SATO

Printer registration manual

Real-time Light for CL4NX/CL6NX/LR4NX-FA

February 28, 2022

Ver. 2.0

Table of Contents

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

2. 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.

3. 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.

4. 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 describes 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

4-1.   DNS settings

Show setting menu of printer.
Settings => Interface => Network => Settings => LAN => IPv4
<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**
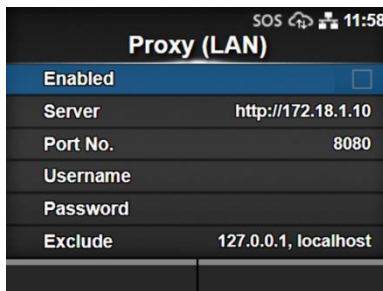
* Three DNS address can be set
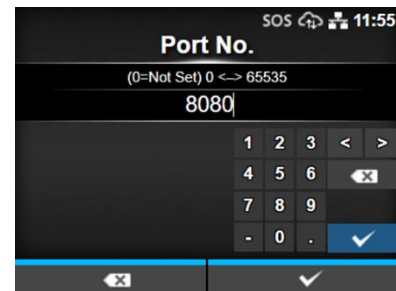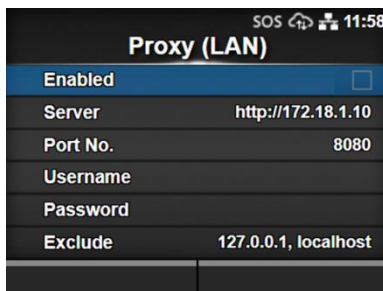
* DNS is not required if DHCP is set.

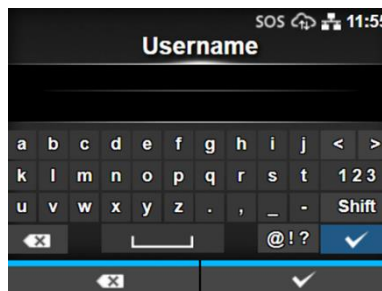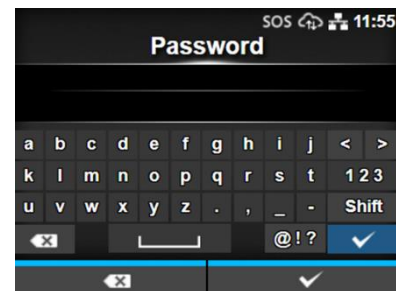## 4-2.   Set Proxy settings. (Mandatory if proxy server is used)

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})

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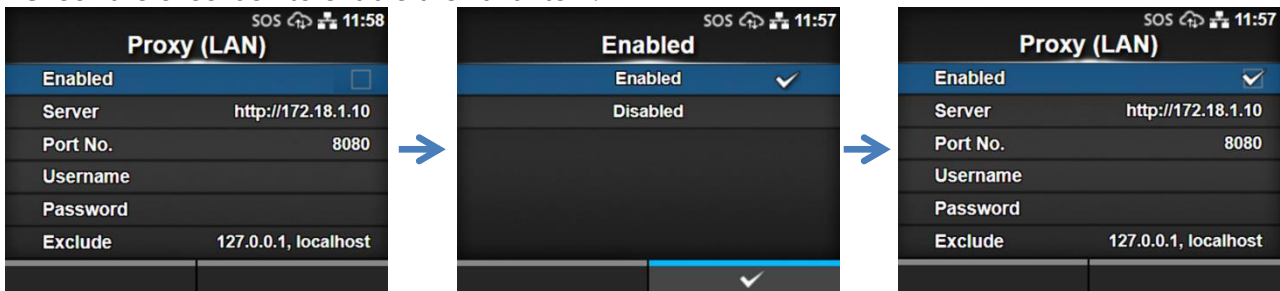

