# EPSON

# TM-T88VI/ TM-T88VI-iHUB
## WebConfig API User's Manual

**Overview**

Describes an overview of WebConfig API.

**Web API Specification**

Describes the web API specification.

**Reference**

Describes how to refer to and change setting values.

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> Provides important information and useful tips.

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# About this Manual

## Aim of the Manual

The aim of this manual is to provide development engineers with the necessary information to develop applications to set and refer to the WebConfig API for the TM-T88VI and the TM-T88VI-iHUB.

## Manual Content

The manual is made up of the following sections:

# *Contents*

# Overview

## *Overview of WebConfig API*

WebConfig API is an API used to configure TM printers via the web. It is mainly used after being incorporated into customer applications.

It uses the GET and PUT methods defined in HTTP to retrieve and modify setting values over HTTPS.

The JSON data format is used.

The PUT method is used to modify settings, and these settings are applied after the printer is reset.
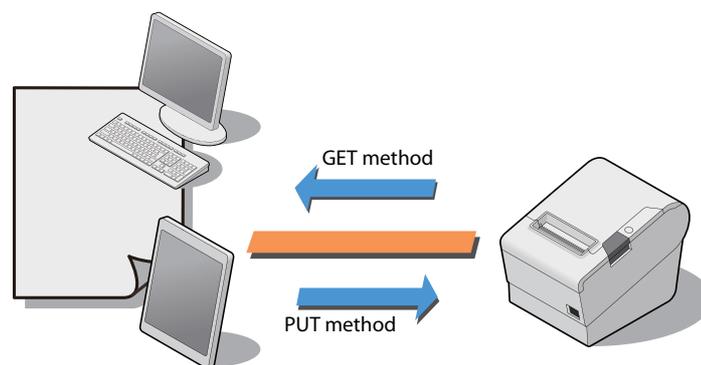
# Supported printers

- TM-T88VI Firmware Ver.40.02 ESC/POS or later
- TM-T88VI-iHUB

## Support functions

Functions supported by the WebConfigAPI are as follows.

- TM intelligent function

Not supported functions:

- Customize Value
- Memory Switches
- Network settings

## Interface

- Wired LAN
- Wireless LAN

# *Usage Instructions*

## Acquisition and Configuration of Setting Values

This section explains the system sequence and each element needed in order to acquire set values from printers and specify the settings by using the WebConfig API.

## Acquisition and Configuration of Setting Values
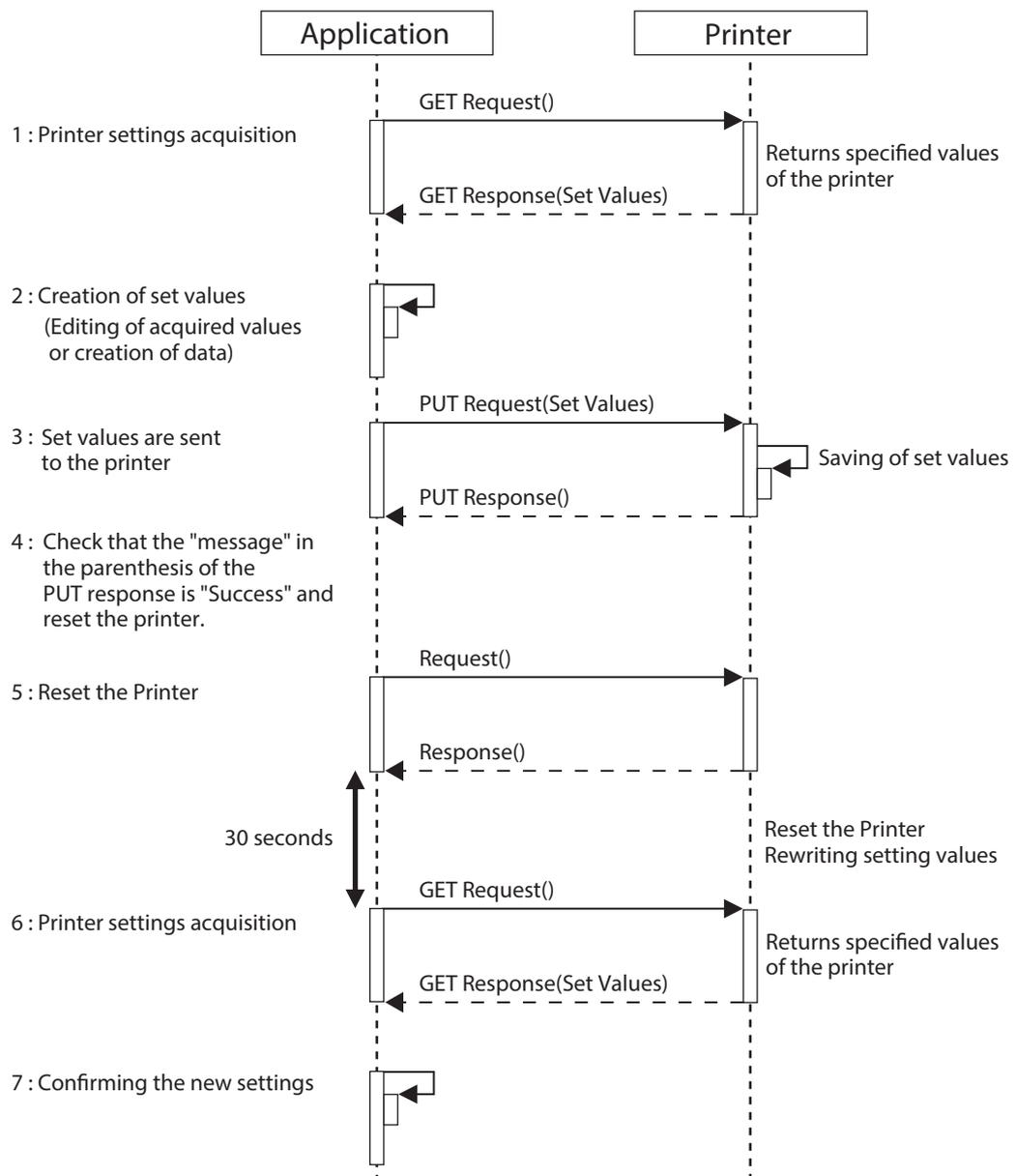
## Acquisition of settings from the printer

