
SmaPri Driver Developer Manual

Driver Settings (iOS)

SATO CORPORATION

Rev.20240625

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Chapter:3

Driver Settings (iOS)

3-1

Install / Uninstall

- Newly install -Overwrite install -Uninstall

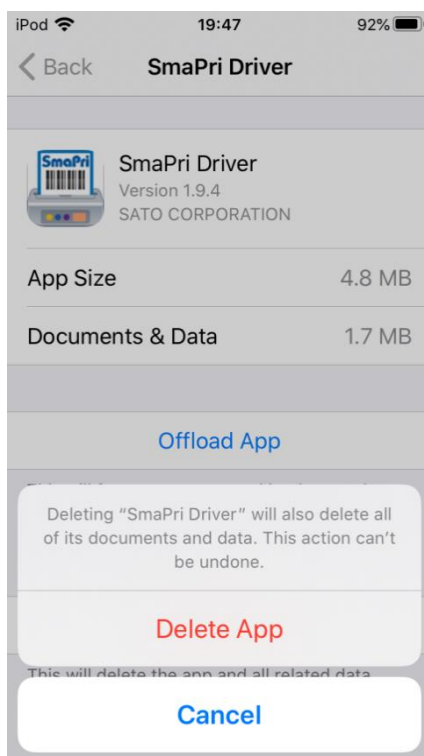
- Newly install

SmaPri Driver can be installed from App Store. Open the App Store application and search for "SmaPri Driver"

- Uninstall

Please be aware that all of the settings and data in the application will be deleted.

- 1) On your iOS device, tap [Settings] > [General] > [iPhone (iPad / iPod touch) Storage] > [SmaPri Driver].
- 2) tap the "Delete App" button that appears to uninstall the SmaPri Driver application.



3-2**Administration screen (status)**

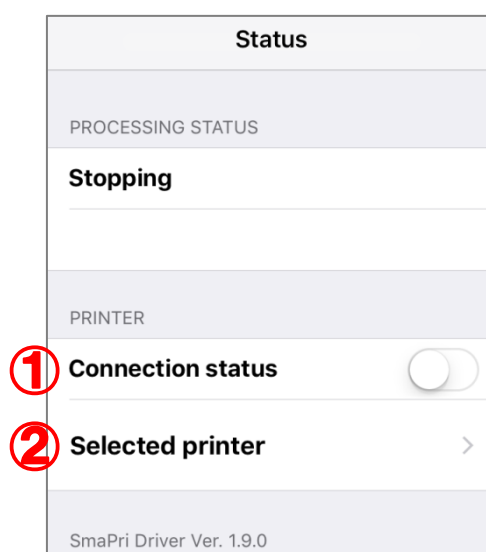
The printer status and connection status are displayed.

- How to Start

- Select "SATO SmaPri Driver" on the application list.

- Custom URL scheme

smapri:/View/Status

- Function Description**1) Connection status**

Display the connection status with the printer. You can switch connection and disconnection with the printer by operating the switch (Not available when Bluetooth is selected).

| Status | Display | Description |
|------------|---------|--|
| Stopped | | Disconnected from printer; Slide the button to ON to start connecting. |
| Connecting | | Connecting to printer; The slider is disabled in this status. |
| Running | | Connected to printer; Slide the button to OFF to disconnect. |

Normally, no manual operation is required. SmaPri Driver automatically connects to the connected printer when it receives a format print request, etc. Also, if communication with the printer does not occur within the time specified in "Disconnection timer" in the printer settings, the connection with the printer is automatically disconnected.

2) Selected printer

Configure the communication settings with the printer.

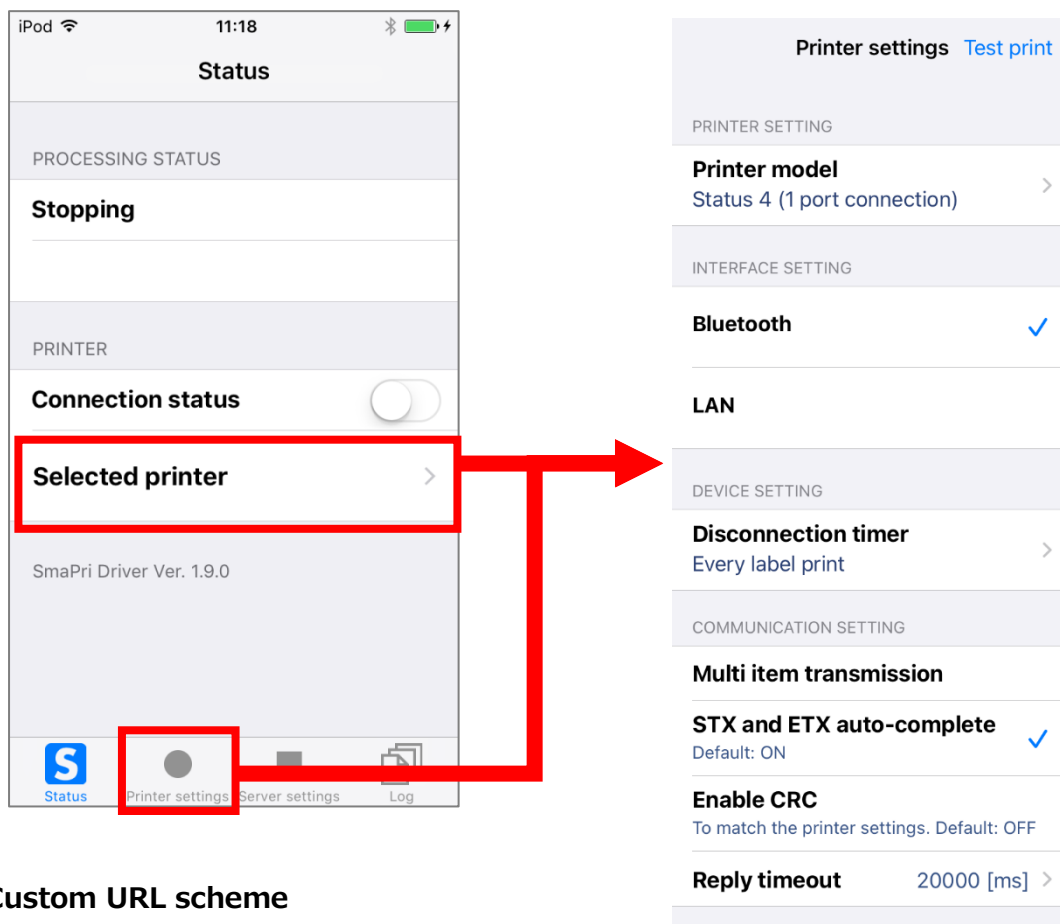
For details, see "[Administration screen \(printer settings\)](#)".

