

SATO Online Services – User's Manual Nov. 30, 2020 ver 2.2



Index

1.	1. Revision History		
2.	Intro	oductions	
2	-1.	System configurations 4	
2	-2.	Supported models	
2	-3.	Stable operations with preventive maintenance	
2	-4.	On-site troubleshooting	
2	-5.	Long term non-connection alert	
3.	Initia	l Registrations	
3	-1.	Open an account	
3	-2.	Invitation email	
3	-3.	Login step	
4.	Logir	ı7	
4	-1.	Login	
4	-2.	Updating user information	
4	-3.	Re-set password	
5.	Conr	nect Printers	
5	-1.	Port diagnostic service	
5	-2.	Manage Locations	
5	-3.	Adding Real time connection devices (network connection (For details, see SOS mobile application)	
5	-4.	Adding On-demand devices(With QR connection)	
5	-5.	Adding On-demand devices(With NFC)	
5	-6.	Adding other devices	
5	-7.	Adding other devices batch registration	
6.	Com	pany info	
6	-1.	Updating company information	
6	-2.	Company - Notification settings	
6	-3.	Company - User information management	
6	-4.	Access level setting	
7.	Dash	board	
7	-1.	Common operations	
7	-2.	Dashboard	
7	-3.	Dashboard parts	
7	-4.	Downloading asset information	
7	-5.	Topics	
8.	Admi	inistrating Registered Printers	



8-1.	Device list	29
8-2.	Device details	31
8-3.	Printer log tab	33
8-4.	Control panel	34
8-5.	Settings tab	
9. Ho	w To Contact Us	37
10. F	AQ	
10-1.	If you forget your login password	37
10-2.	Some menus or buttons described in this manual are not displayed.	37
10-3.	Some functions do not work even if operated exactly as the manual says.	37
10-4.	Cannot register or edit the device.	37





1. Revision History

Version	Issued at	Revisions
Version1.0	Aug 03, 2015	Initially published.
Version1.1	Nov 20, 2017	Add some explanation about SOS mobile application.
Version2.0	Sep 17, 2018	Revise for SOS System Renewal.
Version2.1	Jan 15, 2019	Add description about NFC.





2. Introductions

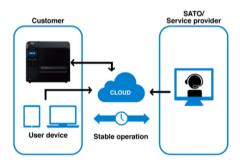
About SATO Online Services

SATO Online Services (hereafter referred to as SOS) monitors all printers using the IoT technology, and performs preventive maintenance, "Proactive action" for consumable parts by tracking the operating statuses. Furthermore, in case of a malfunction, SOS identifies the cause immediately to contribute to quick troubleshooting, and drastically reduces the downtime due to printer errors.

2-1. System configurations

Monitors your SATO printers with the system 24 hours a day, 365 days a year.

- ·Checks the operating statuses of the printers at all times on the SOS Web screen on your PC or mobile device.
- ·The SATO assists stable operation without stopping printers by tracking the operating statuses.



2-2. Supported models

CLNX-J series, LR4NX-FA series, FREQV series and FW2NX series (scheduled)

2-3. Stable operations with preventive maintenance

*The SOS system monitors the printers 24 hours a day, 365 days a year (except for maintenance period).

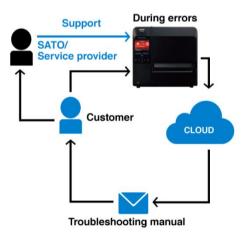
2-4. On-site troubleshooting

If a critical error is detected, the customer is notified,

Critical error: Thermal head, cutter and control board-related errors

Quickly sends a specific solution suitable for the error status via email on the spot.

- ·Notification settings for error statuses can be made. (Optional) Label end error, various sensor errors, etc.
- ·Sends error-specific troubleshooting support instructions via email.
- ·Promptly grasps the printer status from the cloud for speedy solution.
- *If problems cannot be solved on the spot, contact local SATO office





2-5. Long term non-connection alert

For a printer that has not been connected for a fixed term or longer counting from the last connection day, the nearest service center assists to resume connection, and supports to maintain your printer environment.

- •Real time connection For a printer that has not been connected for 90 days or longer counting from the last connection day
- •QR/NFC connection For a printer that has not been connected for 180 days or longer counting from the last connection day

3. **Initial Registrations**

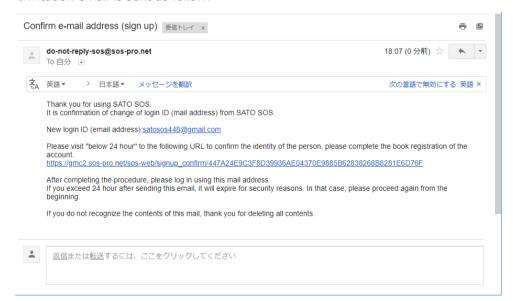
3-1. Open an account.

Before using SOS, create a representative account to log in to SOS by SATO local office or our contracted business partners After an administrative account that represents an individual company or organization is created, the representative account can invite multiple accounts for each printer location or each division.

First, SATO local office or our contracted business partners create the representative account

3-2. Invitation email

Once SATO local office or our contracted business partners invite a main administrate to login to the SOS. Invitation email is sent as follow.



