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# SmaPri Driver Developer Manual

## Driver Settings (iOS)

**SATO CORPORATION**

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# Contents

<b>Contents</b> .....	<b>1</b>
<b>Attention</b> .....	<b>2</b>
<b>Chapter3: Driver Settings (iOS)</b> .....	<b>3</b>
3-1. Install / Uninstall.....	4
- Newly install .....	4
- Uninstall.....	4
3-2. Administration screen (status) .....	5
- How to Start.....	5
- Custom URL scheme.....	5
- Function Description.....	5
3-3. Administration screen (printer settings).....	7
- Custom URL scheme.....	7
- Function Description (Printer settings).....	7
- Function Description (Bluetooth settings).....	8
- Function Description (LAN settings).....	8
- Bluetooth pairing .....	11
3-4. Administration screen (server settings).....	12
- Custom URL scheme.....	12
- Function Description.....	12
3-5. Administration screen (log).....	14
- Custom URL scheme.....	14
- Function Description.....	14
3-6. Application integration using Custom URL scheme.....	17
- Custom URL scheme List.....	17
- Request example .....	17
3-7. File transfer to device storage.....	18
- Transfer files.....	18
3-8. Format registration by file import.....	20
- Format registration from the mail application.....	20

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## Chapter:3

# Driver Settings (iOS)

**3-1****Install / Uninstall**

- Newly install -Overwrite install -Uninstall

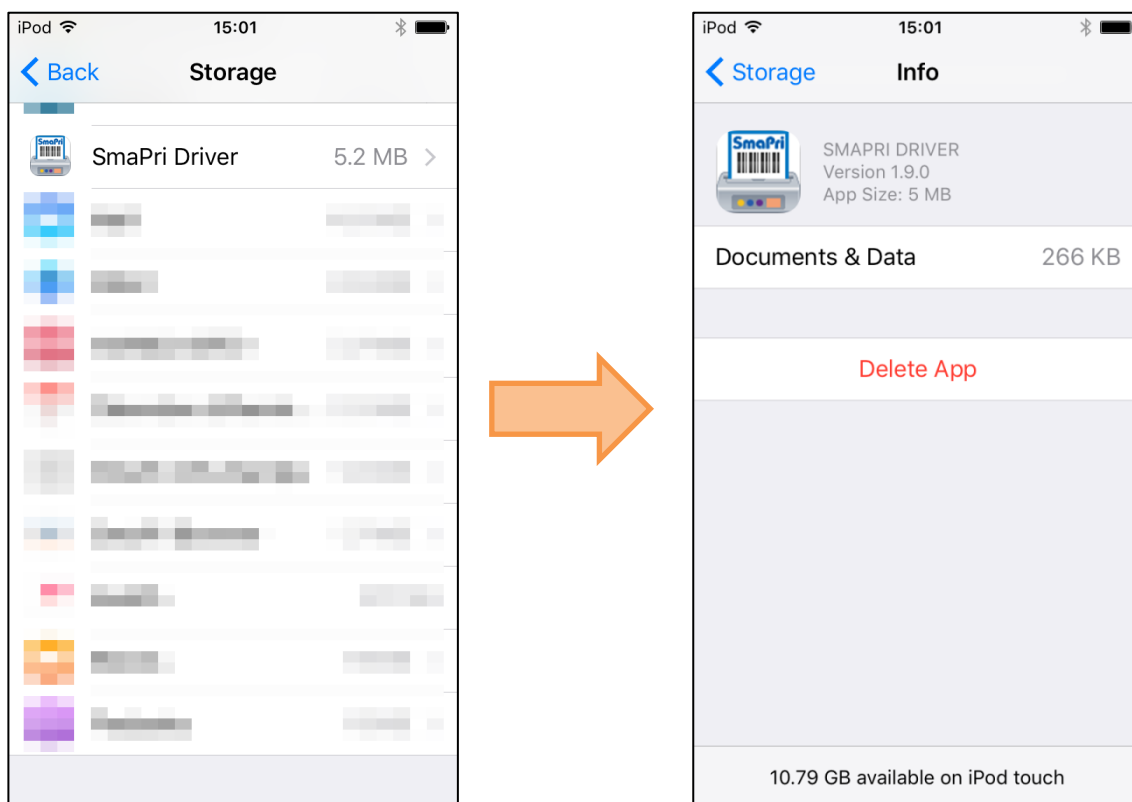
**- Newly install**

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] > [Storage] > [Manage Storage]
- 2) From the list of applications, select "SmaPri Driver" and tap the "Delete App" button that appears to uninstall the SmaPri Driver application.



