
SmaPri Driver Developer Guide

HTTP Reference

SATO CORPORATION

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Target Version

This document is intended for the following software and version.

Please note that some functions may not exist or may have been changed depending on the version.

SmaPri Driver (Android)	Version 1.13.0
SmaPri Driver (Windows)	Version 1.1.1.0

Chapter 5

HTTP Reference (Android/Windows)

5-1**List of Functions / How to use**

The HTTP POST/GET method is used to utilize various functions.

- Function List (Action Path List)

W: Windows, A: Android

- Function (Action Path)	Overview	W	A
Sending/Receiving Data			
Format Printing (/Format/Print)	Specifies the layout "Record number" included in the format file (*.spfmtz) and input item data, and prints the format.	<input type="radio"/>	<input type="radio"/>
Send SBPL Command (/Printer/SendCommand)	Sends the SBPL Command to the printer.	<input type="radio"/>	<input type="radio"/>
Send Data (/Printer/SendRawData)	Sends and receives data to and from the printer.	<input type="radio"/>	<input type="radio"/>
Get Status			
Check Status (/Printer/Status)	Gets the printer status.	<input type="radio"/>	<input type="radio"/>
Check Spooler Status (/Spooler/Status)	Gets the spooler status.	<input type="radio"/>	<input type="radio"/>
Format Information			
Register/Acquire Format (/Format)	Registers the specified format file (*.spfmtz file) in SmaPri Driver, and gets all of the incorporated format information.	<input type="radio"/>	<input type="radio"/>
Get Format Input Item (/Format/InputItem)	Specifies the layout "Record number" included in the format file (*.spfmtz), and gets the input item information.	<input type="radio"/>	<input type="radio"/>
Font Information			
Get Font Information (/Font).	Gets information from the font file (*.ttf) cached in the device.	<input type="radio"/>	<input type="radio"/>
Font Clear (/Font/Clear)	Deletes the font file (*.ttf) cached in the device.	<input type="radio"/>	<input type="radio"/>
Setting/Getting of Output Destination Port			
Get Output Destination Port (/Printer/Port)	Gets the set output destination port (output destination printer).	<input type="radio"/>	<input type="radio"/>
Set Output Destination Port (/Printer/SetPort)	Sets the output destination port (output destination printer).	<input type="radio"/>	<input type="radio"/>
Spool Clear			
Spool Clear (/Spooler/Clear)	Deletes all of the jobs from the spool.	<input type="radio"/>	<input type="radio"/>
Bluetooth Device Operations			
Bluetooth Device Search (/Bluetooth/Discover)	Searches for nearby Bluetooth devices.	<input type="radio"/>	<input type="radio"/>
Bluetooth Device Pairing (/Bluetooth/CreateBond)	Pairs with the specified Bluetooth device.	<input type="radio"/>	<input type="radio"/>
Remove Bluetooth Device Pairing (/Bluetooth/RemoveBond)	Removes pairing with the specified Bluetooth device.	<input type="radio"/>	-

- How to use

SmaPri Driver is operated by requests that consist of a combination of action path and parameters. For details on parameters that can be specified, see the pages on [common parameters](#) and action paths.

[Request Example]

```
http://localhost:8080/Format/Print?__format_archive_url=http://example.com/smapri-format.spfmtz&__format_id_number[0]=1&__format[0].operator=SATO&__format_id_number[1]=2&__format[1].productName=Tea&Sugar&__format[1].price=120&__success_redirect_url=http://example.com/success.html&__failure_redirect_url=http://example.com/failure.html
```

[Breakdown of Request Example]

Server Address	http://localhost:8080/
Action Path	/Format/Print
Parameter (Parameter name = Parameter value)	__format_archive_url=http://example.com/smapri-format.spfmtz
	__format_id_number[0]=1
	__format[0].operator=SATO
	__format_id_number[1]=2
	__format[1].product name=Tea&Sugar
	__format[1].Price=120
	__success_redirect_url=http://example.com/success.html
	__failure_redirect_url=http://example.com/failure.html

- Request using the GET method

A request is made to SmaPri Driver by the HTTP query string. The parameter name and parameter value need to be URL encoded in UTF-8 in the query string.

*Line breaks are used in the following example to make the text easier to read, but line break codes should not be used in the actual file.

[HTTP Request Example (Before URL Encoding)]

```
http://localhost:8080/Format/Print
```

```
?__format_archive_url=http://example.com/smapri-format.spfmtz
&__format_id_number[0]=1
&__format[0].operator=Sato
&__format_id_number[1]=2
&__format[1].productName=Tea&Sugar
&__format[1].price=120
```

Blue Bold Type: Parameter Name

Red Italic Type: Parameter Value

[HTTP Request Example (After URL Encoding)]

http://localhost:8080/Format/Print

```
?__format_archive_url=http%3a%2f%2fexample%2ecom%2fsmapi%2dformat%2espfmtz
&__format_id_number[0]=1
&__format[0].operator=Sato
&__format_id_number[1]=2
&__format[1].productName=Tea%26Sugar
&__format[1].price=120
```

- Request Using the POST Method

A request is made to SmaPri Driver by sending the HTTP form.

Data sent using the POST method needs to be specified as UTF-8 data.

[Example HTML POST Request Description]

```
<form method="post" accept-charset="UTF-8" action="http://localhost:8080/Format/Print">
  <input name="__format_archive_url" value="http://example.com/smapri-format.spfmtz">
  <input name="__format_id_number[0]" value="1">
  <input name="__format[0].operator" value="SATO">
  <input name="__format_id_number[1]" value="2">
  <input name="__format[1].productName" value="Tea&Sugar">
  <input name="__format[1].price" value="120">
  <input type="submit" value="Send Request">
</form>
```

Blue Bold Type: Parameter Name

Red Italic Type: Parameter Value

- Limitations/Precautions

- The order of response data in each action path may be changed and items added when the SmaPri Driver version is updated. Therefore, when processing response data, acquire the parameter value based on the parameter name.
- There are no limitations on the size of data handled by SmaPri Driver for 1 layout or 1 request, or the quantity of data specified in the index when multiple layouts are specified for format printing. The usable size differs depending on the specifications of the used device, usage conditions of other apps and OS specifications. Please note that when font embedding is specified in the layout or large graphics are specified, the request size in particular may become large when a large amount of data is issued at one time due to multiple layouts being specified. Implement sufficient checks in advance, and adjust the size and quantity for each environment.
- Operation cannot be guaranteed in cases where SmaPri Driver is forcibly terminated by shutting down the device, uninstalling, overwrite installing or forced stoppage by the setting app, etc. during issue processing or generation of a consecutive number, because corrupt data is sent to the printer and the consecutive number may be disrupted mid-way. When forcibly terminating the app, either stop the server function or check there is no data in the spooler before terminating.
- Some web browsers such as Microsoft Edge may deny access to the local host by default. Workaround is different depending on the web browser. Contact the web browser provider for details.

5-2**Common Parameters**

-List -XML -HTTP Redirect -HTML -XSL

There are request parameters common across all functions that specify the return format of execution results. Processing results are returned in XML format when no parameters are specified.

- Common Parameters List

Return Format	Data Specification Method	Parameter	Processing Results
XML	—	Not specified	OK/NG common
HTTP Redirect	URL	__success_redirect_url	OK
		__failure_redirect_url	NG
HTML	HTML	__success_html_text	OK
		__failure_html_text	NG
XML+XSL	XSL	__success_xsl_text	OK
		__failure_xsl_text	NG

When multiple common parameters are specified, they are prioritized in the following.

[1] HTTP Redirect [2] HTML [3] XML+XSL

- XML Format

If the return format is not specified, the execution results are returned in XML format as a response. For details on the response parameters, see the description for each function. The XML format response is explained in XPath format.

- HTTP Redirect Format

Specify the redirect destination URL. As a response, 303 is returned as a HTTP response code (302 for HTTP/1.0), and a redirect destination URL with response parameter added is returned to the Location header. When a web browser is used, the browser automatically transfers to the specified website. The response parameter name is the element name defined in XML format as a character string delimited by “. (dot)”, excluding the “response” root element. Repeated sections have an index such as [0] or [1] added after the item name, and the symbol “@” that denotes the XML format attributes is omitted.