3-3**Administration screen (printer settings)**

Configure printer settings including printer model, Bluetooth, and LAN connections.

- How to Start

- Select "Printer settings" on the administration screen(status).

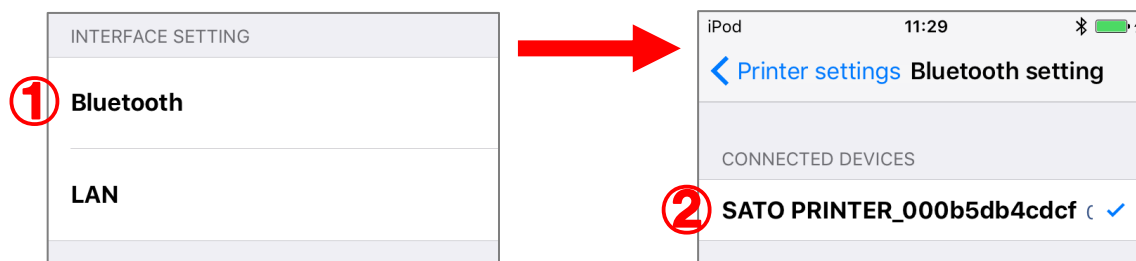
**- Custom URL scheme**

smapri:/View/PrinterSettings

- Function Description (Printer settings)**1) Printer model**

Select to the printer model. Selection is same to printer setting.

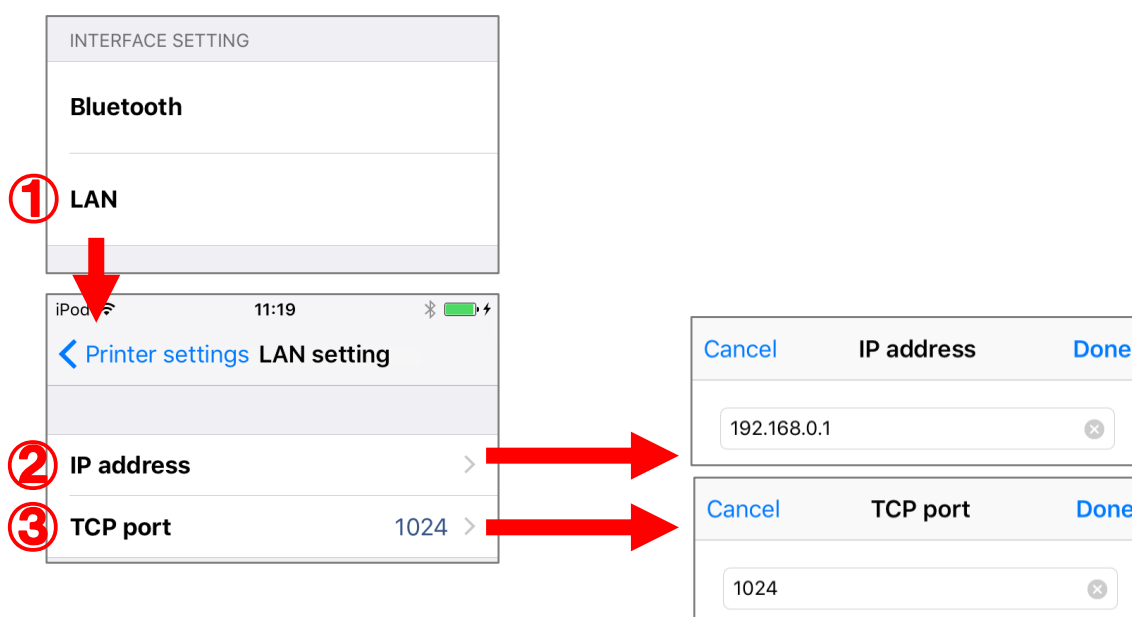
The default is "Status 4 (1 port connection)" (Ver.1.9.5 or later).

- Function Description (Bluetooth settings)**1) Bluetooth connection**

Connect to the printer via Bluetooth.

2) Bluetooth device

Select the Bluetooth device (printer) to connect. Pairing is required beforehand. For details, refer to "[Bluetooth pairing](#)".

- Function Description (LAN settings)**1) LAN connection**

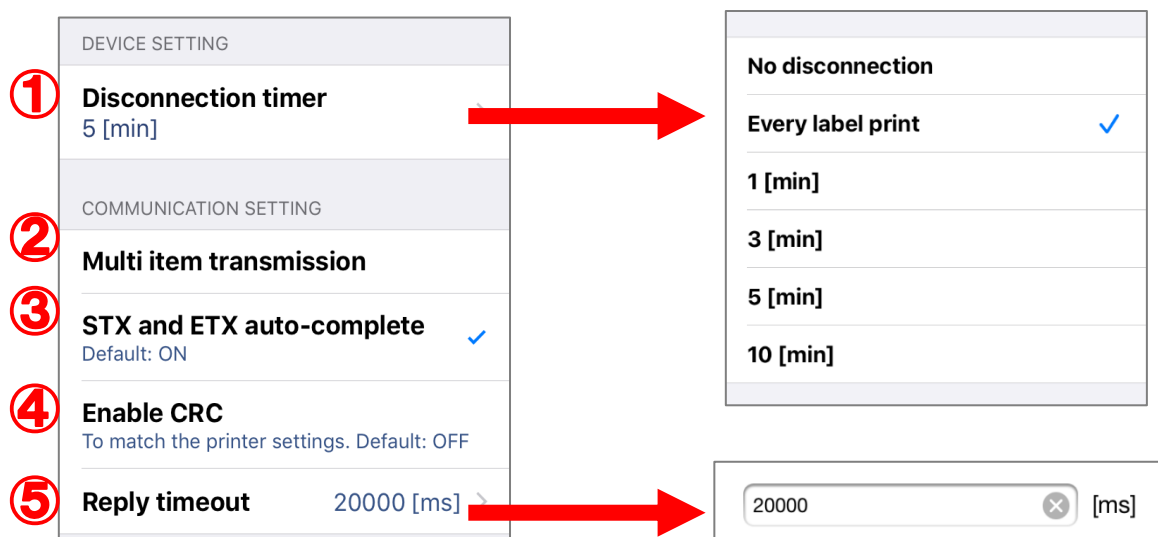
Connect to the printer via the LAN (TCP/IP).

