



# SATO Online Services

SATO Online Services

SOS Smart App – User's Manual

May 25, 2023

Version 1.4

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## Revision History

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Version	Issued at	Revisions
Version1.0	Jan 15, 2019	Initially published.
Version1.1	October 15, 2021	Modification of the link information.
Version1.2	October 24, 2022	Change about new feature release
Version1.3	March 7, 2023	Change about new series release
Version1.4	May 25, 2023	Change about recommended OS to use SOS Smart App

# 1. Introductions

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## 1-1. **About SATO Online Services (terms & condition)**

Thank you for using the 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.

This manual will explain another means to support customers' stable operation, how to use SOS Smart App. Be sure to check terms and conditions posted in the Smart App when using it. We will provide SATO Online Services as agreed upon at account registration.

## 1-2. **To watch over your printer**

SOS Smart App sends operation status to cloud by using mobile communication network. For collecting operation information, use QR / NFC which is standard installed in the printer. The following functions are realized based on the collected information.

## 1-3. **About preventive maintenance**

Consumable parts we designed have threshold value for replacement. You can grasp the state of equipment such as when consumable replace to, display of target equipment on the web.

On-demand(QR/NFC) Conditions for replacement timing calculation.

We will inform you about equipment that was predicted to exceed the threshold value scanned by the QR / NFC 3 times or more and within 3 months, within approximately one week.

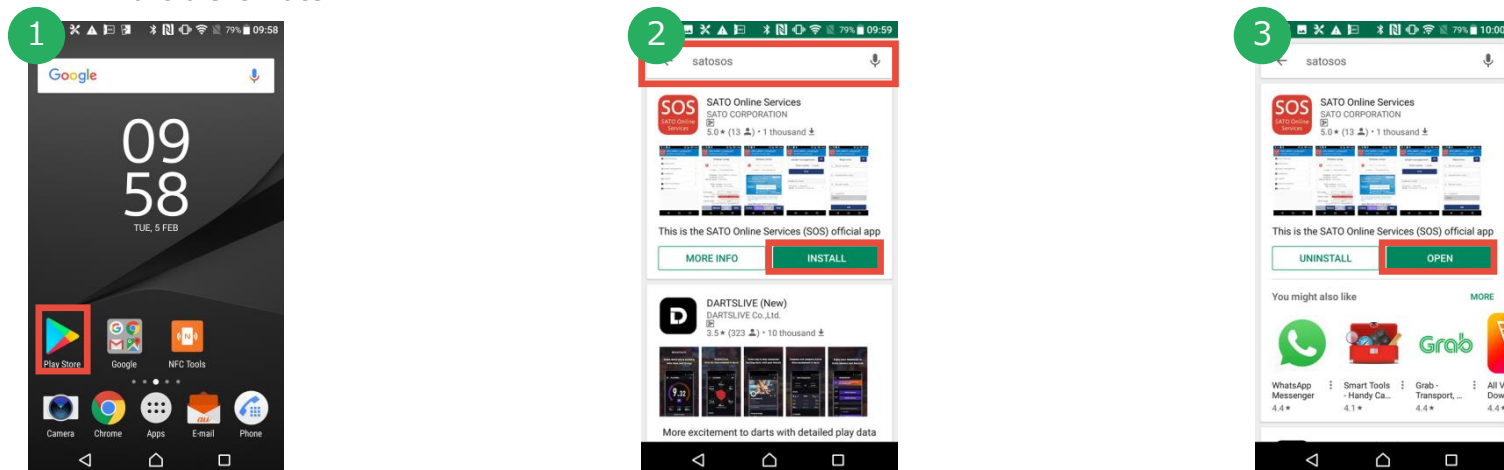
## 1-4. **Manage printer per installation location. (Hierarchy of equipment management)**

A first user who invited by SOS is administrator of your organization. Administrator can create editable user, readable user and can send invitation to both. And it can also create device locations. To use SOS Smart App, please login with these account.

## 2. How to get SOS Smart App

### 2-1. Android

Android 9 or later.



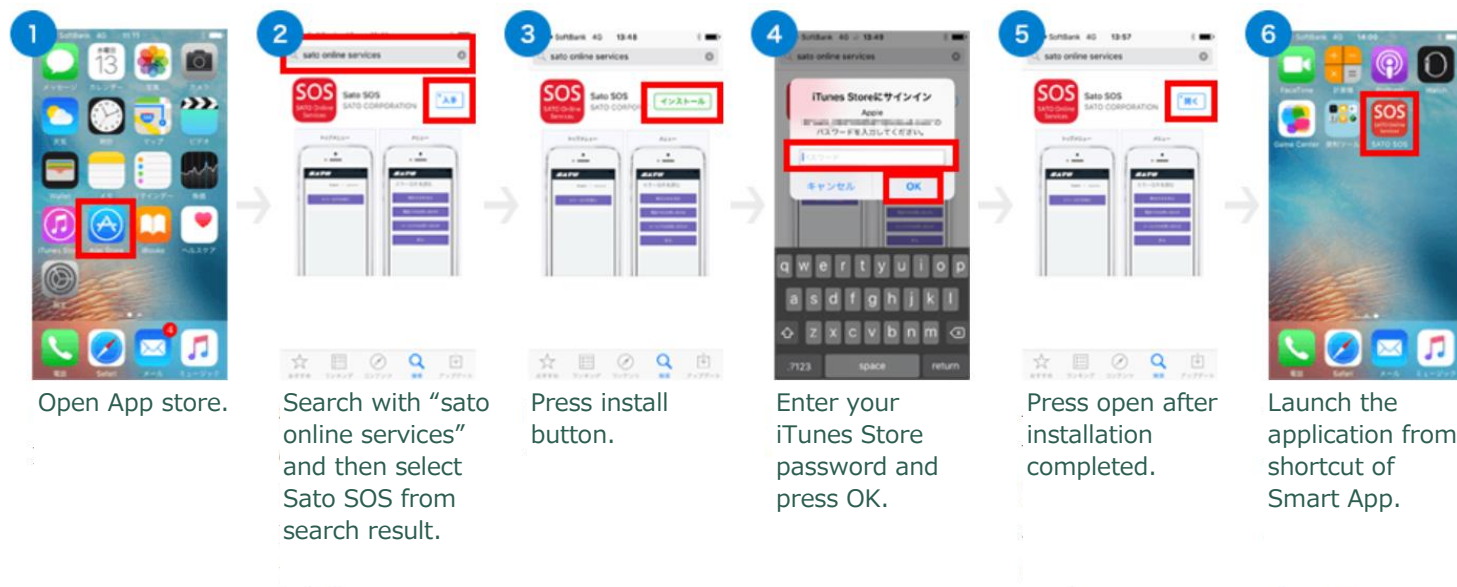
Tap "Play Store" and open Play Store window.

