

SATO All-In-One Tool User Manual

Edition 1.18 January 2021

Software License Agreement

PLEASE READ THE FOLLOWING TERMS AND CONDITIONS BEFORE USING THIS PRODUCT. BY INSTALLING THE PRODUCT, YOU THEREBY INDICATE YOUR ACCEPTANCE OF THESE TERMS AND CONDITIONS. SHOULD YOU DISAGREE WITH ANY OF THE TERMS OR CONDITIONS LISTED BELOW, PROMPTLY REMOVE ALL FILES RELATED TO THIS PRODUCT FROM YOUR HOST PLATFORM AND RETURN THE PRODUCT TO SATO CORPORATION.

- You explicitly agree to accept a non-exclusive license to use the Software identified on the distribution media solely for your own customary business or personal purposes. Your local and national laws govern this Agreement.
- 2. Henceforth, "Software" shall refer to the digitally encoded, machine-readable data and program. The term "Software Product" includes the Software identified on the distribution media, including any accompanying documentation. The term "Distribution Media" refers to any method by which the Software Product is delivered to the end user, including but not limited to Floppy Disks, CD-ROM, Magnetic Tape and On-Line distribution via the Internet. The Software Product is licensed (not sold) to you, and SATO[®] either owns or licenses from other vendors who own all copyright, trade secret, patent and other proprietary rights in the Software Product.
- To protect the proprietary rights of SATO Corporation, you agree to maintain the Software Product and other proprietary information concerning the Software Product in strict confidence and to establish reasonable procedures regulating access to and use of the software.
- 4. You agree not to duplicate or copy the Software except that you may make one backup copy. You agree that any such copy shall contain the same proprietary notices as those appearing on the original.
- 5. You shall not sub-license, sell, lease, or otherwise transfer all or any portion of the Software Product separate from the printer(s), without the prior written consent of SATO Corporation.
- 6. You may not modify or prepare derivative works of the Software Product. You may not transmit the Software Product over a network, by telephone, or electronically using any means; or reverse engineer, decompile or disassemble the Software.
- You may transfer the Software Product with the printer(s), but only if the recipient agrees to accept the terms and conditions of this Agreement. Your license is automatically terminated if you transfer the Software Product and printer(s).
- 8. This License remains in force until terminated, and may be terminated by agreement between you and SATO Corporation, or by SATO Corporation, if you fail to comply with the terms of this License if such failure is not corrected within thirty (30) days after notice. When this License is terminated, you shall either return to the place you obtained them from, or destroy, the printer and all copies of the Software and documentation.

- 9. SATO Corporation warrants that for ninety (90) days after delivery, the Software will perform in accordance with specifications published by SATO Corporation, and that the distribution media will be free from defects in material and workmanship. SATO Corporation does not warrant that the Software is free from all bugs, errors and omissions.
- 10. Your exclusive remedy and the sole liability of SATO Corporation in connection with the Software is replacement of defective distribution media upon their return to SATO Corporation. SATO Corporation will not be liable for any loss or damage caused by delays in furnishing a Software Product or any other performance under this Agreement.

SATO Corporation does not warrant that the functions contained in the Software will meet your requirements or that the operation of the Software will be uninterrupted or error free.

 Use, duplication or disclosure by the Government is subject to restrictions as set forth in the relevant guidelines of your country, such as the Rights in Technical Data and Computer Software clause at FAR 242.227-7013, subdivision (b) (3) (ii) or subparagraph (c) (1) (ii), as appropriate. Further use, duplication or disclosure is subject to restrictions applicable to restricted rights software as set forth in FAR 52.227-19 (c) (2) or equivalent rules.

THE PARTIES AGREE THAT ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY ARE EXCLUDED.

SATO Corporation reserves the right to make changes and/or improvements in the Software without notice at any time.

IN NO EVENT WILL SATO CORPORATION BE LIABLE FOR LOST PROFITS, LOST DATA, BUSINESS INTERRUPTIONS OR ANY OTHER DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF OR INABILITY TO USE THIS PRODUCT, EVEN IF SATO CORPORATION HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR ANY DAMAGES CAUSED BY ABUSE OR MANIPULATION OF THE SOFTWARE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

YOU ACKNOWLEDGE THAT YOU HAVE READ THIS AGREEMENT, UNDERSTAND IT, AND AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS. NEITHER PARTY SHALL BE BOUND BY ANY STATEMENT OR REPRESENTATION NOT CONTAINED IN THIS AGREEMENT. NO CHANGE IN THIS AGREEMENT IS EFFECTIVE UNLESS WRITTEN AND SIGNED BY PROPERLY AUTHORIZED REPRESENTATIVES OF EACH PARTY. BY INSTALLING THIS SOFTWARE PRODUCT, YOU AGREE TO ACCEPT THE TERMS AND-CONDITIONS OF THIS AGREEMENT.

Copyrights

Any unauthorized reproduction of the contents of this document, in part or whole, is strictly prohibited. © 2021 SATO Corporation. All rights reserved.

Limitation of Liability

SATO Corporation and its subsidiaries in Japan, the U.S and other countries make no representations or warranties of any kind regarding this material, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose. SATO Corporation shall not be held responsible for errors contained herein or any omissions from this material or for any damages, whether direct, indirect, incidental or consequential, in connection with the furnishing, distribution, performance or use of this material.

Specifications and contents of this document are subject to change without notice.

Trademarks

SATO is a registered trademark of SATO Holdings Corporation and its subsidiaries in Japan, the U.S. and other countries.

Wi-Fi® is a registered trademark of Wi-Fi Alliance.

Wi-Fi Direct[™] and WPA[™] are trademarks of Wi-Fi Alliance.

Bluetooth is a trademark of Bluetooth SIG, Inc., U.S.A.

Android is a trademark of Google LLC.

Microsoft, Windows and .NET Framework are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Pentium is a registered trademark of Intel Corporation or its subsidiaries.

All other trademarks are the property of their respective owners.

Software Updating Disclaimer

While all efforts have been taken to ensure accuracy and currency of the information contained herein, there are instances where the contents of this document may be outdated. In that case, proceed to your local SATO regional website (<u>https://www.sato-global.com/drivers/redirect.html</u>) to check whether an updated document has been made available for your reference.

Contact Information

Access the following site and select the region/country nearest to you. <u>https://www.sato-global.com/about/locations.html</u>

Table of Contents

Та	ble of	Contents	4
1.	Over	view	6
	1.1.	Supported Models of SATO Printers	6
2.	Syste	em Requirements	7
3.	Setup)	8
4.	Using	g the All-In-One Tool	.11
	4.1.	Overview	. 11
	4.2.	Summarized Features List	. 12
	4.3.	Multi-Lingual Support	. 14
	4.4.	Adding a Printer	
		4.4.1. Adding a Printer via Auto-Discovery	
		4.4.2. Adding a Printer via LAN, Parallel Port or Serial Comm settings	
	4.5.	Navigating the Treeview	. 17
		4.5.1. Creating folders	. 18
		4.5.2. Renaming folders	
		4.5.3. Relocating printers via Drag-and-Drop	
	4.6.	Displaying Printer Firmware Information	
	4.7.	Editing Printer Information	
	4.8.	Enquiring Printer Status	
	4.9.	Interface Configuration	
	4.10.	Displaying Configuration Information	
		4.10.1. Printer Configuration	
		4.10.2. Label Configuration	
	1 1 1	4.10.3. Counter Information Display	
	4.11.	Export/Import Profile	
	1 10	4.11.1. Using External Profile	
		Graphics Conversion	
	4.13.	Graphics Download	
		4.13.1. Dithering Effect	
	4.14.	Font Downloading	
	1 1 5	4.14.1. Font Selection	
		Bitmap Font (fixed size) Download	
	4.10.	Firmware Download 4.16.1. MB200i and MB400i	
		4.16.1. MB2001 and MB4001 4.16.2. CL, CG, CT, LM, S84 and GT	
		4.16.2.1. Boot Download mode	
		4.16.2.2. Flash Download Mode	
		4.16.3. GL	
		4.16.4. TH2 Downloader	
		Test Print feature	
		Switching Interface Selection for CG Printer	
		Restart Printer	
		RFID Mode Setup (for NX, CG2 and CT4i)	
		Sending Printer Command Strings	
		Saving and Applying Printer Profiles	
	4.23.	Mass Update of Printer Configuration	.43

	Preferences	
4.25.	AutoDiscovery Setup	.45
4.26.	Configuration of Network Interface Card	.46
4.27.	Check for Newer Version of Application	.47
4.28.	Changing Communication Protocol of GL4	.48
4.29.	Send SBPL Print File to Printer Driver	.49
4.30.	IP Assignment	. 50
4.31.	Unit Convertor	. 51
4.32.	Status Alert	. 52
4.33.	Real Time Clock (RTC) Setting	. 54
4.34.	Format Download to Keypad	. 55
	Status Bar Icon, System Tray	
4.36.	Shortcut Menu to SATO External Tools	. 56
4.37.	Non-Standard Protocol	. 57
4.38.	Software DIP Switch Setting	. 58
4.39.	Printer Display Customization	. 59
4.40.	Export Printer Configuration for NFC Tool	.61
4.41.	Old Model Compatible	. 66
4.42.	Media Profiles Editing	. 68
	Clone Configuration & AEP Package Downloader	
	SBPL Command Preview	
4.45.	RFID Configuration	.72
4.46.	Application Configuration	.73
4.47.	Notification Configuration	.74
4.48.	NX Format Download	.75
4.49.	Open Web Configuration	.76

