GV50(P) Manage Tool User Guide

GSM/GPRS/GNSS Tracker

TRACGV50MT001

Version: 1.07

International Telematics Solutions Innovator

www. queclink .com

Document Title	GV50(P) Manage Tool User Guide
Version	1.07
Date	2018-01-17
Status	Release
Document Control ID	TRACGV50MT001

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0. Revision History

Revision	Date	Author	Description of Change
1.00	2017-04-24	Happy Peng	1. Initial.
1.01	2017-05-17	Happy Peng	1. Added the commands **AT+GTOUT** and **AT+GTIDL**. 2. Updated the Support Version to GV50R01A01V23N32.
1.02	2017-06-16	Happy Peng	1. Added the command **AT+GTHRM**. 2. Added the command **AT+GTVVS**. 3. Added the command **AT+GTAVS**. 4. Added the parameter <*Protocol Format*> in **AT+GTSRI** and **AT+GTQSS**. 5. Added sub command E in **AT+GTRTO**. 6. Updated the Support Version to GV50R00A02V11N32.
1.03	2017-06-23	Happy Peng	1. Updated the Support Version to GV50R00A02V12N32.
1.04	2017-07-13	Happy Peng	1. Deleted **AT+GTOUT** and related parameters; deleted Mode 0 in **AT+GTDIS** for GV50 Manage Tool. 2. Updated the Support Version to GV50R00A02V14N32.
1.05	2017-09-15	Happy Peng	1. Updated the Support Version to GV50R00A02V20N32.
1.06	2017-12-13	Happy Peng	1. Updated the Support Version to GV50R00A03V13N32.
1.07	2018-1-17	Happy Peng	1. Added the parameter <output direction> in **AT+GTOUT**. 2. Updated the Support Version to GV50R00A04V07N32.

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1. GV50 Manage Tool Interface

GV50 Manage Tool is PC software which can be used to configure GV50 through UART. It is easy for the backend server developers to configure GV50 with the Manage Tool, which has friendly user interface. The correct command messages sent to GV50 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 GV50 before sale. But it is strongly recommended to establish a backend server and control GV50 by SMS or GPRS. Please refer to "*GV50 @Track Air Interface Protocol*" for details.

Before using the Manage Tool, please install driver for the USB data cable. Connect GV50 to PC with USB data cable, and then the computer will auto detect and install the USB driver. After that, a new COM port can be found in the PC system, and then you can run "**GV50 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 operating system below:

- 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

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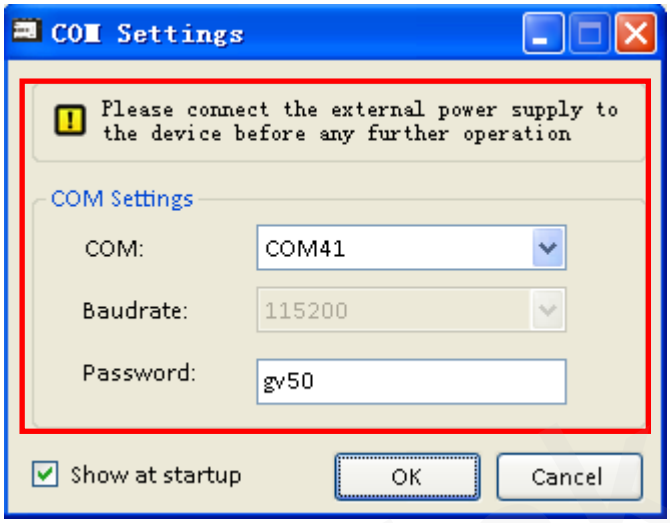
1.2. COM Setting



Select the COM port and baud rate (115200bps by default), input the password ("gv50" by default), click "OK" button, and then setting window will be displayed.

1.3. Quick Setting Wizard

The Quick Setting Wizard provides basic settings for the device. If you want to use more functions of GV50, please change to enter professional setting mode.

Before you enter Quick Setting Wizard, you must make sure the COM connection is OK.

Please refer to Chapter 3.1 for the details of setting with Quick Setting Wizard.

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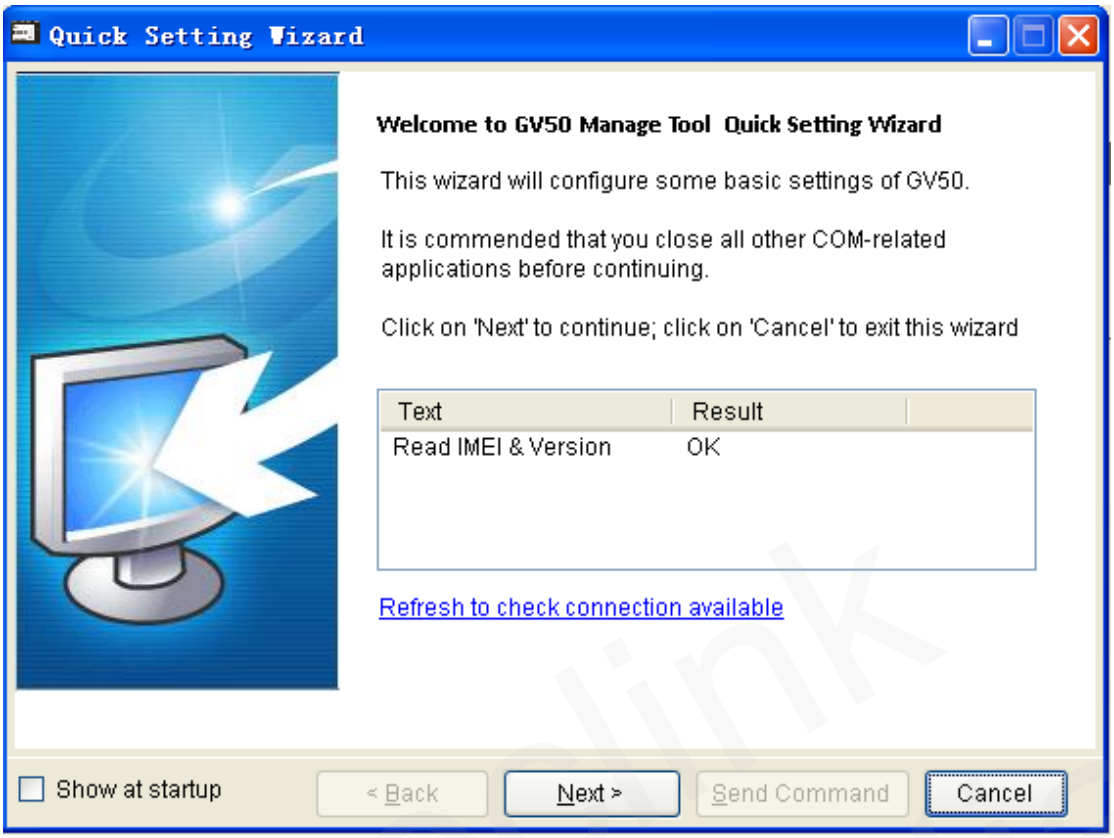
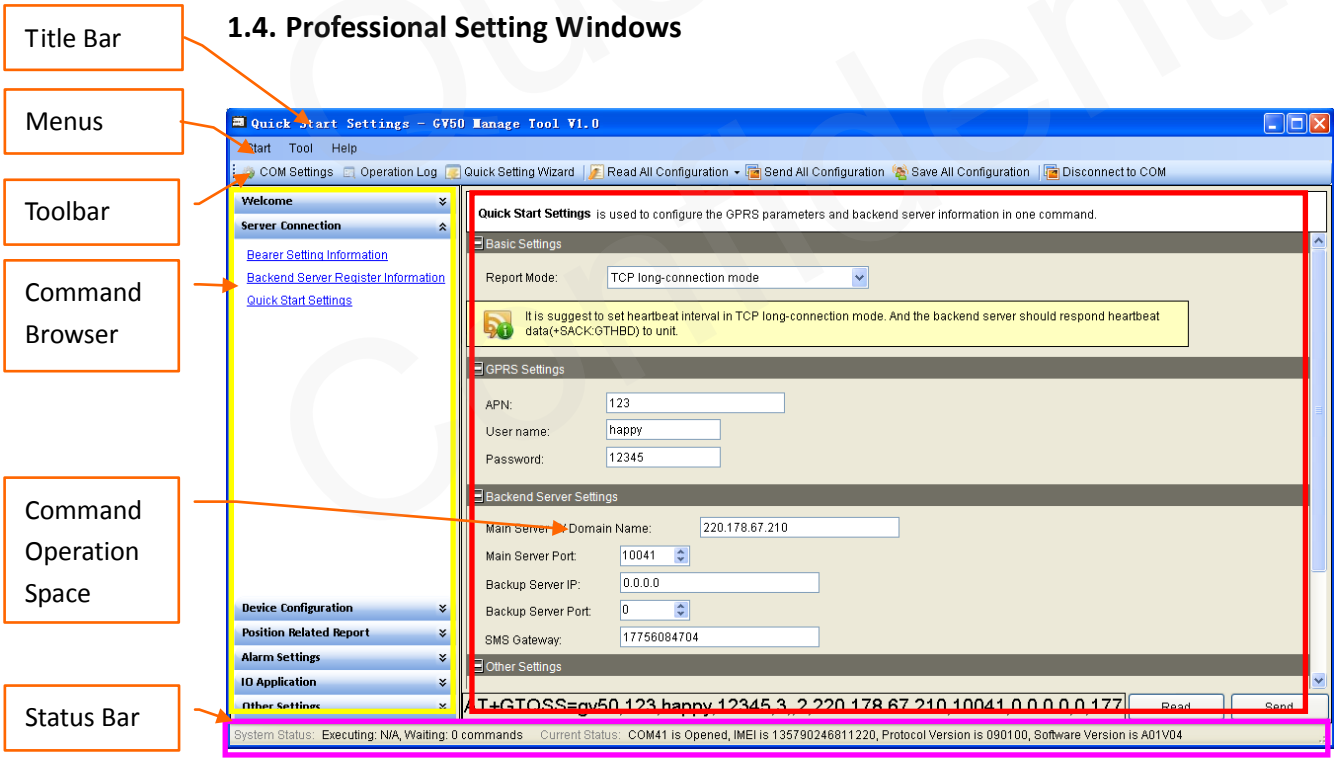