2) IP address

Set the IP address.

3) TCP port

Set the TCP port number. The default is "9100" (Ver.1.15.0 or later).

- Function Description (Device setting, Communication setting)**1) Disconnection timer**

Set the time to automatically disconnect from the printer. The default is "Every label print" (Ver.1.11.0 or later). **In the case of Bluetooth, it is only "Every label print".**

2) Multi item transmission

To specify print data transmit condition. The default is "**Disabled**".

Enable: Sending of next print item without waiting to complete printing current item.

Disabled: Sending of next print item waiting to complete printing current item.

When enabled, it will be check.

Multi item transmission

**3) STX and ETX auto-complete**

To specify automatically added transmission control character (STX/ETX) to the print data. The default is "**Enable**". Usually specifies "**Enable**", so it does not need to change. If "Enable CRC" is "**Enable**", this item is always "**Enable**".

4) Enable CRC

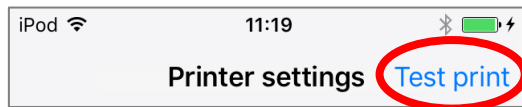
The default is "**Disabled**". Normally you do not need to change it.

This setting must be same as the printer. If "Printer: Disabled" and "SmaPri Driver: Enable", will be the cause of the failure, such as print data is canceled.

5) Reply timeout

To set the timeout value when communicating with the printer and when sending and receiving data. The default is "20000 milliseconds (20 seconds)".

- Function Description (Test print)



Do a test print. This function is convenient for testing communication with the printer.

When test printing, the screen is switched ["Administration screen \(status\)"](#).

If test print failed, refer to ["printer settings"](#) at first.

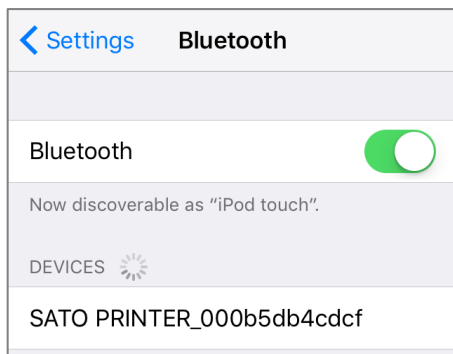
- MB2i series and MB4i series use "Status 3 (MB200i/MB201i,MB400i/MB410i)".
- PW208/PW208NX series use "Status 4" or "Status 3".
- Other models use "Status 4" or "Status 3".

- Bluetooth pairing

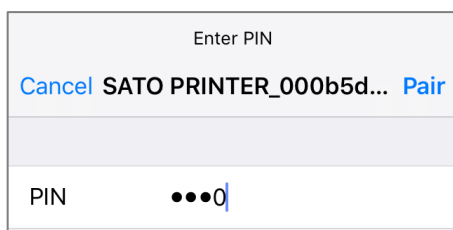
- Select "Bluetooth" from the "Settings" application of the iOS device.



* Bluetooth connection is limited to MFi certification model (MFi model is only PW208/PW208NX series, PW4NX, CT4-LX, HC4-LX as of October 2022.).



- Enter "PIN (set in the printer)" and tap "pair". PIN default value of PW208 series is "0000" (four zeros).

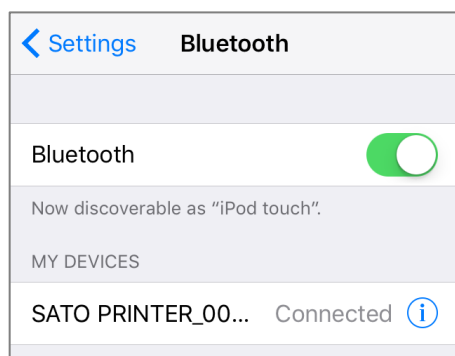


*If the Bluetooth authentication level of the printer is "Level 4," the pairing procedure will be different.

-Confirm that the 6-digit number (random) displayed in the [Bluetooth Pairing Request] dialog matches the 6-digit number displayed on the printer, and click [Pairing].

-The printer operates the buttons and touch panel to allow pairing.

- When pairing is successful, it will be connected to the printer. It is complete when the printer is added to "MY DEVICES".



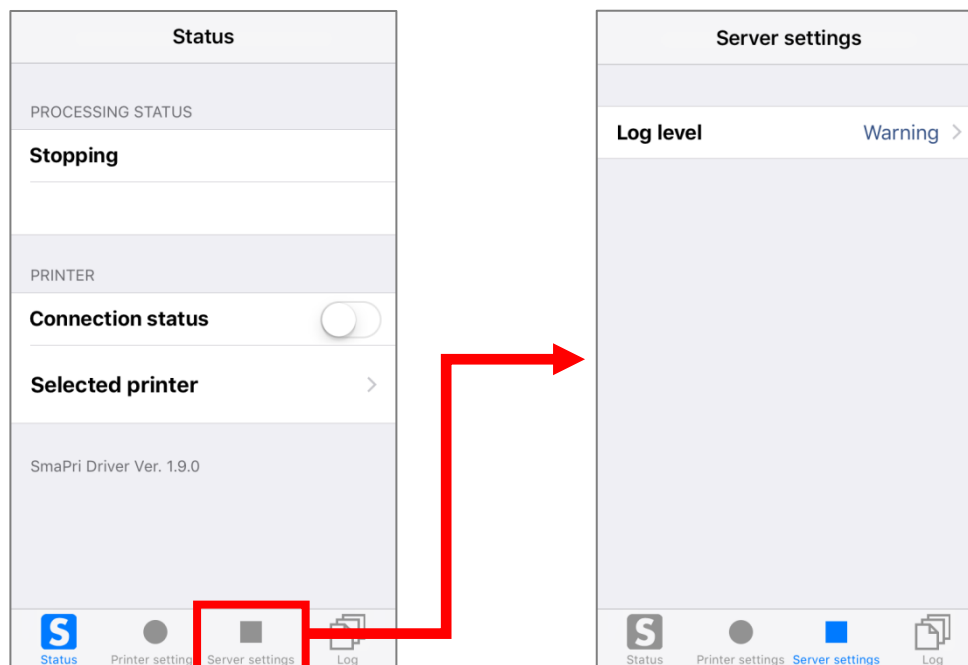
- Set the printer's "communication protocol" and SmaPri Driver "printer model" to the same settings.

