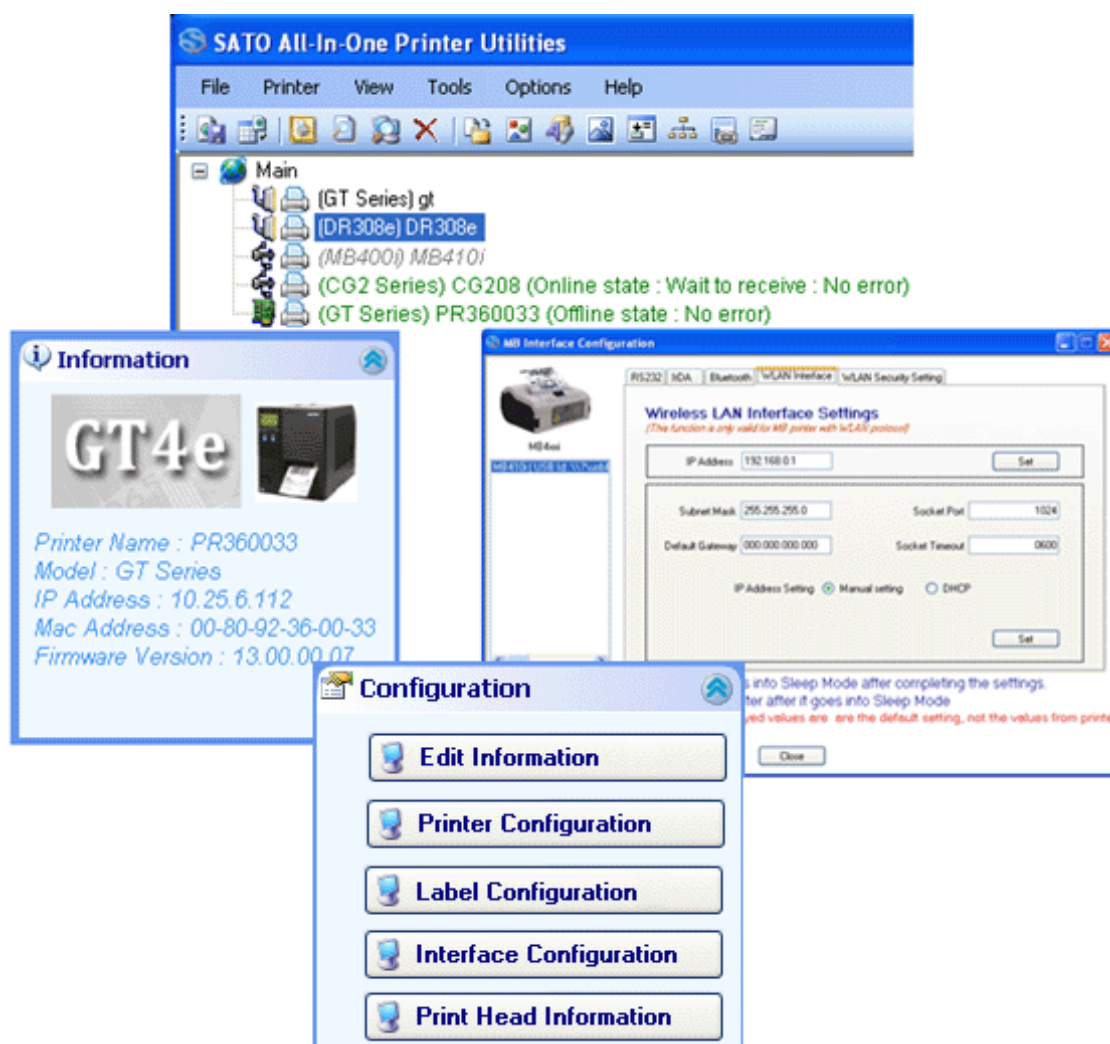


User Manual

SATO All-In-One Printer Control Application



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Version 1.1.8.0

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Overview

1

The SATO All-In-One application for printer remote control was developed to achieve the following goals:

- To simplify the SATO printer configuration and operation processes for end-users
- To allow remote configuration and control of SATO printers that are compatible with this application
- To consolidate as many of the separate software printer utilities as possible into a integrated application

1.1. Supported Models of SATO Printers

Currently only the following models of SATO printers are supported by the current version of the SATO All-In-One application:

- CL4e/CL6e Series
- CG2/CG4 Series
- GT4e Series
- GL4e Series
- M-10e
- MB2i / MB4i
- M84SE Series
- M84 Pro Series
- CT4i Series
- LM Series
- S84 Series
- DR308e
- LM4 Series
- LT408
- D5xx Series
- GY4 Series
- TG3 Series
- TH2 Series
- GZ4 Series
- CL4NX Series
- S84ex/S86 ex

The SATO All-In-One application will be undergoing continual refinement, and it is expected that other SATO printer models will be supported in future, in line with customer demand.

System Requirements

2

The minimum system requirements for the SATO All-In-One Application are

- ◆ A computer with at least a 450MHz Pentium® CPU with 128 MB of RAM, running Windows 2000, Windows XP, Windows Server 2003, Windows Vista, Windows Server 2008 or Windows 7 platforms.
- ◆ Installed **.NET Framework 2.0** (or higher version)
- ◆ At least one supported model of SATO printer that can connect to the computer running this application

Standard SBPL commands are sent to SATO printers to update configuration settings or to retrieve data. The data will then be presented in a meaningful and graphical interface for the software user.

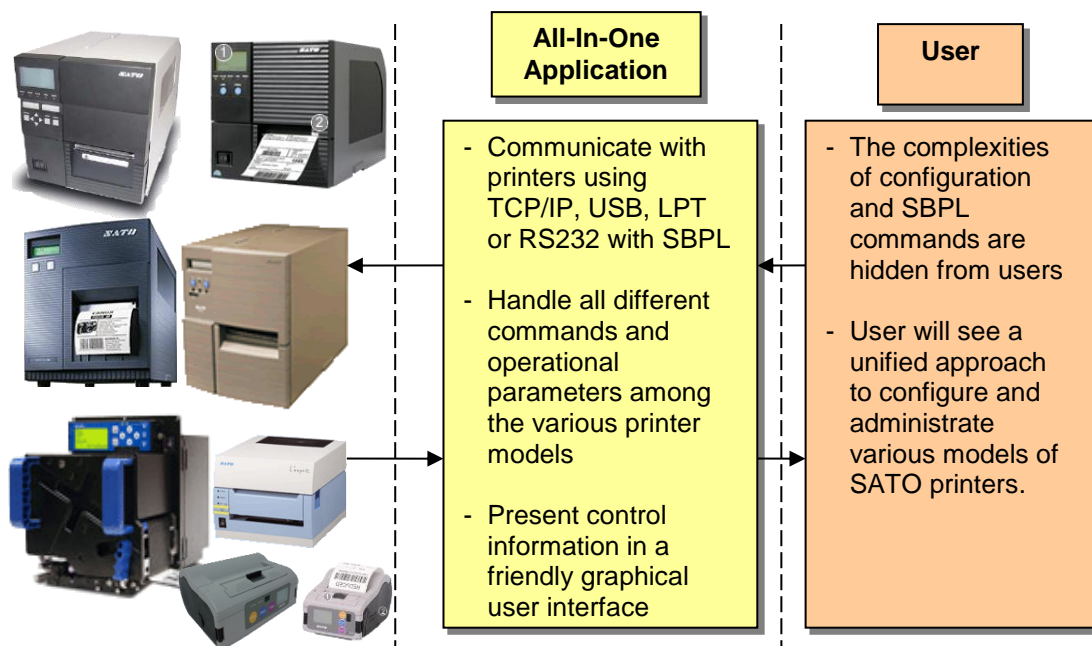


Figure 1 System Overview

Currently, SATO All-In-One Application does not require a database system. The only scenario where persistent data is needed is during the exporting of application profile into XML files.

Please Note that Windows Vista and above OS user must be administrator in order All-In-One tool to perform well. Things like saving Preference Settings, Firmware download etc might not function well if user does not have admin rights.

Setup

3

After obtaining the installation software, double click on the setup file to install the application.



Figure 2 Setup screen

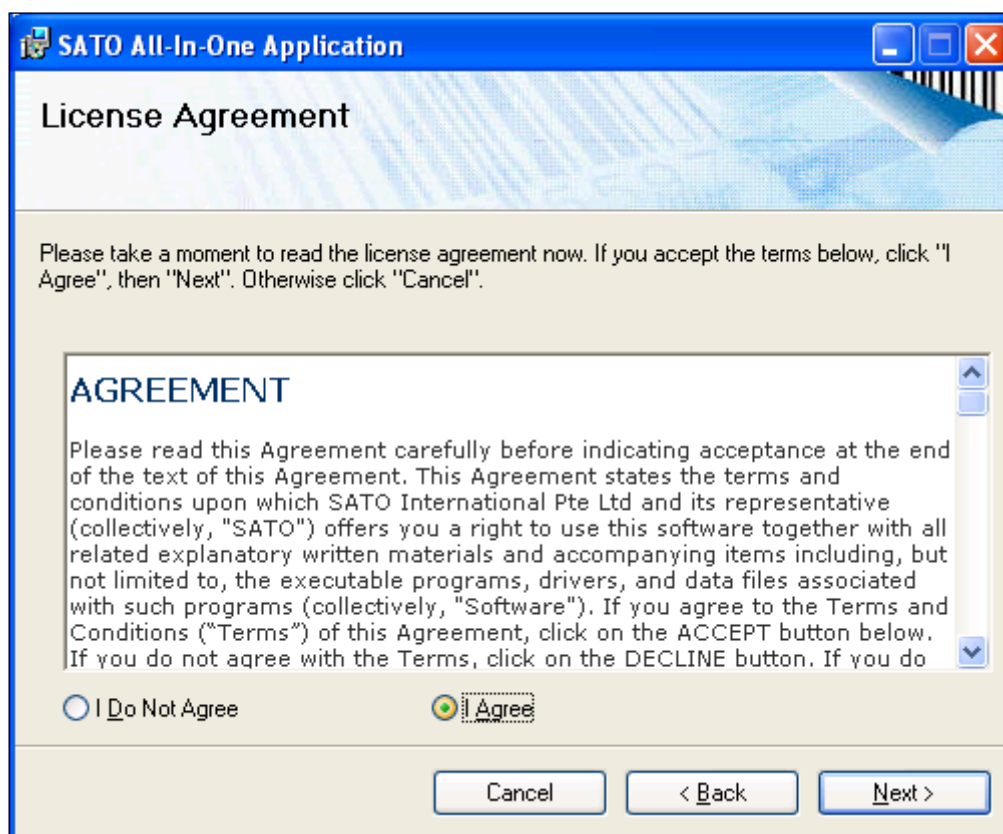


Figure 3 License Agreement

In order to have access to the "Next" button to proceed with the installation, the user must agree with the License Agreement by clicking on the "I Agree" radio button.

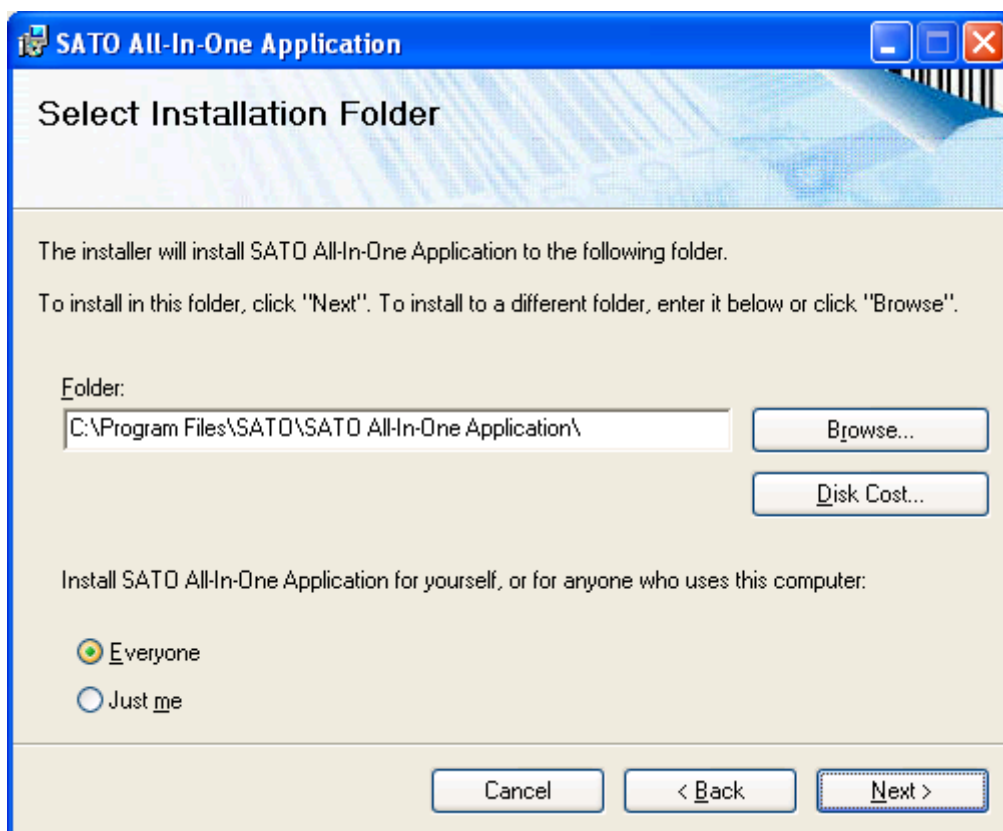


Figure 4 Installation folder

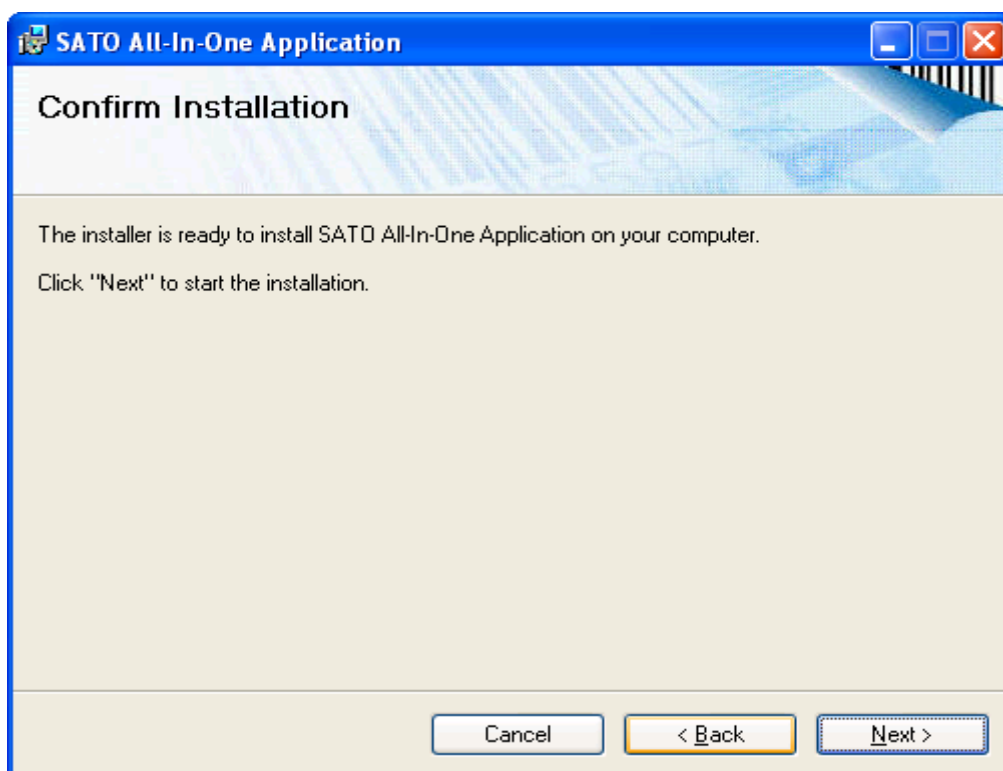


Figure 5 Confirmation

Click the “Next” button to start the installation.

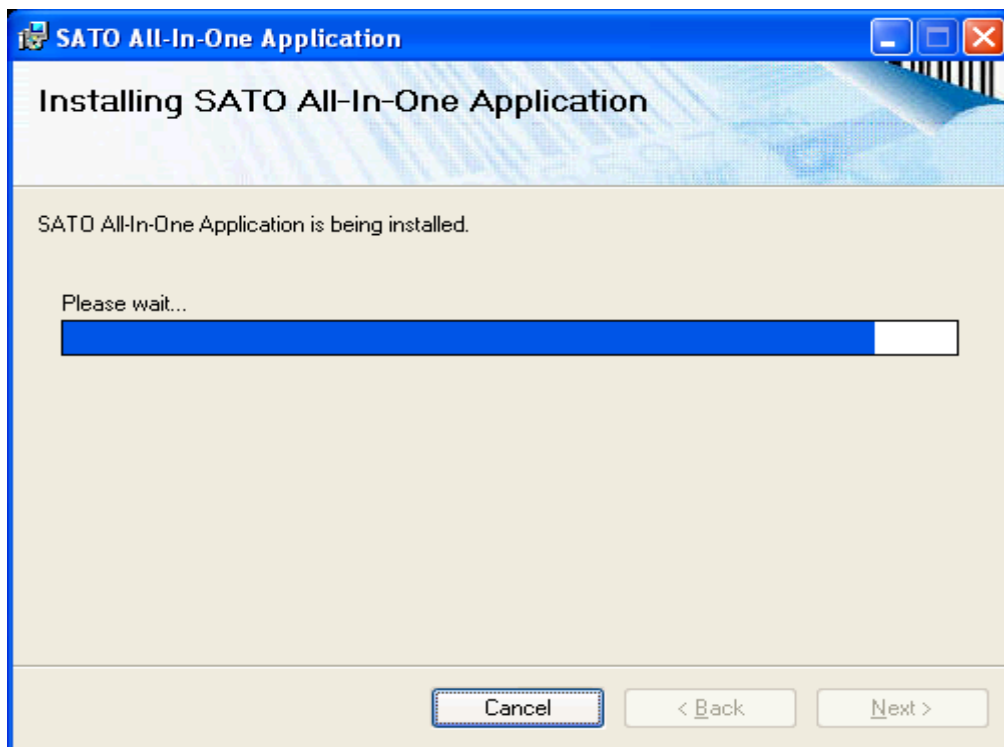


Figure 6 Installation in progress

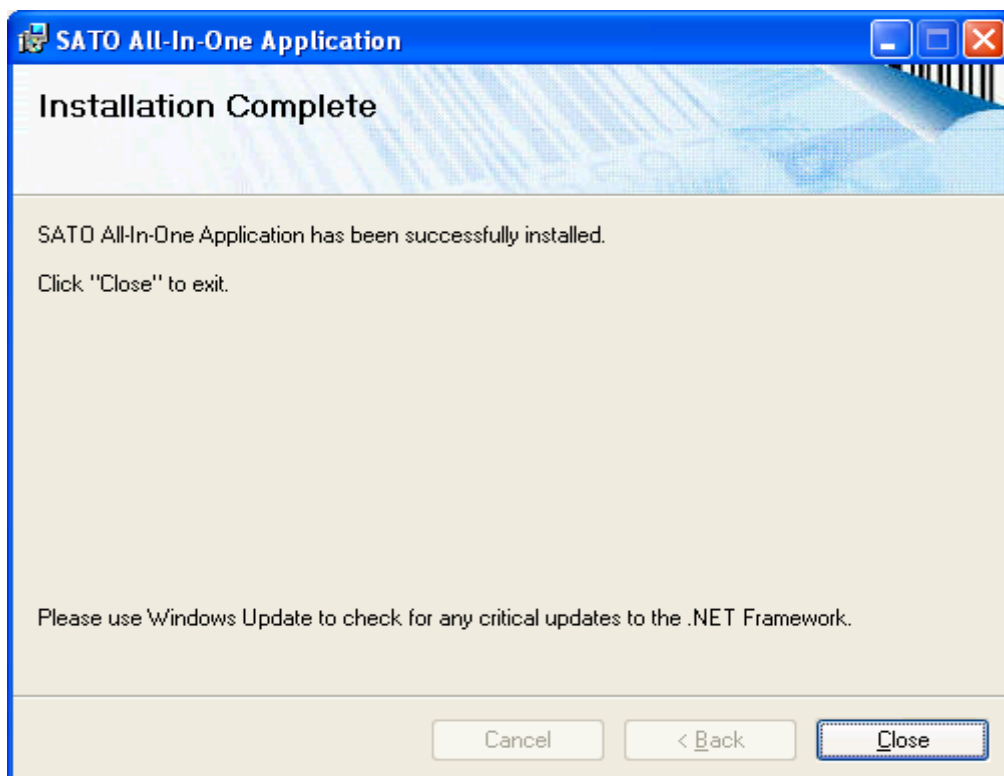


Figure 7 Installation Complete

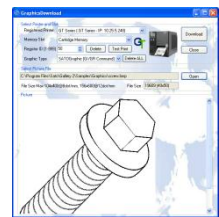
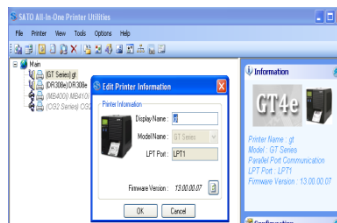
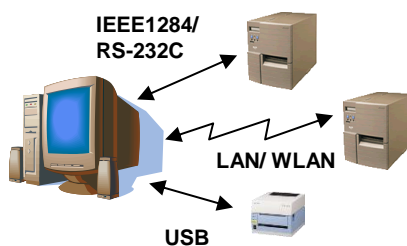
The program can then be launched from the Start Button->All Programs->SATO->SATO All-In-One Application program group.

Using the All-In-One Application

4

4.1. Overview

The SATO All-In-One Application works on the following paradigm:



1 CONNECT
Link to supported printer(s) via Auto-Discovery or via manual entry

2 ORGANIZE
Use the graphical treeview structure to organize connected printers into groups using custom folders & display names.

