



Printer registration manual

Real-time for CL4NX/CL6NX/LR4NX-FA

October 1, 2024

Ver. 2.1





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1. Revision History

Version	Issued on	Revision history
Ver. 1.0	November 8, 2021	First edition
Ver. 1.1	November 12, 2021	Updated proxy server settings
Ver. 2.0	February 16, 2022	Added Cover page, Table of contents, Revision history, SOS diagnostic tool
Ver. 2.1	October 1, 2024	Made changes about SATO ID AUTH



2. Introduction

Before using SOS, SOS account is necessary.

Please contact nearest SATO local office or our contracted business partners

3. Check your network environment

To connect SOS via your network, The following ports is required to be opened

Port No. : **443/TCP** and Port No. : **8883/TCP** *Both use outbound only

<Connect method 1>

connect via firewall both of Port No.443 and 8883

<Connect method 2>

Port No.443 connect via proxy server. Port No.8883 connect via firewall.

4. About SOS diagnostic tool

A tool to quickly diagnose customer's network environment is mounted in the printer.

Use the tool for the network diagnosis. (Depending on the firmware version in use, the tool may not be available for use.)

See "SOS diagnostic tool" for the detail.

5. For adding printers to SATO Online Services

To connect printers to SATO Online Services, Set the following printer setting it is necessary to change the network settings of your printers.

- DNS **required**
- Proxy server required if it connect via proxy server.
- NTP optional

And it is also necessary to prepare following information.

1. SOS account (ID,PW)
2. Definition of unique printer name and it's location name.

If Multiple locations are existing, we recommend registering location settings beforehand.



※It describe only for SOS setting. Other network setting(IP, Subnet, Gateway and WLAN setting) is referred to printer manual.

http://www.manual.sato-global.com/printer/cl4nx_cl6nx/main/index.html

6. DNS settings

Show setting menu of printer.

Settings => Interface => Network => Settings => LAN => IPv4

IPv4 (Wi-Fi)	
Mode	DHCP
DHCP	Renew Lease
IP Address	10.0.0.16
Netmask	255.255.255.0
Gateway	10.0.0.1
DNS	8.8.8.8

<Example>

Mode	Static
IP Address	172.25.47.19
Netmask	255.255.0.0
Gateway	172.25.1.240

DNS

172.18.1.52,172.18.1.53,172.30.5.23

*Three DNS address can be set

*DNS is not required if DHCP is set.

7. Set Proxy settings. (Mandatory if proxy server is used)

① Show proxy setting screen of product's menu

Settings => Interface => Network => Settings => LAN(or Wi-Fi) => Proxy

② Set proxy server value(IP address and port number) in the Server.

ex.) http://172.18.1.10:8080 (http://{IP Address}:{Port number})

Proxy (Wi-Fi)	
Enabled	<input checked="" type="checkbox"/>
Server	http://10.0.0.1:3128
Exclude	127.0.0.1, localhost



Server	
http://10.0.0.1:3128	
<div> <div>a b c d e f g h i j < ></div> <div>k l m n o p q r s t 1 2 3</div> <div>u v w x y z . , _ - Shift</div> <div>⌫ [] @ ! ? ✓</div> </div>	
<div>⌫ ✓</div>	

③ Set the Username and Password respectively. **If the username and password are not available in the proxy server, this setting is not required.**

Proxy (LAN)

Enabled	<input checked="" type="checkbox"/>
Server	http://172.18.1.10
Port No.	8080
Username	
Password	
Exclude	127.0.0.1, localhost

Username

a b c d e f g h i j < >

k l m n o p q r s t 1 2 3

u v w x y z . , _ - Shift

@ ! ? ✓

Password

a b c d e f g h i j < >

k l m n o p q r s t 1 2 3

u v w x y z . , _ - Shift

@ ! ? ✓

④ Check exclude setting contains「127.0.0.1, localhost」.

「127.0.0.1, localhost」 are static value. **Leave this setting and no change.**

Proxy (Wi-Fi)

Enabled	<input checked="" type="checkbox"/>
Server	http://10.0.0.1:3128
Exclude	127.0.0.1, localhost

Exclude

127.0.0.1, localhost

a b c d e f g h i j < >

k l m n o p q r s t 1 2 3

u v w x y z . , _ - Shift

@ ! ? ✓

And if there is no value set on this menu, please enter 127.0.0.1, localhost manually

⑤ Check the checkbox to enable the valid item.

