

GV55N Manage tool User Guide

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GV55N



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0. Revision History

Revision	Date	Author	Description of change
1.00	2015-03-25	Miranda Wang	Initial

1. GV55N Manage Tool Interface

GV55N manage tool is PC software which can be used to configure GV55N through UART. It is easy for the backend server developers to configure GV55N with manage tool, which has friendly user interface. The correct command messages sent to GV55N will be displayed on the manage tool. (These messages can also be sent by SMS or GPRS).

The administrators can also use the manage tool to configure GV55N before selling. But it is strongly recommended to establish a backend server and implement the way to control GV55N by SMS or GPRS. Please refer to “GV55N @Track Air Interface Protocol” for detail.

Before using the manage tools please install driver for the USB data cable (DATA CABLE_M). After that a new COM port can be found in the PC system, and then please follow the steps as below:

1. Connect GV55N to 12VDC power supply and GV55N will power on.
2. Connect GV55N to PC with USB data cable (DATA CABLE_M).
3. Run “GV55N Manage Tool Vx.xx.exe”.

1.1. System Requirements

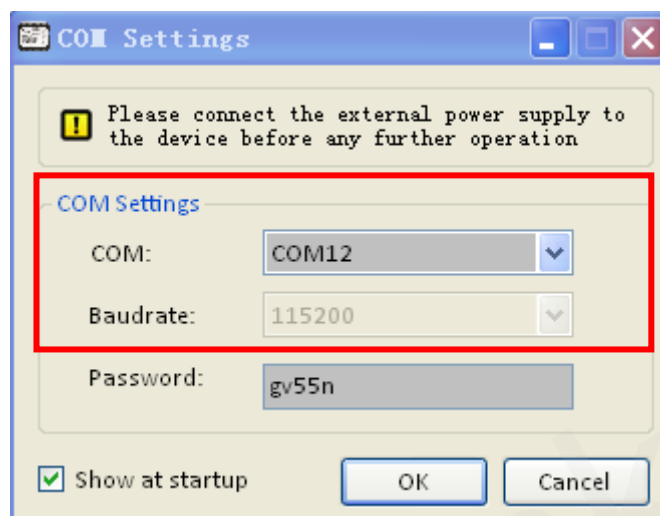
In order for this manage tool to run on your computer, you must use it in below operating system:

- ◆ Windows 98SE;
- ◆ Windows ME Windows 2000 SP4;
- ◆ Windows XP SP2 and above (32 & 64 bit);
- ◆ Windows Server 2003 (32 & 64 bit);
- ◆ Windows Server 2008 (32 & 64 bit);
- ◆ Windows Vista (32 & 64 bit);
- ◆ Windows 7 (32 & 64 bit);

Supported System Environments:

- ◆ Microsoft .NET Framework 2.0 or higher

1.2. COM Setting



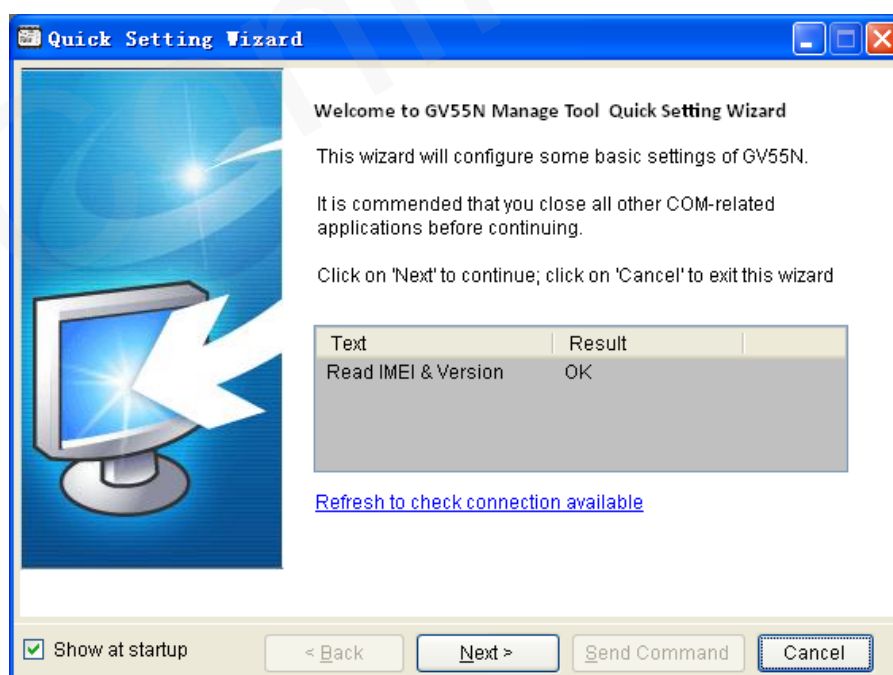
Select the COM port and baud rate (115200bps in default), input the password ("GV55N" in default), and click "OK" button, then setting window will display.

1.3. Quick Setting Wizard

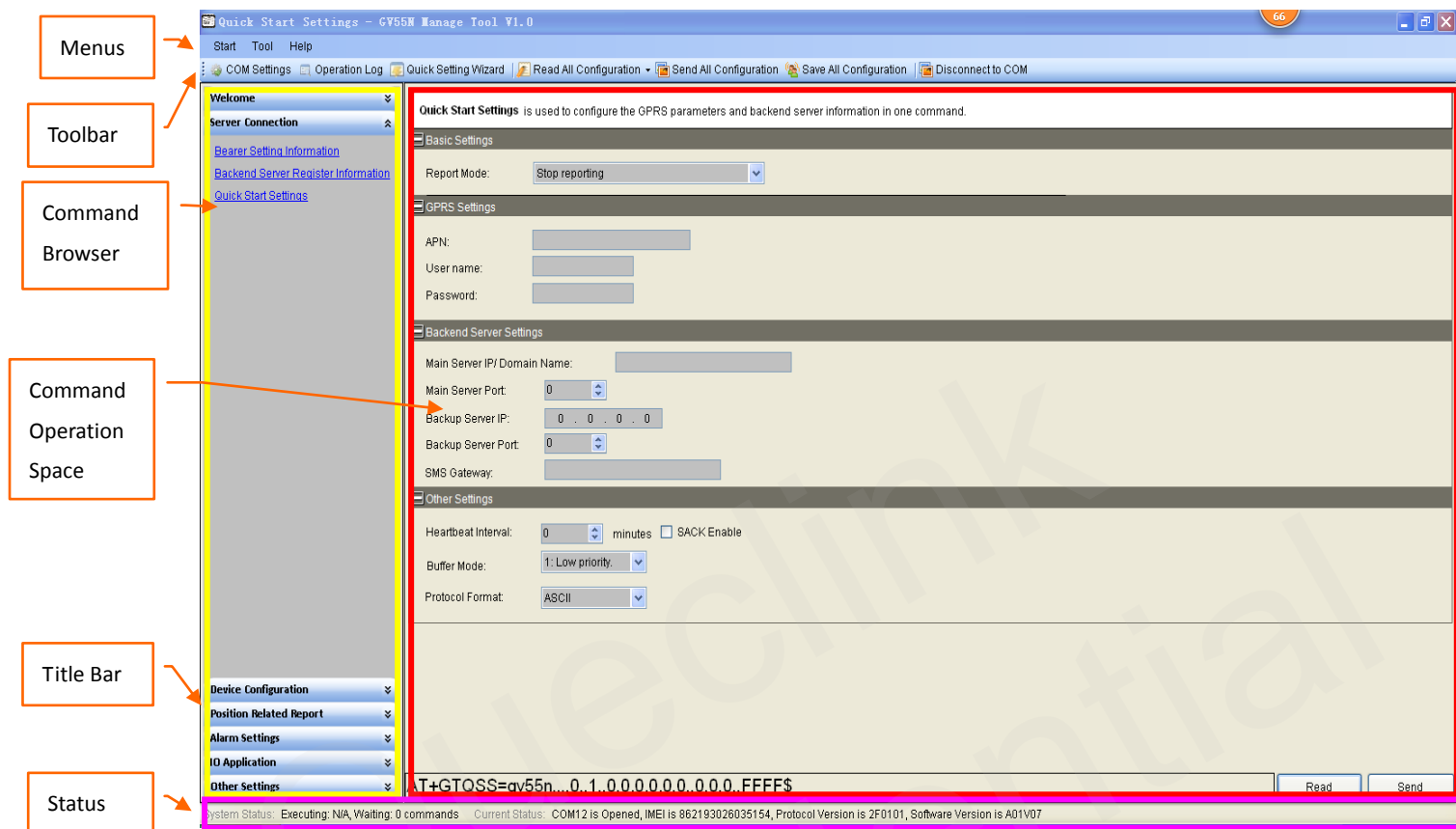
The quick setting wizard gives a basic setting for device. If you want use more functions of GV55N, please change to enter professional setting mode.

