MITSUBISHI ELECTRIC

Programmable Controller

MELSEC iQ-R/MELSEC iQ-F Web Server Function Guide Book

SAFETY PRECAUTIONS

(Read these precautions before using this product.)
Before using Mitsubishi Electric programmable controllers, please read the manuals for the products used and the relevant manuals carefully and pay full attention to safety to handle the products correctly.
In this manual, the safety precautions are classified into two levels: "⚠WARNING" and "⚠CAUTION".

⚠ **WARNING**	Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.
⚠ **CAUTION**	Indicates that incorrect handling may cause hazardous conditions, resulting in minor or moderate injury or property damage.

Under some circumstances, failure to observe the precautions given under "⚠CAUTION" may lead to serious consequences.
Observe the precautions of both levels because they are important for personal and system safety.
Make sure that the end users read this manual and then keep the manual in a safe place for future reference.

[Design Precautions]

⚠WARNING

- When connecting an external device with a CPU module or intelligent function module to modify data of a running programmable controller, configure an interlock circuit in the program to ensure that the entire system will always operate safely. For other forms of control (such as program modification, parameter change, forced output, or operating status change) of a running programmable controller, read the relevant manuals carefully and ensure that the operation is safe before proceeding. Improper operation may damage machines or cause accidents.
- Especially, when a remote programmable controller is controlled by an external device, immediate action cannot be taken if a problem occurs in the programmable controller due to a communication failure. To prevent this, configure an interlock circuit in the program, and determine corrective actions to be taken between the external device and CPU module in case of a communication failure.
- Do not write any data to the "system area" and "write-protect area" of the buffer memory in the module. Also, do not use any "use prohibited" signals as an output signal from the CPU module to each module. Doing so may cause malfunction of the programmable controller system. For the "system area", "write-protect area", and the "use prohibited" signals, refer to the user's manual for the module used.
- To maintain the safety of the programmable controller system against unauthorized access from external devices via the network, take appropriate measures. To maintain the safety against unauthorized access via the Internet, take measures such as installing a firewall.

[Wiring Precautions]

⚠CAUTION

- Securely connect the connector to the module. Poor contact may cause malfunction.
- Do not install the control lines or communication cables together with the main circuit lines or power cables. Keep a distance of 100mm or more between them. Failure to do so may result in malfunction due to noise.
- Place the cables in a duct or clamp them. If not, dangling cables may swing or inadvertently be pulled, resulting in malfunction or damage to modules or cables.
  In addition, the weight of the cables may put stress on modules in an environment of strong vibrations and shocks.
- When disconnecting the communication cable or power cable from the module, do not pull the cable by the cable part. Pulling the cable connected to the module may result in malfunction or damage to the module or cable.
- Check the interface type and correctly connect the cable. Incorrect wiring (connecting the cable to an incorrect interface) may cause failure of the module and external device.
- For Ethernet cables to be used in the system, select the ones that meet the specifications in the user's manual for the module used. If not, normal data transmission is not guaranteed.

[Startup and Maintenance Precautions]

⚠CAUTION

- When connecting an external device with a CPU module or intelligent function module to modify data of a running programmable controller, configure an interlock circuit in the program to ensure that the entire system will always operate safely. For other forms of control (such as program modification, parameter change, forced output, or operating status change) of a running programmable controller, read the relevant manuals carefully and ensure that the operation is safe before proceeding. Improper operation may damage machines or cause accidents.
- Especially, when a remote programmable controller is controlled by an external device, immediate action cannot be taken if a problem occurs in the programmable controller due to a communication failure. To prevent this, configure an interlock circuit in the program, and determine corrective actions to be taken between the external device and CPU module in case of a communication failure.
- After the first use of the product, do not insert/remove the SD memory card to/from the CPU module more than 500 times. Exceeding the limit may cause malfunction.
- Do not touch the metal terminals on the back side of the SD memory card. Doing so may cause malfunction or failure of the module.

[Operating Precautions]

⚠CAUTION

- When changing data and operating status, and modifying program of the running programmable controller from an external device such as a personal computer connected to an intelligent function module, read relevant manuals carefully and ensure the safety before operation. Incorrect change or modification may cause system malfunction, damage to the machines, or accidents.

CONDITIONS OF USE FOR THE PRODUCT

(1) MELSEC programmable controller ("the PRODUCT") shall be used in conditions;
i) where any problem, fault or failure occurring in the PRODUCT, if any, shall not lead to any major or serious accident; and
ii) where the backup and fail-safe function are systematically or automatically provided outside of the PRODUCT for the case of any problem, fault or failure occurring in the PRODUCT.

(2) The PRODUCT has been designed and manufactured for the purpose of being used in general industries.
MITSUBISHI ELECTRIC SHALL HAVE NO RESPONSIBILITY OR LIABILITY (INCLUDING, BUT NOT LIMITED TO ANY AND ALL RESPONSIBILITY OR LIABILITY BASED ON CONTRACT, WARRANTY, TORT, PRODUCT LIABILITY) FOR ANY INJURY OR DEATH TO PERSONS OR LOSS OR DAMAGE TO PROPERTY CAUSED BY the PRODUCT THAT ARE OPERATED OR USED IN APPLICATION NOT INTENDED OR EXCLUDED BY INSTRUCTIONS, PRECAUTIONS, OR WARNING CONTAINED IN MITSUBISHI ELECTRIC USER'S, INSTRUCTION AND/OR SAFETY MANUALS, TECHNICAL BULLETINS AND GUIDELINES FOR the PRODUCT.
("Prohibited Application")
Prohibited Applications include, but not limited to, the use of the PRODUCT in;
- Nuclear Power Plants and any other power plants operated by Power companies, and/or any other cases in which the public could be affected if any problem or fault occurs in the PRODUCT.
- Railway companies or Public service purposes, and/or any other cases in which establishment of a special quality assurance system is required by the Purchaser or End User.
- Aircraft or Aerospace, Medical applications, Train equipment, transport equipment such as Elevator and Escalator, Incineration and Fuel devices, Vehicles, Manned transportation, Equipment for Recreation and Amusement, and Safety devices, handling of Nuclear or Hazardous Materials or Chemicals, Mining and Drilling, and/or other applications where there is a significant risk of injury to the public or property.

Notwithstanding the above restrictions, Mitsubishi Electric may in its sole discretion, authorize use of the PRODUCT in one or more of the Prohibited Applications, provided that the usage of the PRODUCT is limited only for the specific applications agreed to by Mitsubishi Electric and provided further that no special quality assurance or fail-safe, redundant or other safety features which exceed the general specifications of the PRODUCTs are required. For details, please contact the Mitsubishi Electric representative in your region.

(3) Mitsubishi Electric shall have no responsibility or liability for any problems involving programmable controller trouble and system trouble caused by DoS attacks, unauthorized access, computer viruses, and other cyberattacks.

INTRODUCTION

Thank you for purchasing the Mitsubishi Electric programmable controllers.
This manual describes the specifications, parameter settings, procedures before operation, system configuration, functions, and troubleshooting of the Web server function.
Before using the products, please read this manual carefully and develop familiarity with the Web server function to handle the products correctly.
When applying the program examples provided in this manual to an actual system, ensure the applicability and confirm that it will not cause system control problems.
Please make sure that the end users read this manual.

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RELEVANT MANUALS

The following manuals are relevant to this product.

Manual name [manual number]	Description
MELSEC iQ-R/MELSEC iQ-F Web Server Function Guide Book [SH-081982ENG] (this manual)	Specifications, procedures before operation, and troubleshooting of the Web server function
MELSEC iQ-R Ethernet User's Manual (Application) [SH-081257ENG]	Functions, parameter settings, programming, troubleshooting, I/O signals, and buffer memory of Ethernet. For the Web server function, details on JavaScript objects that can be used in the user Web page.
MELSEC iQ-F FX5 User's Manual (Communication) [SH-082625ENG]	Functions of the built-in Ethernet port communication. For the Web server function, details on JavaScript objects that can be used in the user Web page.
MELSEC iQ-R Programmable Controller CPU Module User's Manual [SH-082488ENG]	Procedures before operation, specifications, devices, memory, functions, parameters, and troubleshooting of the programmable controller CPU
MELSEC iQ-R Process CPU Module User's Manual [SH-082493ENG]	Procedures before operation, specifications, devices, memory, functions, parameters, and troubleshooting of the Process CPU
GX Works3 Operating Manual [SH-081215ENG]	System configuration, parameter settings, and online operations of GX Works3

TERMS

Unless otherwise specified, this manual uses the following terms.