1.4. Professional Setting Windows



1.4.1.Title Bar

Title Bar indicates the current command title and the name of the Manage Tool.

1.4.2.Menus

There are “Start”, “Tool”, and “Help” in menus.

1.4.2.1 Start Menu

Start menu includes “*COM Settings*”.

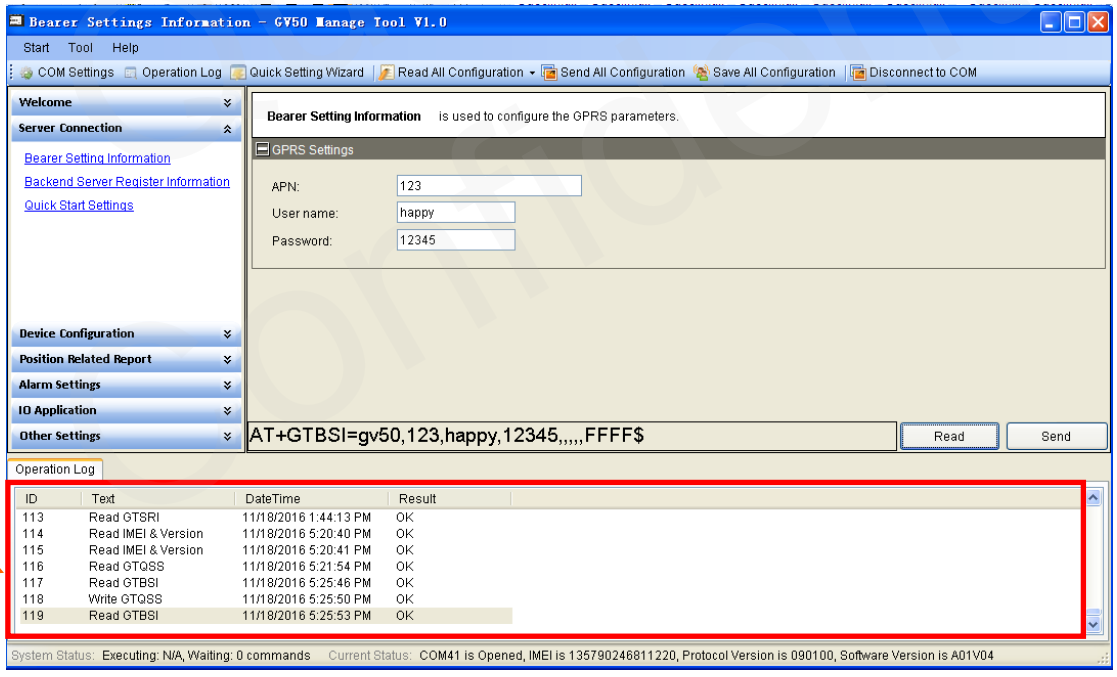
[COM Setting]: It is used to set the COM information and password. For Setting details, please refer to Chapter 1.2.

1.4.2.2 Tool Menu

Tool menu includes “Quick Setting Wizard”, “Operation Log”, and “Options” settings.

[Quick Setting Wizard]: It is used to open Quick Setting Wizard directly. Please refer to Chapter 2.1 for details.

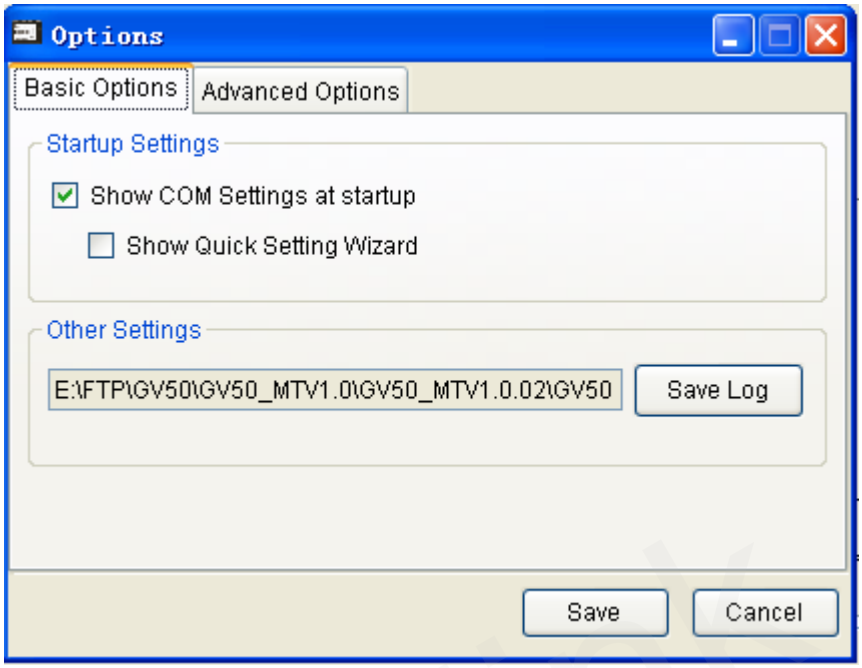
[Operation Log]: It is used to display/hide the operation log.