Before you enter quick setting wizard, you must make sure the COM connection is OK.

Please refer chapter 3.1 for the detail of setting with quick setting wizard.



1.4. Professional Setting Windows

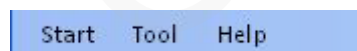


1.4.1. Title Bar

Title Bar indicates current operational command title and the name of manage tool.

1.4.2. Menus

It include "Start", "Tool", "Help" menu in menus.



1.4.2.1 Start Menu

Start menu include "COM Settings".

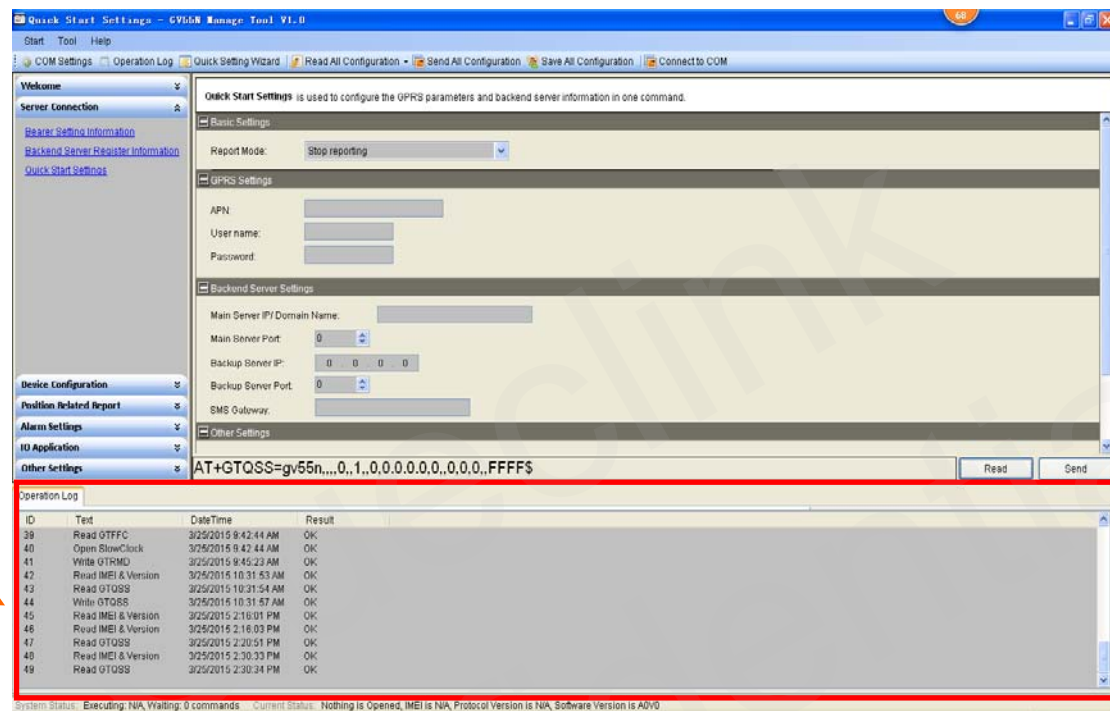
[COM Setting]: It is used to set the COM information and password Setting details please refer to chapter 2.2

1.4.2.2 Tool Menu

Tool menu include “Quick Setting Wizard”, “Operation Log”, “Options” setting.

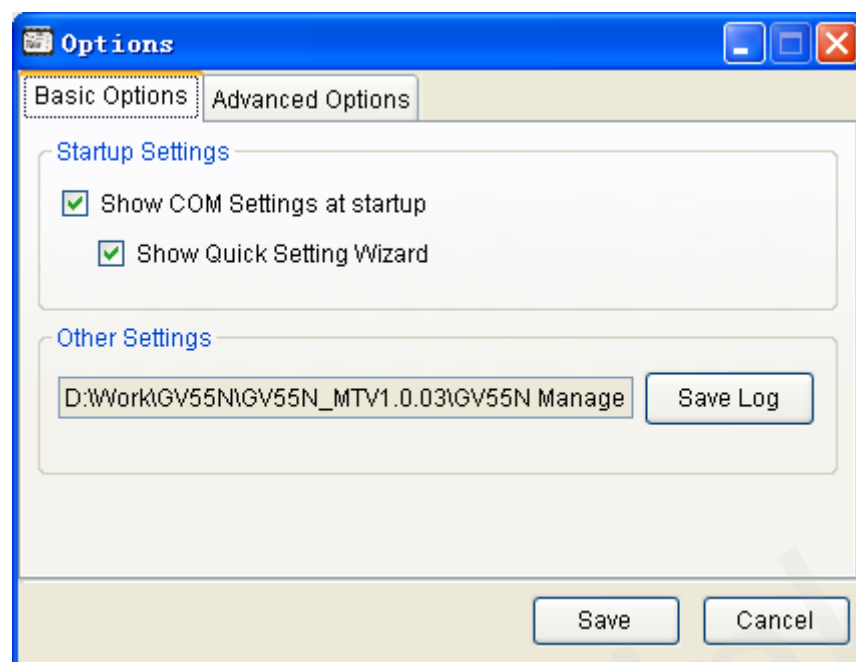
[Quick Setting Wizard]: It is used to open quick setting wizard directly. Please refer to chapter 3.1 for details.

[Operation Log]: It is used to display/hidden the operation log.



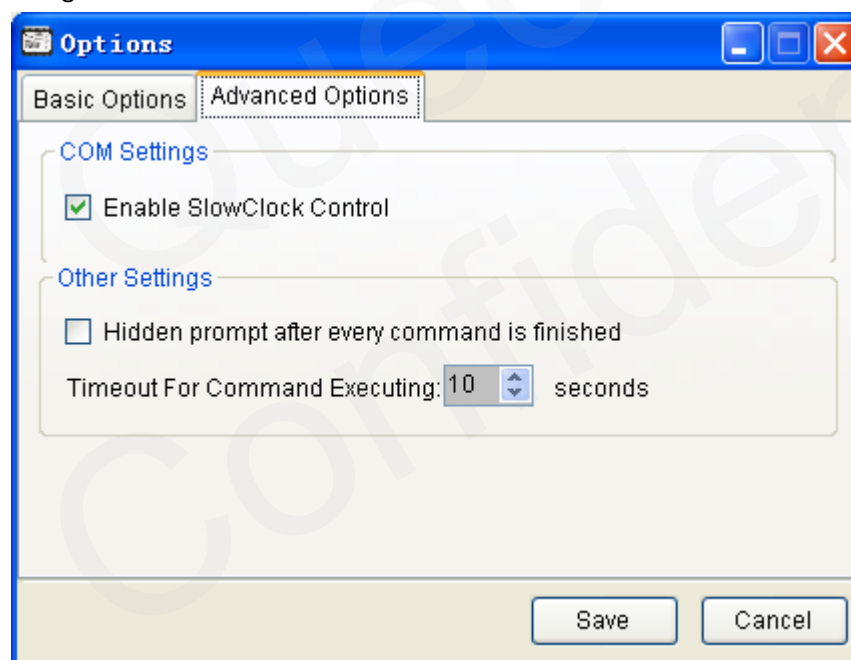
[Options]: It is used to set the basic setting of manage tool.

