Please close all other COM-related applications.



Please change to correct device password if Password Error occurs.



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2. Operation Instructions

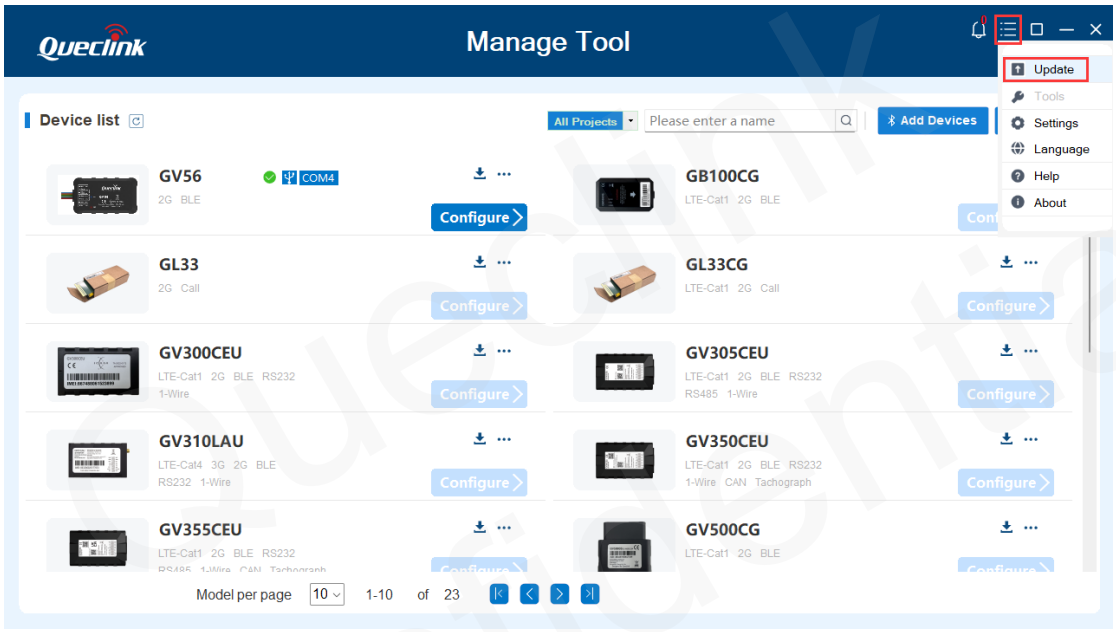
2.1. Upgrade

It supports both tool framework upgrade and configuration upgrade of a single project.

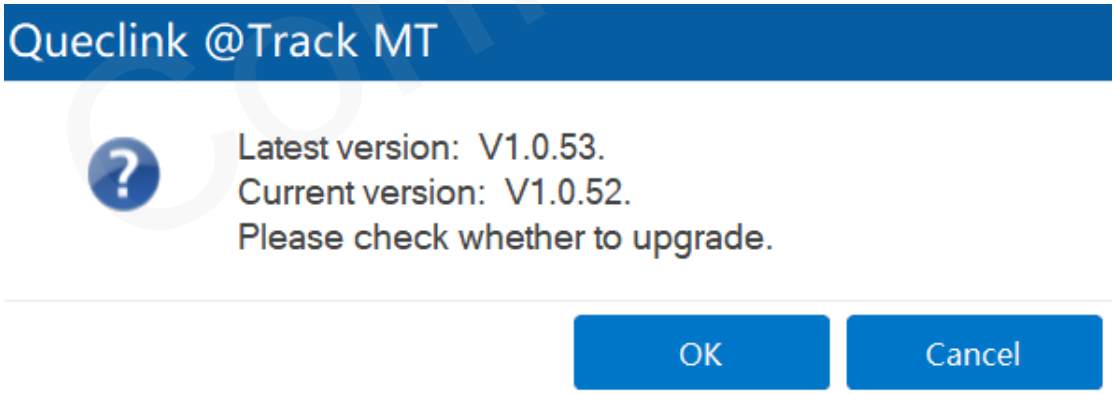
2.1.1.Tool Framework Upgrade

Open "**Queclink @Track MT Setup Vx.x.xx.exe**";

Click "**More**" in the upper right corner as shown below.



Select "**Update**", and then pop up the tip: "**Please check whether to upgrade.**"

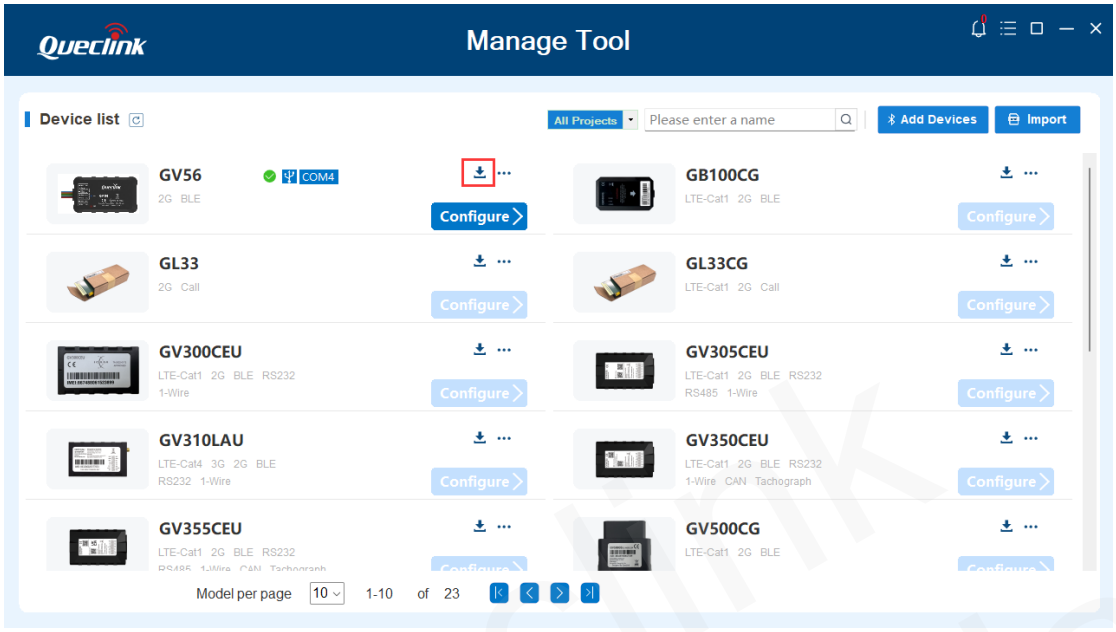


Click "**OK**" to upgrade the tool version.