Term	Description
Buffer memory	Memory in an intelligent function module to store data such as setting values and monitor values. For CPU modules, it refers to memory to store data such as setting values and monitor values of the Ethernet function, or data used for data communication of the multiple CPU system function.
Device	A device (X, Y, M, D, or others) in a CPU module
Engineering tool	A tool used for setting up programmable controllers, programming, debugging, and maintenance

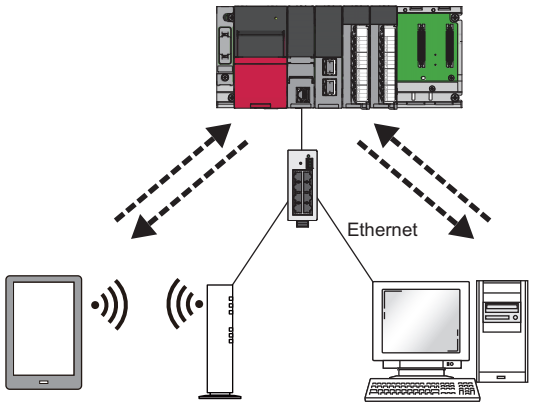
1 WEB SERVER FUNCTION

The Web server function can read/write device data from/to the CPU module by using a Web browser. The device data can be read/written from/to the CPU module by using a general-purpose Web browser of not only an Ethernet-connected personal computer but also a tablet or smartphone via Ethernet. An original Web page can be created by users and displayed as well.

Operations available with the Web server function

■To read/write device data from/to the CPU module by using a Web browser

The CPU module can be operated and the data in the CPU module can be displayed by using a Web browser via Ethernet. Since a Web browser of a tablet and smartphone can also be used, these operations can be performed easily.



Point

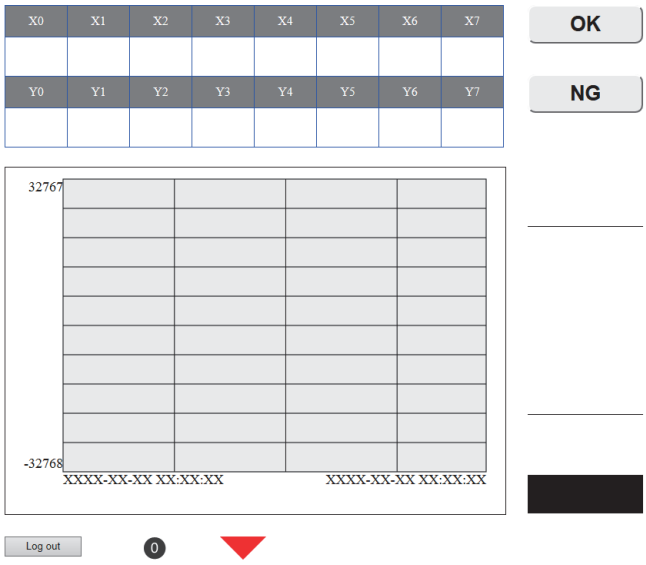
Incorporate measures other than this function if the programmable controller system's safety must be maintained against illegal access from an external device. Mitsubishi shall not be held liable for any system problems that may occur from illegal access. The user authentication of the Web server function is one method of preventing illegal access (such as program or data destruction) from an external device. It does not completely prevent illegal access.

Examples of measures for illegal access are given below.

- Install a firewall
- Install a personal computer as a relay station, and control the relay of send/receive data with an application program
- Install an external device for which the access rights can be controlled as a relay station (Contact the network provider or equipment dealer for details on the external devices for which access rights can be controlled.)

■To create an original Web page (user Web page)

An original Web page can be created by users. The created Web page can be displayed on a Web browser as a user Web page. The layout and functions to be displayed on the Web page can be set freely.

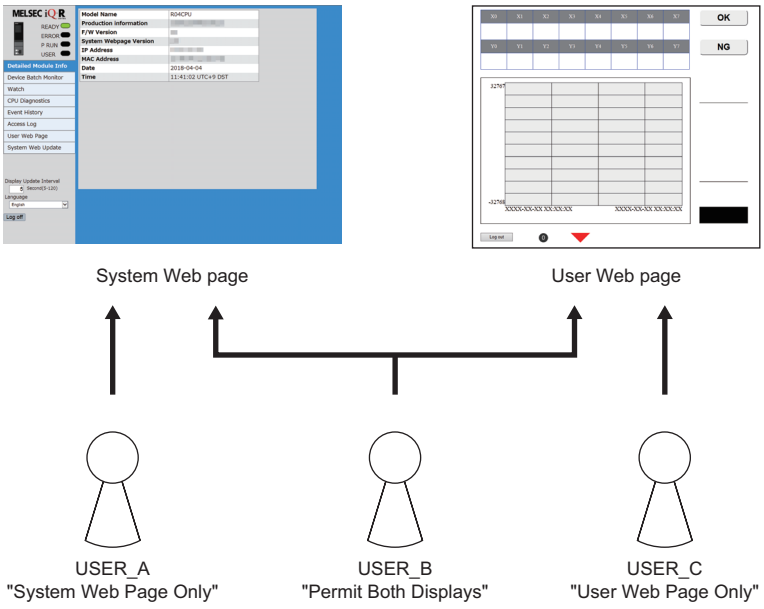


Restriction

- An SD memory card is required to display a user Web page. Therefore, the R00CPU does not support the user Web page.
- To use an SD memory card on an FX5S CPU module, use an SD memory card module.

■To restrict Web server operations/display for each account

User authentication with a user name and password prevents an unauthorized access. Displaying the system Web page and user Web page and writing to the device can be restricted for each account as well.



List of the Web server function

The following table lists items that can be operated or displayed by using Web server function.

Item	Description	Availability		Reference
		MELSEC iQ-R	MELSEC iQ-F	
User authentication	The logon/logoff status can be controlled.	○	○	Page 22 Logging on to the Web server
Detailed module information	Detailed information of the CPU module, such as the model name, production information (product number), and firmware version, is displayed.	○	○	Page 27 Detailed Module Information (Module Information)
Device batch monitor	Devices and buffer memory areas can be monitored in a batch.	○	○	Page 28 Device batch monitor
Watch	Devices and buffer memory areas can be monitored individually for each point.	○	○	Page 32 Watch
Device test	A value can be written to the device area.	○	○	Page 31 Device test
CPU diagnostics	Existing errors can be checked.	○	○	Page 34 CPU Diagnostics
Event history	The event history (such as the date and time of occurrence, event code, and detailed information) is displayed.	○	○	Page 36 Event History
Access log	The history of access to the Web server, the operation performed to the Web server, and the IP address of the access source can be displayed.	○	○	Page 38 Access Log
User Web page	An original Web page created by users can be displayed.	○	○	Page 46 USING USER WEB PAGE
System Web page update	The system Web page can be updated by using a system Web page file.	○	×	Page 41 System Web Page Update
Specify Redundant CPU	Select the system to be displayed. When an error occurs, the redundant status notification is displayed directly under this setting.	○	×	Page 42 Specify Redundant CPU
Refreshing cycle of display	The refreshing cycle of the system Web page can be changed.	○	○	Page 44 Refreshing Cycle of Display
Language switcher	The language displayed on the system Web page is changed to the selected language.	○	○	Page 45 Language Switcher

Point

- The system Web page is the default Web page of the Web server function. Access to the CPU module from a Web browser with the Web server function displays the system Web page. Every Web server function can be used on the system Web page.
- A user Web page is an original Web page created by users that can be displayed by the Web server function. Storing a created Web page to an SD memory card displays the page as a user Web page.

1.1 Functional Specifications

Functional specifications

Item	Description
Number of users that can simultaneously logs on	4
Own station port number	Default: 80 (variable)
Supported language	• Japanese • English • Chinese (Simplified)*1 The user Web page supports multiple languages.*1*2
Supported character code	UTF-8
Number of accounts	4
Refreshing cycle	■MELSEC iQ-R series • System Web page : 5 to 120 seconds (Default: 5 seconds) • User Web page: 1 to 120 seconds (Default: 5 seconds)*3 ■MELSEC iQ-F series • System Web page : 5 to 120 seconds (Default: 5 seconds) • User Web page: 1 to 120 seconds (Default: 5 seconds)

*1 For the FX5U CPU module and FX5UC CPU module, the ones with the firmware version 1.100 or later support these items.

*2 For the FX5UJ CPU module, the ones with the firmware version 1.020 or later support this item.

*3 This refreshing cycle applies for the following firmware versions of CPU modules:
· R00CPU, R01CPU, R02CPU: "30" or later
· R04CPU, R04ENCPU, R08CPU, R08ENCPU, R16CPU, R16ENCPU, R32CPU, R32ENCPU, R120CPU, R120ENCPU: "63" or later
· Process CPU: "37" or later
The refreshing cycle for the firmware versions other than above is 5 to 120 seconds. (Default: 5 seconds)

Client operating environment

Operation of the Web server function has been verified on the following clients.