Search with "SATO Online services" and tap "INSTALL" button to install.

Tap "OPEN" button to start SOS.

### 2-2. iOS

Latest iOS version.



Open App store.

Search with "sato online services" and then select Sato SOS from search result.

Press install button.

Enter your iTunes Store password and press OK.

Press open after installation completed.

Launch the application from shortcut of Smart App.

### 2-3. About Update

SOS Smart App get new version automatically if your Smart phone sets to auto update.

If it sets to manual update, SOS Smart App will display a dialog to get a new version of SOS.

## 3. How to get a login account

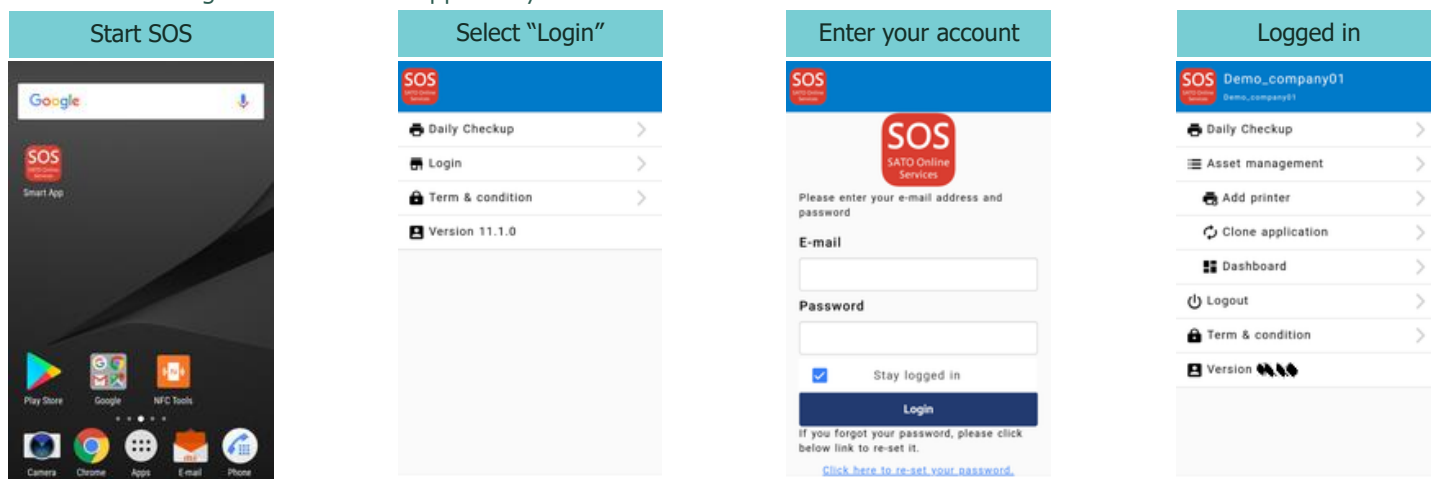
### 3-1. Open an account

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. Login to SOS Smart App

You can login to SOS Smart App with your SOS account.



## 4. Function of SOS Smart App

### 4-1. Important point of reading NFC

Instead of reading QR, you can grasp printer information by touching the red circle in the figure with a smartphone.

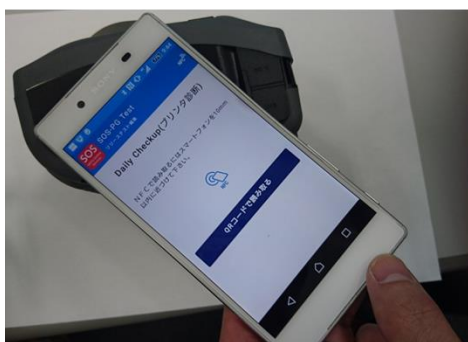


#### Important point of reading NFC

Reading of NFC is supported only for NFC implementation model with Android smartphone.