④ Check exclude setting contains「127.0.0.1, localhost」.
    「127.0.0.1, localhost」are static value. **Leave this setting and no change.**
    And if there is no value set on this menu, please enter 127.0.0.1, localhost manually
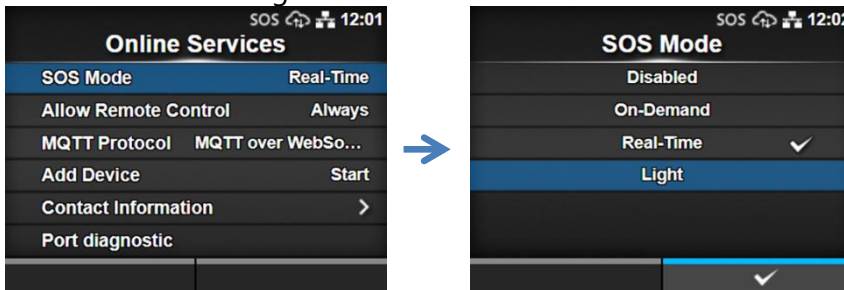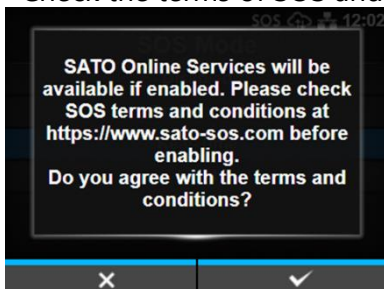
5
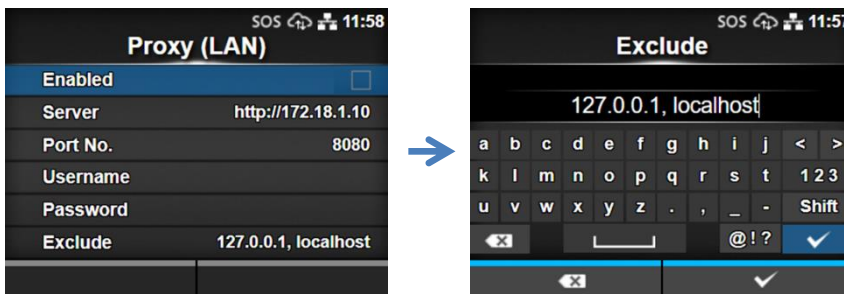
⑤ Check the checkbox to enable the valid item.

4-3.　　SOS mode settings

① Show SOS mode settings screen.
Settings => Interface => Network => Services => Online Services => SOS Mode
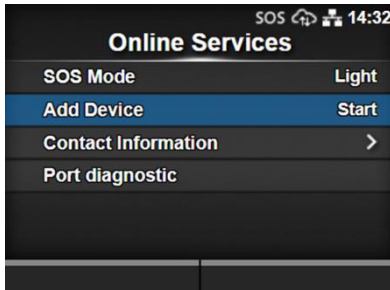
② Set SOS Mode to Light from Disable
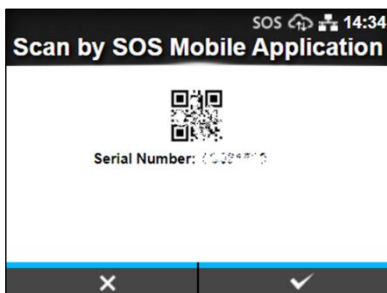

③ Check the terms of SOS and agree them.

5. Prepare to register your printer

5-1. Select SOS connection

5-2. Printer serial number is shown

・Printer serial number is needed to login to SATO Online Services and register your printer.

5-3. PIN code input screen is shown
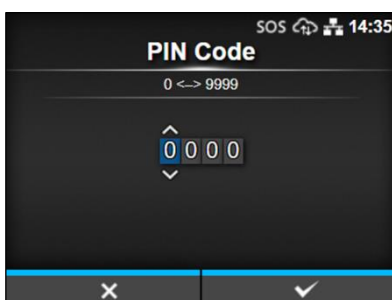
When this screen is shown, acquire a PIN code, following the below step.

Following two steps can be used. Choose the applicable one depending on registration method.

Register via smartphone=> register your printer via SOS Smart App

Register via PC=> register your printer via PC

6. **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.