Overview

The SATO All-In-One Tool 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 an 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 Tool:

- CG2/CG4 Series
- CL4NX/CL4NX Plus/CL4NX-J/CL4NX-J Plus Series
- CL6NX/CL6NX Plus/CL6NX-J/CL6NX-J Plus Series
- CL4e/CL6e Series
- LC4e Series
- CT4i Series
- CW408
- CZ4 Series
- D5xx Series
- DR308e
- GL4e Series
- GT4e Series
- GY4 Series
- GZ4 Series
- HR2 Series
- LM4 Series
- LT408
- M-10e
- M84SE Series
- M84 Pro Series
- MB2i/MB4i Series
- PW208/PW208m Series
- PW208NX/PW208mNX Series
- S84 Series
- S84-ex/S86-ex
- TG3 Series
- TH2
- FX3-LX
- WS2/WS4
- CT4-LX/CT4-LX-J/CT4-LX-HC/HC4-LX/HC4-LX-J
- SG112-ex

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

2

System Requirements

The minimum system requirements for the SATO All-In-One Tool 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, Windows 7, Windows 8/8.1, Windows 10, Windows Server 2012, Windows Server 2016 or Windows Server 2019 platforms.
- Installed .NET Framework 3.5 or higher version (Please refer to this document in case of encountering an error to install.NET Framework)
- 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 Tool 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



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



Figure 1 Language selection



Figure 2 Setup screen



Figure 3 Installation folder



Figure 4 License Agreement

In order to have access to the "Install" button to proceed with the installation, the user must agree with the License Agreement by checking the "I accept the terms of this agreement".



Figure 5 Installation in progress



Figure 6 Installation Complete

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

4

Using the All-In-One Tool

4.1. Overview

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









ORGANIZE

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





4.2. Summarized Features List

	Feature																				s			s		~
		CL4/6xxe/LC4xxe	LM4xxe	GT4xxe	GL4xxe	M-10e	MB2/4xxi	M84xxSE	CT4xxi	S84xx	DR308e	CG2/4	LT408	D500/12	TH2	TG3	CL6 Plus	GY4	GZ4	CL4NX/CL4NX Plus	CL4NX-J/CL4NX-J Plus	S84-ex/S86-ex	CL6NX/CL6NX Plus	CL6NX-J/CL6NX-J Plus	PW208/PW208m	PW208NX/PW208mNX
1	Auto-Discovery	0	0	0	0	0	Х	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Saving and loading Printer Configuration	0	0	0	0	0	0	0	0	0	0	0	0	0	х	0	0	0	0	0	0	0	0	0	0	0
3	Displaying and setting of Printer Configuration	0	0	0	0	0	0	0	0	0	0	0	0	0	х	0	0	0	0	0	0	0	0	0	0	0
4	Firmware Download	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Concurrent download firmware to multiple printers	0	0	0	0	0	х	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Send and query SBPL command	0	0	0	0	0	0	0	0	0	0	0	0	0	Х	0	0	0	0	0	0	0	0	0	0	0
7	True Type Font Download (Expanded Memory/ Cartridge)	0	x	0	0	x	x	x	x	0	x	x	x	x	x	0	0	x	x	0	0	0	0	0	x	x
8	Graphics Download	0	0	0	0	0	Х	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Supported Interfa	ice																								
9	LAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Х	Х
10	RS232c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Х	Х
11	IEEE1284 Parallel Port	0	0	0	0	0	Х	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Х	х
12	USB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Test Print	0	0	0	0	0	0	0	0	0	0	0	0	0	Х	0	0	0	0	0	0	0	0	0	0	0
14	LAN Interface Card Configuration	0	0	0	0	0	х	0	0	0	0	0	0	0	x	x	0	0	0	0	0	0	0	0	х	x
15	Format Download to Keypad	x	х	x	х	х	х	x	х	х	0	0	х	х	х	x	х	х	х	x	х	х	х	х	х	x
16	Bitmap Font Download (Internal Memory)	0	0	0	x	0	0	0	0	0	0	0	0	0	x	0	0	0	x	x	x	0	x	x	x	x
17	TH2 Package Download	х	Х	х	Х	Х	Х	х	Х	Х	Х	Х	Х	Х	0	х	Х	Х	Х	х	Х	Х	Х	Х	Х	х

Note: For troubleshooting purposes, SATO All-In-One Tool 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** <u>4.24 Preferences</u> for details.

When reporting bugs or problems, copy the log file to the systems support team.

	Feature	FX3-LX	HR2	CW408	CZ4xx	M84Prox	WS2/WS4	CT4-LX/CT4-LX-J/CT4-LX-HC	HC4-LX/HC4-LX-J	SG112-ex
1	Auto-Discovery	0	0	0	0	0	0	0	0	0
2	Saving and loading Printer Configuration	0	0	0	0	0	х	0	0	0
3	Displaying and setting of Printer Configuration	0	0	0	0	0	0	0	0	0
4	Firmware Download	0	0	0	0	0	0	0	0	0
5	Concurrent download firmware to multiple printers	0	0	x	0	0	х	0	0	0
6	Send and query SBPL command	0	0	0	0	0	0	0	0	0
7	True Type Font Download (Expanded Memory/ Cartridge) Graphics	x	x	x	x	0	x	x	x	x
0	Download	0	0	0	0	0	Х	0	0	0
	Supported Inte			0			-			-
9 10	RS232c	0	0	0 X	0	0	0	0	0	0
11	IEEE1284	X X	0 X	×	0	0	0 X	0 X	0 X	0
12	Parallel Port USB									
12	Test Print	0	0	0	0	0	0	0	0	0
14	LAN Interface	0	0	0	0	0	0	0	0	0
	Card Configuration	0	0	0	0	0	0	0	0	0
15	Format Download to Keypad	x	х	х	x	Х	x	x	х	x
16	Bitmap Font Download (Internal Memory)	0	0	0	0	0	x	0	0	x
17	TH2 Package Download	х	х	х	х	х	х	х	х	х

4.2. Summarized Features List (continued)

Note: For troubleshooting purposes, SATO All-In-One Tool 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** <u>4.24 Preferences</u> for details.

When reporting bugs or problems, copy the log file to the systems support team.

4.3. Multi-Lingual Support



Figure 7 Multi-Lingual 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 Tool, 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 Tool provides two 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

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 Tool 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 Tool with this printer.

SATO CT412i Properties	×
Stocks Language Barcode Fonts Command Fonts About General Sharing Ports Advanced Security Printer Setting Image: Security SATO CT412i Security Security Security Security	_
Print to the following port(s). Documents will print to the first free checked port.	
Port Description Printer □ COM1: Serial Port □ COM2: Serial Port □ COM3: Serial Port □ COM4: Serial Port □ COM4: Serial Port □ FILE: Print to File SAT0 GL400e (Copy 1), SA ☑ USB Virtual printer port fo	
USB Virtual printer port fo SATO GL408e (Copy 2) Add Port Delete Port Configure Port	
 ☑ Enable bidirectional support ☑ Enable printer pooling 	
OK Cancel Apply Help	

Figure 8 Active connection from printer driver

4.4.1. Adding a Printer via Auto-Discovery

The All-In-One Tool 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.

General Exceptions Advanced	
Windows Firewall is blocking incoming netwo programs and services selected below. Addin to work better but might increase your securit	ng exceptions allows some programs
Programs and Services: Name	Group Policy
Messenger	No
Microsoft Management Console	No
MSR fidProviderCertificationTool.exe	No
Remote Assistance	No
Remote Desktop	No
RfidServices.exe	No
SAP Logon for Windows	No
SATO All-In-One	No
SATOnetConnect	No
✓ satoPrint.exe	No
V silev port	No.
Add Program Add Port	<u>E</u> dit <u>D</u> elete
Display a notification when Windows Firev What are the risks of allowing exceptions?	wall blocks a program

Figure 9 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.

S Add New Printer	 Serial Comm. 	💌 🔀
New Printer Information	O USB Port	СОМ1
Printer Name GL408	C Parallel Port	COM4 [USB2Serial]
Model GL Series 💌		
Interface	O USB Port	ATEN USB2LPT[20]
LAN/Wireless IP 192.168.0.1 X		
🔿 Serial Comm. 💽 📯		
O USB Port		
Parallel Port		
OK Cancel		

Figure 10 Add New Printer

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

4.5. 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 11 below) representing a **Node**. You can manage the nodes in this view (hereafter called the **treeview**) in various ways, as follows.



Figure 11 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 12 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 13 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 Tool, 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 Tool 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 14 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.

File Printer View Tools Options Help		
💁 📽 📴 🔉 💭 🗙 🖄 🗶 🛃	# 🗟 🖾	
GT Series) PR360033 (Error : Head ⊕ 20 new folder1	l open)	U Information
S Network Interfa	ice Setting	GT4e
Mac Address	00-80-92-36-00-33	Model : GT Series IP Address : 10.25.6.112 Mac Address : 00-80-92-36-00-33 Firmware Version : 13.00.00.07
IP Address	10.25.6.112	
Subnet Mask	255.255.0.0	Configuration
Default Gatewa	y 10.25.1.238	
		Edit Information
Nol	Vireless Lan	Printer Configuration
Apply	Close	Label Configuration
		Interface Configuration

Figure 15 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:

S MB Interface Configu	ration	
-	RS232 IrDA Bluetooth WLAN Interface WLAN Security Setting	
1 62	Wireless LAN Interface Settings (This function is only valid for MB printer with WLAN protocol)	
MB4xxi mb44 (IP: 10.25.5.100)	IP Address 192.168.0.1 Set	
	Subnet Mask 255.255.255.0 Socket Port 102	24
	Default Gateway 000.000.000 Socket Timeout 060	00
	IP Address Setting 💿 Manual setting 🔵 DHCP	
	Read (Read exclude Socket Port & Timeout) Set	
Enable Multiple Selection Press_hold the [Control] key for multiple selection	The printer goes into Sleep Mode after completing the settings. Restart the printer after it goes into Sleep Mode *Note: The displayed values are lare the default setting, not the values	
	Close	

Figure 16 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.