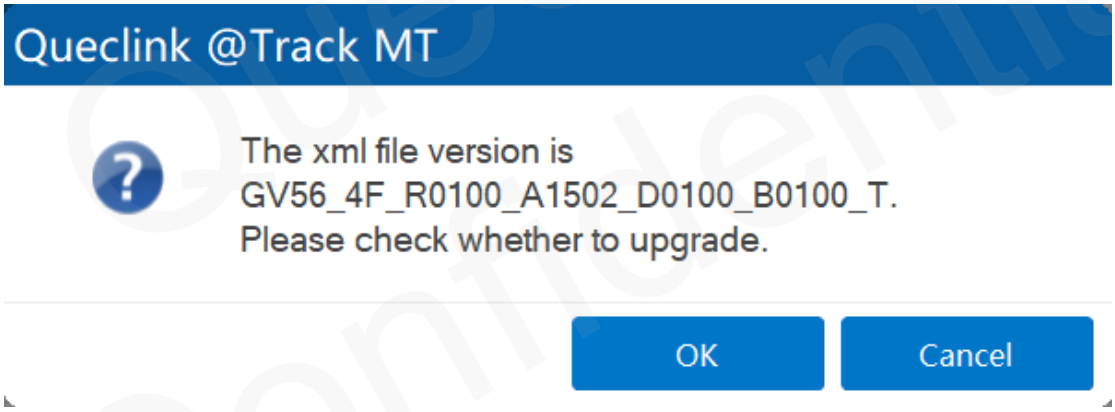
Click "**Cancel**" to cancel the tool version upgrade.

2.1.2.Configuration Upgrade Remotely

Open "**Queclink @Track MT Setup Vx.x.xx.exe**", the following interface will be displayed:



Click on the icon marked in red, and then pop up the tip: "**Please check whether to upgrade.**"



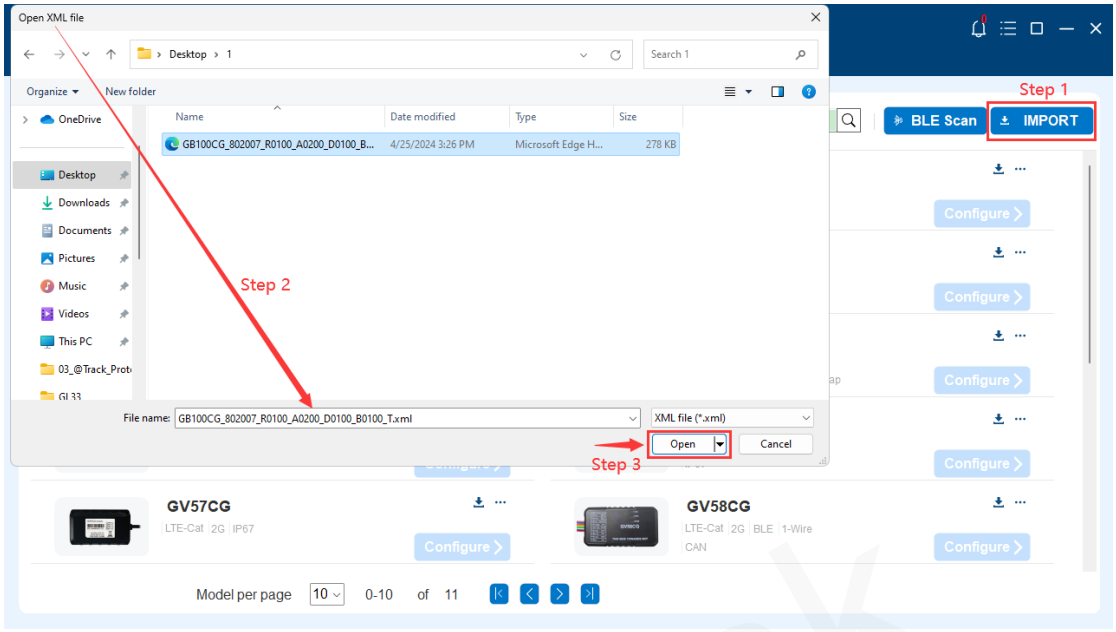
Click "**OK**" to upgrade the version of the xml file.

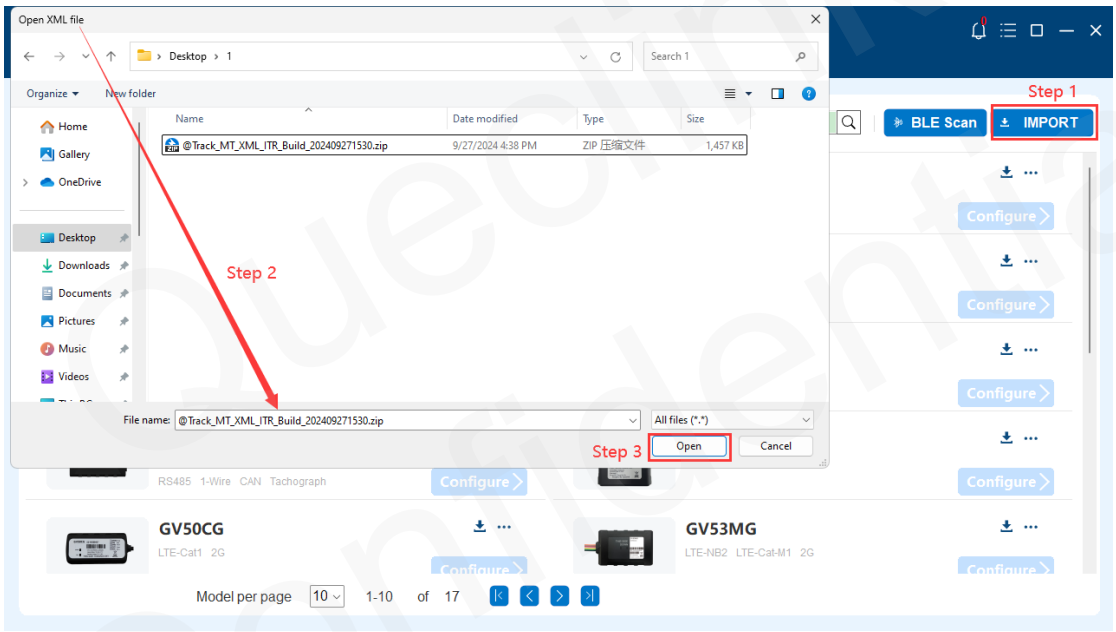
Click "**Cancel**" to cancel the xml file version upgrade.