Terminal	OS	Browser	Browser version			
			MELSEC iQ-R	MELSEC iQ-F		
				FX5S	FX5UJ	FX5U, FX5UC
Personal computer	Microsoft® Windows®	Internet Explorer® *1	11	11	11	11
		Microsoft® Edge	142	142	142	142
		Google Chrome	142	142	142	142
Tablet Smartphone	Android™	Mobile Google Chrome	142	142	142	142
	iOS®	Mobile Safari	11	12	11	9

*1 Internet Explorer® is not recommended because its support has ended in June 2022.

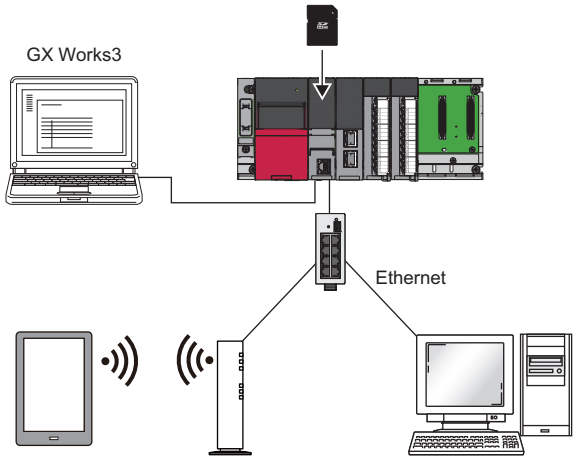
Point

Use a Web browser that supports HTML5, CSS3, and JavaScript for the Web server function.

1.2 System Configuration

This section describes the system configuration to use the Web server function.

System configuration figure

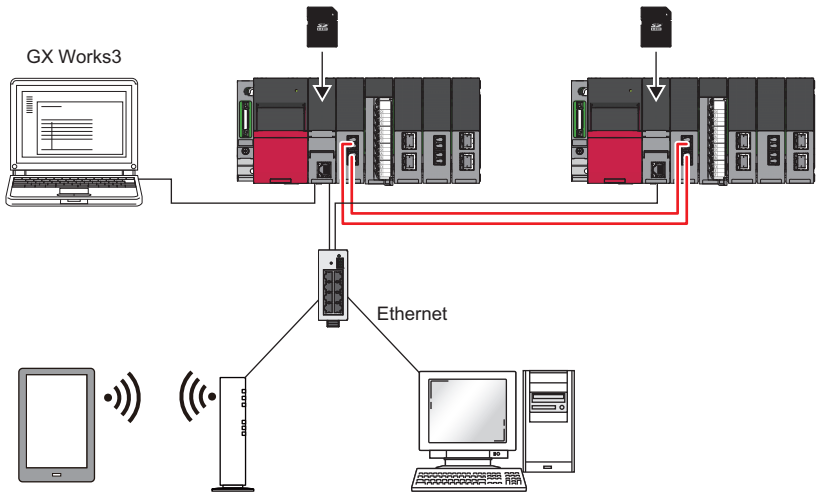


Device name	Description
CPU module	A CPU module with the Web server function (☞ Page 14 CPU Modules with Web Server Function)
Engineering tool (GX Works3)	Software for configuring settings to enable/disable the Web server function and set user authentication.
Web browser	An HTTP client of a personal computer, tablet, or smartphone
Router/hub/wireless LAN	A network configuration that can connect to an Ethernet network is required to use them for the Web server function.
SD memory card	An SD memory card to which the user Web page is stored. Use it for the user Web page.

■Redundant system

In a redundant system configuration, the web server of each system can be connected to by starting the web servers of both the System A CPU module and the System B CPU module and entering the URL (IP address) of System A or System B in the address bar of a Web browser.

If the system to be displayed is specified in the URL path, Web pages of other systems can be accessed through tracking communications.



Device name	Description
CPU module	Use a process CPU (redundant mode). (☞ Page 14 CPU Modules with Web Server Function)
Engineering tool (GX Works3)	Software for configuring settings to enable/disable the Web server function and set user authentication.
Web browser	An HTTP client of a personal computer, tablet, or smartphone
Router/hub/wireless LAN	A network configuration that can connect to an Ethernet network is required to use them for the Web server function.
SD memory card	An SD memory card to which the user Web page is stored. Use it for the user Web page.

1.3 CPU Modules with Web Server Function

The following table lists the CPU modules and firmware versions that have the Web server function.

CPU module	Firmware version	Engineering tool version
R00CPU, R01CPU, R02CPU	"05" or later	"1.045X" or later
R04CPU, R04ENCPU, R08CPU, R08ENCPU, R16CPU, R16ENCPU, R32CPU, R32ENCPU, R120CPU, R120ENCPU	"35" or later	"1.045X" or later
R08PCPU, R16PCPU, R32PCPU, R120PCPU	"37" or later	"1.095Z" or later
FX5U-32MR/ES, FX5U-32MT/ES, FX5U-32MT/ESS, FX5U-64MR/ES, FX5U-64MT/ES, FX5U-64MT/ESS, FX5U-80MR/ES, FX5U-80MT/ES, FX5U-80MT/ESS, FX5U-32MR/DS, FX5U-32MT/DS, FX5U-32MT/DSS, FX5U-64MR/DS, FX5U-64MT/DS, FX5U-64MT/DSS, FX5U-80MR/DS, FX5U-80MT/DS, FX5U-80MT/DSS, FX5UC-32MT/D, FX5UC-32MT/DSS, FX5UC-64MT/D, FX5UC-64MT/DSS, FX5UC-96MT/D, FX5UC-96MT/DSS, FX5UC-32MT/DS-TS, FX5UC-32MT/DSS-TS, FX5UC-32MR/DS-TS	"1.060" or later	"1.040S" or later
FX5UJ-24MR/ES, FX5UJ-24MT/ES, FX5UJ-24MT/ESS, FX5UJ-40MR/ES, FX5UJ-40MT/ES, FX5UJ-40MT/ESS, FX5UJ-60MR/ES, FX5UJ-60MT/ES, FX5UJ-60MT/ESS, FX5UJ-24MR/DS, FX5UJ-24MT/DS, FX5UJ-24MT/DSS, FX5UJ-40MR/DS, FX5UJ-40MT/DS, FX5UJ-40MT/DSS, FX5UJ-60MR/DS, FX5UJ-60MT/DS, FX5UJ-60MT/DSS	"1.000" or later	"1.060N" or later
FX5S-30MR/ES, FX5S-30MT/ES, FX5S-30MT/ESS, FX5S-40MR/ES, FX5S-40MT/ES, FX5S-40MT/ESS, FX5S-60MR/ES, FX5S-60MT/ES, FX5S-60MT/ESS, FX5S-80MR/ES*1, FX5S-80MT/ES*1, FX5S-80MT/ESS*1, FX5S-30MR/DS, FX5S-30MT/DS, FX5S-30MT/DSS, FX5S-40MR/DS, FX5S-40MT/DS, FX5S-40MT/DSS, FX5S-60MR/DS, FX5S-60MT/DS, FX5S-60MT/DSS, FX5S-80MR/DS*1, FX5S-80MT/DS*1, FX5S-80MT/DSS*1	"1.000" or later	"1.080J" or later

*1 Area-specific model

2 PREPARING FOR USE OF WEB SERVER FUNCTION

This chapter describes the procedure for using the Web server function. The procedure differs depending on the series of the CPU module used.

MELSEC iQ-R series

A system Web page file is required to use the Web server function with the MELSEC iQ-R series CPU module. Please consult your local Mitsubishi representative.

1. Prepare the engineering tool and a device where a Web browser can be used.
2. Configure CPU module parameters with the engineering tool. (☞ Page 16 Parameter Settings of CPU Module)
3. Power off and on or reset the CPU module to reflect the parameter settings. (☞ Page 19 Reflecting the parameters)
4. Access the CPU module from the Web browser, and write the system Web page to the CPU module. (☞ Page 20 How to Access Web Server)
5. Log on to the Web server. (☞ Page 22 Logging on to the Web server)
6. Log off from the Web server. (☞ Page 23 Logging off from the Web server)

Point

Before using the Web server function, enable JavaScript and cookies in settings of a Web browser.

■Redundant system

To use the Web server function in a redundant system, follow the procedure described below.