There are notes on reading NFC tags

**《Overlap the NFC mark of the smartphone and the printer when execute the reading.》**



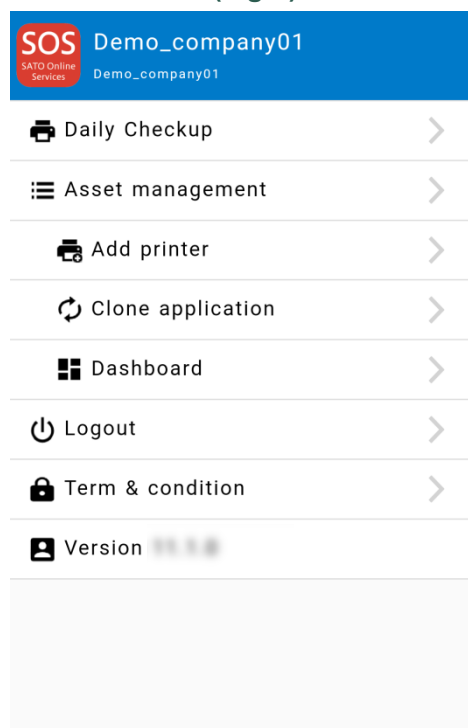
※When reading fails continuously, NFC may not be able to be read depending on the model.  
In this case, restart of your smart phone is required. Please pay attention to the reading position of NFC.

#### About printer's power on/off when reading NFC

When printer power is ON, NFC prioritize Bluetooth connection due to specification of android OS and NFC may not be able to read. For this reason, we recommend turning off printer power when reading NFC.

Function name	Operate with Power ON	Operate with Power OFF
Daily checkup		✓
Asset management		✓
Add printer		✓
Make clone	✓	

#### 4-2. Functions(login)



##### Daily Checkup

Function to check printer status with reading QR or NFC.

To check the operation status of the printer and the usage rate of consumable parts.

##### Asset management

Read the QR / NFC displayed on the printer and supports management of printer assets and inventory work.

To check the above data and export data with SATO Online Services.

##### Add printer

Sign up your printer to SOS.

##### Clone application

Read printer NFC and let printer to create or apply clone files.

\* Clone file has each settings of printer.

##### Dashboard

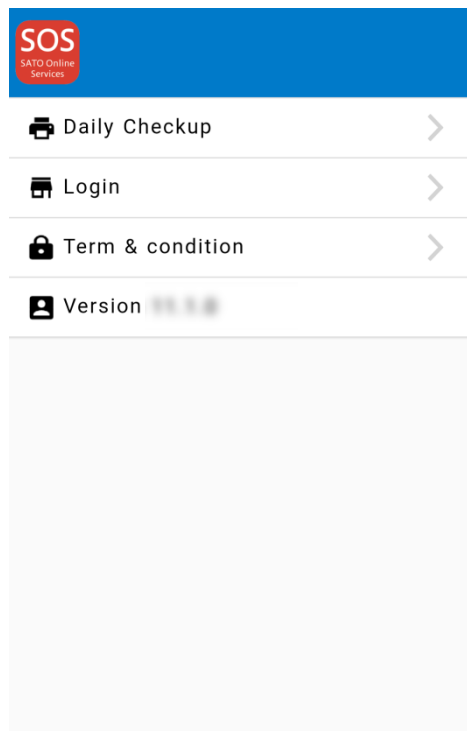
Go to SATO Online Services (Web) and “device list” screen is appeared

##### Logout / Term & condition



Basic function when not logged in

When you not logged in to SOS Smart App, the menu like left picture is shown.



#### Daily Checkup

Function to check printer status with reading QR or NFC.

You can check the operation status of the printer and the usage rate of consumable parts.

#### Login

You can login to SATO Online Services.

#### Term & condition

Show term & condition of SOS.

### 4-3. Account function

There are function restrictions as shown in the table below depending on the SOS login account authority.

	Admin	Editor	Viewer
Daily Checkup	✓	✓	✓
Add printer	✓	✓	
Asset management	✓	✓	✓
Dashboard	✓	✓	✓
Login / Logout	✓	✓	✓
Term and condition	✓	✓	✓

\* The editor cannot delete data. And you can operate only the printer of the limited installation place.

## 5. Daily Checkup

### 5-1. Timing to use

The Daily Checkup performs preventive diagnosis of the printer by reading the QR code or NFC tag which is enumerated below.

\*When an error occurs (read NFC tag or read QR code displayed on screen)

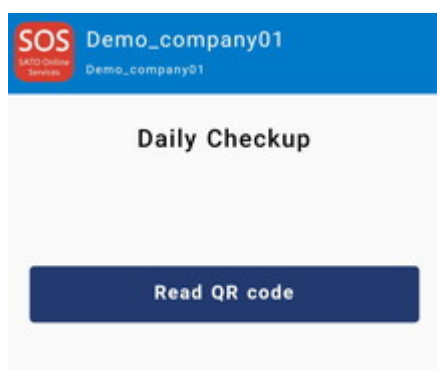
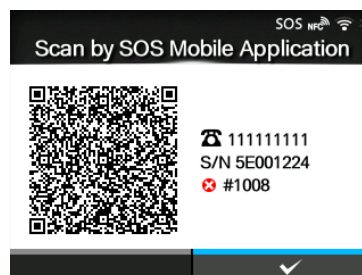
\*Periodic notification.

Please Checkup it at least every 3 months to implement preventive maintenance of consumable parts.

#### 5-1-1. Operation when printer error occurred.

When printer error occurred, printer can display QR code to the screen. To read this QR code with SOS Smart App helps early solution of an error. In case of PW208NX series, read NFC tag when an error is displayed on the screen.