Firstly the settings from the printer are acquired. This is done using the following URLs:

- Used to acquire all data:
  https://<Printer's IP address>/webconfig/api/v1/webconfig.cgi

- Used to acquire a specific key:
  https://<Printer's IP address>/webconfig/api/v1/webconfig.cgi?keyname=<keyname1>,<keyname2>...

The setting values are included in the body of the response.

## Creation of setting values

Creation of each key value to configure the printer.

There are two setting methods: You can specify only the value of the specified key or you can edit the JSON data acquired by using the GET method.

- Specify only the value of the specified key.
  Specify the key and value, see "Reference" on page 23.

- Edit JSON data acquired from the printer.

For example:

Acquisition JSON data

```
...
  "StatusNotification": {
  "Active": "OFF",
  "ID": "",
  "Interval": "5",
  "Name": ""
  "Password": "(Not registered)",
  "Url": "",
  "UseProxy": "OFF",
  "UseServerAuthentication": "OFF",
  "UseUrlEncode": "ON"
...
  }
 "message" : "Success"
},
...
```

Edit data

```
...
  "StatusNotification": {
  "Active": "ON",
  "ID": "",
  "Interval": "5",
  "Name": "PJ9F000156",
  "Url": "http:\/\/statusnoticationserver.test\/test.php",
  "UseProxy": "OFF",
  "UseServerAuthentication": "OFF",
  "UseUrlEncode": "ON"
...
  }
 "message" : "Success"
 },
...
```

## Settings are Sent to the Printer

The specified JSON data is sent to the printer by the PUT method.

https://<Printer's IP address>/webconfig/api/v1/webconfig.cgi

JSON data is added as a PUT parameter.

> The setting values included in the PUT method response, are simply a copy of the setting values that were sent. They are not the final values of the state after setting is complete.

## Reset the Printer

Simply sending setting values to the printer does not change actual values on the printer. The printer needs to be reset for changes to be applied. After acquiring a PUT method response, the printer is reset in order to apply any changes.

https://<Printer's IP address>/webconfig/api/v1/reset.cgi

Sent using the GET method and there are no parameters.

## Printer settings acquisition

After resetting the printer, check that settings have been acquired from the printer and the settings procedure has been completed normally.

It takes approximately 30 seconds for the printer to reset. When 30 seconds has passed after resetting the printer, the settings are then acquired from the printer.

- Acquire all data
  https://<Printer's IP address>/webconfig/api/v1/webconfig.cgi

- Acquire a specific key
  https://<Printer's IP address>/webconfig/api/v1/webconfig.cgi?keyname=<keyname1>,<keyname2>...

The setting values are included in the body of the response. The JSON data format is used.

## Confirming the new settings

Compare the values for each key set in the printer and the JSON set values acquired from the printer, and check that they have been properly revised.

## Digest authentication

You need Digest authentication to communicate with the printer.

The ID for the authentication is "epson".

For the default password, refer to the printer's Technical Reference Guide.

# Restrictions

Manual uploading of web content (.zip files) and certificate files are not possible. In order to upload these, it is necessary to use an uploading program, or upload using the TM-T88VI Utility.

# Web API Specification

## URL of CGI

- Getting or changing the settings:
  https://<Printer's IP address>/webconfig/api/v1/webconfig.cgi

- Printer reset:
  https://<Printer's IP address>/webconfig/api/v1/reset.cgi

## HTTP Method

- GET: Acquires setting values
- PUT: Updates setting values

Other methods such as OPTIONS and HEAD are also supported.

## Response

The following content is included in the response.

### Response Header

| Header | HTTP Method | | | | Description |
|---|---|---|---|---|---|
| | GET | PUT | HEAD | OPTIONS | Value |
| Content-Type: | ● | ● | ● | ● | - |
| | | | | | application/json; charset=utf-8 |
| Access-Control-Allow-Origin: | ● | ● | ● | ● | Specify "*" in the header for permitting cross-domain communication if communication sources are not limited. |
| | | | | | * |
| Access-Control-Allow-Methods: | ● | ● | ● | ● | Communicates the allowable methods of cross-domain communication. |
| | | | | | PUT, GET, OPTIONS, HEAD |
| Access-Control-Allow-Headers: | ● | ● | ● | ● | Communicates the allowable request headers of cross-domain communication. |
| | | | | | Content-Type, Content-Length, Authorization |