2.1.3.Configuration Upgrade Locally

Configuration can be upgraded locally by importing the xml file of the protocol version supported by the terminal. The specific steps are as follows:

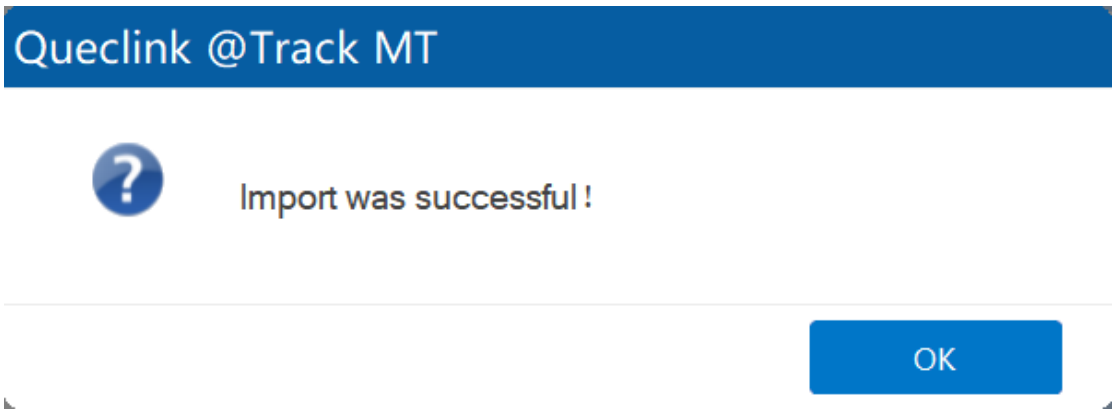
Step 1: Click "**IMPORT**" in the upper right corner. A window will then pop up to open the single xml file or the zip package.





Step 2: Find the xml file and the file name is displayed.

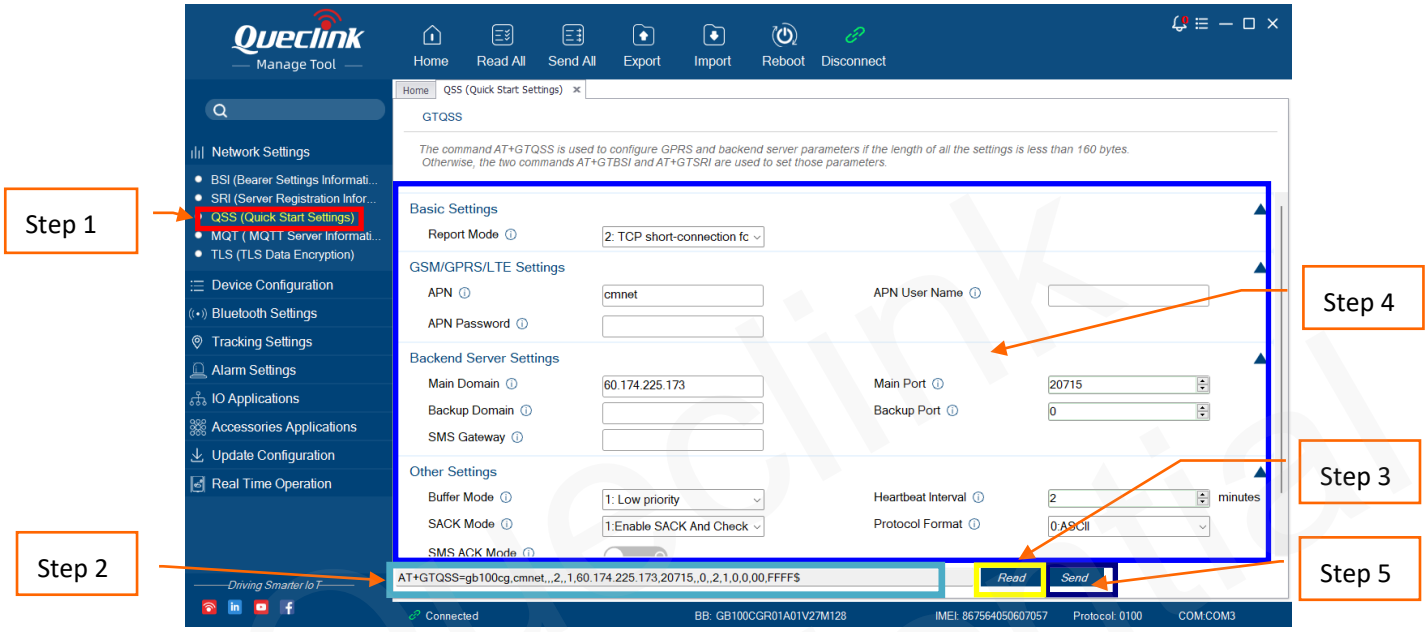
Step 3: Click "**Open**", and then pop up the tip: "**Import was successful!**"



2.2. Device Configuration in Professional Setting

The device configurations can be displayed on the Manage Tool. For the details of the configuration, please refer to the commands in the document ***@Track Air Interface Protocol***.

The following shows a general procedure to configure the terminal with the Manage Tool.



Step 1: Select **QSS (Quick Start Settings).** After that, the parameters of the command (**AT+GTQSS**) are shown in Command Operation Space.