1. Obtain the system Web page file (RnPCPUWebFile_XX_YY.HVF) for process CPUs from your local Mitsubishi representative.
2. Prepare the engineering tool and a device where a Web browser can be used.
3. Configure CPU module parameters with the engineering tool. (☞ Page 16 Parameter Settings of CPU Module)
4. Write data for the programmable controller to the CPU modules of both systems with the engineering tool, and then power off and on or reset the CPU modules to reflect the parameter settings. (☞ Page 19 Reflecting the parameters)
5. Specify the System A IP address to access the Web server. (☞ Page 20 How to access the Web server)
6. Write the system Web page to the System A CPU module.
7. Specify the System B IP address to access the Web server. (☞ Page 20 How to access the Web server)
8. Write the system Web page to the System B CPU module.
9. Log on to the Web server. (☞ Page 22 Logging on to the Web server)
10. Log off from the Web server. (☞ Page 23 Logging off from the Web server)

MELSEC iQ-F series

1. Prepare the engineering tool and a device where a Web browser can be used.
2. Configure CPU module parameters with the engineering tool. (☞ Page 16 Parameter Settings of CPU Module)
3. Power off and on or reset the CPU module to reflect the parameter settings. (☞ Page 19 Reflecting the parameters)
4. Access the CPU module from the Web browser. (☞ Page 20 How to Access Web Server)
5. Log on to the Web server. (☞ Page 22 Logging on to the Web server)
6. Log off from the Web server. (☞ Page 23 Logging off from the Web server)

Point

Before using the Web server function, enable JavaScript and cookies in settings of a Web browser.

2.1 Parameter Settings of CPU Module

Before using the Web server function, set parameters with the engineering tool.

IP address settings

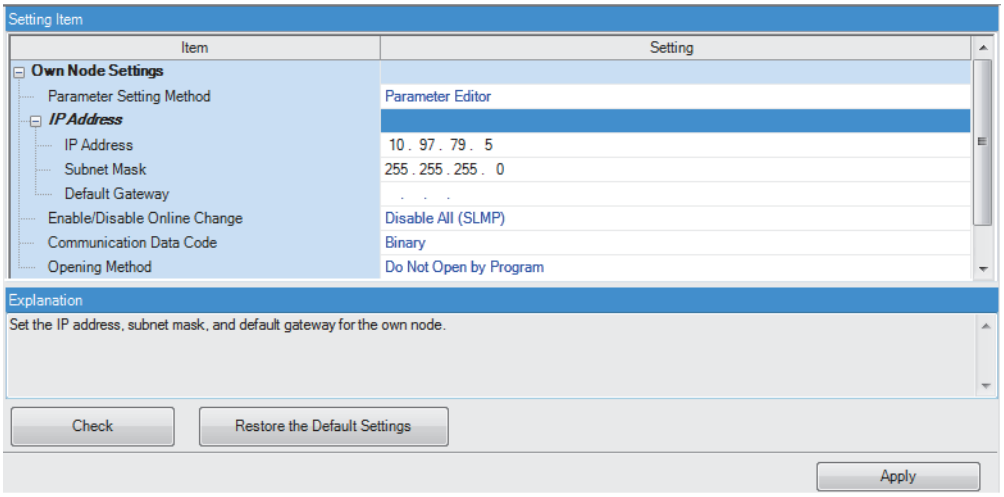
Set the IP address of the CPU module. Set the parameters by selecting the following menu items. The menu items to be selected differ depending on the series of the CPU module used.

- MELSEC iQ-R

[Navigation window] ⇨ [Parameter] ⇨ [CPU module] ⇨ [Module Parameter] ⇨ [Basic Settings] ⇨ [Own Node Settings]

- MELSEC iQ-F

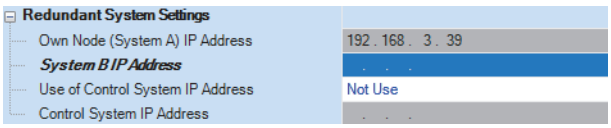
[Navigation window] ⇨ [Parameter] ⇨ [CPU module] ⇨ [Module Parameter] ⇨ [Ethernet Port] ⇨ [Basic Settings] ⇨ [Own Node Settings]



■Redundant system

Set the System B IP address.

[Navigation window] ⇨ [Parameter] ⇨ [CPU module] ⇨ [Module Parameter] ⇨ [Application Settings] ⇨ [Redundant System Settings]



Point

If the IP address is not set, the system operates assuming that 192.168.3.41 (built-in Ethernet port of CPU) is set.

Web server settings

Set the parameters by selecting the following menu items. The menu items to be selected differ depending on the series of the CPU module used.

- MELSEC iQ-R

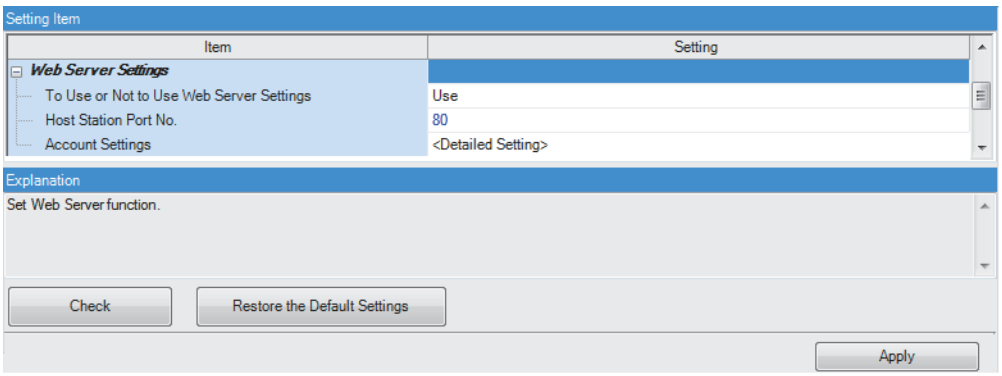
[Navigation window] ⇨ [Parameter] ⇨ [CPU module] ⇨ [Module Parameter] ⇨ [Application Settings] ⇨ [Web Server Settings]

- MELSEC iQ-F

[Navigation window] ⇨ [Parameter] ⇨ [CPU module] ⇨ [Module Parameter] ⇨ [Ethernet Port] ⇨ [Application Settings] ⇨ [Web Server Settings]

Follow the procedure described below.

1. Set "Use" for "To Use or Not to Use Web Server Settings".
2. Set "Host Station Port No.". ("Host Station Port No." has a setting range. For details on the setting range, refer to the following.)



Item	Description	Setting range	
		MELSEC iQ-R	MELSEC iQ-F
To Use or Not to Use Web Server Settings	Select whether to use the Web server function or not.	• Not Use • Use (Default: Not Use)	
Host Station Port No.	Set the port number to be used with the Web server function.*1	80, 1024 to 4999, 5010 to 61439 (The number 45237 cannot be used.) (Default: 80)	80, 1024 to 5548, 5570 to 65534 (Default: 80)
Account Settings	Set the account and password for the Web server function.	☞ Page 18 Account settings	

*1 The port number used for another Ethernet function cannot be used.

Account settings

Register or delete an account. When using the MELSEC iQ-R series CPU module, set an authority type can be set to each account.

■Web server account settings

Configure the Web server account settings by selecting the following menu items. The menu items to be selected differ depending on the series of the CPU module used.

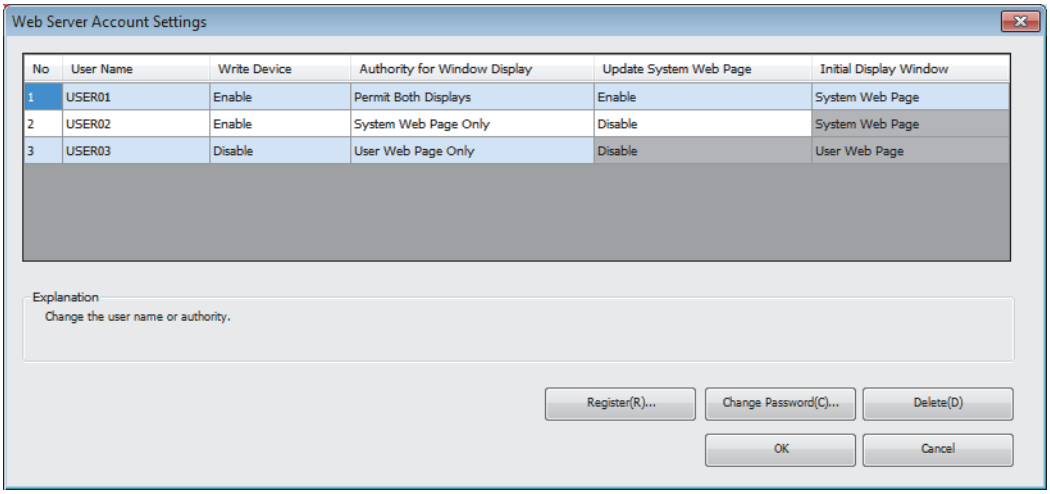
- MELSEC iQ-R

[Navigation window] ⇨ [Parameter] ⇨ [CPU module] ⇨ [Module Parameter] ⇨ [Application Settings] ⇨ [Web Server Settings] ⇨ [Account Settings]

