

GV300N Manage Tool User Guide

GSM/GPRS/GPS Tracker

TRACGV300NMT001

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0. Revision History

Revision	Date	Author	Description of change
1.00	2014-09-18	Vega Yu	Initial
1.01	2014-12-16	Vega Yu	Update the description of setting parameters
1.02	2015-1-31	Elena Ma	Add Command GTCRA
1.03	2015-04-01	Lizzy Li	Updated the format of the document

1. GV300N Manage Tool Interface

GV300N manage tool is PC software which can be used to configure GV300N through UART. It is easy for the backend server developers to configure GV300N with manage tool, which has friendly user interface. The correct command messages sent to GV300N 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 GV300N before selling. But it is strongly recommended to establish a backend server and implement the way to control GV300N by SMS or GPRS. Please refer to “GV300N @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 GV300N to 12VDC power supply and GV300N will power on.
2. Connect GV300N to PC with USB data cable (DATA CABLE_M).
3. Run “GV300N 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:

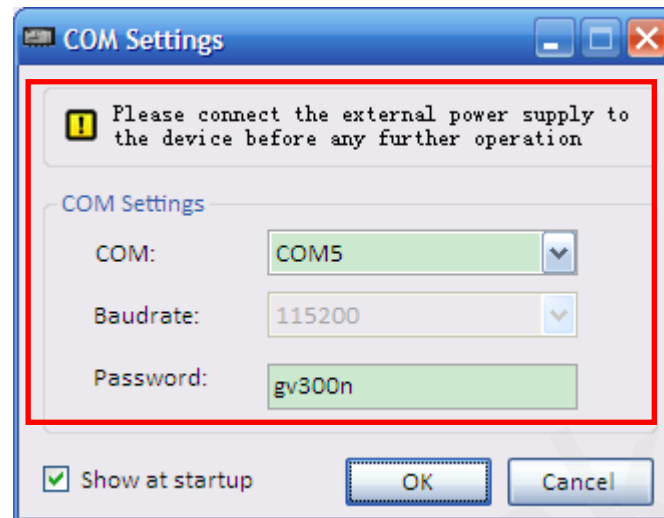
- ◆ Windows XP SP2 and above (32 & 64 bit);
- ◆ Windows Server 2003 (32 & 64 bit);
- ◆ Windows Server 2008 (32 & 64 bit);
- ◆ Windows Vista (32 & 64 bit);
- ◆ Windows 7 (32 & 64 bit);
- ◆ Windows 8 (32 & 64 bit);

Supported System Environments:

- ◆ Microsoft .NET Framework 4.0 or higher
Microsoft .NET Framework 4.0 download

link: <http://www.microsoft.com/en-US/download/details.aspx?id=17718>

1.2. COM Setting



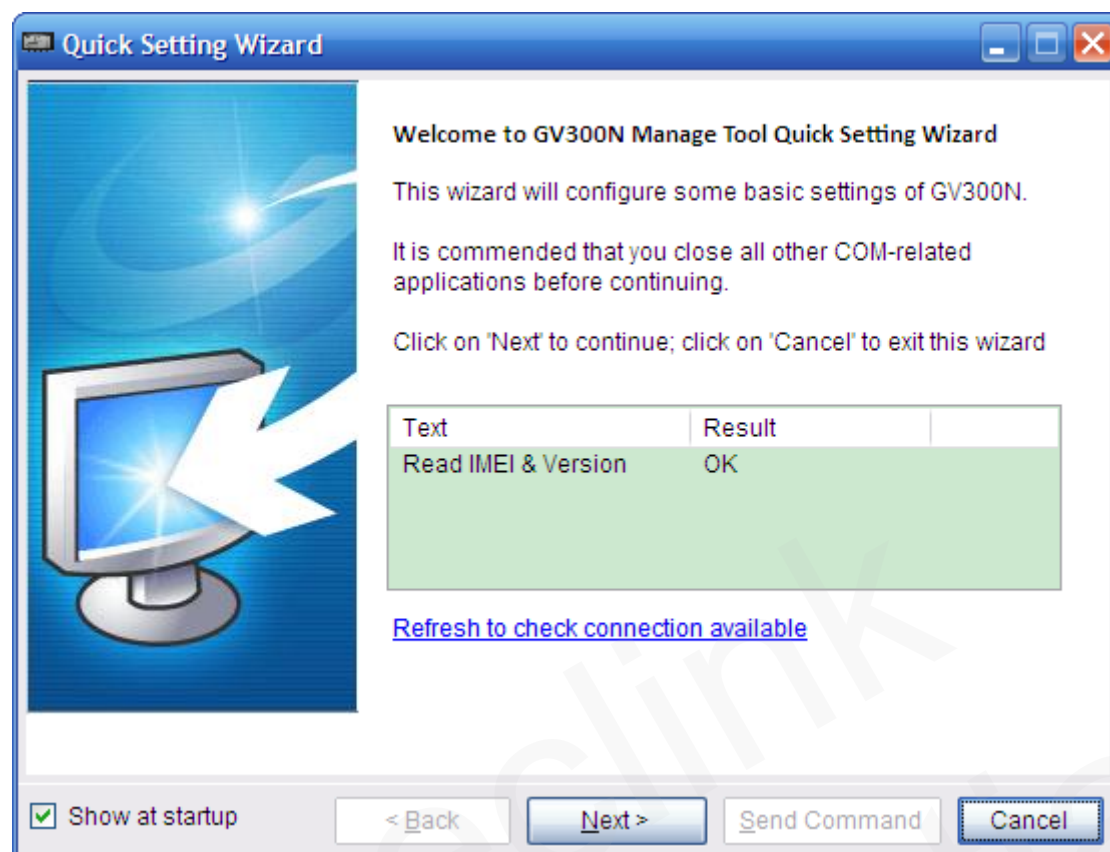
Select the COM port, baud rate (115200bps in default), input the password (“gv300n” in default), and click “OK” button, then setting window will display.