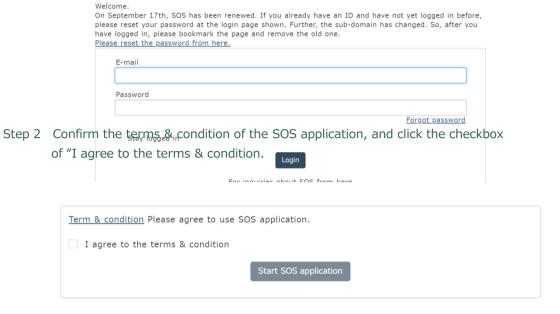
Access the URL written on the email and temporary password, The URL will be invalid in 24 hours for security reasons after the email is received. Access the URL within the time to complete the registration.





3-3. Login step

Step 1 Enter the email address and the temporary password.



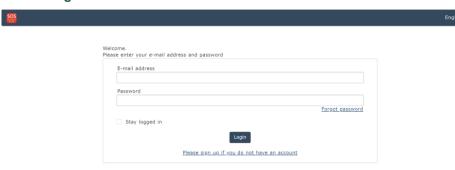
Copyright © SATO HOLDINGS CORPORATION. All rights reserved.

Now, you can log in to SOS using the registered email address and password.



4. Login

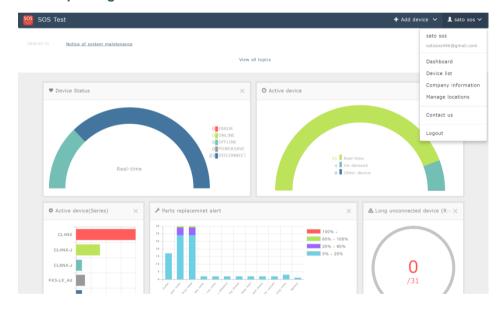
4-1. Login



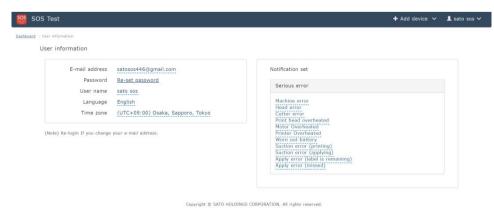
Copyright © SATO HOLDINGS CORPORATION. All rights reserved

- ·Click [SOS Log in] displayed in the sign-up completion screen.
- •The login screen is displayed. Enter the email address and password

4-2. Updating user information



·Click the account name on the common menu on the upper right.



•The following items can be edited on the User information screen.

[E-mail address]

[Password]

[User name]

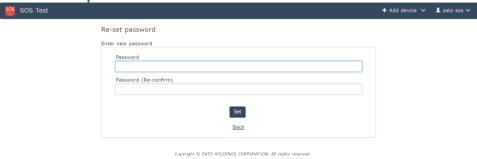
[Language]

[Time zone]

[Notification set]



4-3. Re-set password.

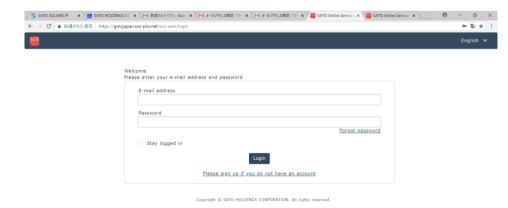


- ·Clicking [Re-set password] on the User information screen will display the screen shown on the left.
- $\cdot \mbox{Enter}$ the new password twice, and click the [Set] icon.



Password reset instruction

·After resetting the password, the screen on the left will be displayed. Then click [SOS Log in].

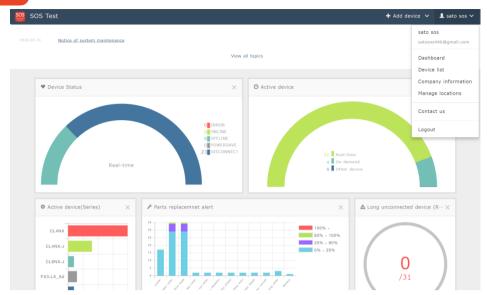


New password entry

•Enter the email address and the new password on the login screen, and click the [Login] icon.







Password reset complete

 \cdot When the dashboard screen shown on the left is displayed, the password reset is complete.





5. Connect Printers

Connect printers to use SOS. There are two methods to connect the printers.

·Real-time connection (Network connection)

The Real-time connection (Network connection) enables the printers connected within your intra-network to be safely connected to the SOS cloud.

The printers are monitored for safety use by sharing the operating statuses, setting information, error information, etc. of the printers with the SOS cloud. To connect your printers from the company's intra-network to SOS, establish communication with the following port numbers.

Port number: 443/TCP and Port number: 8883/TCP *Both are for outbound only.

<Connection method 1>

Use both port numbers 443 and 8883 via firewall.

<Connection method 2>

Use port number 443 via proxy server and 8883 via firewall.

·On-demand connection (QR code connection)

The on-demand connection using QR codes requires scanning QR codes of the printers with a mobile device (smartphone, tablet, etc.) where the SOS mobile application is installed beforehand.

The printers are monitored for safety use by sharing the operating statuses, setting information, error information, etc. of the printers

between the mobile device and the SOS cloud.

5-1. Port diagnostic service

·To connect to SOS from your intra-network, a port diagnostic tool that easily diagnoses the network environment is provided. Use the tool from the following SOS portal site.



Port diagnostic service

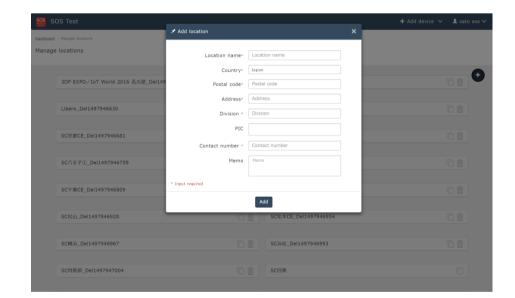
https://www.sato-sos.com/en



5-2. Manage Locations



- •The installation locations of printers can be added, edited, copied and deleted.
- \cdot Select Manage locations from the common menu on the upper right of the Dashboard screen.