Operation Log

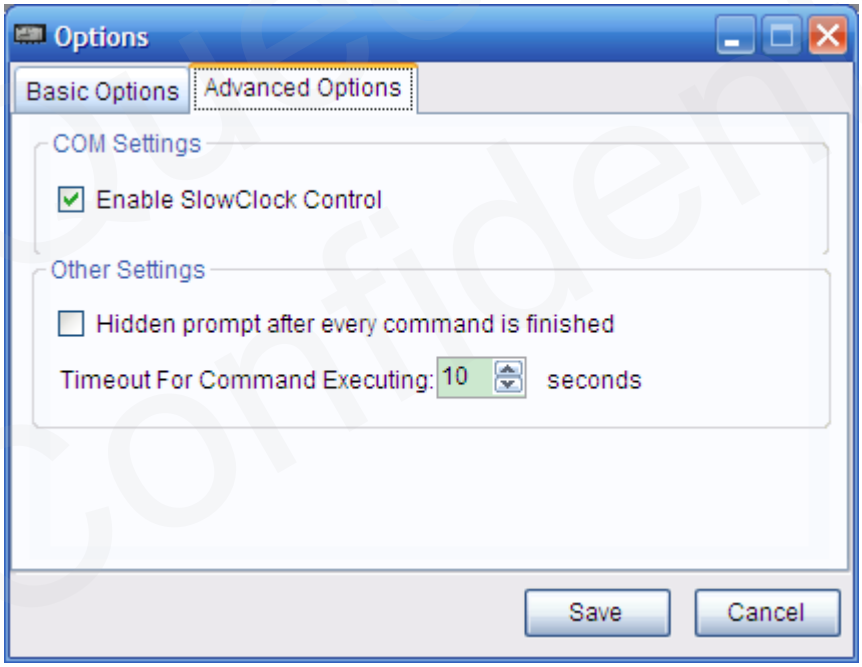
[Options]: It is used to configure the basic settings of the Manage Tool.

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



"*Advanced Options*" includes COM settings and other settings.

COM Settings is used to configure COM setting. It is recommended to use default settings for these settings.



1.4.2.3 Help Menu

[About]: Select "*About*". Then the following pop-up window will be displayed.

"*Manage Tool Version*" indicates the version of this Manage Tool.
"*Support Version*" indicates the firmware which this Manage Tool is used for.
"*Device Version*" indicates the firmware which connects to PC. It is recommended to use the same version as Support Version. If Support Version and Device Version are different, the new feature(s) of the device can not be used in this tool.
"*Hw Version*" indicates the device's HW version which connects to PC.

1.4.3.Toolbar

It includes "*COM Setting*", "*Operation Log*", "*Quick Setting Wizard*", "*Real All Configuration*", "*Send All Configuration*" , "*Save All Configuration*", and "*Connect/Disconnect to COM*".

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

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

[Quick Setting Wizard]: It is used to open Quick Setting Wizard directly. Please refer to Chapter 2.1 for details.

[Read All Configuration]: It is used to display/hide "*Read From Device*" and "*Load Configuration From File*".

"*Read From Device*": It is used to read all configurations from the 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 those of the commands GTQSS and 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 COM manually.

1.4.4.Status Bar

There are system status and current status in status bar.

[System Status]: It indicates the count of commands which are waiting and being executed.

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

1.4.5.Command Browser and Command Operation Space

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

1.4.5.1 Command Brower

Command Brower divides all @Track protocol commands into several parts. Click Function in command Brower, parameters of this command will be shown in command operation space.

Command Brower	Function Description	Related Command
Server Connection	Bearer Setting Information	GTBSI
	Backend Server Registration Information	GTSRI
	Quick Start Settings	GTQSS
Device Configuration	Global Configuration	GTCFG
	Auto-Unlock PIN	GTPIN
	Time Adjustment	GTTMA
	Software Protocol Watchdog	GTDOG
	Outside Working Hours	GTOWH
	Settings for Preserving Device's Specified Logic States	GTPDS
	Hex Report Mask	GTHRM
Position Related Report	Fixed Position Information	GTFRI
	Frequency Change of Fixed Report Information	GTFFC

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Alarm Setting	Tow Alarm Configuration	GTTOW
	Geo-Fence Configuration	GTGEO
	Speed Alarm	GTSPD
	Excessive Idling Detection	GTIDL
	Roaming Detection Configuration	GTRMD
	Start/Stop Report	GTSSR
	Harsh Behavior Monitoring	GTHBM
IO Application	Digital Output Port Setting	GTOUT (for GV50P Manage Tool)
	Digital Input Port Setting	GTDIS
	External Power Supply Monitoring	GTEPS
Virtual Ignition Detection	Voltage Virtual Ignition Setting	GTVVS
	Accelerometer Virtual Ignition Setting	GTAVS
Other Settings	Hour Meter Count	GTHMC
	Real Time Operation	GTRTO
	White List	GTWLT
	Command String Storage	GTCMD
	User Defined Function	GTUDF
	GPS-Assisted Motion Measurement	GTGAM

Note:

1. For the GV50 device, please use Queclink_GV50_Manage_Tool. There is no **AT+GTOUT** command and output related parameters, and no Ignition Detection Mode 0 in the **AT+GTDIS** command.
2. For the GV50P device, please use Queclink_GV50P_Manage_Tool.

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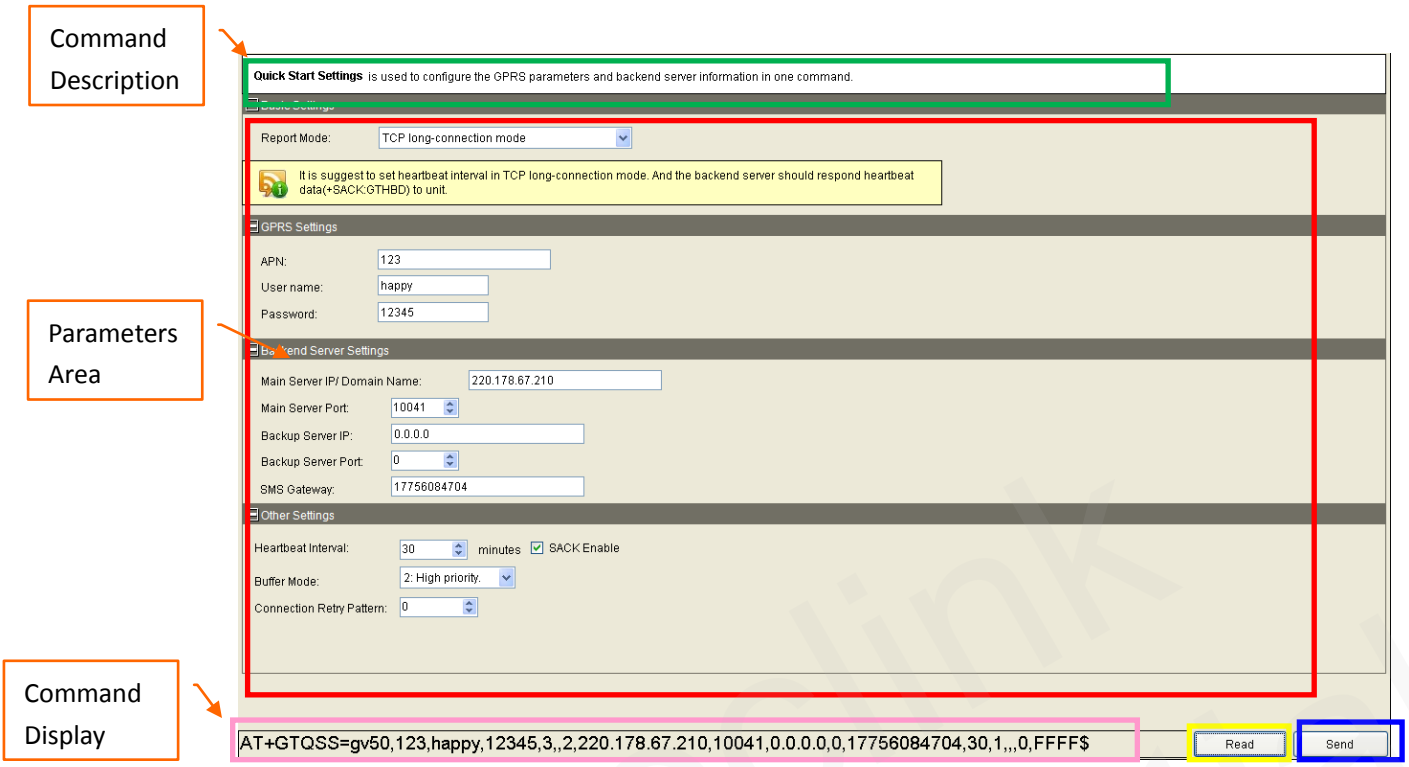
1.4.5.2 Command Operation Space



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

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

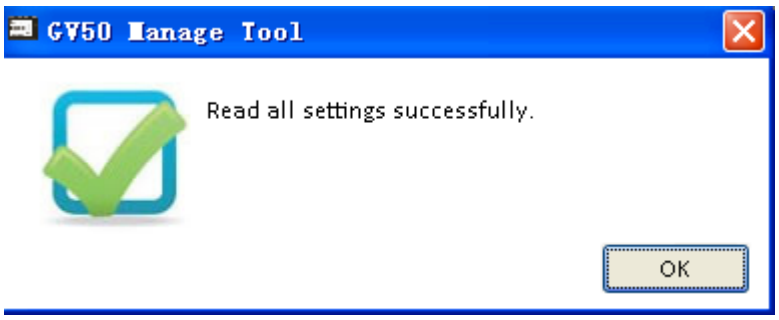
[Command Display]: Command with parameters in parameters area is displayed in this area.