Proxy (Wi-Fi)

Enabled	<input checked="" type="checkbox"/>
Server	http://10.0.0.1:3128
Exclude	127.0.0.1, localhost

Enabled

Enabled	<input checked="" type="checkbox"/>
Disabled	<input type="checkbox"/>

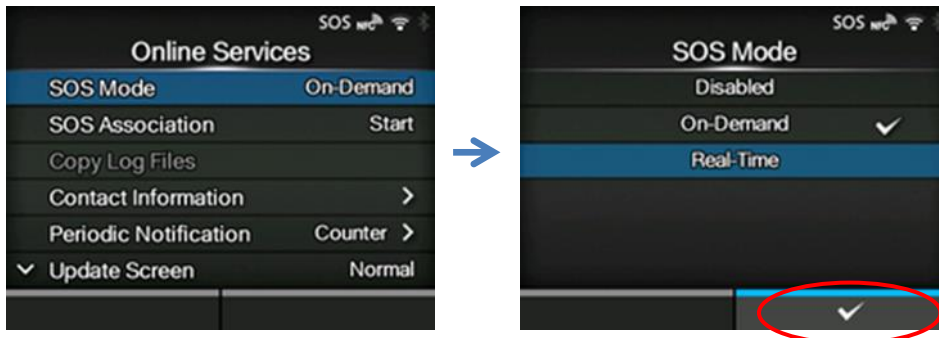
✓

8. SOS mode settings

- ① Show SOS mode settings screen.

Settings => Interface => Network => Services => Online Services => SOS Mode

- ② Set SOS Mode to Real-Time from Disable



- ③ Check the terms of SOS and agree them.

9. Reboot printer

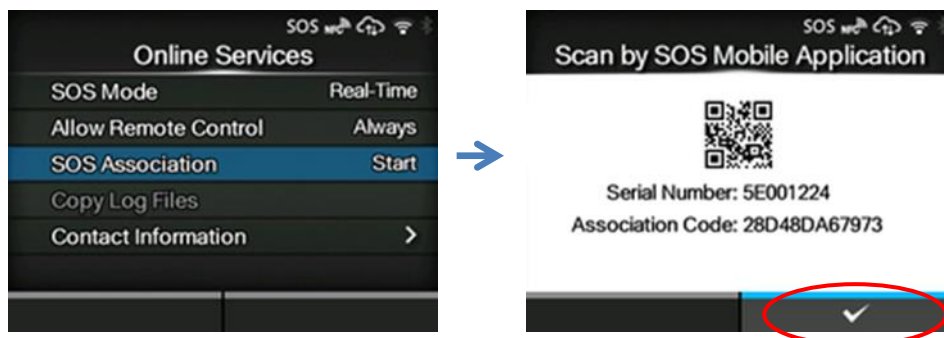
Reboot printer and make sure that SOS icon and cloud icon are appeared on printer LCD.

10. Check Association code.

- ① Show SOS Association menu.

Settings => Interface => Network => Services => Online Services => SOS Association

- ② Press SOS Association to "Start".





- ③ “Serial Number”(8 Chars) and “Association code”(12 Chars) are shown on screen.(Recommend to note it)

*Association code will expire 10 minutes after showing.

11. SOS diagnostic tool

A tool to quickly diagnose customer's network environment. The diagnosis is performed by referring to the network settings selected in the printer. The tool can be used in the printer with the firmware version 1.13.4-r1 and later.

Ensure to check the following before using the tool:

- The printer is connected to the network.
- All the network settings to connect SOS are completed.
- How to use

Select "Port diagnosis" under Settings>Network settings>Network>Services>Online services.

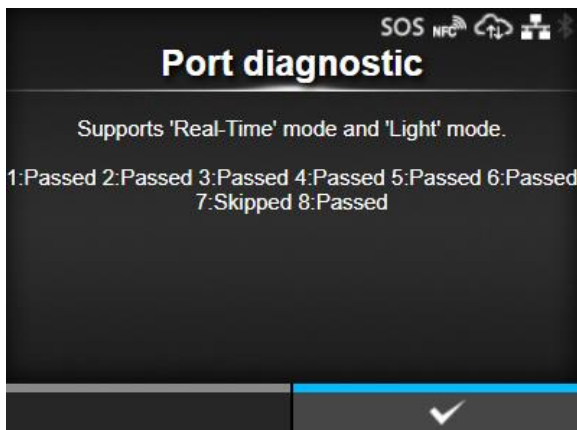
When the confirmation screen appears, press ENTER key.

Diagnosis starts and please hold.