3 CONTROL
Configure/control any SATO printer regardless of its location in the world.

4.2. Summarized Features List

	Feature	CL4/6xxe	LM4xxe	GT4xxe	GL4xxe	M-10e	MB2/4xxi	M84xxSE	CT4xxi	S84xx	DR308e	CG2/4	LT408	D500/12	TH2	TG3	CL6 Plus	GY4	GZ4	CL4NX	S84ex/S86ex
1	Auto-Discovery	O	O	O	O	O	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O
2	Saving and loading Printer Configuration	O	O	O	O	O	O	O	O	O	O	O	O	O	X	O	O	O	O	O	O
3	Displaying and setting of Printer Configuration	O	O	O	O	O	O	O	O	O	O	O	O	O	X	O	O	O	O	O	O
4	Firmware Download	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
5	Concurrent download firmware to multiple printers	O	O	O	O	O	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O
6	Send and query SBPL command	O	O	O	O	O	O	O	O	O	O	O	O	O	X	O	O	O	O	O	O
7	True Type Font Download (Expanded Memory/Cartridge)	O	X	O	O	X	X	X	X	O	X	X	X	X	X	O	O	X	X	O	O
8	Graphics Download	O	O	O	O	O	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Supported Interface																					
9	LAN	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
10	RS232c	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
11	IEEE1284 Parallel Port	O	O	O	O	O	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O
12	USB	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
13	Test Print	O	O	O	O	O	O	O	O	O	O	O	O	O	X	O	O	O	O	O	O
14	LAN Interface Card Configuration	O	O	O	O	O	X	O	O	O	O	O	O	O	X	X	O	O	O	O	O
15	Format Download to Keypad	X	X	X	X	X	X	X	X	X	O	O	X	X	X	X	X	X	X	X	X
16	Bitmap Font Download (Internal Memory)	O	O	O	X	O	O	O	O	O	O	O	O	O	X	O	O	O	X	X	O
17	TH2 Package Download	X	X	X	X	X	X	X	X	X	X	X	X	X	O	X	X	X	X	X	X

Note: For troubleshooting purposes, SATO All-In-One Application generates a log file to capture important debugging information such as error codes. By default, the log file is created at c:\ directory and the file name is *SATO_All-in-one.log*.
The default directory can be changed from the dialog box in Option->Preferences. Refer to Section 4.24 *Application Configuration* for details.
When reporting bugs or problems, copy the log file to the systems support team.
The default directory can be changed from the dialog box in Option->Preferences. Refer to Section 4.24 *Application Configuration* for details.

4.3. Multi-Lingual Support

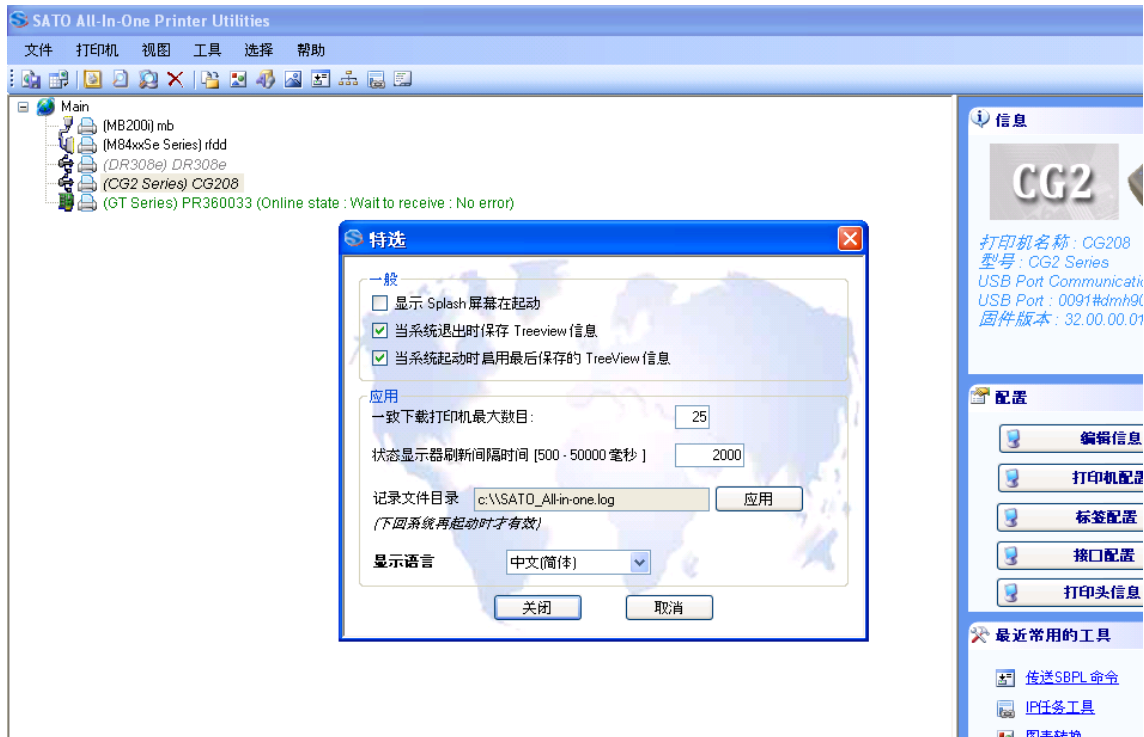


Figure 8 Multi-Lingua Support

This version of All-In-One tool supports English and Traditional/Simplified Chinese. User can change the language setting at the Options->Preferences.

4.4. Adding a Printer

Only SATO printers, specifically those supported by this All-In-One application, can be detected and added. Currently, the following interfaces are supported:

- ◆ LAN (Wired and Wireless, TCP/IP)
- ◆ Serial Communication (RS232c)
- ◆ Parallel Port (IEEE 1284)
- ◆ USB (Plug & Play)

For printers using SILEX Network Interface card (such as GT and CL), it is necessary to use the SILEX firmware which supports bi-directional communications on port 9100, i.e., version A1.2.3 and above.

** For SAI-SILEX firmware, it is necessary to add the printer with Port no.: 1024.*

The All-In-One Application provides three methods for detecting and/or adding compatible printers to the system:

1. Using the Auto-Discovery mode
2. Manually entering an IP Address, or Parallel Port/Serial Comm settings
3. Specifying a range of IP Addresses

In any of the above modes, the system will attempt to handshake with the target printer(s) and issue an appropriate command to retrieve the printer firmware information. If the handshake is successful, the detected printer(s) will be presented in the main panel's treeview as an icon.

Note: When All-In-One Application tries to connect to the printer, it is important to ensure that there is no other application (such as printer driver) using the printer at the same time.

For example, a printer driver which is actively connecting to the CT412i via the USB port with printer driver will cause connection problems to All-In-One Application with this printer.

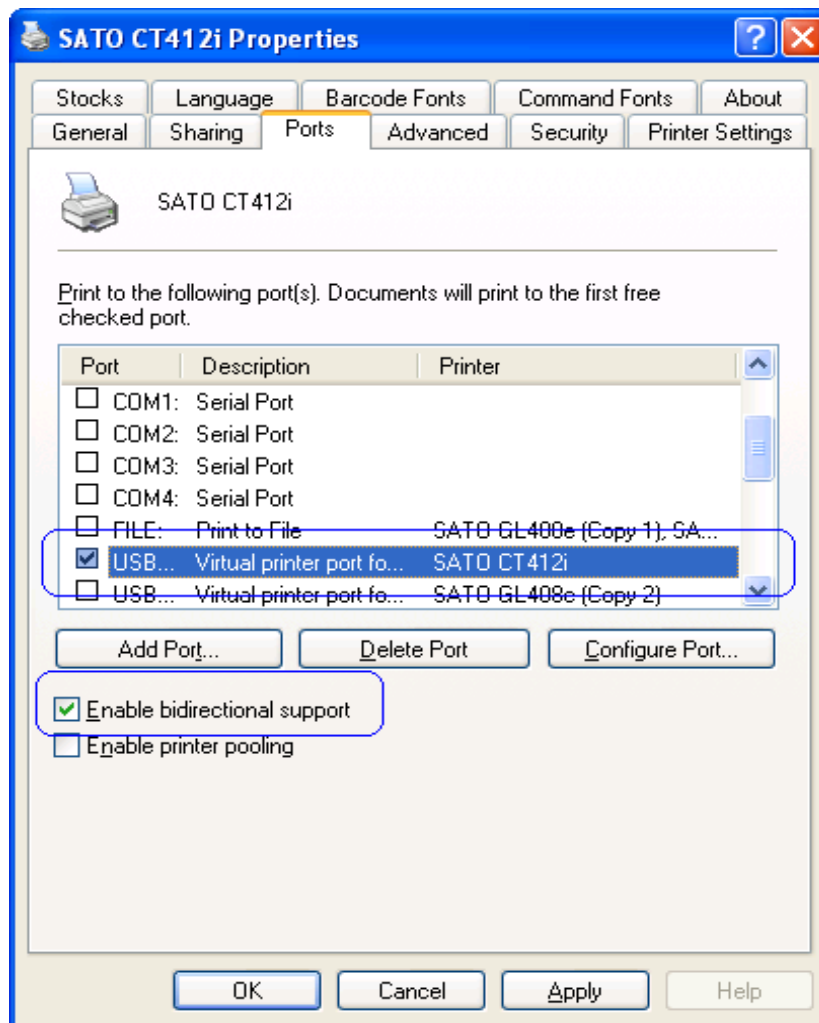


Figure 9 Active connection from printer driver

4.4.1. Adding a Printer via Auto-Discovery

The All-In-One Application can automatically detect SATO printers connected via USB interface, the SILEX network interface card (CL and GT series), or the standard built-in LAN interface (new CT4xxi series, CG Series), or the GL Series Network Interface card.

Upon installation, the software automatically registers itself into the Windows Firewall Exception list. Thus, the firewall can continue to protect the computer without compromising the functionality of the Auto-Discovery feature.

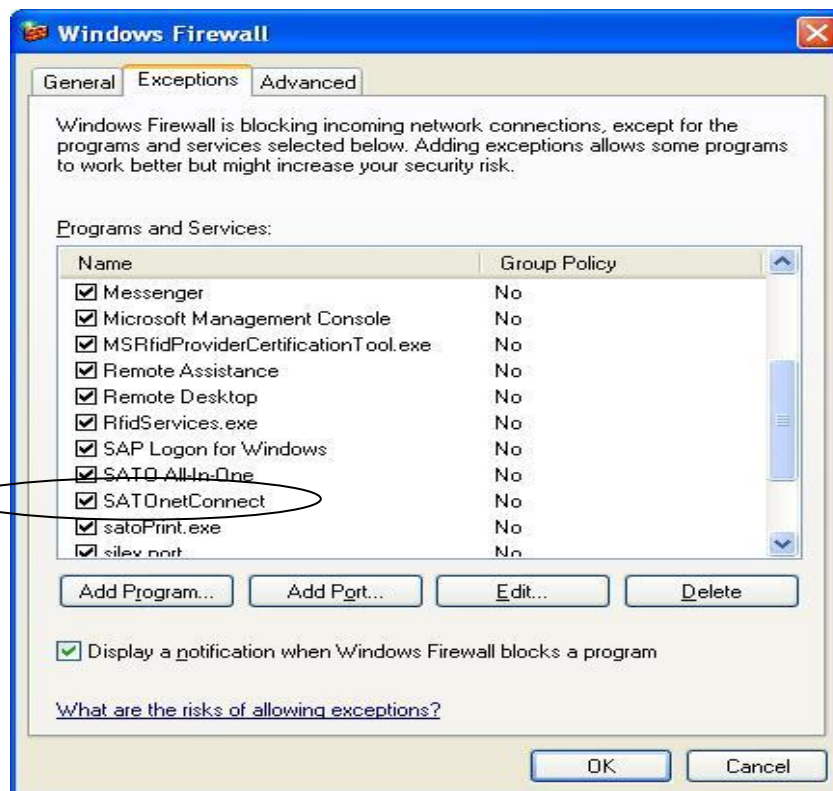


Figure 10 Exception entry in FireWall

4.4.2. Adding a Printer via LAN, Parallel Port or Serial Comm settings

You can add a new printer to the system by specifying its IP Address, USB port, Parallel Port or Serial Comm settings such as network port, communication port and baud rate. User with USB to Serial can easily notify with USB2Serial text beside com port. USB to Parallel port is now supported and will listed under USB Port.

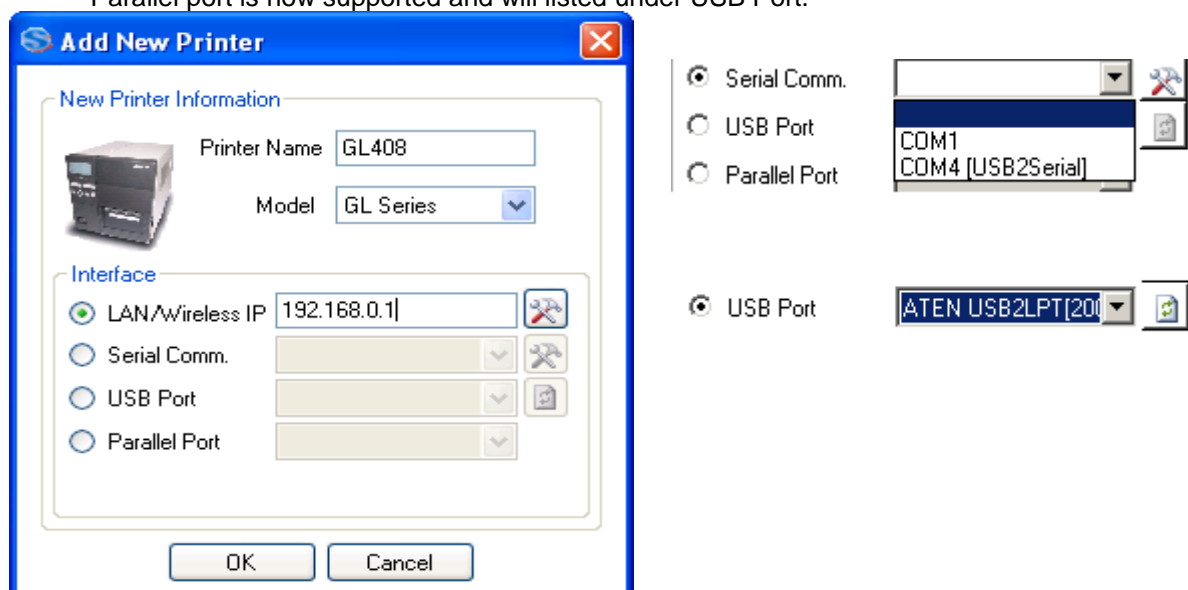


Figure 11 Add New Printer

Note: GL printer with Standard Protocol is able to be added with this method. However, it might take a little longer.

4.4.3. Add a Printer by specifying an IP Range

SATO printers such as MB200i/400i which do not use the SILEX Network Interface card can be auto-detected if you use the “Add Printer – By IP Range” feature.

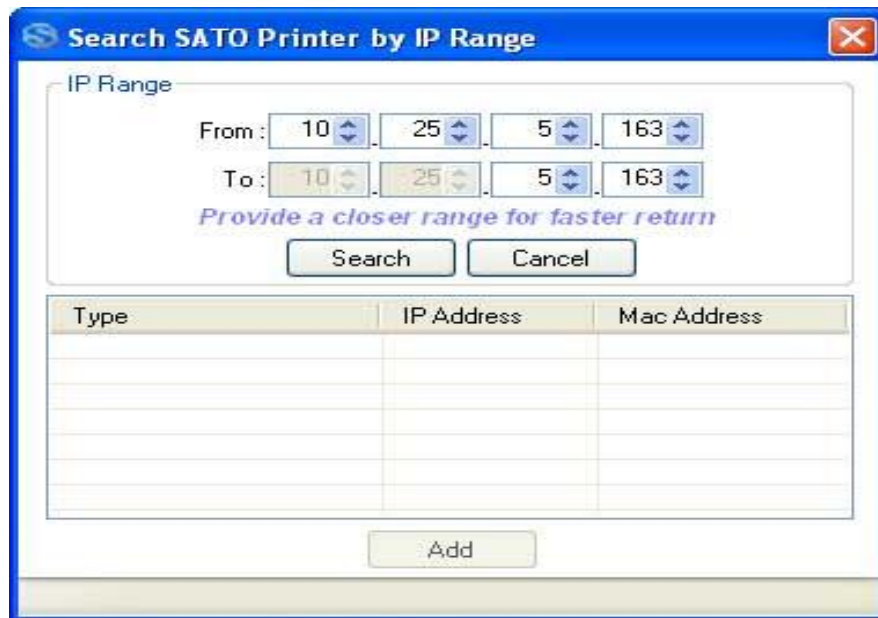


Figure 12 Add Printer - By IP Range

It takes the application approximately one second to probe each IP address in the IP range to determine whether it is a SATO printer (by checking the vendor code in the MAC address). Thus, if you specify a wide IP range, the application may take an unacceptably long time to complete the task. Therefore, a “Cancel” button is provided to allow you to cancel the operation.

4.5. Navigating the Treeview

After all target SATO printers have been successfully detected or registered into the application, they will appear in a Tree view as icons (See Figure 12 below) representing a **Node**. You can manage the nodes in this view (hereafter called the **treeview**) in various ways, as follows.

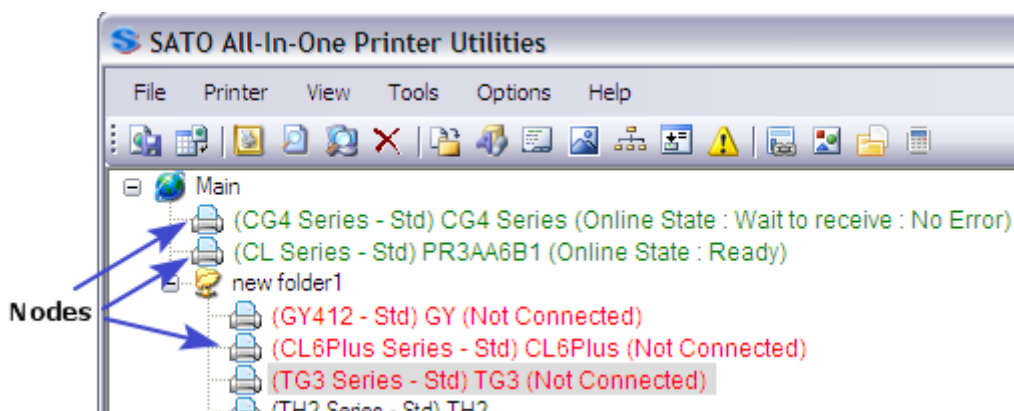


Figure 13 Treeview

4.5.1. Creating folders

By default, detected printers will populate the treeview as nodes at the root. However, just as with any standard treeview in Windows Explorer, you can also create your own folders in the root, and then drag-and-drop any registered printer to and from any folder or root area.

By creating folders, you can organize connected printers into groups meeting particular criteria such as “all GL printers on the Production Floor” or “All compact printers in the Packaging Dept” . You can then control printers in that group more conveniently rather than individually select different printers when needed.

The only limitation is that your custom folders must contain a non-blank name, and the folder name cannot be “**root**” or “**main**”. Also, within the same level, the same folder name cannot be repeated.

4.5.2. Renaming folders

The folder name and the “display” of the printer can be renamed on the treeview. Click on the folder name and wait for the text editing cursor to appear, then type the new name.

4.5.3. Relocating printers via Drag-and-Drop

A node icon can be moved in and out of the root area or folders easily. Just make sure the source and target locations are visible, then drag the icon and drop it in the target location.

4.6. Displaying Printer Firmware Information

When a printer node on the treeview is clicked, you will see basic information about the printer, as depicted below.

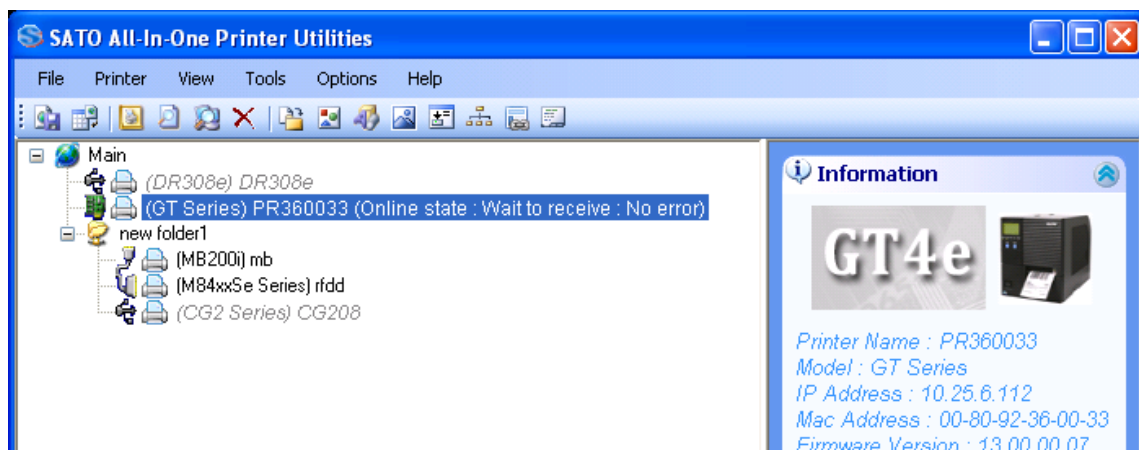


Figure 14 Printer Information

4.7. Editing Printer Information

You are allowed to change the printer's Display Name and the Model, which are displayed next to the node icon.

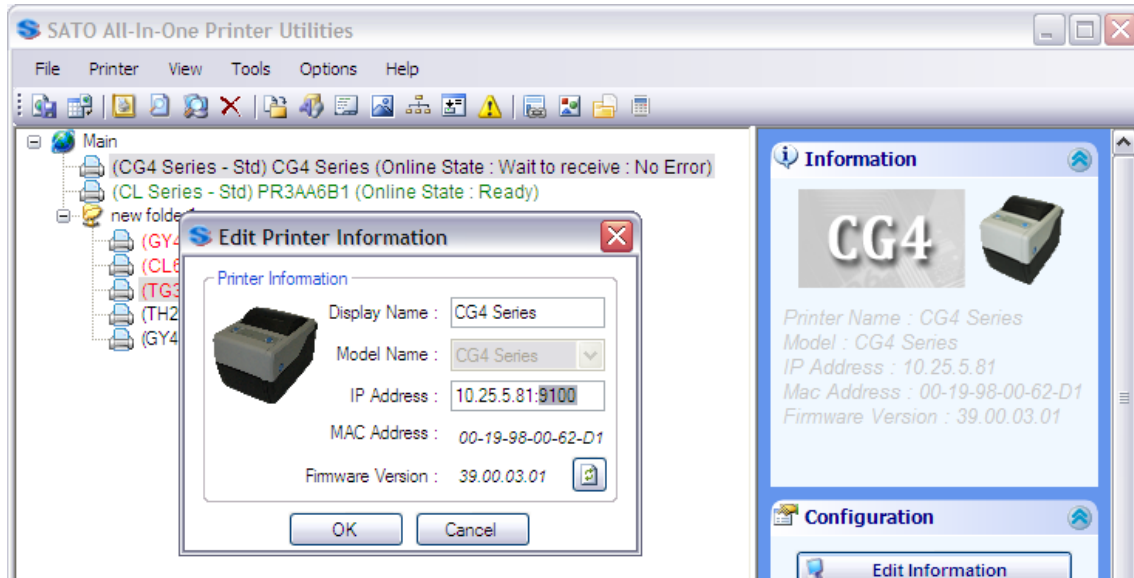


Figure 15 Edit Printer Information

Changing the Display Name/Model does not affect the printer. No command will actually be sent to the printer. The changes apply only to the treeview of the SATO All-In-One application, and are stored in memory or exported to XML files when you export profiles (See **Section 4.11 Export/Import Profile**).