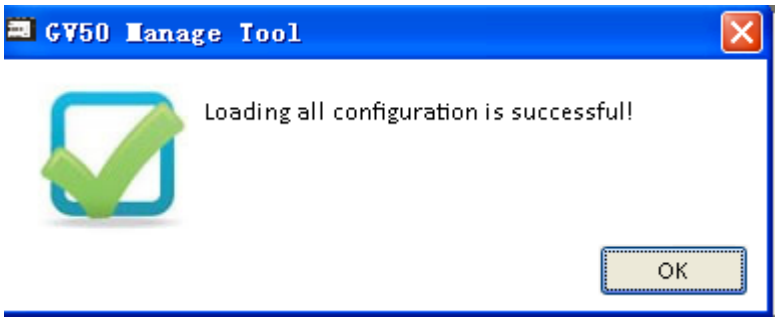
[Read]: Click this button to read this command from the device.

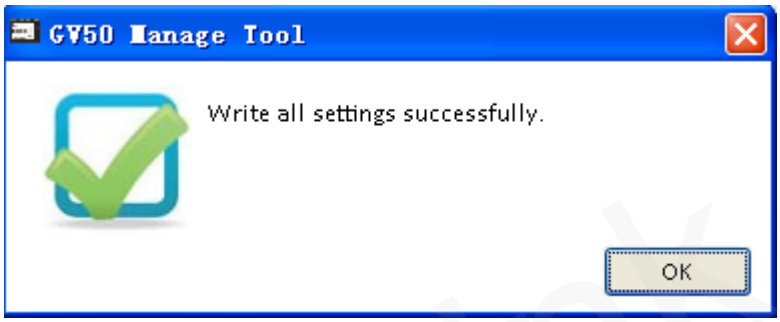
[Send]: Click this button to send this command to the device.

1.5. Operation Result Interface

1.5.1.Operation Successful Interface

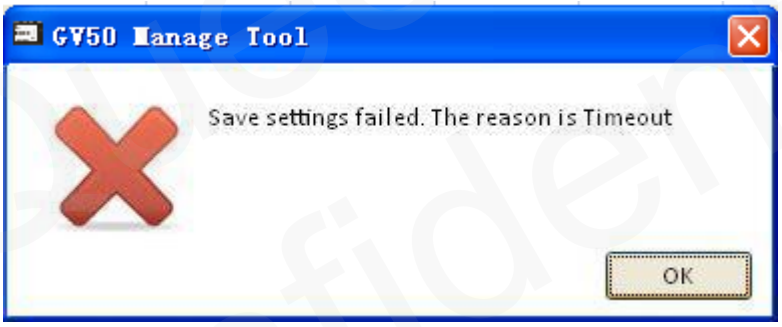




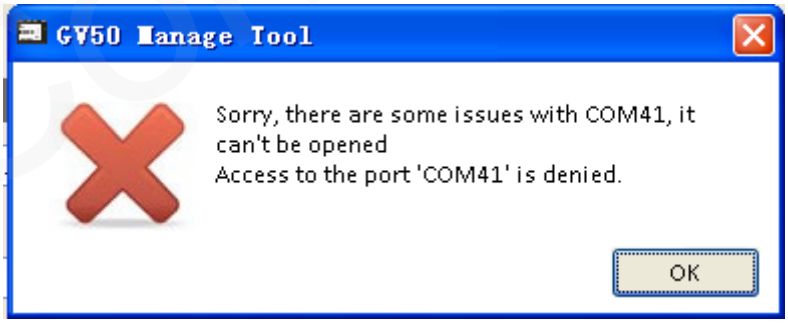


1.5.2.Operation Failed Interface

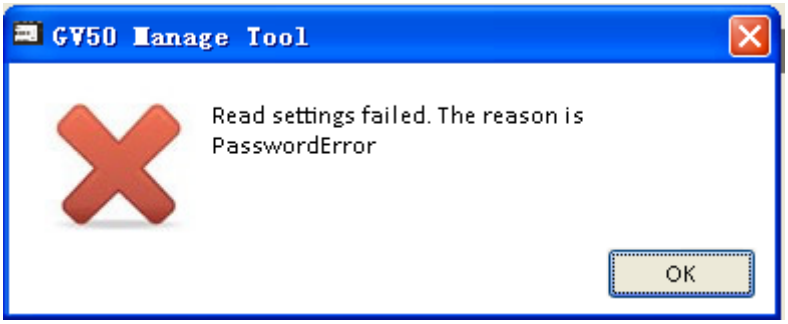
There should be COM port connection problem if the failure reason is timeout.



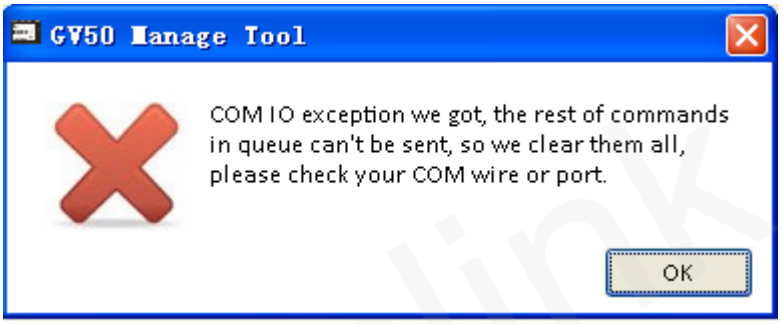
There should be COM port that is occupied. Please close all other COM-related applications.



Please change to correct device password if Password Error occurs.



There are some issues with this COM. Please check your COM wire or port.