Diagnosis results will be shown when the diagnosis is done. Check the results and press ENTER key.
- Diagnosis results

Diagnosis results will be shown as follows:

[Results] (Real-time mode)



Passed: Connection is OK

Failed: Connection is NG

Connecting: Connection ongoing

Timeout: Network timeout

Aborted: The process is aborted

Skipped: The process is skipped

*Even when all results are okay, the ports need to be checked as they may not support TLS1.2.

- Diagnostic results description

The diagnosis consists of eight test items and following test items are performed in order.

Test number	Test item	Connection host	Connection port	NG or timeout message
1	Communication with gateway	Default gateway	-	No ping response from gateway. Due to physical disconnection such as cable is pulled out, or wrong network settings.
2	Host name check	api.sato-sos.com	-	Host name cannot be converted to IP address. Wrong DNS settings.
3	Connection with SOS cloud service	api.github.com	443	Failed to acquire a file from api.github.com. The access may be blocked by firewall. Contact IT Dept. and provide host name and port number to enable the use of this function.
4		codeload.github.com	443	Failed to acquire a file from codeload.github.com. The access may be blocked by firewall. Contact IT Dept. and provide host name and port number to enable the use of this function.
5		api.sato-sos.com	443	Failed to acquire a file from api.sato-sos.com. The access may be blocked by firewall. Contact IT Dept. and provide host name and port number to enable the use of this function.
6		s3-ap-northeast-1.amazonaws.com	443	Failed to acquire a file from s3-ap-northeast-1.amazonaws.com. The access may be blocked by firewall. Contact IT Dept. and provide host name and port number to enable the use of this function.
7	Socket connection with SOS network	aih-stsos-pro-001.azure-devices.net	443	The port is not open. The access may be blocked by firewall. Contact IT Dept. and provide host name and port number to enable the use of this function.
8		aih-stsos-pro-001.azure-devices.net	443 + 8883	

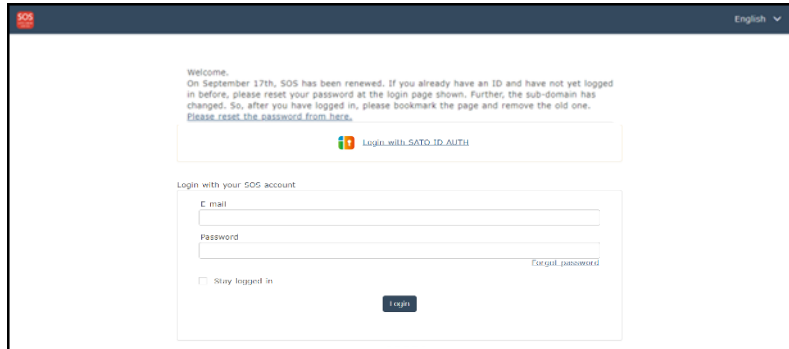
12. Login to SATO Online Services

***SOS Smart App can access to login**

① Login to SATO Online Services

Login URL is your SOS account,

*Login URL is provided SATO or business partners

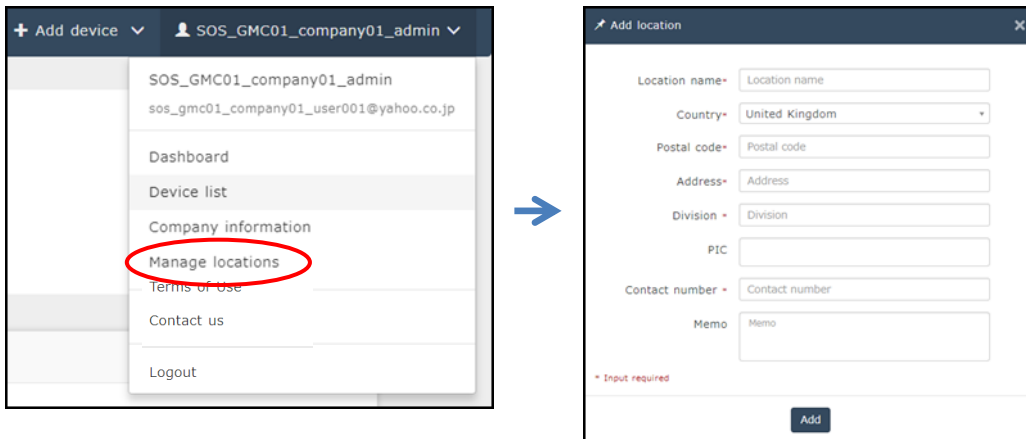


Enter E-mail and Password

13. Register new location

① Move to "Manage locations" menu.