1.3. Quick Setting Wizard

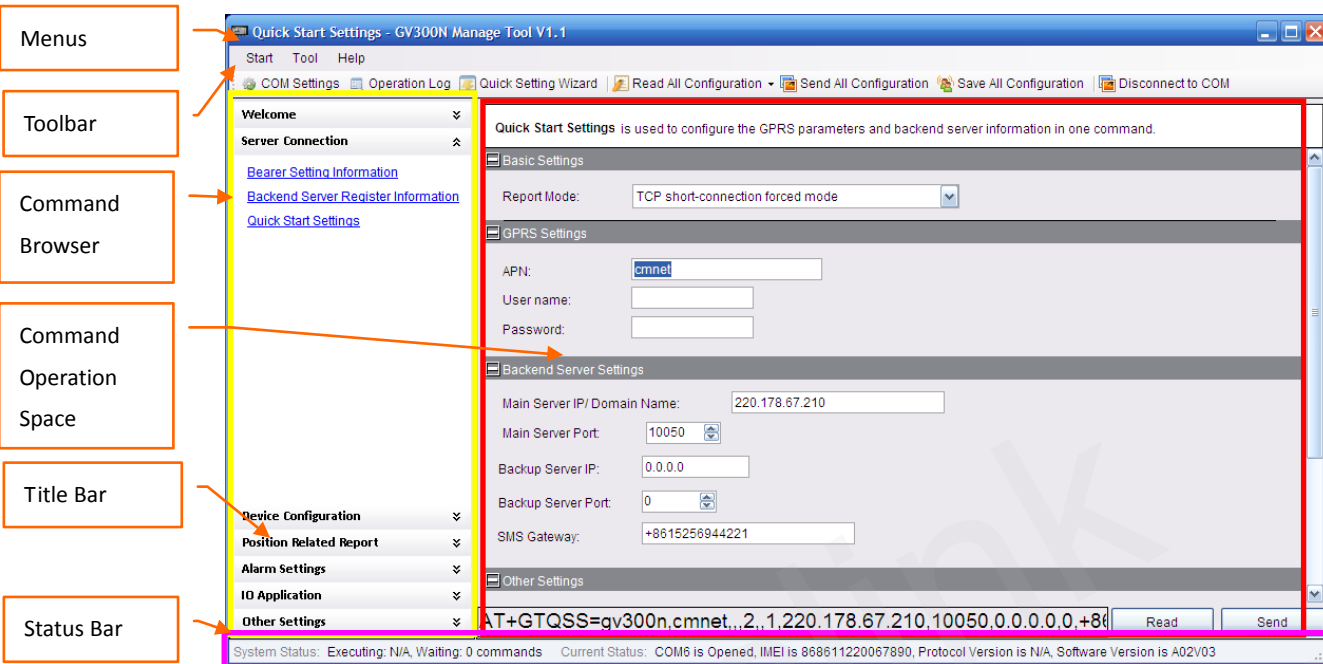
The quick setting wizard gives a basic setting for device. If you want use more functions of GV300N, please change to enter professional setting mode.

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”.

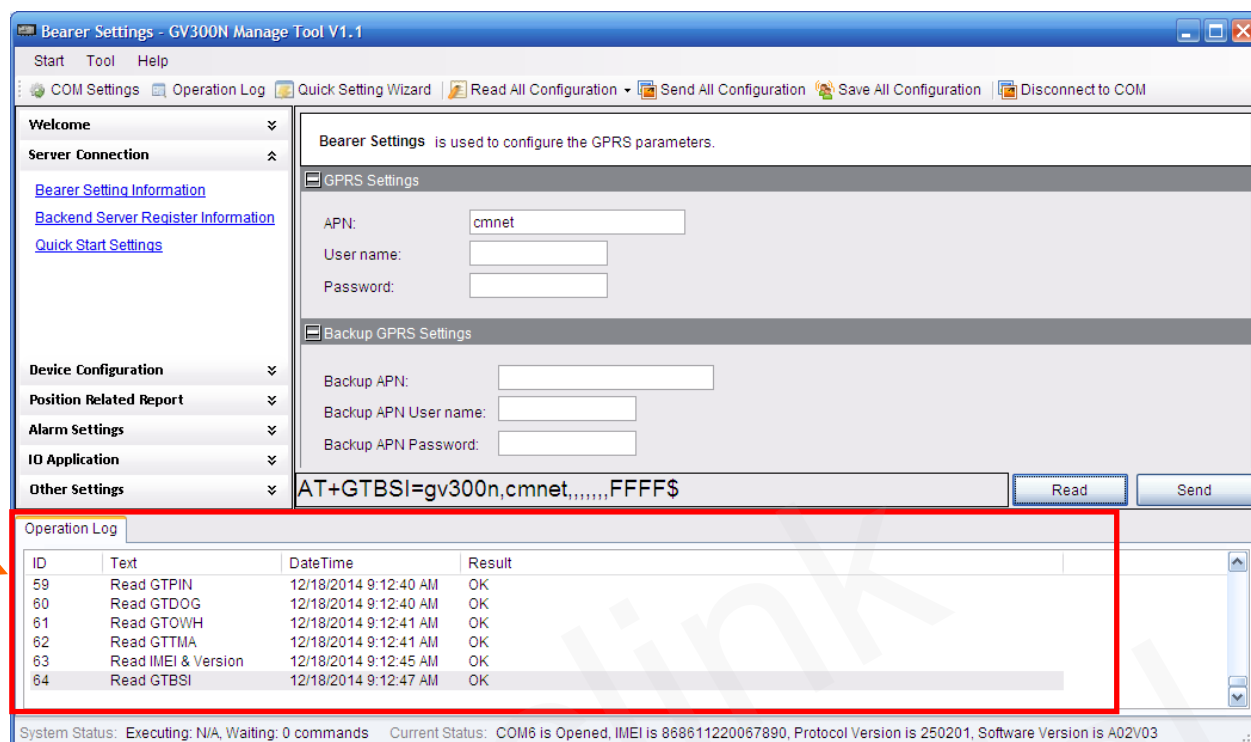
[COM Setting]: It is used to set the COM information and password Setting details please refer to chapter 2.2

1.4.2.2 Tool Menu

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

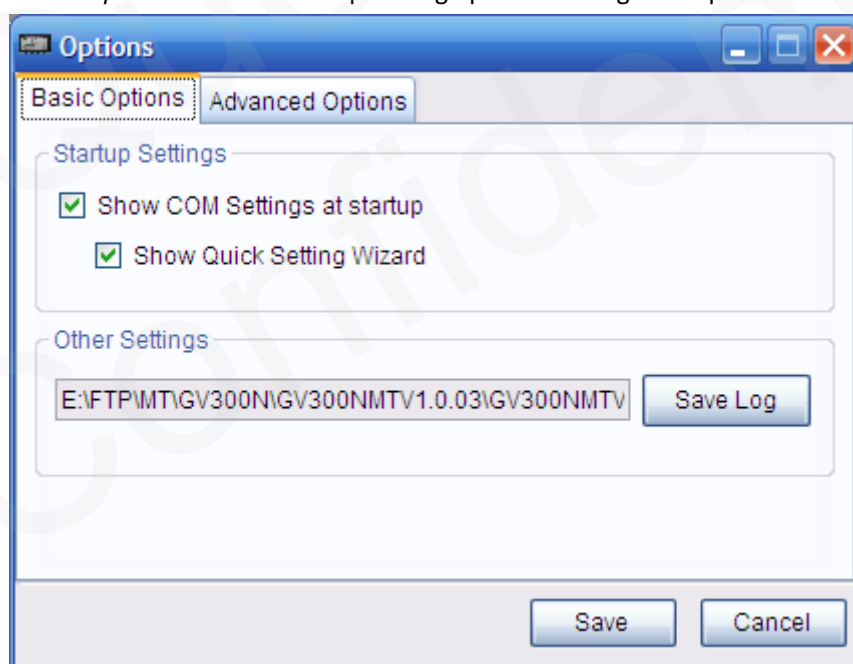
[Quick Setting Wizard]: It is used to open quick setting wizard directly. Please refer to chapter 3.1 for details.