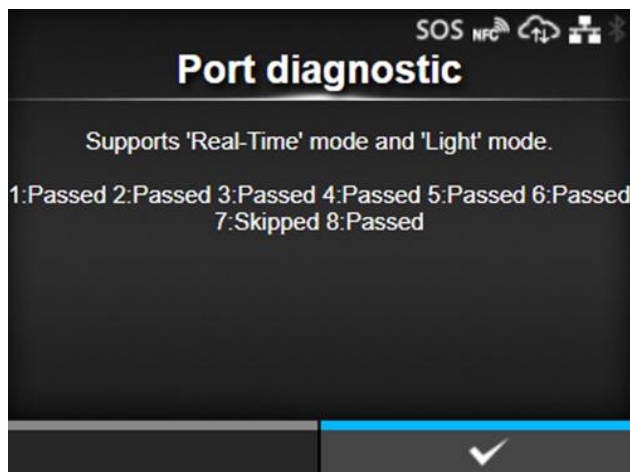When the confirmation screen appears, press ENTER key.

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] (Light 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	

7. Register your printer via SOS Smart App

7-1. Login to SOS Smart App

・Login to SOS Smart App and tap [Add printer].

・Tap [Real-time(Light)] in the printer registration screen.
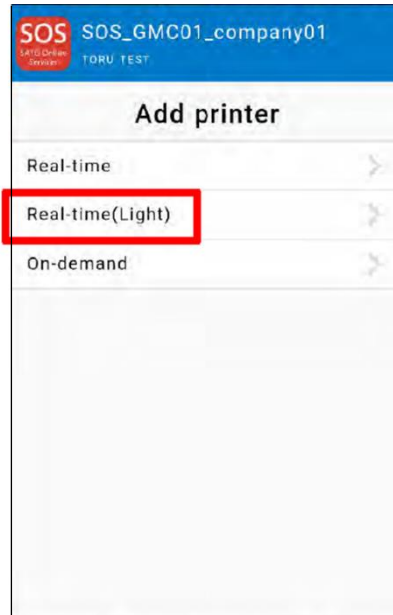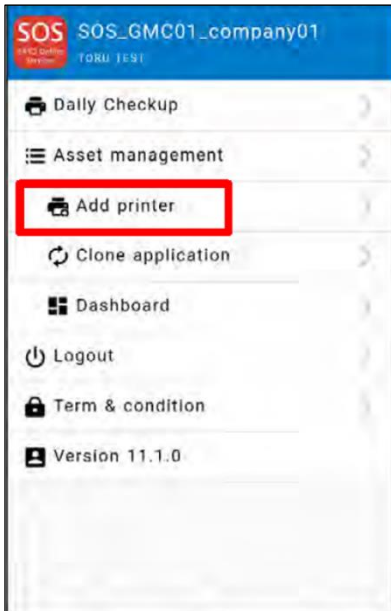
7-2.   **Read via NFC**

While the light mode connection screen is shown, place the smartphone close to the printer NFC area.
NFC is mounted in a red circle portion of the below picture.

7-3.   **Enter printer information**

When the screen is read via NFC, below screen is shown. Enter the model name, location using SOS Smart App and tap [Add] button.
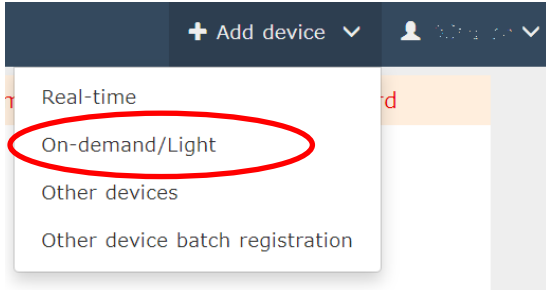
7-4. Restart the printer

After the printer information is added, long-press the power button of the printer to turn off the power once, then restart the printer.