“Basic Options” include startup setting options and log save option.



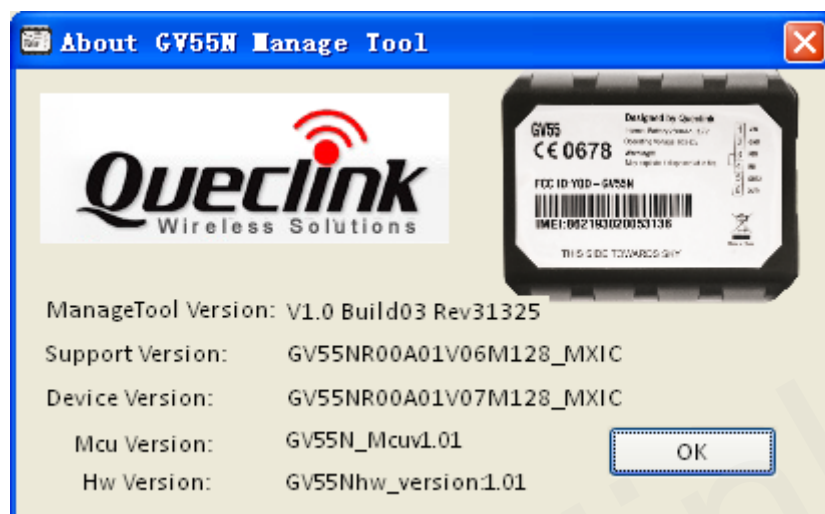
"Advanced Options" include COM settings and other settings.

COM Settings is used to set COM setting. It is recommended using default setting for these settings.



1.4.2.3 Help Menu

[About]: Select “About”. Then the following pop up window will display.



“Manage Tool Version” indicates the version of this manage tool.

“Support Version” indicates the firmware which this manage tool used for.

“Device Version” indicates the firmware which connects to the PC. It is recommended using the same version of support version. If it is different between support version and device version, the new character of device can not be used in this tool.

“Mcu Version” indicates the device’s MCU version which connects to the PC.

“Hw Version” indicates the device’s HW version which connectd to the PC.

1.4.3. Toolbar

It include “COM Setting”, “Operation Log”, “Quick Setting Wizard”, “Real All Configuration”, “Send All Configuration”, “Save All Configuration”, “Connect/Disconnect to COM”.



[COM Setting]: It is used to set the COM information and password. Setting details please refer to chapter 2.2.

[Operation Log]: It is used to display/hidden operation log.

[Quick Setting Wizard]: It is used to open quick setting wizard directly. Please refer to chapter 3.1.1 for details.

[Read All Configuration]: It is used to display/hidden read and load.



“Read From Device”: It is used to read all configurations (except command GTOUT and GTRTO) from device which connects to PC.

“Load Configuration From File”: It is used to load configuration file to the manage tool.

[Send All Configuration]: It is used to send all configurations (except command GTBSI, GTSRI, GTRTO) in Command Operation Space.

[Save All Configuration]: It is used to save all configurations in Command Operation Space to file.

[Connect/Disconnect to COM]: It is used to Connect/Disconnect to COM manually.

1.4.4. Status Bar

System Status: Executing: N/A, Waiting: 0 commands Current Status: COM12 is Opened, IMEI is 862193026035154, Protocol Version is 2F0101, Software Version is A01V07

There is system status and current status in status bar.

[System Status]: It indicates the count of commands which are waiting and executing to set.

[Current Status]: It indicates current COM status, IMEI, protocol version and software version which read from device.

1.4.5. Command Browser and Command Operation Space

This area is mainly read and set parameters of device.

1.4.5.1 Command Brower

Command Brower separates all @track protocol command to several parts. Click Function in command Brower, reference parameters of this command will be shown in command operation space.

Command Brower	Function Description	Relative Command
Server Connection	Bearer Setting Information	GTBSI
	Backend Server Register Information	GTSRI
	Quick Start Settings	GTQSS
Device Configuration	Global Configuration	GTCFG
	Auto-Unlock PIN	GTPIN
	Time Adjustment	GTTMA

	Outside Working Hours	GTOWH
	Software Protocol Watchdog	GTDOG
	Preserve special device logical state	GTPDS
	Software Protocol Watchdog	GTDOG
	Hex Report mask	GTHRM
Position Related Report	Fixed Report Information	GTFRI
	Frequency Change of Fixed Report Information	GTFFC
Alarm Setting	Tow Alarm Configuration	GTOW
	Geo-Fence Configuration	GTGEO
	Roaming Detection Configuration	GTRMD
	Speed Alarm	GTSPD
	Buzzer Alarm Definition	GTBZA
	Over Speed Alarm	GTSPA
	SOS Alarm	GTSOS
	Excessive Idling Detection	GTIDL
	Start Stop Report	GTSSR
	Harsh Behavior Monitoring	GTHBM
	Jamming Detection	GTJDC
	Crash Detection	GTCRA
	GPS Jamming Status Report	GTGPJ
IO Application	Digital Output Port Setting	GTOUT
	Digital Input Port Setting	GTDIS
	Input/Output Port Binding	GTIOB
	External Power Supply Monitoring	GTEPS
Other Settings	Real Time Operation	GTRTO
	Hour Meter Counter	GTHMC
	White List	GTWLT
	Store Command String	GTCMD
	User Defined Function	GTUDF

1.4.5.2 Command Operation Space

Command
Description

Quick Start Settings is used to configure the GPRS parameters and backend server information in one command.

Basic Settings

Report Mode: TCP long-connection mode

It is suggest to set heartbeat interval in TCP long-connection mode. And the backend server should respond heartbeat data(+SACK:GTHBD) to unit.

GPRS Settings

APN:

User name:

Password:

Backend Server Settings

Main Server IP/Domain Name:

Main Server Port:

Backup Server IP:

Backup Server Port:

SMS Gateway:

Other Settings

Heartbeat Interval: minutes ☒ SACK Enable

Buffer Mode:

Protocol Format:

Command Display

`AT+GTQSS=gv55n,,,3,,1,220.178.67.210,10014,0.0.0.0,0,,5,1,0,,FFFF$`

Parameters
Area

Command
Display

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

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

[Command Display]: Command with parameters in parameters area display in this area.

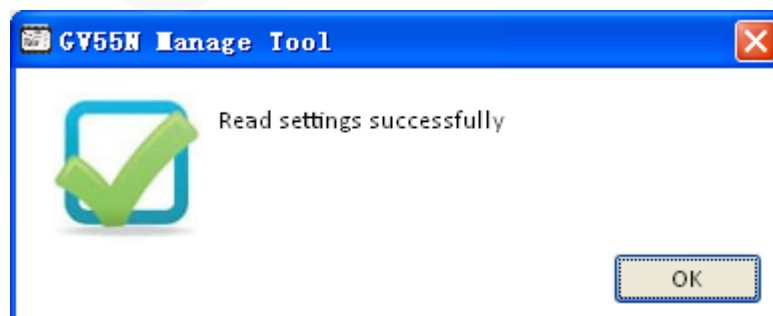
[Read]: Click this button to read this command from device.