Example HTTP Redirect Request

[Request Before URL Encoding]

```
http://localhost:8080/Format
  ?__format_archive_url=file:///sdcard/sample.spfmtz
  &__success_redirect_url=http://sato.co.jp
```

[Request After URL Encoding]

```
http://localhost:8080/Format
  ?__format_archive_url=file%3a%2f%2f%2fsdcard%2fsample%2espfmtz
  &__success_redirect_url=http%3A%2F%2Fsato.co.jp
```

Response Example for HTTP Redirect

```
HTTP/1.1 303 See Other
... (header omitted) ...
Location: [Specified URL]?productVersion=1.8.0
&result=OK&function=/Format&message=[Process Results Message]
&printer=PT208e
&SBPLVersion=06.10.0
&format[0].idNumber=1&format[0].name= Layout 1
&format[1].idNumber=2&format[1].name= Layout 2
&format[2].idNumber=3&format[2].name= Layout 3
... (header omitted) ...
```

Web browser links to the Location header URL^(*).

* Character string that has the processing results parameter added to the specified URL when requested.

- HTML Format

Specifies HTML for displaying the execution results.

HTML with the execution results data embedded is returned as a response. The “<%= **Response Parameter Name** %>” part in the specified HTML is replaced with the appropriate data in the same way as for the JSP format.

The response parameter name is the element name defined in XML format as a character string delimited by “. (dot)”, excluding the “response” root element. Repeated sections have an index such as [0] or [1] added after the item name, and the symbol “@” that denotes the XML format attributes is omitted.


Example HTML Request

*Line breaks are used in the following example to make the text easier to read, but in reality line breaks should not be used.

```
http://localhost:8080/Format
  ?__format_archive_url=file:///sdcard/sample.spfmtz
  &__success_html_text=[Specified HTML]
```

The HTML character string is directly specified in the parameter.

Example HTML Specification

<pre><html> <head> <title>result</title> </head> <body> <p><%= response.result %></p> <p><%= response.function %></p> <p><%= response.message %></p> <p><%= response.printer %></p> <p><%= response.SBPLVersion %></p> <p><%= response.format[0].idNumber %></p> <p><%= response.format[0].name %></p> <p><%= response.format[1].idNumber %></p> <p><%= response.format[1].name %></p> <p><%= response.format[2].idNumber %></p> <p><%= response.format[2].name %></p> </body> </html></pre>	<p>Response Parameter name Replacement</p> 	<p>Response</p> <pre><p>OK</p> <p>/Format</p> <p>[Process Results Message]</p> <p>PT208e</p> <p>06.10.0</p> <p>1</p> <p>Layout 1</p> <p>2</p> <p>Layout 2</p> <p>3</p> <p>Layout 3</p></pre>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

- XSL Format

Specifies XSL for displaying the execution results.

The specified XSL data is converted to XML format and returned as response data. It is used to dynamically generate HTML data in accordance with the response data and display the results in a web browser, etc.

5-3	[Send Data] Format Printing Specifies Record No. and input item data, and prints the format.	Supported OS	Android Windows
------------	--------------------------------------------------------------------------------------------------------	---------------------	--------------------

- Action Path**/Format/Print****- Basic Parameter**

Parameter	Type	Setting Value
__format_archive_url	Optional	Specify "format file (*.spfmtz) URL". - Can use HTTP (http://), FTP (ftp://), file (file://). - Either only "__format_archive_url" or "__format_archive_attach".
__format_archive_attach	Optional	Specify "file name" and "format file data". - Used for POST transmission of the format file as "multipart / form-data" from the application. - Either only "__format_archive_url" or "__format_archive_attach".
__format_id_number ^{*1}	Required	"Record No." of used layout
Item Name ^{*1*2}	Optional	Specify character strings for printing in input items in which "Key input (data)" is set. For "Fixed Graphic" objects (changed when issued), specify the graphic file URL or base 64 encoded character string of graphic data. PNG, JPEG, BMP and GIF image formats are supported. When this specification is omitted, the default value entered in SmaPri Designer is used.
Item Name.visible ^{*1}	Optional	"Do not print" can be specified for each print item. false :Not printed (Can only be specified for (*.spfmtz) format files created using SmaPri Designer VEr.1.17.0.0 or later)
(Print quantity) ^{*1}	Optional	Specifies the quantity issued. The name can be changed as desired for each project in SmaPri Designer, and the default name is "(Print quantity)". When omitted specify, it operates as "(Print quantity)=1".

^{*1} Adding an index [n] to the "__format_id_number" parameter enables multiple layouts such as header, details and footer to be printed when printing receipts, etc. For details, see "[Format Printing \(Multiple Layouts\)](#)".

^{*2} Problems may occur if the size of the data specified by the request is too large. See "[Limitations/Precautions](#)".

Only enabled when "__format_archive_url" is used

Parameter	Type	Setting Value
__format_archive_update	Optional	Update check of the format file is performed when the same URL as the previous time is specified. When "Update" is performed, the file is updated when either the file size or update date differs. noUpdate : No update (default value) update : Updated (with error notification) updateWithoutError : Updated (no error notification)

- Extended Parameter

Parameter	Type	Setting Value
__setting_print_operation	Optional	Printer Operation Settings aaaa,bb,cc aaaa (Cut operation) 0-9999 : Specified quantity is cut 0E : Ejection cut S : Follow format file settings Omitted : Follow printer settings *Specified quantity cut and ejection cut can be used simultaneously in combination (Example: 10E)
		bb (Print Density) 1-10 : Density level (some printer models are "1-5".) S : Follow format file settings Omitted : Follow printer settings
		cc (Print Speed) Value : Speed level S : Follow format file settings Omitted : Follow printer settings
__setting_print_offset	Optional	Correction value of print position ±aaa, ±bbb ±aaa (Vertical direction) Numerical value : Correction value (Unit: dot) Omitted : Follow printer settings
		±bbb (Horizontal direction) Numerical value : Correction value (Unit: dot) Omitted : Follow printer settings
__setting_job_name	Optional	Job name of print data Character string : Used as job name
		Omitted : Layout name used

- Explanation

- SmaPri Driver caches the last registered format file (*.spfmtz). It is saved if the device power is turned off, but deleted if SmaPri Driver is uninstalled.
 - Case when file is updated to a new format file
 - When "__format_archive_attach" is specified.
 - When a different URL to the one registered previous in "__format_archive_attach" is specified.
 - When "__format_archive_url" is specified, and "update" or "updateWithoutError" is specified in the "__format_archive_update" parameter.
 - Case when an existing format file (cache) is used
 - When neither "__format_archive_attach" or "__format_archive_url" is specified.
 - When the same URL as the one registered previous in "__format_archive_attach" is specified.
 - When "noUpdate" is specified for both "__format_archive_url" and "__format_archive_update" parameters.
- "__format_archive_attach" is used when the application sends the format file (*.spfmtz) directly to SmaPri Driver (when the path cannot be specified).
- URLs that can be specified as "__format_archive_url" and "Fixed Graphic" are the HTTP (http://), FTP (ftp://) and file (file://). The Data URL Scheme (data:...) can also be used for "Fixed Graphic".

- It takes time to register format files that use the TrueType font embedding function because the file size is large. There are cases where HTTP communication timeout occurs, or when HTTP and FTP cannot be used.
- “__format_id_number” is the Record No. set in the layout using SmaPri Designer.
- There are no restrictions of the size of image that can be specified for “Fixed Graphic”. However, the larger the size, the lower the throughput when creating print data and transmitting the data to the printer.

- Request Example

The Record No. is the first format to be used for format printing from the formats registered in SmaPri Driver.

*Encode the parameter name and parameter value as a URL in UTF-8 format.

*Line breaks are used in the following example to make the text easier to read, but line break codes should not be used in the actual file.