Name	Value	100	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	*	Carl Street
Initial Feed	Disabled	~	
Proportional Pitch	Proportional pitch	*	1 1 1 1
Linerless Media	Cutter Position	×	Fixed
Media Type		~	Not Applicable
Buzzer Setting	On	*	6 19
Auto Power Off			Not Applicable
Serial Interface Priority		×	Not Applicable

Figure 17 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	180	0~2500 mm
Horizontal Label Size	104	0~104 mm
Vertical Offset Value	0	0~99 mm _1~99 mm
Horizontal Offset Value	0	0~99 mm -1~99 mm
Label Pitch Offset	0	0~12.375 mm -1~12.375 mm
Tear Off	0	0~12.375 mm -1~12.375 mm
Cutter Offset	0	0~12.375 mm -1~12.375 mm
Dispenser Offset	0	0~12.375 mm -1~12.375 mm
Labels Gap Size	0	0~0 mm

Figure 18 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. Counter 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.

IP Address : 10.65.2.123 Mac Address : 00:19:98:12:61:2 Firmware Version : 1.6.3-r11
Firmware Version : 1.6.3-r11
Edit Information
Printer Configuration
Label Configuration
Interface Configuration
3
Counter Information
🔆 Recently Used Tools

Figure 19 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 Tool. 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 20 Open External Profile

By default, All-In-One Tool 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 21 Using External Profile



Figure 22 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**.

		Graphics Conversion		_ □ ■
Select Picture F	ile			
C:¥Users¥Pictu	res¥2P_set_under	r_center-aligned[jpg		Open
Picture				
Ceasel		tivity for a Sustainab	le World	ł
Normal	Stretch	Center		
SBPL Command	d 000000000000000000000000000000000000	000000000000000000000000000000000000000		000000000000000000000000000000000000000
SBPL Command +GH058012000 000000000000 000000000000 00000000	d 000000000000000000000000000000000000			
SBPL Command +GH058012000 000000000000 000000000000 00000000	d 000000000000000000000000000000000000			

Figure 23 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. Graphics Download

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:

- SATO Graphics (ESC+GR/GI command)
 Bitmap Images (ESC+GT/GC command)
 PCX Images (ESC+PI/PY command)

- 4) Logo in Internal Flash (FD command)

	GraphicsDownload – 🗆
Printers Registered Printer Memory Slot	10.65.2.123 (CL4NX Series - IP: 10.65.2.123) ✓ Internal Flash (CC1) ✓ <u>Memory Slot Information</u>
Graphic(s) to down Graphics Operatic Registor ID [1-99 Graphic Type	ons
S Image ID 50	Image FileGraphic TypeDither ModeFile Size(Byte)C:¥Users¥gbs.yayoi.murai¥Pictures¥SATOGraphic [GI/GR C5577
Picture	Load List Save List
Ceaseles	ss Creativity for a Sustainable World

Figure 24 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.

- (GraphicsDownload – 🗆 🗙
Printers Registered Printer 10.65.2.123 (CL4NX Series - If Memory Slot Internal Flash (CC1) v	IP: 10.65.2.123) V Memory Slot Information
Graphic(s) to download Graphics Operations Registor ID [1-999] 51 Dither Mode Graphic Type BMP [GT/GC Command] Open Download D	Mode6 Format Card Print Card Status File Size Max [99999 Bytes] Delete ALL Display
S Image ID Image File 50 C:¥Users¥gbs.yayoi.murai¥Pictu	Graphic Type Dither Mode File Size(Byte) tures¥ BMP [GT/GC Command] Mode6 3603
Picture	Load List Save List
Ceaseless Creativity for	r a Sustainable World
	Close

Figure 25 Dithering Effect

4.14. Font Downloading

Click Tools->Font Download.

ect					
Printers					
Registered	esfd (GT Series - F	Port: LPT1)	~		
Memory Card	Cartridge Memory	~			
Font(s) to downloa	ad				
Downloaded For	nts				
Add	Download	Remove	Clear	Display	Test Print
Font Id F	ont Name	Font File	File Size(Byte)	Characters	Style Code
	rial ell MT	arial.ttf BELL.TTF	367112 bytes 84840 bytes	All	Default Extended
			,		
				Load Lis	t Save List

Figure 26 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

Sele	ect the font you wish to dow	nload and click the 'Sel	ect' button.	
Na	me	File Name		^
B	Agency FB Bold	C:\WINDOWS\Fd	onts\AGENCYB.TTF	_
100	Agency FB	C:\WINDOWS\Fd	onts\AGENCYR.TTF	
B	Aharoni Bold	C:\WINDOWS\Fd	onts\ahronbd.ttf	10
	Algerian	C:\WINDOWS\Fd	onts\ALGER.TTF	
	Andalus	C:\WINDOWS\Fd		
_	Angsana New	C:\WINDOWS\Fd		
B	Angsana New Bold		onts\ANGSAB.TTF	
1	Angsana New Italic	C:\WINDOWS\Fa		
B	AngsanaUPC AngsanaUPC Bold		onts\ANGSAU.TTF	170
Previe	ew	C:\WINDOWS\Fd	nisvanusaub.TTF	
Previe Age This	ency FB s is a test string	ABC abc 123	INIS VANGSAUD, TTP	
Previ Age Thi: Est	ency FB	. ABC abc 123 58920 bytes		-157
Previe Age This Est	ency FB s is a test string imated file size : ^{Code}	. ABC abc 123 58920 bytes	acall Parameter Setting	(V) command
Previe Age This Est	ency FB s is a test string imated file size :	ABC abc 123 58920 bytes		<x> command.</x>
Previ Age This Est Style Style	ew ency FB s is a test string imated file size : ^{Code}	ABC abc 123 58920 bytes ral character set	scall Parameter Setting he font will be recalled by ESC+RD	12

Figure 27 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 FuturallBook
- 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

- Double-byte 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.

Printers				
Registered Printer	M-10e (M-10e - Po	rt LPT2)	*	-
Memory Card Slot	Internal Flash		 Available/Total Size: 	
Font(s) to download	d			<u> </u>
Downloaded For	nts			_
Add	Download	Remove	Clear Display	Test Print
Font Id Fo	ont Name	Font File	File Size(Byte) Characte	rs Style Code
Font Id Fo	ont Name	Font File	File Size(Byte) Characte	rs Style Code
Font Id Fo	ont Name	Font File	File Size(Byte) Characte	rs Style Code
Font Id Fo	ont Name	Font File	File Size(Byte) Characte	rs Style Code
Font Id Fo	ont Name	Font File	File Size(Byte) Characte	rs Style Code
Font Id Fo	ont Name	Font File	File Size(Byte) Characte	rs Style Code
Font Id Fo	ont Name	Font File	File Size(Byte) Characte	rs Style Code
Font Id Fo	ont Name	Font File	File Size(Byte) Characte	rs Style Code
Font Id Fi	ont Name	Font File	File Size(Byte) Characte	rs Style Code
Font Id Fr	ont Name	Font File	File Size(Byte) Characte	rs Style Code

Figure 28 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.

🕄 Un																					
For	t Store	age In	forma	tion –			_				_										Overall Selection List
	Fo	nt ID	01			1	*		Font	Name	:					*Max	32 Ch	aracti	ers		Selections
Sele	cted F	ont	Arial	[Re	Regular, Size 10] Change Font					L L	Basic Latin										
		0	#	\$	%	&	1.1	1	1	*					1		4	2	3		30 [0025-0042]
4	5	6	7	\$ 8	70 9	× .	1	् <) =	>	+ ?	, @	Ā	B	C	0 D	E	2 F	о G	-	31 [005F-007D]
H	1	J	K	L	M	N	ò	P	Q	R	S	T	U	V	Ŵ	X	Y	Z	1		Total Characters
H	1	~			a	b	c	d	e	f	g	h	i	i	k	Î	m	n	0	Unicode 007D	61
p	q	r	s	t	u	v	W	x	v	z	{	ï	}	~						Hebrew	1 01
Cur	s and rentSe n 005	electio	n		(ey for	r multij		-	of chai	racter	s sele	ction			ок			Cano	cel	Arabic Letin Extended Additional General Punctuation Superscripts and Subscripts Currency Symbols Number Forms Arrows Mathematical Operators Miscellaneous Technical Box Drawing Block Elements Geometric Shapes Miscellaneous Symbols Private Use Area Alphabetic Presentation Forms Arabic Presentation Forms Arabic Presentation Forms Arabic Presentation Forms-A Arabic Presentation Forms-B Specials	

Figure 29 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 <u>must be loaded using RS232c interface.</u>

Printer	Information	-
Printe	r Name: mb400i	-
Interfa	ace: Serial Port: COM1	1 62
Instruc	ctions	
	tch the MB printer to Download Mode. Then connect it from H w1-0ff, DSW2-0ff, DSW3-0n, DSW-0ff_(Screen)	lost with RS232 cab
	ect the firmware directory	
3. Turr	n on the printer	
4. Pres	ss the [Start Download] button.	
5. Turr 6. Witł Cov	Installation procedure n off the printer after completion of download n the same DSW setting, perform a Factory Default Clear rer Open, press and hold the Print and the Feed buttons, then p	
5. Turr 6. With Cov 7. Clos	n off the printer after completion of download n the same DSW setting, perform a Factory Default Clear	
5. Turr 6. With Cov 7. Clos	n off the printer after completion of download n the same DSW setting, perform a Factory Default Clear er Open, press and hold the Print and the Feed buttons, then p se the cover and press the Feed button to do a Factory Defaul	
5. Turr 6. With Cove 7. Clos	n off the printer after completion of download in the same DSW setting, perform a Factory Default Clear er Open, press and hold the Print and the Feed buttons, then p se the cover and press the Feed button to do a Factory Default are Directory	t Test Print.