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

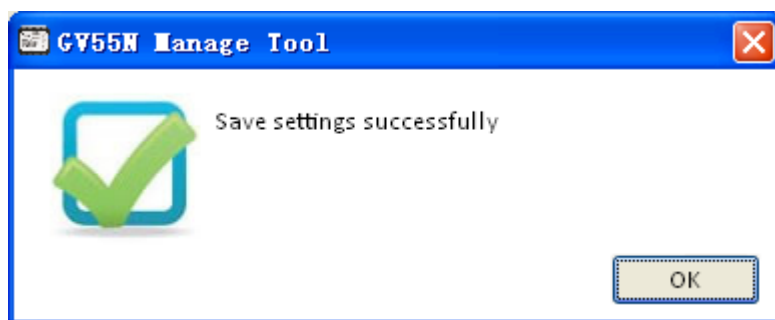
1.5. Operation Result Interface

1.5.1. Operation Successfully Interface

Command read OK.

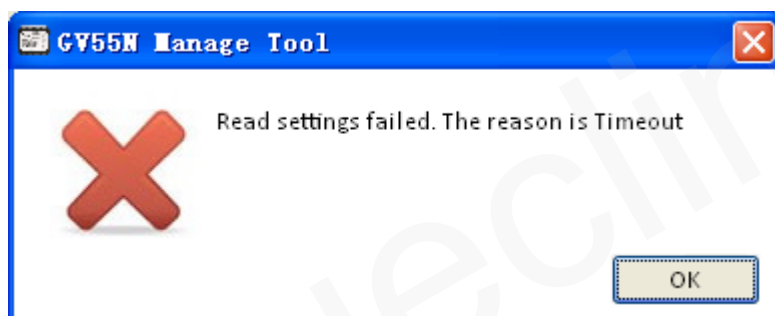


Command send OK.

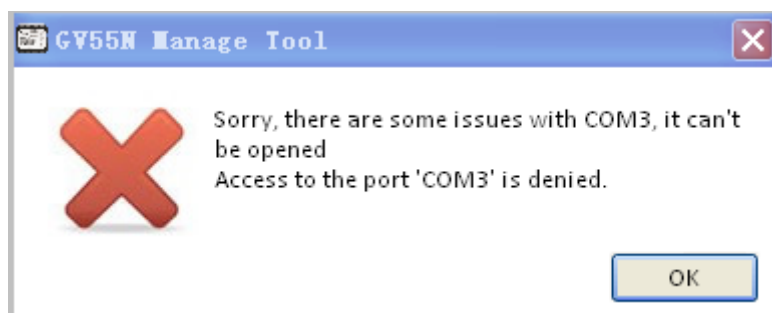


1.5.2. Operation Failed Interface

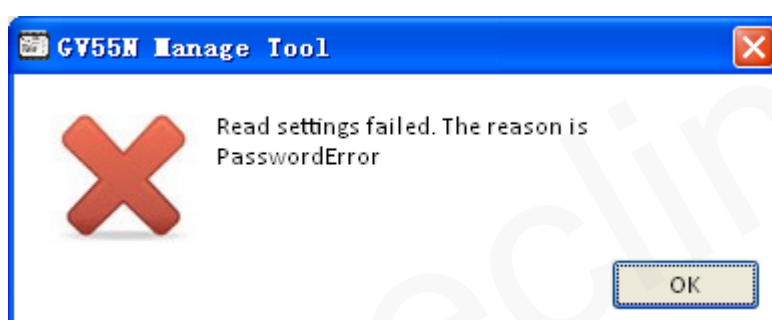
There should be COM port connection problem if the fail reason is timeout.



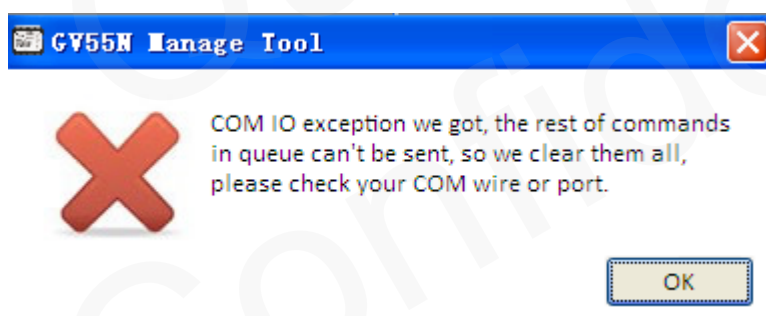
There should be COM port is occupied. Please close all other COM-related applications.



Please change to correct device password if Password Error.



There are some issues with this com, please check your com wire or port.



2. Operation Instruction

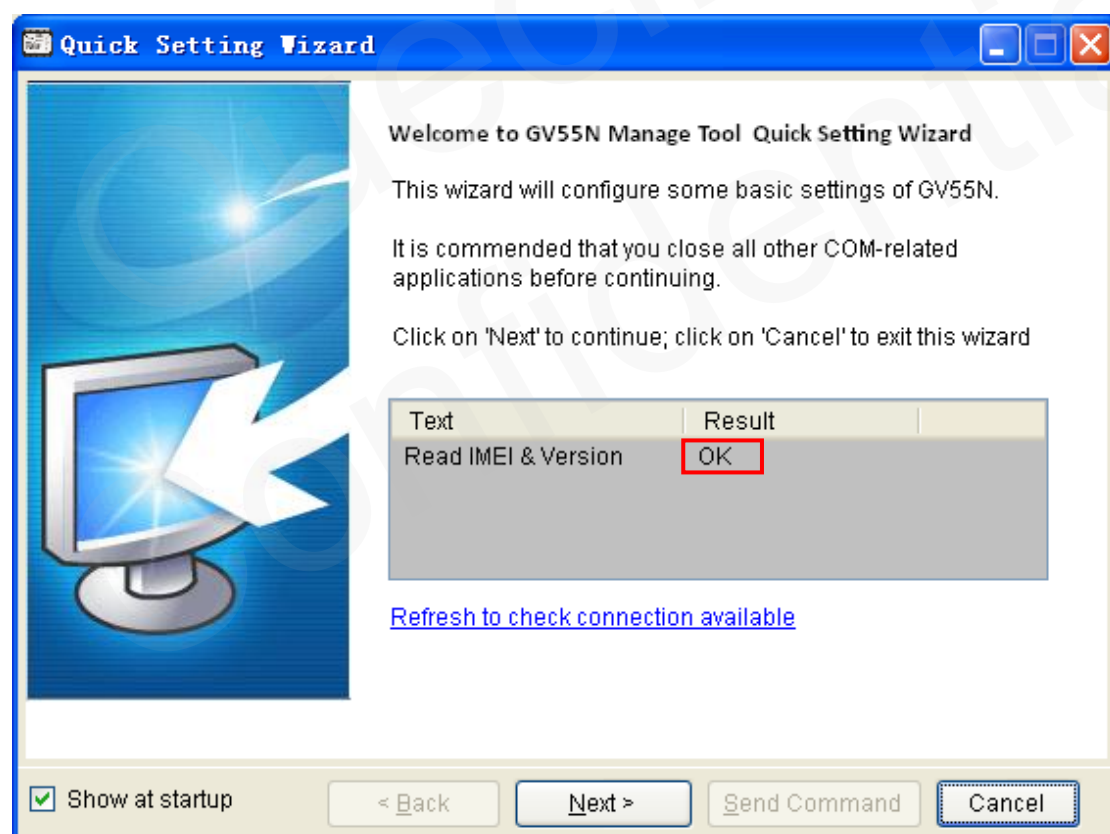
2.1. Device Configuration with Quick Setting Wizard

The manage tool is developed based on the @Track Air Interface Protocol. Please refer to "GV55N @Track Air Interface Protocol" for detail.