3-4**Administration screen (server settings)**

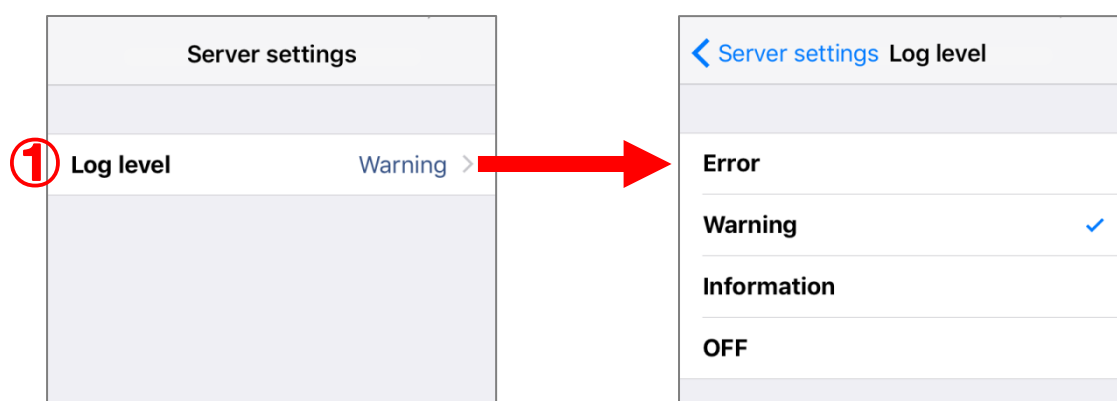
Configure log level.

- How to Start

- Select "Server settings" at "Administration screen (status)".

**- Custom URL scheme**

smapri:/View/ServerSettings

- Function Description

1) Log level

To set the operation log output level.

The default is "**Information**"(Ver.1.9.5 or later). All entries are output to the log.

To check the contents of the log, see "[Administration screen \(Log\)](#)".

Every custom URL scheme requests will be saved into log when selects "information" log level. This may cause storing user name and password for basic authentication, GET request parameters and data as plain text in the log. Do not set to "information" if security is concerned.

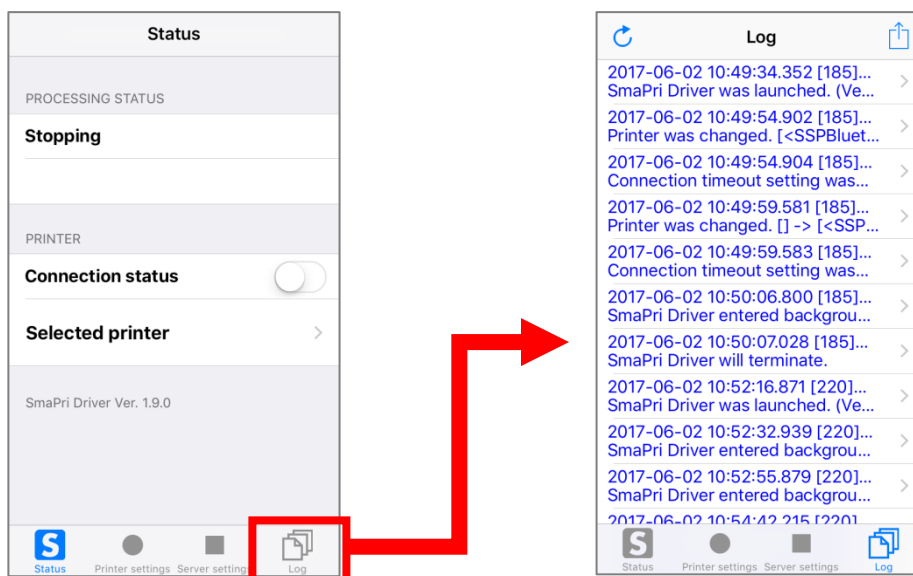
| Content | Log level | | | |
|---|-----------|-------|--------------|------------------|
| | OFF | Error | War- ning | Infor- mation |
| <ul style="list-style-type: none"> - Smapri Driver start and stop - Communication error with printer - Other serious errors | No | Yes | Yes | Yes |
| <ul style="list-style-type: none"> - Errors for custom URL scheme requests and parameters (error content) - Errors when modifying settings with the administration screen | No | No | Yes | Yes |
| <ul style="list-style-type: none"> - Custom URL scheme request content and result - Modifying setting with the administration screen | No | No | No | Yes |

3-5**Administration screen (log)**

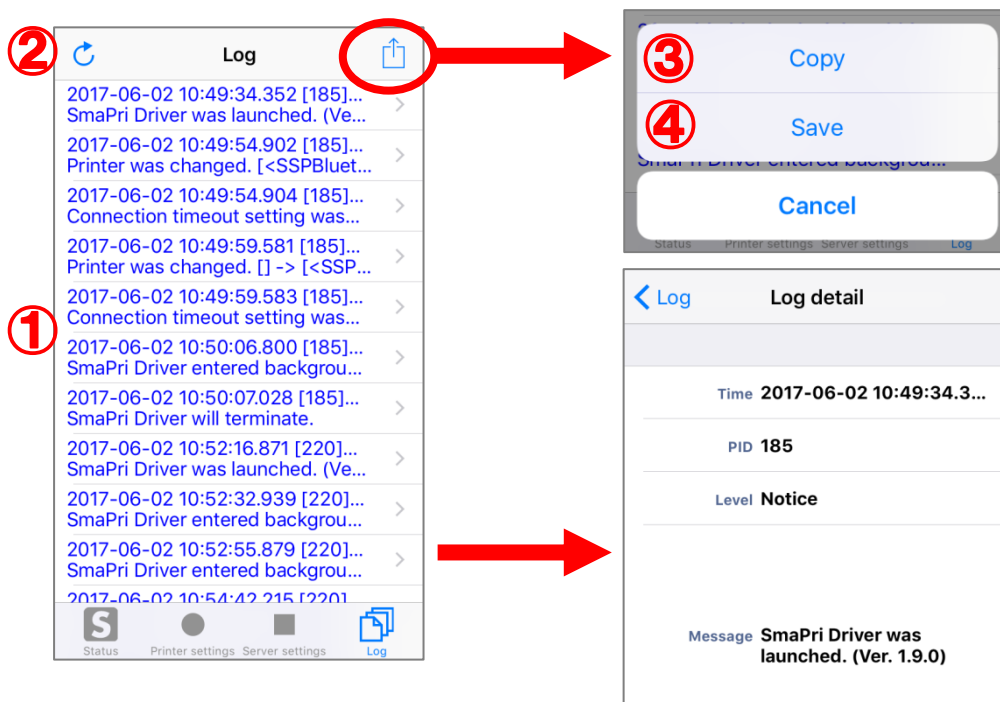
Display log.