Figure 30 MB Firmware download

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



Figure 31 Boot or Flash Download

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

4.16.2.1. Boot Download mode

🛇 Boot Firmware Dow	nload for printer S84 (Po	ort: LPT1)		
 i) Restart the prin ii) Use ENTER key and printer will 2. Use '+ 'button an Make sure the file 4. If you are certain a 5. Upon completion of [Import Notice: Failur board might be only n 	e in Boot Firmware Downlo epair option. Download pro	ER + DownArrow + POI RFACE slot (check behi DAD READY: a list. (NOTE: Do NOT ac nload. (filename with 'boc 'Button. a Printer with Default Set ad may cause damage to cess might fail if the targ	WER ON]. nd printer for slot name) dd START.MOT file)	cing PCB used in
Firmware File to Downloa Selected Firmware Files File Name	1		Total File Size : File :	Size
Download Progress	Progress	% Status		
	lii Dowr)	>

Figure 32 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.

S Boot Firmware Download for printer S84 (Port: LPT1)	
 Download Instruction Set the printer to be in Boot Download Mode now. Restart the printer with [Function + ENTER + DownArrow + PC Use ENTER key to select the correct INTERFACE slot (check bef and printer will show 'PROGRAM DOWNLOAD READY'. Use * * button and add firmware files into the list. (NOTE: Do NOT a 3. Make sure the file list is correct order for download. (filename with 'bo 4. If you are certain and ready click 'Download' Button. Upon completion of Entire process, restart the Printer with Default Se [Import Notice: Failure in Boot Firmware Download may cause damage board might be only repair option. Download process might fail if the tan Windows Print Spooler (Printer Driver). It is recommended to stop the P firmware download.] 	ind printer for slot name) dd START.MOT file) ot' follow by '1' '2' etc) tting. [CANCEL + POWER ON] to printer. In some models replacing PCB jet interface connection is being used in
Firmware F Selected F File Nan L¥Firmw L¥Firmw OK	
Download Progress % Status Name Progress % Status S84_17000003_1.RPU 100% File sent, Rec S84_17000003_3.RPU 0% File sent, Rec	
Abort Exit	

Figure 33 Executing next firmware file

🛇 Boot Firmware Download	for printer S84 (Port: LPT	1)	
ii) Use ENTER key to se and printer will show ¹ 2. Use '+ ' button and add 3. Make sure the file list is 4. If you are certain and rea 5. Upon completion of Entir [Import Notice: Failure in Bo board might be only repair of	I Function + ENTER + Do lect the correct INTERFACE PROGRAM DOWNLOAD RE firmware files into the list. (N correct order for download. (f dy click 'Download' Button. e process, restart the Printer pot Firmware Download may option. Download process mi	slot (check behind printer for slot nai	OWER ON] odels replacing PCB on is being used in
Firmware File to Download Selected Firmware Files File Name L¥Firmware¥S84>>¥Standaro L¥Firmware¥S84>>¥Standaro L¥Firmware¥S84>>¥Standaro		ad Process Completed Successfully. h Default Setting. [CANCEL + POWER ON] OK	9160 KB
Download Progress			
Name 584_17000003_1.RPU 584_17000003_2.RPU 584_17000003_3.RPU	Progress %	1% File sent, Received ACK	
<	IIII		>
	Abort	Exit	.::

Figure 34 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).

🗟 Firmware Download (CL)		
CL Series Select Printer SATO PRINTER WL (IP: 10.25.1.220) SATO PRINTER (IP: 10.25.1.221)	LAN Interface) that sup 1. Set the printer(s) to ONLINE 2. After firmware files are compl a factory clear and default so 3. The printer will be back to O after the whole process.	mode. letely sent to printer, etting will be performed. NLINE mode automatically ch printer takes about 3-5 minutes.
	Select File	
	E:\firmware\CL\05.00.08.00(2	2120) Latest Browse
	05000800_1.RPU 05000800_2.RPU	Total File Size : 5,111 KBytes
	Download Progress	
Click and hold the mouse for multiple		
selection	Start Do	ownload E <u>x</u> it
Ready		

Figure 35 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.

GL Series 1. Select Printer 2.	. Switch OFF the printer. Switch ON the printer whil "Enter" and "Cancel" Keys on the printer control ; when "Firmware Download Mode" status messag	panel. Rele ge appear o	ease the keys on the LCD.
	Instructions 1. Switch OFF the printer. Switch ON the printer while press and hold down the "Enter" and "Cancel" Keys on the printer control panel. Release the keys when "Firmware Download Mode" status message appear on the LCD. 2. Select the firmware file and press [Start Download] button below.		
P_380159 (IP: 10.25.5.201) P_300008h (IP: 10.25.1.123)	lote: It is recommended to print the current configur efore proceed with firmware download and restore ownload. lease make sure that network connection betweer ownloader PC is stable. It is important not to interru nce it is started.	it back afte n the printer	er firmware r and firmware
F	Firmware File to Download		
	Select File		Browse
	E:\firmware\GL Printers\firmware\0524.PRG		
	File Size : 5404 Kb		
	Download Progress		
	Name	%	Progress
			>
Click and hold the mouse for multiple selection	Start Download	sit 👘	

Figure 36 GL Firmware loading
4.16.4. TH2 Downloader

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

SATO All-In-One Tool		
File Printer View Too	ols Options Help	_
i 💁 🞲 🔯 🖄 🗙 🕴 🚨	Auto-Discover	
🖃 🧭 Main	Firmware Download	
	Font Download	ine State : Idle)
CT4-LX	Format Download	line State : Idle) State : Idle)
(FX3-LX	Graphics Download	tate : Idle)
-BANK 🚠	Mass Apply Configuration	· ·
— 🍠 📇 (TH2 Sen 📰	Send SBPL Commands	
1	Status Alerts	
49	TH2 Downloader	



Figure 37 TH2 Downloader

4.17. Test Print feature



Figure 38 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 rightclick the printer to bring up the Context Menu, and choose the "Interface Mode".



Figure 39 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 40 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 41 Restart Printer Function will not work if the Interface Mode has changed

4.20. RFID Mode Setup (for NX, CG2 and CT4i)

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



Figure 42 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.

😂 RFID Mode Setu	p	
RFID Mode		
Set to RFID Mode:	Enhanced RFID Mode 💌	Set
Data Type:	1: ASCII 💌	
Retry Times:	3 🗸	
Print Permission:	Stop Printing 🛛 🗸	
Rebooting:	Stop to reboot 🛛 👻	

Figure 43 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.

	Com			-17 A.		-												-0				1
D:¥d	loc¥Cl	L408e	comr	hands	¥firmv	vareV	/ersior	nSB.b	(t		_		_		_	_			Brow	se	Send	Query
omn	nand	Tex	t																			Ģ
Clicł	k to e	nter	peci	al ch	aracte	er: (ST>		ETX		ESC		SOH		ЕОТ		ENG		NUL			
гSВ	ŝ.																				~	Send
																						Query
																						<<
																					Y	Clear
00	01	02	03	04	05 0	06 C	07 0	0 8	9 Q	4 0	B O	C 0	DO	E OF	D	ata						
01	53	10.00																				
01	53	42											VI.		r5	β						
eive		42													r.e	β						
eive)ata							07														Total bu
eive)ata	0 0			-	1		-	08	09	04	08	0C 41	0D	OE	OF						Total by 52
eive)ata (0 0 2 3	33	2E	30	30	2E	30	30	2E	30	33	41	20	0E 20	0F 20						-
eive)ata	10 0 2 3 0 3	1 33) 34	2E	30 30	30 30	2E 20	-	-	Location in the		1	1	20 20	OE	OF						-
eive	Data C 2 2	10 0 2 3 0 3	1 33 0 34 0 20	2E 2E 20	30 30 20	30 30	2E 20	30 20	30 20	2E 20	30 20	33 20	41 20	20 20	0E 20 20	0F 20 20						-
eive ex D	Data C Q 2 2 2 2	00 0 2 3 0 3 0 2 0 2	1 33 0 34 0 20	2E 2E 20	30 30 20	30 30	2E 20	30 20	30 20	2E 20	30 20	33 20	41 20	20 20	0E 20 20	0F 20 20						52
eive ex D •	Data C Q 2 2 2 1 Tex	0 0 2 3 0 3 0 2 0 2 t	1 33) 34) 20) 20	2E 2E 20 03	30 30 20	30 30	2E 20	30 20	30 20	2E 20	30 20	33 20	41 20	20 20	0E 20 20	0F 20 20						-
eive ex D •	Data C Q 2 2 2 2	0 0 2 3 0 3 0 2 0 2 t	1 33 0 34 0 20	2E 2E 20 03	30 30 20	30 30	2E 20 20	30 20	30 20	2E 20	30 20	33 20	41 20	20 20	0E 20 20	0F 20 20						52

Figure 44 The Send Printer command

4.22. Saving and Applying Printer Profiles



Figure 45 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 46).