The quick setting wizard gives a basic setting for device. If you want use more functions of GV55N, please change to professional setting mode.

2.1.1. Welcome to Quick Setting Wizard

Click "Quick Setting Wizard" in toolbar, open quick setting wizard. If the "Result" in this window is OK, click "Next". If the "Result" is not OK, please check the COM port connection till the result is OK.



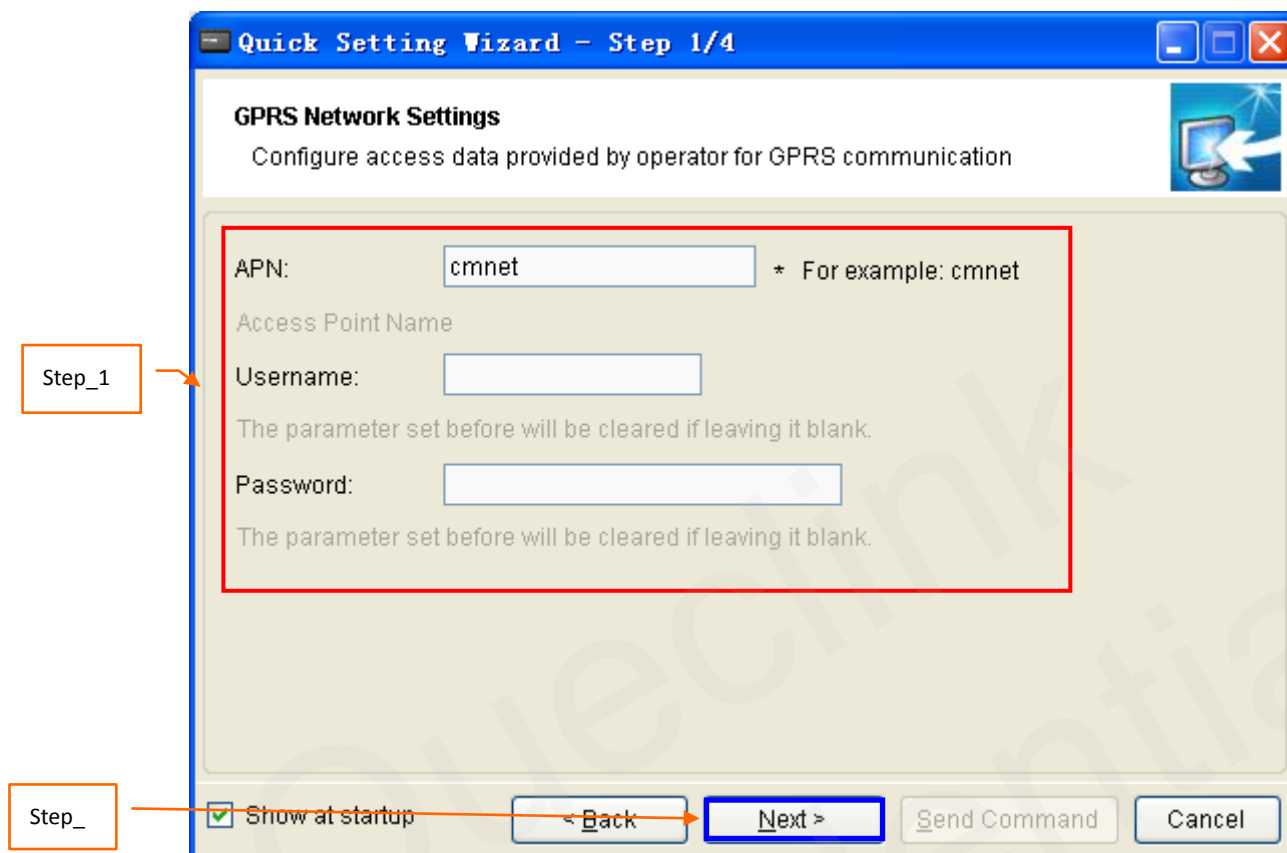
Welcome to Quick Setting Wizard

2.1.2. GPRS Network Setting

Step_1: Set APN, APN user name and password in this window. The meaning of these parameters,

please refer to the “GV55N @Track Air Interface Protocol” for detail.

Step_2: Then click “Next”.

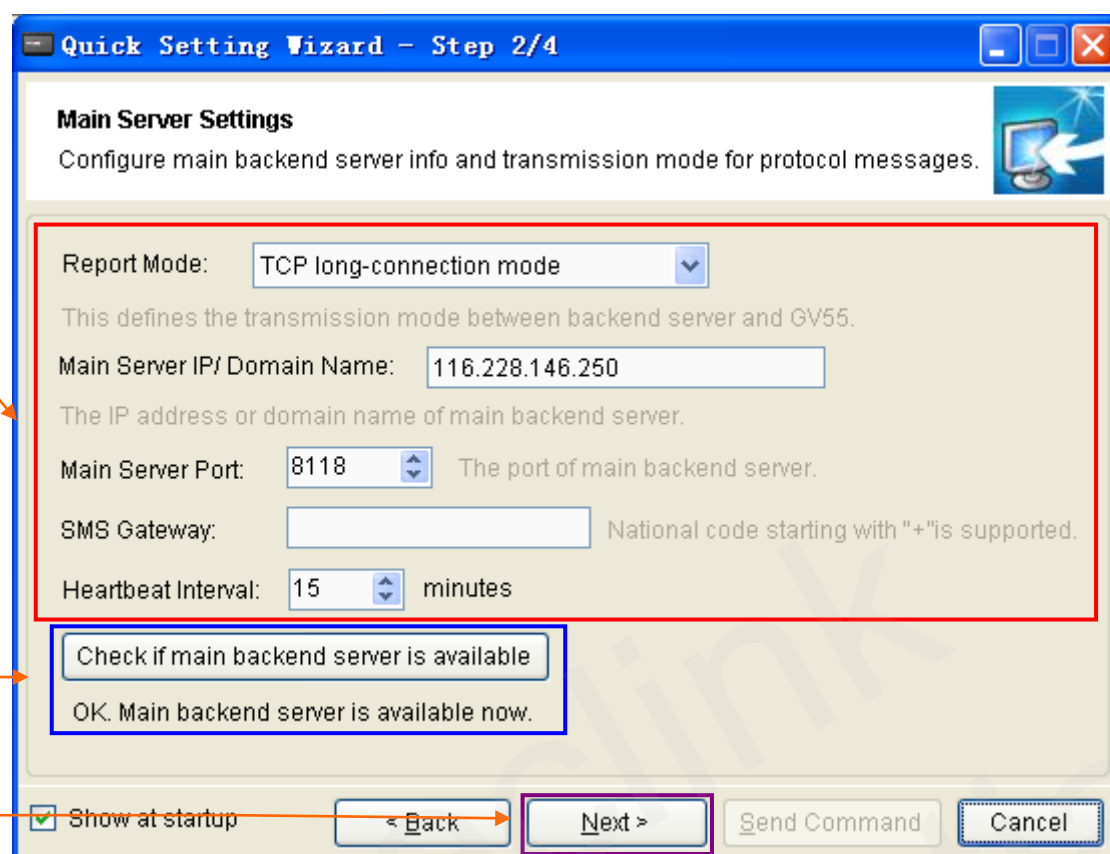


2.1.3. Main Server Setting

Step_1: Set report mode, main server, main server port, and SMS gateway in this window. The meaning of these parameters, please refer to the “GV55N @Track Air Interface Protocol” for detail.