- How to Start

- Select "Log" on "Administration screen (status)".

**- Custom URL scheme**

None

- Function Description

1) Log list

Shows logs last 246 entries. When each log is tapped, log detail is shown.

- * The log is saved up to about 80 KB at maximum. Since contents not shown in the log list are also internally recorded, please save the log to a file and check it. Since the system refers to the system logs that is shared with other processes, the actual logs displayed may be fewer than 256 or may disappear occasionally.

The log is recorded in the following format:

2024-06-25 17:52:06.289 [200]...
SmaPri Driver was launched. (Ver.... >

| Log information | Content |
|------------------------------|---|
| 1st row (space delimited) | Log date and time, process ID, Log level (<Error>: Error, <Warning>: Warning, <Notice>: Information) |
| 2nd row and later | Detail information (e.g., the content of the request (Maximum 1024 bytes) received from the host application, the content of the error and its cause) |

Text color of logs is different by severity. **Error** is red, **Warning** is yellow, and **Information** is blue. **Log level** can be changed with [Administration screen \(server settings\)](#).

[Example of error and warning log]

2024-06-25 18:06:11.334 [200] <... >
The format archive file is registere...

2024-06-25 18:06:11.354 [200] <... >
Connecting to the printer...(SSPT...

2024-06-25 18:06:11.358 [200] <... >
Failed to connect to the printer. (<...

2024-06-25 18:06:16.377 [200] <... >
Operation was cancelled.

2024-06-25 18:06:16.381 [200] <... >
Action response: result=NG, funct...

2024-06-25 18:06:17.163 [200] <... >
SmaPri Driver entered background.

2) Update

To refresh the log list to show the latest log.

3) Copy

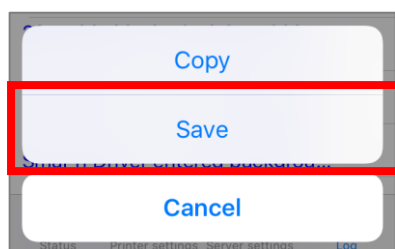
Copy the displayed log information (maximum 256 entries) to pasteboard.

4) Save

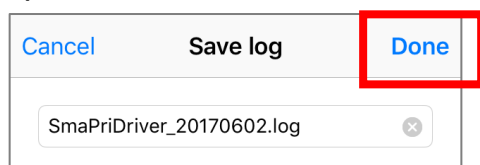
Save the log information to a file.

- Save the log to a file

1) Select "Save".



2) Select "Done".

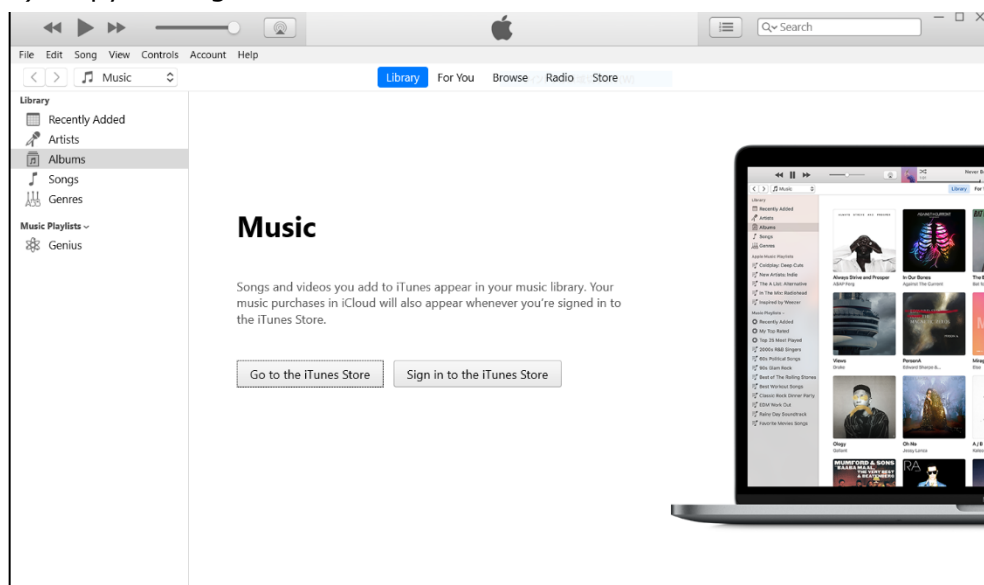


Note

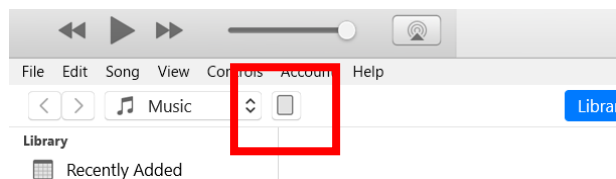
- The default file name is "SmaPriDriver_YYYYMMDD.log".

3) A Log file is saved in the device's storage.

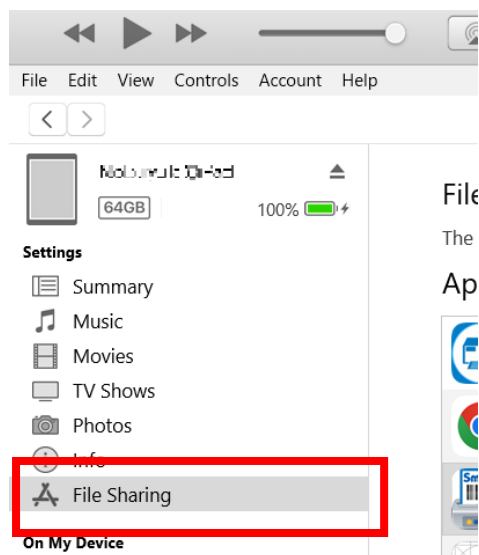
4) Copy the log file to PC. Connect the device to the PC with a USB cable and launch iTunes.