[Request Before URL Encoding]

```
http://localhost:8080/Format/Print
? format_archive_url=http://example.com/smapri.spfmtz
&__format_archive_update=update
&__format_id_number=1
&String1=Orange
&Barcode1=123456789012
&Price1=100
&Frame1.visible=false
&QTY=1
```

[Request After URL Encoding]

```
http://localhost:8080/Format/Print
? format_archive_url=http%3a%2f%2fexample%2ecom%2fsmapri%2espfmtz
&__format_archive_update=update
&__format_id_number=1
&String1=Orange
&Barcode1=123456789012
&Price1=100
&Frame1.visible=false
&QTY=1
```

[File path specification example]

HTTP Server	→ http://example.com/smapri.spfmtz
FTP Server	→ ftp://example.com/smapri.spfmtz
Android Local file	→ file:///storage/emulated/0/SATO/smapri.spfmtz
Windows Local file	→ file:///D:/SATO/smapri.spfmtz

- Response (XML)

The response order may be changed and items added when the version is updated.

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	Processing Results (OK/NG)
/response/function	/Format/Print
/response/message	Processing Results Message "SUCCESSFUL" when processing is successful If it fails, a character string describing the cause is displayed (E.g.: Parameter "string1" value is invalid.)
/response/printer	Printer device name specified in the format
/response/printer/@resolution	Printer resolution (dpi)
/response/SBPLVersion	SBPL specified in the format
/response/statusCode	"00" fixed.
/response/statusCode/@type	Printer Status Type (standard/lapin)

- Example Response

```
<?xml version="1.0" encoding="UTF-8"?>
<response xml:space="preserve" version="1.0" productName="SATO SmaPri Driver"
productVersion="1.11.0" creationTime="2016-08-26T17:26:04+09:00">
  <result>OK</result>
  <function>/Format/Print</function>
  <message>[Processing Results Message]</message>
  <printer resolution="203">PW208</printer>
  <SBPLVersion>06.10.0</SBPLVersion>
  <statusCode type=" standard">00</statusCode>
</response>
```

5-4	[Send Data] Format Printing (Multiple Layouts) Specifies multiple “Record No.” and input data, and prints the format.	Supported OS	Android Windows
------------	---------------------------------------------------------------------------------------------------------------------------------	---------------------	--------------------

Multiple layouts can be specified and printed by adding an index value [n] to the “Layout Record No.” and “Item name” parameters specified when format printing. When printing a variable length receipt using a combination of multiple layouts such as header, details and footer, use this when you want to print out multiple layouts together using one printing instruction.

The index value [n] is specified as a continuous value starting from 0. See the “Request Example” for details.

Basic Parameter	Type	Setting Value
__format_id_number[n]	Required	Record No. of used layout
__format[n].Item name	Optional	Specify character strings for printing in input items in which “When issued (data)” is set. For “Fixed Graphic” objects (changed when issued), specify the graphic file URL or base 64 encoded character string of graphic data. PNG, JPEG, BMP and GIF image formats are supported. When this specification is omitted, the default value entered in SmaPri Designer is used.
__format[n].(Quantity Issued)	Optional	Specifies the quantity issued. User can specify the name for each project in SmaPri Designer, and the default name is (Quantity Issued). When omitted, it operates as (Quantity Issued)=1.
Extended Parameter	Type	Setting Value
__format[n].Item name.visible	Optional	“Do not print” can be specified for each item. false :Not printed (Can only be specified for (*.spfmtz) format files created using SmaPri Designer VEr.1.17.0.0 or later)

- Request Example

Formats from those registered in SmaPri Driver are combined in the following order and printed.

Index [0]:Record No.1 → Index [1]:Record No.2 → Index [2]:Record No.2 → Index [3]:Record No.3

In the following example, it is assumed that format files in which “Name” and “Receipt No.” items are set in Record No.1 layout, “Product” and “Price” items are set in Record No.2 layout, and “Total” item is set in Record No.3 layout are registered in advance.

*Encode the parameter name and parameter value as a URL in UTF-8 format when sending the request.

*Line breaks are used in the following example to make the text easier to read, but line break codes should not be used in the actual file.

*If you want to output 2 sets of exactly the same report, either execute the same request twice or increase the number of indexes so that two sets are specified. When “(QTY)=2” is specified for each of the layout, printing is performed in the order of “header + header + detail 1 + detail 1 + detail 2 + detail 2...”.

[Request Before URL Encoding]

http://localhost:8080/**Format/Print**

?__format_archive_url=http://example.com/smapri.spfmtz

&__format_archive_update=update

&__format_id_number[0]=1

&__format[0].operator=Sato

&__format[0].Receipt No=123

&__format_id_number[1]=2

&__format[1].productName=Tea

&__format[1].price=120

&__format_id_number[2]=2

&__format[2].productName=Rice ball

&__format[2].price=100

&__format_id_number[3]=3

&__format[3].Total=220

[Request After URL Encoding]

http://localhost:8080/**Format/Print**

?__format_archive_url=http%3a%2f%2fexample%2ecom%2fsmapri%2espfmtz

&__format_archive_update=update

&__format_id_number%5b0%5d=1

&__format%5b0%5d.%e6%8b%85%e5%bd%93%e5%90%8d=%e4%bd%90%e8%97%a4

&__format%5b0%5d.%e4%bc%9d%e7%a5%a8No=123

&__format_id_number%5b1%5d=2

&__format%5b1%5d.%e5%95%86%e5%93%81%e5%90%8d=%e3%81%8a%e8%8c%b6

&__format%5b1%5d.%e4%be%a1%e6%a0%bc=120

&__format_id_number%5b2%5d=2

&__format%5b2%5d.%e5%95%86%e5%93%81%e5%90%8d=%e3%81%8a%e3%82%80%e3%81%99%e3%81%b3

&__format%5b2%5d.%e4%be%a1%e6%a0%bc=100

&__format_id_number%5b3%5d=3

&__format%5b3%5d.%e7%b7%8f%e9%a1%8d=220

- Format of Request Described Above and Print Image -

No.1 format:

担当者名 :	(担当者名)
伝票No :	(伝票No)

No.2 format:

(商品名)	(価格)
-------	------

No.3 format:

総額 :	(総額)
------	------

担当者名 :	佐藤
伝票No :	123
お茶	120
おむすび	100
総額 :	220

index [0]

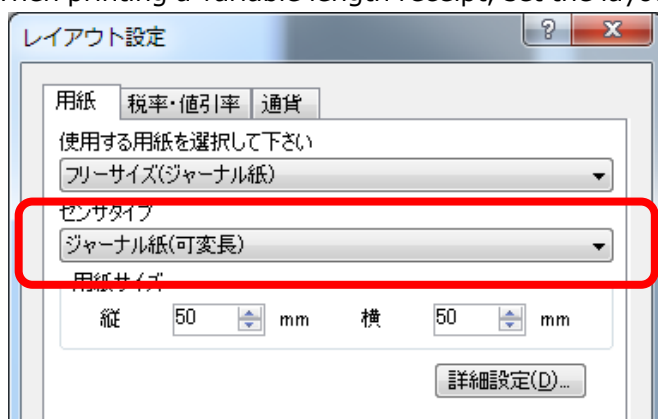
index [1]

index [2]

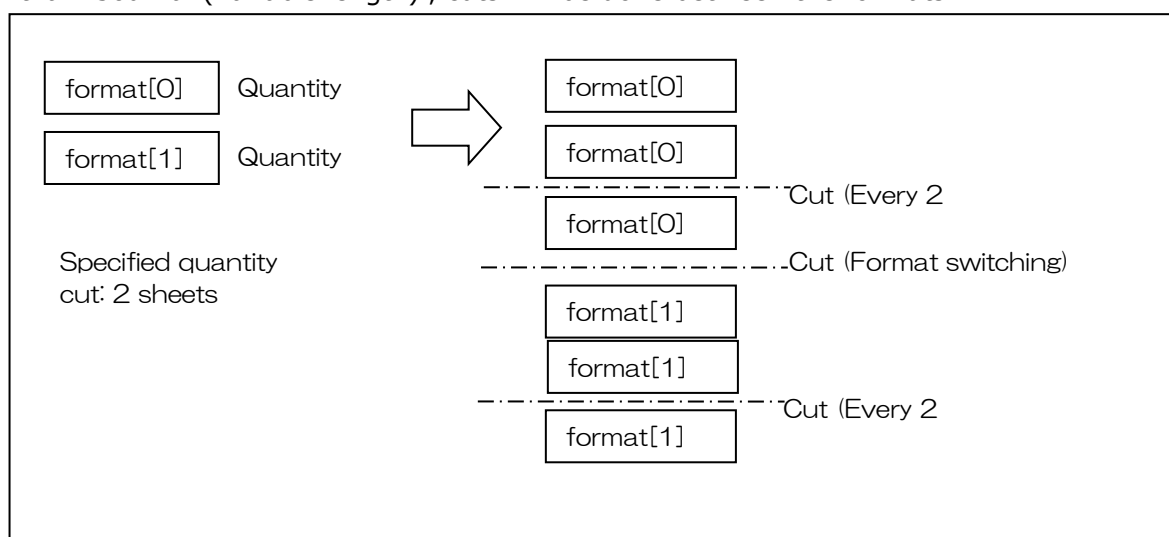
index [3]

- Explanation

- Specify the index [n] as a continuous value starting from 0 when making the format printing request.
- Specify the same layout as the sensor type to prevent unexpected printing results.
- You cannot combine a layout for the “Journal (Variable Length)” sensor type with the layout for any other sensor type for printing.
- When printing a variable length receipt, set the layout sensor type to “Journal (Variable Length)”.