Step_2: Click “Check if main backend server is available” to check if main server IP and port is valid in network. If the result is ERROR, please check the server connection. You can not get report from server if the server connection has problem.

Step_3: Click “Next”.



Quick Setting Wizard - Step 2/4

Main Server Settings
Configure main backend server info and transmission mode for protocol messages.

Report Mode:

This defines the transmission mode between backend server and GV55.

Main Server IP/ Domain Name:

The IP address or domain name of main backend server.

Main Server Port: The port of main backend server.

SMS Gateway: National code starting with "+" is supported.

Heartbeat Interval: minutes

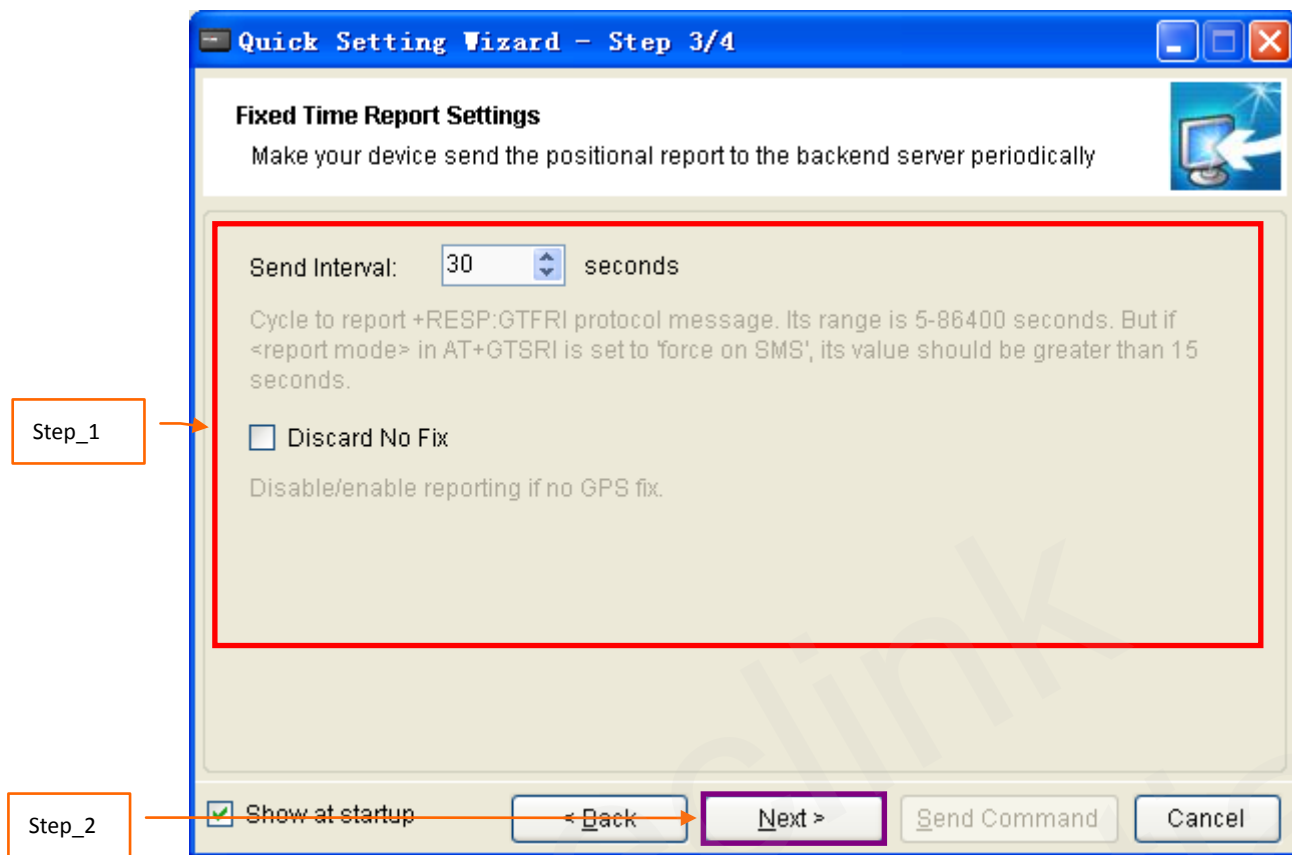
OK. Main backend server is available now.

☒ Show at startup

2.1.4. Fixed Time Report Setting

Step_1: Set send interval, discard no fix in this window. The meaning of these parameters, please refer to the "GV55N @Track Air Interface Protocol" for detail.

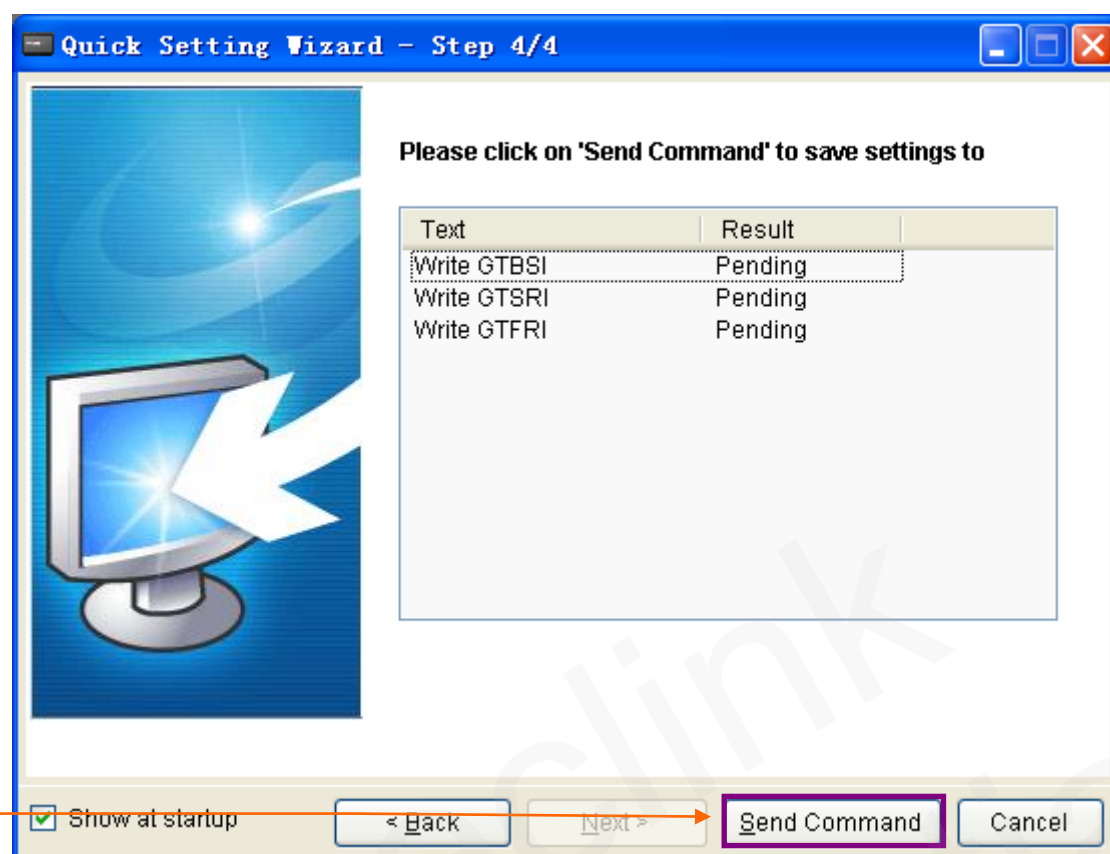
Step_2: Click "Next".