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



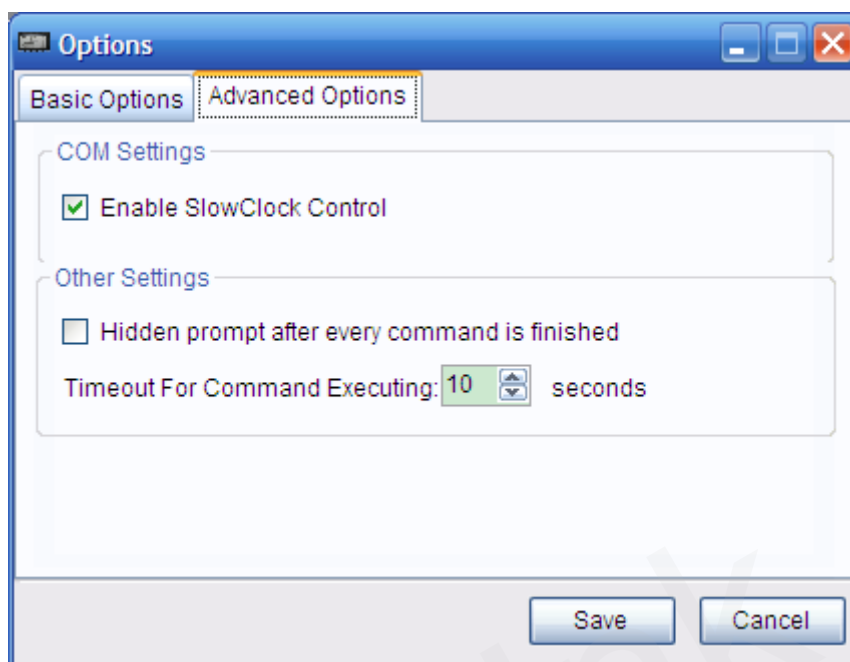
[Options]: It is used to set the basic setting of manage tool.

“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 connected 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 for details.

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



“*Read From Device*”: It is used to read all configuration(except command GTDAT) 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 GTQSS, GTDAT, 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



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
	Software Protocol Watchdog	GTDOG
	Outside Working Hours	GTOWH
	Time Adjustment	GTTMA
	Jamming Detection Configuration	GTJDC
	Jamming Behavior Setting	GTJBS
	Hex Report mask	GTHRM
	Preserve special device logical state	GTPDS
Position Related Report	Fixed Position Information	GTfri
	Frequency Change of Fixed Report Information	GTFFC
Alarm Setting	Geo-Fence Configuration	GTGEO
	Tow Alarm Configuration	GTtow
	Speed Alarm	GTSPD
	SOS Alarm	GTSOS
	Excessive Idling Detection	GTIDL
	Harsh Behavior Monitoring	GTHBM
	Start Stop Report	GTSSR
	Buzzer Alarm Definition	GTBZA
	Over Speed Alarm	GTSPA
	Temperature Alarm	GTTMP
	Roaming Detection Configuration	GTRMD
	Polygon Geo-Fence	GTPEO
	Crash Detection and Acceleration Report	GTCRA
IO Application	Digital Output Port Settings	GTOUT
	External Power Supply Monitoring	GTEPS
	Digital Input Port Setting	GTDIS
	Analog Input Port Setting	GTAIS
	Input/Output Port Binding	GTIOB
Other Settings	Voice Monitor	GTMON
	Transparent Data Transmission	GTDAT

	Hour Meter Counter	GTHMC
	Real Time Operation	GTRTO
	Serial Port Setting	GTURT
	White List	GTWLT
	AC100/AC200 Devices Setting	GTACD
	Extend digit fuel sensor	GTEFS
	ID Authentication	GTIDA
	Main Serial Port Setting	GTMUT
	Uart Data Transfer	GTUDT
	Fuel Sensor Calibration Table	GTFSC
	Camera Setting Command	GTCMS
	Take Picture Command	GTTAP
	CANBUS Device Configuration	GTCAN
	UFSxxx FOTA Upgrade	GTUFS
	Store Command String	GTCMD
	User Defined Function	GTUDF

1.4.5.2 Command Operation Space

Command Description

Parameters Area

Command Display

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

Basic Settings

Report Mode: Stop reporting

GPRS Settings

APN:

User name:

Password:

Backend Server Settings

Main Server IP/ Domain Name:

Main Server Port: 0

Backup Server IP: 0.0.0.0

Backup Server Port: 0

SMS Gateway:

Other Settings

Heartbeat Interval: 0 minutes

SACK Enable: The backend server does not reply SACK message after receiving message from the terminal

Buffer Mode: Low priority

AT+GTQSS=gv300n,,,0,1,,0,0.0.0.0,0,0,0,0,FFFF\$

Read
Send

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

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

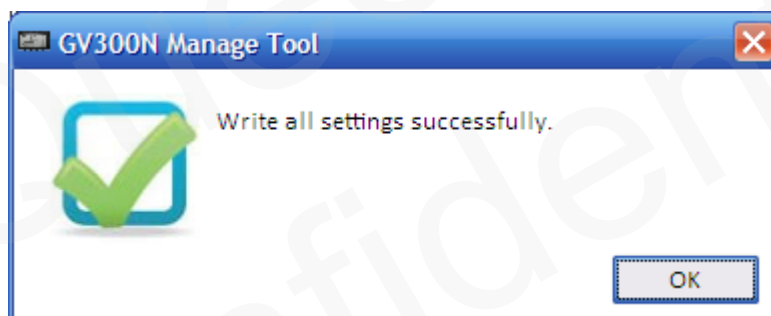
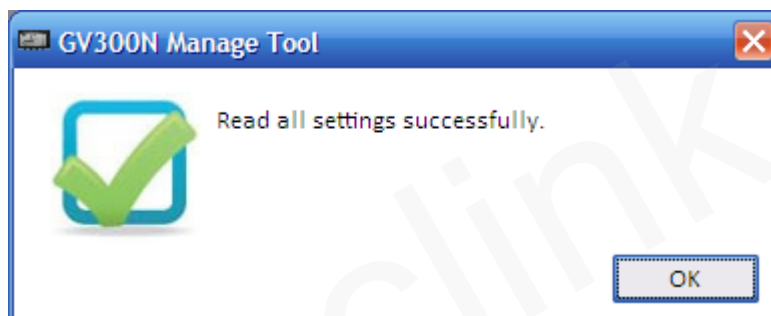
[Command Display]: Command with parameters in parameters area display in this area.