When an error is occurred at a printer, the error message is shown on the printer screen. And selecting the [SOS] item, the QR code for scanning will be displayed. The following pictures are example of CL4NX screen.



Next step, start SOS Smart App and choose [Daily Checkup] then [Read QR code].

Demo\_company01  
Demo\_company01

### Printer error

#1008 / Out of paper

CL4NX-J / 5E001224(S/N)

Company Demo\_company01  
Location gbs  
Device name 5E001224

Total counter 0.2 Km  
No. of cuts 1154 times

P/H usage

0 %

No need to replace

Platen usage

0 %

No need to replace

Cutter usage

0 %

No need to replace

Manual Call Mail

QR code reading function is booted and read QR code displayed on the screen of printer.

When finished the reading, it send the information of error to SOS cloud and the diagnostics screen is shown.

Also Daily Checkup can read NFC tag in case of FX3 and PW2NX series.



Instead of reading the QR code, you can check the same diagnostic result by touching the red circle in the figure with the smartphone

#### 5-1-2. How to set periodic notification

By setting the mileage, the number of cuts, or the date of the paper, you can display the QR code on the printer screen when the set threshold is reached.



Regularly, by reading the displayed QR code, you can accumulate printer information in the SOS cloud. By doing so, you can check the setting status of the printer, the amount of paper used, and the estimated time to replace expendable parts.

For information on how to change periodic notification, check the web manual below.

<CL4NX/CL6NX Operator Manual>

[http://www.manual.sato-global.com/printer/cl4nx\\_cl6nx/main/index.html](http://www.manual.sato-global.com/printer/cl4nx_cl6nx/main/index.html)

Input a search keyword

[Periodic Notification] (SOS users only)

<FX3 Operator Manual>

<http://www.manual.sato-global.com/printer/fx3/main/index.html>

Input a search keyword

[Periodic Notification] (SOS users only)

<LR4NX-FA Operator Manual>

<http://www.manual.sato-global.com/labelmachine/lr4nx-fa/main/index.html>

Input a search keyword

[Periodic Notification] (SOS users only)

<CT4-LX Operator Manual>

<http://www.manual.sato-global.com/printer/ct4-lx/main/index.html>

Input a search keyword

[Periodic Notification] (SOS users only)

<CL4NX Plus/CL6NX Plus Operator Manual>

<http://www.manual.sato-global.com/printer/clnxplus/main/index.html>

Input a search keyword

[Periodic Notification] (SOS users only)

<PW2NX>

※ PW2NX series has no periodic notification. Instead of that, you can read information anytime via NFC tag.

<S84/86NX Operator Manual>

<https://www.manual.sato-global.com/printer/s8nx/en/main/index.html>

Input a search keyword

[Periodic Notification] (SOS users only)




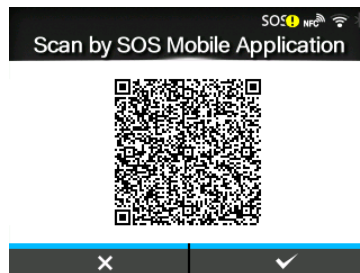
<PW4NX Operator Manual>

<https://www.manual.sato-global.com/printer/pw4nx/en/main/index.html>

Input a search keyword

[Periodic Notification] (SOS users only)

When the counter or date reaches the notification setting threshold, an  icon is displayed on the device screen. Please make the printer offline at this time. The following QR code is displayed.



Next step, Start SOS Smart App and choose [Daily Checkup] then [Read QR code].

QR code reading function is booted and read QR code displayed on the screen of printer.

When finished the reading, it send the information of error to SOS cloud and the diagnostics screen is shown.

## 5-2. Diagnostics result and how to solve an error.

**Printer error**

 **#1008 / Out of paper**

CL4NX-J / 5E001224(S/N)

Company Demo\_company01  
Location gbs  
Device name 5E001224

Total counter 0.2 Km  
No. of cuts 1154 times

P/H usage   
No need to replace

Platen usage   
No need to replace

Cutter usage   
No need to replace

Manual Call Mail

Diagnostics result screen has following items.

- Error name (Only when an error has occurred.)
- Model name / Serial number
- Company, Location, Device name
- Total counter
- Number of cuts
- Printer head usage / replace timing
- Platen usage / replace timing
- Cutter usage / replace timing



There are two kinds of solution support functions in the menu at the bottom of the diagnostic screen.

[Manual]: Refer to web manual and solution support.

The screenshot shows the SATO Online Services interface for a user named 'Demo\_company01'. The main heading is 'Printer error'. Below it, a red error message box displays '#1008 / Out of paper' with a red 'X' icon. The printer model 'CL4NX-J / 5E001224(S/N)' is listed. A section titled 'Error Message 1008 (Out of Paper)' provides instructions: 'When there is an error with the product, the error message appears on the screen. Check the cause and countermeasure, and then take appropriate action.' Below this is a small image of a printer screen showing the 'Out of Paper' error. At the bottom, a navigation bar contains four buttons: 'Status', 'Manual' (highlighted in purple), 'Call', and 'Mail'.

[Mail]: Sending inquiry via E-Mail.