- MELSEC iQ-F

[Navigation window] ⇨ [Parameter] ⇨ [CPU module] ⇨ [Module Parameter] ⇨ [Ethernet Port] ⇨ [Application Settings] ⇨ [Web Server Settings] ⇨ [Account Settings]

Click the [Register] button to register a new user. (☞ Page 19 Adding a new user)

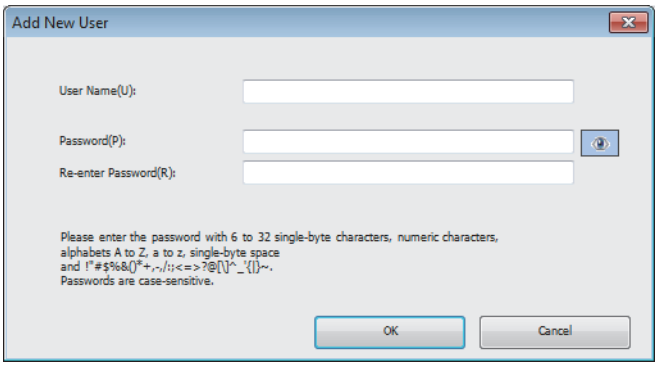


Item	Description	Setting range
No.	An account No. of each user for the Web server is displayed.	1 to 4
User Name	A user name to be used for the authentication at the access to the Web server is displayed. Click the user name to change it.	1 to 20 one-byte characters (alphanumeric characters and symbols)
Write Device	Enable or disable changing the value in the device test window. (☞ Page 31 Device test)	• Disable • Enable (Default: Disable)
Authority for Window Display*2*3*4*5	Enable or disable access to the system Web page or user Web page.	• Permit Both Displays • System Web Page Only • User Web Page Only (Default: System Web Page Only)
Update System Web Page*1	Enable or disable updates of the system Web page. This item can be set when "Permit Both Displays" or "System Web Page Only" is set for "Authority for Window Display".	• Disable • Enable (Default: Disable)
Initial Display Window*2*3*4*5	Set a window that is displayed first after the user logs on. The setting range depends on the setting of "Authority for Window Display".	• System Web Page • User Web Page (Default: System Web Page)
[Register] button	Click this button to register a new user.	—
[Change Password] button	Click this button to change a password.	—
[Delete] button	Click this button to delete a selected user	—

*1 This item is for MELSEC iQ-R series CPU modules.
*2 For the FX5U CPU module and FX5UC CPU module, the ones with the firmware version 1.100 or later support these items.
*3 To set these items for the FX5U CPU module and FX5UC CPU module, use the engineering tool with the version 1.047Z or later.
*4 For the FX5UJ CPU module, the ones with the firmware version 1.020 or later support these items.
*5 To set these items for the FX5UJ CPU module, use the engineering tool with the version 1.080J or later.

■Adding a new user

Click the [Register] button in the "Web Server Account Settings" window to display the "Add New User" window.



Item	Description	Setting range
User Name	Input a user name to be used for the authentication at the access to the Web server. This parameter is case-sensitive. For the characters available for the user name, refer to the following.	1 to 20 one-byte characters (alphanumeric characters and symbols)
Password	Input a password to be used for the authentication at the access to the Web server. This parameter is case-sensitive. For the characters available for the password, refer to the following.	6 to 32 one-byte characters (alphanumeric characters and symbols)
Re-enter Password	Input a password for confirmation. Input the same password as the newly set password. The available characters are the same as those for "Password".	6 to 32 one-byte characters (alphanumeric characters and symbols)

The following table lists the characters that are available for the user name and password.

Type	Character
One-byte alphanumeric characters (upper-case/ lower-case characters)	0 to 9, A to Z, a to z
Symbols	A one-byte space, !, ", #, $, %, &, ', (,), *, +, ,, -, ., /, :, ;, <, =, >, ?, @, [, \,], ^, _, `, {, |, }, ~

Reflecting the parameters

After completing the IP address settings, Web server settings, and account settings, write the parameters to the CPU module from the engineering tool. Changes in parameters are reflected when:

- The CPU module is powered off and on.
- The CPU module is reset.

2.2 How to Access Web Server

This section describes how to access the Web server from a Web browser.

Restriction

Since the communications of the Web server function does not support encrypted communications (SSL communications), do not access the Web server via the Internet. To access the Web server, use the LAN. The communications may be intercepted if the Web server is accessed via the Internet.

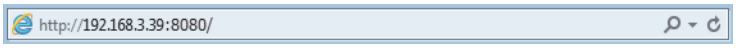
How to access the Web server

Input the following address in the address bar of a Web browser.

http://[IP address of the Web server (CPU module)]/

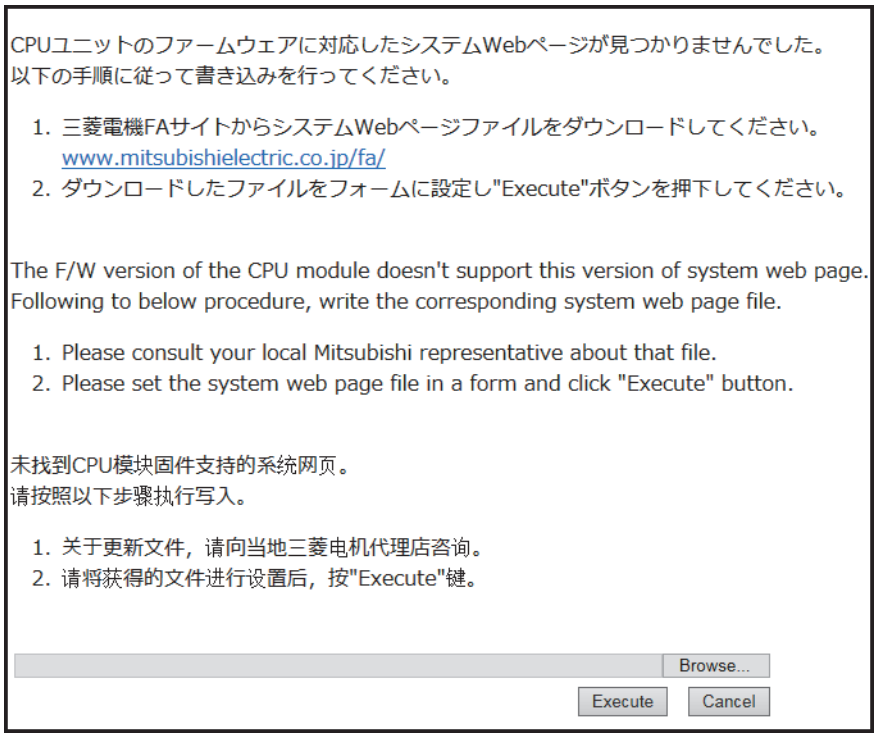
If the own station port number has been changed from the default (80), input the following address.

http://[IP address of the Web server (CPU module)]:[Own station port number]/



Point

- To access the Web server (CPU module) with a domain name specified, resolve the name on the client side in advance.
- Do not directly specify the URL of each page after logon to access the Web server. Doing so displays an incorrect window, and prevents collection of information from the Web server.
- If the following window appears after the access, follow the messages on the window to write the system Web page file to the CPU module. (☞ Page 21 Procedure for writing the system Web page)



■Redundant system

Specify the IP address of System A or System B to connect, and perform operations for each system.

Perform access by entering the System A IP address or the System B IP address of the redundant system in the address bar of a Web browser.

http://[System A IP address or System B IP address]:[port number]/*1

*1 The port number can be omitted if the port number has not been changed in the Web server settings.

Procedure for writing the system Web page

The system Web page must be written to the CPU module when the Web server function is used for the first time with the MELSEC iQ-R series CPU module.

The procedure for writing the system Web page is as follows:

1. Consult your local Mitsubishi representative to get the system Web page file.
2. Decompress the system Web page file (zip file).
3. Set the decompressed system Web page file for the input form of the system Web page.
4. Click the [Execute] button.