| Header | HTTP Method | | | | Description |
| --- | --- | --- | --- | --- | --- |
| | **GET** | **PUT** | **HEAD** | **OPTIONS** | **Value** |
| X-Content-Type-Options: | ● | ● | ● | ● | Prevents the browser from identifying JSON data as data other than JSON data. (Requires Internet Explorer 8 or later) |
| | | | | | nosniff |
| X-XSS-protection: | ● | ● | ● | ● | Enables the browser XSS filter function. |
| | | | | | 1; mode=block |
| X-Frame-Options: | ● | ● | ● | ● | Prevents clickjacking attacks. Capable of preventing script execution of frames and iframes. |
| | | | | | deny |
| Content-Security-Policy: | ● | ● | ● | ● | Detects and mitigates well known types of attacks including cross-site scripting (XSS) and data injection attacks. |
| | | | | | default-src 'none' |
| WWW-Authenticate: | ● | ● | ● | ● | Although digest authentication is necessary, this is specified if there is no authentication information or authentication fails (such as when the password is incorrect). It is not specified when digest authentication is completed normally. |
| | | | | | Digest realm="<IP address>", nonce="xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx", qop="auth" |

## Response Body

| HTTP Method | Description |
| --- | --- |
| GET | The setting values are returned from the printer. For details of these return values, see "GET method" on page 16. |
| PUT | The request body is returned. These are not the setting values acquired from the printer. For details of these return values, see "PUT method" on page 17. |

# Request

## Transmission Capacity

The maximum request message (Request Header and Request Body) capacity is 65533 bytes.

## Request Header

Please specify as follows.

| Header | Description |
|---|---|
| Content-Type: | application/json; charset=utf-8 |
| Authorization: | Digest username="epson" realm="ByPassword" nonce="xxxxxxxxxxxxxxxxxxxxxxxx", qop="auth",,,,,, |

## Request Body

| HTTP Method | Description |
|---|---|
| GET | Acquires the current setting values from the printer. For details of these set values, see "GET method" on page 16. |
| PUT | Contains the values to configure the printer. For details of these set values, see "PUT method" on page 17. |

# *Parameter*

## GET method

GET method: Acquires the current setting values.

| GET Parameter | Response (status) | Response (body) | Description |
|---|---|---|---|
| • If acquiring all set values: No GET parameters<br><br>• If acquiring a specific setting value: Specifies a keyname by the GET parameter. [format] keyname=<JSON keyname you want to get><br><br>• If acquiring multiple setting values: Separating with commas multiple keynames in GET parameter. [format] keyname=<keyname1>, <keyname2>… | 200 OK | {<br>　"Setting" : <JSON object for the setting item specified in the key><br>　"message": "Success",<br>} | Settings acquired successfully.<br>Reply consists only of the object of the specified key if the keyname is specified. |
| | 503 Service Unavailable | {<br>　"Setting" : {},<br>　"message": "Cannot communicate with the printer : The other host interface may hold the communication",<br>} | Could not get permission to communicate via port 9100.<br>Communication was not possible because printer is being used. |
| | 500 Internal Server Error | {<br>　"Setting" : {},<br>　"message": "Failed to get the settings"<br>} | Failed to acquire settings. |
| | 500 Internal Server Error | {<br>　"message": "Failed: No enough memory"<br>} | Failed due to insufficient memory.<br>Repair is necessary if the problem occurs even after restarting the printer. |
| | 400 Bad Request | {<br>　"Setting" : {},<br>　"message": "Specified key is not exist"<br>} | Failed to acquire settings.<br>Keyname % not present in JSON data of keyname=% specified values.<br>A keyname not found in the setting value JSON data has been specified. |
| | 400 Bad Request | {<br>　"message": "Invalid Parameter"<br>} | Parameter other than "keyname" is present. |
| | 401 Authentication Required | As authentication is carried out by lighttpd, the response body is returned by lighttpd. | Authentication information is required. |

If multiple keys are specified for keyname, "Success" is returned when the specified value for a single keyname is acquired even though several keyname cannot be acquired due to some error. Check each key value accordingly.

Value exists:　Setting value was acquired.

No value:　　Setting value could not be acquired due to improper keyname.

## PUT method

PUT method: Updates setting values.

| PUT Parameter | Response (status) | Response (body) | Description |
|---|---|---|---|
| Specifies several set of keyname and value by the following way.<br><br>[format]<br>{ "Setting" : {<br>　&lt;keyname1 you want to modify&gt; : &lt;value you want to set&gt;,<br>　&lt;keyname2 you want to modify&gt; : &lt;value you want to set&gt;,<br>　... ,<br>　}<br>}<br><br>• You need to specify keyname and value in the prescribed manner as described at "Reference" on page 23.<br>• Any characters in  PUT parameter must be escaped as described at "Escape Sequence" on page 19. | 200 OK | {<br>　"Setting" : &lt;JSON object for the setting item specified in the key&gt;<br>　"message": "Success",<br>} | Updating was successful.<br>Refer to "Reset the Printer" on page 11. |
| | 413 Request Entity Too Large | {<br>　"message": "Request Entity Too Large"<br>} | Data is excessively large.<br>For the maximum size of "Setting" parameters (after URL decoding), refer to "Transmission Capacity" on page 15. |
| | 500 Internal Server Error | {<br>　"message": "Failed to update the settings"<br>} | Failed to update settings. |
| | 500 Internal Server Error | {<br>　"message": "Failed: No enough memory"<br>} | Failed due to insufficient memory.<br>Repair is necessary if the problem occurs even after restarting the printer. |
| | 503 Service Unavailable | {<br>　"message": "Cannot communicate with the printer : The other host interface may hold the communication"<br>} | Could not get permission to communicate via port 9100.<br>Communication was not possible because printer is being used. |
| | 401 Authentication Required | As authentication is carried out by lighttpd, the response body is returned by lighttpd. | Parameter other than "Setting" is present. |
| | 400 Bad Request | {<br>　"message": "Invalid Parameter"<br>} | "Setting" not found. |
| | 400 Bad Request | {<br>　"message": "Invalid Parameter"<br>} | Parameter other than "Setting" is present. |
| | 400 Bad Request | {<br>　"message": "Setting values should be JSON object"<br>} | Setting values are not in the JSON format. |

| PUT Parameter | Response (status) | Response (body) | Description |
|---|---|---|---|
| | 400 Bad Request | {<br>  "message": "Special characters must be escaped"<br>} | Invalid JSON escape. |

## When Using a Prohibited Method

"405 Method Not Allowed" or "403 Forbidden" is returned as the response (status).