- When specifying the print density and speed for printing a variable length receipt using a combination of layouts with the “Journal (Variable length)” sensor type, use the “__setting_print_operation” parameter.
- When using a combination of layouts with the “Journal (Variable length)” sensor type the print quantity should be specified for the (printed last) layout that has the largest index [n].
- If you want to cut only the last label when printing using a combination of layouts with sensor types other than “Journal (Variable length)”, specify “E” (Ejection cut) for the cut operation in the “__setting_print_operation” parameter.
- When the specified quantity cut is selected for printing a combination of layouts with sensor types other than “Journal (Variable length)”, cuts will be done between the formats.



5-5	[Send Data] SBPL Send Sends the SBPL command (Sato pronter control command).	Supported OS	Android Windows
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- Action Path

/Printer/SendCommand

- Basic Parameter

Parameter	Type	Setting Value
__command	Required*	SBPL Command
__command_url	Required*	SBPL Command File URL
__encoding	Optional	Command Encoding Type text (default value) / base64

*Either "__command" or "__command_url" is required

- Extended Parameter

Parameter	Type	Setting Value
__escape_character	Optional	When "__encoding" is text, characters that replace "ESC(0x1B)" (default value: ^ (0x5E))
__setting_job_name	Optional	Job name of print data Character string : Used as job name When omitted : Layout name
__tc_character	Optional	Specify automatic addition of [STX] and [ETX] (true/false) (default value: true)

- Explanation

- For the "__command", specify from "ESC" A to "ESC" Z once per each set. "STX", "ETX" and CRC are automatically added.
- When "__encoding" is text, the character string that corresponds to "__escape_character" within the value specified for "__command" is replaced with "ESC(0x1B)".
2-byte code character strings are also replaced. As an example, if the replacement text is "^ (0x5E)", the 2nd byte of the Chinese character in cases such as "運(0x895E)" and "型(0x8C5E)" are replaced with "ESC(0x1B)".
When using a 2-byte code, either set "__encoding" to base64 or set the "__escape_character" to a character string of more than 2 characters.
- The "ESC(0x1B)" replacement process of the "__escape_character" is not applied to the

SBPL command file specified in the “__command_url”.

- A character string of more than 2 characters can be specified for “__escape_character”.
- The file path (file://...), HTTP path (http://...) and FTP path (ftp://...) can be used as the URL specified in “__command_url”.

- Request Example

Instruct a reprint to the printer.

*Encode the parameter name and parameter value as a URL in UTF-8 format when sending the request.

[Request Before URL Encoding]

http://localhost:8080/**Printer/SendCommand**?__command=^A^C^Z

[Request After URL Encoding]

http://localhost:8080/**Printer/SendCommand**?__command=%5eA%5eC%5eZ

- Response (XML)

The response order may be changed and items added when the version is updated.

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	Processing Results (OK/NG)
/response/function	/Printer/SendCommand
/response/message	Processing Results Message SUCCESSFUL when processing is successful If it fails, a character string describing the cause is displayed (E.g.: A value in parameter character string 1 is invalid.)
/response/statusCode	"00" fixed.

- Example Response

```
<?xml version="1.0" encoding="UTF-8"?>
<response xml:space="preserve" version="1.0" productName="SATO SmaPri Driver"
  productVersion="1.0" creationTime="2011-09-05T14:12:28+09:00">
  <result>OK</result>
  <function>/Printer/SendCommand</function>
  <message>[Processing Results Message]</message>
  <statusCode>00</statusCode >
</response>
```

5-6	[Send Data] Send Data Sends and receives data to and from the printer.	Supported OS	Android Windows
------------	----------------------------------------------------------------------------------	---------------------	--------------------

- Action Path**/Printer/SendRawData****- Basic Parameter**

Parameter	Type	Setting Value
__send_data	Required	Send Data
__encoding	Optional	Command Encoding Type base64 (default value) /hex
__receive_byte_count	Optional	Received No. of bytes
__receive_termination_data	Optional	Received Termination Data

Extended Parameter

None

- Explanation

- When “__encoding” is hex, specify a hexadecimal character string for “__send_data” and “__receive_termination_data”. (E.g.: “05” for ENQ, “41” for A)
- Multiple bytes of data can be specified for “__receive_termination_data”.
- Data Receive Conditions
(1)__receive_byte_count, (2)__receive_termination_data

(1)	(2)	
None	None	Does not receive data
With data	None	Receive specified byte quantity of data
None	With data	Receive until the received data matches the specified data
With data	With data	Receive until either of the conditions (1) or (2) is fulfilled

- Request Example

Send ENQ to the printer and receive the status (11 bytes).

* Encode the parameter's name and value as a URL in UTF-8 format when sending the request.

```
http://localhost:8080/Printer/SendRawData?__send_data=05&__encoding=hex&__receive_byte_count=11
```

- Response (XML)

The response order may be changed and items added when the version is updated.

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	Processing Results (OK/NG)
/response/function	/Printer/SendRawData
/response/message	Processing Results Message SUCCESSFUL when processing is successful If it fails, a character string describing the cause is displayed (E.g.: A value in parameter character string 1 is invalid.)
/response/receiveData	Data received from the printer
/response/receiveData/@encoding	Data Encoding Type

- Example Response

```
<?xml version="1.0" encoding="UTF-8"?>
<response xml:space="preserve" version="1.0" productName="SATO SmaPri Driver"
  productVersion="1.0" creationTime="2011-09-05T14:12:28+09:00">
  <result>OK</result>
  <function>/Printer/SendRawData</function>
  <message>[Processing Results Message]</message>
  <receiveData encoding="hex">0220204130303030303003</receiveData>
</response>
```

5-7	[Status] Check Status Acquires the printer status.	Supported OS	Android Windows
------------	--------------------------------------------------------------	---------------------	--------------------

- Action Path

/Printer/Status

- Basic Parameter / Extended Parameter

None

- Request Example

```
http://localhost:8080/Printer/Status
```

- Response (XML)

The response order may be changed and items added when the version is updated.

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	Processing Results (OK/NG)
/response/function	/Printer/Status
/response/message	Processing Results Message SUCCESSFUL when processing is successful If it fails, a character string describing the cause is displayed (E.g.: A value in parameter character string 1 is invalid.)
/response/statusCode	Hexadecimal character string printer status code (E.g. 0 x 41)*1
/response/statusCode/@type	Printer Status Type (standard/lapin)

*1For details on the status code, see "Status Code Reference".

- Example Response

```
<?xml version="1.0" encoding="UTF-8"?>
<response xml:space="preserve" version="1.0" productName="SATO SmaPri Driver"
  productVersion="1.0" creationTime="2011-09-05T14:12:28+09:00">
  <result>OK</result>
  <function>/Printer/Status</function>
  <message>[Processing Results Message]</message>
  <statusCode type="lapin">30</statusCode>
</response>
```

5-8	[Status] Check Spooler Status Acquires the spooler status.	Supported OS	Android Windows
------------	----------------------------------------------------------------------	---------------------	--------------------

- Action Path

/Spooler/Status

- Basic Parameter / Extended Parameter

None

- Request Example

http://localhost:8080/Spooler/Status

- Response (XML)

The response order may be changed and items added when the version is updated.