[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

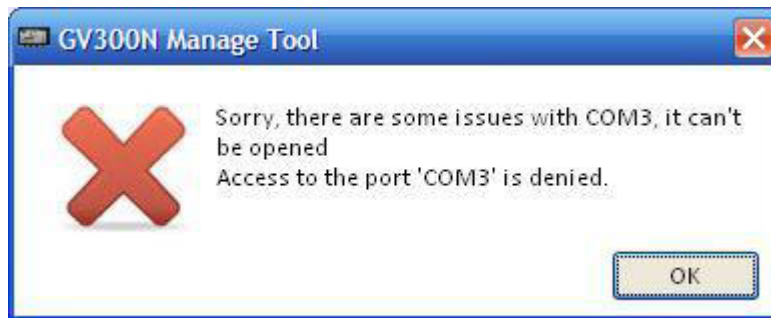


1.5.2. Operation Failed Interface

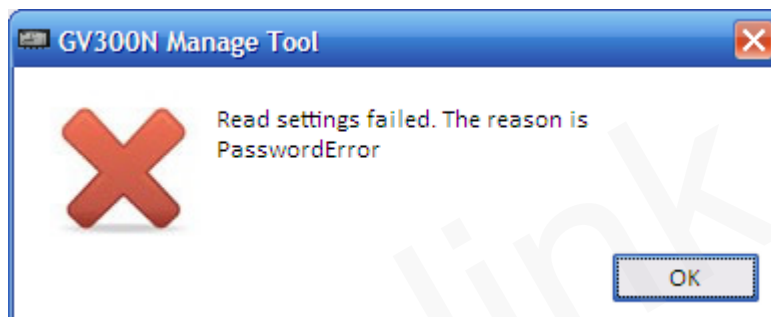
There should be COM port connection problem if the fail reason is timeout.



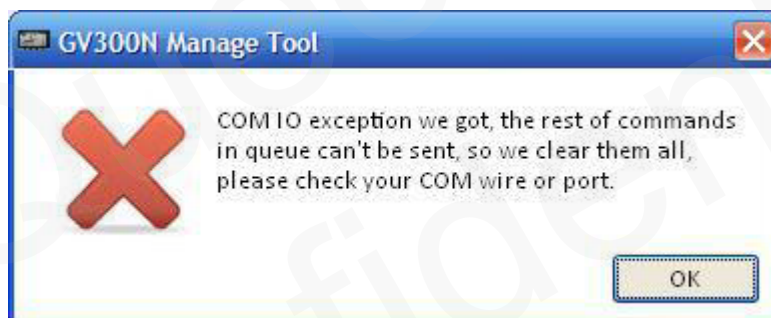
There should be COM port is occupied. Please close all other COM-related applications.



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

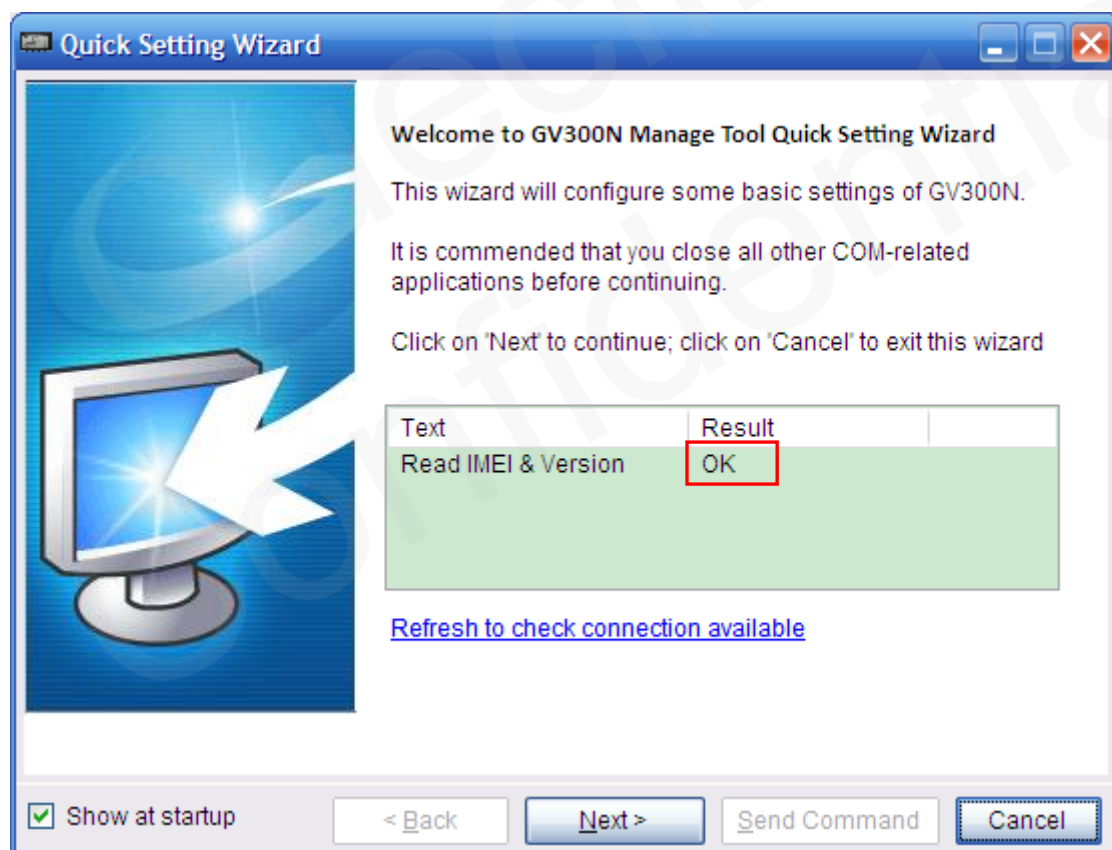
2.1. Device Configuration with Quick Setting Wizard

The manage tool is developed based on the @Track Air Interface Protocol. Please refer to “GV300N @Track Air Interface Protocol” for detail.

The quick setting wizard gives a basic setting for device. If you want use more functions of GV300N, 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.