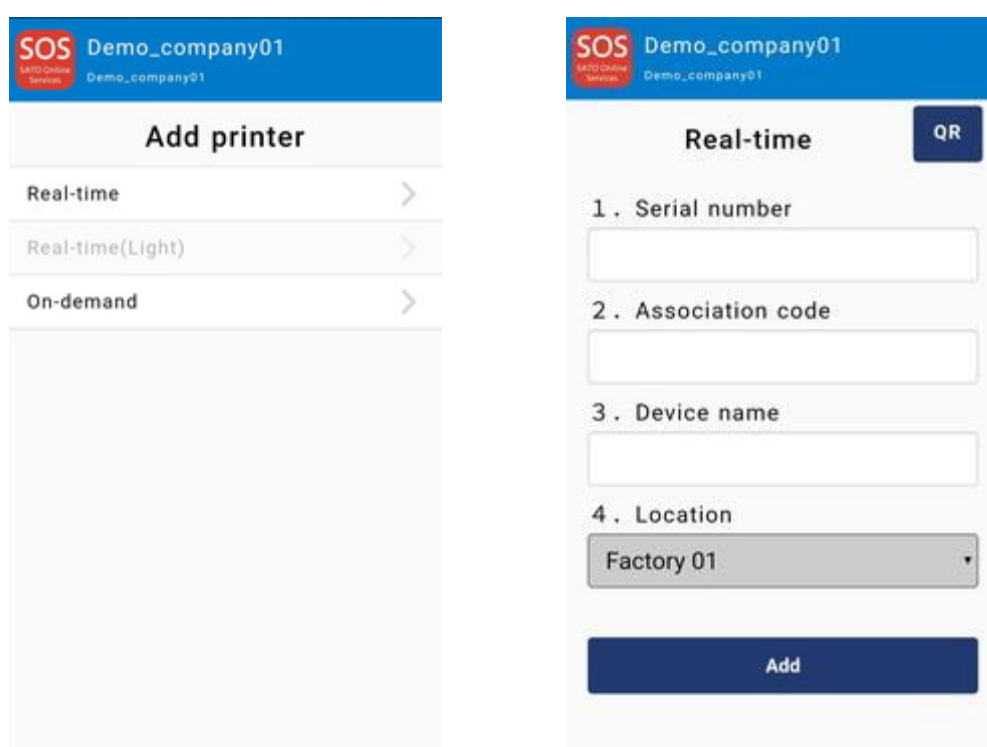
This screenshot shows the same SATO Online Services interface, but with the 'Mail' button highlighted in purple in the bottom navigation bar. The error information is the same. Below the error message, there is a form for sending an inquiry via email. The form includes fields for 'Company' (Demo\_company01), 'Location' (gbs), and 'Device name' (5E001224). It also displays 'Total counter 0.2 Km' and 'No. of cuts 1154 times'. There are two text input fields labeled 'Subject' and 'Description' for the user to provide details of their inquiry.

## 6. Add printer

### 6-1. Real-time (Real-time and Real time WebSocket)

※Network settings for printer is required.

- Login to SOS Smart App, then select [Add printer].
- At Add printer screen, select [Real-time].
- At Real-time screen select [QR], and read the QR code displayed on the printer screen.
- Serial number and association code will displayed automatically, then input device name and select Location. After that, touch [Add].
- Real-time connection setting is finished.



※Please refer to SOS user manual to know how to display the QR code for “Add printer” on the screen of printer.

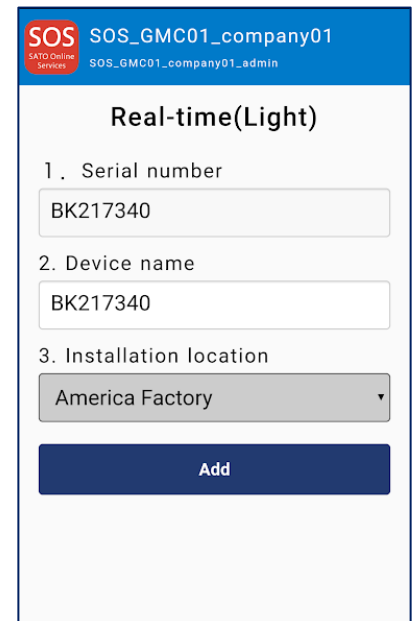
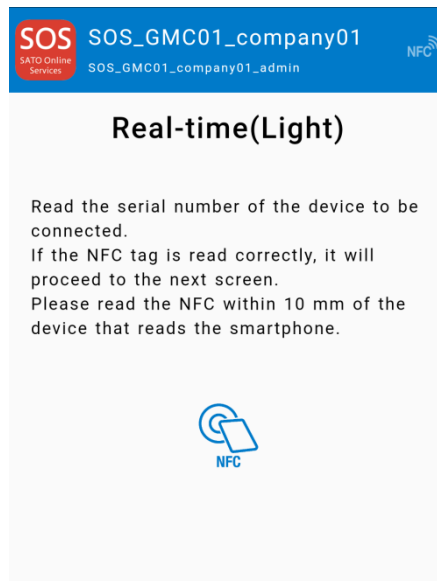
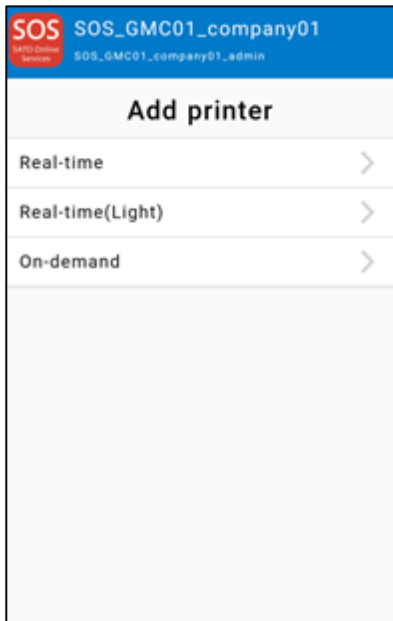
CL4/6NX, LR4NX, FX3, CT4, CLNX Plus, S84/86NX, PW4NX

[https://www.sato-sos.com/en/support/sos\\_usermanual.pdf](https://www.sato-sos.com/en/support/sos_usermanual.pdf)

## 6-2. Real-time Light (Android only)

※Network settings for printer is required for “Real-time Light”.