4.8. Enquiring Printer Status

For printers connected by LAN, the SATO All-In-One application periodically sends a status-probing command and display the printer status for monitoring purposes.

This feature is not available to printers connected via Parallel Port and RS-232. This is based on the assumption that local printers (non LAN) can be monitored locally rather than via remote.

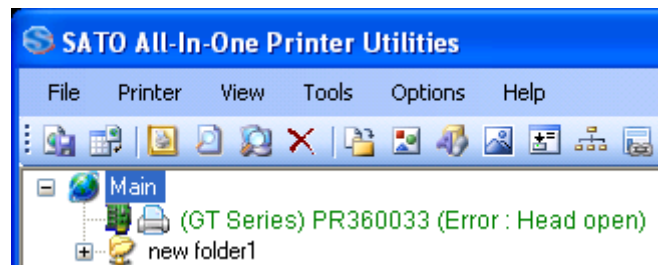


Figure 16 Status Monitoring

4.9. Interface Configuration

Interface Configuration feature is available for CT, MB, CG printers and e-series models that connected with LAN interface.

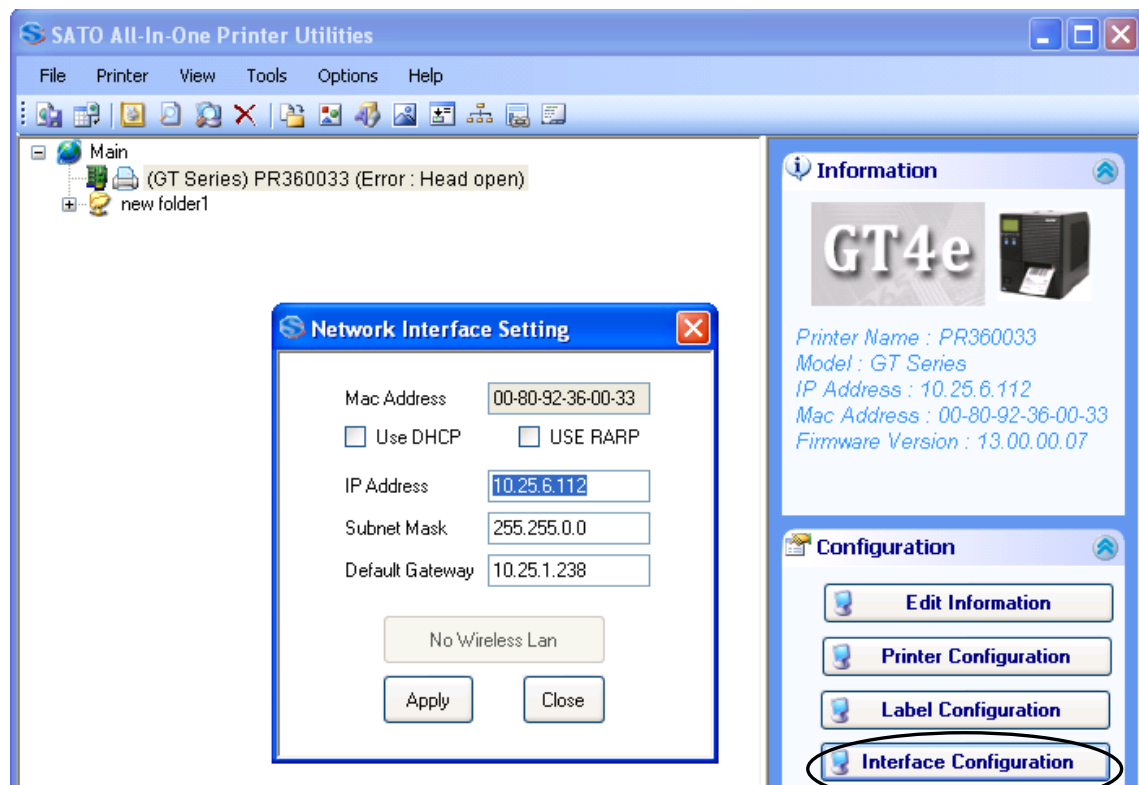


Figure 17 Interface Configuration

Note: When the "Interface Configuration" window is open, the ENQ Status monitoring function of the printer will be stopped.

The following picture shows the Interface Configuration for MB printer:

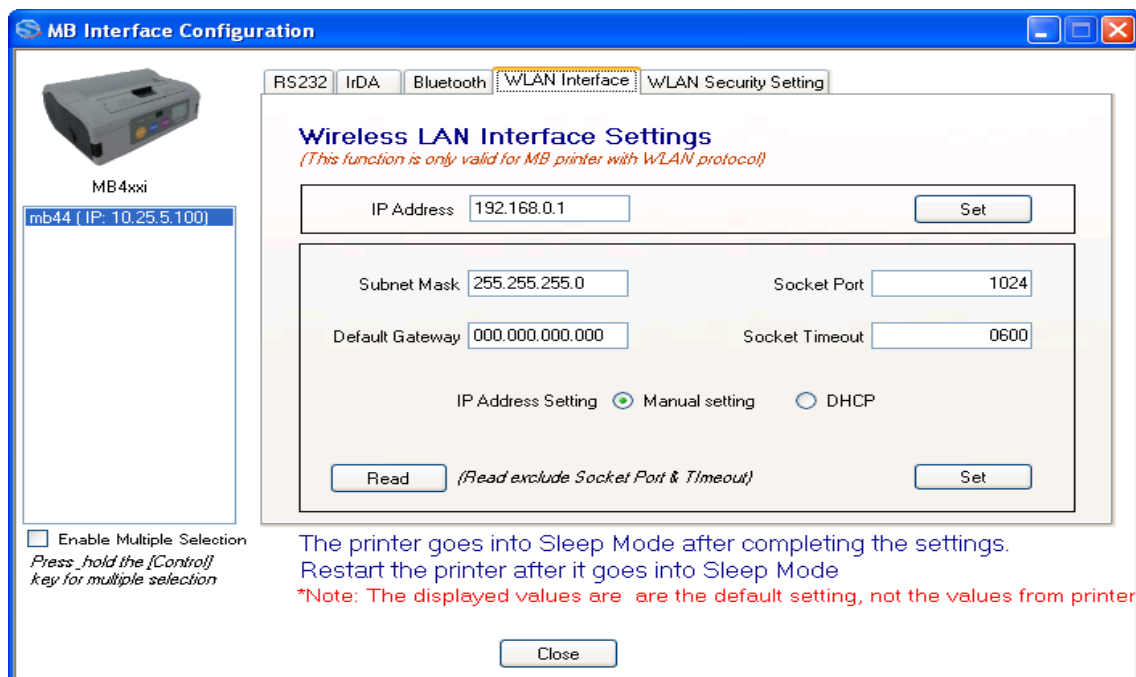


Figure 18 MB-series Interface Configuration

This function supports concurrent setting to multiple MB printers. The following interface settings can be configured on this functionality:

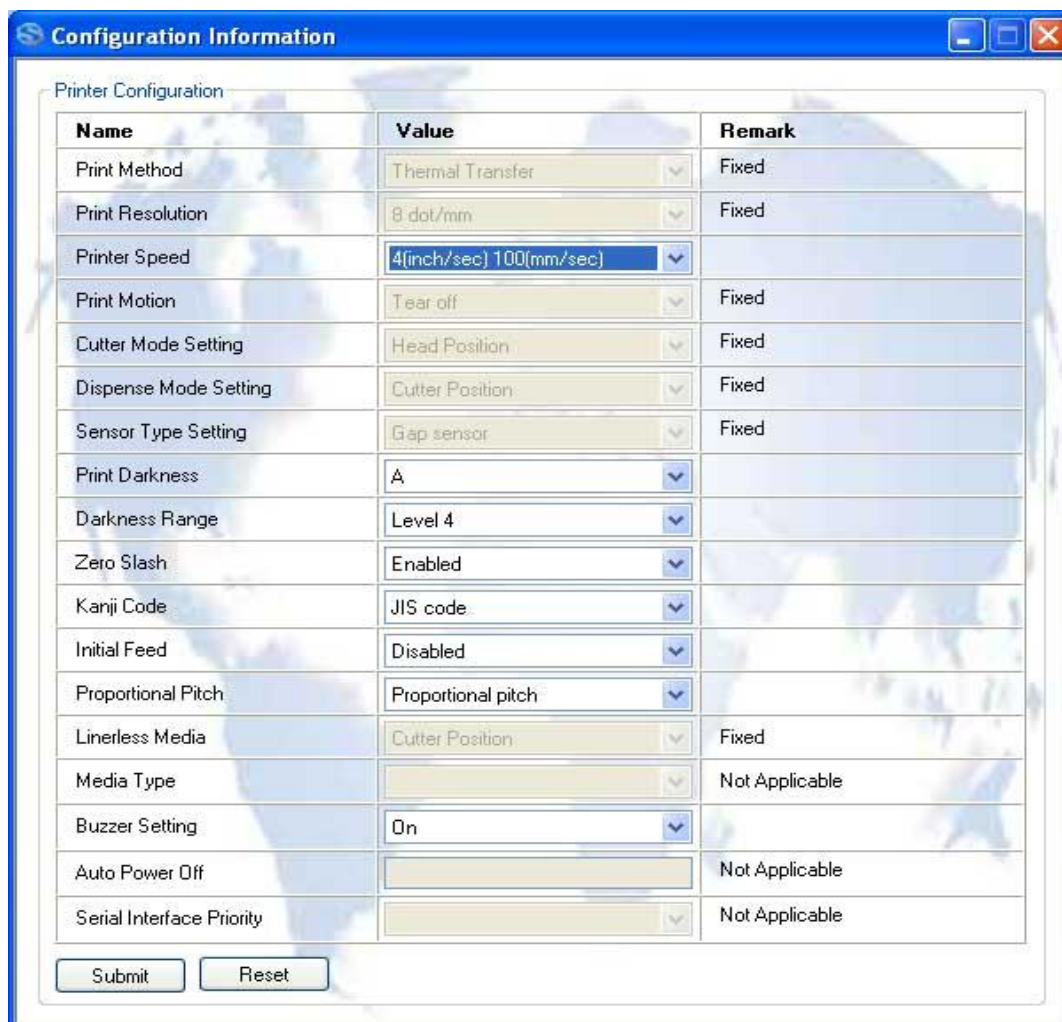
- RS232 settings
- IrDA settings
- Bluetooth settings
- Wireless LAN settings

4.10. Displaying Configuration Information

The displaying and updating of printer configuration information is split into 2 parts: Printer information and Label information. These can be viewed and updated by clicking the "Printer Configuration" and the "Label Configuration" button respectively.

4.10.1. Printer Configuration

SBPL commands will be sent to the printer to retrieve the printer configuration information. The screen will only display the system configuration Information such as print speed and darkness level.



The screenshot shows a window titled "Configuration Information" with a "Printer Configuration" tab. It contains a table with three columns: Name, Value, and Remark. The table lists various printer settings, most of which are fixed or not applicable. At the bottom, there are "Submit" and "Reset" buttons.

Name	Value	Remark
Print Method	Thermal Transfer	Fixed
Print Resolution	8 dot/mm	Fixed
Printer Speed	4(inch/sec) 100(mm/sec)	
Print Motion	Tear-off	Fixed
Cutter Mode Setting	Head Position	Fixed
Dispense Mode Setting	Cutter Position	Fixed
Sensor Type Setting	Gap sensor	Fixed
Print Darkness	A	
Darkness Range	Level 4	
Zero Slash	Enabled	
Kanji Code	JIS code	
Initial Feed	Disabled	
Proportional Pitch	Proportional pitch	
Linerless Media	Cutter Position	Fixed
Media Type		Not Applicable
Buzzer Setting	On	
Auto Power Off		Not Applicable
Serial Interface Priority		Not Applicable

Submit Reset

Figure 19 Printer System Configuration Information

Use the drop-down lists to make any necessary changes to the configuration. When the "Submit" button is pressed, the system captures your inputs and issues SBPL commands to change the settings in the printer.

4.10.2. Label Configuration

The remaining configuration data contains label configuration information. The unit of measurement will be changed from “dot” to “mm”.

Name	Value	Remark
Vertical Label Size	178	0~356 mm
Horizontal Label Size	104	0~152 mm
Vertical Offset Value	0.125	0~99 mm -1~-99 mm
Horizontal Offset Value	0.125	0~99 mm -1~-99 mm
Label Pitch Offset	0	Fixed
Tear Off	0	Fixed
Cutter Offset	0	Fixed
Dispenser Offset	0	Fixed
Labels Gap Size	3	Fixed

Submit Reset

Figure 20 Label Configuration

Use the drop-down lists to make any necessary changes to the configuration. When the “Submit” button is pressed, the system captures your inputs and issues SBPL commands to change the settings in the printer.

4.10.3. Print Head Information Display

Some supported model can click on ‘Print Head Information’ button under Configuration to view the detail information for print head counters and statuses.

Printer Name : PR3AA6B1
Model : CL Series
IP Address : 10.25.5.188
Mac Address : 00-80-92-3A-A6-B1
Firmware Version : 1E2092

Configuration

- Edit Information
- Printer Configuration
- Label Configuration
- Interface Configuration
- Print Head Information

Recently Used Tools

Name	Value	Remark
Head Status	Print Head OK	

Name	Value	Remark
Life Counter	10239057.375 (mm)	
Head Counter1	9922913.125 (mm)	
Head Counter2	316144.25 (mm)	
Head Counter3	0 (mm)	
Cutter Counter	18	
Dispenser Counter	0 (mm)	

* Please refer to the counter values in Factory Test Print

Refresh

Figure 21 Print Head Information Display

4.11. Export/Import Profile

The effort and time required to populate the application's treeview with the correct printers and folders, need not be repeated every time you start the All-In-One application. By saving the "profile" of already detected printers into a file (in XML format), the application will not normally need to auto-detect printers on the network again, unless you force the software to do so.

The profile can also be exported to other computers connected to the same printers, so that the same treeview information can be restored without delay.

The following information is captured in the XML profile file:

- Folder Information
- Name
- Tree Level
- Printer type
- Name
- Model
- DisplayName
- Firmware Version
- Folder Name
- Interface Type
- IP Address
- Mac Address
- Port
- Baud rate
- Parity
- DataBits
- StopBit
- HandShake
- PortName

Click **File->Export Profile** or **File->Import Profile** to download or upload the printer configuration profiles.

4.11.1. Using External Profile



Figure 22 Open External Profile

By default, All-In-One loads printer profile information stored in the application directory during start-up. However, user can choose to load the printer profile information stored in other directory.

User chooses an external printer profile by File->Open External Profile. The application title shows the name of the external profile, to indicate that the current printer profile used by the application.

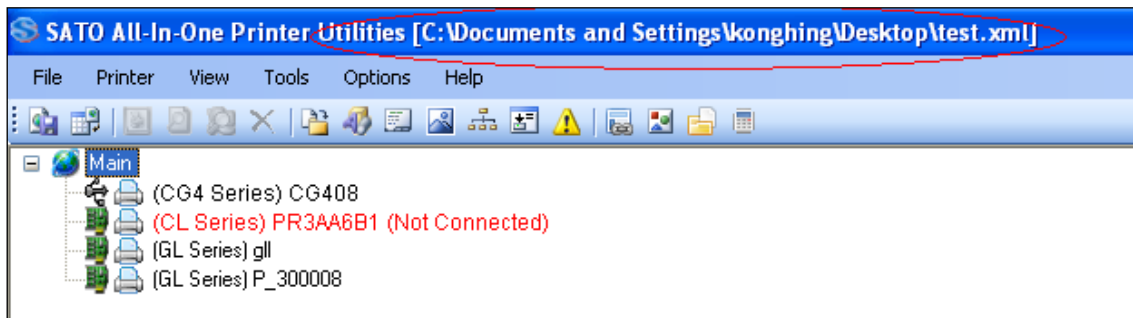


Figure 23 Using External Profile



Figure 24 Closing and Switching Profile

Close External Profile: This is to close the external profile and loads again the internal application profile. The internal profile will be loaded during the next application start-up.

Switch to Local Profile: This is to switch to the local application profile but the external profile is still open. The external profile will be loaded during the next application start-up.

4.12. Graphics Conversion

This utility provides conversion functions from raster graphics files (*.BMP;*.GIF;*.JPG;*.PNG) into SBPL commands. Click **Tools->Graphic Conversion**.

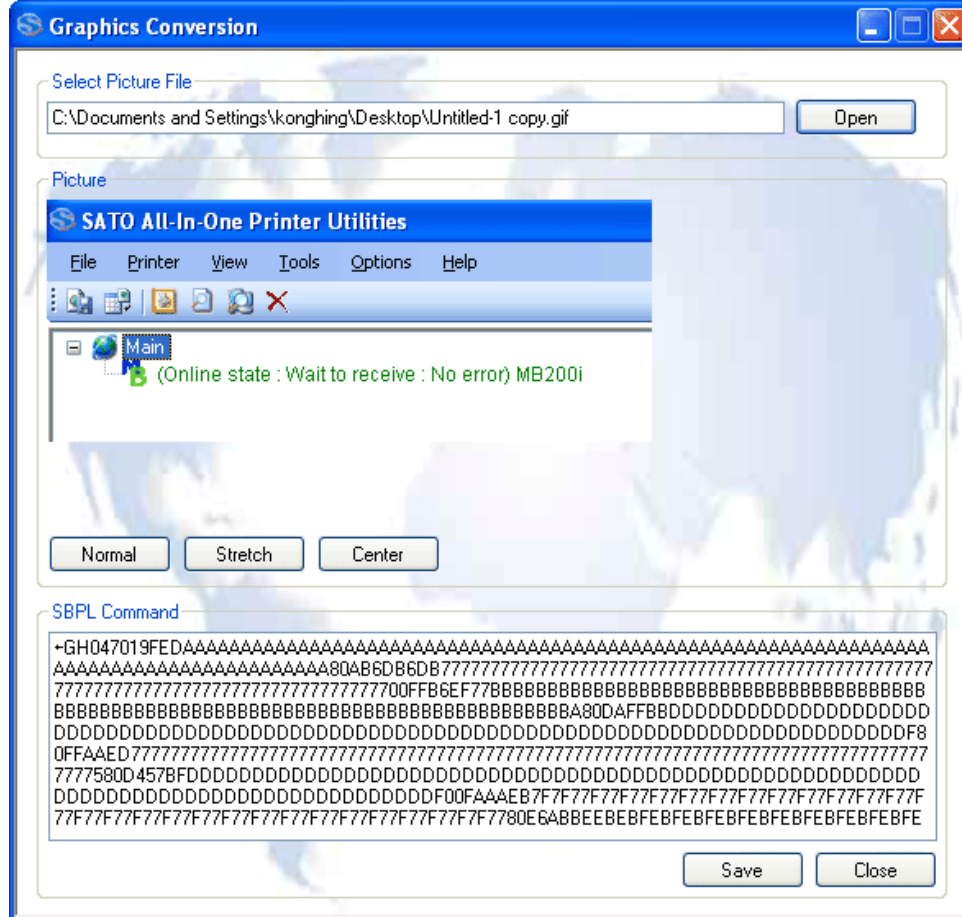


Figure 25 Graphics Conversion

Click the **Open** button to browse for the desired graphics file. A preview of the file will be displayed. You can also edit the graphic by using the **Stretch** or **Center** button, or reset the changes using the **Normal** button.

The appropriate SBPL commands for printing the file will be displayed in the bottom-most window. Click **Save** to save the commands into a file, or click **Close** to end the conversion.

4.13. Loading Graphics

Click **Tools->Graphics Download**. This function allows you to upload and store the graphics into the memory of a printer. It supports the following graphics formats:

- BMP
- JPG
- GIF
- PNG

The function supports the following types of uploading formats:

- 1) SATO Graphics (ESC+GR/GI command)
- 2) Bitmap Images (ESC+GT/GC command)
- 3) PCX Images (ESC+PI/PY command)
- 4) Logo in Internal Flash (FD command)

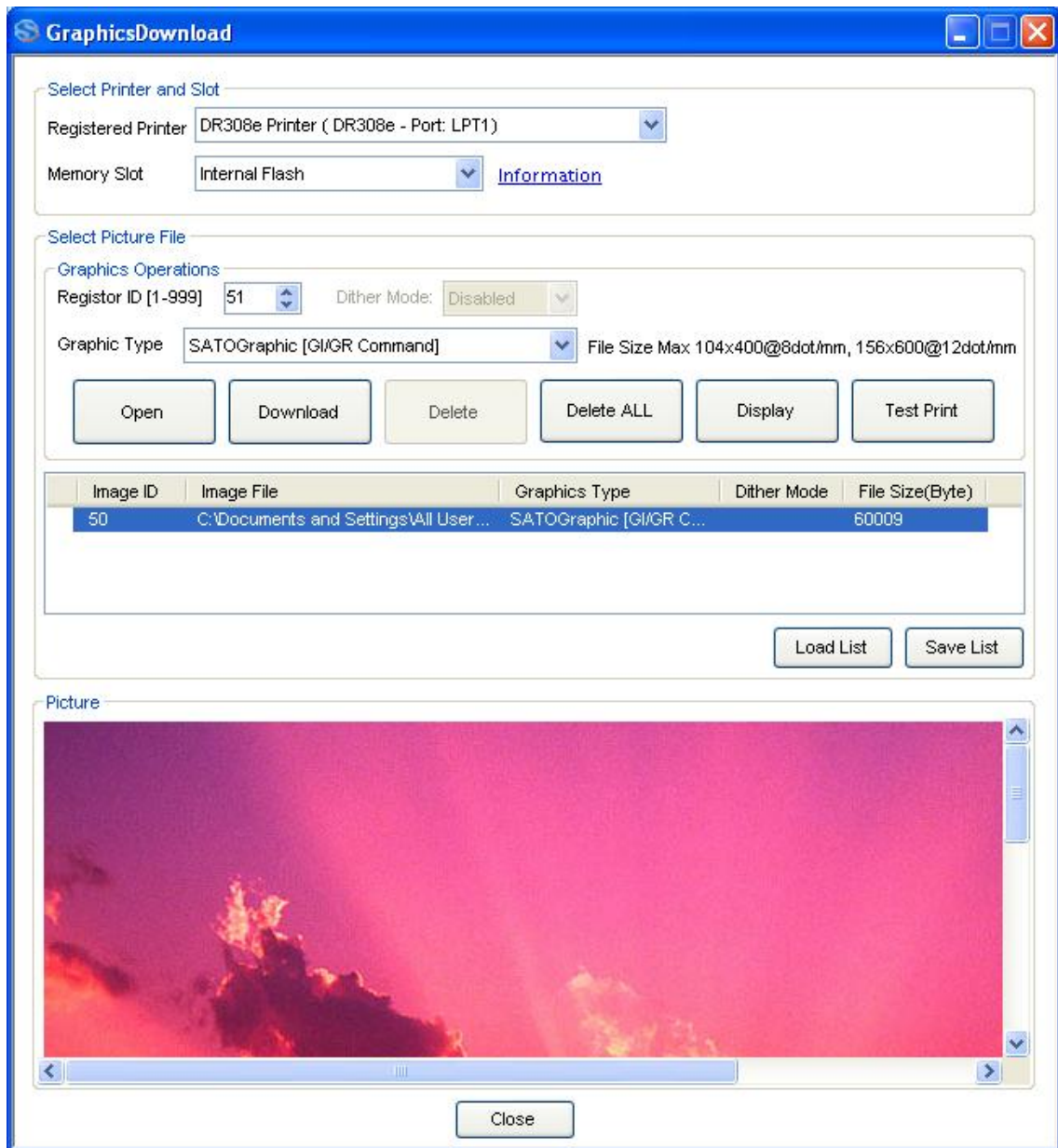


Figure 26 Graphics loading

4.13.1. Dithering Effect

For Bitmap and PCX files, the Dithering effect feature is available to allow downloading of graphics with color fading effects.