User name menu => Manage locations.

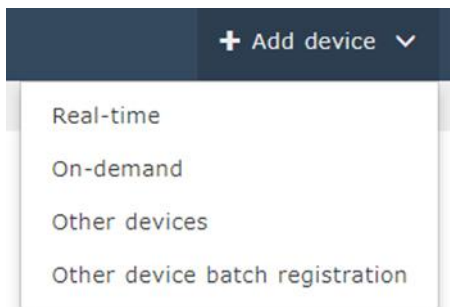


② Input information of new location and press [Add]

14. Register your printer via PC.

① Move to "Real-time" screen.

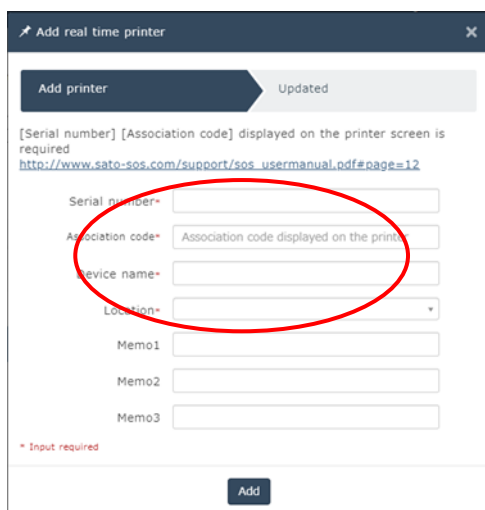
User name menu=> Real-time



*Need to create SOS Account beforehand.

* You can also use SOS Smart App for this operation

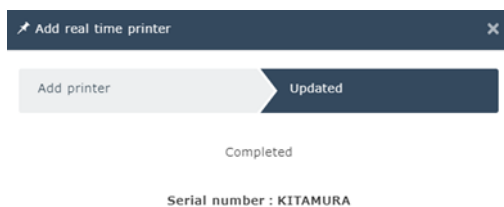
② Input printer information



Input following information and press "Add"

- Serial number.
(see at 5 . ③)
- Association code
(see at 5 . ③)
- Device name
Identification name of printer.
- Location
Where printer is installed at.

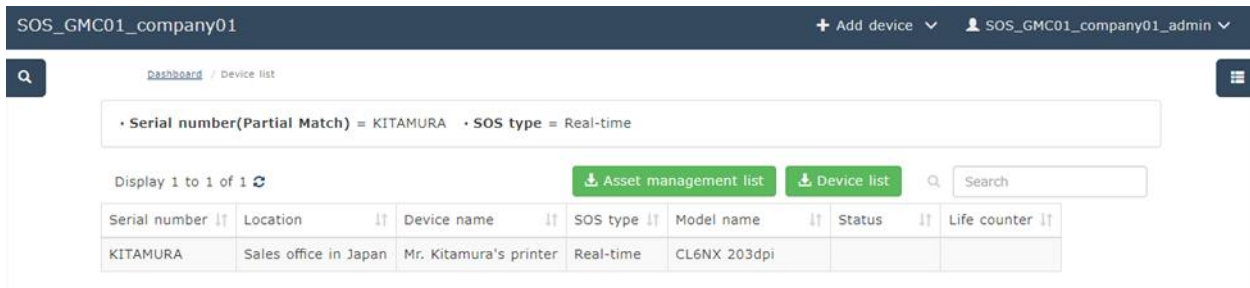
*Other item is optional.



Printer registration is completed.

15. Confirmation.

Check the “Device list” of SATO Online Services show operated serial number.



SOS_GMC01_company01 + Add device SOS_GMC01_company01_admin

Dashboard / Device list

• Serial number(Partial Match) = KITAMURA • SOS type = Real-time

Display 1 to 1 of 1

Asset management list Device list Search

Serial number	Location	Device name	SOS type	Model name	Status	Life counter
KITAMURA	Sales office in Japan	Mr. Kitamura's printer	Real-time	CL6NX 203dpi		

Registration process is completed.

Please see following manual for check other information.

https://www.sato-sos.com/en/support/sos_usermanual.pdf

* The above registration process can also be performed from SOS Smart App (application for SOS smartphone).

Also, SOS Smart App is convenient to input the association code by QR code reading function. For details, refer to the SOS Smart App manual.

https://www.sato-sos.com/en/support/sos_usermanual_mobile.pdf