·Adding installation locations

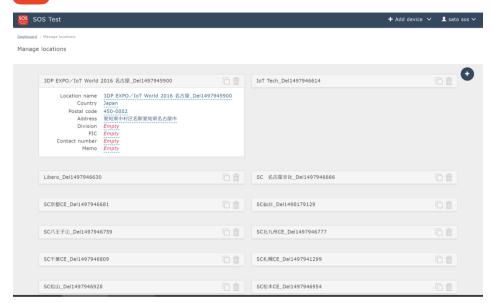
Click the [+] icon on the Manage locations
screen, open the Add location screen, and
enter the following items.

Location name*
Country*
Postal code*
Address*
Division*
PIC (Person In Charge)
Contact number*
Memo

*All fields followed by an asterisk must be filled in.

After the field entries are complete, click the [Add] icon to complete the setting.





·Editing, copying and deleting installation locations

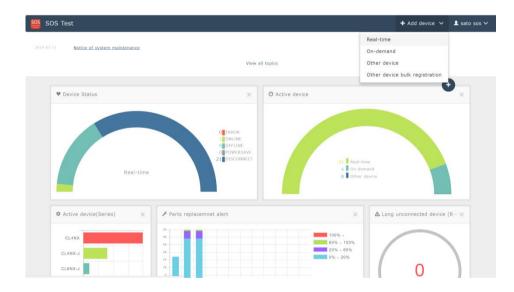
Clicking the location name to edit will open the editing items

as shown on the left. Select the item, and edit it. After entry, click the $[\lor]$ icon to complete the setting.

To copy the installation location, click the [] icon on the right side of the location name.

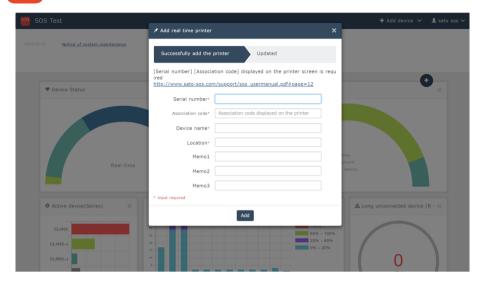
To delete the installation location, click the [icon on the right side of the location name.

5-3. Adding Real time connection devices (network connection (For details, see SOS mobile application)



·Click [+ Add device] on the upper right of the Dashboard screen as shown on the left, and select [Real-time].





•The Add real time printer screen is displayed. Then enter the following items.

Serial number*

Association code*

(Association code displayed on the printer)

Device name*

Location*

Memo1

Memo2

Memo3

- *All fields followed by an asterisk must be filled in.
- · After entry, click the [Add] icon to complete the setting.

Displaying the serial number and association code on the printer

This section describes how to operate the printer and shows screen samples. For details on printer operations, go to the manual available on our SOS website.(Search SATO ONLINE SERVICES)



- ·Power on the printer. The Online screen is displayed.
- ·Check that a LAN or Wi-Fi network connection is established and the SOS icon is displayed.
- · Press the key. The Offline screen is displayed.

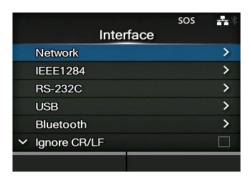


On the Offline screen, press the key. The Settings screen is displayed.



·On the Settings screen, press the (\triangleleft \triangleright) keys to select "Interface", and then press the \iff key.

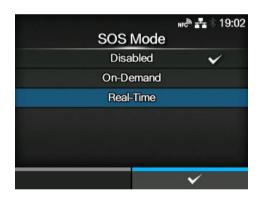




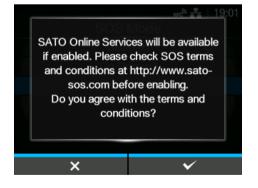
·On the Interface screen, press the (\triangle ∇) keys to go down to "Network"⇒"Service"⇒"Online Services" with the \iff key to select it.



 \cdot On the Online Services screen, press the (\triangle $\overline{\mathbf{V}}$) keys to select "SOS Mode".

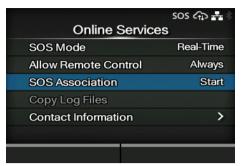


·On the SOS Mode screen, press the (\triangle ∇) keys to select "Real-Time", and then press the key or key.

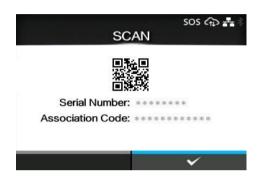


·Read the SOS Terms and Conditions, and then press the key to accept it.





· Go back to the Online Services screen. Press the ($\triangle \nabla$) keys to select "SOS Association", and then press the key.



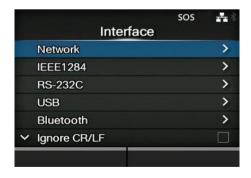
- * Prepare memo paper at hand.
- ·The 8-digit "Serial Number" and 12-digit "Association Code" are displayed. Write them down and transfer the number and code on the Add A Printer screen previously shown.
- ·After entering them, check that the icon appears at the top of the screen. If the icon does not appear, the printer may be disconnected from SOS Cloud. Check network settings again.

5-4. Adding On-demand devices(With QR connection)

Operate the printer to show the on-demand PIN registration screen.