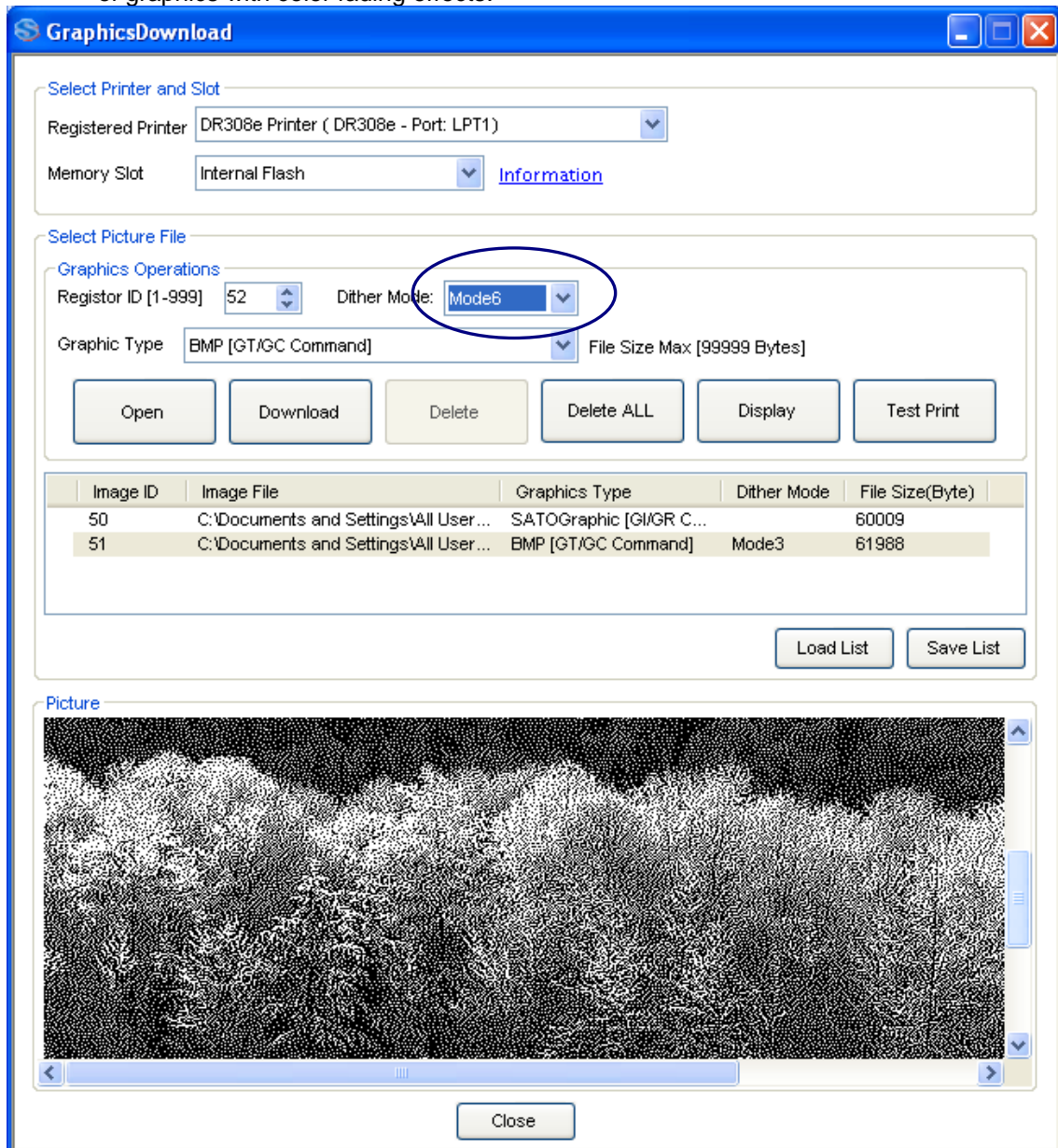


Figure 27 Dithering Effect

4.14. Font Downloading

Click **Tools->Font Download**.

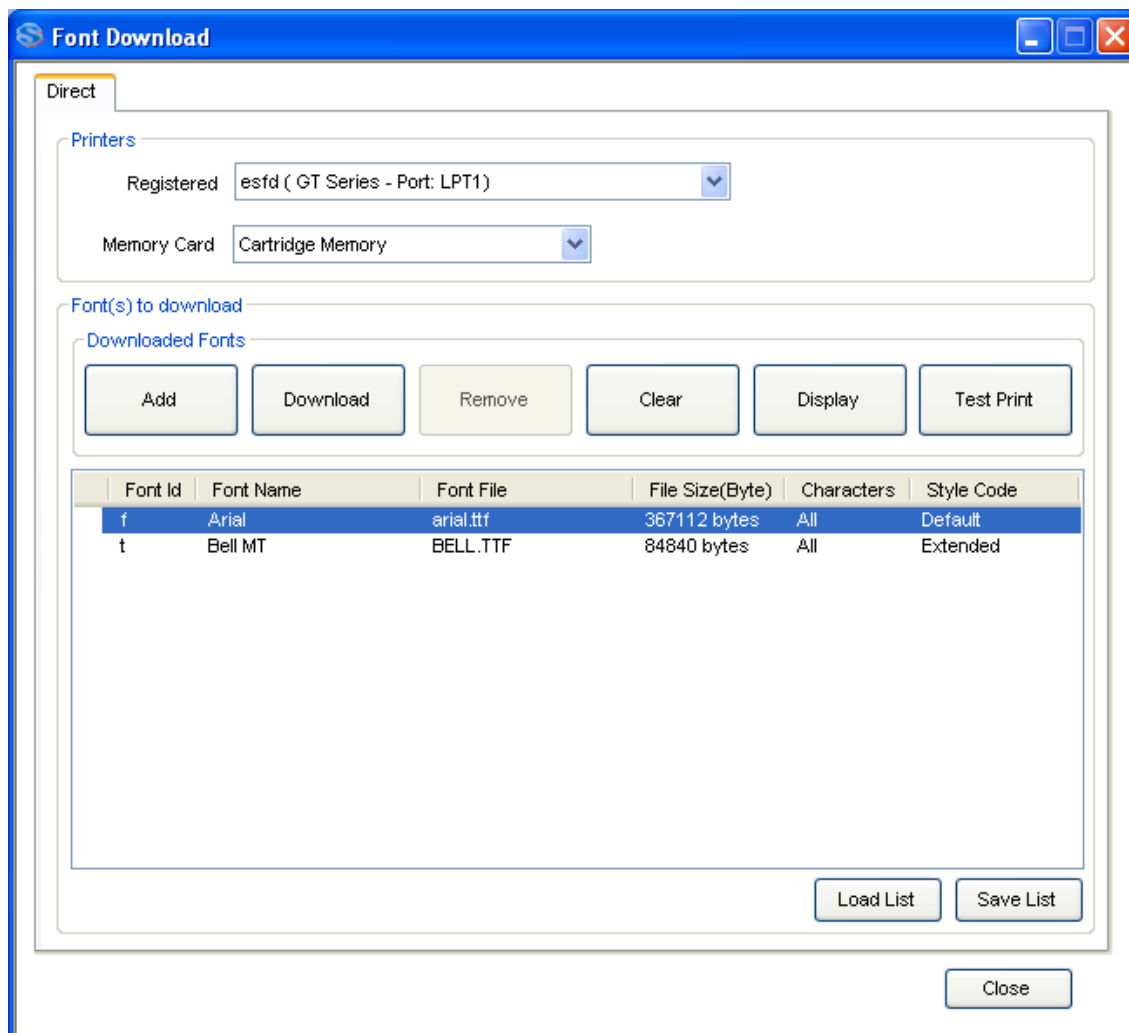


Figure 28 Font Download

Full set of True Type Font (TTF) can be downloaded to the extended memory or cartridge. Whereas only selected size font (bitmap font) can be downloaded to internal flash. The following shows the steps of downloading full set of TTF into **extended memory or cartridge**.

The Font information can be reused and applied onto another printer by using the “Load List” and the “Save List” functions.

4.14.1. Font Selection

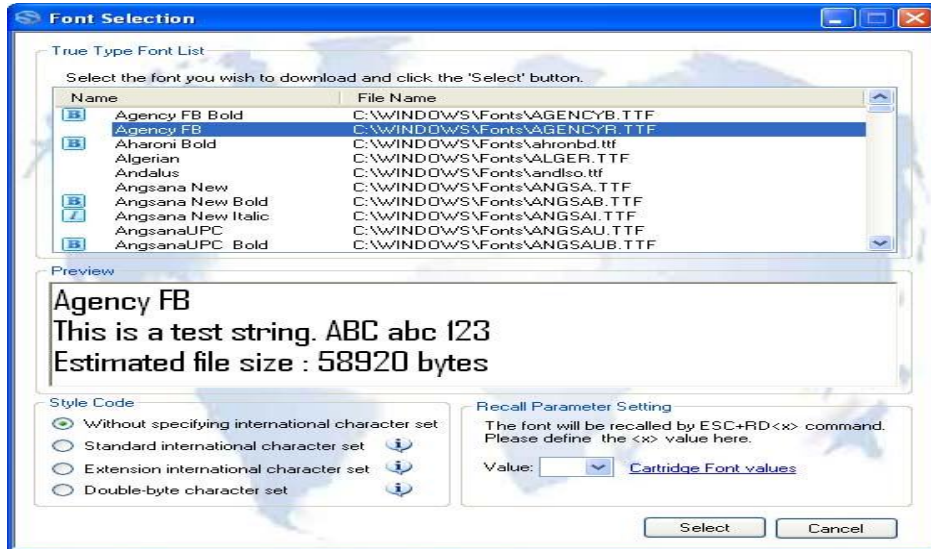


Figure 29 Font Selection

When the “Add Font” option is selected from the popup-menu (5), the above dialog box will be displayed to let you select the font to load.

- **Without specifying international character set**
This option is for User TrueType Font load. The command will have a prefix ESC+RD<x>00, where x ranges from ‘u’ to ‘z’, to be specified by user.
- **Standard international character set**
This option is for Code Page 850 character set. The command will have a prefix of ESC+RD<x>10, where x is specified by user according to the font style:

F	FuturaIIBook
G	CG Triumvirate Condensed
P	CG Palacio
S	CG Century Schoolbook
V	Univers Medium
u,v,w,x,y,z	User True Type Font

- **Extension international character set**
This option is for a font that contains an extension international character set such as Arabic and Thai. The command will have a prefix of ESC+RD<x>20, where x is specified by user according to the font style:

V	Univers Medium
t	CG Times
T	Angsana UPC
u,v,w,x,y,z	User True Type Font

- **Extension international character set**

This option is for double-byte character sets such as Chinese, Korean and Japanese. The command will prefix with ESC+RD<x>00, where x is specified by user according to the font style:

- C Simplified Chinese (GB2312)
- C Traditional Chinese (Big5)
- K Korean (HYGungSo-Bold)
- u,v,w,x,y,z User True Type Font

4.15. Bitmap Font (fixed size) Download

Bitmap font with specific size can be downloaded into the Internal Flash of the printer using FD command. The font downloaded with this method can be recalled using the ESC+RF command. Refer to the command specifications of each model for details.

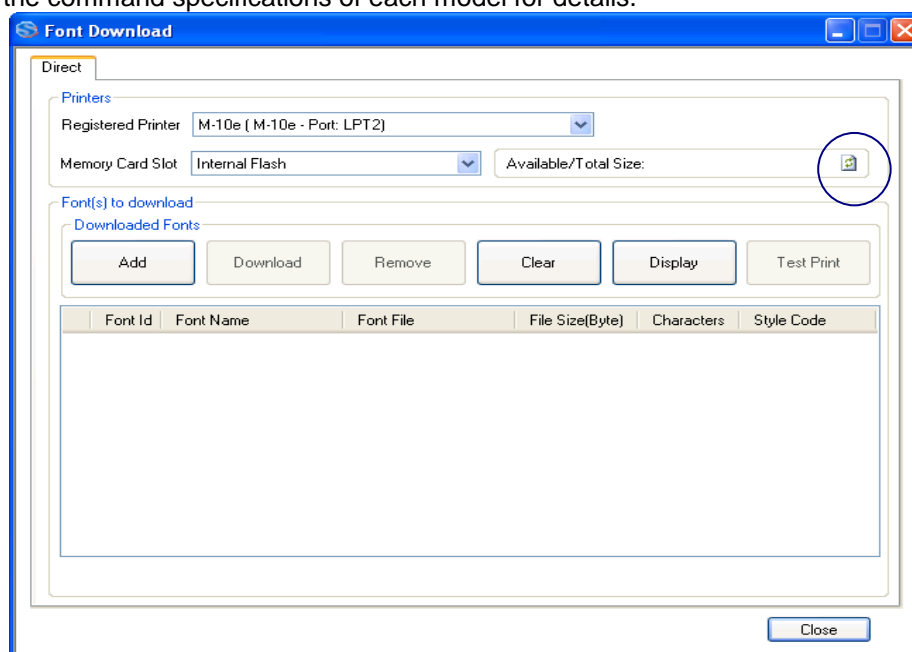


Figure 30 Selecting Internal Flash for Bitmap Font Download

The Refresh button is to get updated storage information of the Internal Flash. Note that the storage space is used for both Bitmap Font and Graphics downloaded using ESC+FD command.

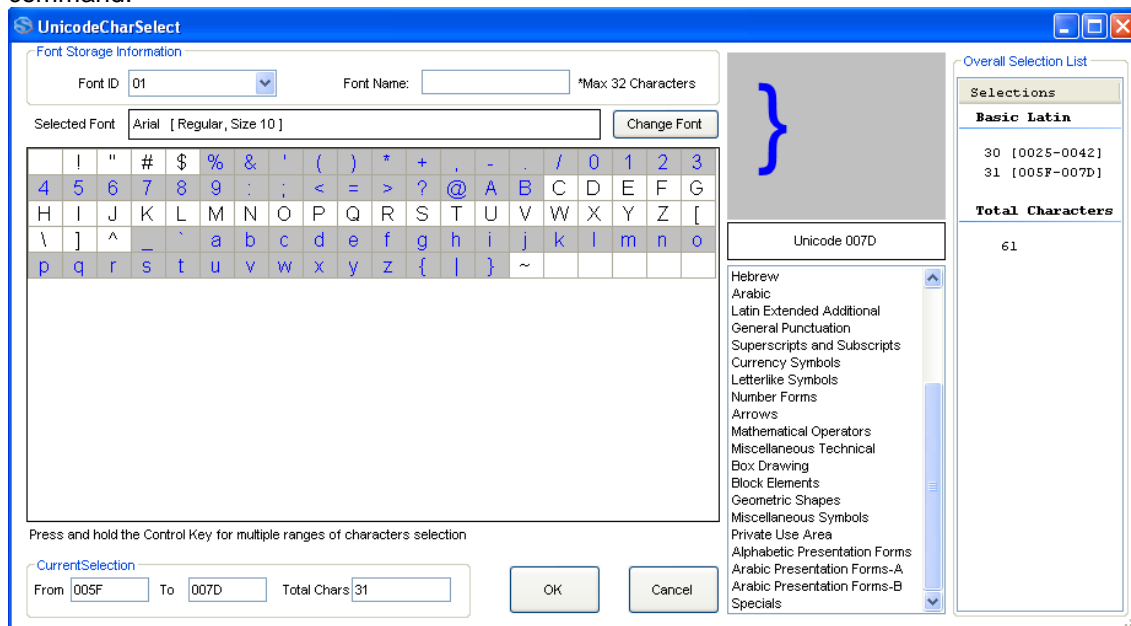


Figure 31 Download Fixed Size Bitmap font

Multiple range of character set is possible by selecting the character while holding down the [Ctrl] key. It is able to span across different Character Set.

4.16. Firmware Download

4.16.1. MB200i and MB400i

Select any MB200i and MB400i printer from the treeview, right click on it and choose Firmware Download from the popup menu. The firmware must be loaded using RS232c interface.

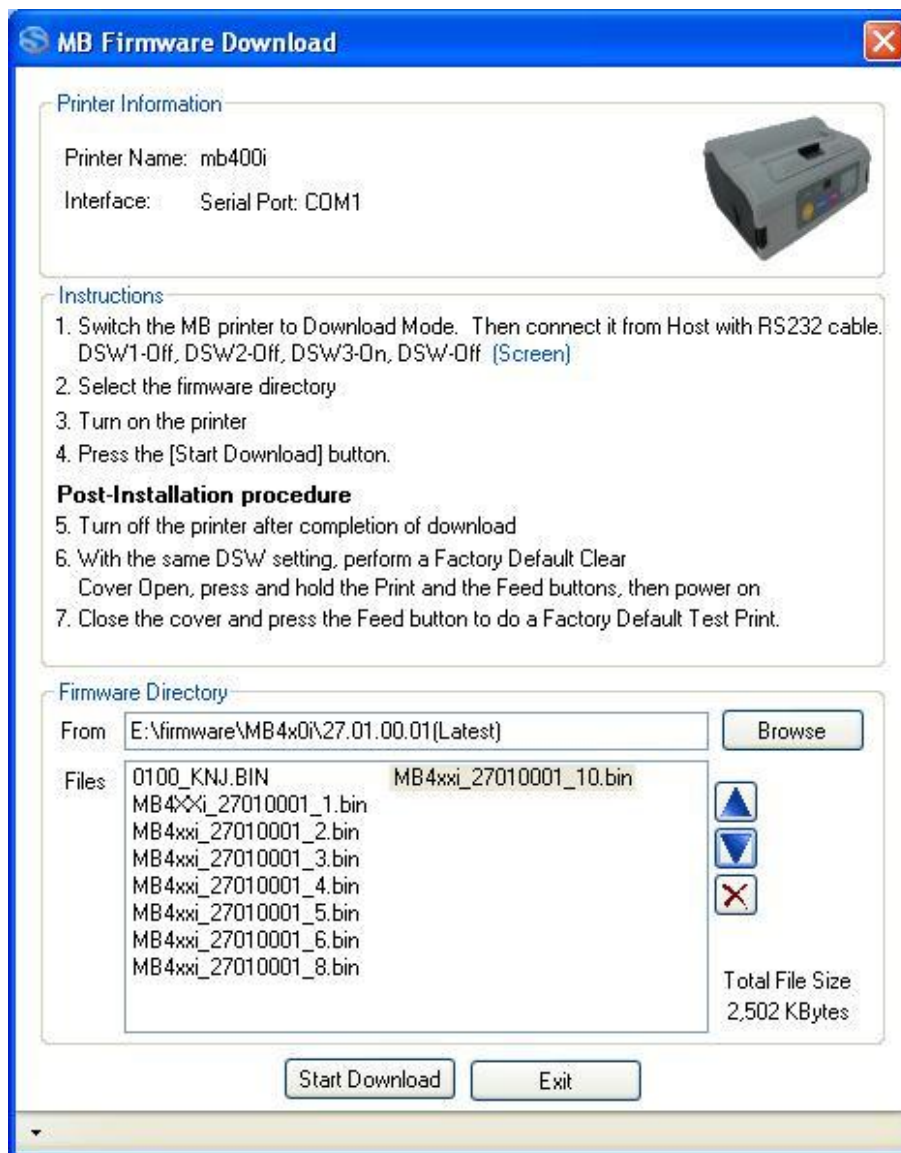


Figure 32 MB Firmware download

4.16.2. CL, CG, CT, LM, S84 and GT

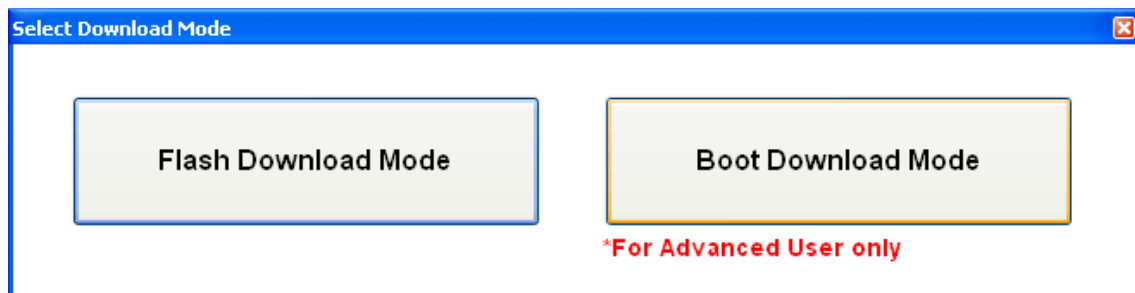


Figure 33 Boot or Flash Download

User is to select the download mode: Boot or Flash Download.