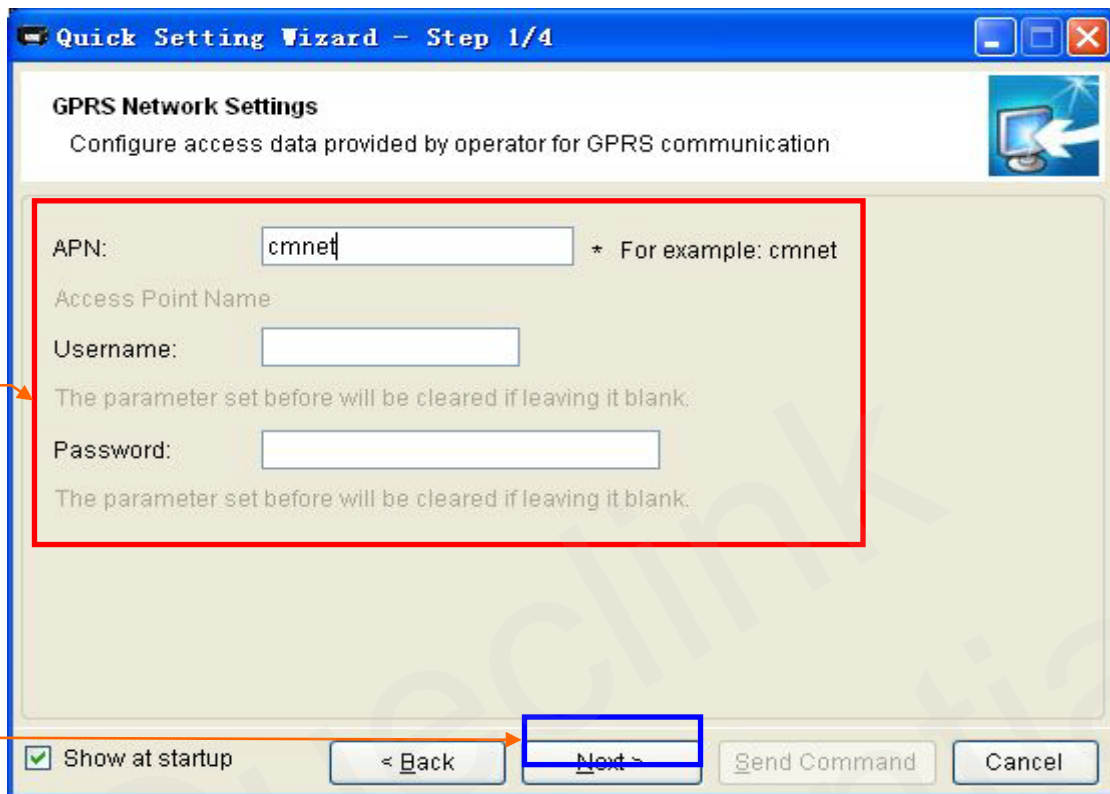
Welcome to Quick Setting Wizard

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 “GV300N @Track Air Interface Protocol” for detail.

Step_2: Then click “Next”.



Quick Setting Wizard - Step 1/4

GPRS Network Settings
Configure access data provided by operator for GPRS communication

APN: * For example: cmnet

Access Point Name

Username:

The parameter set before will be cleared if leaving it blank.

Password:

The parameter set before will be cleared if leaving it blank.

☒ Show at startup

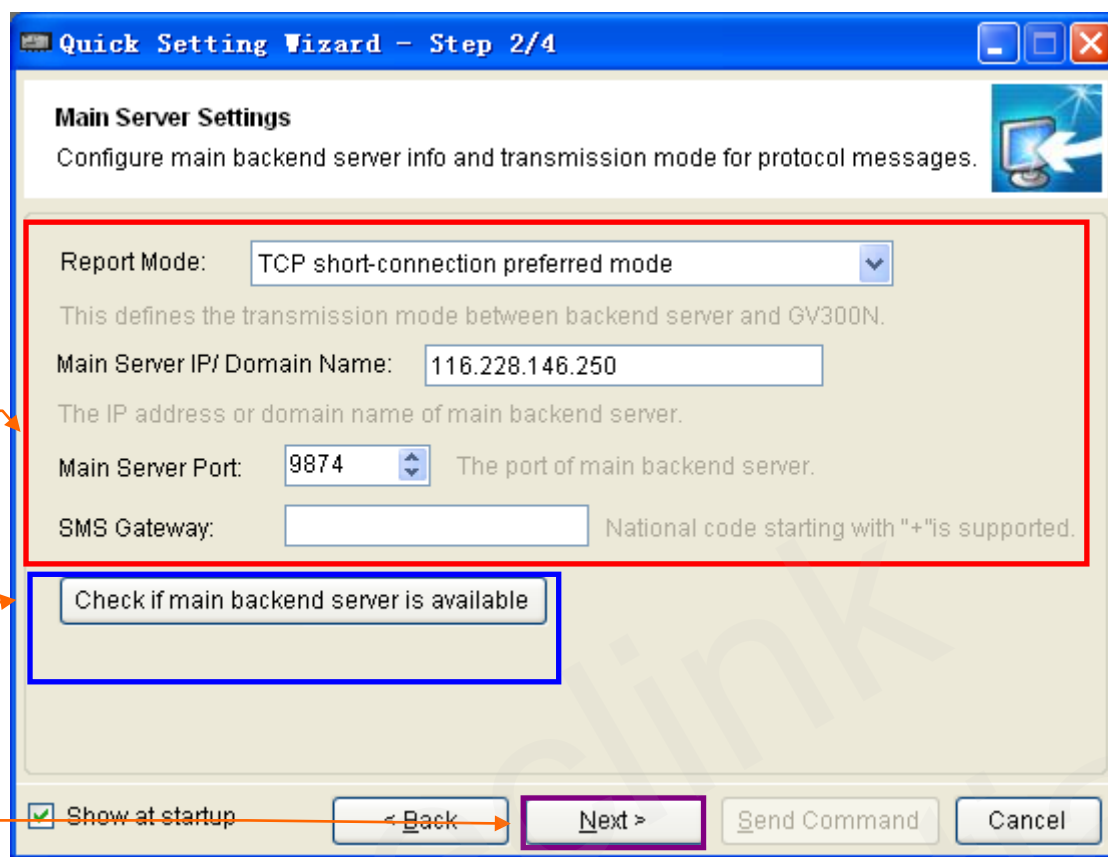
< Back Next > Send Command Cancel

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 “GV300N @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: TCP short-connection preferred mode
This defines the transmission mode between backend server and GV300N.

Main Server IP/ Domain Name: 116.228.146.250
The IP address or domain name of main backend server.

Main Server Port: 9874 The port of main backend server.