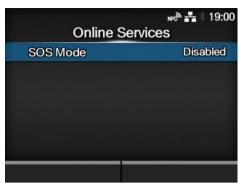


· On the Settings screen for the printer, press the (\triangleleft \triangleright) keys to select "Interface", and then press the \iff key.

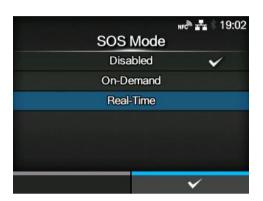


· On the Interface screen, press the ($\triangle \nabla$) keys to go down to "Network" \Rightarrow "Service" \Rightarrow "Online Services" with the \iff key to select it.





· On the Online Services screen, press the (\triangle $\overline{\nabla}$) keys to select "SOS Mode".

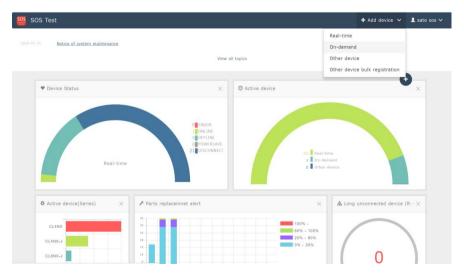


·On the SOS Mode screen, press the (\triangle ∇) keys to select "On-Demand", and then press the key or key.



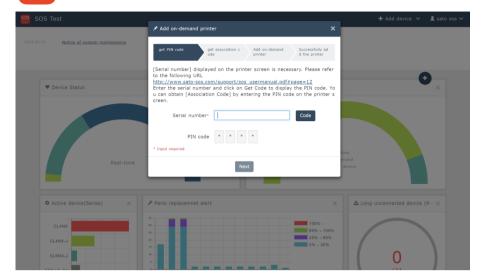
• The serial number of the printer is displayed.

After that, configure settings for SATO Online Services.



·Click [+ Add device] on the upper right of the Dashboard screen as shown on the left, and select [On-demand].

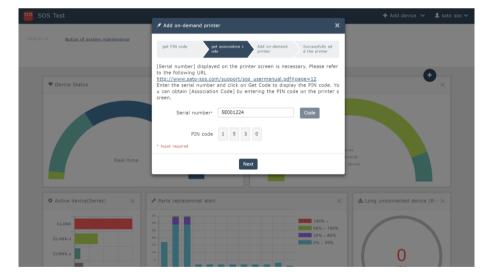




- •The Add on-demand printer screen is displayed. Then enter the serial number displayed on the LCD of the printer, and click the [Code] icon.
- \cdot [PIN code] is displayed, and enter it on the printer side.

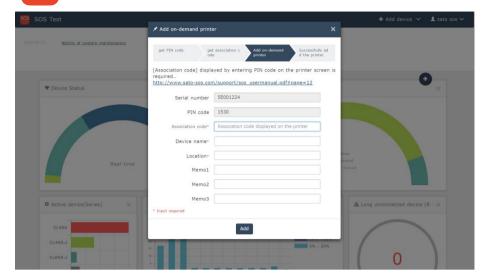


Pressing the key on the screen where the printer serial is displayed will display the PIN entry screen. Press the (Δ ∇) keys to set the PIN code for the printer. The printer screen displays the association code.



- *Perform the following operations on the PC.
- $\cdot \mbox{Click}$ the [Next] icon on the screen shown on the left.





·Enter the following items.

Association code*

(Association code displayed on the printer)

Device name*

Location*

Memo1

Memo2

Memo3

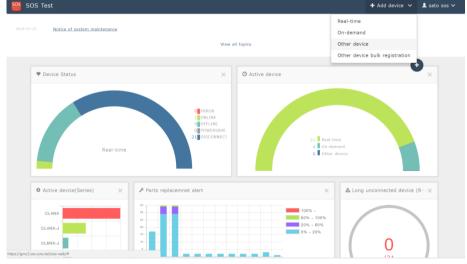
*All fields followed by an asterisk must be filled in

After entry, click the [Add] icon to complete the setting.

5-5. Adding On-demand devices(With NFC)

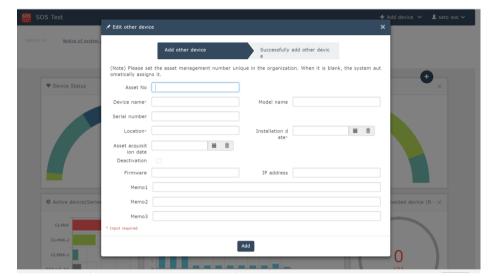
If you are using following printer series (PW2NX, FX3) then you can connect your printer to SOS via NFC. If you want to use this method, please use SOS Mobile application and see that's manual.

5-6. Adding other devices



·Click [+ Add device] on the upper right of the Dashboard screen as shown on the left, and select [Other device].





 $\cdot \text{The Edit}$ other device screen is displayed. Then enter the following items.

Asset No

Device name*

Model name

Serial number

Location*

Installation date*

Asset acquisition date

Deactivation

Firmware

IP Address

Memo1

Memo2

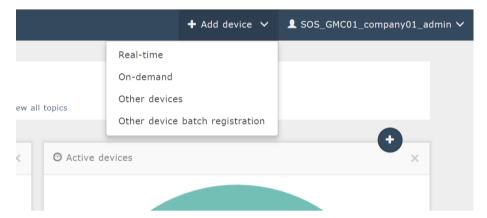
Memo3

*All fields followed by an asterisk must be filled in.

After the field entries are complete, click the [Add] icon to complete the setting.