Step 2: The command to be sent to the terminal will be generated and displayed here. Please note this command can also be sent through SMS or GPRS/LTE.

Step 3: It is recommended to read the parameters from the terminal and edit settings based on them.

Step 4: Set the parameters.

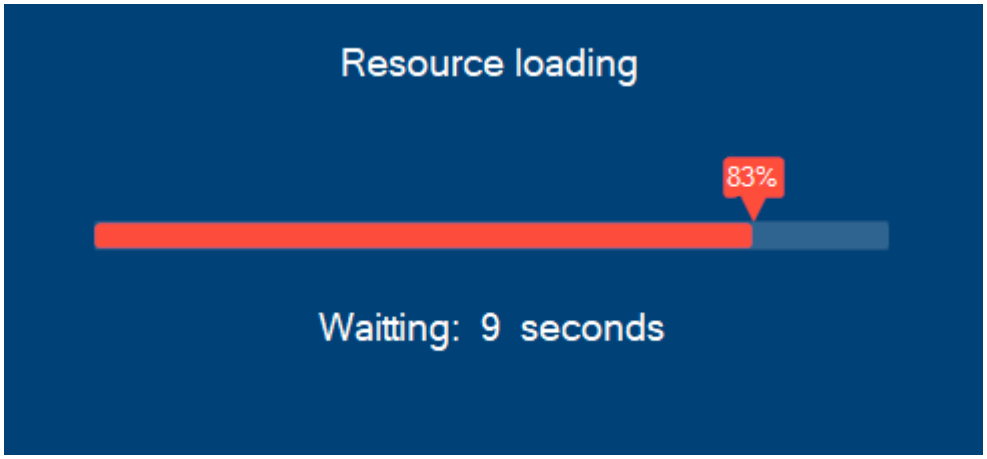
Step 5: Click the **Send** button; the command **(AT+GTQSS)** is sent to the terminal

Note: The parameters of the commands (**AT+GTSRI** and **AT+GTBSI**) will be changed together when the parameters of the command (**AT+GTQSS**) are changed.

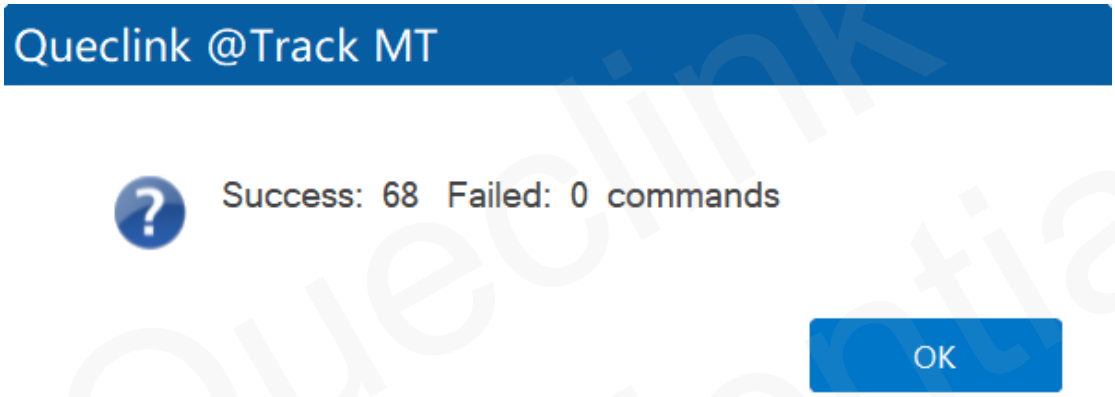
2.3. Read All/Export All

It is recommended to read all configurations from the device before saving the configuration.

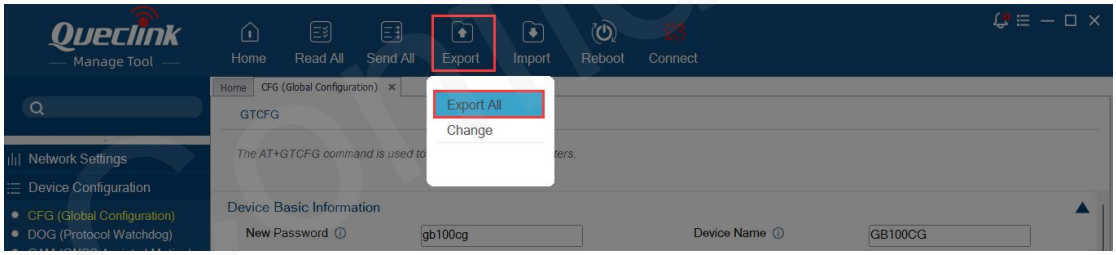
Step 1: Click the "**Read All**" button, then the progress tip will be shown:



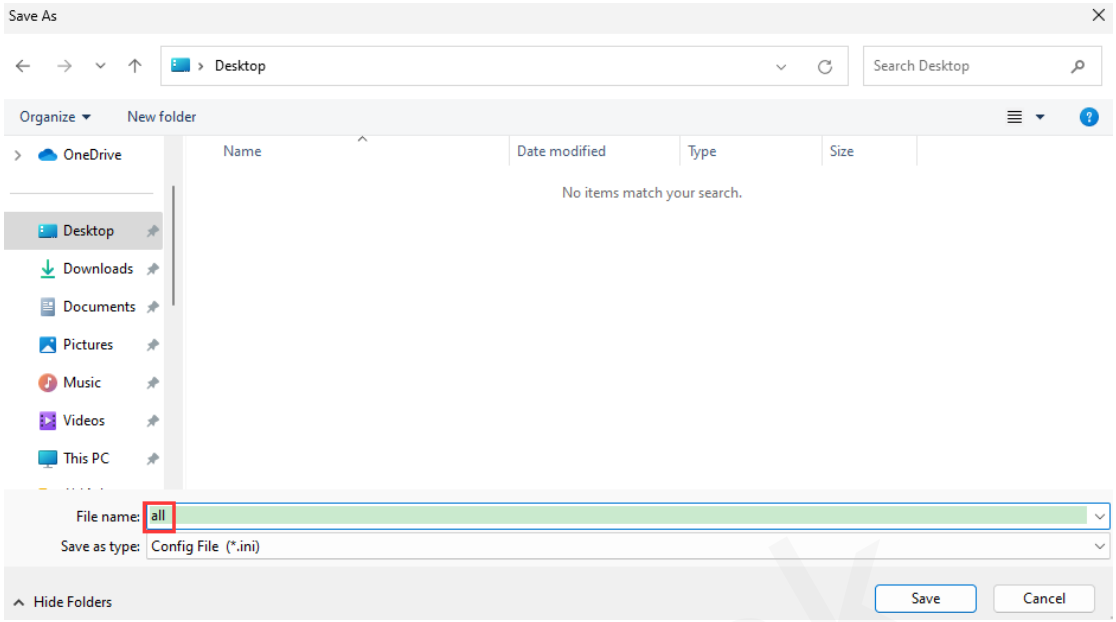
Step 2: After reading successfully, the following result will be displayed.