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

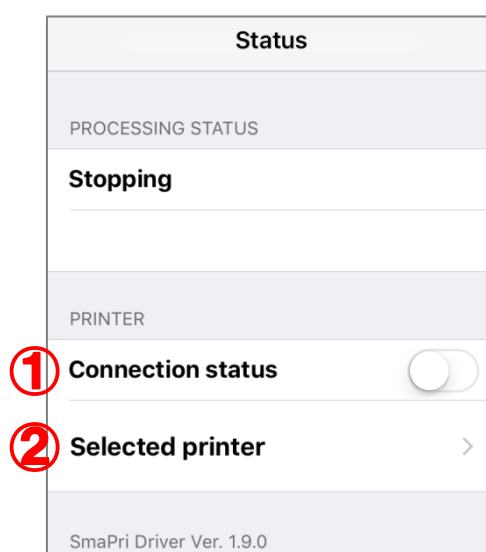
The printer status and connection status are displayed.

**- How to Start**

- Select "SATO SmaPri Driver" on the application list.
- Select "SATO SmaPri Driver" from the status bar.

**- 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.

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.

SmaPri Driver will connect to printer automatically for processing print requests or sending SBPL commands. It will **disconnect automatically** if there is no communication with the

printer for the time duration specified in the "Disconnection timer" setting under printer settings.

## **2) Selected printer**

Shows the printer IP address and TCP Port number specified as the connection destination.

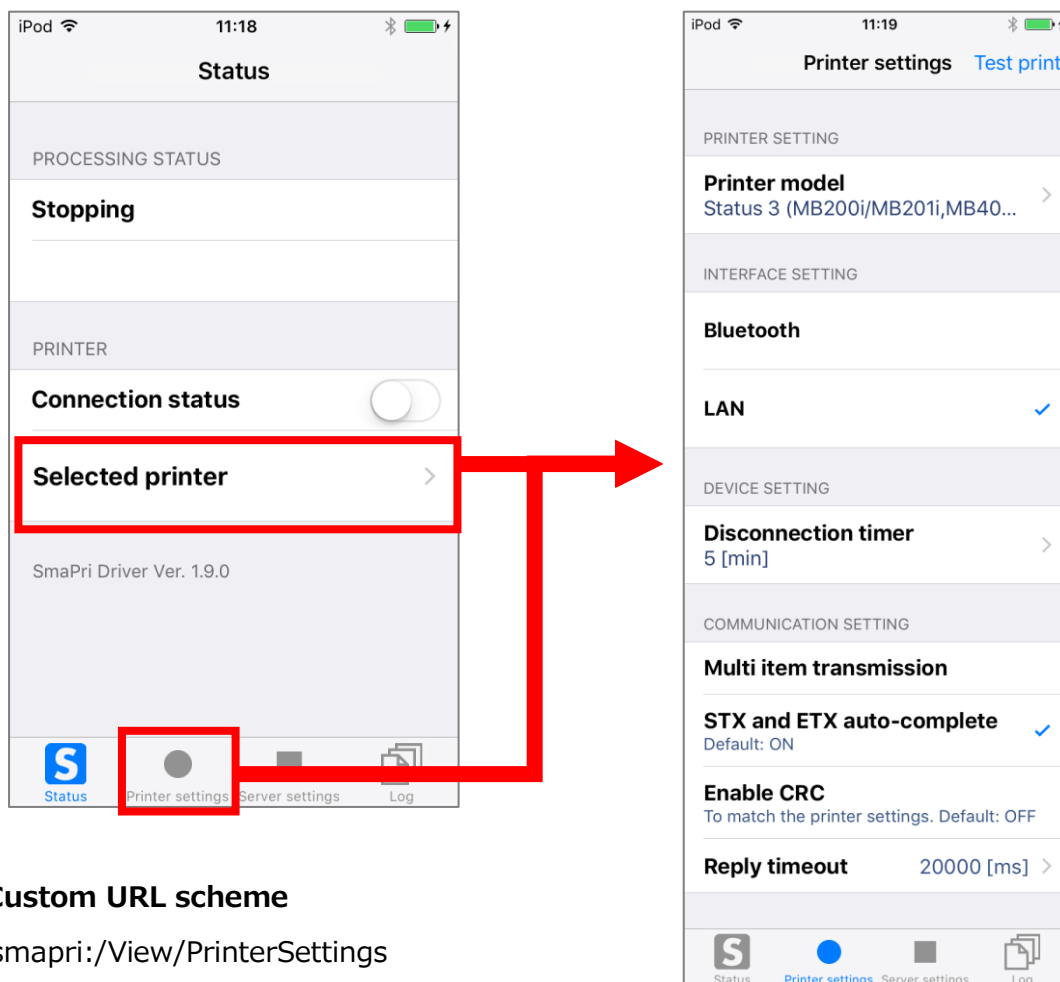
You can tap this to display the "[Administration screen \(printer settings\)](#)".