- Login to SOS Smart App, then select [Add printer].
- On Add printer screen, select [Real-time-Light].
- On Real-time (Light) screen, touch the NFC tag of printer with smartphone
- Serial number will displayed automatically, then input device name and select Location. After that, touch [Add].
- Real-time-Light connection setting is finished.



※Please refer to SOS user manual to know how to operate PW208NX.

[https://www.sato-sos.com/en/support/sos\\_preparation\\_light\\_pw208nx.pdf](https://www.sato-sos.com/en/support/sos_preparation_light_pw208nx.pdf)

- After connecting with Real-time Light, press and hold the power button to turn off the printer. And turning on the power again, check connection status at device list of SOS.

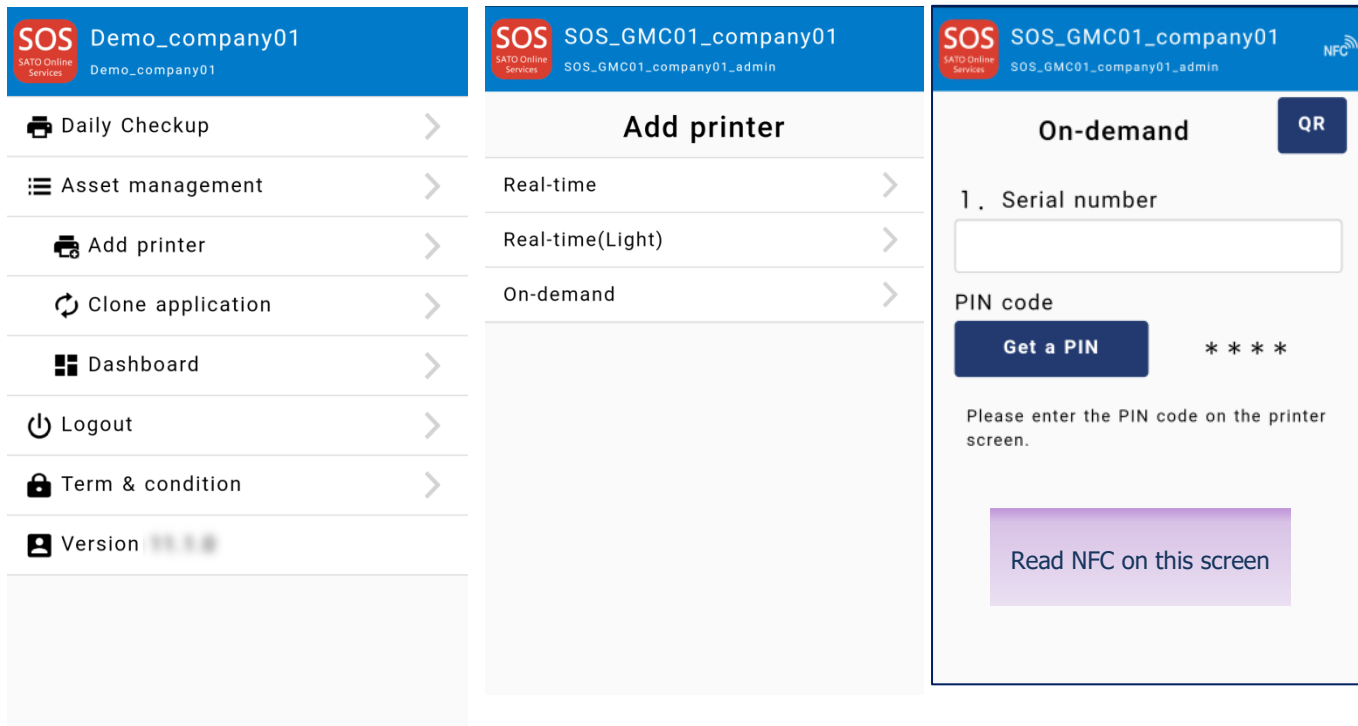




### 6-3. On-demand (Connecting by NFC)

•Login to SOS Smart App and press[Add printer].

•Tap the [ON-DEMAND] button on the Add printer screen.



• When the following screen is displayed, touch the NFC mounting part of the printer with a smartphone to read the printer information.

Enter the device name and location, and then tap the Add button to complete adding the printer by NFC connection.


•Perform **Daily Checkup** after the printer registration is completed.

※Refer to the user manual for printer operation instructions.PW208NX

[https://www.sato-sos.com/en/support/sos\\_usermanual.pdf](https://www.sato-sos.com/en/support/sos_usermanual.pdf)

6-4. On-demand (Connection by QR code)

- Operate the printer and display the PIN registration screen on demand. (\*)
- Log in to the SOS Smart App and tap [Add printer].
  - On the printer add printer screen, tap [ON-DEMAND].
  - Tap the [QR] button on the On-Demand screen to load the [QR Code] displayed on the printer screen.
  - When the printer serial number is entered, tap the [Generate] button to display the 4-digit PIN code.