Step 3: Click the button "**Export**" > "**Export All**".



Step 4: Select a folder, and enter a name for the configuration file.



Then all the configuration will be saved successfully as "**xxx_at.ini**", which can be found in the directory.



Note: The configuration file has been saved with all the AT commands (except **AT+GTRTP**, **AT+GTLTP**, **AT+GTDAT**, **AT+GTTAP**, **AT+GTCDA**, **AT+GTIDC**, **AT+GTTTR**, **AT+GTSMS**, **AT+GTTKS**, **AT+GTRTO**, **AT+GTCFU**, **AT+GTFVR**, **AT+GTUFS**, **AT+GTUPD**). The name of the .ini file is composed of configuration file name and "_at".

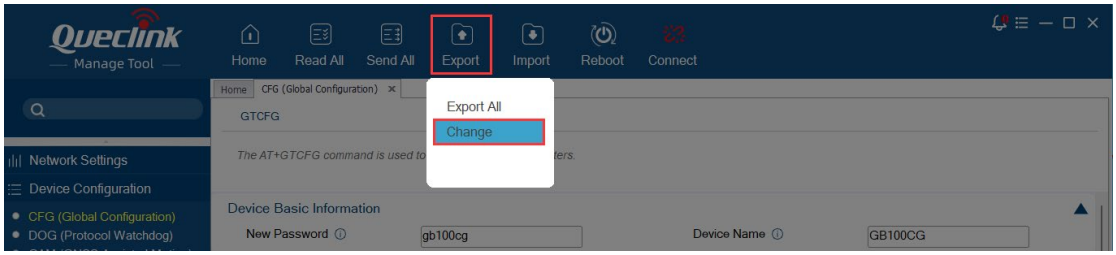
2.4. Read/Export Change

It is possible to read and export not only all configurations, but also changed configurations.

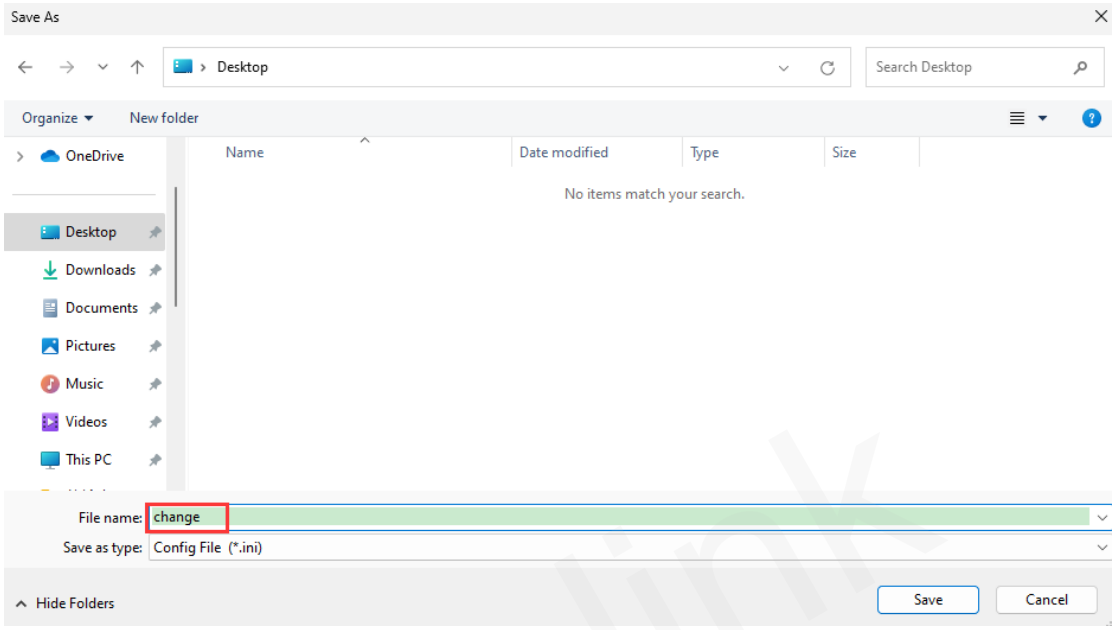
Step 1: Select some commands, and click the "**Read**" button separately. The parameters of the selected commands can be read.

Step 2: Change the parameters of some commands, which can be not sent by the tool.

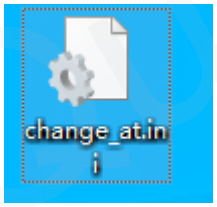
Step 3: Click the button "**Export**" > "**Change**".



Step 4: Select a folder, and enter a name for the configuration file.

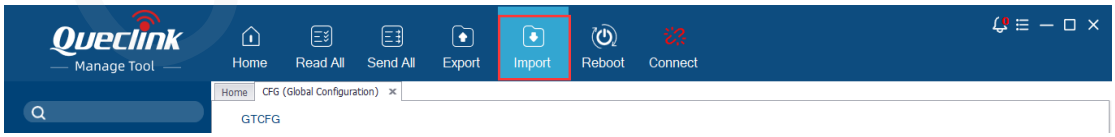


Then the changed configuration will be saved successfully as "**xxx_at.ini**", which can be found in the directory.