🗿 C:\mb4.xml - Microsoft Internet Explorer 📃 🔲	\times
Eile Edit View Favorites Tools Help	1
🕞 Back 🝷 🌍 🗧 📓 🏠 🔎 Search 🔶 Favorites	»
Address 🔮 C:\mb4.xml 💽 🏹 G	io
<pre><?xml version="1.0" encoding="utf-8" ?> - <model value="MB400i"> <printmethod value=""></printmethod> <printresolution value="8 dot/mm"></printresolution> <printspeed value="75(mm/sec)"></printspeed> <printmode value="Continuous"></printmode> <cuttermode value="Continuous"></cuttermode> <cuttermode value="Label"></cuttermode> <dispensemode value=""></dispensemode> <linerlessmode value=""></linerlessmode> <dispensemode value=""></dispensemode> <dispensemode value=" Cap sensor"></dispensemode> <zeroslash value="Enabled"></zeroslash> <kanjicode value="Bisbled"></kanjicode> <kanjicode value="Bisbled"></kanjicode> <kanjicode value="Bisbled"></kanjicode> <kanjicode value="Bisbled"></kanjicode> <kanjicode value="Bisbled"></kanjicode> <labelheight value="Bisbled"></labelheight> <labelhe< td=""><td></td></labelhe<></model></pre>	
	~
🖉 Done 📃 😡 😡 👰	

Figure 46 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**.

S Applying Printer Configur	ation	
Select Model Printer Model CL Series	~	
Select Configuration File to apply – Configuration File		Browse
Select Printers	Printer List	
Select by All Printers Only Current Folder Current Folder + Subfolders Select All Select None	Printer List cl lpt (Port: LPT1) cl (IP: 10.25.1.221)	Status
	Apply Close	

Figure 47 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. Preferences

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

Se Preferences
General ✓ Show splash screen on startup ✓ Save Treeview information when exit application ✓ Load last saved TreeView information when startup Enable Debug Logging of Application Discover unknown printers Auto resolve Model for unknown printers
Application Maximum number of printers for concurrent download: 25 Status Monitor refresh interval [500 - 50000 msec] 2000
Log file directory c:\SATO_All-in-one.log Change (this will take effect on the next application start up) Default Language English
Save Cancel

Figure 48 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

This function offers an advanced setup feature of AutoDiscovery which enables the application to discover printers in the different segment. (By default configuration, All-in-One Tool AutoDiscovery only searches printers on the same segment.) This function is intended to system administrator and/or network administrator who have knowledge of network since this function has the potential to cause malfunction of the software function.

To use this function, the router is required to support "directed broadcast" and should be properly configured. Then you go to "Options" - "AutoDiscovery Setup" - "Broadcast Address Setup" to specify broadcast IP range where you want All-in-One Tool to discover.

🖳 AutoDiscove	ery Setup							
CLocal Interface S	Selection							
Local Network In	cal Network Interface :							
Intel(R) 82566M	1M Gigabit Network Cor	nnection - VirtualBox Bridged Network 💌						
Name :	Local Area Connection	n						
MAC Address :	00:1A:6B:36:79:13							
IP Address :	10.25.7.77							
Broadcast Addre		0.0.0.255						
Broadcast IP	Add							
255.255.255.25	Remove	Samples: Local Network Broadcast IP 255.255.255.255 (Default) Directed Broadcast IP 10.25.5.255 10.25.255.255 (Note: Router must be configured accordingly for Directed Broadcast to work)						
	Apply	Cancel						

Figure 49 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.

: Wait to receive : No error)		1
	S Wireless LAN Setting	×
	SSID: SIRD 32 Chars[max.]	
S Network Interface Setting	Channel: 11 💌	
Mac Address 00-80-92-01-0C-42 ✓ Use DHCP USE RARP IP Address 10.25.1.59 Subnet Mask 255.255.255.0 Default Gateway 10.25.1.238 ✓vireless Setting Apply Close	Authentication: Open System Apply Close WEP Config WEP 802.1X Config WPA Config Disable Key Size: 64bits Key 1 Key 2 Key 3 Key 4 Hint on character counts: 10 Hex Chars (0-9, A-F) Close Clos	
	Network Interface Setting Mac Address 00-80-92-01-0C-42 ✓ Use DHCP USE RARP IP Address 10.25.1.53 Subnet Mask 255.255.255.0 Default Gateway 10.25.1.238 Wireless Setting	Network Interface Setting Mac Address Mac Address 00-80-92-01-0C-42 Mac Address Mac Address 00-80-92-01-0C-42 Mac Address Mac Address 00-80-92-01-0C-42 Mac Address 00-80-92-01-0C-42 Mac Address 00-80-92-01-0C-42 WEP Config WEP 802.1X Config WEP Config WEP 802.1X Config WEP Solution: WEP Config WEP Solution: WEP Solution: Were Size: 64bits Key 1 Key 2 Key 3 Wireless Setting Wireless Setting Hint on character counts:

Figure 50 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 51 Check for Update

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



Figure 52 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".

File Printer View Tools Options H	elp
🔄 🚅 📴 🖉 💭 🗙 🐴 🖬 🚳	3 ii 🗟 🖾 😑
🖃 🏈 Main	
🖵 🖉 📇 (GL Series) fd (Online : Etherne	X Delete
	E Test Print
	Send SBPL Commands
	Save Printer Configuration
	Apply Printer Configuration
	Pirmware Download
	💋 Communication Protocol 🔸 🛛 Status 5
	Status 4
	Status 3
	Status 2
	Standard

Figure 53 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

😂 Send SBPI	. To Printer Driver
File	Browse
Printer Driver	SATO MM-10e (SATO M-10e)
Quantity	1
🔄 Interval	(mili-second)
Pri	nt Close
will be sent to	allows sending SBPL command print file to SATO printer driver. The print file o the printer through the interface defined in the port setting of the driver operties setting in the printer driver will not be applicable in the printing

Figure 54 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.

S Printer N	Network Set	ир		X
Refresh	Assign	IP Reboot LAN	Restart	Add Setup
Printer	IP Address	Mac Address	Info	Status
PR36F01A PR36F01A SCC1664D PR3AA680	10.25.1.226 10.25.1.228 10.25.1.220 10.25.1.227 10.25.1.224 10.25.1.224 10.25.1.222 10.25.1.220 10.25.1.227 10.25.1.228 10.25.1.228 10.25.1.222	00:80:92:36:F0:AD 00:80:92:36:F0:9B 00:80:92:3A:A6:80 00:80:92:3A:2C:C2 00:80:92:36:F0:1A 00:80:92:36:F0:1A 08:00:1F:C1:66:4D 00:80:92:3A:A6:80 00:80:92:3A:2C:C2 00:80:92:3A:2C:C2 00:80:92:36:F0:9B 00:80:92:36:F0:AD 08:00:1F:C1:66:4D	SATO PRINTER SATO PRINTER SATO PRINTER SATO PRINTER SATO PRINTER SATO PRINTER AR-C262M SATO PRINTER SATO PRINTER SATO PRINTER SATO PRINTER AR-C262M	Online state : Ready Online state : Ready Offline state Online state : Ready Online state : Ready Online state : Ready Online state : Ready Offline state Online state : Ready Online state : Ready Online state : Ready Online state : Ready
Ready				

Figure 55 IP Assignment Tool

🛇 Network Interface Setting 🛛 🛛 🔀				
MAC Address	00-80-92-3A-2C-C2			
DHCP	🔽 RARP			
IP Address	10.25.1.227			
Subnet Mask	255.255.0.0			
Default Gateway	10.25.1.238			
No Wireless Lan Apply Close				

Figure 56 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

S UnitConvertor		×
Conversion		1
Printer Resolution:	203dpi 8 dots/mm 🛛 👻	
Converting From:	⊙ dots ◯ mm ◯ cm ◯ inch ◯ hex	
Converting To:	🔘 dots 💿 mm 🔘 cm 🔘 inch 🔘 hex	
Converting Value:	203	
	Convert Clear	
Result)
Converted Value:	25.4	ļ

Figure 57 Unit Convertor

4.32. Status Alert

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 and alert popup will appear top right corner of Display Screen. To disable, check the Disable Popup top right corner of Alert Configuration dialog box.

S Email Alert Notification			
CG2 Series Select Printer CG2 Series - 1 (IP: 10.25.6.36) CG2 Series (IP: 10.25.5.101) GN412TT (IP: 10.25.5.137) PR36D628 (IP: 10.25.6.207) GLL (IP: 10.25.5.118)	SMTP Mail Server Server Address your_Email_S	nable Email Alert Enable Email Rerver_address Use SSL userA(userB(Log File Disable Popup ecipients Edit Remove @company.com @company.com
	Paper End Ribbon Low Buffer Overflow Error PrintHead Error	Cover Open Cover Open Ribbon End Buffer Low Battery Error Media Error RFID Tag Error	 PrintHead Open Battery Low Rewind Full Sensor Error Cartridge Error RFID Protect Error Other Errors
Click and hold the mouse for multiple selection			Apply Cancel

Figure 58 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 59 Alert Popup Dialog

S Email Alert Notification			
CG2 Series Select Printer CG2 Series - 1 (IP: 10.25.6.36) CG2 Series (IP: 10.25.5.101) GN412TT (IP: 10.25.5.137) PR36D628 (IP: 10.25.6.207) GLL (IP: 10.25.5.118)		I Setting) P Enable Email Alert (Ena nd Settings\userA\Desktop\log	
	Alerts Notifications Items Sel	tting For Selected Printer	
	🔽 Offline	Cover Open	🔽 PrintHead Open
	🔽 Paper End	🔽 Ribbon End	Battery Low
	🔽 Ribbon Low	Buffer Low	🔽 Rewind Full
	Buffer Overflow Error	Battery Error	Sensor Error
	PrintHead Error	🗹 Media Error	Cartridge Error
	Card Error	🔽 RFID Tag Error	RFID Protect Error
	Cutter Error	Connection Error	✓ Other Errors
Click and hold the mouse for multiple selection			Apply Cancel

Figure 60 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.