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

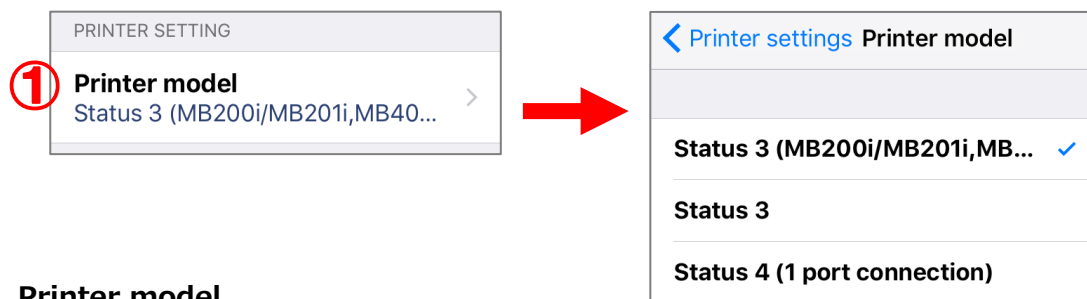
Configure printer settings including printer model, Bluetooth and LAN connections.

**- How to Start**

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

**- Custom URL scheme**

smapri:/View/PrinterSettings

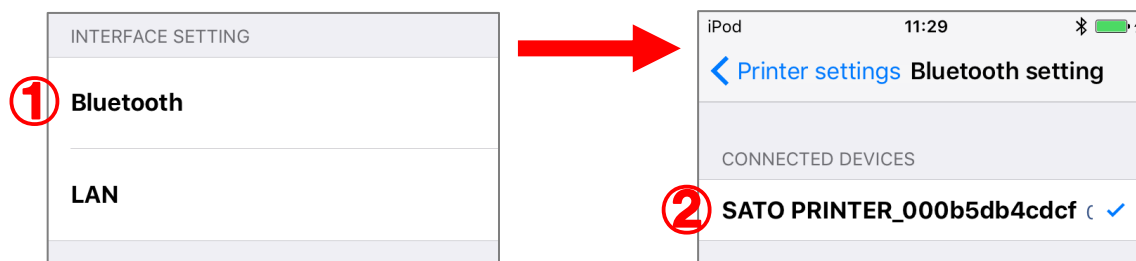
**- Function Description (Printer settings)****1) Printer model**

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

The default is "Status 3 (MB200i/MB201i,MB400i/MB410i)".

\*Other printer (e.g. PW208) defaults are "Status 4".