4.16.2.1. Boot Download mode

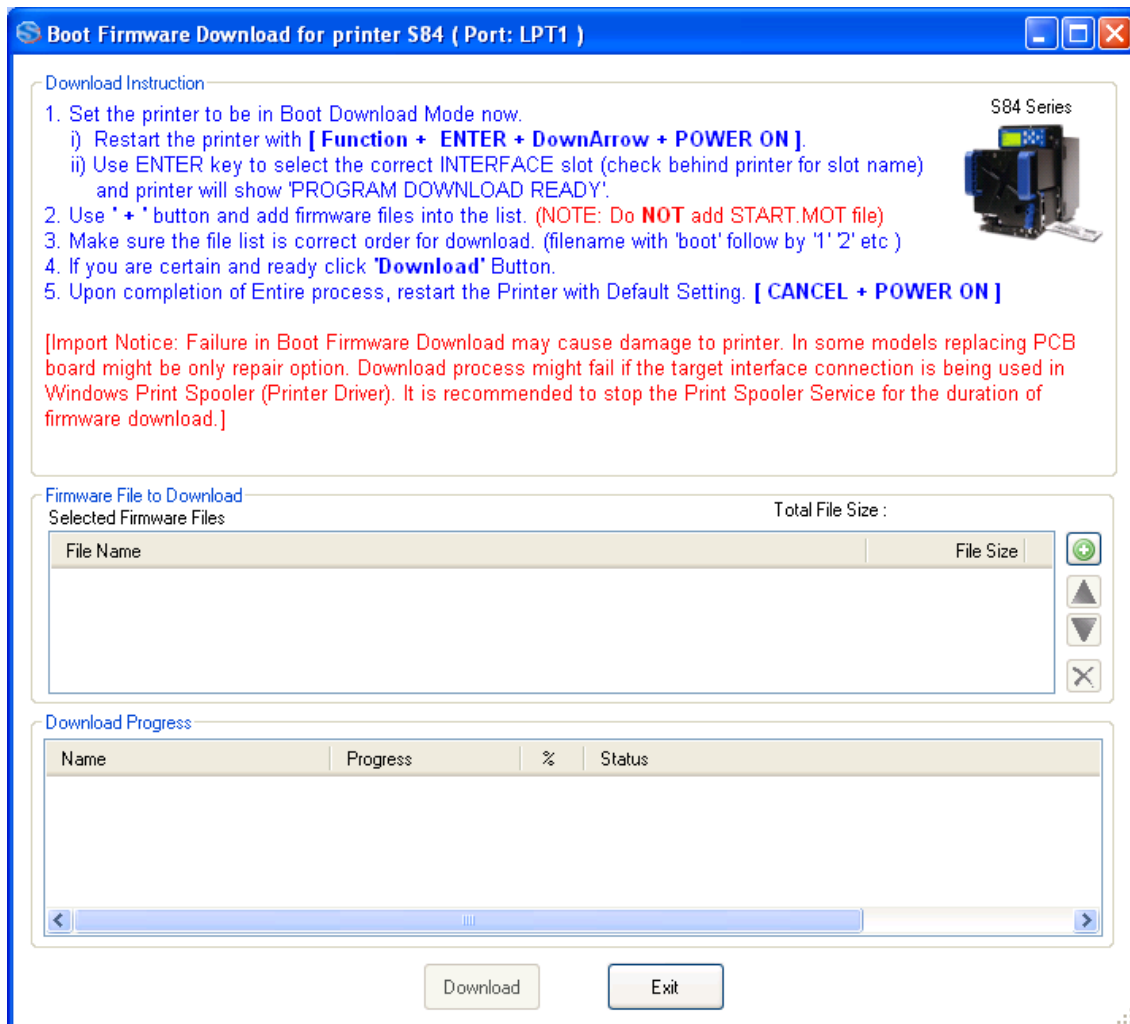


Figure 34 Boot Download mode

User is advised to take extra precautions when using this function. Instruction on the dialog must be strictly followed. This process is carried out with a mixture of human interventions of the printer and the application.

When the first firmware file is completed, user is to set the printer (by pressing button on the printer) to ensure it is on "Program Download" mode before the next file is sent from the application. Failure in doing so might cause unexpected exceptions and damages to the printer.

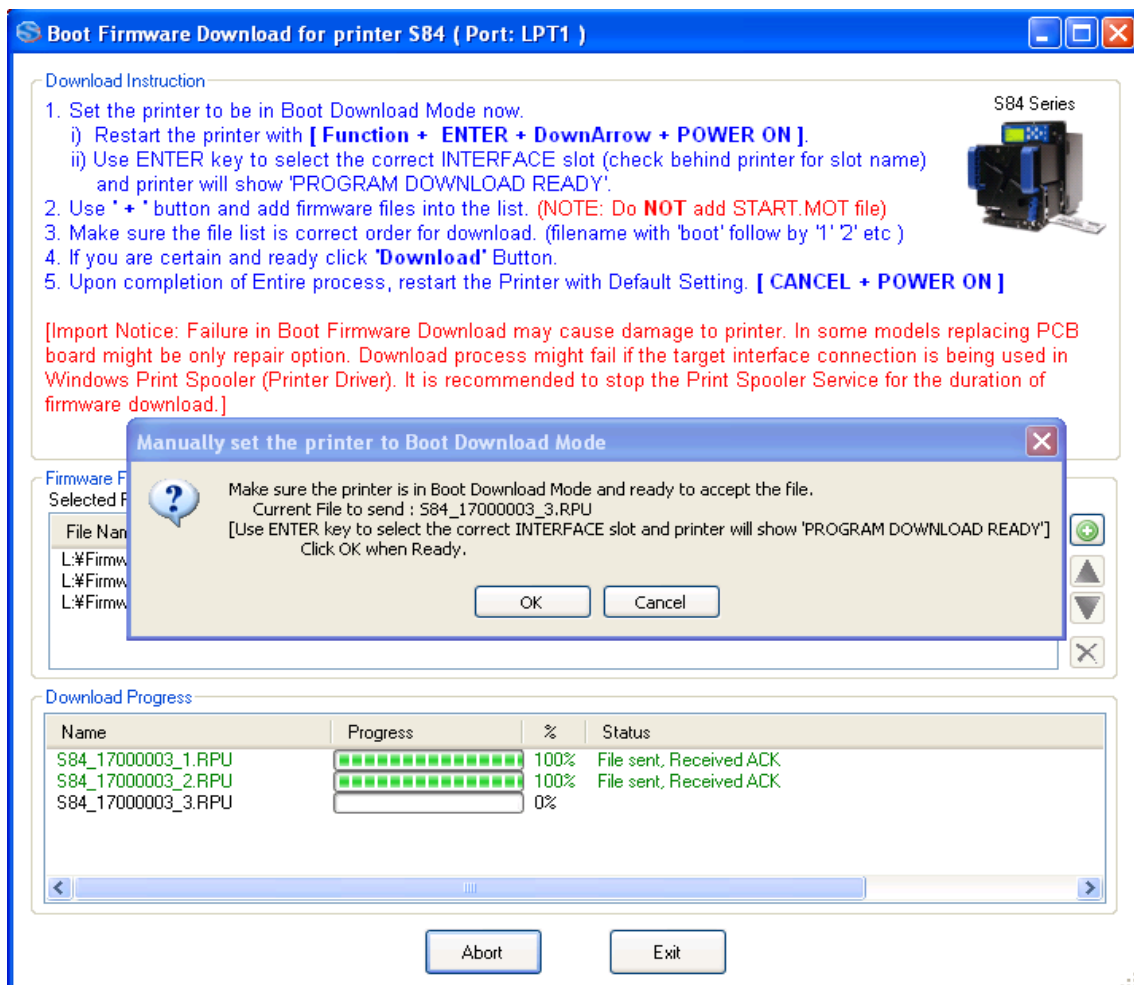


Figure 35 Executing next firmware file

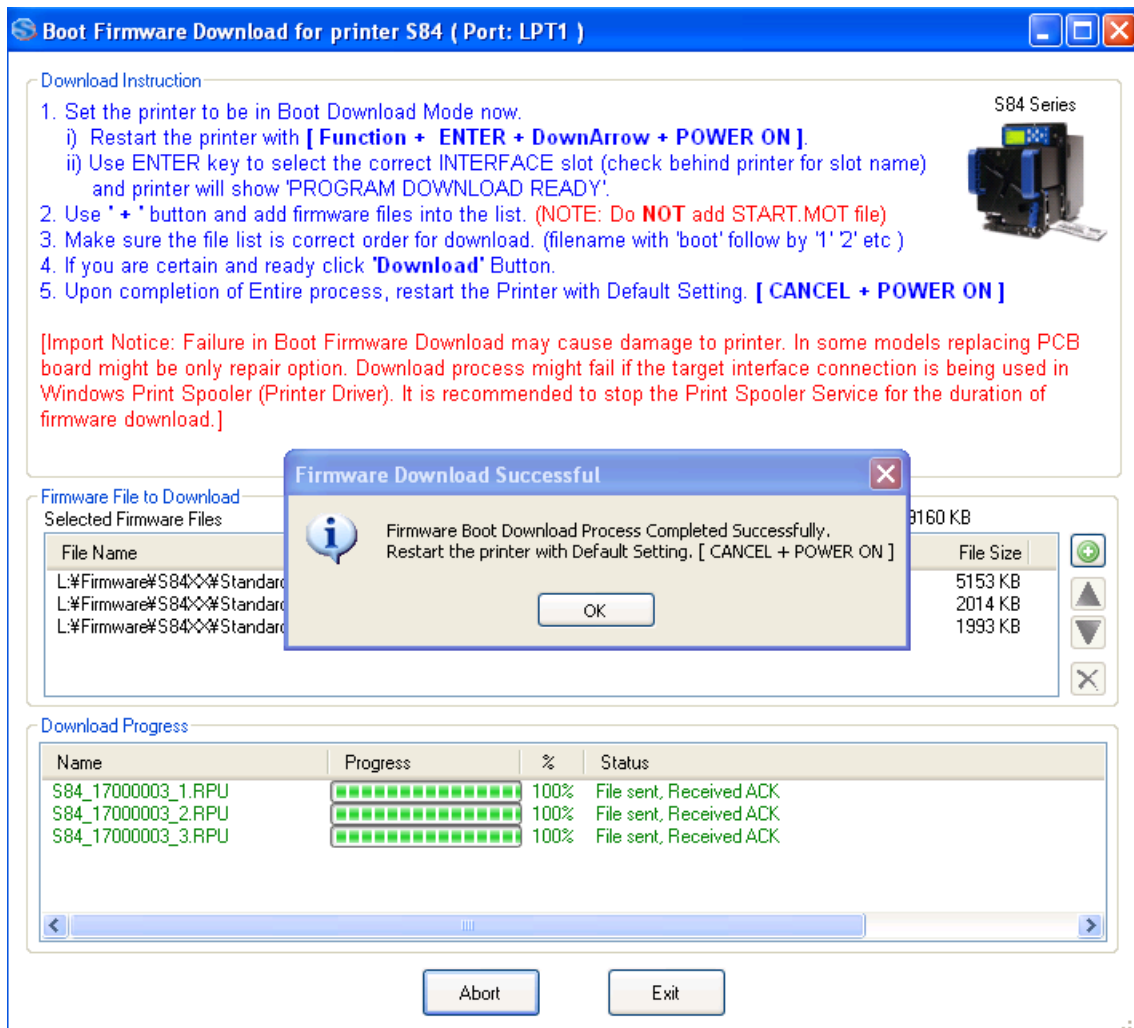


Figure 36 Download Complete

When the downloading processing is complete, user is to perform a default setting on the printer, manually.

Please note that the downloading process must be complete without interruptions of the connectivity to the printer.

* **Important:** for downloading of emulation firmware, it is important to refer to the respective firmware download manual for the correct procedure. Certain types of firmware require downloading of font file in order to get the firmware upgrade process working. The sequence of files to download also has to be strictly followed.

4.16.2.2. Flash Download Mode

This function supports firmware loading of GT/CG/CL/CT/LM/S84 with the following limitation:

- Older CL firmware that does not provide the Auto Download and the Restart command will not be supported

The download process is automatic, where the All-In-One tool automatically sends the next firmware file and restarts the printer to perform factory clear + default setting after download completes.

It supports concurrent firmware loading to multiple printers (of the same model).

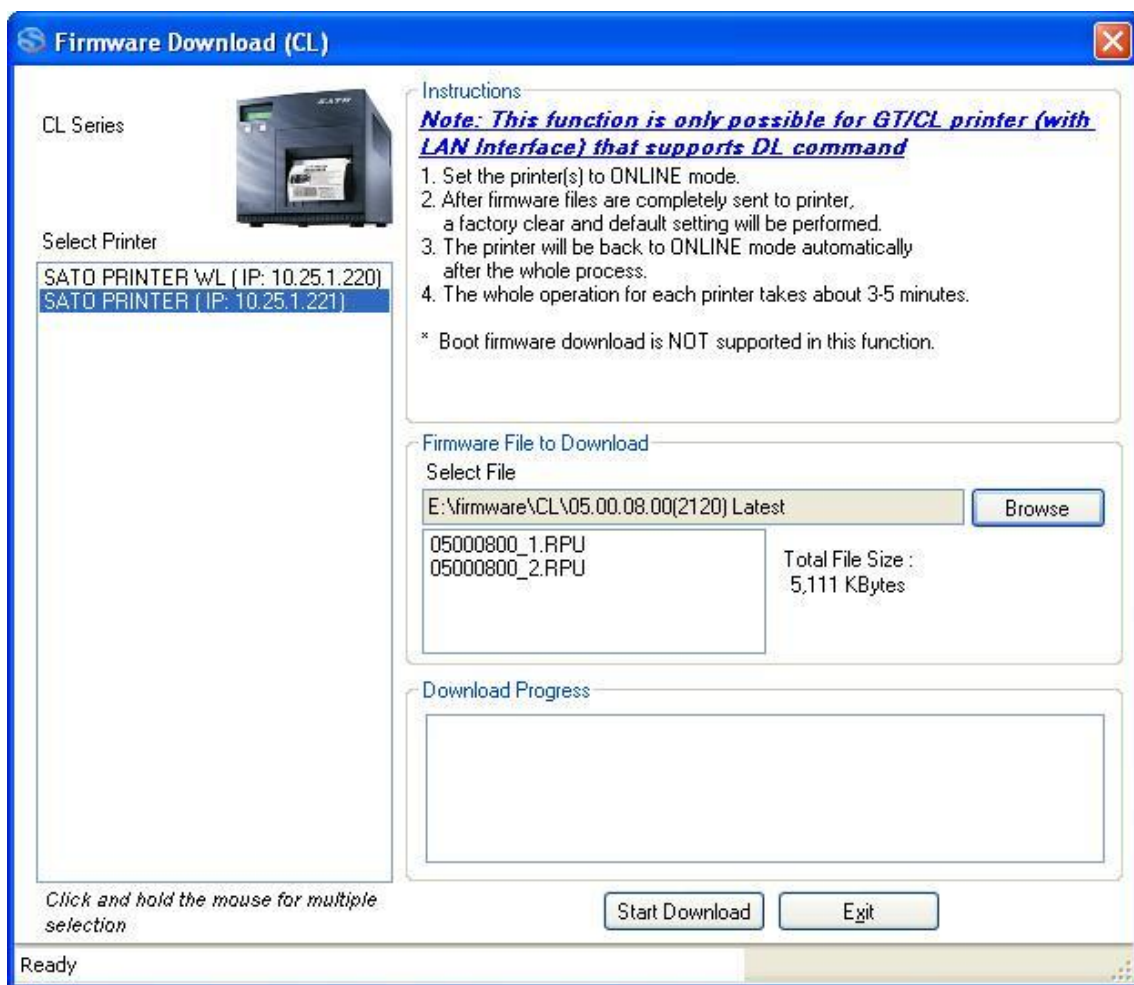


Figure 37 Firmware Download for CL and GT

4.16.3. GL

This function currently supports firmware loading via a LAN interface. The FTP protocol is used to transfer the firmware file from host to printer.

The printer will automatically restart after the firmware loading is complete.

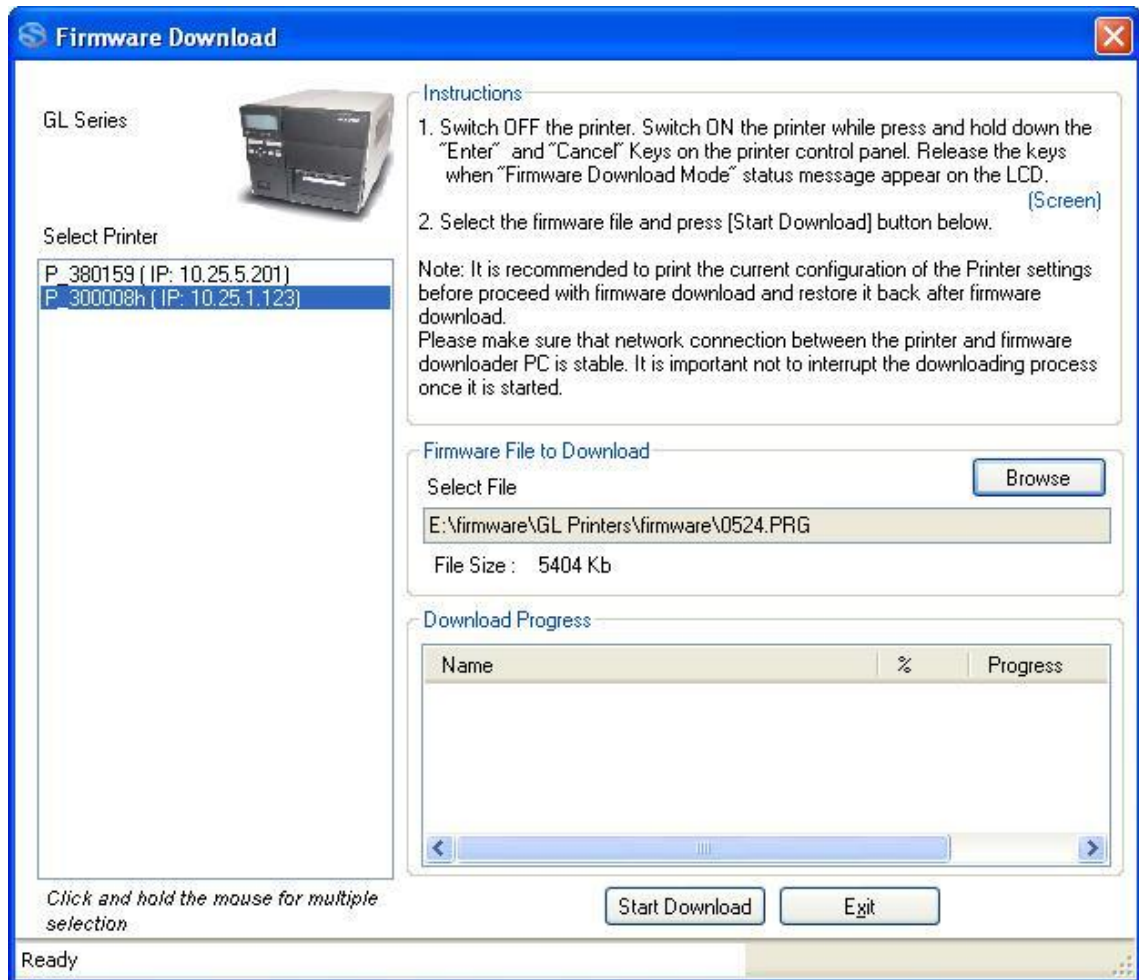
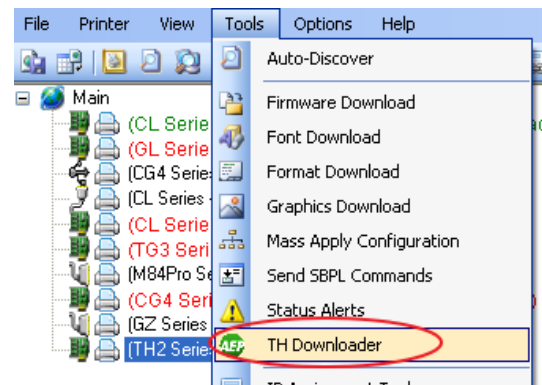


Figure 38 GL Firmware loading

4.16.4. TH2 Downloader

User can use TH Downloader Feature to download package (.pkg) file to multiple TH2 printers concurrently. Select Tools->TH Downloader menu to open TH2 Downloader dialog. Select .pkg file to download, select the printers to download and proceed with "Start Download" button.