File	Printer	View	Tools	Options	Help		
	1	2	X 皆	46 🖾	A 🖧	± 🥼	
= 🎑	Main						
	5 .	18200i) M		_			
			s) GL408 -> OT443				
			s) GT41: es) CG4				
			P_30000	_			
-		G2 Serie:	-				
-		L Series)		elete			
		(T Series) (5 Series)	- 1 - т	est Print			-
			🛓 S	end SBPL	Command	s	
			🛃 s	iave Printe	r Configu	ration	
			L. A	oply Print	er Configu	Iration	
			P F	ïrmware D	ownload		
			<mark>ه</mark> ۹	TC Config	uration		

Figure 61 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.

S RTC Configuration
Set RTC Configuration
Year Month Day Hour Minute
Date: 2010 / 3 / 29 Time: 17 : 30
Refresh Submit
*This function will only work when RTC module is installed in the printer.

Figure 62 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_xx*.dat file to download to printer.

🎯 Format Down	🛇 Format Download 🛛 🛛 🔀				
Format Design Designer Application Installed SATO Keypad Tool 1. Please save the label format to a destination location using SD Card Output. 2. Open the saved label format and download it via printer.					
- Format Informatio	n				
Format File:	FMT_0001.DAT				
File Destination:	C:\Temp\SD\DATA\FMT\FMT_00\FMT_0001.DA*	Open			
Format No.:	0001 Edit				
Format Name:	Layout1 Edit				
Format Size:	264				
File Size:	273				
Download Format Download Now Clear All Formats Before Download Status: None					

Figure 63 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 64 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.

💼 SATO	SATO All-In-One Application
🛅 Stardock	 AEPWorks
🛅 Startup	🕨 🛅 PSim 🔹 🕨
🛅 StrokeIt	🕨 🛅 TH2 Utility 🔹 🕨
💼 Symantec Endpoint Protection	Keypad Tool
🛅 TeraCopy	Keypad Tool Operation manual

Figure 65 Other Sato Applications in Start Menu



Figure 66 Shortcut Menu to SATO External Tool via All In one

4.37. Non-Standard Protocol

All-In-One Tool 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 (e.g. ^ 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.

3	S StandardProtocol						
ſ	Protocol Code						
	No.	Standard	Non-Standard				
	1	STX	8				
	2	ETX	}				
	3	ESC	^				
	4	ENQ	@				
	5	CAN	!				
	6	NULL	~				
	7	Offline]				
	Send Close						



Figure 67 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 68 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 send 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 69 DIP Switch Panel

4.39. Printer Display Customization

The feature lets download boot splash/screen images and help videos being available in the Information->Help menu position of the CL4NX/CL4NX Plus/CL4NX-J/CL4NX-J Plus series (firmware version must be 1.4.1 or higher), CL6NX/CL6NX Plus/CL6NX-J/CL6NX-J Plus, FX3-LX, CT4-LX, CT4-LX-J, CT4-LX-HC, HC4-LX and HC4-LX-J printers. The user can access the function by either choosing it from context or tool menu.



Figure 70 Accessing Printer Display Customization using Context and Tool Menus

ype	File Description	Downloaded	Download New File
mage	Printer startup image	Yes	Step 1 :
lmage	Printer shutdown image	Yes	Select file description of the new image or video you would like to download from the table
Image	Image after .pkg file installation (firmware, clone)	No	
Image	Image after playing help video	No	Step 2 :
Video	Help video for setting label roll (standard printer)	No	Select a file to download
Video	Help video for setting label roll (printer with cutter/linerless option)	No	File Requirement PNG image file with width 320 pix and height 240 pix
Video	Help video for setting label roll (printer with dispenser)	No	
Video	Help video for setting label roll (printer with dispenser liner rewinder)	No	Step 3 :
Video	Help video for setting fanfold label (standard printer)	No	Click START DOWNLOAD button for downloading the file to the printer.
Video	Help video for setting fanfold label (printer with cuttter)	No	
Video	Help video for setting ribbon	No	
Video	Help video for replacing label roll (standard printer)	No	START DOWNLOAD
Video	Help video for replacing label roll (printer with cutter/linerless option)	Yes	
Video	Help video for replacing label roll (printer with dispenser)	No	Deletina Existina File
Video	Help video for replacing label roll (printer with dispenser liner rewinder)	No	Deleang Existing File
Video	Help video for replacing fanfold label (standard printer)	No	Step 1 :
Video	Help video for replacing fanfold label (printer with cutter)	No	Select file description you would like to delete from the table
Video	Help video for replacing ribbon	No	
Video	Help video for replacing thermal head	No	Step 2 :
Video	Help video for replacing platen roller	No	Click DELETE button for deleting the existing file in the printer.
Video	Help Video for printer cleanup	Yes	

Figure 71 Printer Display Customization

The Printer Display Customization function records a new file or overrides the old one if the file already exists on the printer. The user is notified by "Yes" if the particular file exists or "No" if there is nothing downloaded there yet.

The downloading process starts by selecting the image/video in a grid needed to download, choosing the particular file from the computer's file system expected to reside on the printer. In order to download the file please press Start Download button.

There are two types of deleting process. The Delete All button removes all files of the printer and the Delete button does it one by one as the selected row indicates.

Download image

CT4-LX, CT4-LX-J, CT4-LX-HC, HC4-LX, HC4-LX-J - .png extension, 480x272 pixels size Other printers - .png extension, 320x240 pixels size

Download video

CT4-LX, CT4-LX-J, CT4-LX-HC, HC4-LX, HC4-LX-J - .webm extension, 480x272 pixels size, file size less than 15MB Other printers - .webm extension, 320x240 pixels size, file size less than 15MB

Deleting of images will stop displaying them by the printer but deleting the videos will restore original help movies already being included by default.

4.40. Export Printer Configuration for NFC Tool

NFC Tool is a part of Mobile All-in-One Tool Android app. This function is available for CLNX printer series (serial number 6B~ or newer), CLNX Plus/CLNX-J/CLNX-J Plus printer series, FX3-LX, CT4-LX/CT4-LX-J/CT4-LX-HC.

Note: Printer model with "-J" at the end denotes Japan version.

This feature exports printer configuration from selected printer and save the configuration as file. The file extension is AIOTNFC which can be used with the Mobile All-in-One Tool for transferring configuration to other printers without AC power.

CLNX printer series with NFC interface can accept data contains printer configuration via NFC interface while printer power is off. Accepted configuration will be applied when turn on the printer. By using this function, productivity of the printer configuration process may be improved. Users can use this function to configure multiple printer units without removing printer units from packaging box at distribution centre, warehouse or customer site.

You shall configure one printer using LCD, All-in-One Tool or web interface. So, this printer will be used for exporting configuration data.

Open the All-in-One Tool, select the printer and open Export Printer Configuration for NFC Tool from right click submenu or printer menu.

Help	SATO All-In-One Printer Utilities
L6NX (Online State Idle)	File Printer View Tools Options Help Add new printer Add new printer Remove Printer Save Printer Configuration Apply Printer Configuration Tate Idle) Export Printer Configuration for NFC Tool
Export Printer Configuration for NFC Tool Restart Printer SRDI Pretocol	

Figure 72 Export Printer Configuration for NFC Tool menu

On the Export Printer Configuration for NFC Tool dialog, select interface, provide WiFi Additional Configuration and select application.

ected printer	will be exported to data fi	e.	
			selected printer.
ce to be includ	ded into the configuration file:		
~	Exclude IP Address Setti	ings	
uration			
5 or 13 Alpha	numeric Characters		8 to 63 ASCII Characters
		WPA PSK:	
5 or 13 Alpha	numeric Characters		
5 or 13 Alpha	numeric Characters		
5 or 13 Alpha	numeric Characters		
ation to be inc	cluded into the configuration fi	e:	
	-		
	a, please ma ce to be includ v uration 5 or 13 Alpha 5 or 13 Alpha 5 or 13 Alpha	please make sure that you have com- ce to be included into the configuration file:	

Figure 73 Export Printer Configuration for NFC Tool dialog

- Interface •
 - 0
 - You can include only 1 printer interface setting into configuration file. If you do not want to include static IP address, check for Exclude IP Address Settings. 0 All-in-One Tool will not include IP address setting into the configuration file.

LAN IPv4	 Exclude IP Address Setting
LAN IPv4	
LAN IPv6 WiFi IPv4	
WiFi IPv4 WiFi IPv6	
IEEE 1284	humeric Characters
RS-232C	
USB Bluetooth	numeric Characters

Figure 74 Interface selection

- WiFi Additional Configuration
 - You need to provide WEP KEY and / or WPA PSK when you select WiFi for interface.