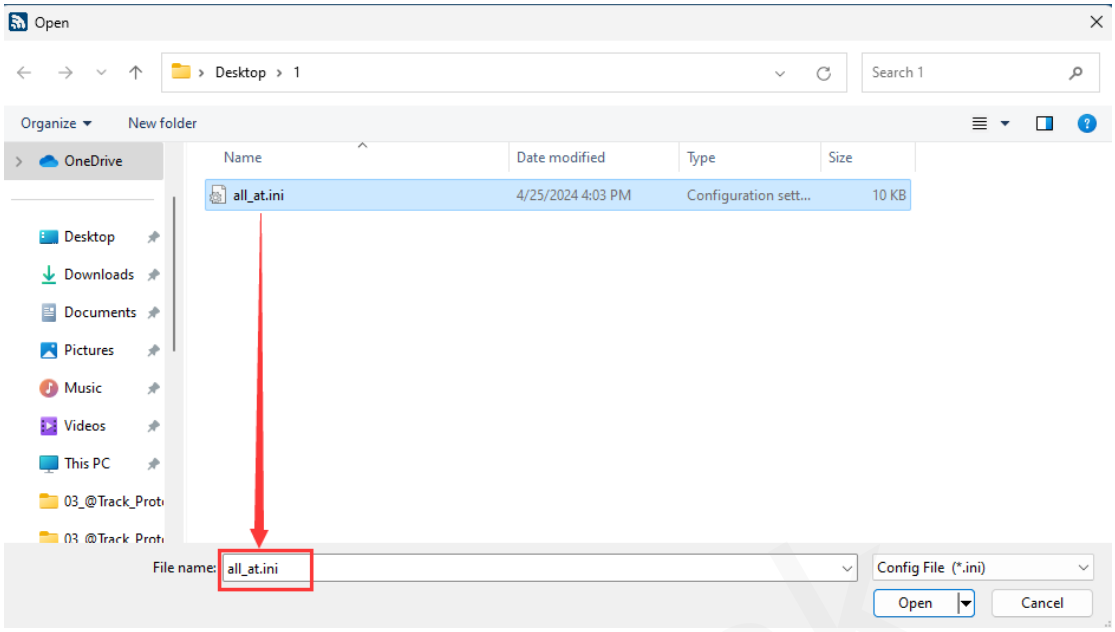


2.5. Import

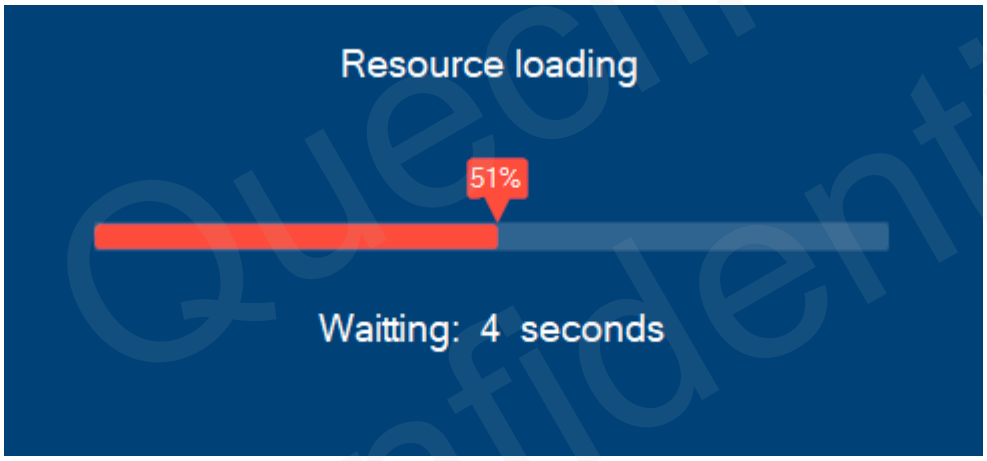
Step 1: Click the button "**Import**".



Step 2: Select the folder where the configuration file is stored as shown below.



Then the configurations of the file can be loaded by the manage tool.



Step 3: Check the load commands one by one and they are consistent with the configuration file.

Note: All commands can be loaded with files, or only some commands can be loaded.

2.6. Send All

There are 3 functions ("**Send All**", "**Only Change**" and "**Change/Import**") in the menu of "**Send All**".

"**Send All**" is used to send all the AT commands (except **AT+GTLTP**, **AT+GTRTP**, **AT+GTTTR**, **AT+GTUFS**, **AT+GTCFU**, **AT+GTRTO**, **AT+GTSMS**, **AT+GTUPC**, **AT+GTQSS**, **AT+GTCDA**, **AT+GTTAP**, **AT+GTDAT**, **AT+GTTKS**, **AT+GTFVR**, **AT+GTUPD**, **AT+GTIDS**) from manage tool to the device when they are connected.

"**Only Change**" is only used to send the changed command.

"**Change/Import**" can be used to send both the modified command and the Import configuration.

2.7. Home

This function can help you quickly view the device information and diagnose device problems.

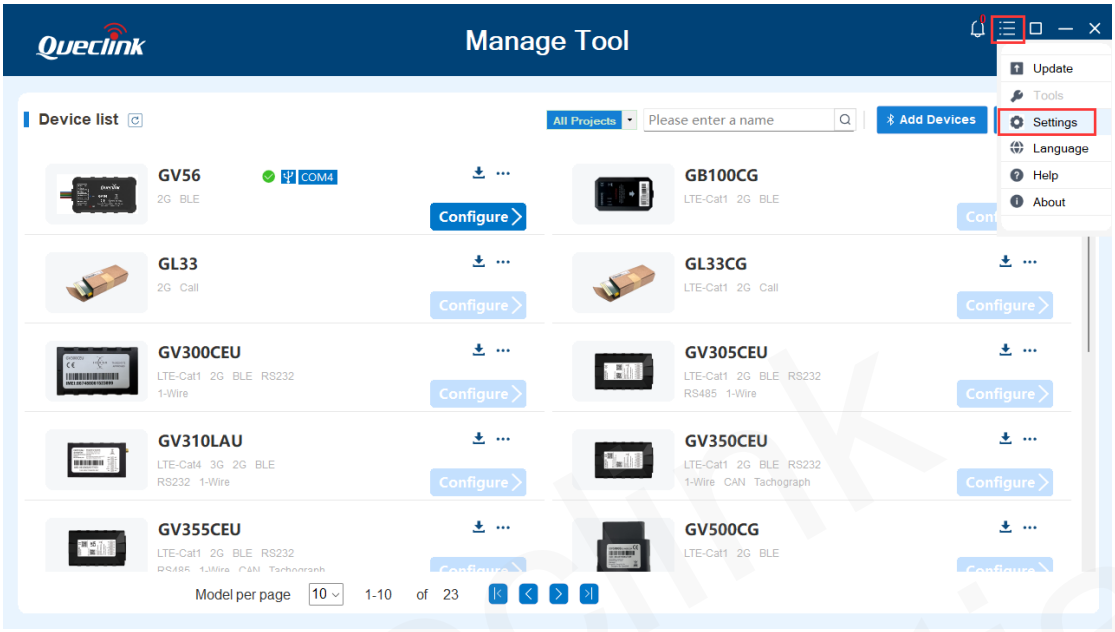
It includes the following types:

- Device Information
- Network Information
- BLE Information
- CAN Information
- GNSS Information
- GNSS Satellite Signal
- I/O Status
- Motion Sensor Information
- Acceleration Data Line Chart

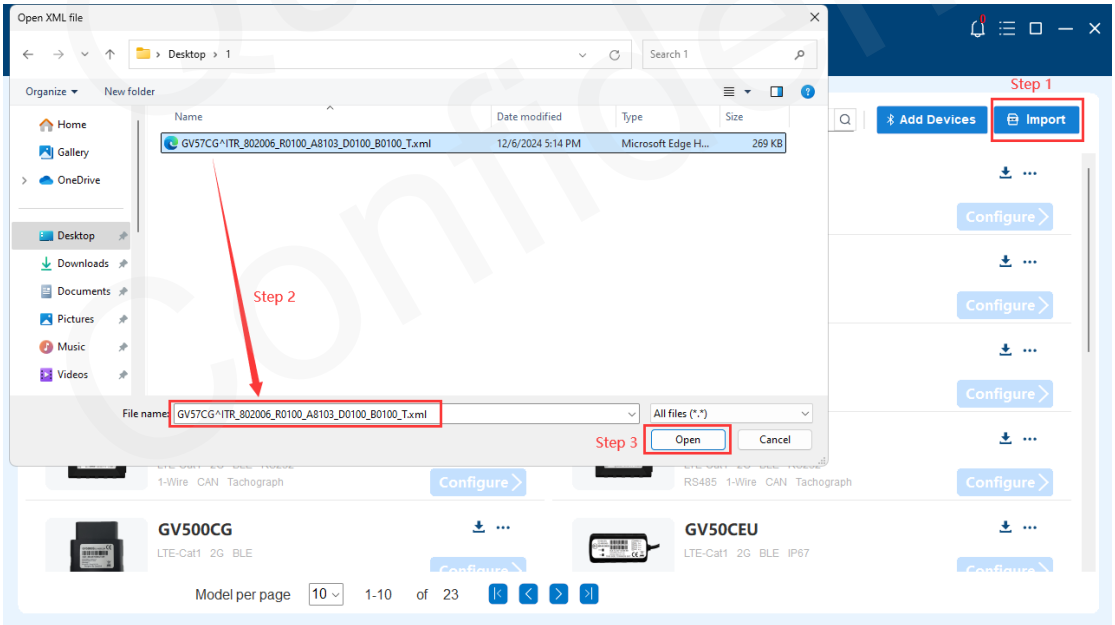
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3. System Settings

Click "**More**" in the upper right corner and select "**Settings**", then the System Settings interface will be displayed.



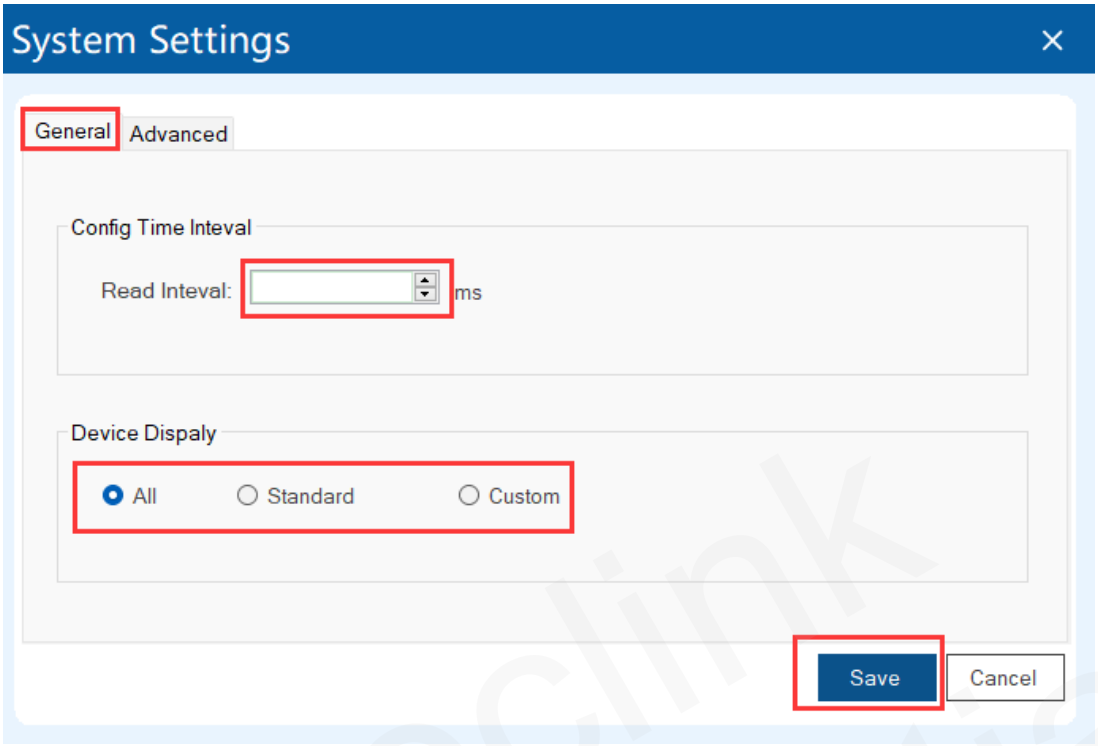
Note: For custom devices, it is necessary to check whether the corresponding xml file is contained in the system folder of the Manage Tool installation path in the computer. If not, please import the corresponding xml file.