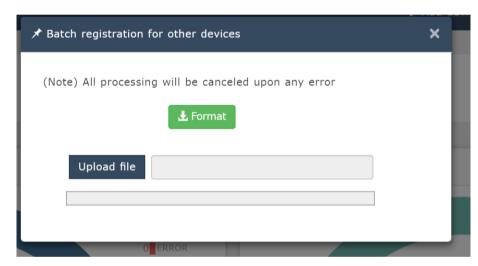


5-7. Adding other devices batch registration



Other device batch registration

·Click [+ Add device] on the upper right of the Dashboard screen as shown on the left, and select [Other device bulk registration].



- •The Batch registration for other device screen is displayed. Then click the [Format] icon, and download the format.
- ·With the [File selection] icon, select the format with the items in 5-6 section entered, and click the [Start] icon to complete.

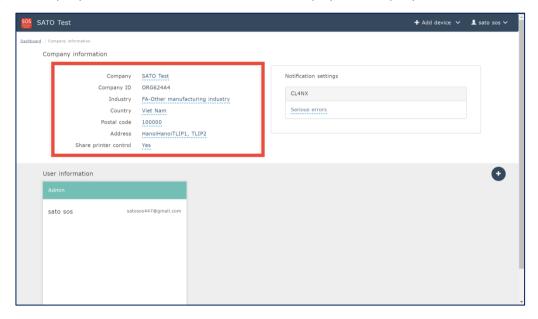




6. **Company info**

6-1. Updating company information

Clicking the Company information on the main menu will display the Company information screen.



When logging in with the administrator authority or editor authority, Company, Industry, Country, Postal code, Address and Share printer control can be edited.

When logging in with the viewer authority, viewing is only possible.

1. About Share printer control

If Share printer control is set to "Yes," the settings of your label printers can be changed by our customer help desk.

Support is provided when you have any problems.

If Share printer control is set to "No," the settings of your label printers cannot be changed by our customer help desk.

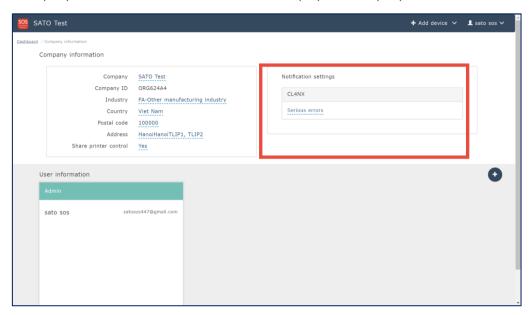
Viewing is only possible.





6-2. Company - Notification settings

Clicking the Company information on the main menu will display the Company information screen.



When logging in with the administrator authority or editor authority, Notification settings can be edited. When logging in with the viewer authority, viewing is only possible.

- About Notification settings as default
 As default settings, an email notification is sent if serious errors designated by our company occur.
- 2. Editing Notification settings

Clicking Serious errors, etc. of the series to edit notification settings will open the screen of the notification settings details. Then the detailed settings can be made.

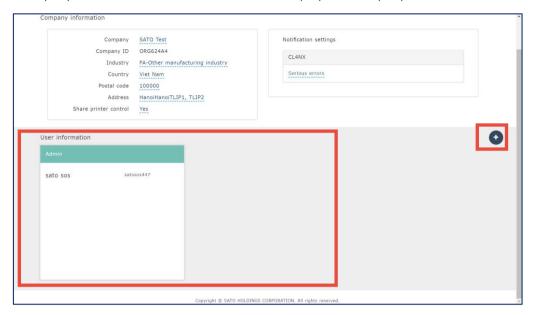
The notification settings can be made for each series.





6-3. Company - User information management

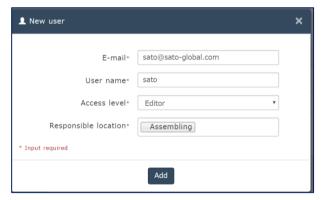
Clicking the Company information on the main menu will display the Company information screen.



Only when logging in with the administrator authority, the User information is displayed, and users can be added, edited and deleted.

1. Adding a user

Clicking the plus button on the right side of the screen will display the New user screen. Enter E-mail, User name, Access level and Responsible location of the person to invite, and click Add. Then an invitation mail is sent to the entered email address.



The invited person clicks the URL written in the received email, open the login screen, and log in with the email address and temporary password.

It is information from SATO SOS.
"SOS Test"sato sos received an invitation to the account addressed to this email address.

Please proceed to sign up from the following URL.

After signing up, you can use the service from the login to the printer like "SOS Test".

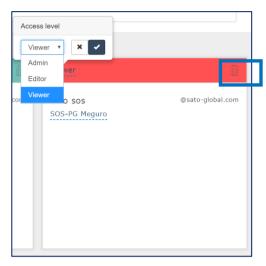
https://gmc2.sos-pro.net/sos-web/login

Temporary password:b57hPon6cf5M7qK2



2. Editing a user

The authority indication and responsible location of the user displayed with a dotted underline can be edited.



3. Deleting a user

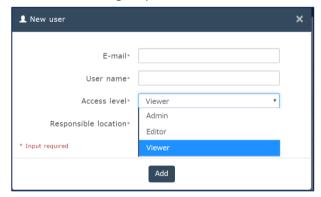
Click the trash can mark to delete the user.

To invite a user once deleted, add the user.

6-4. Access level setting

SOS classifies the access level of users logging in into 3 types: Administrator, Editor and Viewer to enable appropriate management.