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2. Operation Instruction

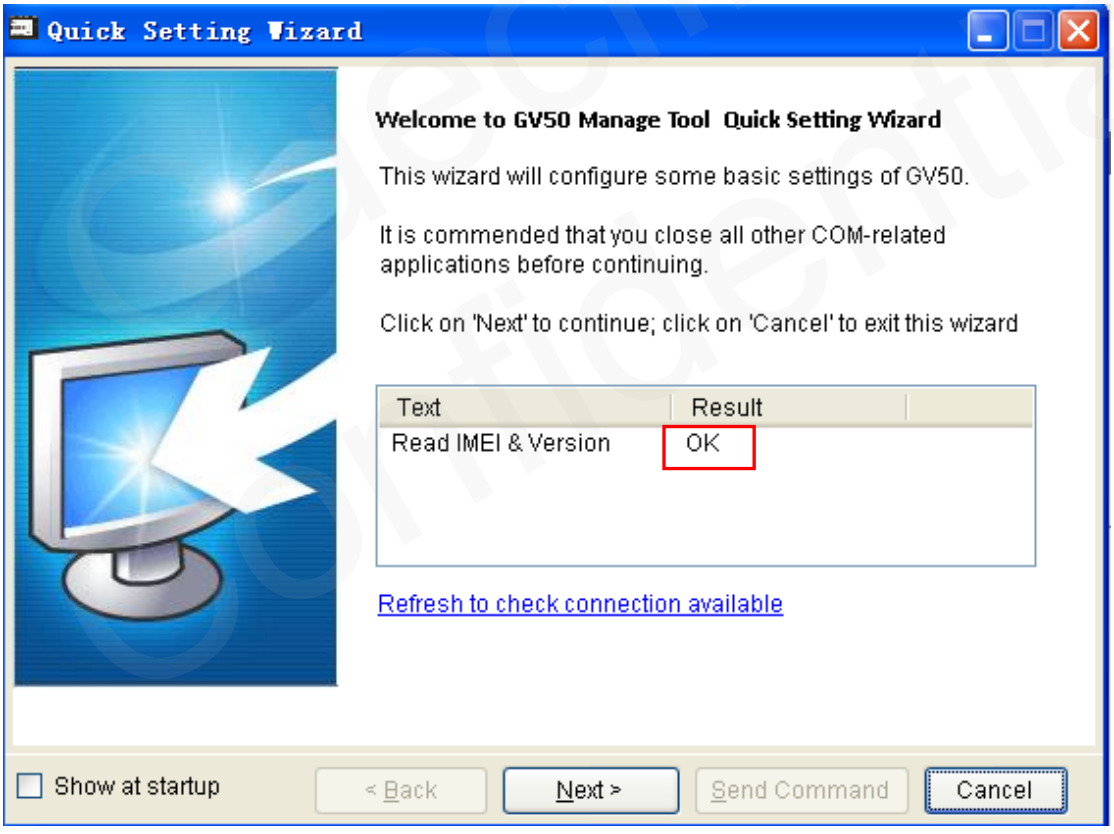
2.1. Device Configuration with Quick Setting Wizard

The manage tool is developed based on the @Track Air Interface Protocol. Please refer to "*GV50 @Track Air Interface Protocol*" for details.

The Quick Setting Wizard provides basic settings for the device. If you want to use more functions of GV50, please change to professional setting mode.

2.1.1.Welcome to Quick Setting Wizard

Click "*Quick Setting Wizard*" in toolbar, and 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.

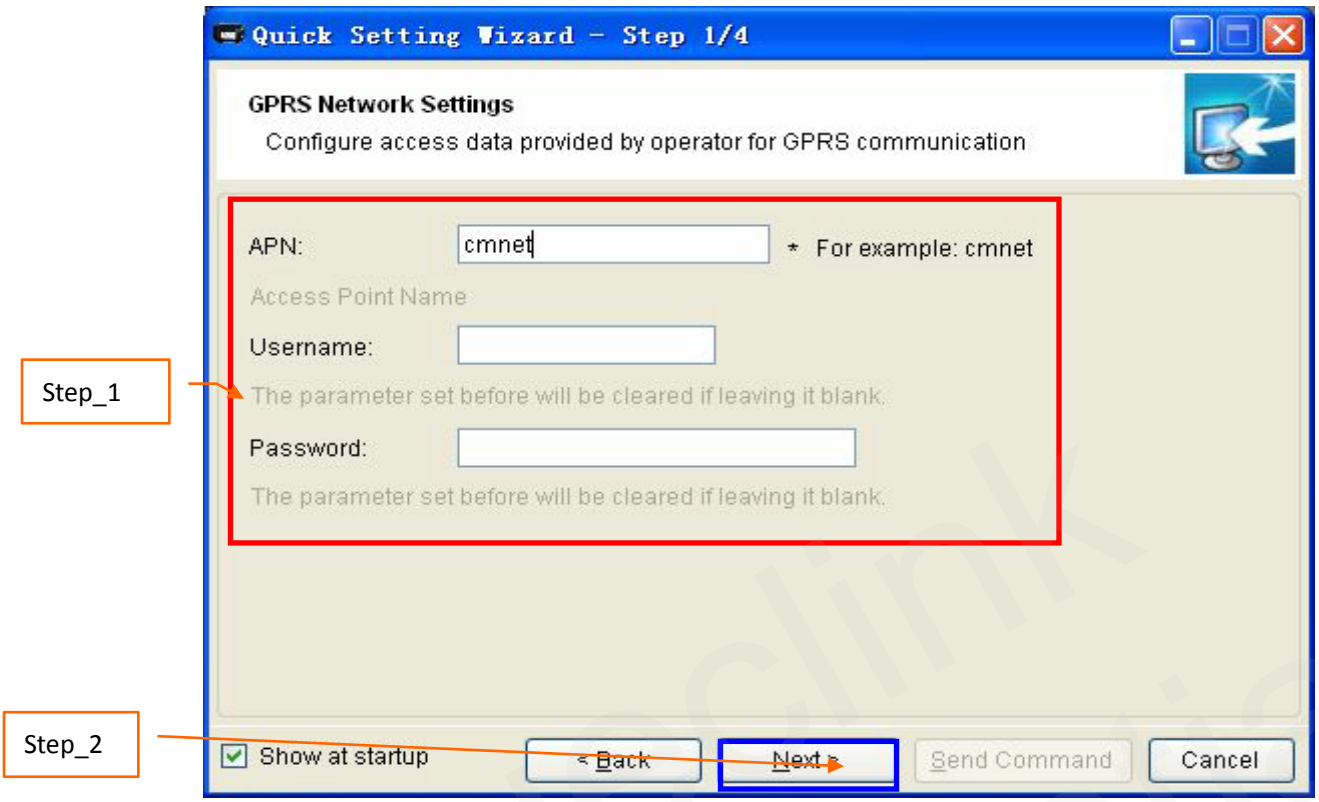


Welcome to Quick Setting Wizard

2.1.2.GPRS Network Setting

Step_1: Set APN, APN user name and password in this window. For the meanings of these parameters, please refer to the "*GV50 @Track Air Interface Protocol*".

Step_2: Then click "*Next*".