ViFi IPv4	~ 🗹 Ex	clude IP Address Sett	ings	
WiFi Additional Config	guration			
	5 or 13 Alphanumeric	Characters		8 to 63 ASCII Characters
WEP KEY 1:	5		WPA PSK:	
	5 or 13 Alphanumeric	Characters		
WEP KEY 2:				
	5 or 13 Alphanumeric	Characters		
WEP KEY 3:				
	5 or 13 Alphanumeric	Characters		
WEP KEY 4:				

Figure 75 WiFi additional configuration

- Application
 - You can include only 1 application setting into configuration file.



Figure 76 Application selection

Save As dialog will be displayed when you click Save button. Specify file name and save the file. The file shall be transferred to Android mobile device which you will be using Mobile All-in-One Tool for configuring printers.

Note that not all printer settings will be included in the configuration file, as size of configuration file must fit CLNX printer series NFC interface data capacity. Please refer to below table for the settings will be included in the configuration file.

Setting	Configuration	LAN IPv4	LAN IPv6	WiFi IPv4	WiFi IPv6	IEEE1284	RS-232C	USB	Bluetoot
Common	Print speed	\checkmark	\checkmark	\checkmark	\checkmark	1	\checkmark	1	\checkmark
	Print darkness level Vertical size of label	√ √	√ √	√ √	\checkmark	√ √	√ √	√ √	√ √
			\checkmark			\checkmark		√ √	
	Horizontal size of label Offset of vertical base reference point	√ √	\checkmark	√ √	\checkmark	√ √	\checkmark	√ √	√ √
	Offset of horizontal base reference point	√ √	√ √	\checkmark	\checkmark	√ √	\checkmark	√ √	\checkmark
	Print method	√ √	\checkmark	\checkmark	\checkmark	√ √	\checkmark	~	\checkmark
	Sensor type	√ √	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√ √	\checkmark
		✓ ✓	\checkmark	\checkmark	\checkmark	√ √	\checkmark	√ √	\checkmark
	Language settings Time zone	\checkmark	\checkmark	\checkmark	\checkmark	√ √	\checkmark	√ √	\checkmark
	Power saving setting	✓ ✓	\checkmark	\checkmark	\checkmark	√ √	\checkmark	√ √	\checkmark
	Adjust print position		v √	√ √	v √	√ √		√ √	
	Offset adjust	√ √	\checkmark	\checkmark	\checkmark	~	~	~	\checkmark
	Detect ribbon near end	√	\checkmark		v √		~		
	Priority setting	√ √	\checkmark	\checkmark	\checkmark	~	\checkmark	√ √	\checkmark
	Label near end	√	√	√	~	~	~	~	↓ ✓
	Unit of Measurement	\checkmark	\checkmark	\checkmark	\checkmark	√ √	V	√ √	√ √
LAN	DHCPv4 setting	√	•	•	,	•	•	•	
LAN	IPv4 address	√ 							
	IPv4 subnet mask	√ √							
	IPv4 default gateway	√ 							
	IPv4 DNS primary address	√							
	IPv4 DNS secondary address	\checkmark							
	IPv6 address setting		\checkmark						
	IPv6 address		√ √						
	IPv6 default router		√ √						
	IPv6 subnet prefix		\checkmark						
	IPv6 DNS primary address		\checkmark						
	Communication protocol (For SBPL)	\checkmark	\checkmark	\checkmark	\checkmark				
	BCC check	√	√ √	•					
	SNTP function	\checkmark	~	\checkmark	\checkmark				
	NTP IPv4 server address		v √	√ √	v √				
	SNTP error notification	\checkmark	~	\checkmark	\checkmark				
	SNMP contact information	√ 	\checkmark	√ 	\checkmark				
	SNMP equipment name	\checkmark	\checkmark	\checkmark	\checkmark				
	SNMP installation location	· ~	√	√	√				
	SNMP setting	\checkmark	\checkmark	\checkmark	\checkmark				
	LPD	√ 		√ 	v √				
	FTP	\checkmark	\checkmark	\checkmark	\checkmark				
	LAN/WLAN Switching	· ~	√	√	√				
WiFi	DHCPv4 setting			\checkmark					
•••••	IPv4 address			√					
	IPv4 subnet mask			\checkmark					
	IPv4 default gateway			\checkmark					
	IPv4 DNS primary address			\checkmark					
	IPv4 DNS secondary address			√					
	IPv6 address setting				\checkmark				
	IPv6 address				√				
	IPv6 default router				\checkmark				
	IPv6 subnet prefix				√				
	IPv6 DNS primary address				\checkmark				
	WLAN mode			\checkmark	√				
	SSID			\checkmark	\checkmark				
	Hidden SSID			√	√				
	Channel number			\checkmark	\checkmark				
	Infrastructure mode network security			√	√				
	Adhoc mode network security			\checkmark	\checkmark				
	WEP key			\checkmark	\checkmark				
	WEP key 1			√ (*1)	√ (*1)				
	WEP key 2			√ ^(*1)	√ ^(*1)				
	WEP key 3			√ ^(*1)	√ ^(*1)				
	WEP key 4			√ (*1)	√ ^(*1)				
	WEP key index			\checkmark	\checkmark				
	WPA authentication			\checkmark	\checkmark				
	PSK			√ (*1)	√ (*1)				
	WiFi direct device name			√	.√				
EE1284	Communication protocol (for SBPL)					\checkmark			
	BCC check					\checkmark			
S-232C	Baud rate						\checkmark		
	Data bit						\checkmark		
	Parity bit						\checkmark		
	Stop bit						\checkmark		
	Communication protocol (for SBPL)						\checkmark		
	BCC check						\checkmark		
USB	Communication protocol (for SBPL)							\checkmark	
	BCC check							√	
uetooth									\checkmark
	Communication protocol (for SBPL)								√
	Authentication level								\checkmark
	PIN code								√
	CRC mode								~
									•

Table 1: Settings will be included in NFC configuration file (interface)

Table 2: Settings will be included in NFC configuration file (application)

Setting	Configuration	SBPL	SZPL	SIPL	SDPL	STCL
SBPL	Zero slash	\checkmark				
	Type face	\checkmark				
	Proportional pitch	\checkmark				
	EURO	\checkmark				
	Kanji code	\checkmark				
	Kanji mode	\checkmark				
	Code page	\checkmark				
SZPL	Pitch offset at top of label		√			
	Label shift offset		\checkmark			
	Protocol		\checkmark			
	Command head		\checkmark			
	Control head		\checkmark			
	Delimiter		\checkmark			
	Date and time format		\checkmark			
SIPL	Zero slash			\checkmark		
	EURO			\checkmark		
	Code page			\checkmark		
	Proportional			\checkmark		
SDPL	Protocol code				\checkmark	
	SOH				\checkmark	
	STX				\checkmark	
	CRC				\checkmark	
	CNT				\checkmark	
	Label rotation				\checkmark	
	Format attribute				\checkmark	
	Pause mode				\checkmark	
	SOP emulation				\checkmark	
	1 byte code page				\checkmark	
	Compatibility TTF				\checkmark	
	SDPL measure unit				\checkmark	
STCL	Control code					\checkmark
	Command head 1					\checkmark
	Command head 2					\checkmark
	Command head 3					\checkmark
	EURO					\checkmark
	Zero slash					√

4.41. Old Model Compatible

This feature is enabled to make CT4-LX/CT4-LX-J/CT4-LX-HC/HC4-LX/HC4-LX/J printers to be compatible with L'espritV-ex, L'espritV. Right click on printer name and select Old Model Compatible from the list.



Figure 77 Old Model Compatible

Edit each item and click Apply button. The information is sent to printer.

Old Model Compatible		>
Old Model Compatible		
Compatible USB device ID	Disable	~
Media Specification	Adhesive Label	~
Collective Setting	-	-
Compati ENQ Reply	O Enable	
OCR Font	◯ Enable	
Jomal Font	◯ Enable	
Character Pitch	◯ Enable	
Volatilize Parameters	◯ Enable	
Chinese Character	◯ Enable	
Human Readable Overwrite	◯ Enable	
Obsolete Command Error	◯ Enable	
Option Wait Time Command	◯ Enable	
BT Command Matrix2of5	◯ Enable	
X20 Font Compatible	◯ Enable	
Reload	Apply Close	

Figure 78 Old Model Compatible

4.42. Media Profiles Editing

This feature is to register CT4-LX/CT4-LX-J/CT4-LX-HC/HC4-LX/HC4-LX/HC4-LX-J printer setting by label as Media Profile. When you change to a different label in a printer, you can select the profile for the label from Home screen and it will configure the printer based on the profile values by simple operation. (Up to 5 profiles)

Right click on printer name and select Media Profile Editing from the list.



Figure 79 Media Profiles Editing

Select Media Profile 1 to 5 and click the button.

Media Profile Registratio	n	_	\times
Media Profile Regist	tration		
Media Profile 1	Non-	Registered	
Media Profile 2	Non-	Registered]
Media Profile 3	Non-	Registered]
Media Profile 4	Non-	Registered]
Media Profile 5	Non-	Registered]

Figure 80 Media Profiles Registration

Edit each item and enter Registered Name and click Apply button. The profile information is saved in a printer.

Media Profiles Editing			-	
edia Profiles Edi	ting			
Media Profile			Media Profile 1	
Media Type			Label	~
Print Method			Direct Thermal	~
Sensor Type			I-MARK	~
Label Waste Prevention			Disable	~
Registered Label Length	[dot]		4800	
Printer Speed			4(inch/sec) 100(mm/sec	:) ~
Print Darkness			5	~
Registered Name				
Reload	Delete	Print to file	Apply	Close

Figure 81 Media Profiles Editing

4.43. Clone Configuration & AEP Package Downloader

Clone Configuration & AEP Package Downloader is a feature to save printer setting to a .pkg file and download the pkg file to other printers. It can copy one printer setting to other printers. This feature is available in CLNX/CLNX Plus/CLNX-J/CLNX-J Plus series, FX3, CT4-LX, CT4-LX-J, CT4-LX-HC, HC4-LX and HC4-LX-J.