- ·Admin ... Adding a user and all the other operations are allowed.
- ·Editor ... Adding a user, device, etc. is not allowed.
- ·Viewer ... Viewing only restricted information is allowed.

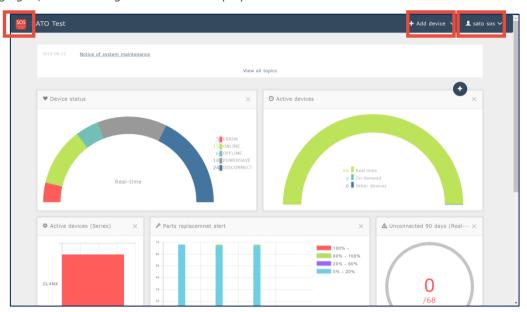




7. Dashboard

7-1. Common operations

When logging in, the following Dashboard is displayed.



1. Home button



Clicking the SOS mark on the upper left of the screen will display the Dashboard.

2. Adding a device

+ Add device Clicking the Add device button on the upper right of the screen will display the device connection menu.

- ·Real-time ... Displays a screen to add a network connection device.
- ·On-demand ... Displays a screen to add a QR connection device.
- ·Other device ... Displays a screen to add an SOS-incompatible device or other devices.
- ·Other device batch registration
 - ... Displays a bulk registration screen to add an SOS-incompatible device or other devices.

3. Main menu

Licking the login name on the upper right of the screen will display the main menu.

- ·Login name ... Displays the User information screen.
- ·Dashboard ... Displays the Dashboard.
- · Device list ... Displays the Device list screen.
- $\cdot \hbox{Company information} \quad \dots \hbox{Displays the Company information screen}.$
- · Manage locations ... Displays the Manage locations screen.
- ·Contact us ... Displays the Contact us screen.
- ·Logout ... Select this to log out.



7-2. Dashboard

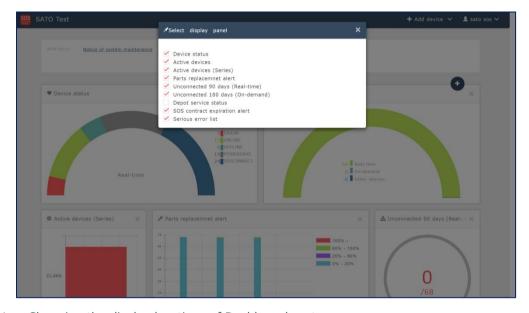
You can check the statuses of your devices clearly on this home screen.



7-3. Dashboard parts

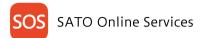
Individual parts that constitute the Dashboard are called the Dashboard parts.

The Display locations of Dashboard parts can be changed. Also, Show/Hide setting for each part can be made.



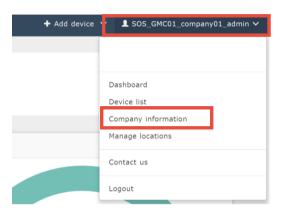
- 1. Changing the display locations of Dashboard parts
 - Drag the Dashboard part you wish to move to the desired location in order to change the display location.
- 2. Show/Hide setting for Dashboard parts
 - Clicking the plus button will display the Select display panel screen.
 - Add the \square mark to the Dashboard parts to display, and remove the \square mark from the Dashboard parts to hide.





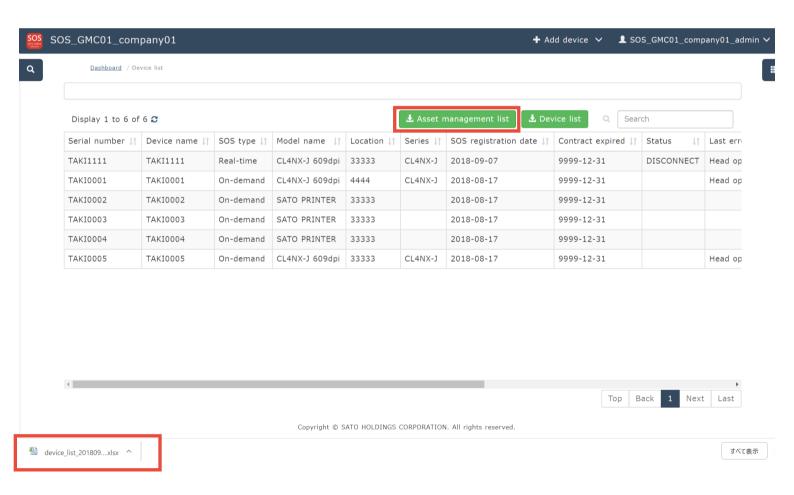
7-4. Downloading asset information

You can download the device information displayed on the Dashboard in the CSV file format. Click the Device list on the main menu to display the Device list screen.



Click the Asset management list button on the Device list screen to download the CSV file.

After the CSV file is successfully downloaded, click the bottom right of the screen to display the file in Excel format.





7-5. Topics

Displays topics related to SOS.

Notifies the maintenance, added new functions, etc. of the SOS system.



Checking the past topics
 Click "View topics list" to check the past topics.