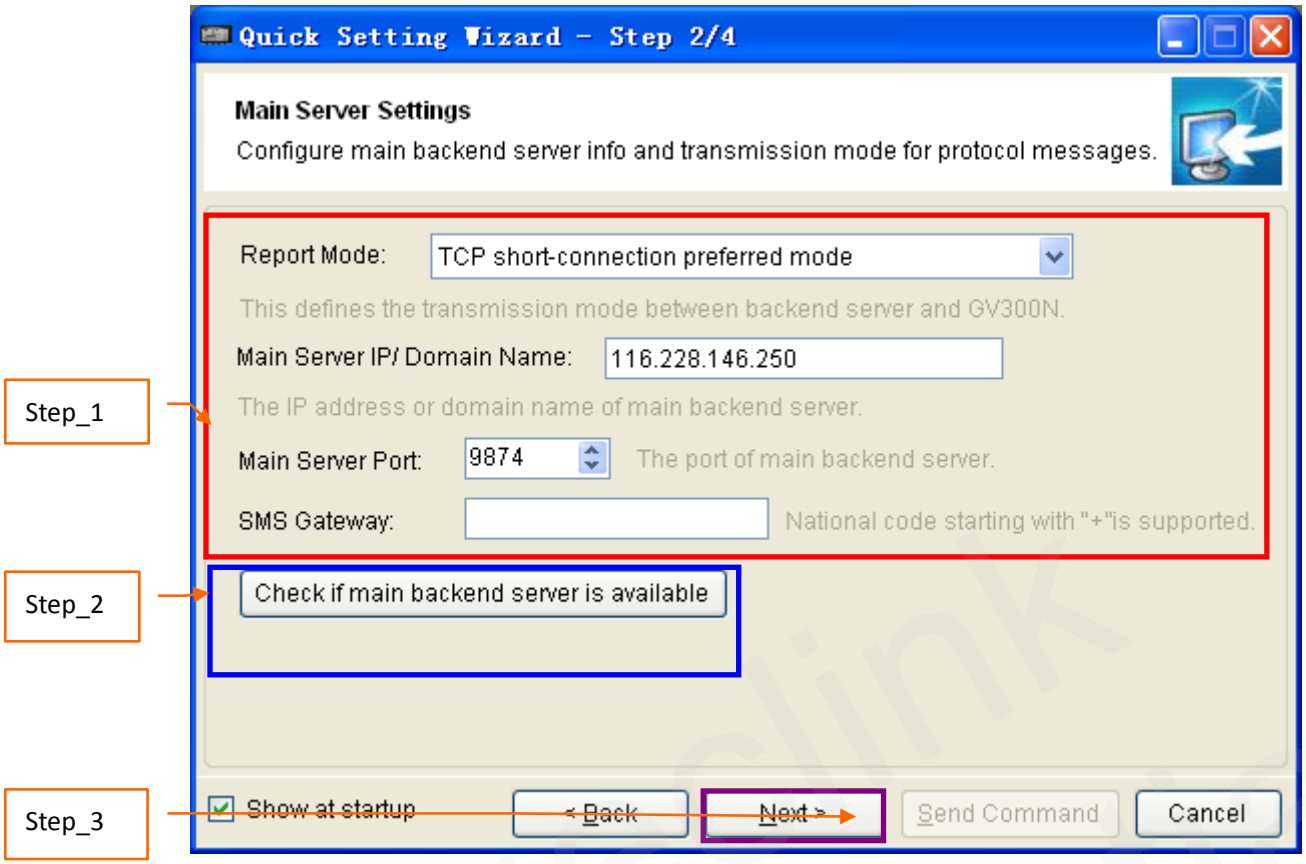


2.1.3.Main Server Setting

Step_1: Set report mode, main server, main server port, and SMS gateway in this window. For the meanings of these parameters, please refer to the "*GV50 @Track Air Interface Protocol*".

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

Step_3: Click "*Next*".



2.1.4.Fixed Time Report Setting

Step_1: Set check interval, send interval, and discard no fix in this window. For the meanings of these parameters, please refer to the "*GV50 @Track Air Interface Protocol*".

Step_2: Click "*Next*".

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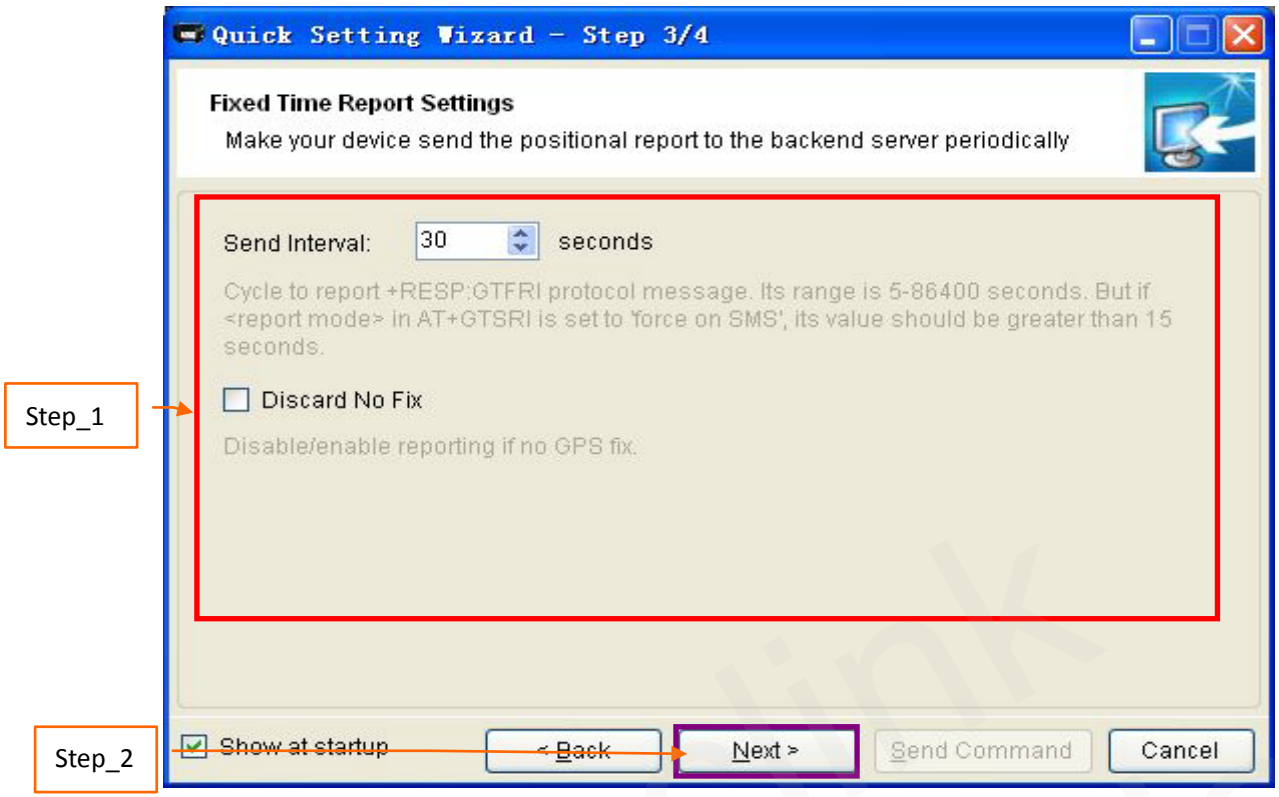

2.1.5.Send Command to the Device

Step_1: Click "*Send Command*". The commands *GTBSI*, *GTSRI,* and *GTFRI* will be sent to the device.

Step_2: If the settings are downloaded successfully, the result returns "OK". Click "*OK*", the result window is closed. Quick setting is completed.