# Characters

## Character Code

UTF-8

## Escape Sequence

According to the JSON RFC (Request for Comments), the setting character string transmitted by PUT must use the following escape sequences.

This also applies to the JSON character string acquired using GET.

| Escape notation | Original character | Description |
|---|---|---|
| \" | " | Double quotation |
| \\ | \ | Back slash |
| \b | | Back space |
| \f | | New page |
| \n | - | New line |
| \r | | Line feed |
| \t | | Tab |

Escape is not used for uXXXX (hexadecimal character strings) in Japanese, etc.

## Passwords

To ensure security, all passwords are hashed. They are displayed as follows:

- When registered: (Registered)
- When not registered: (Not registered)

"Registered" and "Not Registered" cannot be used as a password.

When registering/changing a password, please replace the (Registered) or (Not registered) string with the desired password.

# Operation specifications

## Printer Response Time

Response is within 10 seconds.

# Example of Request and Response

Here is an example of acquiring the StatusNotification and ServerDirectPrint settings.

Example of modification of StatusNotification and ServerDirectPrint settings.

GET request example (key specification)

- Request

Request Header

```
GET /webconfig/api/v1/webconfig.cgi?keyname=StatusNotification,ServerDirectPrint HTTP/1.1
Host: <Host name or IP address>
Authorization: Digest username="epson", realm="ByPassword", nonce="", uri="/webconfig/api/v1/webconfig.cgi",
response="f708199215ba938f85ae77c373c192c2", opaque=""
```

Request Body is none

- Response

Response Header

```
HTTP/1.1 200 OK
Access-Control-Allow-Origin: *
Access-Control-Allow-Methods: PUT, GET, OPTIONS, HEADER
Access-Control-Allow-Headers: Content-Type, Content-Length, Authorization
Content-Type: application/json; charset=utf-8
X-Content-Type-Options: nosniff
X-XSS-protection: "1; mode=block"
X-Frame-Options: deny
Content-Security-Policy: default-src 'none'
Connection: close
Transfer-Encoding: chunked
Date: Wed, 09 Nov 2016 07:46:22 GMT
Server: lighttpd
```

Response Body

```
{
  "Setting": {
    "ServerDirectPrint": {
      "Active": "OFF",
      "CutReserveTimeout": "2",
      "ID": "",
      "Interval1": "5",
      "Interval2": "5",
      "Interval3": "5",
      "Name": "ECCN905633",
      "Password": "(Not registered)",
      "Url1": "",
      "Url2": "",
      "Url3": "",
      "UseProxy": "OFF",
      "UseServerAuthentication": "OFF",
      "UseUrlEncode": "ON"
    },
    "StatusNotification": {
      "Active": "OFF",
      "ID": "",
      "Interval": "5",
      "Name": "ECCN905633",
      "Password": "(Not registered)",
      "Url": "",
      "UseProxy": "OFF",
      "UseServerAuthentication": "OFF",
      "UseUrlEncode": "ON"
    }
  },
  "message": "Success"
}
```

PUT request example (key specification)

- Request

Request Header

```
PUT /webconfig/api/v1/webconfig.cgi HTTP/1.1
<Host name or IP address>
Authorization: Digest username="epson", realm="ByPassword", nonce="", uri="/webconfig/api/v1/webconfig.cgi",
response="0a3e57cca43d8221d942d13aeb377658", opaque=""
Content-Type: application/json
```

Response Body

```
{
 "Setting": {
  "ServerDirectPrint": {
   "Active": "OFF",
   "CutReserveTimeout": "2",
   "ID": "",
   "Interval1": "5",
   "Interval2": "5",
   "Interval3": "5",
   "Name": "ECCN905633",
   "Url1": "",
   "Url2": "",
   "Url3": "",
   "UseProxy": "OFF",
   "UseServerAuthentication": "OFF",
   "UseUrlEncode": "ON"
  },
  "StatusNotification": {
   "Active": "OFF",
   "ID": "",
   "Interval": "5",
   "Name": "ECCN905633",
   "Url": "",
   "UseProxy": "OFF",
   "UseServerAuthentication": "OFF",
   "UseUrlEncode": "ON"
  }
 }
}
```

- Response

Response Header

```
HTTP/1.1 200 OK
Access-Control-Allow-Origin: *
Access-Control-Allow-Methods: PUT, GET, OPTIONS, HEADER
Access-Control-Allow-Headers: Content-Type, Content-Length, Authorization
Content-Type: application/json; charset=utf-8
X-Content-Type-Options: nosniff
X-XSS-protection: "1; mode=block"
X-Frame-Options: deny
Content-Security-Policy: default-src 'none'
Connection: close
Transfer-Encoding: chunked
Date: Wed, 09 Nov 2016 07:46:22 GMT
Server: lighttpd
```