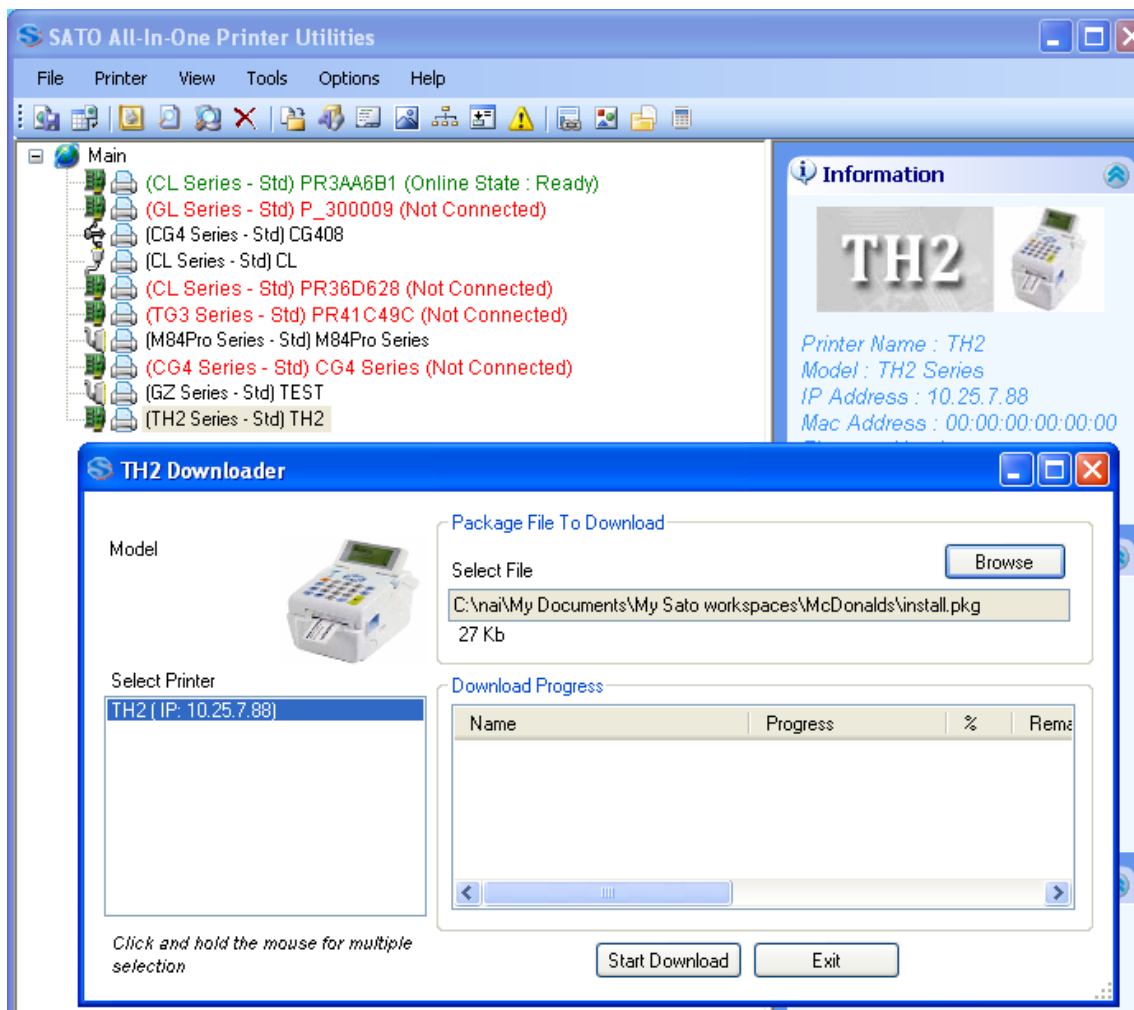


Figure 39 TH2 Downloader

4.17. Test Print feature

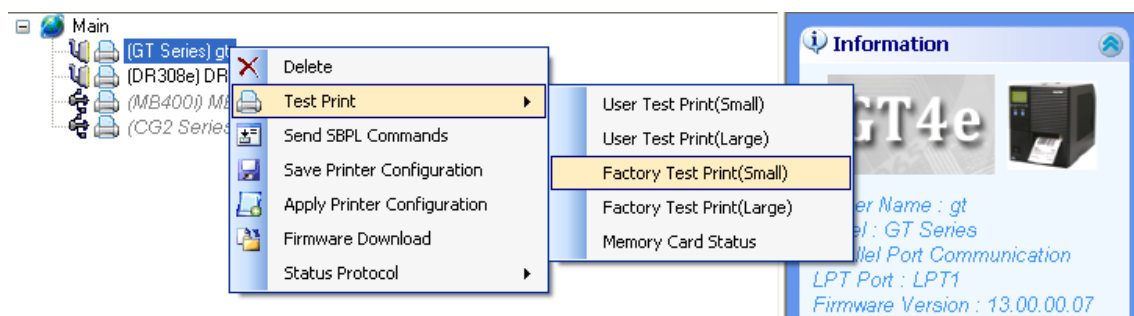


Figure 40 Test Print

This feature allows user to send built-in Test Print commands to any registered printer. The user can invoke the standard test print functions such as User Test Print or Factory Test Print, in either small or large label sizes.

4.18. Switching Interface Selection for CG Printer

After the CG printer is added to the application, the interface selection can be switched by right-click the printer to bring up the Context Menu, and choose the “Interface Mode”.

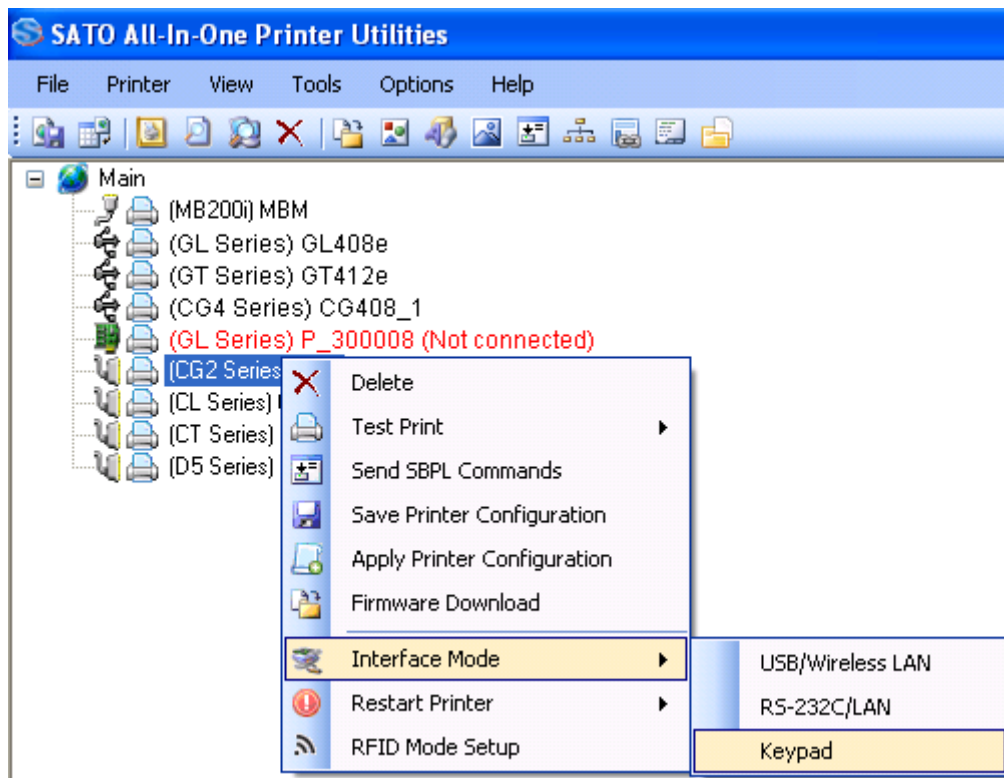


Figure 41 Switching Interface Selection for CG Printer

Note: User is required to **manually** restart the printer after switching the printer interface mode.

4.19. Restart Printer

Currently, this function is only available on CG and GT models.

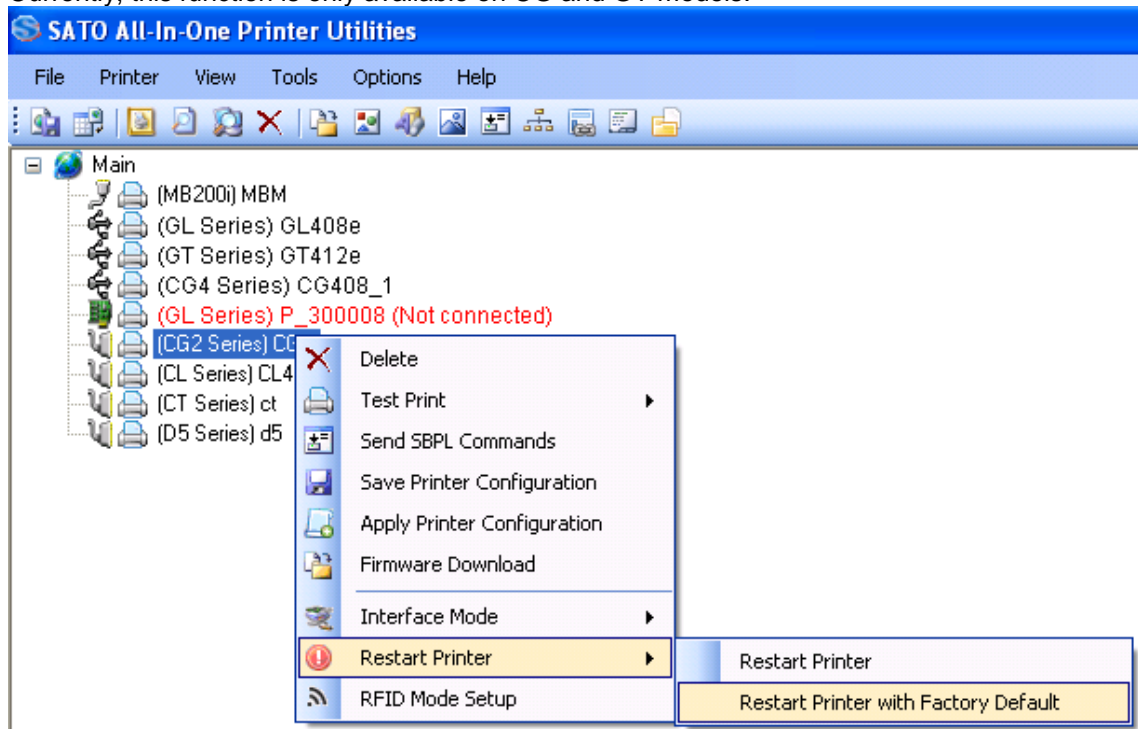


Figure 42 Restart Printer

For CG printer, if the printer is on LAN interface, it will be switched to USB mode after restarting the printer with Factory Default.

Note: Do not use this function if the printer has just changed the interface mode.

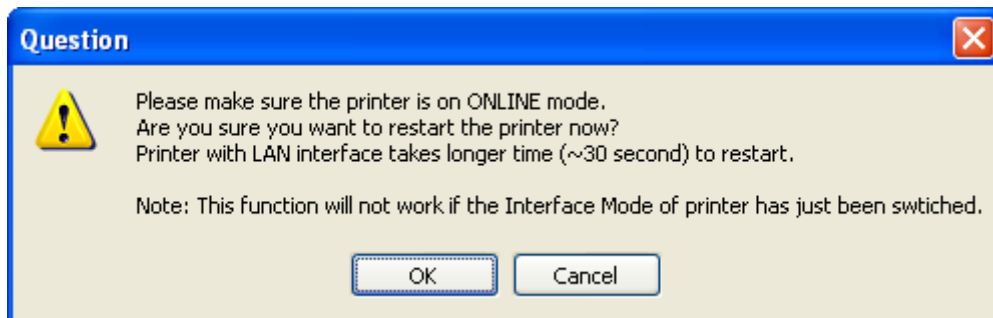


Figure 43 Restart Printer Function will not work if the Interface Mode has changed

4.20. RFID Mode Setup (for CG2 and CT4i)

Currently, this function is only available on CG2 and CT4i printer.

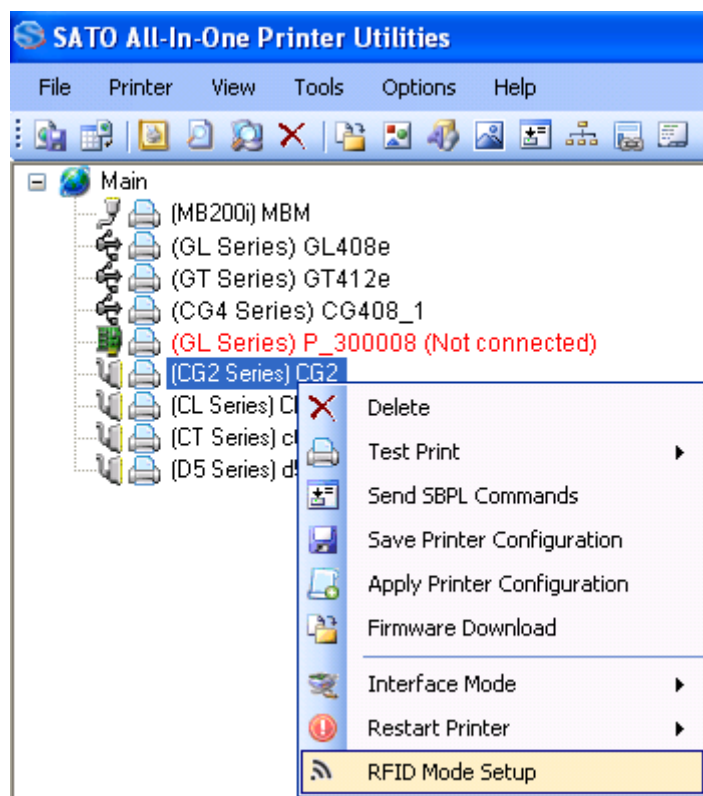


Figure 44 RFID Mode Setup

This function allows user to switch between normal mode, RFID mode and enhanced RFID mode. It is only applicable to printer with the optional RFID kit installed.

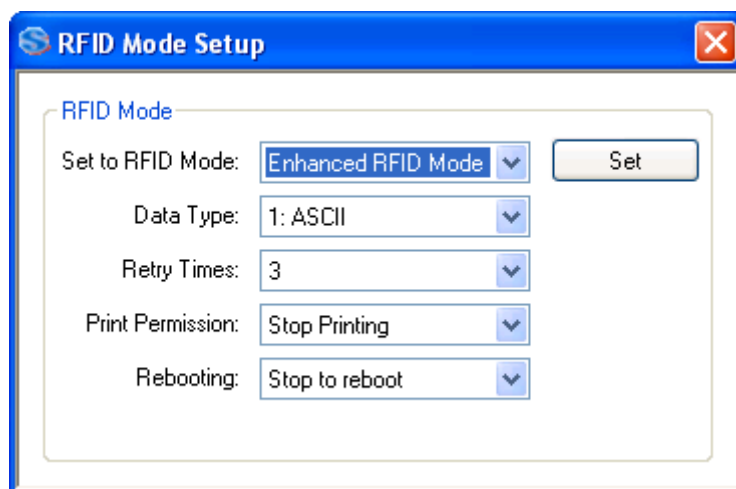


Figure 45 RFID Mode Setup Dialog

4.21. Sending Printer Command Strings

Right-click a printer icon from the treeview and choose Send SBPL Command from the popup menu. This function allows the user to send SBPL commands in both text format and file format. The user can also use it to retrieve printer response from the command.

The response of the printer is displayed in both ASCII and HEX formats.

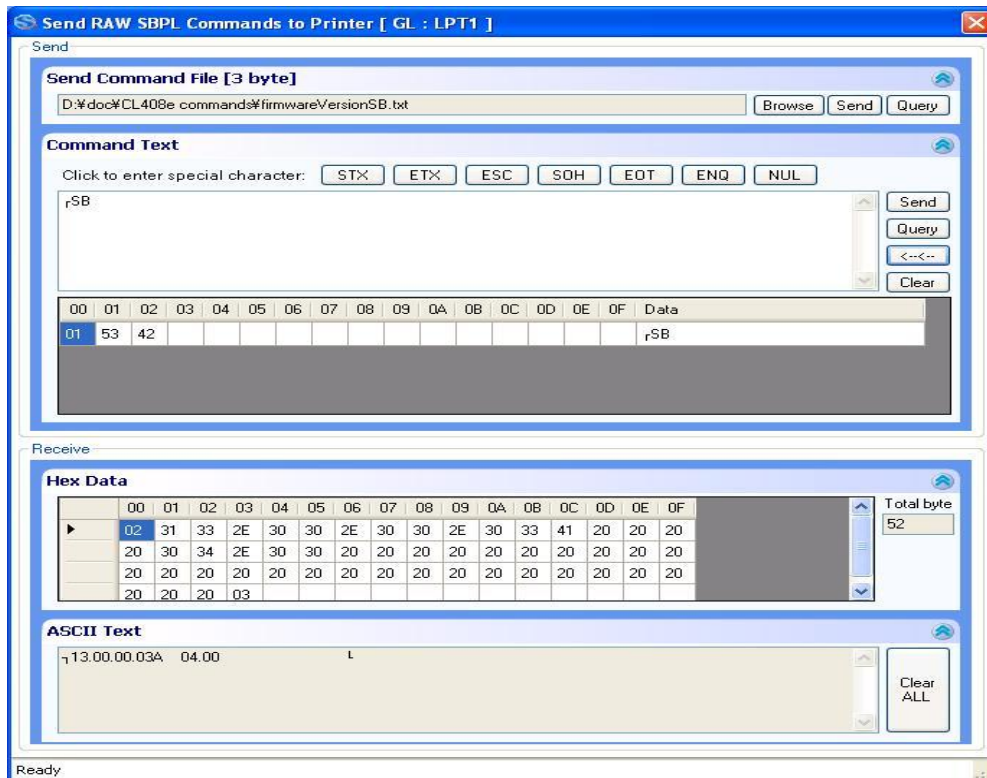


Figure 46 The Send Printer command

4.22. Saving and Applying Printer Profiles

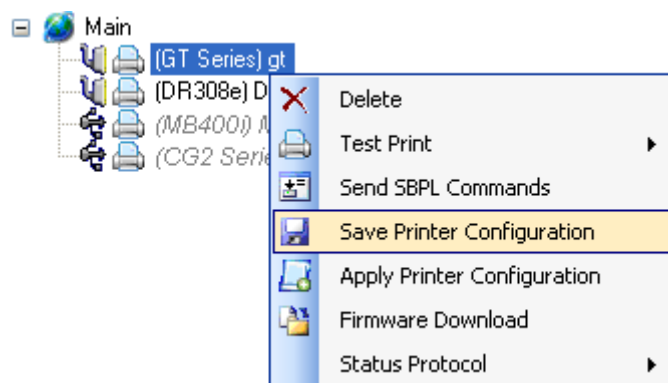


Figure 47 Saving and Applying a Printer Configuration

This feature is necessary for users who need to apply a set of tested settings to many printers at once.

For Saving Printer Configuration, an **SBPL** command will be executed to retrieve the Printer Configuration of the selected printer. The information is then saved into an XML file specified by the user.

For Applying Printer Configuration, the command will be executed after reading the XML file which is specified by the user.

An example of the XML file is shown here (Figure 30).



Figure 48 XML File

4.23. Mass Update of Printer Configuration

This feature is to apply a printer configuration to more than one printer (within the same model) concurrently. Click **Tools->Mass Apply Configuration**.

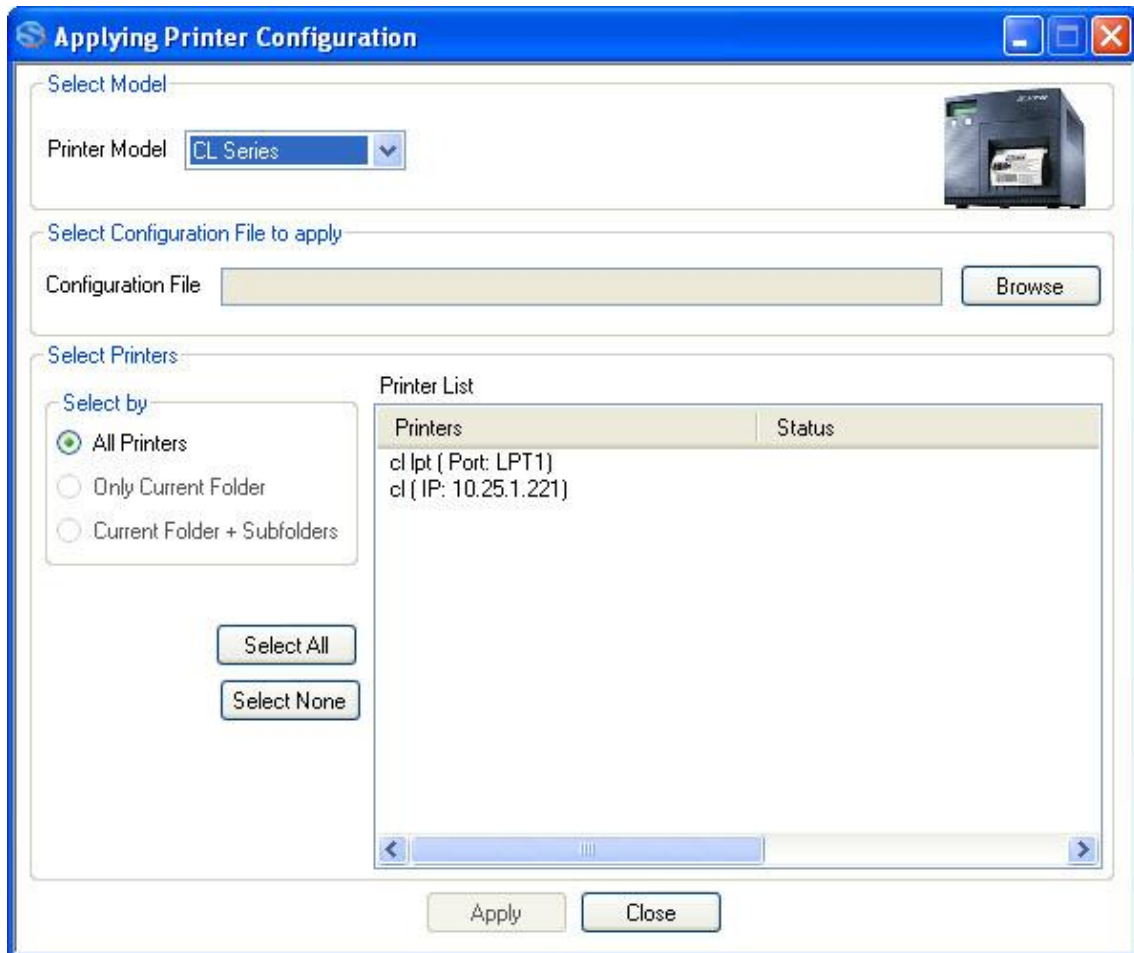


Figure 49 Mass Update of Printer Configuration

After selecting the printer model, the user can choose the printer configuration file (that was previously saved as explained in section 4.22). A list of printers of the selected models will be displayed. User can hold the Control Key to perform the multiple selections of the printer to apply the configuration.

4.24. Application Configuration

Some aspects of the application can be configured at **Options->Preferences**

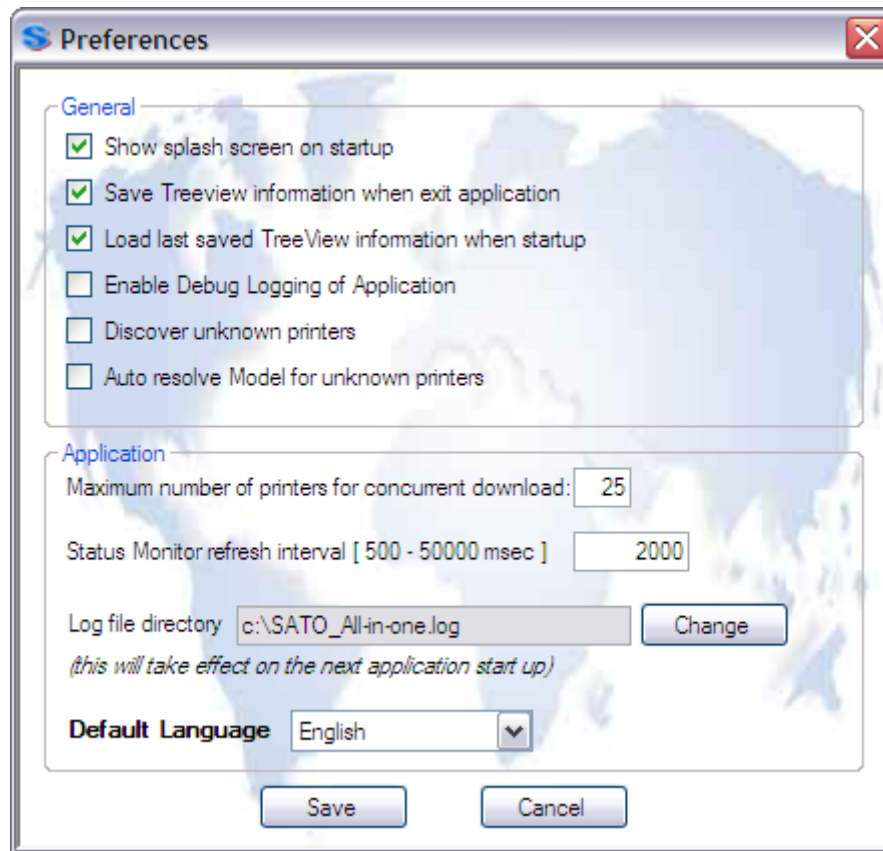


Figure 50 Preferences Dialog

This should be the only proper way to change the application configuration information. Configuration files should not be modified without advice from SATO technical staff. In case of application problem user should check "Enable Debug Logging of Application" feature and run the application to recreate issue and provide SATO_All-in-One.log file to customer support for help.