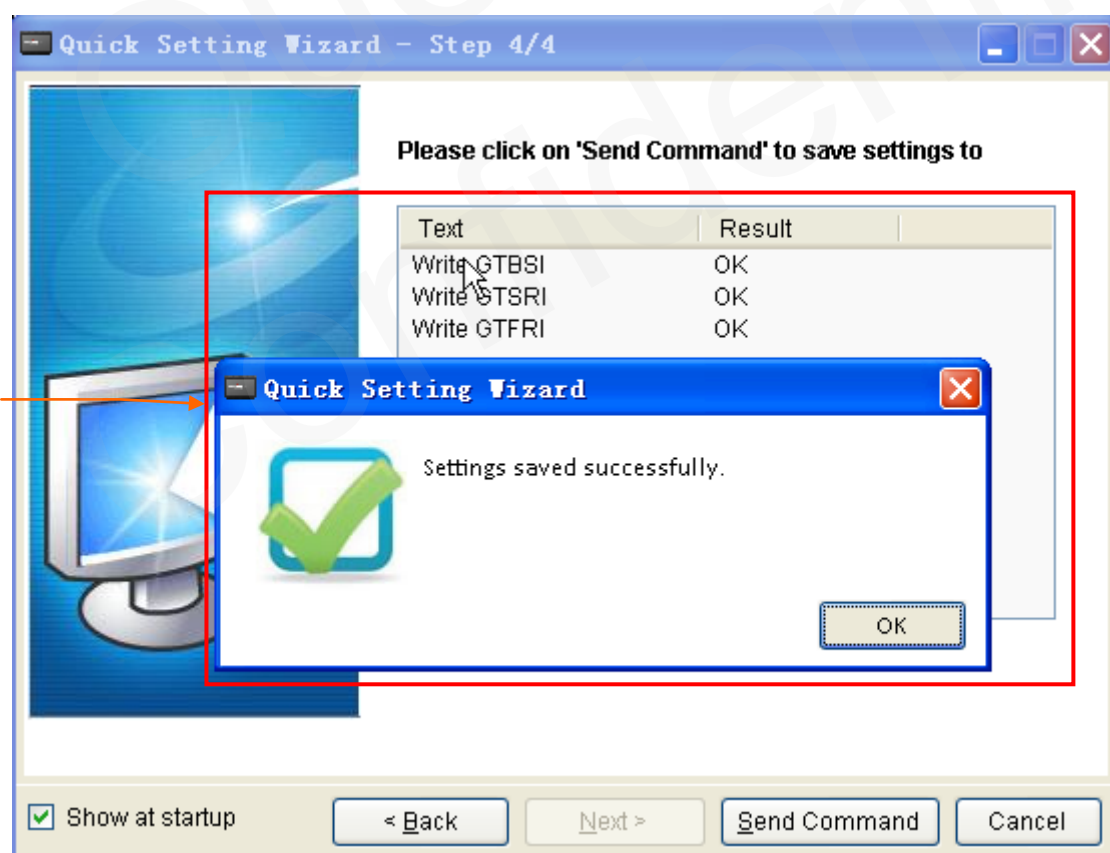
2.1.5. Send Command to Device

Step_1: Click "Send Command". Command *GTBSI*, *GTSRI*, and *GTFRI* will send to device.

Step_2: If the settings download successfully, the result returns OK. Click "OK", the result windows closed. Quick setting is completed.

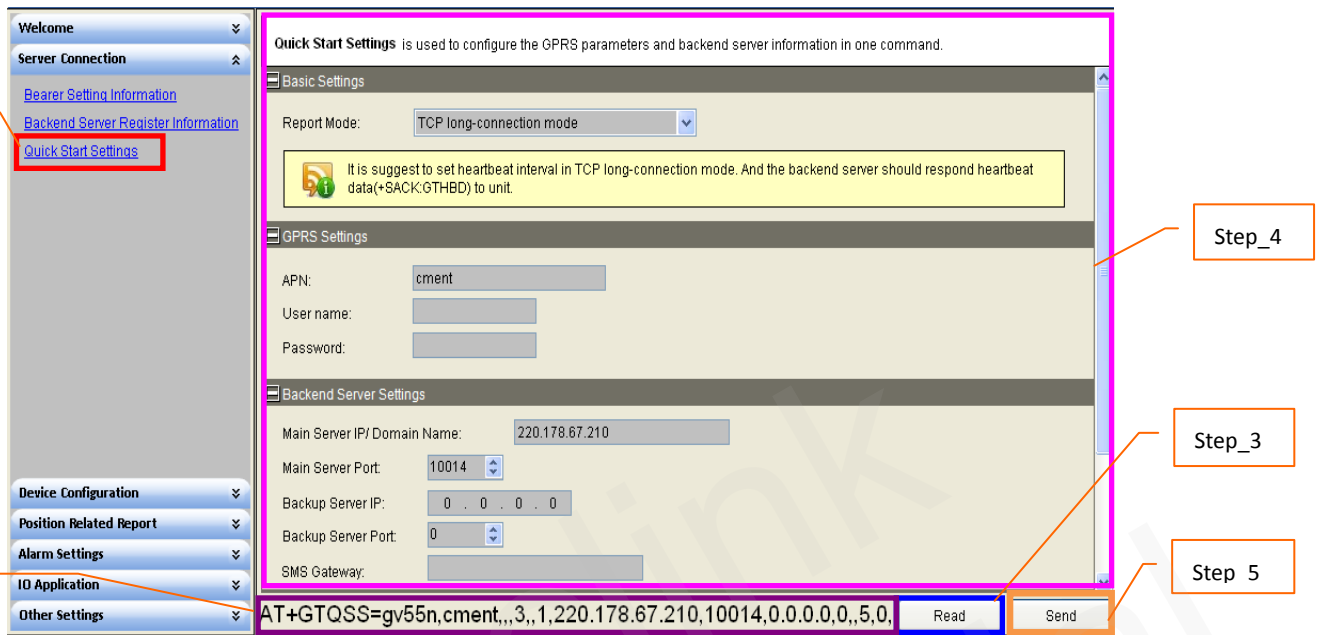


Step_1



Step_2

2.2. Device Configuration in Professional Setting Mode



Step_1: Select “Quick Start Settings”, after that the parameters of GTQSS show in Command Operation Space.

Step_2: The command message which shall be sent to GV55N will be generated based on input and displayed here. Please note this command message can also be sent to GV55N through SMS or GPRS.

Step_3: It is recommended to read the parameters from GV55N and edit based on them.

Step_4: Set the GPRS and backend server information parameters. Please refer to “GV55N @Track Air Interface Protocol” for the meaning of each parameter.

Step_5: Click the “Send” button; download the parameters of GTQSS to GV55N.

Note: The parameters of GTSRI and GTBSI will be changed when change the parameters of GTQSS.

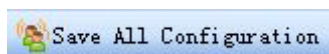
2.3. Read/Save All Configuration

Step_1: It is recommended to read all configurations from device before save the configuration.
Select “Read All Configuration” → “Read From Device”.