2.3 Logon/logoff

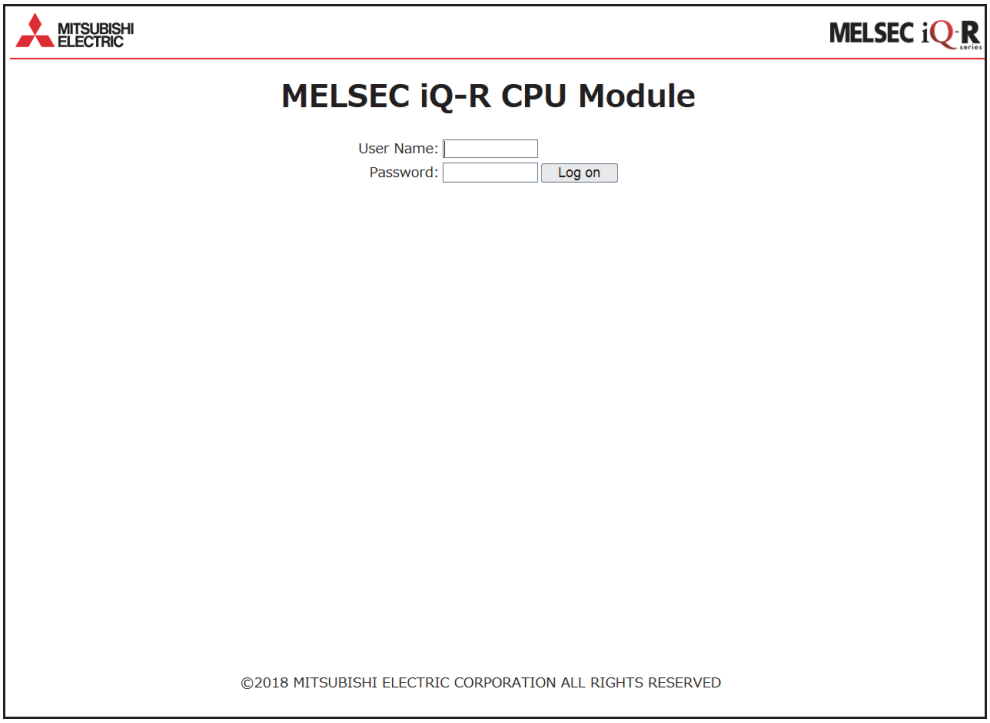
Logging on to the Web server

Accessing the Web server displays the logon (user authentication) window.

To log on to the Web server, input the user name and password which are set with the engineering tool, and click the [Log on] or [Login] button.

For the user name and password settings, refer to the following.

☞ Page 18 Web server account settings



Point

- If logon fails 10 times in succession, logon to the account is disabled for a certain time.
- Five minutes of no communications after logon automatically log off the Web server.
- Logon/logoff using different browsers on a single terminal are recognized as logon/logoff using different terminals. Similarly, logon/logoff using a secret window or private window on a single browser are recognized as logon/logoff using different terminals.

■Redundant system

If the IP address of System A, System B, or control system is set, specify the control system IP address to access the Web server.

Perform access by entering the IP address of System A, System B, or control system in the address bar of a Web browser.

http://[IP address]:[port number]/*1

- If the System A IP address or System B IP address is specified, the system (System A/System B) that is accessed can be changed by specifying the access system in the URL path.

http://[IP address]:[port number]/[system to be displayed]/*1

- When the Web server is accessed by specifying the control system IP address, access is redirected to the IP address of System A or System B, whichever serves as the control system at the time of access. If the control system IP address is specified, specification of the path subsequent to IP address (system to be displayed, folder, and file) is invalid.

*1 The port number can be omitted if the port number has not been changed in the Web server settings.

Point

- When the Web page of the control system is to be accessed, it can be accessed by using the control system IP address, without having to be aware of the system status (control system/standby system) or the System A IP address or System B IP address.
- Logon to both systems or logon only to the connected system can be specified. If both systems are logged on, logon is not required when switching from the connected system's Web page to the other system's Web page after logging on.
- If logon fails, an error message is displayed on this window.
- If the "Specify Both Systems" checkbox is selected and the logon button is pressed, logon to both systems is performed, and if the logon button is pressed without the checkbox selected, only the system that is being accessed is logged on.
- If four users have already logged on to their own system or another system, logon to both systems cannot be performed.

By selecting "Specify Redundant CPU" on the common menu window, the Web page can be switched between the connected system's Web page and another system's Web page. No matter whether the Web server of System A or that of System B is connected to, the Web page of each system can be accessed by switching the Web page with "Specify Redundant CPU".

Logging off from the Web server

To log off from the Web server, always use the [Log off] or [Logout] button. Do not log off by using other methods such as the [×] button on a Web browser.

If an account logs off without using the [Log off] or [Logout] button, the logon information remains for a certain time, and thus the other users may not be able to log on. (☞ Page 58 TROUBLESHOOTING)

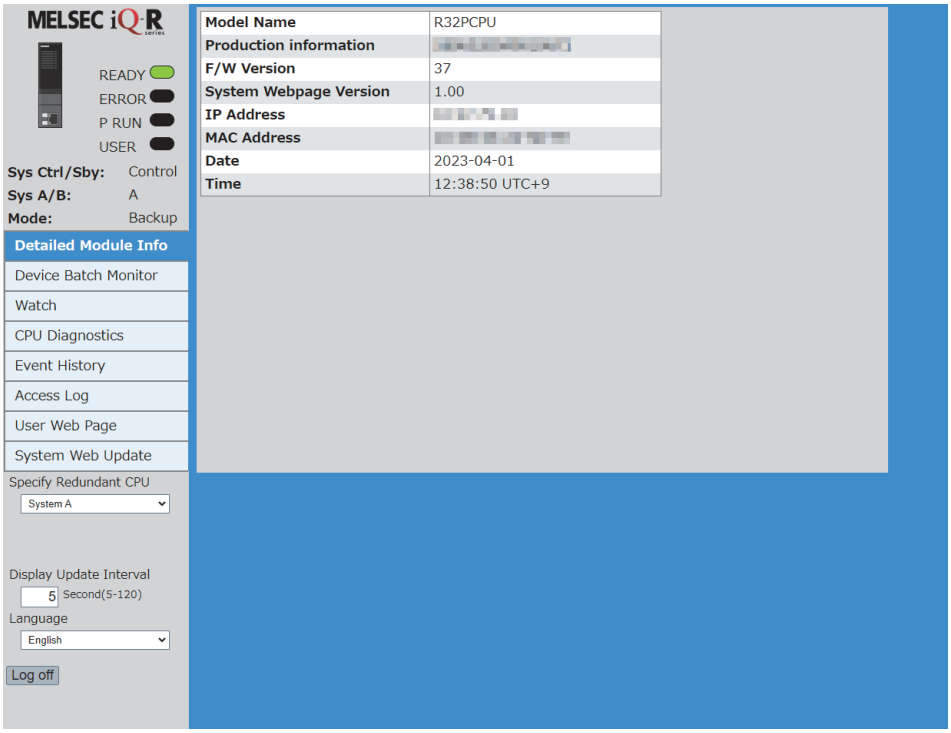
■Redundant system

If both systems are logged on, logoff from both systems is possible. If logoff from both systems is not possible because tracking communications are disabled or the other system is powered off, an error occurs and logoff is possible only for the connected system.

3 USING WEB SERVER FUNCTION

Monitoring, diagnostics, or other operations of the CPU module can be performed by switching to each window from the menu. Available functions and display differ depending on the series of the CPU module used. (☞ Page 11 List of the Web server function)