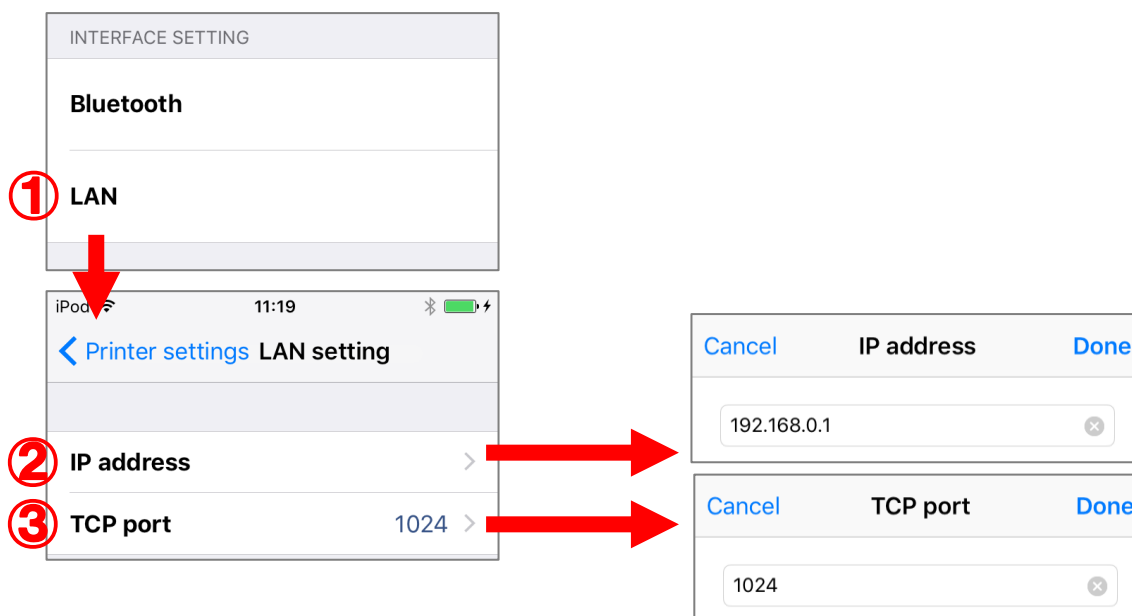


**- Function Description (Bluetooth settings)****1) Bluetooth connection**

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**

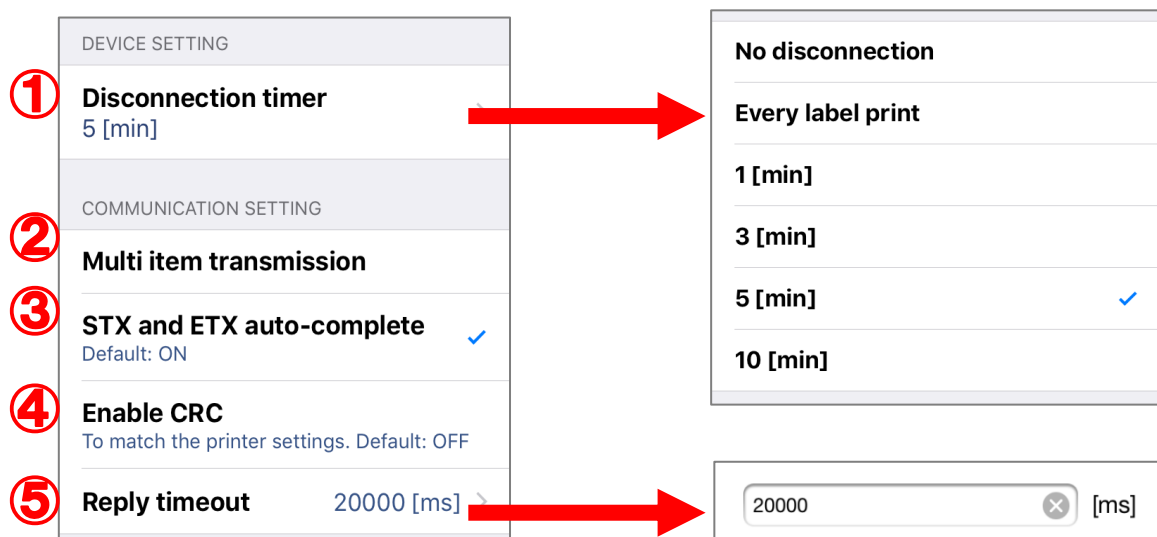
Connect to the printer via the LAN (TCP/IP).

**2) IP address**

Set the IP address.

**3) TCP port**

Set the TCP port number. The default is "1024" and that value usually does not need to be changed. Case of "Printer model" value is "Status 4", set "TCP port" value to "9100".

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

Set the time to automatically disconnect from the printer. The default is "5 [min]".  
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.

**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**

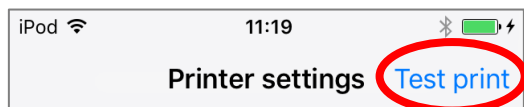
Set the CRC check. The default is "**Disabled**".

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.

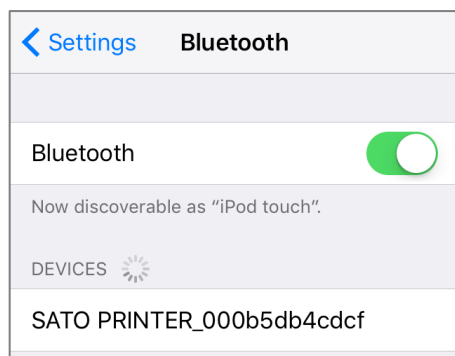
- MB2i series and MB4i series use "Status 3 (MB200i/MB201i,MB400i/MB410i)".
- PW208 series use "Status 4" or "Status 3".
- Other models use "Status 4" or "Status 3".