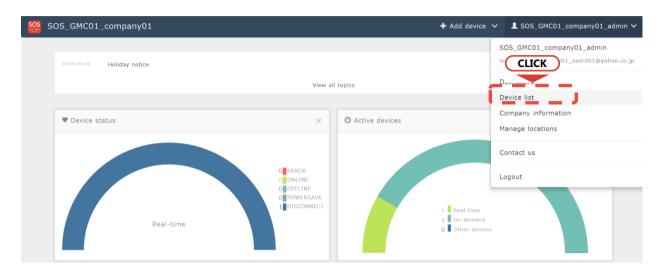


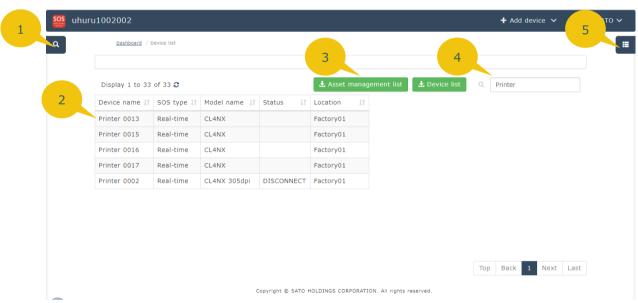


8. Administrating Registered Printers

8-1. Device list

Using the Device list, you can search and manage the devices you have registered with SOS. To display the Device list, select "Device list" from the common menu.





Device list control

1. Search window

Open the Search window, and narrow down devices to be displayed in the search result by using multiple items as search keys, such as device name and installation location.

2. Details

Device details are shown. Clicking the Details will display the Device details screen that allows you to check more detailed information such as device setting information.



3. Download button

Search results can be downloaded in a batch. More items are output with the Asset management button than with the Device list button. Note that the Asset management button can be used only by customers who have signed up for our maintenance support.

4. Free word search

Further narrow down the contents of the Device list currently displayed with free words. The search targets of the contents entered here are all columns.

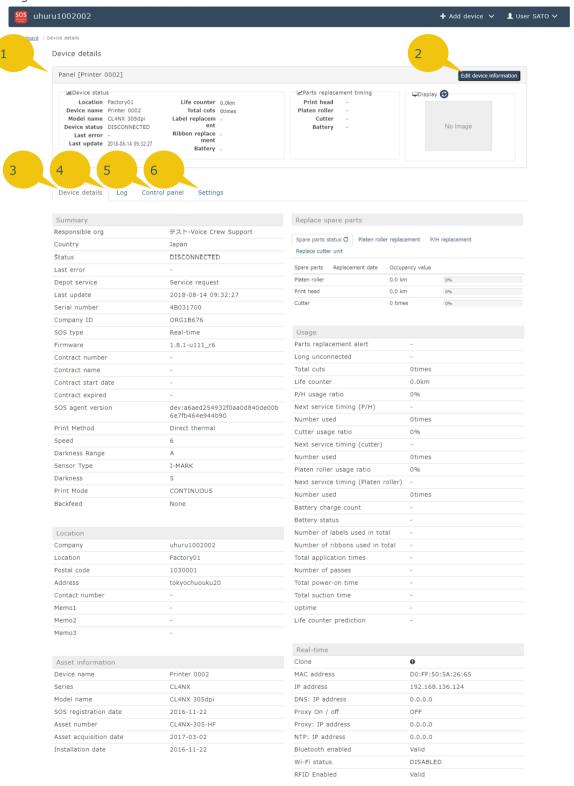
5. Display column selection

You can select columns to display in the list. Select necessary items such as consumption rate of printer consumables so that the selected items can be displayed at the next and succeeding searches.



8-2. Device details

On the Device details screen, you can display various information such as device setting information and usages of parts, and edit registration information of devices.



Copyright © SATO HOLDINGS CORPORATION. All rights reserved.



1. Device Panel

Displays the basic information of a device. Clicking the Gicon in the Display status field will enable you to capture the current printer screen.

(The capture function may not be used depending on the firmware version of the printer.)

2. Edit device information button

Edit the displayed device name, and register or delete the device.

3. Device details tab

Refer to the usage and setting contents of the device.

4. Printer log tab

Check the history of operations performed by the SOS system to the device, history of errors and warnings that have occurred on the printer, etc. The details are described in the next and subsequent pages.

5. Control panel tab

Printer control can be performed such as test print to the printer from the SOS system. The details are described in the next and subsequent pages.

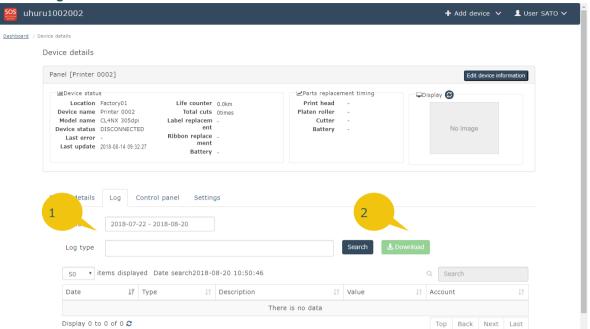
6. Settings tab

Refer to the setting parameters of the printer and change the settings. The details are described in the next and subsequent pages.





8-3. Printer log tab



1. Search conditions

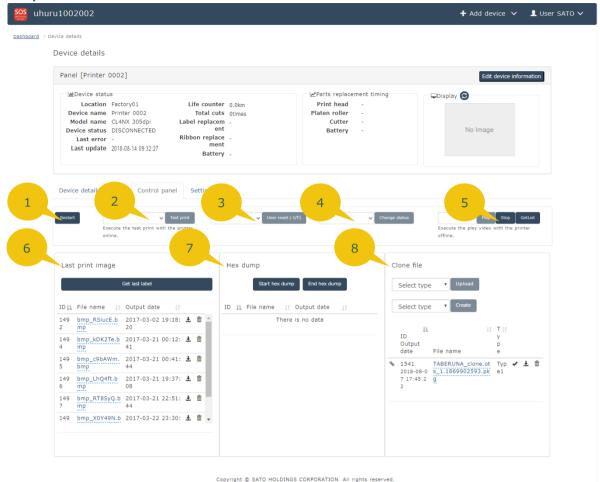
A log extraction period and log type can be specified as search conditions.