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

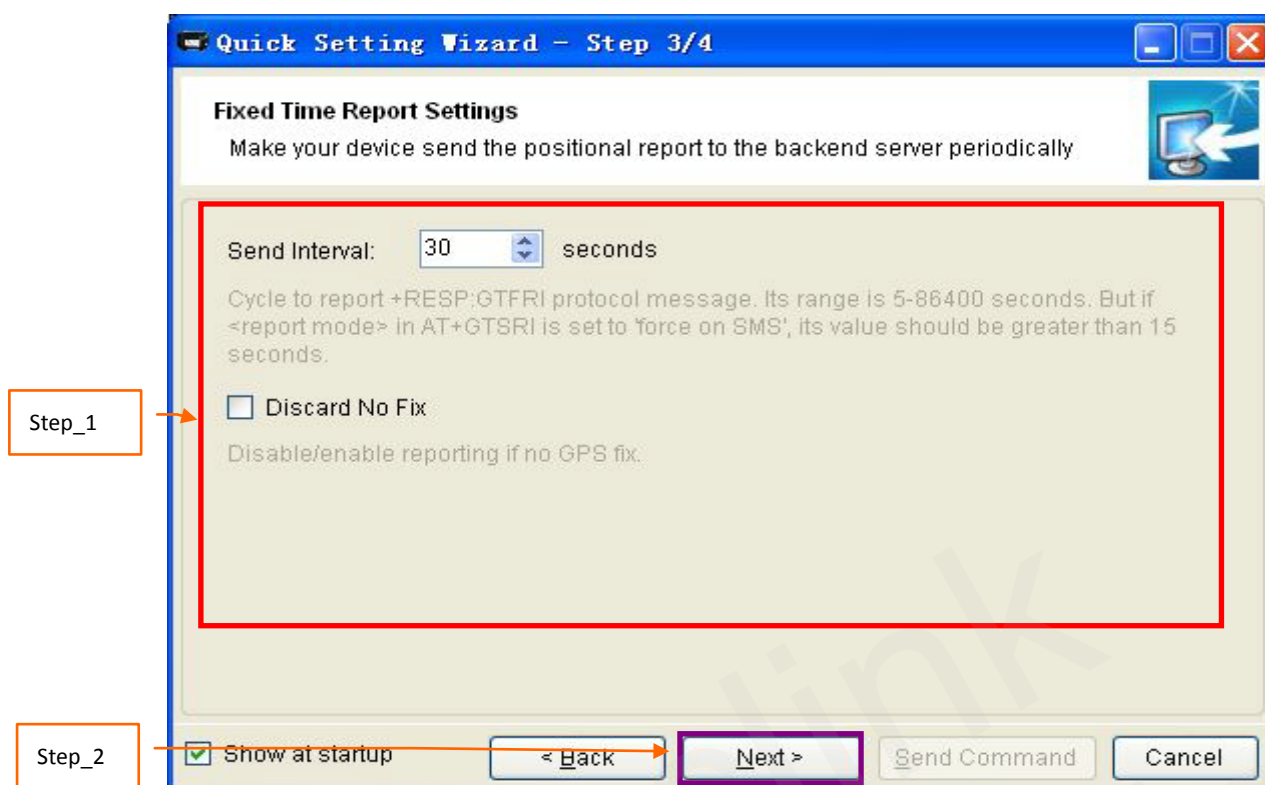
Check if main backend server is available

☒ Show at startup < Back **Next >** Send Command Cancel

2.1.4. Fixed Time Report Setting

Step_1: Set check interval, send interval, discard no fix in this window. The meaning of these parameters, please refer to the "GV300N @Track Air Interface Protocol" for detail.

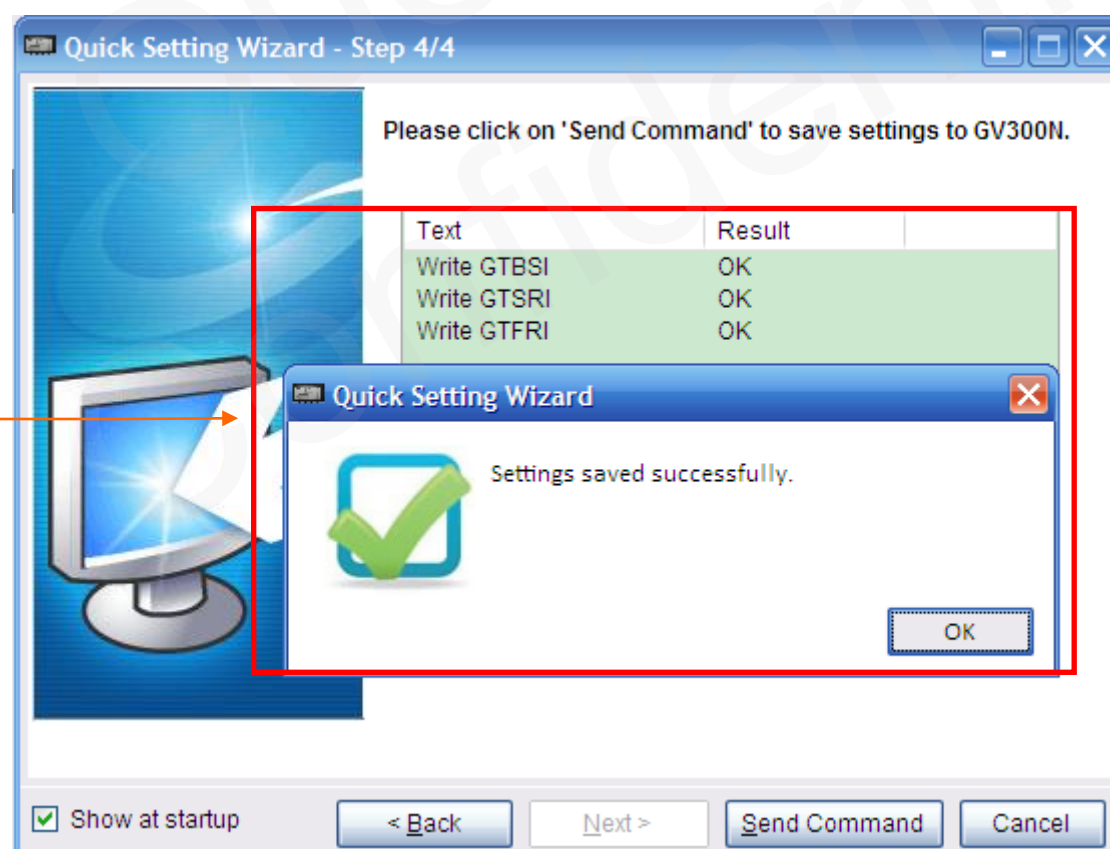
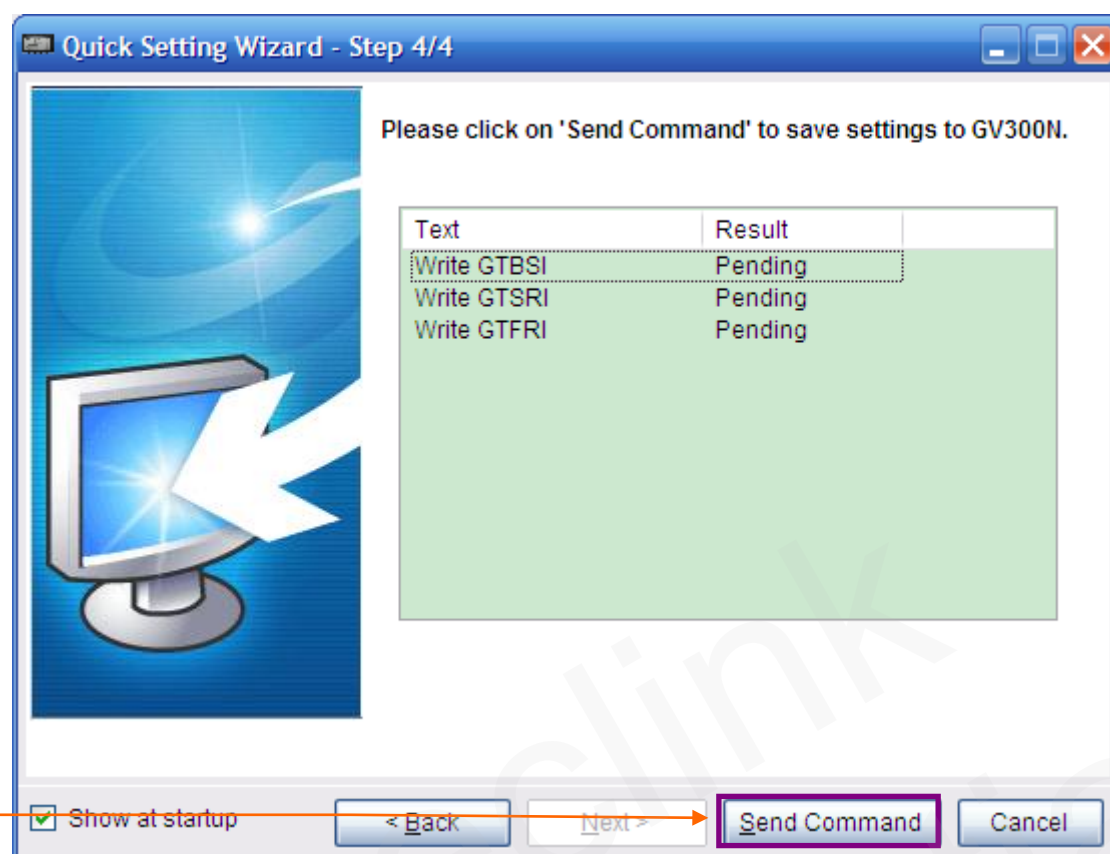
Step_2: Click "Next".