Response Body

```
{
 "Setting": {
  "ServerDirectPrint": {
   "Active": "OFF",
   "CutReserveTimeout": "2",
   "ID": "",
   "Interval1": "5",
   "Interval2": "5",
   "Interval3": "5",
   "Name": "ECCN905633",
   "Password": "(Not registered)",
   "Url1": "",
   "Url2": "",
   "Url3": "",
   "UseProxy": "OFF",
   "UseServerAuthentication": "OFF",
   "UseUrlEncode": "ON"
  },
  "StatusNotification": {
   "Active": "OFF",
   "ID": "",
   "Interval": "5",
   "Name": "ECCN905633",
   "Password": "(Not registered)",
   "Url": "",
   "UseProxy": "OFF",
   "UseServerAuthentication": "OFF",
   "UseUrlEncode": "ON"
  }
 },
 "message": "Success : Please confirm by get again and You need to reset the printer to apply settings."
}
```

# Reference

This chapter explains items that can be acquired from the printer, as well as items and values that can be set.

When using GET, this is included in the response body.

When using PUT, this is included in the request body.

Here it is possible to describe only the items to be set, and use items included in the GET response body for creation.

*: Not supported by TM-T88VI.

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
|---|---|---|---|---|
| | | | | **Value** |
| ePOS-Print | | | | ePOS-Print setting |
| | Active | | | Sets to whether to enable or disable ePOS-Print. When using the following functions, it is necessary to set the value of this key to "ON". <br>• Server Direct Print <br>• ePOS-Device * <br>• Print Forwarding <br>• Status Notification <br>• Device Data Notification * |
| | | | | "OFF", "ON" |
| ePOS-Device * | | | | ePOS-Device setting |
| | Active | | | Sets to whether to enable or disable ePOS-Device. When using the following functions, it is necessary to set the value of this key to "ON". <br>• Device Data Notification |
| | | | | "OFF", "ON" |
| OFSC-Print | | | | Not used |
| | Active | | | - |

**3**

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
|---|---|---|---|---|
| | | | | Value |
| Printer List | | | | List of ePOS-Print, ePOS-Device *, Server Direct Print, and Device Data Notification * output destination printers. |
| | Printer1 | | | Setting for the TM-T88VI/ TM-T88VI-iHUB. |
| | | DeviceID | | The ID for identifying the printer. |
| | | | | Device ID specified for "local_printer" or the printer. String with a length of 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". There must not be any duplicate string for another DeviceID. |
| | | IPAddress | | The ID for identifying the printer. |
| | | | | "127.0.0.1" |
| | | ModelName | | Specify the printer model name. |
| | | | | "TM-T88VI" |
| | Printer2 to Printer21 | | | Network printer |
| | | DeviceID | | The ID for identifying the printer. |
| | | | | String with a length of 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". There must not be any duplicate string for another DeviceID. |
| | | IPAddress | | The IP address for identifying the printer. |
| | | | | String in IPv4 address format. %A: 1 to 223 %B: 0 to 255 %C: 0 to 255 %D: 0 to 254 There must not be any duplicate IPAddress for another device. |
| | | ModelName | | Specify the printer model name. |
| | | | | Model name string (For support printers, refer to the Technical Reference Guide of the printer) |
| KeyInputDevice * | | | | Key input device |
| | KeyboardLayout | | | Specify the keyboard layout for the key input device. |
| | | | | "US", "JP", "DE", "FR", "IR", "ES", "GB" |

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
|---|---|---|---|---|
| | | | | **Value** |
| KeyInputDeviceList * | | | | Key input device list |
| | KeyInputDevice1 to KeyInputDevice5 | | | Key input device |
| | | DeviceID | | Specify the ID for identifying the key input device. |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". There must not be any duplicate string for another DeviceID. |
| | | VendorName | | Specify the vendor name of the key input devices. |
| | | | | String with a length of 0 to 30 characters. |
| | | ProductName | | Specify the product name of the key input devices. |
| | | | | String with a length of 0 to 30 characters. |
| | | VID | | Specify the USB Vendor ID for identifying the key input device. |
| | | | | "0x0000" to "0xFFFF" |
| | | PID | | Specify the USB Product ID for identifying the key input device. |
| | | | | "0x0000" to "0xFFFF" |
| | | ControlScript | | Specify the control script of the key input devices. |
| | | | | • String with 1 to 255 ASCII characters. <br> • "Keyboard_Generic.js" (When controlling as a keyboard) <br> • "Scanner_Generic.js" (When controlling as a barcode scanner) |
| | | InterfaceNumber | | Specify the USB interface number for identifying the key input device. |
| | | | | "0" to "255" |

**3**

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
|---|---|---|---|---|
| | | | | **Value** |
| SerialCommunicationDeviceList * | | | | Serial communication device list |
| | SerialCommunicationDevice1 to SerialCommunicationDevice5 | | | Serial communication device |
| | | DeviceID | | Specify the ID for identifying the serial communication device. |
| | | | | 1 or more to 30 or less characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". There must not be any duplicate string for another DeviceID. The device ID for the device connected to a serial connector is "local_serial" (you cannot change this ID). |
| | | VendorName | | Specify the USB serial conversion cable vendor name. |
| | | | | 0 or more to 30 or less characters. |
| | | ProductName | | Specify the USB serial conversion cable product name. |
| | | | | 0 or more to 30 or less characters. |
| | | VID | | Specify the USB serial conversion cable USB vendor ID. |
| | | | | Empty string if the device is connected to the printer's serial connector. Specify the cable VID within the range from XXX to YYY in the case of a USB serial conversion cable. |
| | | PID | | Specify the USB serial conversion cable USB product ID. |
| | | | | Empty string if the device is connected to the printer's serial connector. Specify the cable PID within the range from XXX to YYY in the case of a USB serial conversion cable. |
| | | ControlScript | | Specify the control script of serial communication devices. |
| | | | | String with 1 to 255 ASCII characters. |
| | | BaudRate | | Specify the baud rate. |
| | | | | "2400", "4800", "9600", "19200", "38400", "57600", "115200" |
| | | DataBit | | Specify the data bit. |
| | | | | "7", "8" |