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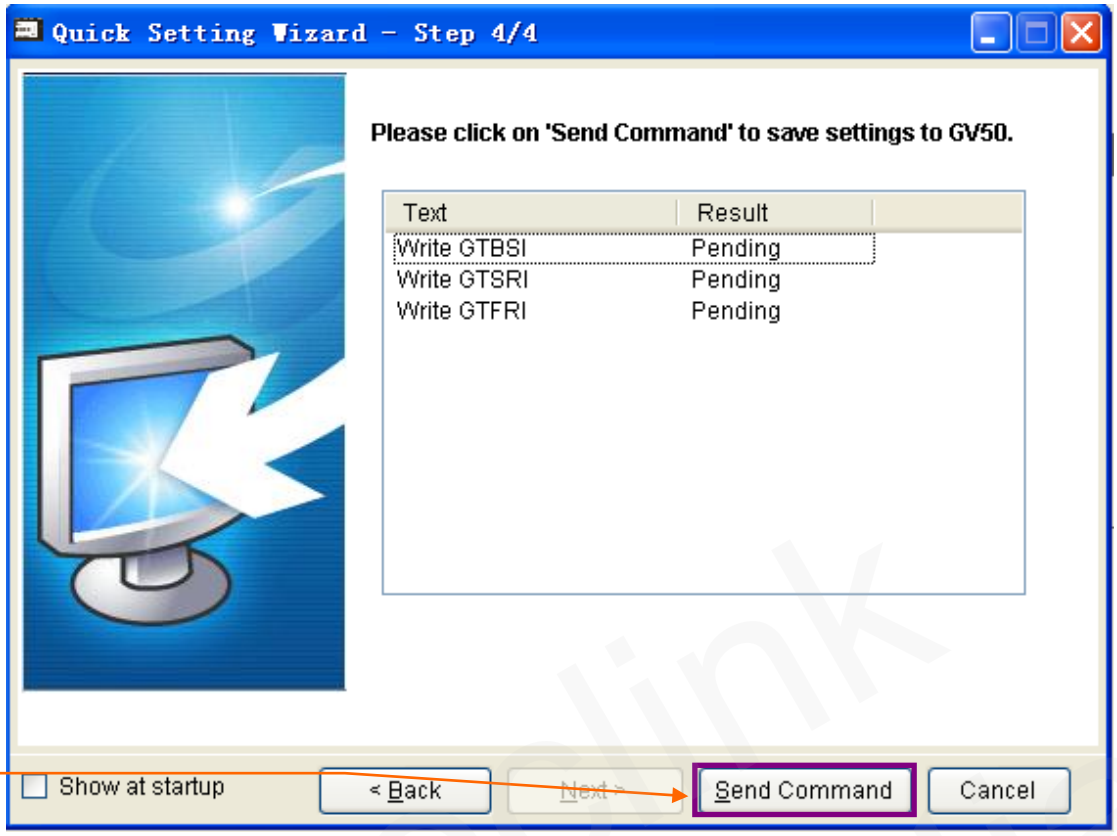
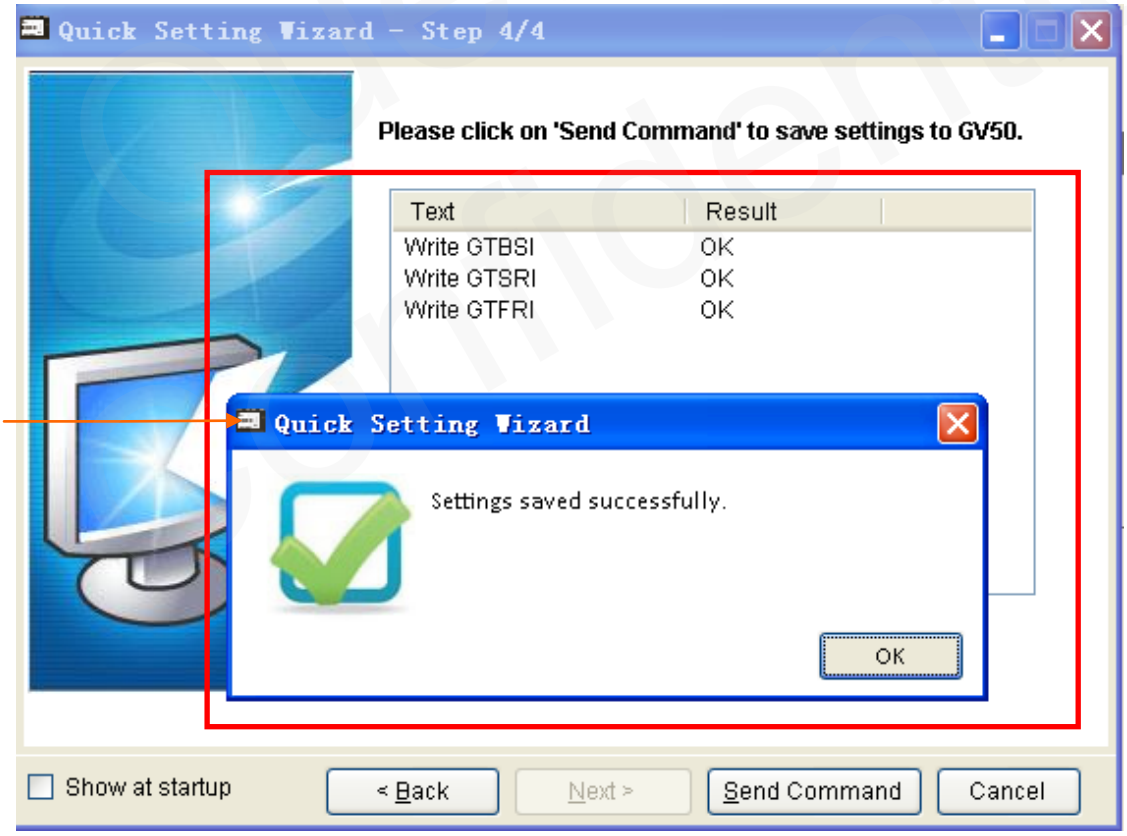

Quick Setting Wizard - Step 4/4
Please click on 'Send Command' to save settings to GV50.
Text
Result
Write GTBSI
Pending
Write GTSRI
Pending
Write GTFRI
Pending
Show at startup
< Back
Next >
Send Command
Cancel

Step_1

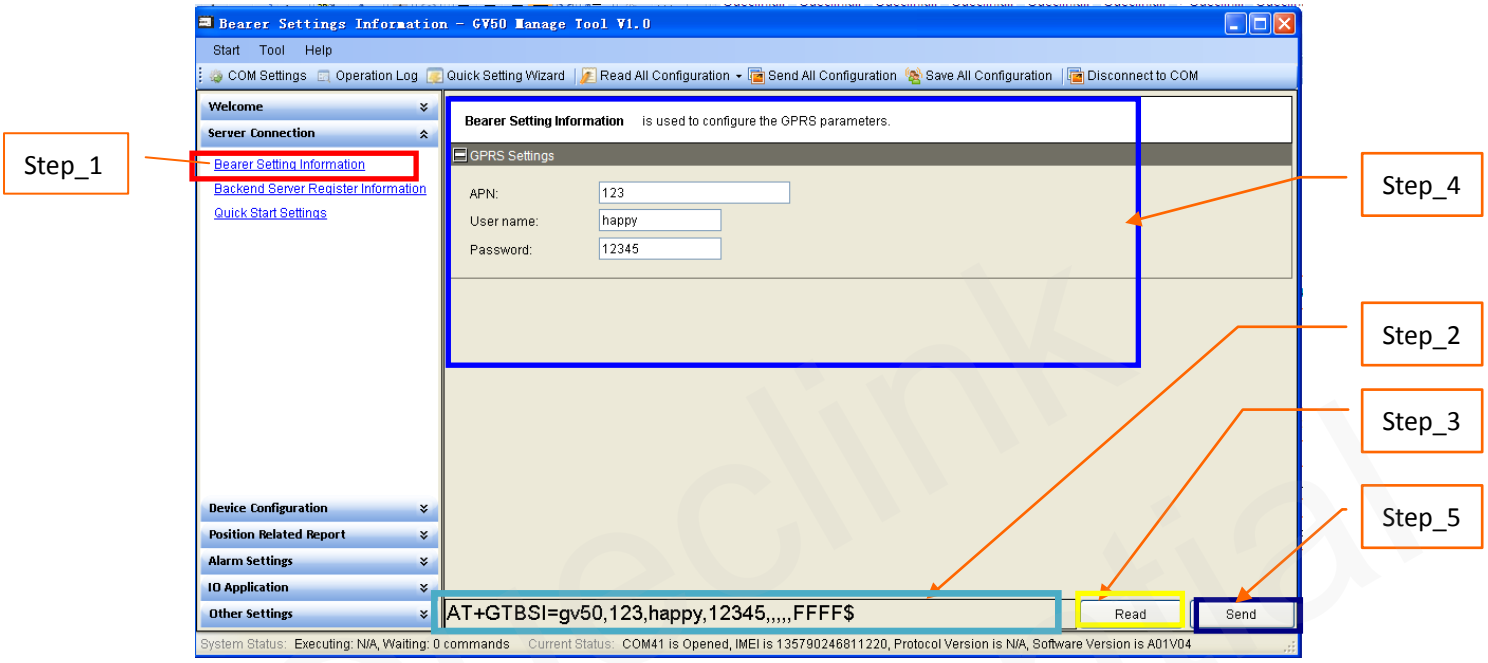

Quick Setting Wizard - Step 4/4
Please click on 'Send Command' to save settings to GV50.
Text
Result
Write GTBSI
OK
Write GTSRI
OK
Write GTFRI
OK
Quick Setting Wizard
Settings saved successfully.
OK
Show at startup
< Back
Next >
Send Command
Cancel

Step_2

2.2. Device Configuration in Professional Setting Mode

The Manage Tool is developed based on the @Track Air Interface Protocol. Please refer to "*GV50 @Track Air Interface Protocol*" for details.

The following shows a general procedure to configure GV50 with the Manage Tool.



Step_1: Select "*Bearer Setting Information*". After that, the parameters of GTBSI will be shown in Command Operation Space.

Step_2: The command message which shall be sent to GV50 will be generated based on input and displayed here. Please note this command message can also be sent to GV50 through SMS or GPRS.

Step_3: It is recommended to read the parameters from GV50 and edit settings based on them.

Step_4: Set APN parameters. Please refer to "*GV50 @Track Air Interface Protocol*" for the meaning of each parameter.

Step_5: Click the "*Send*" button; download the parameters of GTBSI to GV50.