4.25. AutoDiscovery Setup

To refine the AutoDiscovery feature use the setup dialog available from Options->Auto-Discover Setup menu. This is option is meant for advance user who has good knowledge with networking on PC. This dialog allows changing the default interface to send discovery packages. Multiple broadcast address could be added to suite the various customer needs.

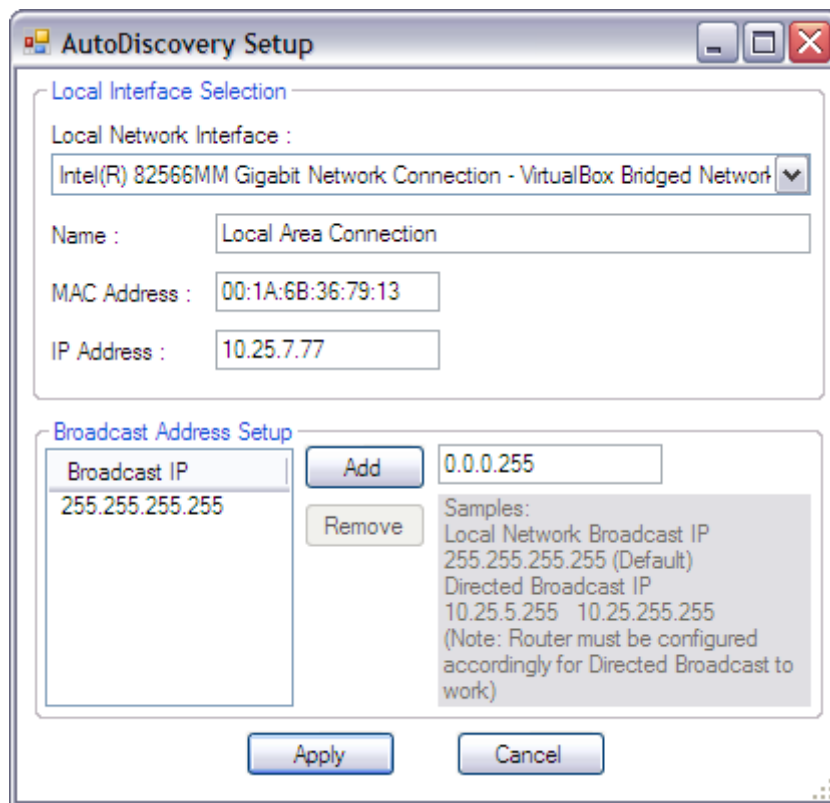


Figure 51 AutoDiscovery Setup Dialog

4.26. Configuration of Network Interface Card

For SATO Printers equipped with Network Interface Card, the network properties (such as IP address and Wireless settings) can be configured by choosing the “Interface Configuration” function.

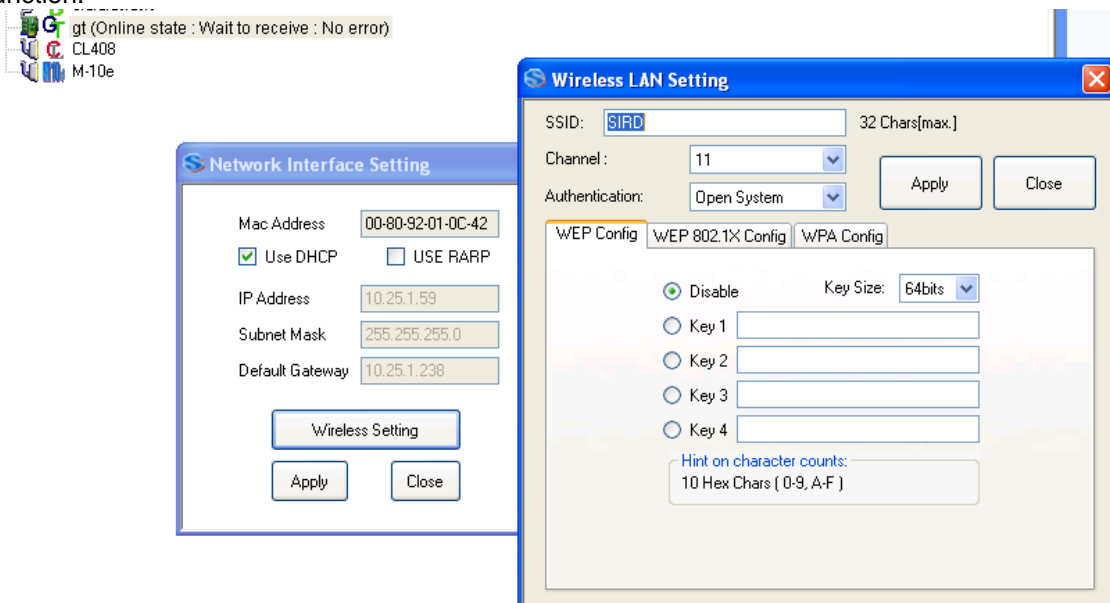


Figure 52 Configuration of Network Interface Card

4.27. Check for Newer Version of Application

The application offers a feature to help user to check if a newer version of the application is available on the website.

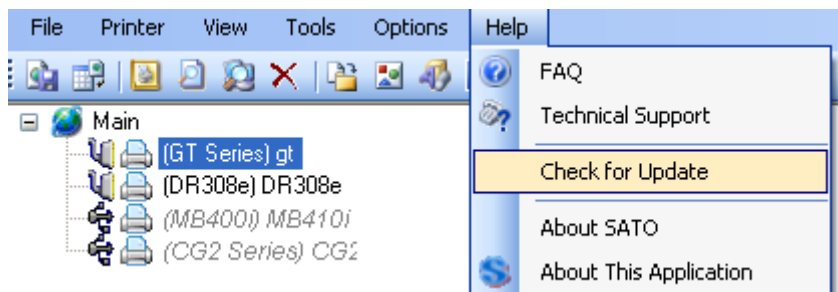


Figure 53 Check for Update

If there is a newer version, the following dialog will be displayed.

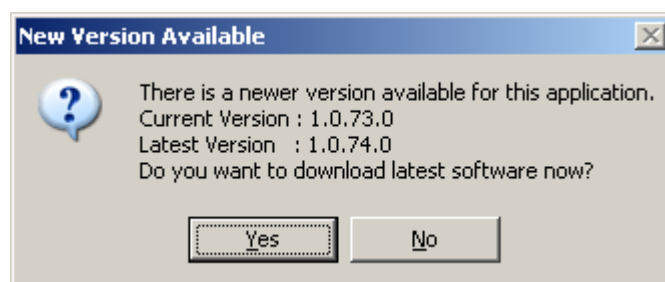


Figure 54 Found newer version

If the user clicks the "Yes" button, an Internet Browser will be opened to download the latest the application package.

4.28. Changing Communication Protocol of GL4

The communication protocol of GL4 printer can be configured by right-clicking on the GL printer node, and then choose "Communication Protocol".

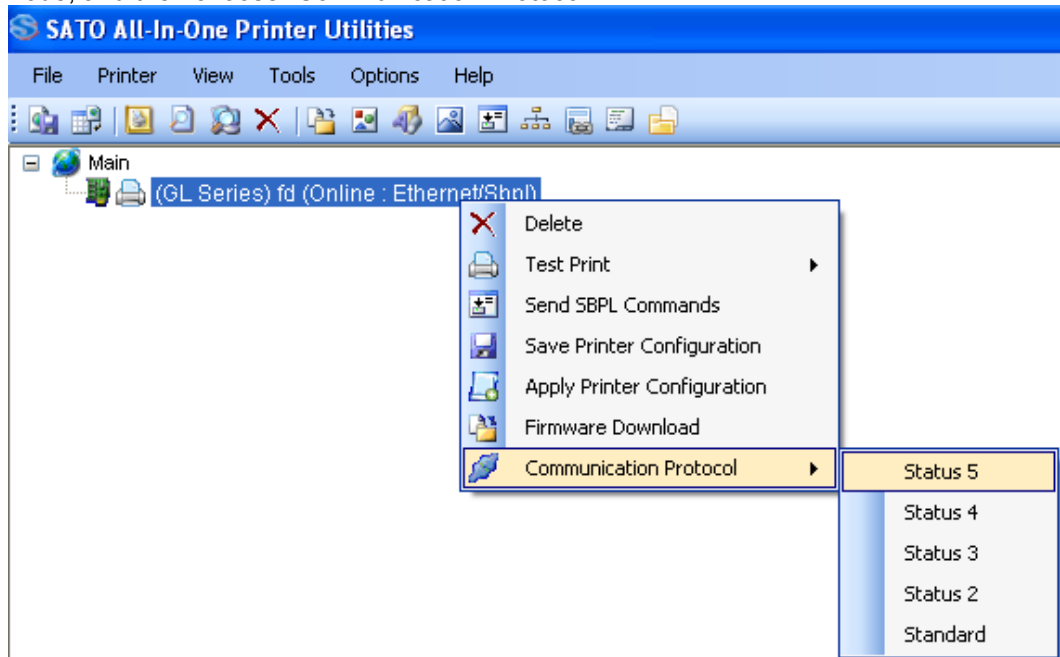


Figure 55 Changing Communication Protocol of GL4

The printer is not required to be restarted after this operation.
This function is only applicable for GL4 printer with LAN/WLAN interface mode.

4.29. Send SBPL Print File to Printer Driver

This function allows sending of SBPL print file to SATO printer driver. The print file will be sent to the print through the interface defined in the driver properties->Port Setting.

Note that the driver settings such as Print Speed or Print Darkness will not be applicable to the print file.

Click Tools->Send SBPL to Printer Driver

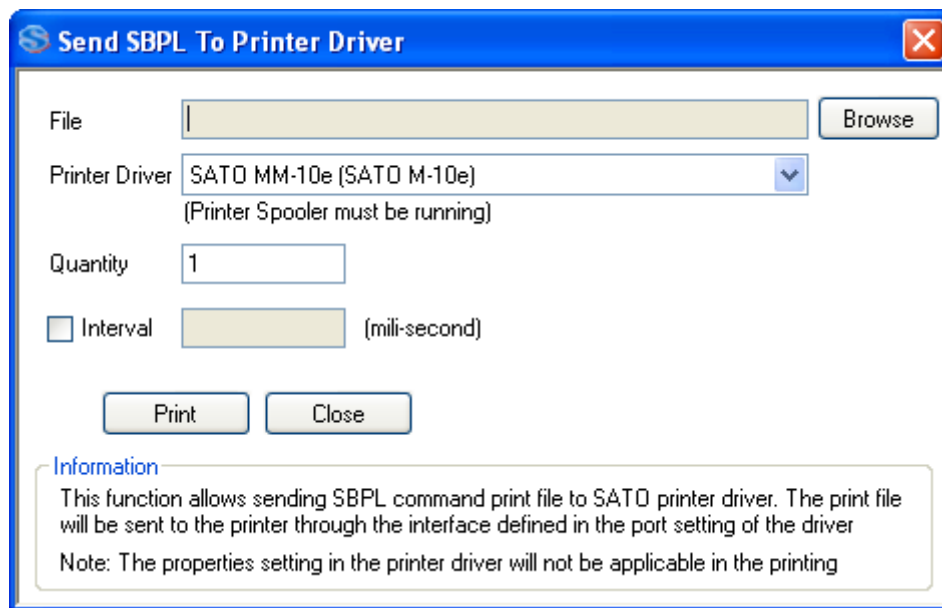


Figure 56 Send SBPL to Printer Driver

Only SATO printer drivers installed in the PC will be displayed.

If the print file is to be printed more than once, and delay is needed in between the print files, then check the Interval checkbox and input the time delay value (in millisecond, 1 second = 1000 millisecond).

4.30. IP Assignment

This function allows user to perform quick search of all Sato printers connected to network. Some network configurations such IP and SubnetMask settings are possible.

Click file menu->Tools->IP Assignment Tool

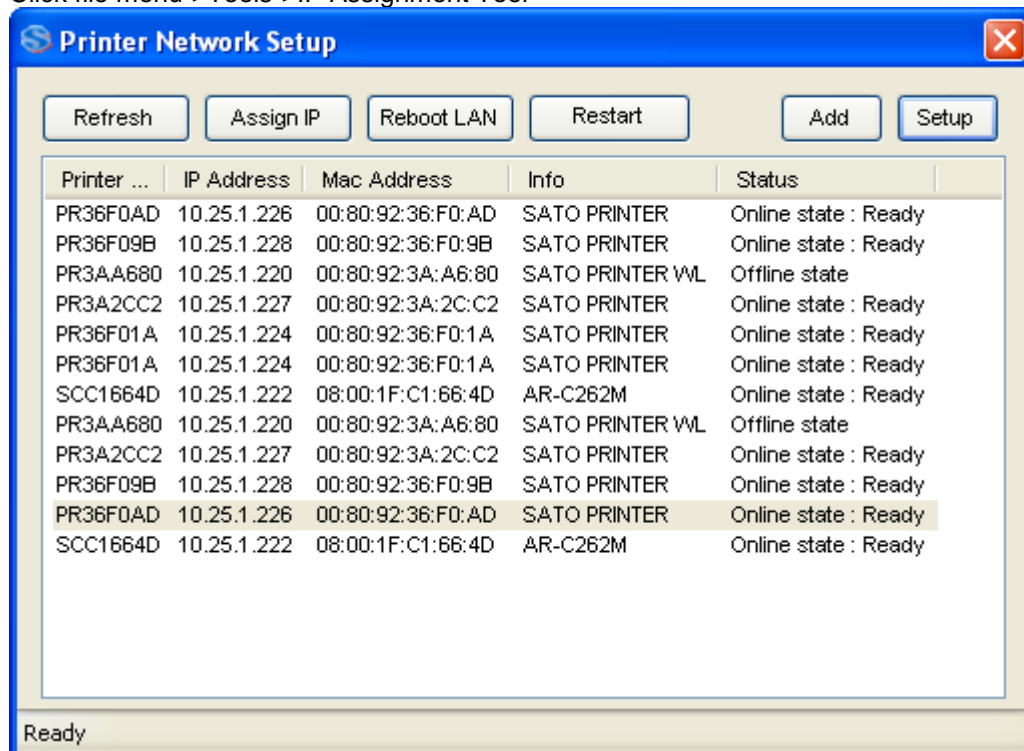


Figure 57 IP Assignment Tool

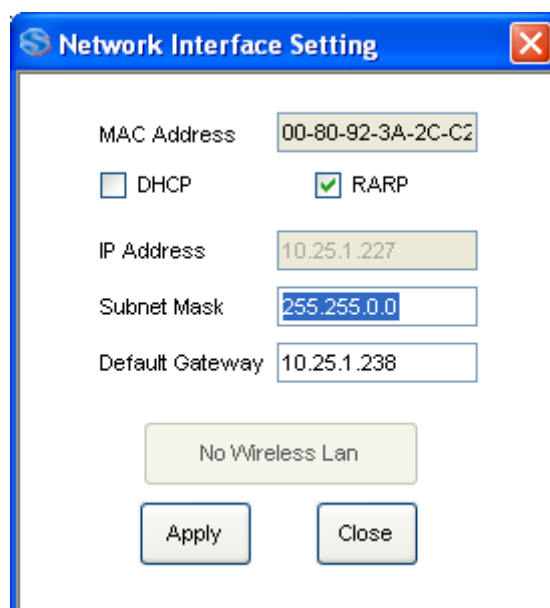


Figure 58 Network Setting

4.31. Unit Convertor

This function allows user to perform unit conversion among dots, mm, cm, inch and hex, in the corresponding resolution.

Click file menu->Tools->Unit Conversion

The screenshot shows a window titled "UnitConvertor" with a standard Windows-style title bar (blue with a close button). The window is divided into two main sections: "Conversion" and "Result".

Conversion Section:

- Printer Resolution:** A dropdown menu showing "203dpi 8 dots/mm".
- Converting From:** Radio buttons for "dots" (selected), "mm", "cm", "inch", and "hex".
- Converting To:** Radio buttons for "dots", "mm" (selected), "cm", "inch", and "hex".
- Converting Value:** A text input field containing "203".
- Buttons:** "Convert" and "Clear" buttons.

Result Section:

- Converted Value:** A text input field showing "25.4".

Figure 59 Unit Convertor

4.32. Status Alert via Email

This function sends alert emails to the specified users if an error occurs on the monitored LAN/WLAN printers. Click file menu->Tools->Status Alert
By default Popup is enabled to disabled check the Disable Popup top right corner of Alert Configuration dialog box. Alert popup will appear top right corner of Display Screen.

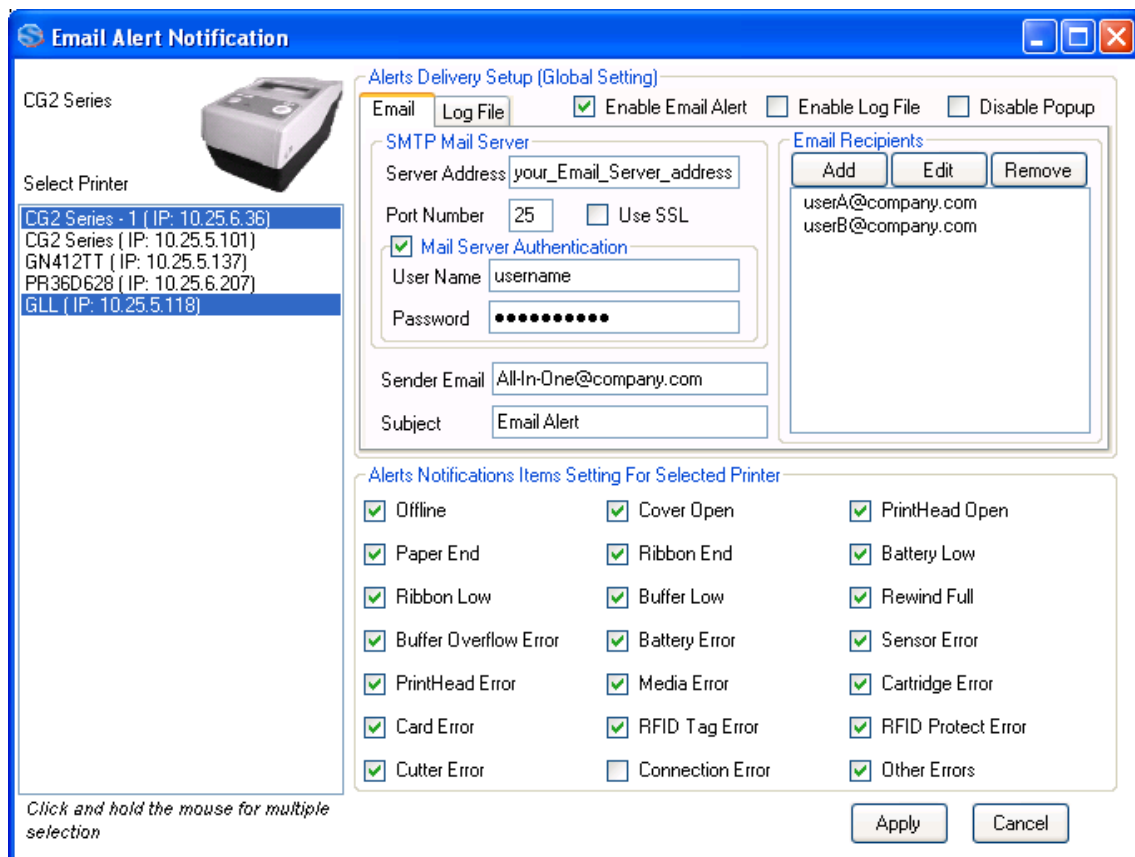


Figure 60 Email Alert Notification

Note : User is to specify the address of out-going email server (SMTP Server). Depending on the email configuration, user might need to provide information of an authenticated email account under the “Mail Server Authentication” in order to make use of the server to send emails.



Figure 61 Alert Popup Dialog

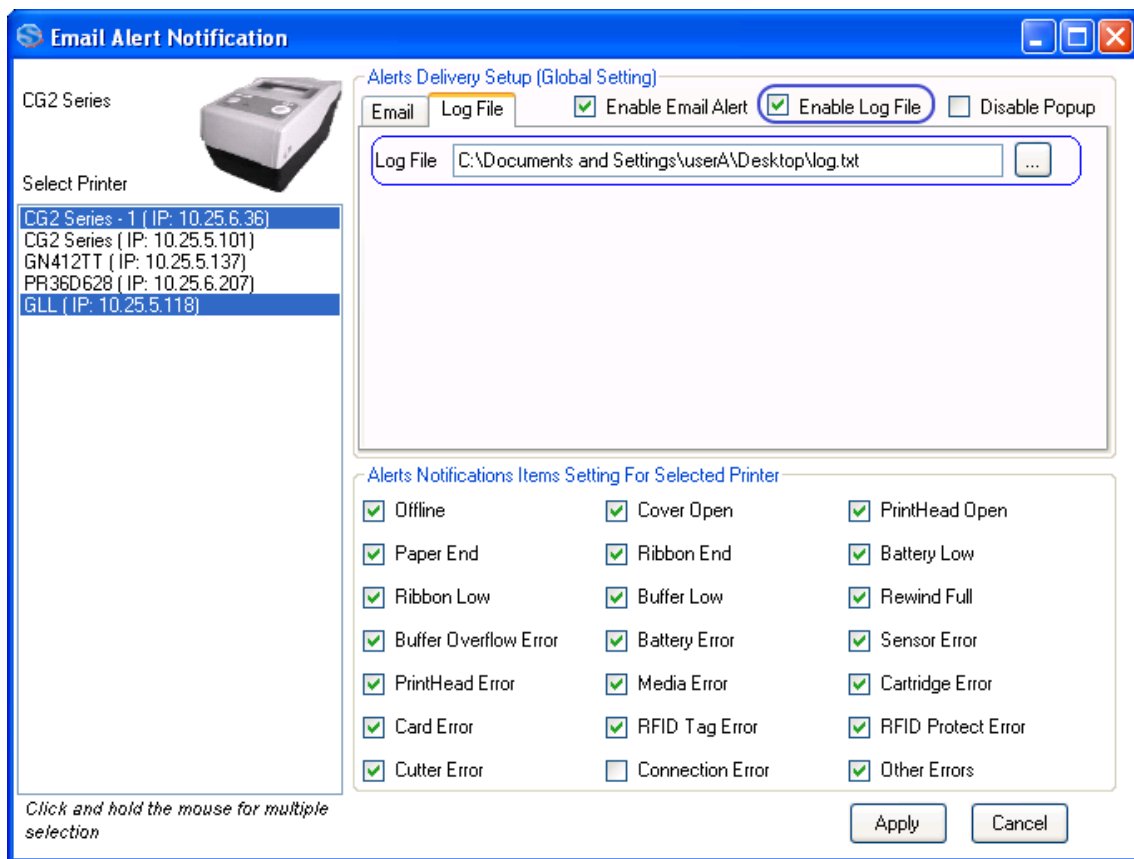


Figure 62 Log File

Detected errors can be logged in a log file by enabling the Log File option and provide a log filename.