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
|---|---|---|---|---|
| | | | | **Value** |
| | | Parity | | Specify the parity. |
| | | | | "None", "Odd", "Even" |
| | | StopBit | | Specify the stop bit. |
| | | | | "1", "1.5", "2" |
| | | FlowControl | | Specify the flow control. |
| | | | | "None", "Hardware", "XOnXOff" |
| | | InterfaceNumber | | Specify the interface number. |
| | | | | "0" to "255" |
| DefaultDeviceControlScriptList * | | | | This is the device control script embedded in the printer. It can be referenced but not specified. |
| | DeviceControlScript1 | | | Specify the device control script. |
| | | FileName | | Specify the file name. |
| | | | | Keyboard_Generic.js |
| | | DeviceType | | Specify the device type. |
| | | | | type_keyboard |
| | | DeviceGroup | | Specify the device group. |
| | | | | group_hid |
| | DeviceControlScript2 | | | Specify the device control script. |
| | | FileName | | Specify the file name. |
| | | | | Keyboard_MID_QM128A_RAA.js |
| | | DeviceType | | Specify the device type. |
| | | | | type_keyboard |
| | | DeviceGroup | | Specify the device group. |
| | | | | group_hid |
| | DeviceControlScript3 | | | Specify the device control script. |
| | | FileName | | Specify the file name. |
| | | | | MSR_V3TU_FK.js |
| | | DeviceType | | Specify the device type. |
| | | | | type_msr |
| | | DeviceGroup | | Specify the device group. |
| | | | | group_hid |

**3**

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
|---|---|---|---|---|
| | | | | Value |
| | DeviceControlScript4 | | | Specify the device control script. |
| | | FileName | | Specify the file name. |
| | | | | Scanner_Generic.js |
| | | DeviceType | | Specify the device type. |
| | | | | type_scanner |
| | | DeviceGroup | | Specify the device group. |
| | | | | group_hid |
| | DeviceControlScript5 | | | Specify the device control script. |
| | | FileName | | Specify the file name. |
| | | | | CashChanger_RT_200RAD_200.js |
| | | DeviceType | | Specify the device type. |
| | | | | type_cash_changer |
| | | DeviceGroup | | Specify the device group. |
| | | | | group_serial |
| | DeviceControlScript6 | | | Specify the device control script. |
| | | FileName | | Specify the file name. |
| | | | | SimpleSerial_Generic.js |
| | | DeviceType | | Specify the device type. |
| | | | | type_simple_serial |
| | | DeviceGroup | | Specify the device group. |
| | | | | group_serial |
| | DeviceControlScript7 to DeviceControlScript10 | | | Specify the device control script. |
| | | FileName | | Not specified |
| | | | | - |
| | | DeviceType | | Not specified |
| | | | | - |
| | | DeviceGroup | | Not specified |
| | | | | - |

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
|---|---|---|---|---|
| | | | | **Value** |
| ProxyInfo | | | | Proxy settings.<br>It is necessary to specify "ON" for this setting if the following functions are "ON".<br>• UseProxy of ServerDirectPrint<br>• UseProxy of StatusNotification<br>• UseProxy of WebContentsUpdater |
| | Url | | | Specify the proxy server URL. |
| | | | | The communication destination server URL string.<br>Empty string or string not exceeding 2043 characters that starts with "http://" or "https://".<br>Single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "-", ".", "/", "!", "~", "*", "'", "(", ")", "[", "]", ";", "?", ":", "@", "&", "=", "$", ",", "%", "#" and "+". |
| | Port | | | Specify the proxy server port number. |
| | | | | "0" to "65535" |
| | ID | | | Specify the proxy server authentication ID. |
| | | | | Empty string or string with 1 to 30 characters.<br>Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". |
| | Password | | | Specify the proxy server authentication password. |
| | | | | Empty string or string with 1 to 30 characters.<br>Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-".<br>The following cannot be specified.<br>"Registered", "Not Registered" |
| ServerDirectPrint | | | | Server direct print settings. |
| | Active | | | Specify whether server direct printing is enabled/disabled. |
| | | | | "OFF", "ON" |
| | Name | | | Specify the ID for identifying the communication source (identification information transmitted to the server). |
| | | | | Empty string or string with 1 to 30 characters.<br>Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-".<br>The printer serial number is used for "Name" when the initial value or an empty string is specified. It is left empty if the printer serial number is not set. |
| | ID | | | Specify the Digest authentication ID. |
| | | | | Empty string or string with 1 to 30 characters.<br>Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". |