2. Download button

The search result of the displayed log can be downloaded in text file format.



8-4. Control panel



Restart button

The printer can be restarted on the SOS system. Note that when labels are being issued, it is stopped before restart.

2. Test print button

Select an item to test-print from the combo box, and click the Test print button to direct the printer to test-print.

3. User reset(-I/F) button

Select "ResetConfig" from the combo box, and click the User reset(-I/F) button. Then the setting parameters of the printer can be restored to the default values.

4. Change status button

Select ONLINE or OFFLINE from the combo box to change the printer status.

5. Play video

Help videos built into the printer can be played on the printer. Click the "GetList" button to display the list of playable videos in the combo box. Select a video, and click the Play button to play it.

6. Last print image acquisition

Acquire the image data of the last-printed label with the printer. The acquired data can be downloaded from the list beneath the button.

7. Hex dump acquisition

Clicking the Start hex dump button will start to acquire the Hex dump (file containing the issue direction data from PC, etc. to printer expressed hexadecimally). Clicking the End hex dump button will upload the Hex dump



of the data printed during the period from Hex dump start to end, to the SOS system. The data uploaded to the system can be downloaded from the list.

8. Clone file operation

Upload the Clone file (file with the printer settings copied) from the PC or printer. By changing the clone type in the combo box, you can change the contents included in the Clone file to be uploaded.

- ·Type 1 All setting parameters
- •Type 2 Setting parameters except for IP address(*)
- ·Type 3 Setting parameters except for network settings including IP addre



* Depending on the type of printer and firmware version, Type 2 and Type 3 clones may not be acquired.

Each icon in the file display area represents the following operations.

 $oldsymbol{\$}$ icon Click this icon to switch enable/disable of Clone file sharing within the same installation location.

✓icon Click this icon to apply the Clone file to this printer.

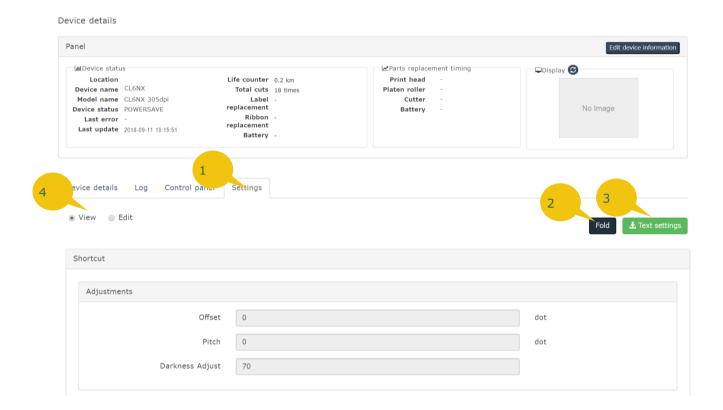
Licon Download the Clone file.





8-5. Settings tab

The setting information list of the SOS network connection device is acquired when the



Settings tab is displayed.

1. Edit/View switching button

Switch between the View mode and Edit mode. When changing the setting parameters of the printer on the SOS system, select the Edit mode.

2. Display all button

This button expands all the folded items. Pressing the button again will return to the previous state.

3. Text file output of setting value button

The setting parameters are downloaded as a text file in a batch.

4. Setting fields

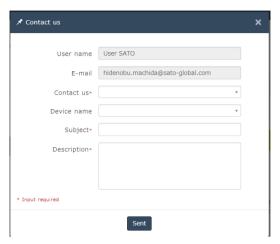
View the setting parameters of the printer and edit them on the SOS system. For details of each setting parameter, see the manual corresponding to your printer.





9. How To Contact Us

If there is any inquire, Press the contact us from the SOS main menu and fill in all fields



10. **FAQ**

10-1. If you forget your login password

Set your password again following the instructions of the login information section in this manual. Our company cannot confirm your password for security reasons.

10-2. Some menus or buttons described in this manual are not displayed.

Some of the functions are provided only to the customers who have made a maintenance support agreement on the printer with our company.

For details of the maintenance support, please feel free to contact our support desk described at the end of this manual.

10-3. Some functions do not work even if operated exactly as the manual says.

Errors may occur temporarily depending on the network status, etc. Perform re-operation.

Also, depending on the type of printer and firmware version, some functions such as the screen shot capture function on the Device details screen may not be supported. For details, please feel free to contact our support desk.

10-4. Cannot register or edit the device.

Depending on the assigned SOS user authority, screen viewing is only permitted. Please ask the person in charge of SOS user management in your company.



Trademarks and Licenses

•QR code is a registered trademark of DENSO WAVE Incorporated.

Cautions on this manual

- •It is prohibited to reprint any or all parts of this manual without permission.
- •This manual is subject to change without prior notice.
- •The images of the illustrations and the screens shown in this manual may be different from the actual ones.



SATO HOLDINGS CORPORATION

SATO Corporation

Tamachi Station Tower N, 3-1-1 Shibaura, Minato-ku, Tokyo, Japan 108-0023

For inquires by phone:

Please contact local SATO office

http://www.satoworldwide.com/sato-group/global-network.aspx

Copyright © SATO HOLDINGS CORPORATION. All rights reserved.