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	OK (Fixed)
/response/function	/Spooler/Status
/response/message	Spooler Status (status : message) stop : Stopped waiting : Waiting printing : Printing printerOffline : Offline pause : Paused connectionError : Connection error printerError : Printer Error
/response/status	
/response/jobs	
/response/jobs/@count	
/response/jobs/job	
/response/job/@name	
/response/job/@creationTime	Job created date and time
/response/job/@size	Job size (bytes)

- Example Response

```
<?xml version="1.0" encoding="UTF-8"?>
<response xml:space="preserve" version="1.0" productName="SmaPri Driver"
  productVersion="1.0" creationTime="2011-09-05T14:12:28+09:00">
  <result>OK</result>
  <function>/Spooler/Status</function>
  <message>Printing</message>
  <status>printing</status>
  <jobs count="2">
    <job name="job1" creationTime="2011-09-05T14:12:28+09:00" size="128">
    <job name="job2" creationTime="2011-09-05T14:13:28+09:00" size="64">
  </jobs>
</response>
```

5-9	[Format] Register/Acquire Format Registers the format file and acquires format information.	Supported OS	Android Windows
------------	-------------------------------------------------------------------------------------------------------	---------------------	--------------------

- Action Path**/Format****- Basic Parameter**

Parameter	Type	Setting Value
__format_archive_attach	Optional	Format file encoded as a Base64 URL character string
__format_archive_url	Optional	Format file (*.spfmtz) URL

Extended Parameter

None

- Explanation

- Unlike "Format/Print", the format file is always overwritten and registered.
- When parameters are omitted, formatting is not registered and only the response is returned. An error occurs when there is no registered format file.
- When either "__format_archive_attach" or "__format_archive_url" is specified, the existing format file is always overwritten.
- Use this when "__format_archive_attach" sends the format file (*.spfmtz) from the native application to SmaPri Driver.
- The file path (file:///...), HTTP path (http:///...) and FTP path (ftp:///...) can be used as the URL specified in "__format_archive_url".
- It takes time to register format files in which TrueType fonts are embedded because the file size is large. A timeout failure may occur when the HTTP path or FTP path is specified.

- Request Example

Registers the device storage format file in SmaPri Driver, and acquires the format information.

- * Encode the parameter's name and value as a URL in UTF-8 format when sending the request.
- * Line breaks are used in the following example to make the text easier to read, but line break codes should not be used in the actual file.

[Request Before URL Encoding]

http://localhost:8080/**Format?**__format_archive_url=file:///sdcard/sample.spfmtz

[Request After URL Encoding]

http://localhost:8080/**Format?**__format_archive_url= file%3a%2f%2f%2fsdcard%2fsample%2espfmtz

[File path specification example]

HTTP Server	→ http://example.com/smapri.spfmtz
FTP Server	→ ftp://example.com/smapri.spfmtz
Android Local file	→ file:///storage/emulated/0/SATO/smapri.spfmtz
Windows Local file	→ file:///D:/SATO/smapri.spfmtz

- Response (XML)

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	Processing Results (OK/NG)
/response/function	/Format
/response/message	Processing Results Message SUCCESSFUL when processing is successful If it fails, a character string describing the cause is displayed (E.g.: the value for parameter __format_archive_url is invalid.)
/response/projectName	Project Name (Only output when format files (*.spfmtz) created using SmaPri Designer Ver.1.17.0.0 or later are registered)
/response/lastModified	Data Output Date and Time (Only output when format files (*.spfmtz) created using SmaPri Designer Ver.1.17.0.0 or later are registered)
/response/fileSize	Format Archive File Size (bytes)
/response/printer	Printer device name specified in the format
/response/printer/@resolution	Printer resolution (dpi)
/response/SBPLVersion	SBPL specified in the format
/response/format	Format Information (No. of formats repeated)
/response/format/@idNumber	Format Record No.
/response/format/@name	Format Record name

*The response order may be changed and items added when the version is updated.

- Example Response

```
<?xml version="1.0" encoding="UTF-8"?>
<response xml:space="preserve" version="1.0" productName="SATO SmaPri Driver"
  productVersion="1.0" creationTime="2011-09-05T14:12:28+09:00">
  <result>OK</result>
  <function>/Format</function>
  <message>[Processing Results Message]</message>
  <printer resolution="203">PT208e</printer>
  <SBPLVersion>06.10.0</SBPLVersion>
  <format idNumber="1" name="Layout 1"/>
  <format idNumber="2" name="Layout 2"/>
  <format idNumber="3" name="Layout 3"/>
</response>
```

- Example Response (Redirect URL)

```
HTTP/1.1 303 See Other
... (header omitted) ...
Location: [Specified URL]?result=OK&function=/Format&message=[Process Results Message]
&printer=PT208e
&SBPLVersion=06.10.0
&format[0].idNumber=1&format[0].name= Layout 1
&format[1].idNumber=1&format[1].name= Layout 2
&format[2].idNumber=1&format[2].name= Layout 3
... (header omitted) ...
```

- Example HTML Specification

```
<html>
  <head>    <title>result</title>
</head>
  <body>
    <p><%= response.version %></p>
    <p><%= response.productName %></p>
    <p><%= response.productVersion %></p>
    <p><%= response.creationTime %></p>
    <p><%= response.result %></p>
    <p><%= response.function %></p>
    <p><%= response.message %></p>
    <p><%= response.printer %></p>
    <p><%= response.SBPLVersion %></p>
    <p><%= response.format[0].idNumber %></p>
    <p><%= response.format[0].name %></p>
    <p><%= response.format[1].idNumber %></p>
    <p><%= response.format[1].name %></p>
    <p><%= response.format[2].idNumber %></p>
    <p><%= response.format[2].name %></p>
  </body>
</html>
```

5-10	[Format] Acquire Format Input Item Specifies the layout Record No., and acquires the input item information.	Supported OS	Android Windows
-------------	------------------------------------------------------------------------------------------------------------------------	---------------------	--------------------

- Action Path

/Format/InputItem

- Basic Parameter

Parameter	Type	Setting Value
__format_archive_attach	Optional	File name and format file data
__format_archive_url	Optional	Format file (*.spfmtz) URL
__format_id_number	Required	Record No. of used layout

Only enabled when “__format_archive_url” is used

Parameter	Type	Setting Value
__format_archive_update	Optional	Update check of the format file is performed when the same URL as the previous time is specified. When “Update” is performed, the file is updated when either the file size or update date differs. noUpdate : No update (default value) update : Updated (with error notification) updateWithoutError : Updated (no error notification)

Extended Parameter

Parameter	Type	Setting Value
__response_addition_xml	Optional	Response Additional Information operation : Operation setting table : Table graphic :Graphic table *More than one can be specified separated by commas

- Explanation

- SmaPri Driver caches the last registered format file (*.spfmtz). It is saved if the device power is turned off, but deleted if SmaPri Driver is uninstalled.
 - Case when file is updated to a new format file
 - When “__format_archive_attach” is specified.
 - When a different URL to the one registered previous in “__format_archive_attach” is specified.
 - When “__format_archive_url” is specified, and “update” or “updateWithoutError” is specified in the “__format_archive_update” parameter.
 - Case when an existing format file (cache) is used
 - When neither “__format_archive_attach” or “__format_archive_url” is specified.
 - When the same URL as the one registered previous in “__format_archive_attach” is specified.
 - When “noUpdate” is specified for both “__format_archive_url” and “__format_archive_update” parameters.
- It is used when “__format_archive_attach” sends the format file (*.spfmtz) directly from the application to SmaPri Driver (when the path cannot be specified).

- URLs that can be specified as “__format_archive_url” are the HTTP path (http://), FTP path (ftp://) and file path (file://).
- It takes time to register format files that use the TrueType font embedding function because the file size is large. There are cases where HTTP communication timeout occurs, or when HTTP and FTP path specifications cannot be used.
- “__format_id_number” is the Record No. set in the layout using SmaPri Designer.