**3**

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
|---|---|---|---|---|
| | | | | **Value** |
| | Password | | | Specify the Digest authentication Password. |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". The following cannot be specified. "Registered", "Not Registered" |
| | Url1 to Url3 | | | Specifies whether to enable or disable the Server 1 to Server 3. |
| | | | | The communication destination server URL string. Empty string or string not exceeding 2043 characters that starts with "http://" or "https://". Single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "-", ".", "/", "!", "~", "*", "'", "(", ")", "[", "]", ";", "?", ":", "@", "&", "=", "$", ",", "%", "#" and "+". |
| | Interval1 to Interval3 | | | Specifies whether to enable or disable the Server 1 to Server 3. |
| | | | | "0" to "86400" |
| | UseServerAuthentication | | | Specify whether server authentication (HTTPS) is used. |
| | | | | "OFF", "ON" |
| | UseProxy | | | Specify whether a proxy is used. |
| | | | | "OFF", "ON" When this setting is "ON", is it necessary to specify "ProxyInfo". |
| | UseUrlEncode | | | Specify whether a URL encode is used. |
| | | | | "OFF", "ON" |
| | CutReserveTimeout | | | Not used |
| | | | | - |

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
|---|---|---|---|---|
| | | | | **Value** |
| StatusNotification | | | | Status notification settings. |
| | Active | | | Specify whether status notification is enabled/disabled. |
| | | | | "OFF", "ON" |
| | Name | | | Specify the ID for identifying the communication source (identification information transmitted to the server). |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". The printer serial number is used for "Name" when the initial value or an empty string is specified. It is left empty if the printer serial number is not set. |
| | ID | | | Specify the Digest authentication ID. |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". |
| | Password | | | Designates the password used for Digest authentication. |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". The following cannot be specified. "Registered", "Not Registered" |
| | Url | | | Specify the status notification data transmission destination server URL. |
| | | | | The communication destination server URL string. Empty string or string not exceeding 2043 characters that starts with "http://" or "https://". Single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "-", ".", "/", "!", "~", "*", "'", "(", ")", "[", "]", ";", "?", ":", "@", "&", "=", "$", ",", "%", "#" and "+". |
| | Interval | | | Specify the server data transmission interval time. |
| | | | | "0" to "86400" |
| | UseServerAuthentication | | | Specify whether a server authentication (HTTPS) is used. |
| | | | | "OFF", "ON" |
| | UseProxy | | | Specify whether a proxy is used. |
| | | | | "OFF", "ON" When this setting is "ON", is it necessary to specify "ProxyInfo". |
| | UseUrlEncode | | | Specify whether a URL encode is used. |
| | | | | "OFF", "ON" |

**3**

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
| --- | --- | --- | --- | --- |
| | | | | **Value** |
| PrintForwarding | | | | Print forwarding settings. |
| | PrintForwarding | | | Specify whether the print forwarding and spooling functions are enabled/disabled. |
| | | | | "OFF", "ON w/cut", "ON w/o cut" |
| | PrintMessage | | | Specify whether the print message during forwarding is enabled/disabled. |
| | | | | "OFF", "ON" |
| | AlertMessage | | | Specify the message to be printed during forwarding. |
| | | | | Character string of 255 bytes or less. Although it is possible to specify a multi-byte character string (single/double-byte), the string should have UTF-8 encoding. |
| | MessageAttrs | | | Specify the attribute values of forwarding message text decoration. |
| | | | | Specify the combination of bit flags shown in the following pattern as a hexadecimal character string. (Maximum value when all specified: 0x003F) 0x0000: No text decoration 0x0001: Bold 0x0002: Underline 0x0004: Horizontal double-size characters 0x0008: Vertical double-size characters 0x0010: Black and white negative 0x0020: Inverted printed characters When the first character is "0", data is acquired as octal number. When it is "0x", it is a hexadecimal number. Otherwise it is a decimal number. |
| | MessagePosition | | | Specify the forwarding message print timing. |
| | | | | "Too", "Bottom" |
| | RetryCount | | | Specify the retry count when a print error occurs. |
| | | | | "0" to "60" |
| | RetryInterval | | | Specify the retry interval when a print error occurs. |
| | | | | "0" to "60" |

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
| --- | --- | --- | --- | --- |
| | | | | **Value** |
| | CandidateList | | | List of candidate printers for forwarding. |
| | | Candidate1 to Candidate21 | | Printers for forwarding. |
| | | | Primary | Specify the device ID for the first candidate printer in the list. |
| | | | | Please specify the device ID registered in the "DeviceID Print-erList". String with a length of 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". Device ID other than the reserved device ID of the display (local_display). This must not be a duplicate of another primary device ID. |
| | | | Secondary | Specify the device ID for the secondary candidate printer in the list. |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". Device ID other than the reserved device ID of the display (local_display). |
| | | | Tertiary | Specify the device ID for the tertiary candidate printer in the list. |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". Device ID other than the reserved device ID of the display (local_display). |
| DeviceDataNotification * | | | | Device data notification settings. |
| | Active | | | Specify whether device data notification is enabled/disabled. |
| | | | | "OFF", "ON" |
| | Name | | | Specify the ID for identifying the communication source (identification information transmitted to the server). |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". The printer serial number is used for "Name" when the initial value or an empty string is specified. It is left empty if the printer serial number is not set. |
| | ID | | | Specify the Digest authentication ID. |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". |