## - Bluetooth pairing

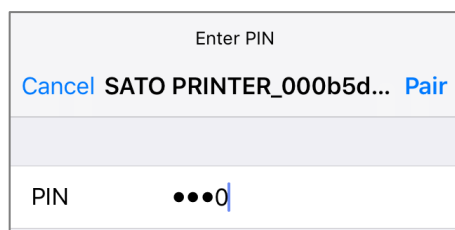
- Select "Bluetooth" from the "Settings" application of the iOS device.



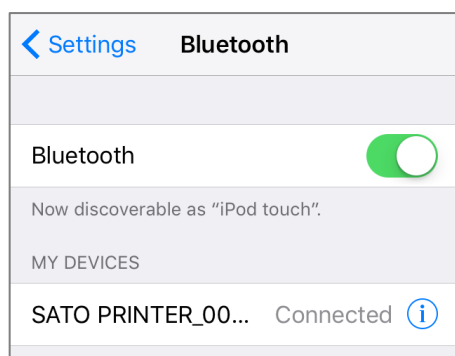
\*Bluetooth connection with iOS device can be done only with PW208 of MFi certification acquisition model.  
(as of February 2016)



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



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



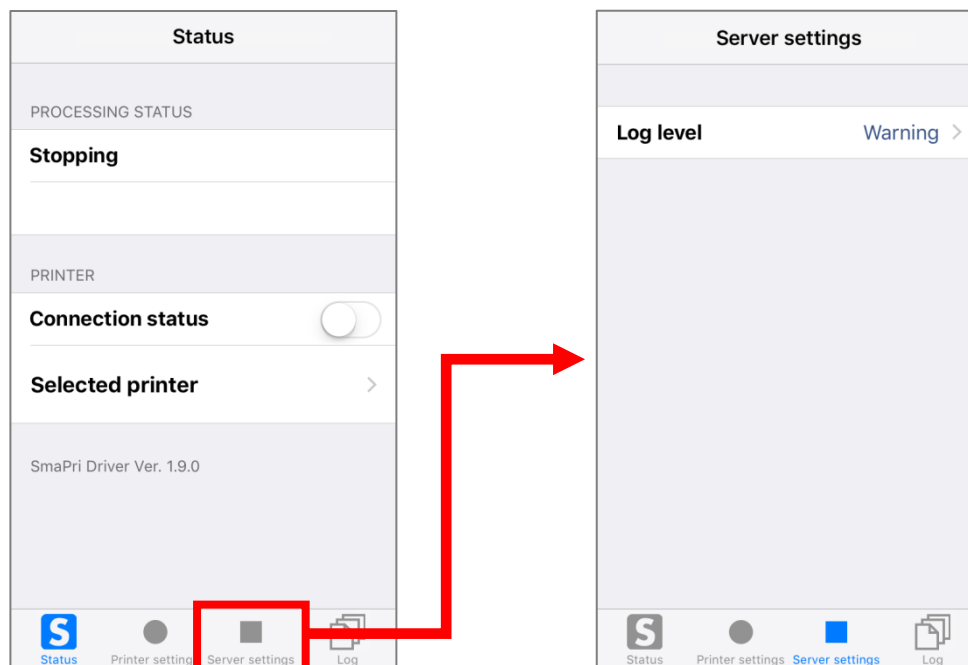
- Set the printer's "communication protocol" and SmaPri Driver "printer model" to the same settings. The initial value of "communication protocol" of PW 208 is "status 4".

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

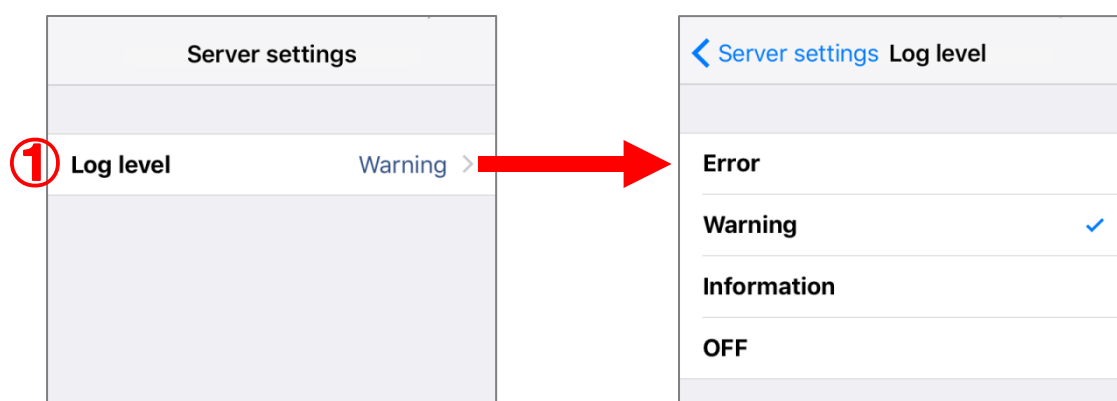
Configure log level.