- Request Example

The Record No. acquires the input item information from the 1st format from those registered in the format archive in SmaPri Driver.

```
http://localhost:8080/Format/InputItem?__format_id_number=1
```

- Response (XML)

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	Processing Results (OK/NG)
/response/function	/Format/InputItem
/response/message	Processing Results Message SUCCESSFUL when processing is successful If it fails, a character string describing the cause is displayed (E.g.: A value in parameter character string 1 is invalid.)
/response/printer	Printer device name specified in the format
/response/printer/@resolution	Printer resolution (dpi)
/response/SBPLVersion	SBPL specified in the format
/response/format	Format Information (No. of formats repeated)
/response/format/@idNumber	Format Record No..
/response/format/@name	Format Record name
/response/input	Input Item Information (Repeated the number of input items only)
/response/input/@type	Type of Input Item (text/barcode/price/dateTime/sequence/table/quantity/graphic)
/response/input/@name	Item Name of Input Item
/response/input/@tableIdNumber	Table Number (Only when type is table)
/response/input/@length	Input No. of Digits *1
/response/input/@defaultValue	Default value *2
/response/print	Print Item Information (Repeated the number of print items only)
/response/print/@type	Type of Print Item (text/barcode/price/dateTime/sequence/line/frame/table/graphic/command)
/response/print/@name	Item Name of Print Item

*The response order may be changed and items added when the version is updated.

*1 When the type is graphic, “0” is constantly returned.

*2 When the type is graphic, a character string encoded in base64 is returned for the default value image file data.

- When “__response_addition_xml” is operation (Additional response)

Path	Content
/response/speed	Print speed information (setting value amount repeated)
/response/speed/@settingValue	Print speed setting value
/response/speed/@speedValue	Print speed value “mm/s”
/response/speed/@default	Default value: (true/false)
/response/depth	Print density information (setting value amount repeated)
/response/depth/@settingValue	Print density setting value
/response/depth/@default	Default value: (true/false)
/response/verticalPositionCorrection	
/response/verticalPositionCorrection/@minValue	Vertical direction base point correction minimum value “dot”
/response/verticalPositionCorrection/@maxValue	Vertical direction base point correction maximum value “dot”
/response/horizontalPositionCorrection	
/response/horizontalPositionCorrection/@minValue	Horizontal direction base point correction minimum value “dot”
/response/horizontalPositionCorrection/@maxValue	Horizontal direction base point correction maximum value “dot”
/response/numberOfSheetsCut	When specified quantity cut is supported
/response/numberOfSheetsCut/@maxValue	Specified quantity cut maximum value
/response/numberOfSheetsCut/@defaultValue	Specified quantity cut default value
/response/ejectionSheetCut	When ejection cut specification is supported
/response/ejectionSheetCut/@defaultValue	Ejection cut default value (true/false)

- When “__response_addition_xml” is table (Additional response)

Path	Content
/response/table	Repeat no. of tables
/response/table/@idNumber	Table No.
/response/table/@name	Table name
/response/table/record	Repeat the number of records only
/response/table/record/@registrationNumber	Record registration number
/response/table/record/stringValue	Record character string

- When “__response_addition_xml” is graphic (Additional response)

Path	Content
/response/table	Repeat the number of tables only
/response/table/@idNumber	100 (fixed)
/response/table/@name	Table name
/response/table/record	Repeat the number of records only
/response/table/record/@registrationNumber	Record registration number
/response/table/record/stringValue	Record character string
/response/table/record/graphicValue	Record graphic data (base64 Encoded Character String)

- Example Response (XML)

- When operation, table and graphic are specified in “__response_addition_xml”

```
<?xml version="1.0" encoding="UTF-8"?>
<response xml:space="preserve" version="1.0" productName="SmaPri Driver"
  productVersion="1.0" creationTime="2011-09-05T14:12:28+09:00">
  <result>OK</result>
  <function>/Format/InputItem</function>
  <message>[Processing Results Message]</message>
  <printer resolution="203">PT208</printer>
  <SBPLVersion>06.10.0</SBPLVersion>
  <format idNumber="1" name="Layout 1"/>
  <speed settingValue="1" speedValue="75"/>
  <speed settingValue="2" speedValue="103" default="true"/>
  <depth settingValue="1"/>
  <depth settingValue="2"/>
  <depth settingValue="3" default="true"/>
  <depth settingValue="4"/>
  <depth settingValue="5"/>
  <verticalPositionCorrection minValue="-300" maxValue="300"/>
  <horizontalPositionCorrection minValue="-300" maxValue="300"/>
  <numberOfSheetsCut maxValue="9999" defaultValue="1"/>
  <ejectionSheetCut defaultValue="true"/>
  <input type="text" name="Character string 1" length="10"/>
  <input type="barcode" name="Barcode 1" length="12" defaultValue="123456789012"/>
  <input type="price" name="Price 1" length="6" defaultValue="1000"/>
  <input type="table" tableIdNumber="1" name="Table convert" length="4" defaultValue="1"/>
  <table idNumber="1" name="Table 1">
    <record registrationNumber="1">
      <stringValue>Record 1</stringValue>
    </record>
    <record registrationNumber="2">
      <stringValue>Record 2</stringValue>
    </record>
  </table>
  <table idNumber="100" name="Graphic Table">
    <record registrationNumber="1">
      <stringValue>Plus 6mm</stringValue>
      <graphicValue>Qk2+AQAAAAA... (partially omitted) ...APwAA/wAAAAAD/AAA=</graphicValue>
    </record>
    <record registrationNumber="2">
      <stringValue>Paper 6mm</stringValue>
      <graphicValue>Qk2+AQAAAAA... (partially omitted) ...//+AAH/wA////gD//AAA=</graphicValue>
    </record>
  </table>
</response>
```


- Example Response (Redirect URL)

- When table is specified in “__response_addition_xml”

```
HTTP/1.1 303 See Other
... (header omitted) ...
Location: [Specified URL]?result=OK&function=/Format/InputItem&message=[Process Results Message]
&printer=PT208e
&SBPLVersion=06.10.0
&format.idNumber=1&format.name= Layout 1
&input[0].type=text&input[0].name= Character String 1&input[0].length=10&input[0].defaultValue=
&input[1].type=barcode&input[1].name=Barcode 1
&input[1].length=12&input[1].defaultValue=123456789012
&input[2].type=price&input[2].name=Price 1&input[2].length=6&input[2].defaultValue=1000
&table[0].idNumber=1&table[0].name= Table 1
&table[0].record[0].registrationNumber=1&table[0].record[0].stringValue= Record 1
&table[0].record[1].registrationNumber=2&table[0].record[1].settingValue= Record 2
&table[1].idNumber=1&table[1].name= Graphic Table
&table[1].record[0].registrationNumber=1&table[1].record[0].stringValue= Plus 6mm
&table[1].record[1].registrationNumber=2&table[1].record[1].settingValue= Paper 6mm
... (header omitted) ...
```

- Example HTML Specification

- When “__response_addition_xml” is not specified

```
<html>
  <head>
    <title>result</title>
  </head>
  <body>
    <p><%= response.version %></p>
    <p><%= response.productName %></p>
    <p><%= response.productVersion %></p>
    <p><%= response.creationTime %></p>
    <p><%= response.result %></p>
    <p><%= response.function %></p>
    <p><%= response.message %></p>
    <p><%= response.printer %></p>
    <p><%= response.SBPLVersion %></p>
    <p><%= response.format.idNumber %></p>
    <p><%= response.format.name %></p>
    <p><%= response.input[0].type %></p>
    <p><%= response.input[0].name %></p>
    <p><%= response.input[0].length %></p>
    <p><%= response.input[0].defaultValue %></p>
    <p><%= response.input[1].type %></p>
    <p><%= response.input[1].name %></p>
    <p><%= response.input[1].length %></p>
    <p><%= response.input[1].defaultValue %></p>
    <p><%= response.input[2].type %></p>
    <p><%= response.input[2].name %></p>
    <p><%= response.input[2].length %></p>
    <p><%= response.input[2].defaultValue %></p>
  </body>
</html>
```

5-11	[Font] Acquire Font Information Acquires information from the font file cached in SmaPri Driver.	Supported OS	Android Windows
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- Action Path**/Font****- Basic Parameter / Extended Parameter**

None

- Explanation

- When a format file (*.spfmtz) created using SmaPri Designer er.1.17.0.0 or later is registered as a format, the font file is cached in the device. SmaPri Driver also needs to be a supported version (Android: Ver.1.11.0 or later, Windows: Ver.1.1.0.0 or later).
- When the format file (*.spfmtz) is updated, the data size can be reduced when performing "Data Output" with SmaPri Designer by unchecking the "Include TrueType Font File" check box. If the required font file is not cached, an error occurs at printing.