**3**

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
|---|---|---|---|---|
| | | | | **Value** |
| | Password | | | Designates the password used for Digest authentication. |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". The following cannot be specified. "Registered", "Not Registered" |
| | Url | | | Specify the URL of Web contents that are automatically updated. |
| | | | | The communication destination server URL string. Empty string or string not exceeding 2043 characters that starts with "http://" or "https://". Single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "-", ".", "/", "!", "~", "*", "'", "(", ")", "[", "]", ";", "?", ":", "@", "&", "=", "$", ",", "%", "#" and "+". |
| | UseServerAuthentication | | | Specify whether a server authentication (HTTPS) is used. |
| | | | | "OFF", "ON" |
| | UseProxy | | | Specify whether a proxy is used. |
| | | | | "OFF", "ON" When this setting is "ON", is it necessary to specify "ProxyInfo". |
| | UseUrlEncode | | | Specify whether a URL encode is used. |
| | | | | "OFF", "ON" |
| | BoxID | | | Specify the ID of the communication box used by the Device Data Notification function. |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". |
| DataNotificationDeviceList * | | | | List of devices subject to Device Data Notification. |
| | DataNotificationDevice1 to DataNotificationDevice20 | | | Specify the devices subject to Device Data Notification. |
| | | DeviceID | | Specifies the device ID. |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". ID of device specified in the Printer, Key input device or Serial communication device, or "local_display". |

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
|---|---|---|---|---|
| | | | | **Value** |
| WebContentsUpdater | | | | Web content automatic update settings. |
| | Active | | | Specify whether the web content automatic update function is enabled/disabled. |
| | | | | "OFF", "ON" |
| | Name | | | Specify the ID for identifying the communication source (identification information sent to the server). |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". The printer serial number is used for "Name" when the initial value or an empty string is specified. It is left empty if the printer serial number is not set. |
| | ID | | | Specify the Digest authentication ID. |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". |
| | Password | | | Specify the Digest authentication password. |
| | | | | Empty string or string with 1 to 30 characters. Characters that can be used are single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "." and "-". The following cannot be specified. "Registered", "Not Registered" |
| | Url | | | Specify the URL for web content to be automatically updated. |
| | | | | The communication destination server URL string. Empty string or string not exceeding 2043 characters that starts with "http://" or "https://". Single-byte alphanumeric characters (0 to 9, a to z, A to Z), "_", "-", ".", "/", "!", "~", "*", "'", "(", ")", "[", "]", ";", "?", ":", "@", "&", "=", "$", ",", "%", "#" and "+". |
| | UseServerAuthentication | | | Specify whether server authentication (HTTPS) is used. |
| | | | | When this setting is "ON", a server authentication certificate must be registered. "OFF", "ON" |
| | UseProxy | | | Specify whether a proxy is used. |
| | | | | When this setting is "ON", a server authentication certificate must be registered. "OFF", "ON" |

**3**

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
|---|---|---|---|---|
| | | | | **Value** |
| | Schedule | | | Depending on the content of this setting, it is necessary to specify the following:<br>• Hourly: TimeInterval<br>• Daily: Hour, Minute<br>• Weekly: Week, Hour, Minute<br>• Monthly: Day, Hour, Minute |
| | | | | "Hourly", "Daily", "Weekly", "Monthly" |
| | TimeInterval | | | The time interval is specified in hours when "Schedule" is set to "Hourly". |
| | | | | "1" to "23" |
| | Week | | | Specify the particular day of the week to perform the update when "Schedule" is set to "Weekly". |
| | | | | "Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday" |
| | Day | | | Specify the particular day of the week to perform the update when "Schedule" is set to "Monthly". |
| | | | | "1" to "31" |
| | Hour | | | Specify the particular hour to perform the update. |
| | | | | "0" to "23" |
| | Minute | | | Specify the particular minute to perform the update. |
| | | | | "0" to "59" |
| | LastResult | | | Acquire the results of the last WebContents update. |
| | | TimeStamp | | Acquire the date and time of the last WebContents update. |
| | | | | Example: "Wed Jul 8 16:03:58 2015"<br>"-" is returned when an update has not been performed. |
| | | UpdateDate | | Acquire the date and time when the automatic update was last performed. |
| | | | | Example: "Wed Jul 8 16:03:58 2015"<br>"-" is returned when an update has not been performed. |
| | | UpdateStatus | | Acquire the results when the automatic update was last performed. |
| | | | | 0: Update completed normally<br>1: Completed normally: Not updated because latest version already<br>2: Has never been updated<br>Negative value: Abnormal termination |

| Key 1 | Key 2 | Key 3 | Key 4 | Description |
|---|---|---|---|---|
| | | | | **Value** |
| PHP | | | | PHP time difference settings. |
| | TimeDifference | | | Time difference settings.<br>The TimeZone setting is given precedence when XXX has been already set, or when this setting and TimeZone are transmitted simultaneously.<br>Enter "" (empty string) for "TimeZone" if using this setting. |
| | | | | "-12" to "+14" |
| | TimeZone | | | Specify the PHP timezone.<br>A TimeDifference value of "0" is returned when this setting is enabled.<br>This setting and TimeDifference cannot be defined simultaneously. |
| | | | | "UTC", "America/Los_Angeles" etc.<br>(Operates using UTC (no time difference) if an invalid value is specified.) |
| DocumentPath | | | | Specify the Web document path.<br>Specify the WebConfigPath and UserWebAppPath by using the following combinations.<br>WebConfigPath = "\/"<br>UserWebAppPath = "\/webapp"<br>or<br>WebConfigPath = "\/PrinterConfigurationPage"<br>UserWebAppPath = "\/" |
| | WebConfigPath | | | Specify the WebConfig path. |
| | | | | "\/", "\/PrinterConfigurationPage" |
| | UserWebAppPath | | | Specify the user web application path. |
| | | | | "\/", "\/webapp" |

**3**