2.1.5. Send Command to Device

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

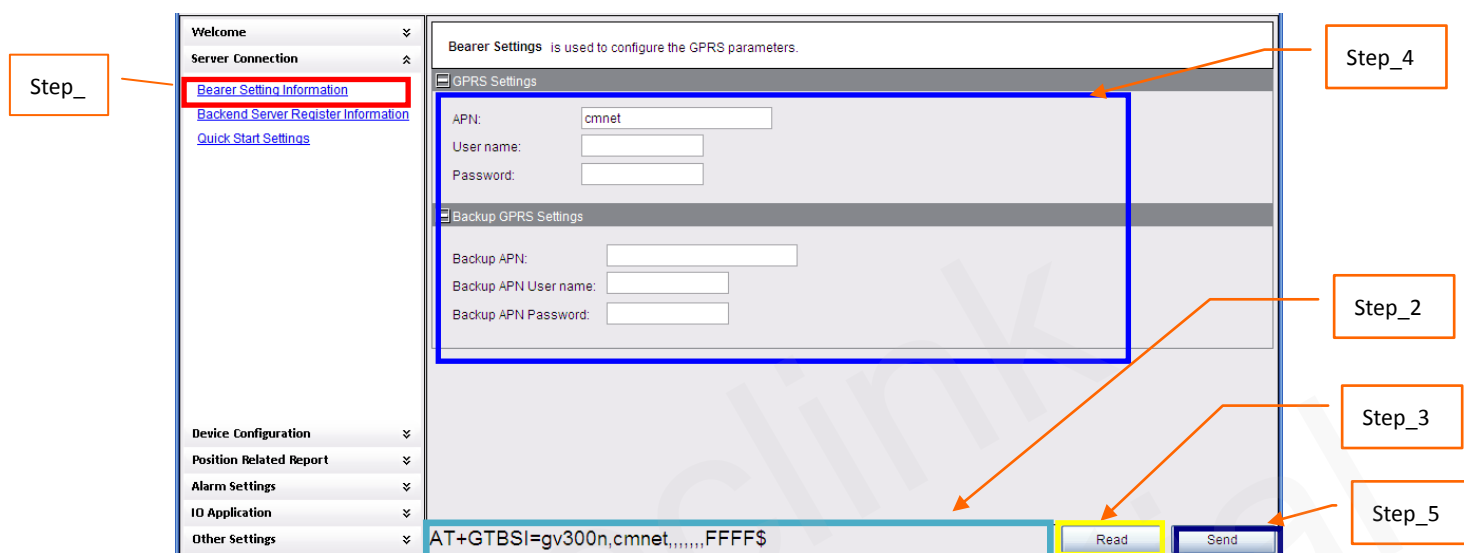
Step_2: If the settings download successfully, the result returns OK. Click “OK”, the result windows closed. Quick setting is completed.



2.2. Device Configuration in Professional Setting Mode

The manage tool is developed based on the @Track Air Interface Protocol. Please refer to “GV300N @Track Air Interface Protocol” for detail.

Following is a general procedure to configure GV300N with manage tool.



Step_1: Select “Bearer Setting Information”, after that the parameters of GTBSI show in Command Operation Space.

Step_2: The command message which shall be sent to GV300N will be generated based on input and displayed here. Please note this command message can also be sent to GV300N through SMS or GPRS.

Step_3: It is recommended to read the parameters from GV300N and edit based on them.

Step_4: Set APN parameters. Please refer to “GV300N @Track Air Interface Protocol” for the meaning of each parameter.

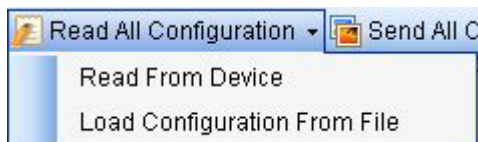
Step_5: Click the “Send” button; download the parameters of GTBSI to GV300N.