Initial display window for the MELSEC iQ-R series

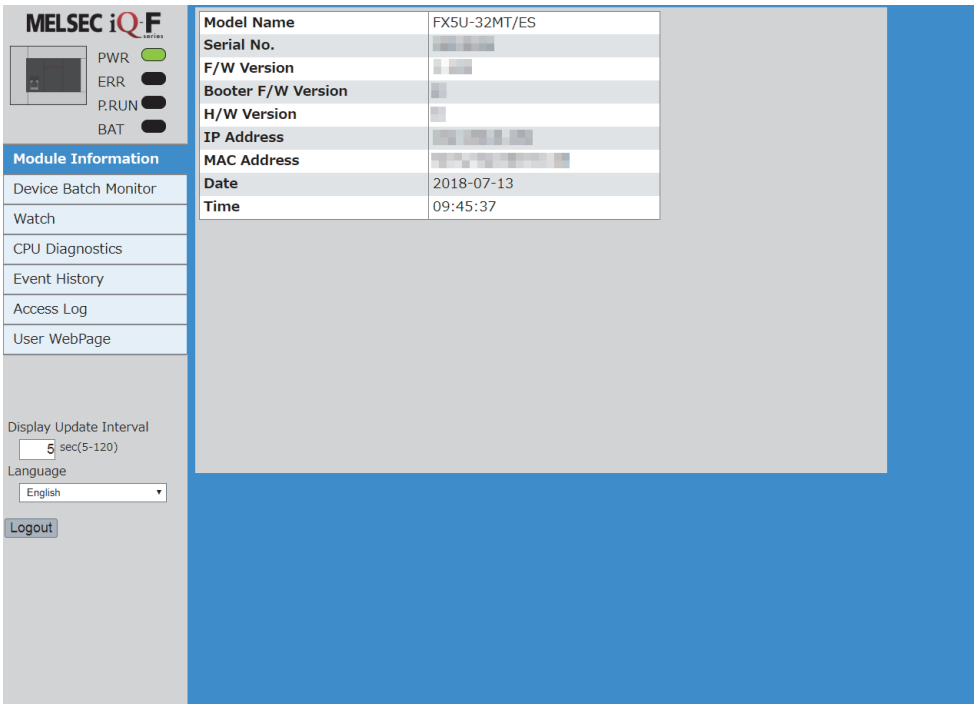


Item	Description
Detailed Module Info	Information related to the CPU module, such as the model name, production information, firmware version, system Web page version, IP address, and MAC address, is displayed. This window is displayed as the initial display window after logon. (☞ Page 27 Detailed Module Information (Module Information))
Device Batch Monitor	Devices and buffer memory areas can be monitored in a batch. (☞ Page 28 Device batch monitor)
Watch	Devices and buffer memory areas can be monitored individually for each point. (☞ Page 32 Watch)
CPU Diagnostics	Existing errors can be checked. (☞ Page 34 CPU Diagnostics)
Event History	The event history retrieved from the CPU module (such as the date and time of occurrence, event code, and detailed information) is displayed. (☞ Page 36 Event History)
Access Log	The history of access to the Web server, operations performed to the Web server, and the IP address of the access source can be displayed. Thus, the access frequency, each operation, and unauthorized accesses to the Web server can be monitored. (☞ Page 38 Access Log)
User Web Page	An original Web page created by users can be displayed on a Web browser by using HTML, JavaScript, and image files. (☞ Page 46 USING USER WEB PAGE) When "System Web Page Only" is set to "Authority for Window Display" with the engineering tool, this item is not displayed.
System Web Update	Writing the system Web page file to the CPU module updates the system Web page. (☞ Page 41 System Web Page Update) When "Disable" is set to "Update System Web Page" with the engineering tool, this item is not displayed.
Specify Redundant CPU[*1]	Select the system to be displayed. When an error occurs, the redundant status notification is displayed directly under this setting.
Display Update Interval	Set the interval for refreshing monitor items of each function on the system Web page to the latest information. Set the value between 5 and 120 seconds in increments of 1 second. (Default: 5 seconds) (☞ Page 44 Refreshing Cycle of Display)

Item	Description
Language	The display language of the system Web page can be switched to the selected language. (☞ Page 45 Language Switcher)
[Log off] button	Click this button to log off from the system Web page.

*1 Only CPU modules that are compatible with the MELSEC iQ-R redundant system are displayed.

Initial display window for the MELSEC iQ-F series



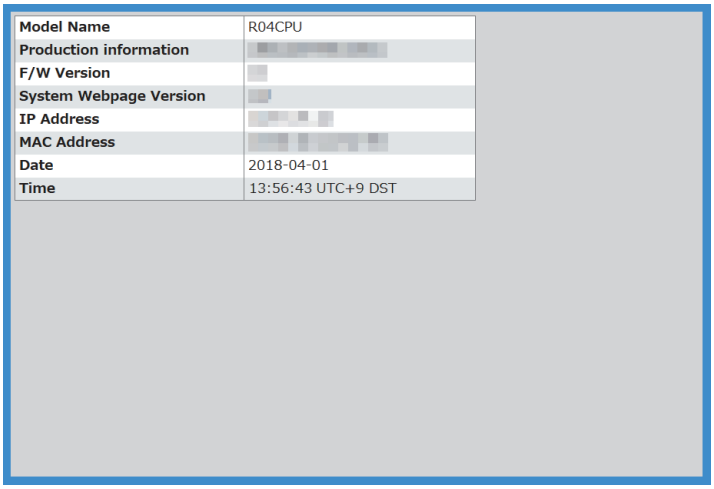
Item	Description
Module Information	Information related to the CPU module, such as the model name, product number (production information), firmware version, booter version, hardware version, IP address, and MAC address, is displayed. This window is displayed as the initial display window after logout. (☞ Page 27 Detailed Module Information (Module Information))
Device Batch Monitor	Devices and buffer memory areas can be monitored in a batch. (☞ Page 28 Device batch monitor)
Watch	Devices and buffer memory areas can be monitored individually for each point. (☞ Page 32 Watch)
CPU Diagnostics	Existing errors can be checked. (☞ Page 34 CPU Diagnostics)
Event History	The event history retrieved from the CPU module (such as the date and time of occurrence, event code, and detailed information) is displayed. (☞ Page 36 Event History)
Access Log	The history of access to the Web server, operations performed to the Web server, and the IP address of the access source can be displayed. Thus, the access frequency, each operation, and unauthorized accesses to the Web server can be monitored. (☞ Page 38 Access Log)
User Web Page	An original Web page created by users can be displayed on a Web browser by using HTML, JavaScript, and image files. (☞ Page 46 USING USER WEB PAGE) When "System Web Page Only" is set to "Authority for Window Display" with the engineering tool, this item is not displayed.
Display Update Interval	Set the interval for refreshing monitor items of each function on the system Web page to the latest information. Set the value between 5 and 120 seconds in increments of 1 second. (Default: 5 seconds) (☞ Page 44 Refreshing Cycle of Display)
Language	The language displayed on the system Web page is changed to the selected language. (☞ Page 45 Language Switcher)
[Logout] button	Click this button to log out from the system Web page.

3.1 Detailed Module Information (Module Information)

iQ-R iQ-F

Information related to the CPU module, such as the model name, production information, firmware version, system Web page version, IP address, and MAC address, is displayed. This window is displayed as the initial display window after logon.

MELSEC iQ-R series



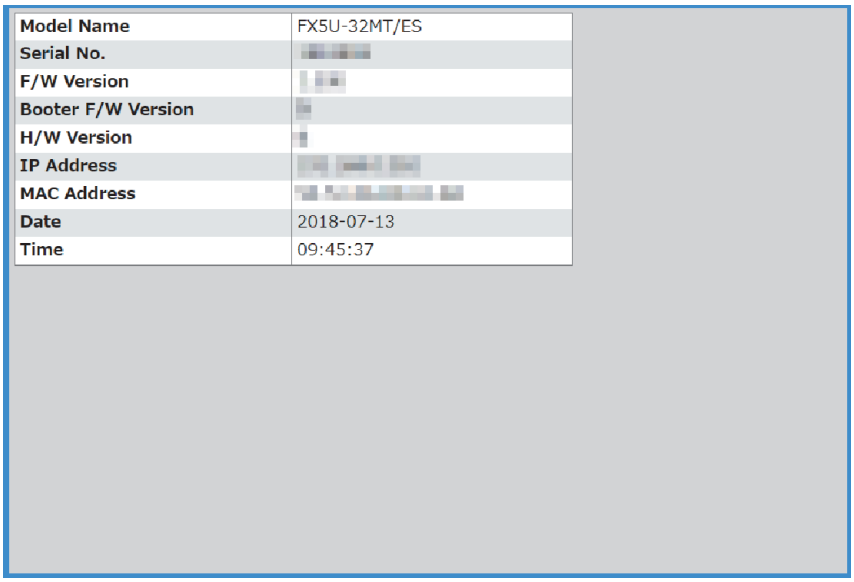
Item	Description
System Webpage Version	The version of the system Web page is displayed. The number before the point indicates the major version, and the number after the point indicates the minor version.

Point

- When the RnENCPU is used, the IP address of the CPU part is displayed in "IP Address".
- The time, time zone, and whether daylight saving time is set or not are displayed in "Time". "DST" is displayed only while daylight saving time is set. For setting the time zone, refer to the following.