 Demo\_company01  
Demo\_company01

Daily Checkup

Asset management

Add printer


Clone application

Dashboard

Logout

Term & condition

Version 1.0.0

 SOS\_GMC01\_company01  
SOS\_GMC01\_company01\_admin

Add printer

Real-time

Real-time(Light)

On-demand

 SOS\_GMC01\_company01  
SOS\_GMC01\_company01\_admin

On-demand

QR

1. Serial number

PIN code

Get a PIN

\*\*\*\*

Please enter the PIN code on the printer screen.

- When the PIN code is set to the printer, the QR code is displayed on the printer screen.



- Tap the [QR] button on the On-Demand screen to load the [QR Code] displayed on the printer screen.
- The association code will be entered. After entering the device name and selecting the location, press the [Add] button.
- Registration of printer authentication using QR connection is completed.
- Daily Checkup must be performed after the printer registration is completed.

The screenshot shows the SOS app interface for 'Demo\_company01'. At the top, there is a blue header with the SOS logo, the company name, and an NFC icon. Below the header, there is a section titled '2. Association code' with a 'QR' button. A text input field contains the code 'C886A3952513'. Below this, a message reads: 'Please enter the association code displayed on the printer screen. Or please read the QR code.' The next section is '3. Device name' with a text input field containing '5E001224'. Below that is '4. Location' with a dropdown menu showing 'Factory 01'. At the bottom, there is a large blue 'Add' button.

※Refer to the user manual for printer operation instructions.

CL4/6NX, LR4NX, FX3, CT4, CLNX Plus, S84/86NX, PW4NX

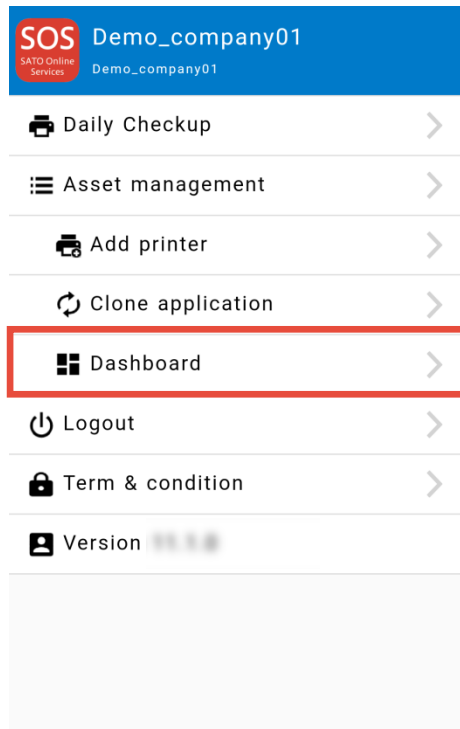
[https://www.sato-sos.com/en/support/sos\\_usermanual.pdf](https://www.sato-sos.com/en/support/sos_usermanual.pdf)

## 7. Dashboard

---

### 7-1. Device list (Check an added printer)

launch the SATO Online Services app from the SOS Smart App and display the device list.  
This is useful to verify that the printer has been added correctly.  
Tap Dashboard button on the screen.



The device list of the SATO Online Services application is displayed, taking over the login information of the SOS Smart App.

Tap details to display the device detail screen.



You can check the detailed information of the device.

SOS

Demo\_company01

Dashboard

Device list

Search

Display 1 to 13 of 13

Asset management list

Device list

Serial number	Device name	SOS
00000000	FX3 Android Toshi	Rea
4F033258	TEST 01	Rea
5L001119	CL4NX RFID HF gbs	Rea
5L001122	CL4NX gbs	Rea
BH209443	FX3-LX Linux SHPPD	Rea

SOS

Demo\_company01

Dashboard

Device details

Device details

Panel [CL4NX gbs]

Edit device information

Device status

Location

gbs

Device name

CL4NX gbs

Model name

CL4NX-J 305dpi

Device status

DISCONNECTED

Last error

Last update

2018-12-12 13:03:41

Life counter

0.0 km

Total cuts

6 times

To close the dashboard screen, use the  button in the upper right corner of the screen or the Back key on your mobile device.