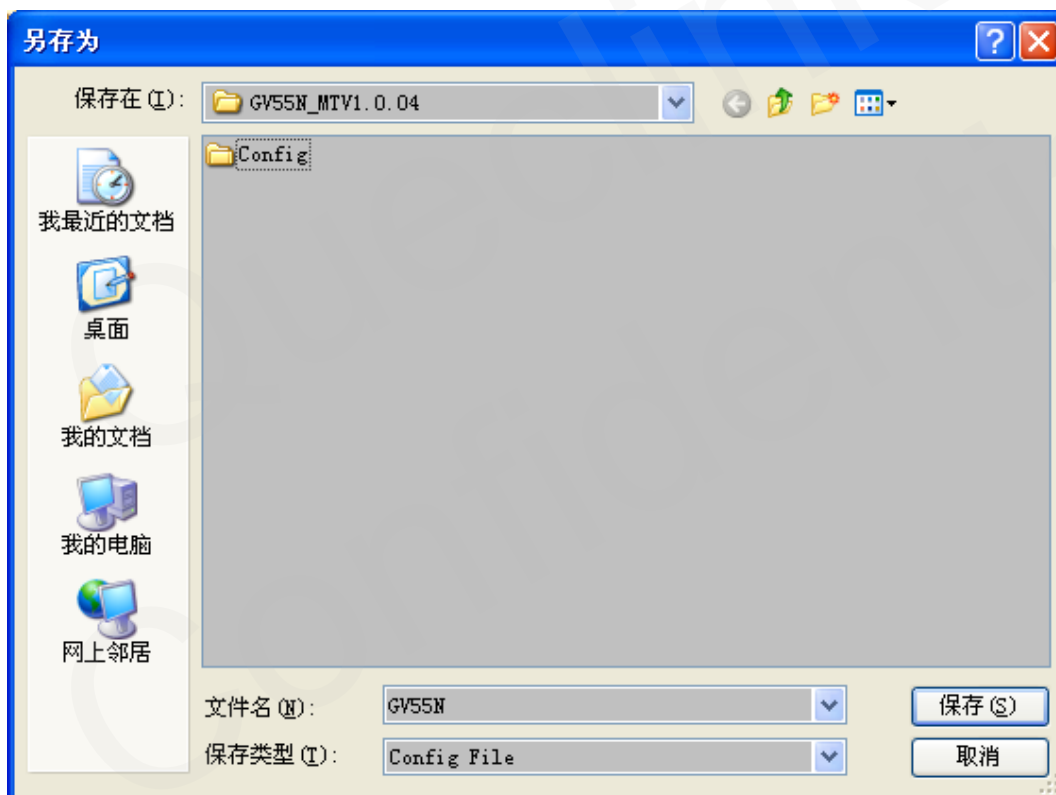


NOTE: Command GTOUT and GTRTO will not be read when “Read From Device”.

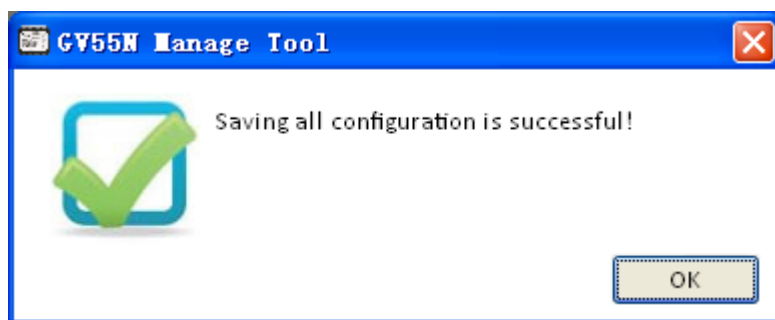
Step_2: After read successfully, click “Save All Configuration” in toolbar.



Step_3: Select a folder, and key in the name of configuration file, then click “Save” button.

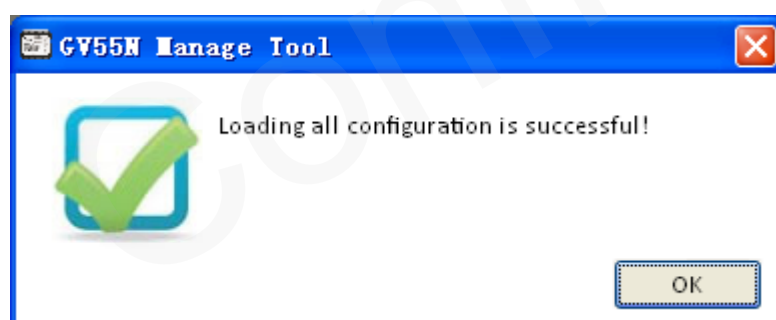
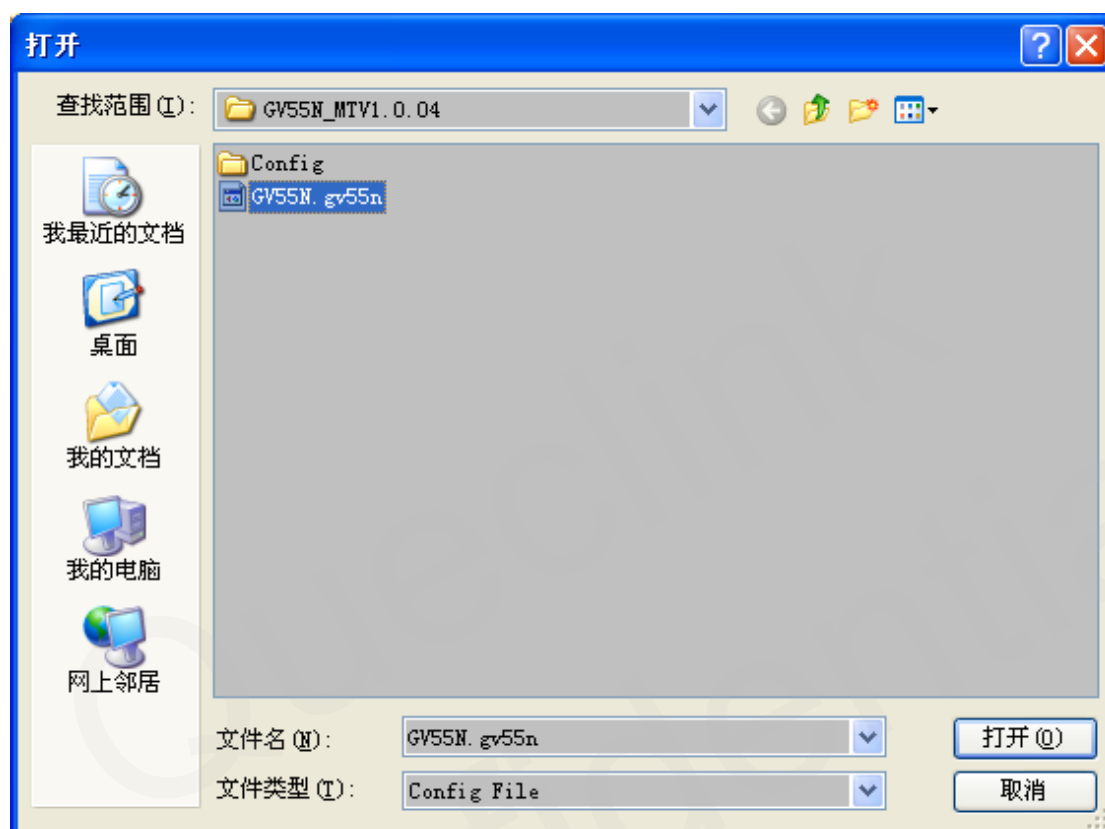


Step_4: Save successfully.



2.4. Load/Send All Configuration

Step_1: Before send all configurations, please load the configuration file or set all parameters in commands. To load configuration file, please select “Read All Configuration” → “Load Configurations From File”. And then select the configuration file you needed.



Step_2: You can set the parameters in commands base on the configuration file, and then click “Send All Configuration” in toolbar.



NOTE: Command GTBSR, GTSRI, GTRTO will not be sent when “Send All Configuration”.

Step_3: Manage Tool will send all commands to device.