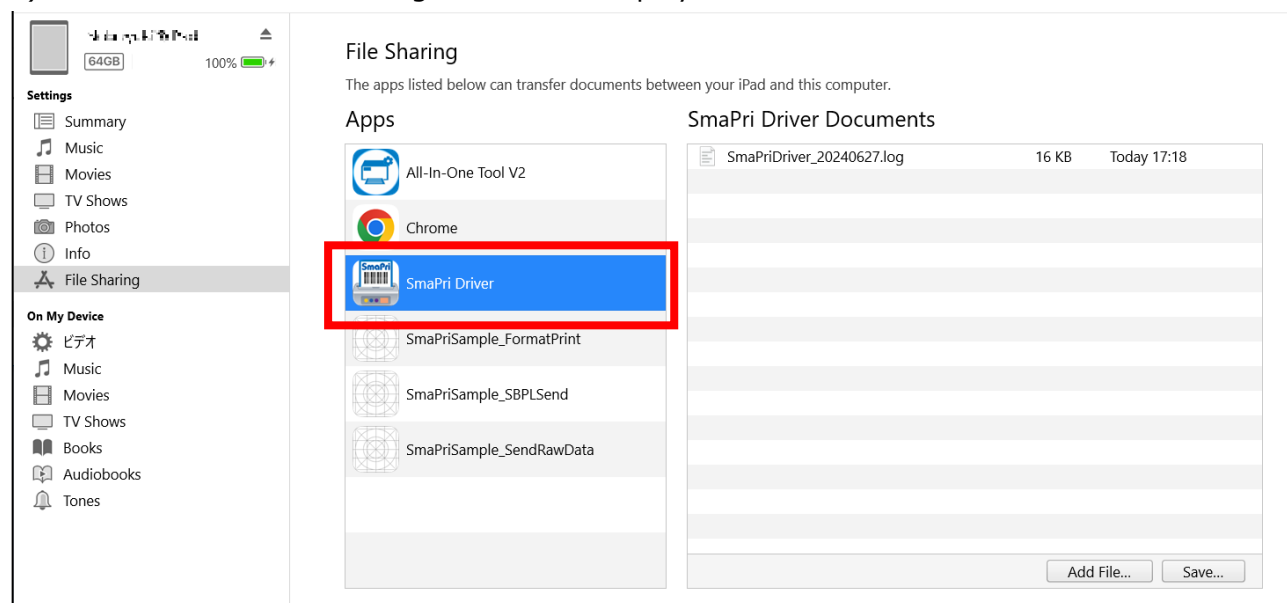
5) Select the device icon in the top left of the screen.



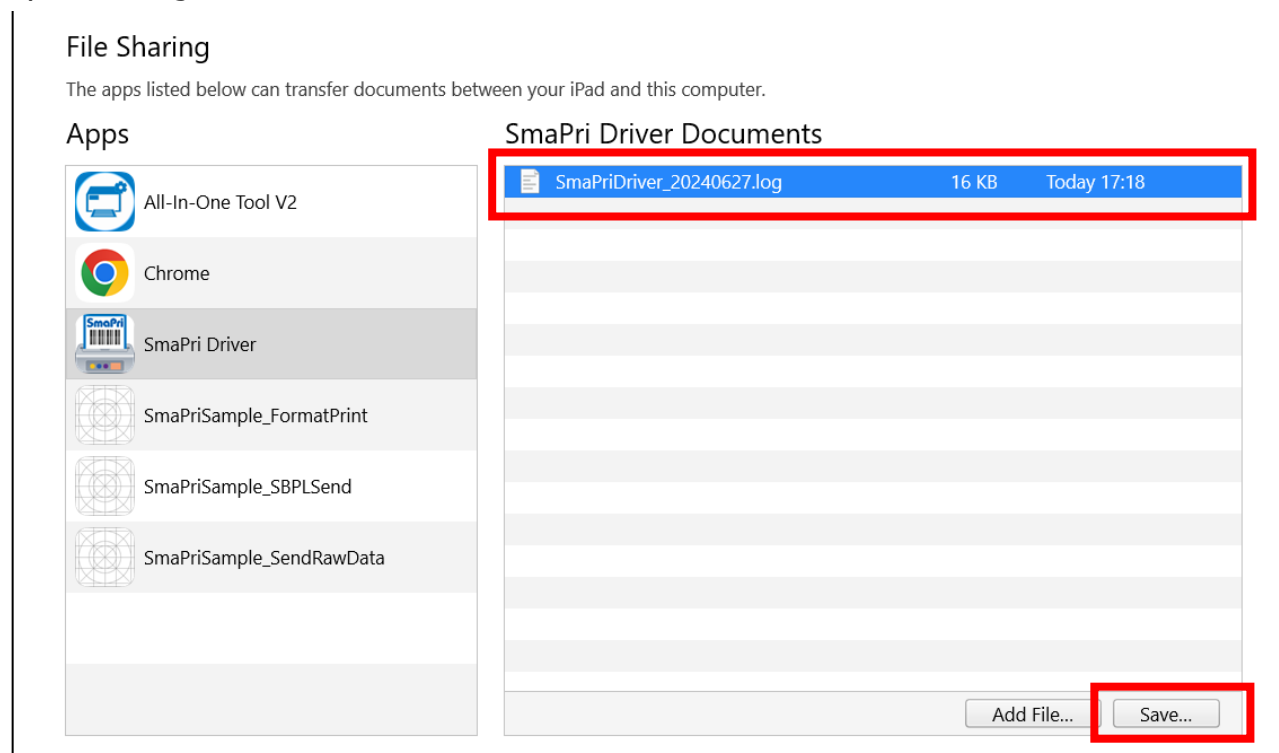
6) Select "File Sharing".



7) Select "SmaPri Driver". Log files will be displayed.



8) Select log file and click “Save”.



9) Select the folder where to save the log file. The log file will be copied to PC.