## 8. Asset management

### 8-1. About asset management and printer diagnostics

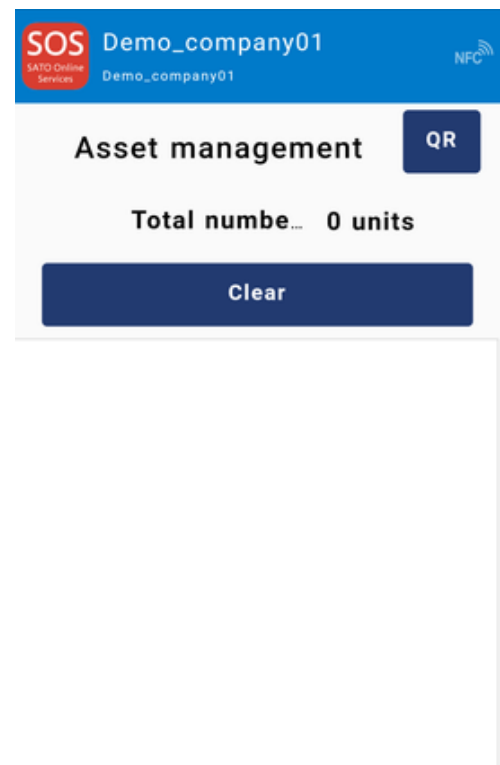
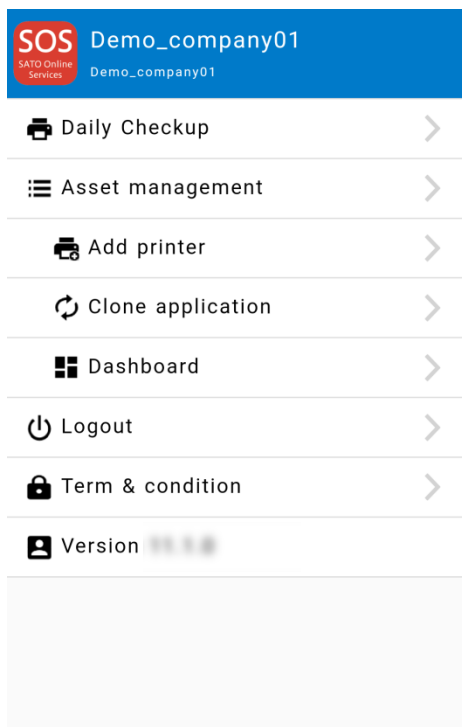
Asset management makes it easy to check the presence of a device by reading the QR code or NFC displayed on the device.

The results are listed on the smartphone screen and reflected on the SOS web system.

- Reflected results can be exported in tabular format with updated time stamps.
- Checking the usage status of the device on the terminal.

《NFC readable device : PW208NX》

Tap the Asset management button on the home screen.





#### Reading with QR code

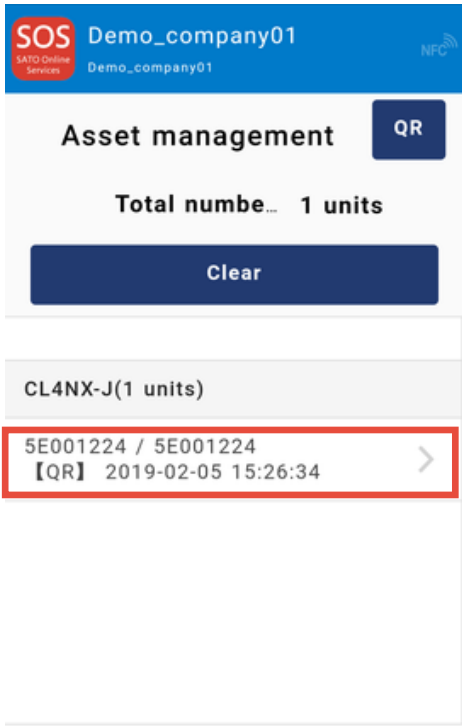
Tap QR and read the QR code displayed on the device.

#### Reading with NFC

With this screen displayed, touch the NFC part of the printer with your smartphone.

Read information will displayed. Tap line to check how the device is being used.

Show device usage.



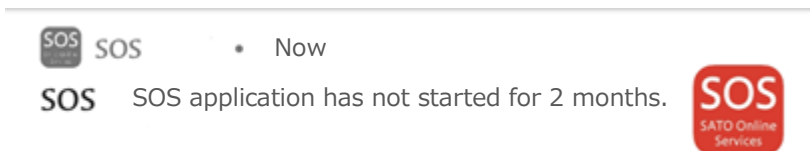
If you need to replace consumable parts, or if you encounter a problem with the device, use the following solutions.

- 1 Manual ... Show printer web manual.
- 2 Mail ... Sends E-Mail from SOS Smart App.



## 9. Usage alarm function

If you have not started the application for a long time, the following notification appears. Why don't you take this opportunity to perform your printer diagnosis?



## 10. List of Error Message

Learn about errors on your system that are not caused by printer errors.

#	Message	Description
1	Due to poor signal quality, it cannot be connected. Network error	Failed to connect to server. Check your carrier's signal strength and Wi-Fi connection.
2	Under maintenance	The server is performing maintenance. Try running the application again later.
3	Please allow camera access. If not, you cannot read the QR code.	Grant the SOS application access right to the camera on your terminal. Refer to the manual of your terminal for how to set access rights.
4	Unexpected error	An unexpected error has occurred. Please wait for a while and try again. If this message appears repeatedly, please contact our office.
5	Printer does not exist in your organization.	If this message appears, please check the following:. *Has the scanned printer already performed "Add printer"? *Is this printer registered at your location?
6	The device has already been registered.	Appears when a printer is added to a printer that has already been added. Please check the registration status.
7	A timeout occurred.	This message appears when you are logged in from two or more terminals simultaneously under the same account. It also appears if you are logged in to the web system and mobile app at the same time.
8	Device is not registered.	



#	Message	Description
9	Invalid association code	If this message appears, please contact your SATO local office.
10	Invalid serial number	
11	There is an error in the item of the QR that was read.	

## 11. FAQ

---

### 11-1. Is the SOS Smart app free?

Yes, anyone can use it for free, but if you are not logged in with an SOS account, the function is limited. Please contact your local SATO office regarding your SOS account.

## Trademarks and Licenses

•QR Code is a registered trademark of DENSO WAVE CORPORATION.

## About this manual

\*Reproduction in whole or in part without permission is prohibited.

\*The contents are subject to change without notice.

\*Illustration and screen display may be partially actual.



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## Contact Information

Please contact your local SATO sales office.

<https://www.sato-global.com/about/locations.html>

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