Right click on printer name and select Clone Configuration & AEP Package Downloader from the list.



Figure 82 Clone Configuration & AEP Package Downloader

Clone Import

Select an option from Clone Import and click Save Clone button then it will save Pkg file. Note: Only USB connection is supported for CT4-LX/CT4-LX-J/CT4-LX-HC/HC4-LX/HC4-LX-J printers

Clone Configuration & AEP Packag	je Downloadel			
Select Printer	Package File To Download			-
	Select File			Browse
CL4NX 203dpi - 3 (IP: 10.65.7.108)				
FX3 (IP: 10.65.2.93) PJMRoom (IP: 10.65.22.131) CL6NX 305dpi (IP: 10.65.2.106) CL4NX305 (IP: 10.65.2.63)	File Size(Byte): Download Progress			
CT4-LX-J305dpi (USB Port: 014a#yadb	Name	Progress	%	Remarks
				Start Download
	Clone Import			
	Settings			
	O Settings + Network			
	Jettings + Network			
	 Setting + Network information 	mation (with IP)		
		mation (with IP)		Save Clone
Click and hold the mouse for multiple selection	Setting + Network information	mation (with IP)		Save Clone

Figure 83 Clone Configuration & AEP Package Downloader

• Package File to Download

Select pkg file from the Select File, and click Start Download. The pkg file information is saved to the printer.

AEP package file can be downloaded to printer using this feature.

4.44. SBPL Command Preview

This function is available for these NX series and newer printers' models only and the feature is intended for previewing of the SBPL command. The user must be connected to the printer so the software can communicate with the device to acquire the data converted into a label on the screen. The file's content containing the SBPL command can be previewed as well as loaded into to command's box to check/modify the content. The user can play with previewed label's size, also reacting to the mouse's scrolling, to see more detailed label.

SATO All-In-One Tool	
File Printer View Tools Opt	tions Help
i 💁 🔐 📓 🖉 🗙 🎼 🖉	8 af 🖅 🛕 🐻 💌 🔓 💷 🥅
E 🎒 Main	
	PL Std) CL6NX-J 305dpi (Not Connected)
CT4-LX Series - SBPI	_ Std) CT4-LX DT 203dpi (Offline)
B 📥 (CL4NX Series - CDD)	
	Delete
📖 🗒 📥 (CL4NX Series - 🚔	Test Print +
— 📕 👝 (CL6NX Series - 🔚	SBPL Commands Preview
CL4NX Series -	Send SBPL Commands
CL6NX-J Series	Save Printer Configuration
📟 📕 📥 (FX3-LX Ln Serie 💆	· · · · · · · · · · · · · · · · · · ·
	Apply Printer Configuration
	Firmware Download
	Disable Status Monitoring
CL4NX Series -	Export Printer Configuration for NFC Tool
CL4NX Series -	Restart Printer

Figure 84 Running of SBPL Command Preview feature



Figure 85 SBPL Command Preview Window

4.45. RFID Configuration

The user can either set or retrieve the RFID's settings by playing with the Refresh/Save buttons. This function is intended only for the NX series and newer printers' models being equipped with RFID module.



Figure 86 Running of RFID Command Feature

CL6NX RFID Configuration	n	×
RFID Setting		
Success Count of Life	0 0~999999	^
Failure Count of Life	0 0~999999	
Print Count of Life	0 0~999999	
Success Count	0 0~999999	
Failure Count	0 0~999999	
RFID Print Count	0 0~999999	
Counter Clear	Clear	
Model of Reader		
Version of Reader		
Antenna Pitch	STANDARD ~	
RFID Retry Mode	RETRY ~	
RFID Retry Print	1 0~9	
RFID Error Slanted Line	Enable Disable	
RFID Offset of a Tag	0 -15~240 (mm)	
		\checkmark
	Refresh Save	

Figure 86 RFID Command Window

4.46. Application Configuration

This function is intended only for the NX series and newer printers' models. This window lets user change printer's emulation settings with a Save and to retrieve them using a Refresh button.



Figure 87 Running of Application Window

SBPL	SZPL SIPL	SDPL STCL SEPL AEP	
Com	mand Error	O Enable Disable Save	1
Star	ndard Code		
	STX Code	02 \checkmark ESC Code 1B \checkmark	
	ETX Code	03 \checkmark ENQ Code 05 \checkmark	
	CAN Code	18 V Offline Code 40 V	
	NULL Code	00 ~	
Font	Setting		
	- Zero Slash	Enable ~	
	Proportional	Proportional pitch ~	
	Code Page	CP858 ~	
	Euro Code	D5 ~	
-2By	te Character Font	Setting	
	Character set	GB18030 ~	
	Code Page	GB18030 ~	
	Font Type	Gothic \checkmark	
Cor	npatible		
		anji Command 🕓 Enable 💿 Disable	

Figure 88 Application Configuration Window

4.47. Notification Configuration

This feature is intended for the NX series and newer printers' models only and the settings for saving and retrieving of the notifications can be done accordingly.

SATO All-In-One Tool	
File Printer View Tools Options	Help
💁 🔐 🔯 🖄 🗙 隆 🆓 🖾 📓 🚠 🕯	I 🚹 🥃 🖬 😓 🖷 🛄
Man (CL6NX,J Series - SBPL Std) (CT4-LX Series - SBPL Std) (CT4-LX Series - SBPL Std) (CL4NX Series - SBPL Std (CL4NX Series - SBPL Std	CL6NX-J 305dpi (Online State : Idle) 14-LX DT 203dpi (Not Connected) Delete Test Print SBPL Commands Preview Send SBPL Commands
	Apply Printer Configuration Firmware Download
	SBPL Protocol Clone Configuration & AEP Package Downloader RFID Configuration Application Configuration
PW208NX Series - Std) PW2	Notifications Configuration

Figure 89 Running of Notification Configuration

	<u> </u>	<u> </u>	
Notification for Printer Cleanup	O Enable	Disable	
Distance to dDsplay Notification	400	10~1000 (m)	
Notification for Replacing Themal Head	O Enable	Disable	
Distance to Display Notification for Replacing Thermal Head	100	10~100 (km)	
otification for Replacing Cutter Unit	○ Enable	Disable	
Distance to Display Notification for Replacing Cutter Unit	1000	10~1000 (k cuts)	
Notification for Replacing Platen Roller	O Enable	Disable	
Distance to Display Notification for Replacing Platen Roller	100	10~100 (km)	

Figure 90 Notification Configuration Window

4.48. NX Format Download

The NX Format Download is available for NX series and newer except PW208 type printers' models. The feature downloads the specially formatted .txt/.prn file into the printer's memory. The window's functionality is pretty similar to the Font Download feature – the user can: load, download, delete, display, test print and load the content from/into the grid from/into to the list

SATO All-In-One Tool		
File Printer View To	ools Options Help	
i 💁 💕 i 🔯 🙆 🗙 i 🐴	49 💷 🛃 🚓 📰 🛕 🔜 🔛 💼 🛄	
⊡ 🎒 Main 	eries - SBPL Std) CL6NX-J 305dpi (Not Connected) ries - SBPL Std) CT4-LX DT 203dpi (Online State : Idle) X Detete Image: State Structure Idle Image: State Structure State Structure Image: State State State Structure Image: State State State State Image: State State State State	
	Clone Configuration & AEP Package Downloader	
	RFID Configuration	
	Application Configuration	
	Notifications Configuration	
	INA Pormat Download	

Figure 91 Running of NX Format Download

Registered Printer	r CL4NX 609dpi (CL4	4NX Series - IP: 10.65	5.2.27) 🗸 🗸			
Memory Slot	Internal Flash	\sim	Ava	ilable/Total Size		\$
Format Operation	ns					_
Format ID [1-999	9] 50 🜲			Format Card	Print Card Status	
Open	Download	Delete	Delete ALL	Display	Test Print	
C Format ID	Data					
C Format ID	Data					
C Format ID	Data					
C Format ID	Data					
C Format ID	Data					

Figure 92 NX Format Download Window

4.49. Open Web Configuration

This functionality is available for NX series and newer devices, having a LAN interface, only. It configures the device with the Web Browser via the network. The user by logging-in to the different levels can achieve access to the different settings. There are the different sections in the menu being responsible for appropriate configuration's parts.



Figure 93 Running of Open Web Configuration Feature

Ceaseless Creativity for a Sustainable World	ebConfig	Model: SATO CL6NX Resolution: 305 dpi (12 dpmm) MAC Address: D0:39:72:90:DB:E7	
Dashboard Settings Tools Certificates		Logou	
Printer Status Power save mode	Printing Speed: 81ps Darkness Range: A Darkness: 5 Sensor Type: Gap Print Mode: Tear-Off Backfeed: Before	Device Model: CL6NX 305dpi Resolution: 305 dpi (12 dpmm) Serial Number: 5L888296 PCB Serial Number: Installed Options: Bluetooth	
Network IPv4 Address: 10.65.2.140 MAC Address: D0:39:72:90:DB:E7	System Firmware version: 1.11.3-r1 Uptime: 5h, 51min Contact: Name: Location:		

Figure 94 Example of Web Configuration Page