4.33. Real Time Clock (RTC) Setting

This function is to send the RTC configuration command to the printer. It is only applicable on those printers with RTC module installed.

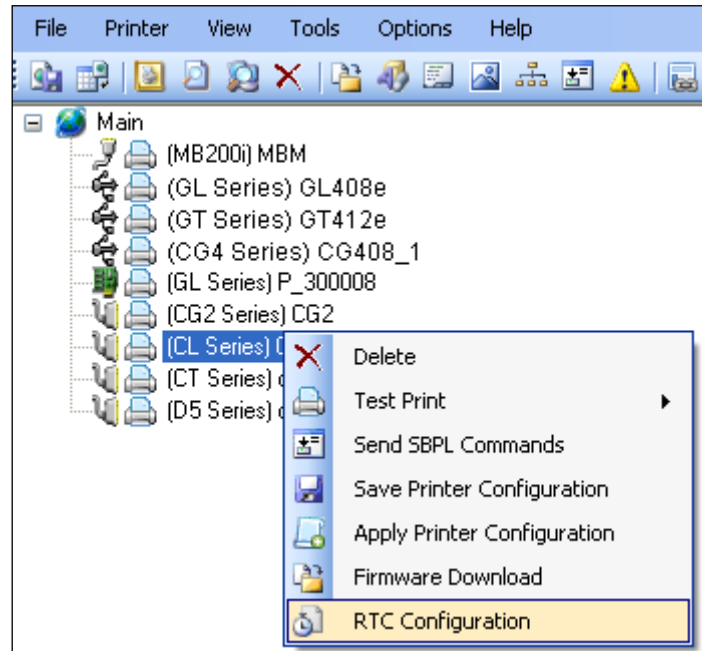


Figure 63 RTC Configuration

By default, the current date/time from the host system is displayed as the setting. Upon changing the value of the drop-down list, the value of the date/time is changed accordingly.

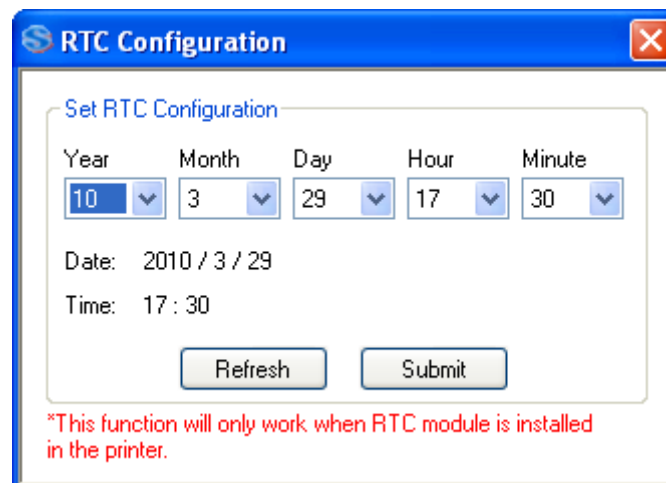


Figure 64 RTC Date/Time Setting

Click the "Refresh" button to get the updated date/time information from the host PC.
Click the "Submit" button to send the RTC Setting command to the printer.

4.34. Format Download to Keypad

This function is to send the Format files to the keypad via the printer. It is only applicable to those printer models which support Keypad and download can be done only when keypad is attached to printer. Format Files are created with SATO Keypad Tool software. In Format Download Dialog click Open button and select SD Card folder \Data\FMT\FMT_xx*.dat file to download to printer.

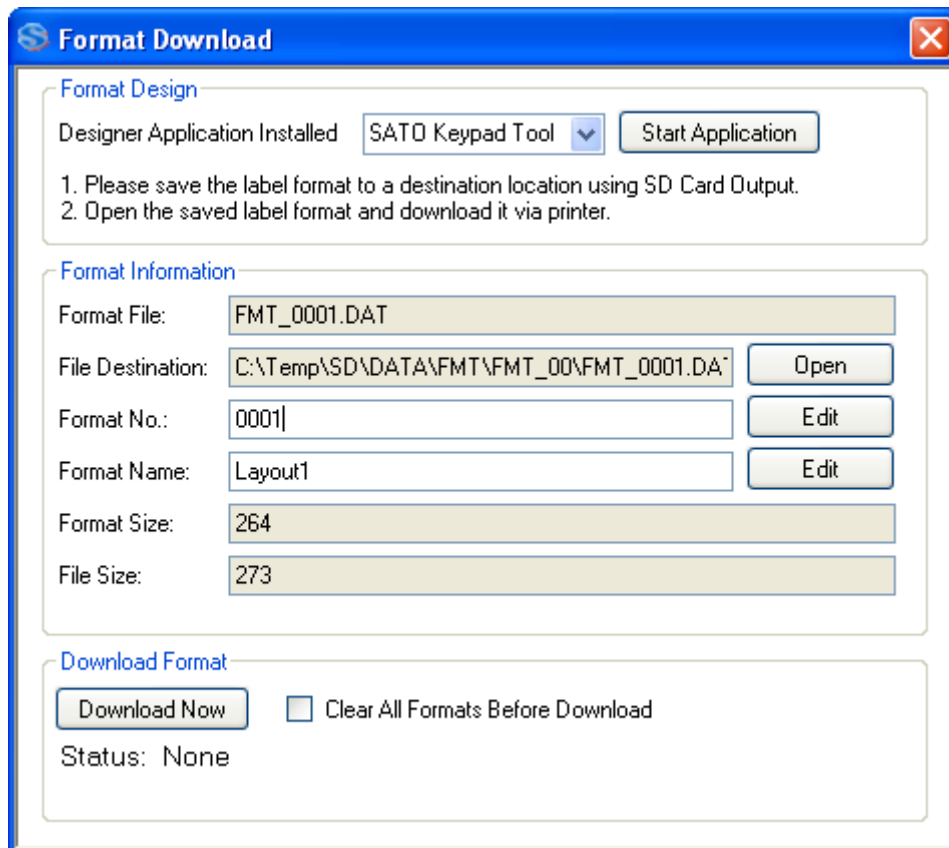


Figure 65 Format Download to Keypad

4.35. Status Bar Icon, System Tray

All-In-One tool provide Status Bar icon so that if needed user could run All-In-One tool in background and minimize to System Tray. If Close to Tray setting is selected, Application will minimize to System Tray when user try to Close the windows without using File->Exit menu. Exit menu will actually exit the application from System Tray as well.

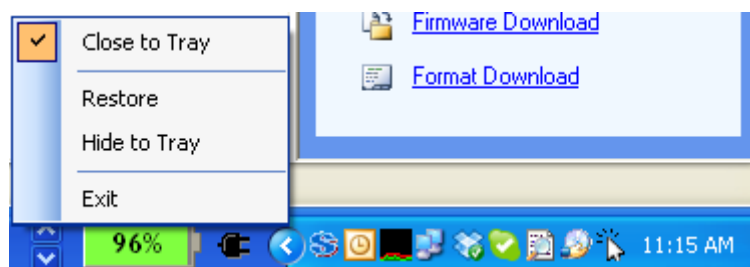


Figure 66 Status Bar Icon and menu

4.36. Shortcut Menu to SATO External Tools

All-In-One tool provided shortcut menu for all tool installed under “SATO” Start Menu Program folder. This provides quick and easy access to other SATO software user might need directly from All-In-One tool.

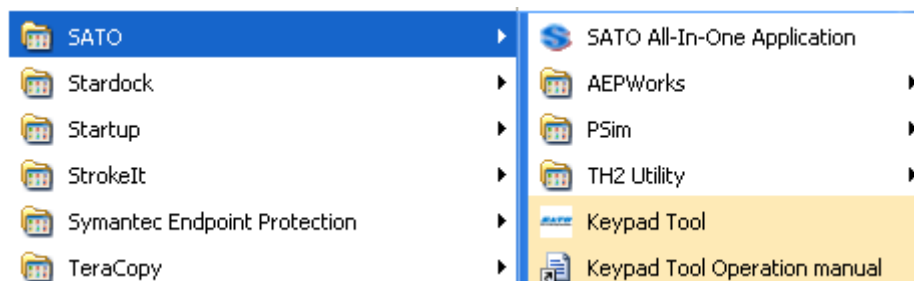


Figure 67 Other Sato Applications in Start Menu

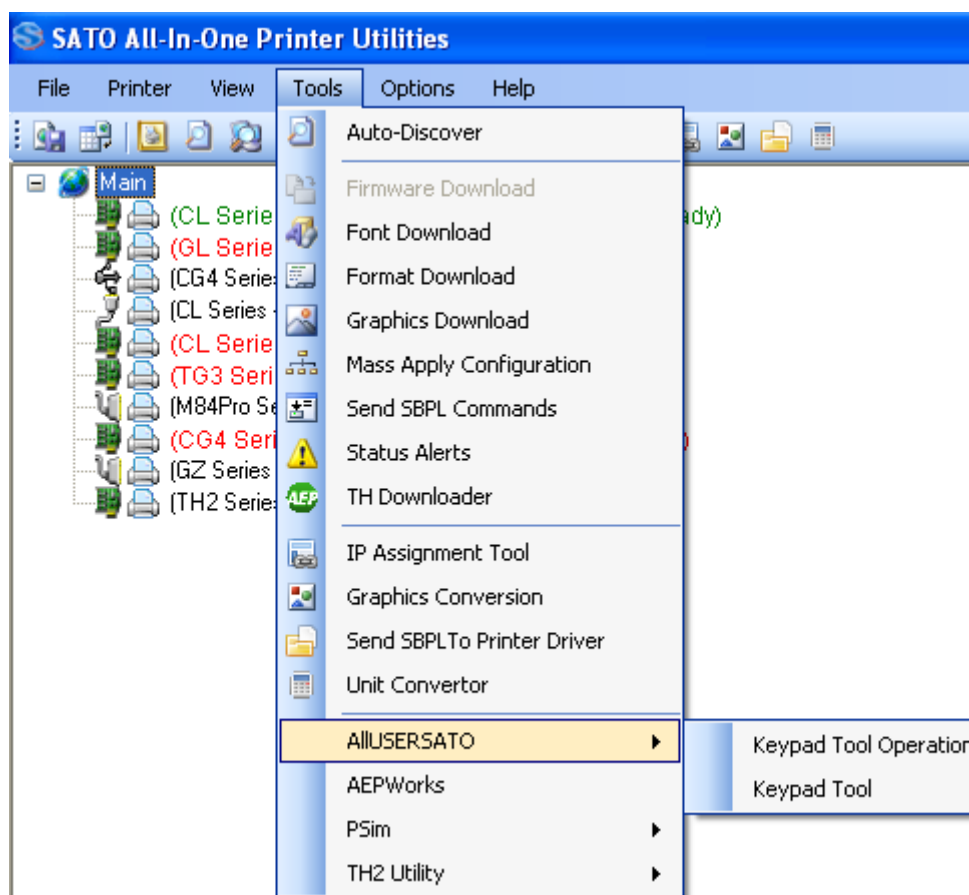


Figure 68 Shortcut Menu to SATO External Tool via All In one

4.37. Non-Standard Protocol

All-In-One use Standard Protocol for sending or querying data to printer. In Standard Protocol mode, commands are started with ESC (Hex 0x1B). SATO printer can be operated in Non-Standard mode where escape character where printable characters (eg. ^ character is used instead of ESC for command).

User can identify the current protocol by looking at the main treeview, before the printer name. By default printer were added as Standard protocol and user has to manually change to correct protocol mode by using context menu of printer in treeview.

User can change the Non-Standard code while switching to Non-Standard protocol.

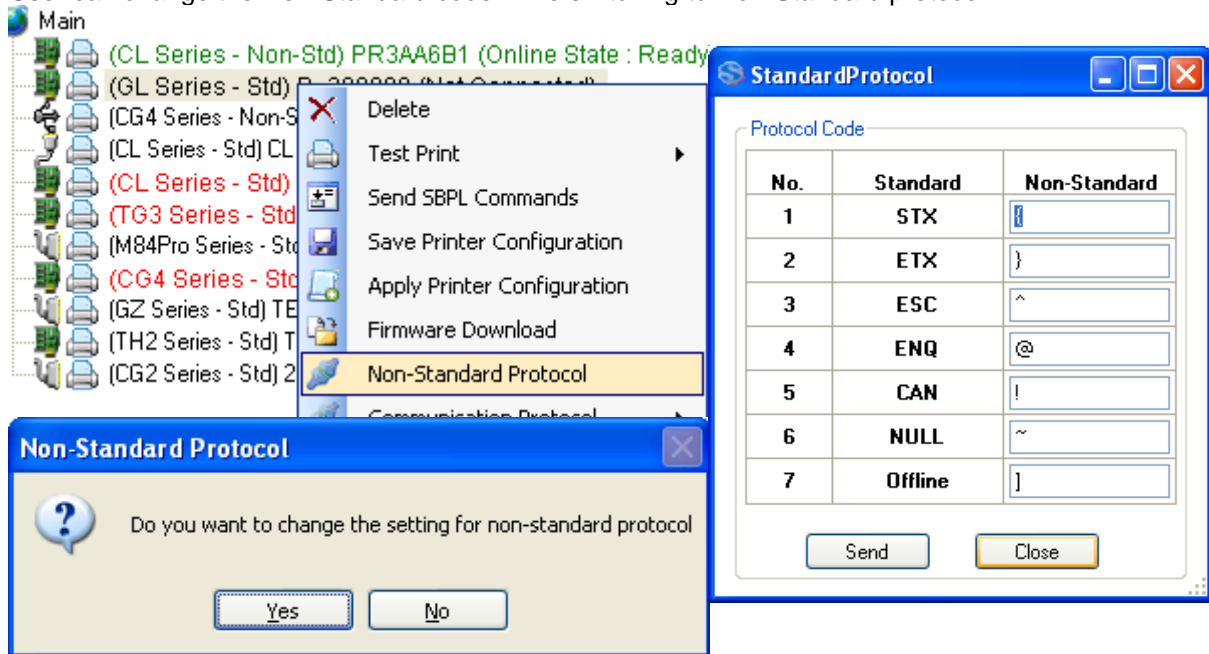


Figure 69 Standard and Non-Standard protocol

4.38. Software DIP Switch Setting

Some printer models such as GZ Series support setting DIP Switch setting via Software, SBPL command. This feature provides easy way to setup DIP Switch setting via AIO Tool. Please note that at present, reading of current DIP Switch setting is not supported. That means the setting displayed upon loading of dialog is just the default setting which may not be the same as the current setting of target printer. Right click on printer name and select DIP Switch Setting from context menu to invoke DIP Switch Panel dialog.

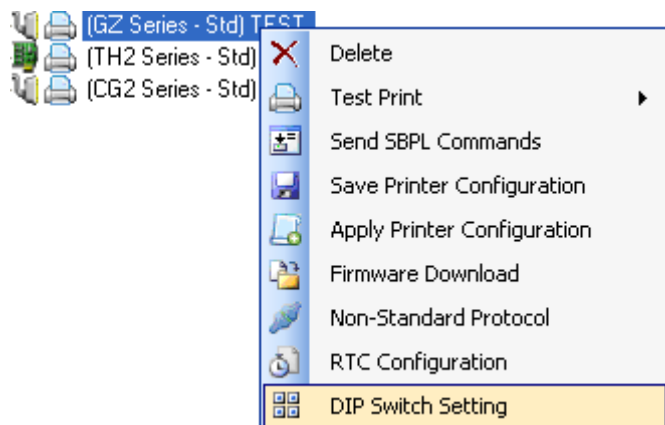


Figure 70 DIP Switch Setting Context Menu

Use Mouse to click on DIP Switch as desired and click Set button to send SBPL command to printer. User could choose the command protocol to use either SBPL or SZPL using radio at the bottom of dialog. Preset commands listed some other useful preset command to sent to printer. Please note that last two Reboot command can only be sent when the printer is in Download Mode. The command will be ignored in Online mode. (Note: At present, only GZ printer support this feature.)

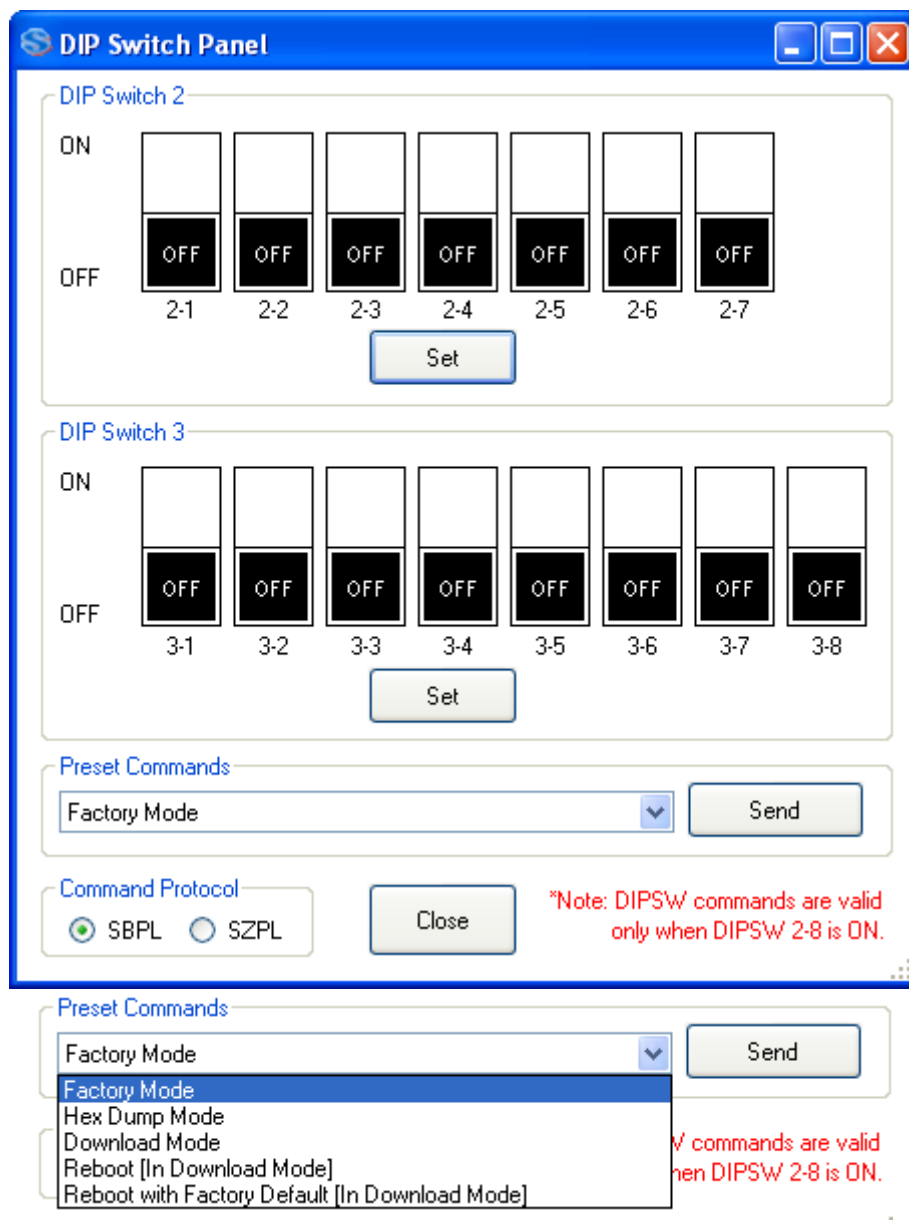
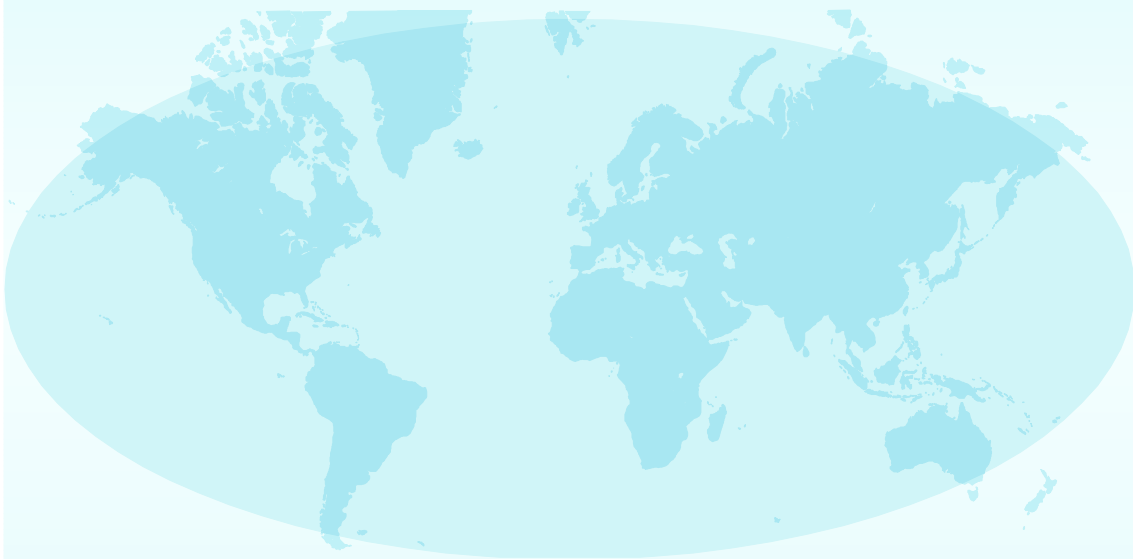


Figure 71 DIP Switch Panel



Extensive contact information of worldwide SATO
operations can be found on the internet at
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