- Request Example

http://localhost:8080/Font

- Response (XML)

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	Processing Results (OK/NG)
/response/function	/Font
/response/message	Processing Results Message SUCCESSFUL when processing is successful, or a character string describing the cause is displayed if it fails
/response/fonts	-
/response/fonts/@count	No. of font files
/response/fonts/font	Font information (Repeat the number of font files only)
/response/fonts/font/@family	Font family name
/response/fonts/font/@style	Font style (italic / underscore / negative / outlined (hollow) / strikeout / bold / regular / oblique) *When combining multiple styles, " " is used to delimit the list.
/response/fonts/font/@size	Font File Size (Byte)

*The response order may be changed and items added when the version is updated.

- Example Response (XML)

```
<?xml version="1.0" encoding="UTF-8"?>
<response xml:space="preserve" version="1.0" productName="SATO SmaPri Driver"
productVersion="1.11.0" creationTime="2016-08-25T18:50:27+09:00">
  <result>OK</result>
  <function>/Font</function>
  <message>[Processing Results Message]</message>
  <fonts count="2">
    <font family="Arial" style="bold|italic" size="32767"/>
    <font family="Meiryo" style="regular" size="65535" />
  </fonts>
</response>
```

- Example Response (Redirect URL)

```
HTTP/1.1 303 See Other
... (header omitted) ...
Location: [Specified URL]?result=OK&function=/Font&message=[Process Results Message]
&fonts.@count=2
&fonts.font[0].@familyName=Arial&fonts.font[0].@style=bold|italic&fonts.font[0].@size=32767
&fonts.font[1].@familyName=Meiryo&fonts.font[1].@style=regular&fonts.font[1].@size=65535
... (header omitted) ...
```

- Example HTML Specification

```
<html>
  <head>
    <title>result</title>
  </head>
  <body>
    <p><%= response.@version %></p>
    <p><%= response.@productName %></p>
    <p><%= response.@productVersion %></p>
    <p><%= response.@creationTime %></p>
    <p><%= response.result %></p>
    <p><%= response.function %></p>
    <p><%= response.message %></p>
    <p><%= response.fonts.@count %></p>
    <p><%= response.fonts.font[0].@family %></p>
    <p><%= response.fonts.font[0].@style %></p>
    <p><%= response.fonts.font[0].@size %></p>
    <p><%= response.fonts.font[1].@family %></p>
    <p><%= response.fonts.font[1].@style %></p>
    <p><%= response.fonts.font[1].@size %></p>
  </body>
</html>
```

5-12	[Font] Font Clear Deletes the font file (*.ttf) cached in the device.	Supported OS	Android Windows
-------------	---------------------------------------------------------------------------------	---------------------	--------------------

- Action Path

/Font/Clear

- Basic Parameter / Extended Parameter

None

- Explanation

- When a format file (*.spfmtz) created using SmaPri Designer er.1.17.0.0 or later is registered as a format, the font file is cached in the device.
- Font clear deletes all font files cached in the device.
- If there is no necessary font, labels using the font can not be issued, please register the format file again.

- Request Example

```
http://localhost:8080/Font/Clear
```

- Response (XML)

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	Processing Results (OK/NG)
/response/function	/Font/Clear
/response/message	Processing Results Message SUCCESSFUL when processing is successful, or a character string describing the cause is displayed if it fails

*The response order may be changed and items added when the version is updated.

- Example Response (XML)

```
<?xml version="1.0" encoding="UTF-8"?>
<response xml:space="preserve" version="1.0" productName="SATO SmaPri Driver"
  productVersion="1.11.0" creationTime="2016-08-25T19:43:15+09:00">
  <result>OK</result>
  <function>/Font/Clear</function>
  <message>SUCCESS</message>
</response>
```


5-13**[Port] Acquire Output Destination Port**

Acquires the set output destination port (printer).

**Supported
OS**Android
Windows**- Action Path****/Printer/Port****- Basic Parameter / Extended Parameter**

None

- Request Example`http://localhost:8080/Printer/Port`**- Response (XML)**

The response order may be changed and items added when the version is updated.

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	OK (Fixed)
/response/function	/Printer/Port
/response/message	SUCCESSFUL : Successful NO_PRINTER_SET :Printer not registered
/response/deviceType *	bluetooth/tcpip/usb/driver
/response/address *	Printer Address Bluetooth: MAC address format (Example: 00:01:90:E3:84:77) TCP/IP: IPv4 format + TCP port number (Example: 192.168.1.1:9100) USB: Null character (desired USB printer) or USB serial ID Driver: This item is not output.
/response/protocol	Printer communication protocol (status3/status3_lapin/status4)
/response/crc	CRC addition (false/true)
/response/connected	Whether connected to the printer (false/true)
/response/bondedBluetoothDevices	Paired Bluetooth information
/response/bondedBluetoothDevices/@count	No. of devices
/response/bondedBluetoothDevices/device	Device address (Repeated for number of devices)
/response/bondedBluetoothDevices/device/@name	Device name

*Only "usb" and "driver" are supported in the Windows version.

- Example Response

```
<?xml version="1.0" encoding="UTF-8"?>
<response version="1.0" productName="SATO SmaPri Driver"
  productVersion="1.11.0" creationTime="2016-08-29T10:14:51+0900">
  <result>OK</result>
  <function>/Printer/Port</function>
  <message>SUCCESSFUL</message>
  <deviceType>bluetooth</deviceType>
  <address>00:0B:5D:B4:CD:CF</address>
  <protocol>status4</protocol>
  <crc>>false</crc>
  <connected>>true</connected>
  <bondedBluetoothDevices count="2">
    <device name="SATO PRINTER_000b5db4cdcf">00:0B:5D:B4:CD:CF</device>
    <device name="SATO MOBILE PRINTER">00:01:90:EC:18:1C</device>
  </bondedBluetoothDevices>
</response>
```

5-14	[Port] Specify Output Destination Port Sets the output destination port (printer).	Supported OS	Android Windows
-------------	----------------------------------------------------------------------------------------------	---------------------	--------------------

- Action Path

/Printer/SetPort

- Basic Parameter

Parameter	Type	Setting Value
__device_type	Optional	Printer Device Type (bluetooth/tcpip) * When "__device_type" is specified, "__address" is required.
__address	Optional	Printer Address Bluetooth: MAC address format (Example: 00:01:90:E3:84:77) TCP/IP: IPv4 format + TCP port number (Omitted: 1024) (Example: 192.168.1.1:9100) * For Bluetooth, an address which is not paired will be an error.
__protocol	Optional	Printer protocol (status3/status3_lapin/status4)
__crc	Optional	CRC addition (false/true)

Settings of omitted parameters are not changed.

- Extended Parameters *Only parameters supported by Windows version

Parameter	Type	Setting Value
__device_type	Optional	Printer Device Type (usb/driver)
__address	Optional	For USB Omitted: Connected USB printer * Character string: USB Serial ID**
__driver_name	Optional	For Driver Character string: Printer name (Printer driver name)

Settings of omitted parameters are not changed.

*When this is specified, it is necessary to limit the number of printers concurrently connected to the device to 1.
Specify the serial ID when concurrently connecting 2 or more USB printers.

**The USB serial ID can be checked using the LCD menu on the printer unit or using the test printing function on the printer unit. For details, see the printer instruction manual.

- Request Example

*Encode the parameter's name and value as a URL in UTF-8 format when sending the request.