10) The log file can be opened in a text editor such as Notepad.

```

SmaPriDriver_20240625.log X
C:\Users\A0004583\Downloads> SmaPriDriver_20240625.log
20 SmaPri Driver entered background.
21
22 2024-05-14 13:59:09.825 [284] <Notice>
23 Printer was changed. [] -> [<SSPTcpPrinter: 0x2820aaed0> [HostName:192.168.1.11, Port:9100, Protocol:Status4, CrcEnabled:NO
24
25 2024-05-14 13:59:38.258 [284] <Notice>
26 SmaPri Driver entered background.
27
28 2024-05-14 13:59:55.006 [284] <Notice>
29 Opened URL: smapri:/Format/Print?__format_archive_url=http%3A%2F%2Fdc.sato.co.jp%2Fsmapri%2Fsample%2Fhtml_ios%2FSample.spfmt
30
31 2024-05-14 13:59:55.164 [284] <Notice>
32 Information for format archive file (http://dc.sato.co.jp/smapri/sample/html_ios/Sample.spfmtz) was retrieved. (Last modifie
33
34 2024-05-14 13:59:55.165 [284] <Notice>
35 Specified format archive file was not downloaded because of the same as registered one.
36
37 2024-05-14 13:59:55.179 [284] <Notice>
38 Connecting to the printer...(<SSPTcpPrinter: 0x2820aaed0> [HostName:192.168.1.11, Port:9100, Protocol:Status4, CrcEnabled:NO
39
40 2024-05-14 13:59:55.181 [284] <Error>
41 Failed to connect to the printer. (<SSPTcpPrinter: 0x2820aaed0> [HostName:192.168.1.11, Port:9100, Protocol:Status4, CrcEnabl
42
43 2024-05-14 14:00:06.218 [284] <Notice>
44 Connecting to the printer...(<SSPTcpPrinter: 0x2820aaed0> [HostName:192.168.1.11, Port:9100, Protocol:Status4, CrcEnabled:NO
45
46 2024-05-14 14:00:06.431 [284] <Notice>
47 Connected to the printer. (<SSPTcpPrinter: 0x2820aaed0> [HostName:192.168.1.11, Port:9100, Protocol:Status4, CrcEnabled:NO C
48

```

3-6**Application integration using Custom URL scheme**

Display administration screen using custom URL scheme.

You can perform SmaPri Driver functions (various "Administration screen") from other applications or any web browser using custom URL scheme.

- Custom URL scheme List

| URI | Function | Supplement |
|------------------------------|--|------------|
| smapri:/View/Status | Administration screen (status). | |
| smapri:/View/PrinterSettings | Administration screen (printer settings) | 1 |
| smapri:/View/ServerSettings | Administration screen (server settings) | 2 |

Supplement 1: Administration screen (printer settings)

- The following message appears when the spooler is processing print jobs.
"Printer setting cannot be changed while spooling. Wait for printing all print jobs or pause the spooler to change settings."
- The following message appears when SmaPri Driver is connected to a printer.
"Printer will be disconnected. Do you want to continue?"
 When you tap "OK", printer will be disconnected and the printer settings screen appears.
 When you tap "Cancel", the printer settings screen appears but no changes can be made.

Supplement 2: Administration screen (server settings)

The following message appears during printing, and the administration screen (status) will be displayed.

"Server settings screen cannot be opened while SmaPri Driver is processing requests."

- Request example

Call "Administration screen (status)" from web browser (by HTML link).

```
<p><a href="smapri:/View/Status">SmaPri status</a></p>
```

3-7**File transfer to device storage**

Transfer some files with iTunes.

You can use iTunes to copy files between your PC and your iOS device. This chapter describes the procedure for transferring the following files.

- Format file (*.spfmtz)

If you want to place the format file on your device, you need to copy it with iTunes.

For details, please refer to "Custom URL scheme Reference".

- Log file (SmaPriDriver_YYYYMMDD.log)

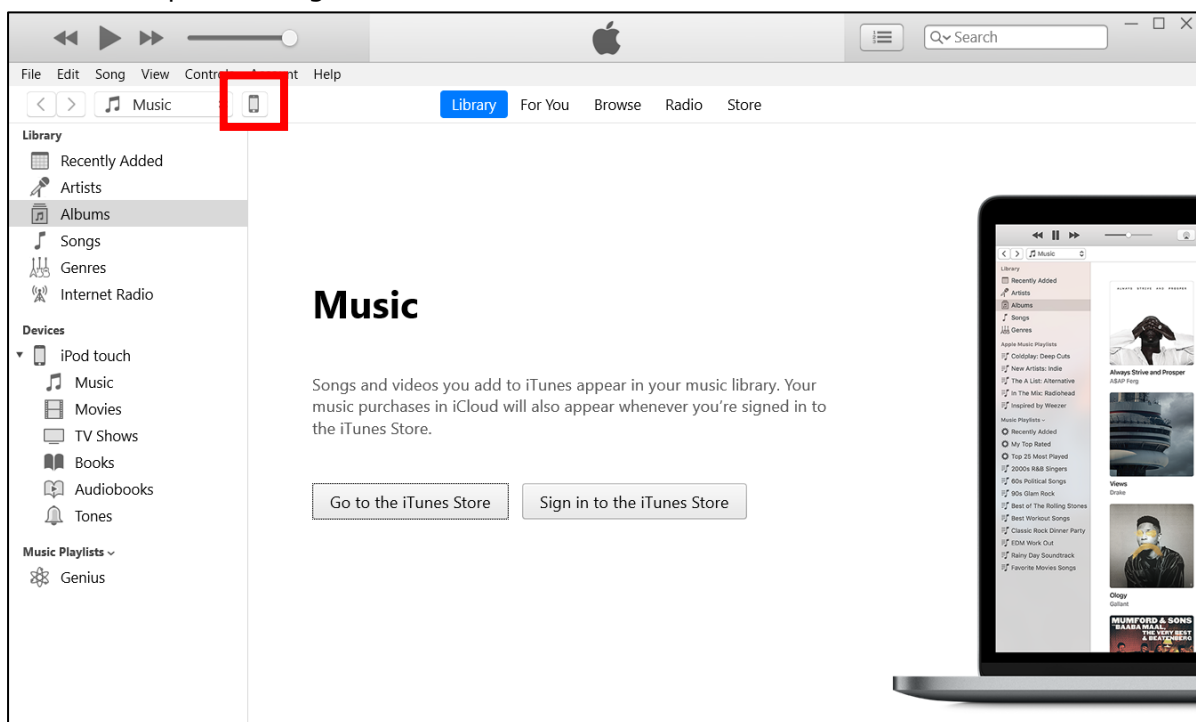
For the procedure for saving the log file, please refer to "[3-5. Administration screen \(log\)](#)".