**- 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 "**Warning**". Entries that correspond to error and warning 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.

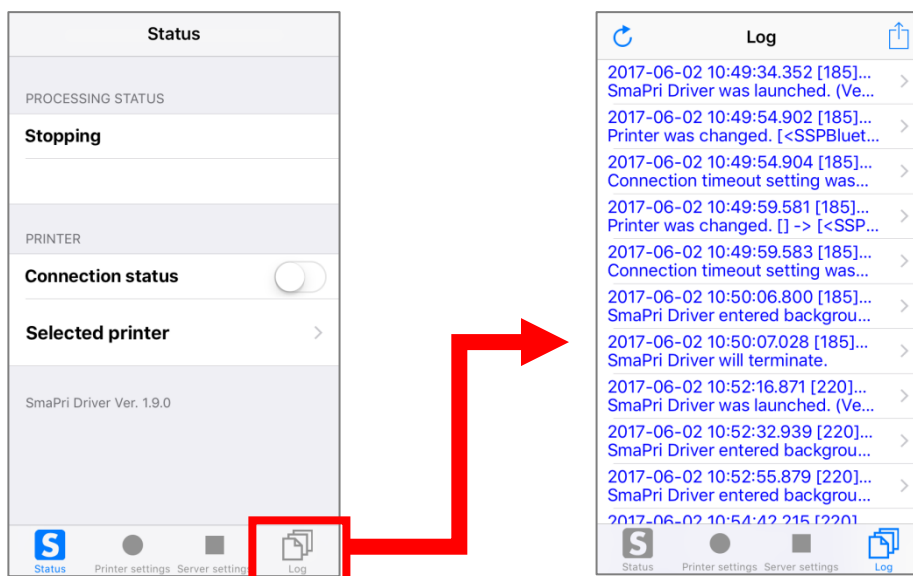
Content	Log level			
	OFF	Error	Warning	Information
<ul style="list-style-type: none"> <li>- Smapri Driver start and stop</li> <li>- Communication error with printer</li> <li>- Other serious errors</li> </ul>	No	Yes	Yes	Yes
<ul style="list-style-type: none"> <li>- Errors for custom URL scheme requests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

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

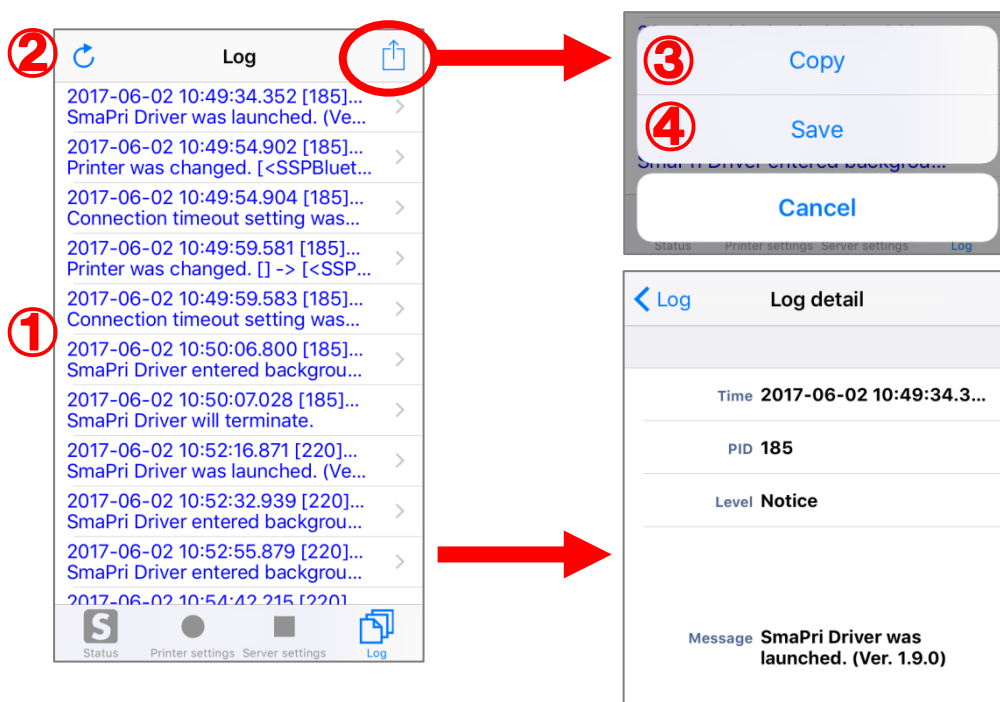
Display log.