[Request Before URL Encoding]

http://localhost:8080/Printer/SetPort?__device_type=bluetooth&__address=00:01:90:E3:84:77

http://localhost:8080/Printer/SetPort?__device_type=tcip&__address=192.168.1.1:9100

http://localhost:8080/Printer/SetPort?__device_type=usb&__address=tbqa0446

http://localhost:8080/Printer/SetPort?__device_type=driver&__driver_name=SATO CL4NX 203dpi

[Request After URL Encoding]

http://localhost:8080/Printer/SetPort?__device_type=bluetooth&__address=00%3a01%3a90%3aE3%3a84%3a77

http://localhost:8080/Printer/SetPort?__device_type=tcip&__address=192%2e168%2e1%2e1%3a9100

http://localhost:8080/Printer/SetPort?__device_type=usb&__address=tbqa0446

http://localhost:8080/Printer/SetPort?__device_type=driver&__driver_name=SATO%20CL4NX%20203dpi

- Response (XML)

The response order may be changed and items added when the version is updated.

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	Processing Results (OK/NG)
/response/function	/Printer/SetPort
/response/message	Processing Results Message SUCCESSFUL when processing is successful If it fails, a character string describing the cause is displayed (E.g.: The value for parameter __address is invalid.)

- Example Response

```
<?xml version="1.0" encoding="UTF-8"?>
<response version="1.0" productName="SATO SmaPri Driver"
  productVersion="1.4.0" creationTime="2012-10-23T15:26:22+0900">
  <result>OK</result>
  <function>/Printer/SetPort</function>
  <message>SUCCESSFUL</message>
</response>
```

5-15	[Spool] Spool Clear Deletes all of the jobs from the spooler.	Supported OS	Android Windows
-------------	-------------------------------------------------------------------------	---------------------	--------------------

- Action Path

/Spooler/Clear

- Basic Parameter / Extended Parameter

None

- Request Example

```
http://localhost:8080/Spooler/Clear
```

- Response (XML)

The response order may be changed and items added when the version is updated.

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	Processing Results (OK/NG)
/response/function	/Spooler/Clear
/response/message	Processing Results Message SUCCESSFUL when processing is successful If it fails, a character string describing the cause is displayed (E.g.: The value for parameter __address is invalid.)

- Example Response

```
<?xml version="1.0" encoding="UTF-8"?>
<response xml:space="preserve" version="1.0" productName="SATO SmaPri Driver"
  productVersion="1.5.0" creationTime="2013-04-09T17:10:15 AM+0900">
  <result>OK</result>
  <function>/Spooler/Clear</function>
  <message>SUCCESSFUL</message>
</response>
```

5-16**[Device] Bluetooth Device Search**

Searches for nearby Bluetooth devices.

**Supported
OS**Android
Windows**- Action Path****/Bluetooth/Discover****- Basic Parameter**

Parameter	Type	Setting Value
__timeout	Required	Search Time (1-61)*1
__mode	Optional	sync : Sync mode (default value) async : Async mode

*1 On Android, even if 12 or more is specified, the search ends with about 12 seconds as specified by the OS.

Extended Parameter

None

- Explanation

- When the “__mode” is sync, a response is returned after the search time specified in “__timeout” has elapsed.
- When the “__mode” is async, a response is returned immediately after the request without waiting for the search to complete. In this case, if a request is performed without specifying parameters (“__timeout”, “__mode”), the Bluetooth device list can be acquired while searching. Judgement of whether or not the search is complete is made according to the “/response/message” value (IN PROGRESS: searching, SUCCESSFUL: Search complete).

- Request Example

//3 second search starts in sync mode

http://localhost:8080/Bluetooth/Discover?__timeout=3&mode=sync

//When 3 seconds has elapsed, the list of found devices is returned as a response

//10 second search starts in async mode

http://localhost:8080/Bluetooth/Discover?__timeout=10&mode=async

//A list of devices found from the start of searching until present is acquired

http://localhost:8080/Bluetooth/Discover

- Response (XML)

The response order may be changed and items added when the version is updated.

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	Processing Results (OK/NG)
/response/function	/Bluetooth/Discover
/response/message	Processing Results Message SUCCESSFUL when processing is successful IN PROGRESS while searching If it fails, a character string describing the cause is displayed (E.g.: The value for parameter __timeout is invalid.)
/response/bluetoothDevices	Bluetooth device information found by searching
/response/bluetoothDevices/@count	No. of devices
/response/bluetoothDevices/device	BD address (Repeated for number of devices)
/response/bluetoothDevices/device/@name	Device name
/response/bluetoothDevices/device/@bonded	Paired or not (true/false)

- Example Response

```
<?xml version="1.0" encoding="UTF-8"?>
<response xml:space="preserve" version="1.0" productName="SATO SmaPri Driver"
  productVersion="1.0.0" creationTime="2015-06-24T17:10:15 AM+0900">
  <result>OK</result>
  <function>/Bluetooth/Discover</function>
  <message>SUCCESSFUL</message>
  <bluetoothDevices count="2">
    <device name="PT208j" bonded="false" >00:01:90:E3:84:77</device>
    <device name="SATO MOBILE PRINTER" bonded="true" >00:01:90:EC:1D:7A</device>
  </bluetoothDevices>
</response>
```

5-17**[Device] Bluetooth Device Pairing**

Pairs with the specified Bluetooth device.

**Supported
OS**Android
Windows**- Action Path****/Bluetooth/CreateBond****- Basic Parameter**

Parameter	Type	Setting Value
__address	Required	BD address: MAC address format (Example) 00:01:90:E3:84:77
__PIN	Optional	PIN Code (Max. 16 digits)

- Extended Parameter

None

- Request Example

- * Encode the parameter's name and value as a URL in UTF-8 format when sending the request.
- * Line breaks are used in the following example to make the text easier to read, but line break codes should not be used in the actual file.

[Request Before URL Encoding]

```
http://localhost:8080/Bluetooth/CreateBond
? __address=00:01:90:E3:84:77&__PIN=0000
```

[Request After URL Encoding]

```
http://localhost:8080/Bluetooth/CreateBond
? __address=00%3a01%3a90%3ae3%3a84%3a77&__PIN=0000
```

- Response (XML)

The response order may be changed and items added when the version is updated.

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	Processing Results (OK/NG)
/response/function	/Bluetooth/CreateBond
/response/message	Processing Results Message SUCCESSFUL when processing is successful If it fails, a character string describing the cause is displayed (E.g.: The value for parameter __address is invalid.)

- Example Response

```
<?xml version="1.0" encoding="UTF-8"?>
<response xml:space="preserve" version="1.0" productName="SATO SmaPri Driver"
  productVersion="1.0.0" creationTime="2015-06-24T17:10:15 AM+0900">
  <result>OK</result>
  <function>/Bluetooth/CreateBond</function>
  <message>SUCCESSFUL</message>
</response>
```

5-18**[Device] Remove Bluetooth Device Pairing**

Removes pairing with the specified Bluetooth device.

**Supported
OS**

Windows

- Action Path**/Bluetooth/RemoveBond****- Basic Parameter**

Parameter	Type	Setting Value
__address	Required	BD address: MAC address format (Example) 00:01:90:E3:84:77

Extended Parameter

None

- Request Example

* Encode the parameter name and parameter value as a URL in UTF-8 format when sending the request.

[Request Before URL Encoding]

http://localhost:8080/Bluetooth/RemoveBond?__address=00:01:90:E3:84:77

[Request After URL Encoding]

http://localhost:8080/Bluetooth/RemoveBond?__address=00%3a01%3a90%3aE3%3a84%3a77

- Response (XML)

The response order may be changed and items added when the version is updated.

Path	Content
/response	Root Element of Processing Results
/response/@version	XML Data Version (1.0)
/response/@productName	SATO SmaPri Driver
/response/@productVersion	SmaPri Driver Version
/response/@creationTime	XML Data Creation Time
/response/result	Processing Results (OK/NG)
/response/function	/Bluetooth/RemoveBond
/response/message	Processing Results Message SUCCESSFUL when processing is successful If it fails, a character string describing the cause is displayed (E.g.: The value for parameter __address is invalid.)

- Example Response

```
<?xml version="1.0" encoding="UTF-8"?>
<response xml:space="preserve" version="1.0" productName="SATO SmaPri Driver"
  productVersion="1.0.0" creationTime="2015-06-24T17:10:15 AM+0900">
  <result>OK</result>
  <function>/Bluetooth/RemoveBond</function>
  <message>SUCCESSFUL</message>
</response>
```

- Explanation

Since Android OS does not release an API for removing pairing, SmaPri does not support it (as of December 5, 2017).