- Transfer files

With iTunes 12 as an example, explain how to transfer files between iOS device and computer.

1) Display iOS device menu on iTunes

Connect iOS device to computer with USB cable. Click the button that appears iTunes top-left when the computer recognizes iOS device.

**2) Click "File Sharing"**

Click the "File Sharing" that shows iTunes menu.

When you scroll the displayed screen down to the bottom, there is a "File Sharing".

3) Click "SmaPri Driver"

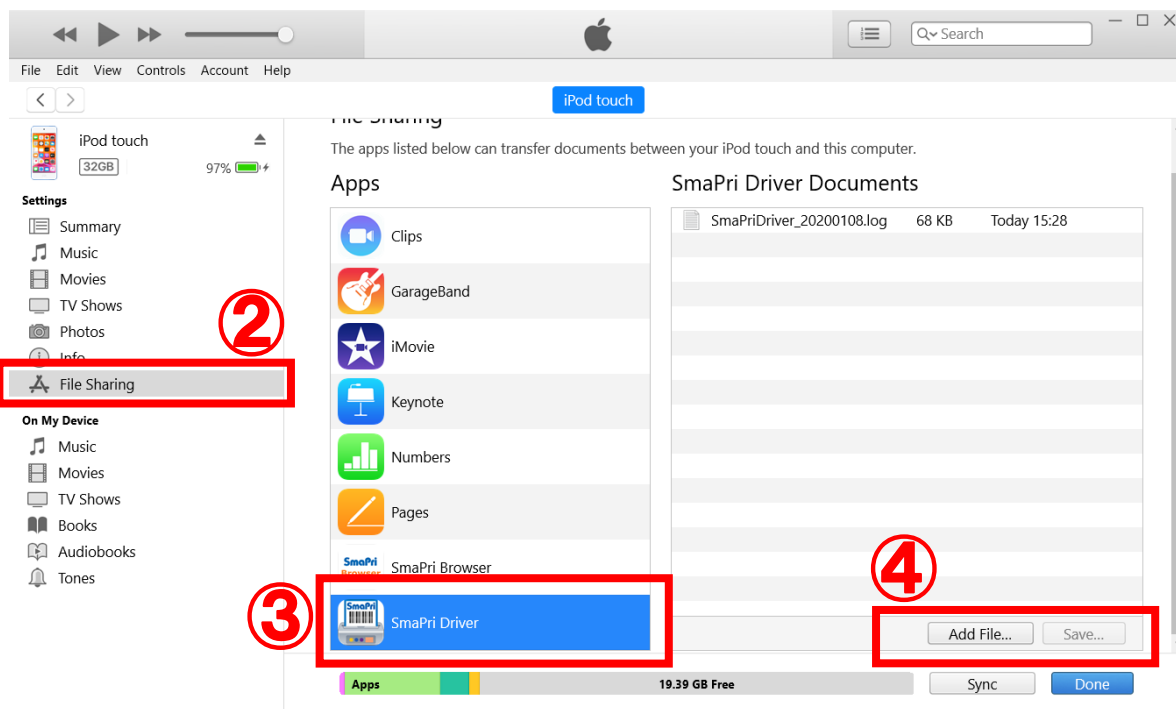
Click "SmaPri Driver" to select in App list.

4) File transfer

Displays file list on "SmaPri Driver Documents".

Click "Add File..." button to transfer files from computer to iOS device.

Click "Save ..." button to transfer files from iOS device to computer.



3-8**Format registration by file import**

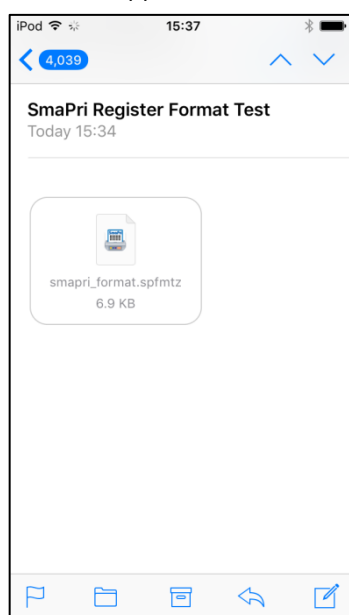
Open the format file with another application and register it in SmaPri Driver.

You can register a format file downloaded by mail application, browser application, etc. to SmaPri Driver.

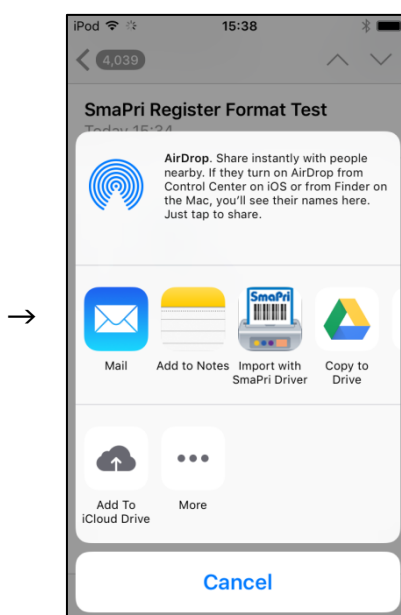
- Format registration from the mail application

The figure below is in case of the iOS 10 standard mail application.

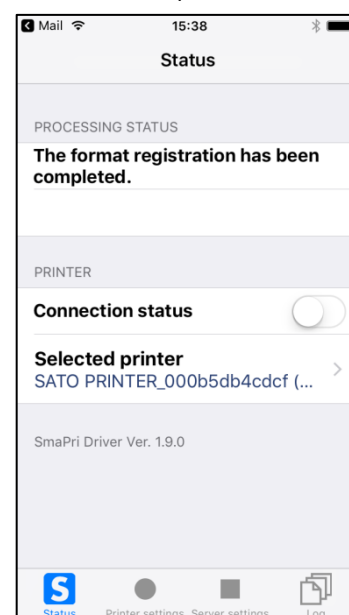
Open format file from mail application.



Import with SmaPri Driver



Format registration completed

**Notes**

Due to Safari specifications, file import does not work correctly in Safari. Please use another browser app such as Chrome.