8. Register your printer via PC.

8-1. Login to SATO Online Services
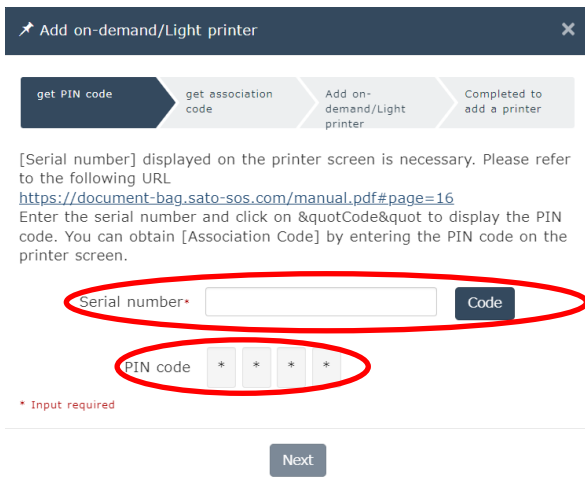
https://www.sato-sos.com/ => login to SOS

・Login to SATO Online Services with your account and click On-demand/Light mode in the printer registration shown at the top right of the screen.

*You need to register for a SOS account beforehand.

8-2. Enter printer serial number

・Input screen of the printer serial number is shown. Enter the serial number of the added printer and click [Code] button.
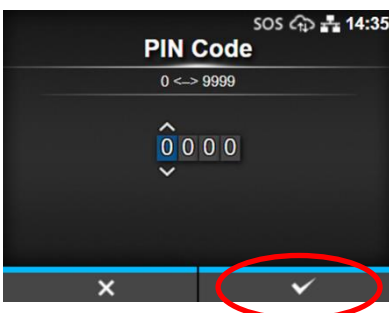
*Enter the printer serial number you made a note in the Step5-2.

・PIN code is shown.

*This PIN code is necessary to identify the added printer.
*It is recommended to make a note of the PIN code.

8-3. Return to "Printer screen" and enter the PIN code

・Enter the given PIN code in the Web screen.

・Press the right softkey [✓] of the printer to confirm the entered PIN code.

*Enter the PIN code you made a note in the Step8-2.

8-4.   Association code is shown

・Printer serial number and association code are shown in the printer screen.

*It is recommended to make a note of the association code.

8-5.   Go to SATO Online Services screen in PC

・Click [Next] in the Add QR connection printer screen.

・Association code input screen is shown.

(Left image)

・Enter the association code shown in the printer.

*Enter the association code shown in the previous
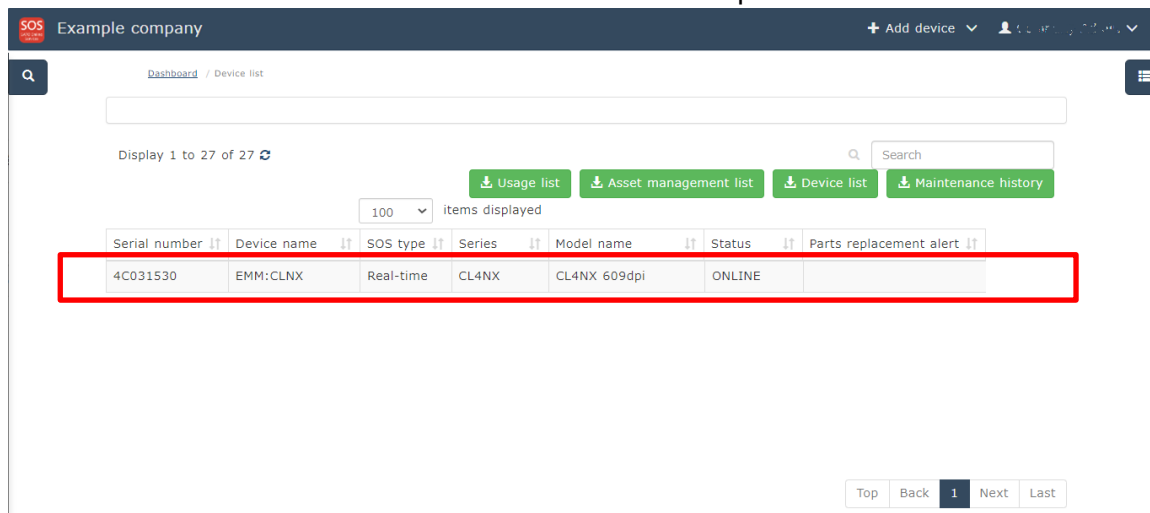
    step.

・Enter the printer name.

・Enter the location.

・Click [Add] button.

9. **Confirmation.**

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

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