**- How to Start**

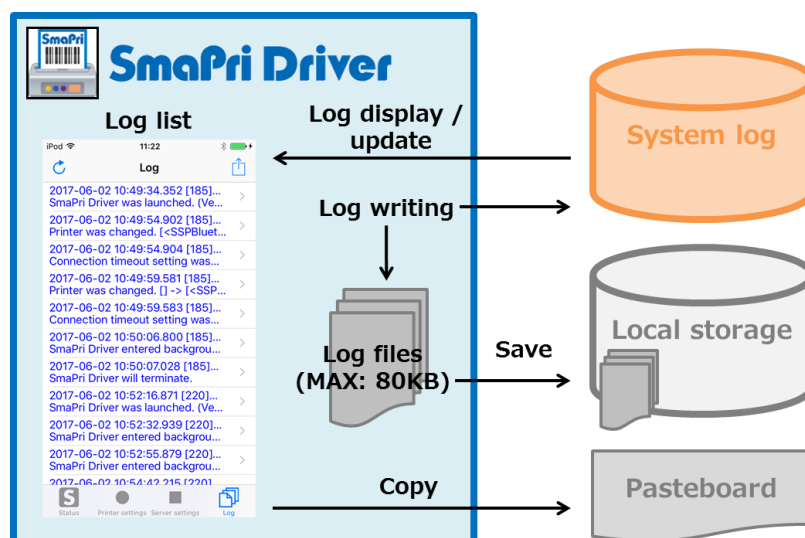
- Select "Log" on "Administration screen (status)".

**- Custom URL scheme**

None

**- Function Description**

□ グ機能の概要図



## 1) Log list

Shows log information and content. When each log is tapped, log detail is shown.

The log list shows the last 256 entries. 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.

- \* Since contents not shown in the log list are also internally recorded, please save the log to a file and check it. The log is saved up to about 80 KB at maximum.
- \* Logged custom URL scheme requests are limited to 1024 characters per record (and may be truncated as necessary).

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 \(server settings\)](#).

Log information		内容
1st row (space delimited)	Output date	YYYY-MM-dd
	Output time	HH:mm:ss
	Process ID	PID(decimal)
	Severity	Error, Warning, Notice(Information)
2nd row and later	Log content	String that expresses the log content.

## 2) Update

To refresh the log list to show the latest log.