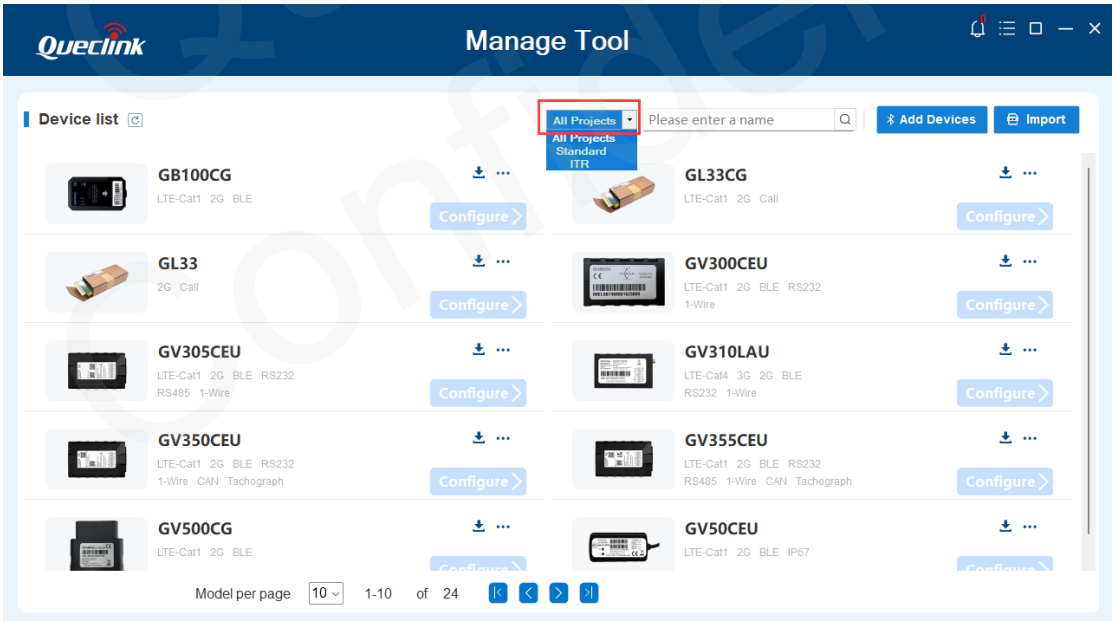
3.1. General

Config Time Interval is designed to set the interval for **Read All**.

Device Display is designed to set which type of device will be displayed in the device list interface.

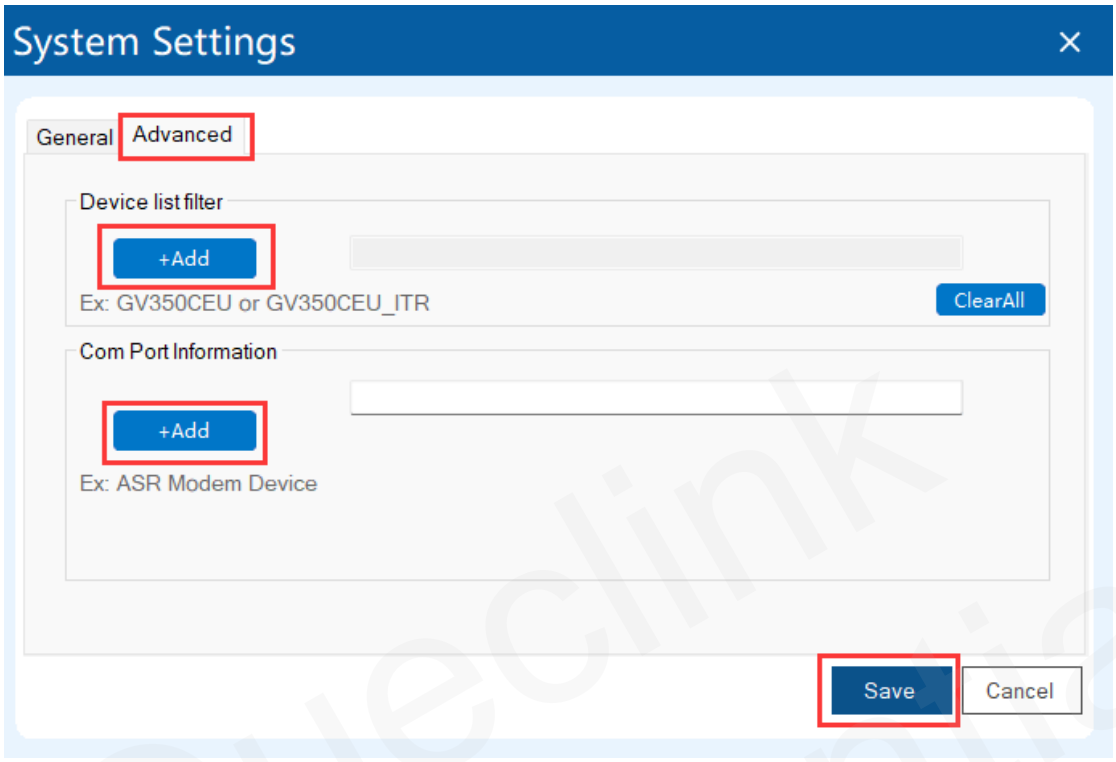


Note: The **ALL Project** option in the **Device List** interface can also be used to set which type of device to be displayed. But this option will be reset to default after closing the Manage Tool interface.



3.2. Advanced

The **Device list filter** option is designed to set one or more specific projects to be displayed in the Device List interface.



Please manually add the correct Port name (e.g., "**MTK USB Port**") to the **Com Port Information** option if the Manage Tool cannot identify the device port due to a mismatch between the com port name defined by the device and the one displayed on your computer.