Note:

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

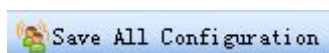
2.3. Read/Save All Configuration

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

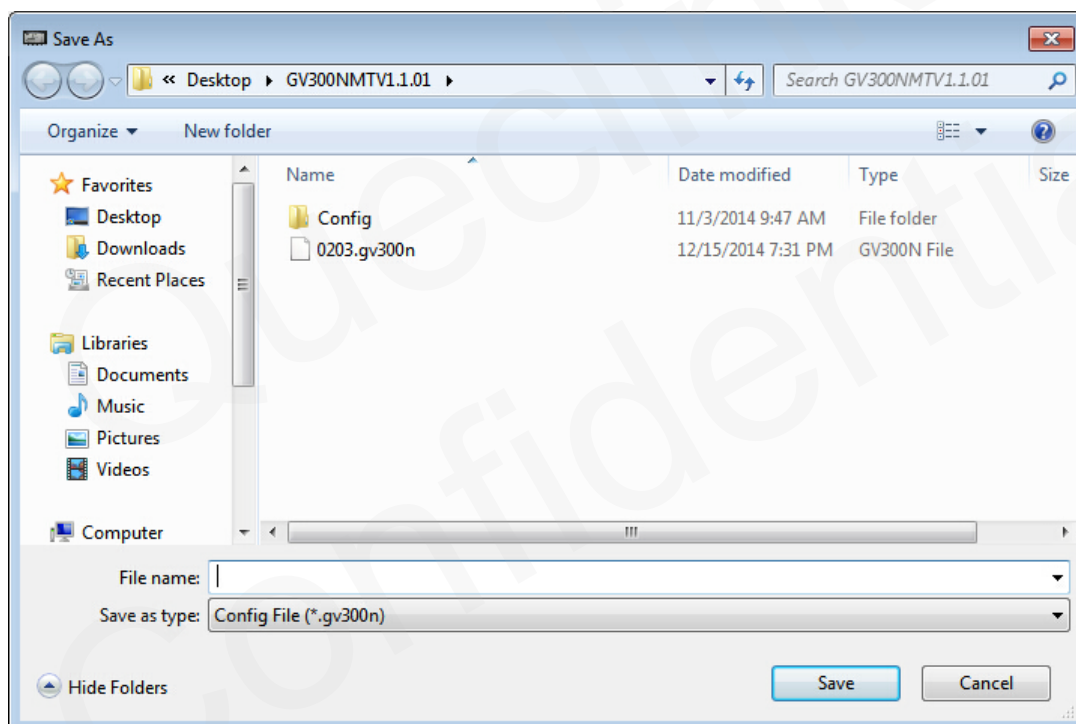


NOTE: Command GTDAT will not be read when ”Read From Device”.

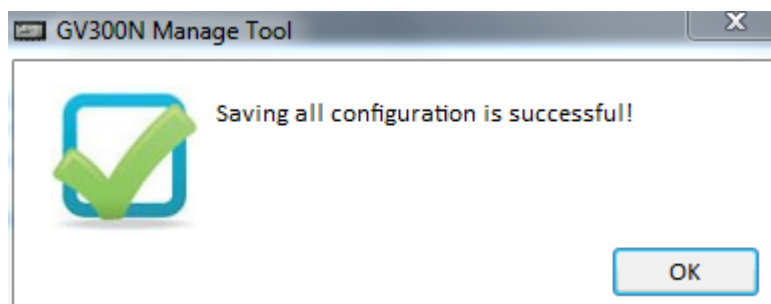
Step_2: After read successfully, click “Save All Configuration” in toolbar.



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

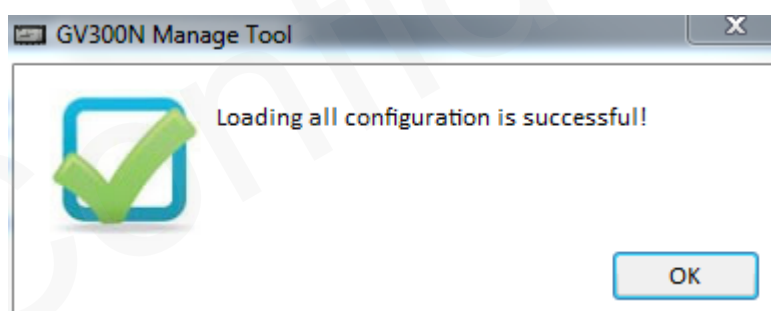
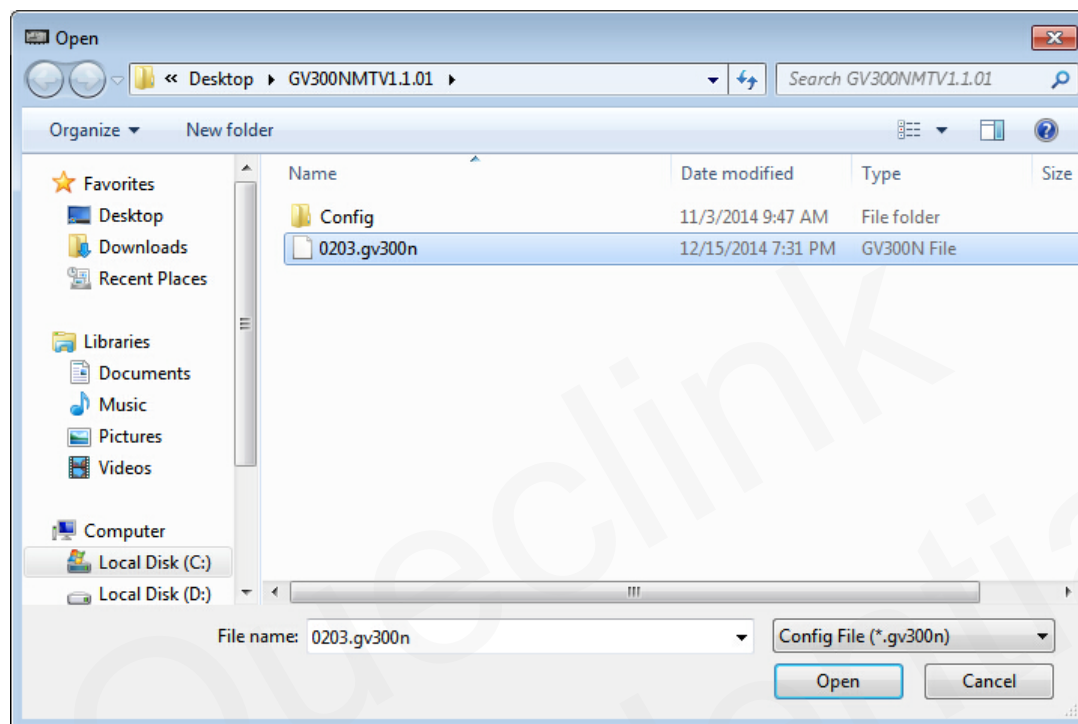


Step_4: Save successfully.



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 GTQSS, GTDAT, GTRTO will not be sent when “Send All Configuration”.

Step_3: Manage Tool will send all commands to device.