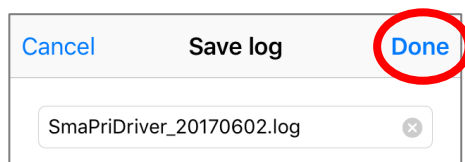
### 3) Copy

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

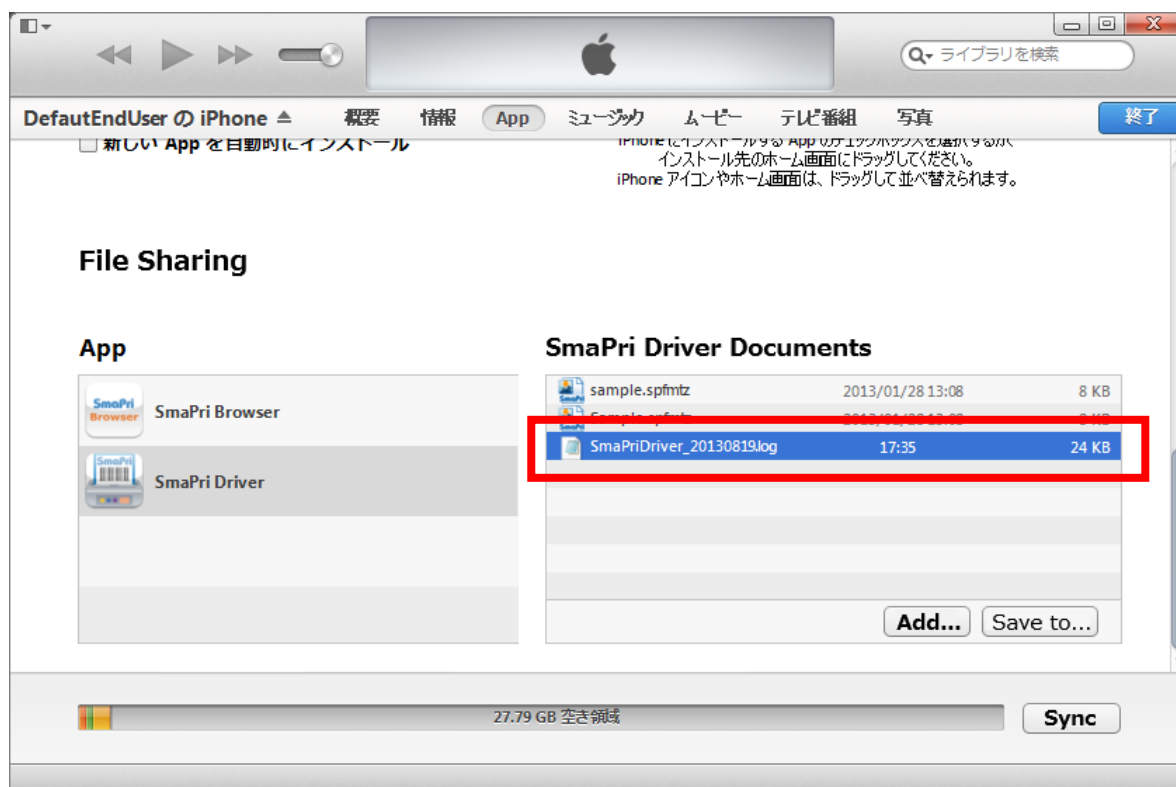
### 4) Save

Save the log information to a file.

Log information that could not be displayed can be checked by saving the log to file. Select the output destination, enter the file name (the default is **SmaPriDriver\_YYY/MM/DD.log**), and tap "OK" to save.



You can transfer the saved log file to your computer using iTunes.



**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 transfer files between iOS-device to development-machine by iTunes file sharing. For SmaPri Driver (for iOS), it is used for transfer of "format file", "log file".

- Format file (\*.spfmtz)

Register a format file in advance before printing instead of registering a format during printing.

Usually, you register the format file at the time of printing. For details, please refer to "Print Format" or "Register Format" in "Custom URL scheme Reference".

- Log file (\*.log)

The log file is saved in the device storage when saving. To view the log file, please use iTunes to transfer the log file from the iOS-device to the computer.

### - Transfer files

With iTunes 11 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-right when the computer recognizes iOS device. (Not to press the eject button.)



## 2) Click "App" button

Click the "App" button 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..." button to transfer files from computer to iOS device.

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



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

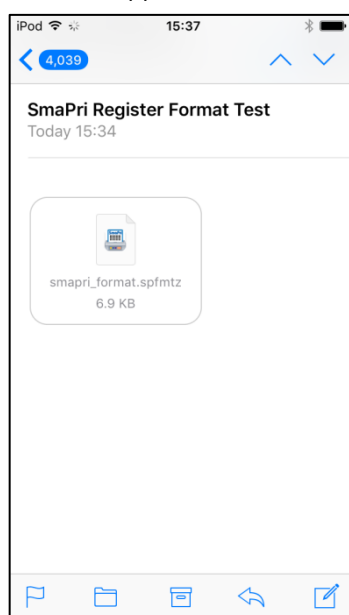
Open the format file with another application and register it in SmaPri Driver.

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

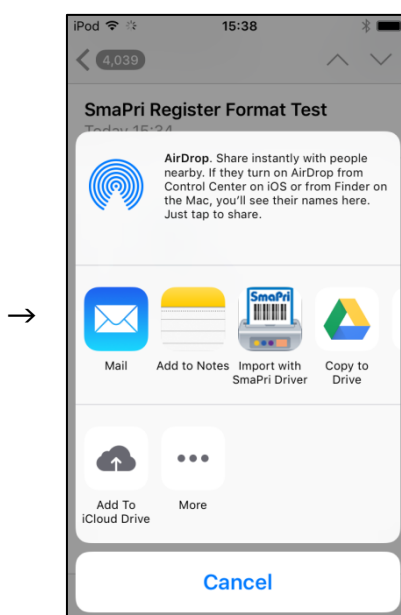
**- Format registration from the mail application**

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