Note:

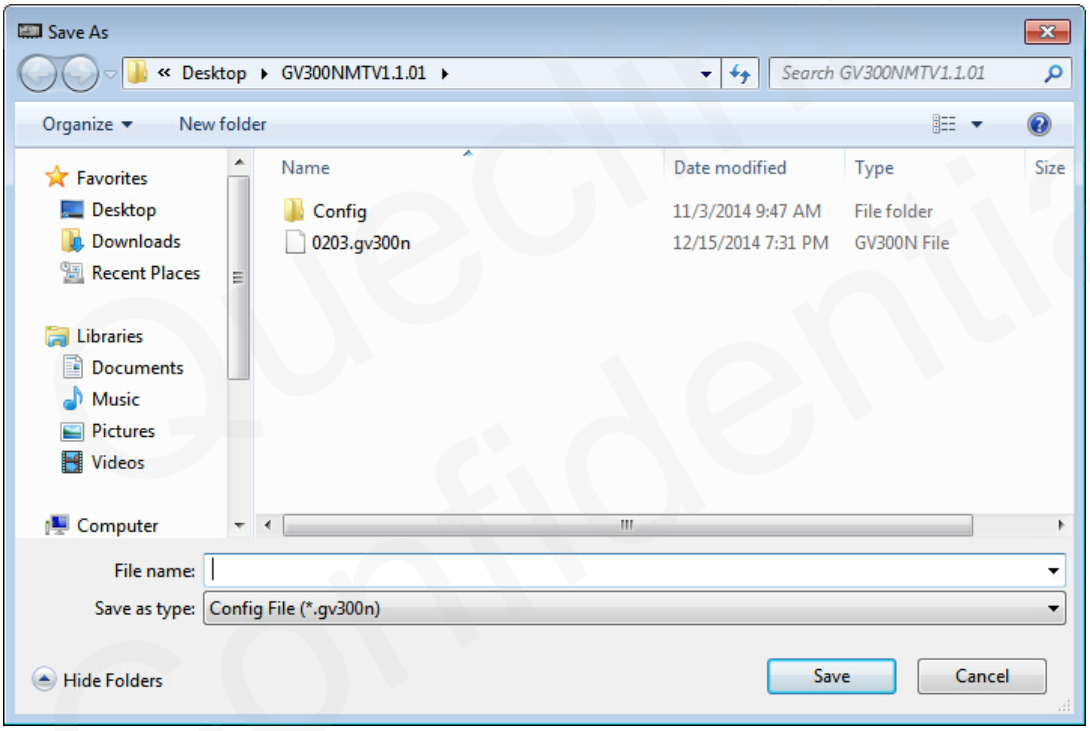
The parameters of GTSRI and GTBSI will be changed when the parameters of GTQSS are changed.

2.3. Read/Save All Configurations

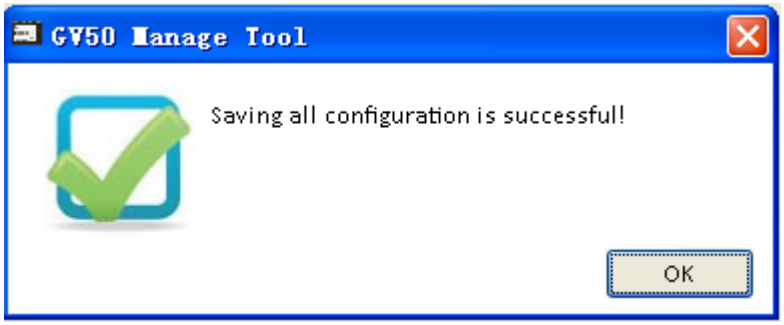
Step_1: It is recommended to read all configurations from the device before saving the configuration. Select "*Read All Configuration*"→"*Read From Device*".

Step_2: After reading successfully, click "*Save All Configuration*" in toolbar.

Step_3: Select a folder, type in the name of configuration file, and then click "*Save*" button.



Step_4: Saved successfully.

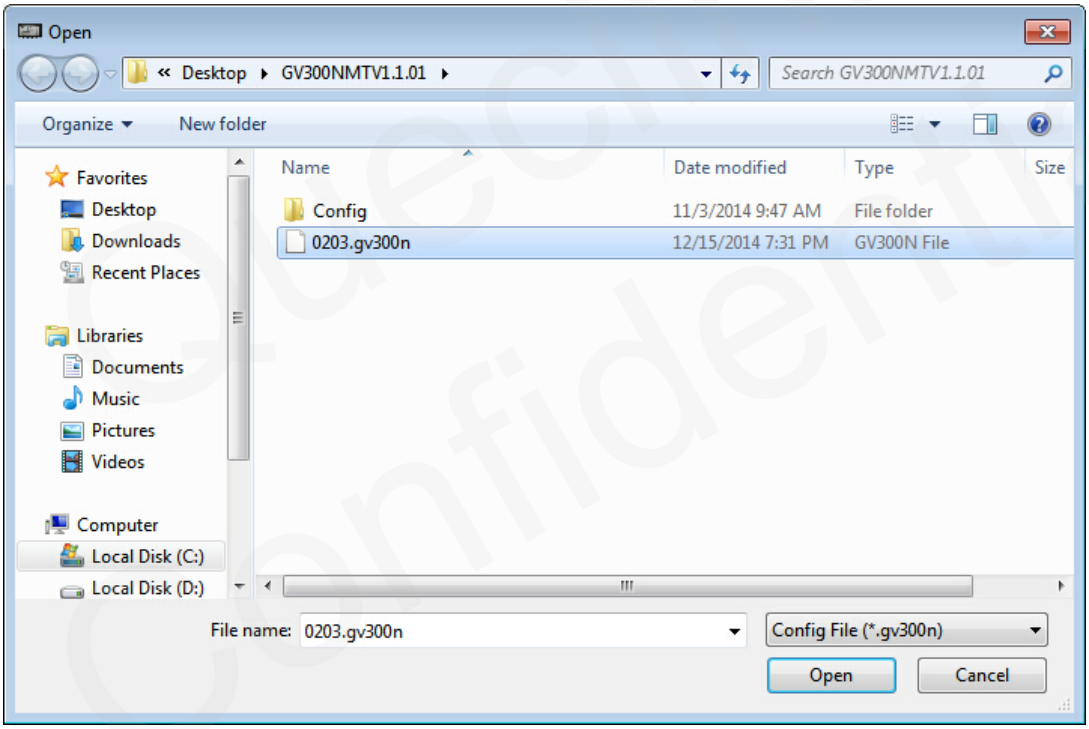


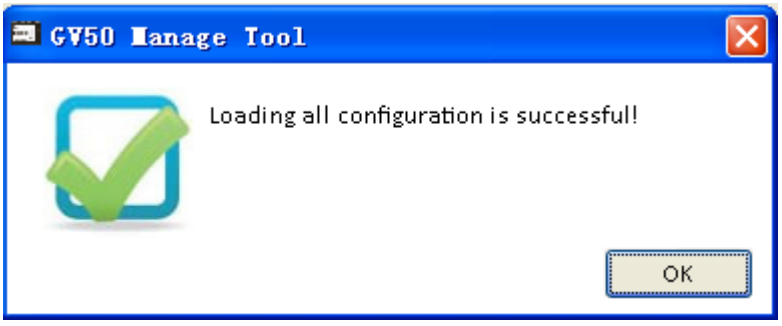
Note:

1. Manage Tool will generate a configuration file with parameter configuration and an .ini file with AT command (which MT has saved except **AT+GTRTO**). The name of the .ini file is composed of configuration file name and "_at".
For example, click "Save All Configuration" and type in the name of configuration file with "gv50", it will generate "gv50.gv50" and "gv50_at.ini".
2. It is recommended to save all configurations before sending AT+GTCFG command or sending all commands. Becuase GTCFG command can change password which makes situation complicated.

2.4. Load/Send All Configurations

Step_1: Before sending 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*". Then select the configuration file you need.





Step_2: You can set the parameters in commands based on the configuration file, and then click "*Send All Configuration*" in toolbar.

Note: The commands GTQSS and GTRTO will not be sent when clicking "*Send All Configuration*".

Step_3: The Manage Tool will send all commands to the device.

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2018.01.24