MELSEC iQ-R CPU Module User's Manual (Application)

MELSEC iQ-F series



3.2 Device Monitor

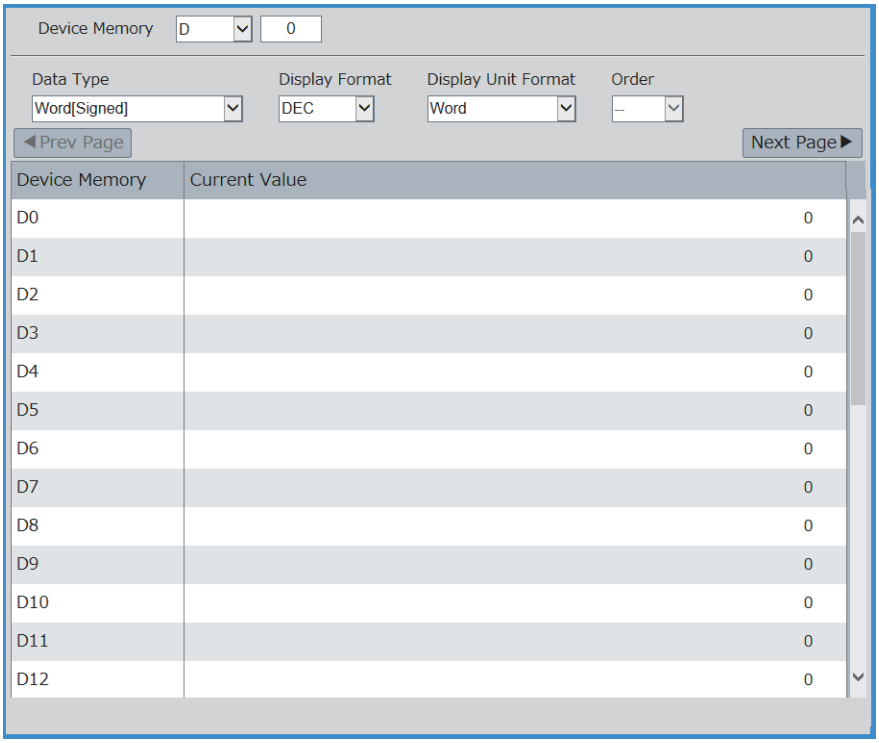
Devices can be monitored, or their values can be changed.

Device batch monitor

iQ-R iQ-F

MELSEC iQ-R series

Devices and buffer memory areas can be monitored in a batch. The display format differs depending on the specified device.



■Monitoring example

1. Select a device to be monitored from "Device Memory" at the upper section of the window.
2. Enter the start device number.
3. Select a value for "Data Type", "Display Format", "Display Unit Format", and "Order". The drop-down lists of "Data Type", "Display Format", "Display Unit Format", and "Order" differ depending on the device.
4. After selecting them, press Enter.

Point

The current values of the device areas being monitored are refreshed automatically at the interval specified in "Display Update Interval" on the menu.

■Available devices

Device
X, Y, M, L, B, F, SB, V, T, ST, LT, LST, C, LC, D, W, SW, DX, DY, SM, SD, Jn\X[*1], Jn\Y[*1], Jn\B[*1], Jn\SB[*1], Jn\W[*1], Jn\SW[*1], Un\G, U3En\G, U3En\HG, Z, LZ, R, ZR, RD, BL, BLn\S

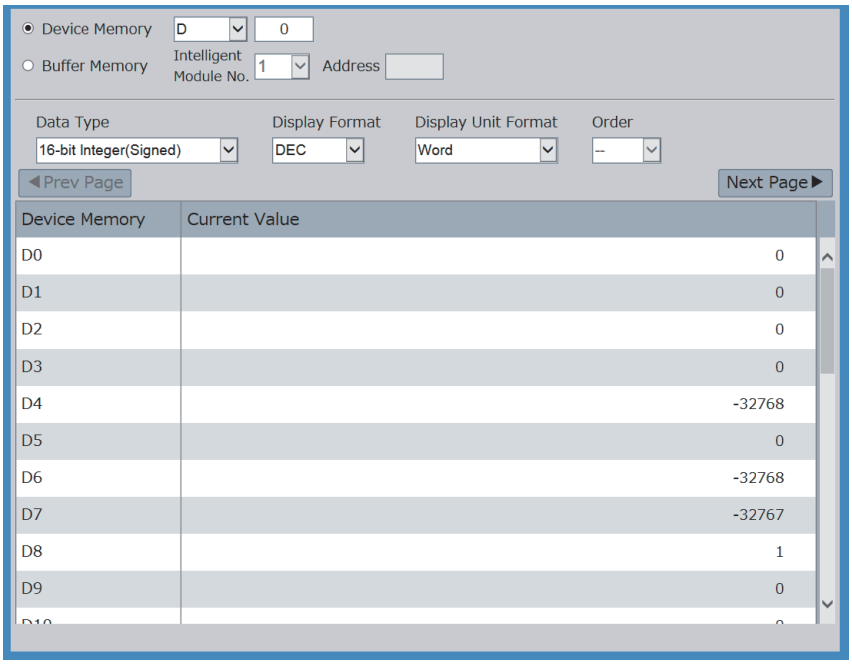
*1 For programmable controller CPUs, the maximum numbers of link direct device points differ in the system Web page with version 1.02 or later.
- Jn\X/Jn\Y: 160K points
- Jn\B: 640K points
- Jn\W: 2560K points
- Jn\SB/Jn\SW: 5120 points

■Current value change

☞ Page 31 Device test

MELSEC iQ-F series

Devices and buffer memory areas can be monitored in a batch. The display format differs depending on the specified device.



■Monitoring example (when monitoring a device)

1. Select a device to be monitored from "Device Memory" at the upper section of the window.
2. Enter the start device number.
3. Select a value for "Data Type", "Display Format", "Display Unit Format", and "Order". The drop-down lists of "Data Type", "Display Format", "Display Unit Format", and "Order" differ depending on the device.
4. After selecting them, press Enter.

■Monitoring example (when monitoring a buffer memory area)

1. Select an intelligent module No. to be monitored from "Buffer Memory" at the upper section of the window.
2. Enter the start buffer memory address.
3. Select "Data Type" and "Display Format". The drop-down lists of "Data Type" and "Display Format" differ depending on the buffer memory area.
4. After selecting them, press Enter.

Point

The current values of the device areas being monitored are refreshed automatically at the interval specified in "Display Update Interval" on the menu.

■Available devices

All the devices can be monitored. However, the index modified devices, bit-specified word devices, or digit-specified bit devices cannot be monitored.

📖 MELSEC iQ-F FX5 User's Manual (Communication)

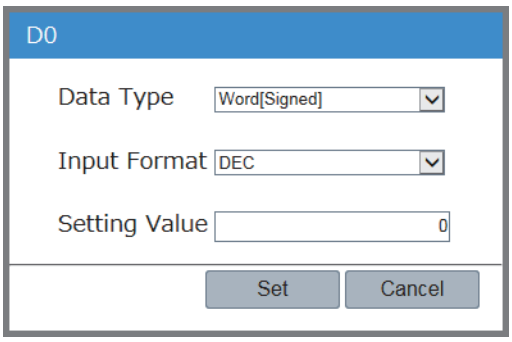
■Current value change

☞ Page 31 Device test

Device test

iQ-R iQ-F

Click the current value of the device and the device test window appears. The current value can be changed in this window.



1. Click the current value of the device area to be changed to display the device test.
2. Specify a value for "Data Type" and "Input Format", and then input a new value in "Setting Value".
3. Click the [Set] button to display the confirmation window for writing the setting value.
4. Click the [Yes] button in the confirmation window for writing the setting value to write the setting value.

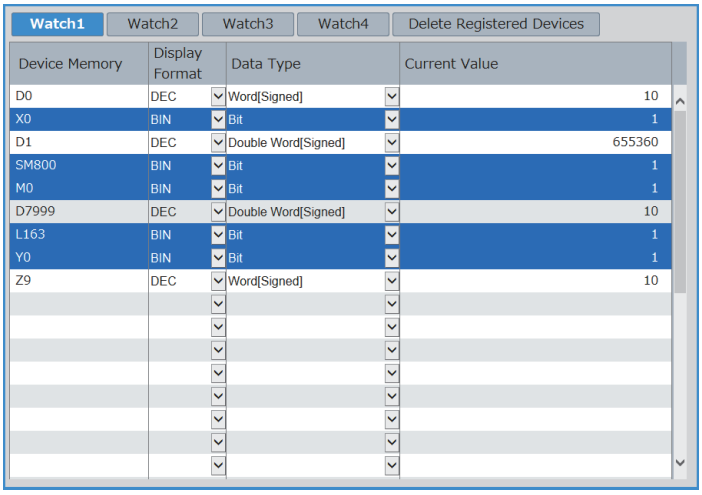
Point

To display the device test, set "Write Device" of the account currently logged on as "Enable" in advance. (☞ Page 18 Account settings)

Watch

iQ-R iQ-F

Devices and buffer memory areas can be monitored individually for each point. Displayed items and available devices differ depending on the series of the CPU module used.



Item	Description
[Watch] button	The device areas to be monitored can be registered in the "Watch1" to "Watch4" windows*1. Use of the "Watch1" to "Watch4" windows*1 enables device areas to be monitored for different purposes.
[Delete Registered Devices] button	The device areas registered in the "Watch1" to "Watch4" windows*1 can be deleted in a batch.

*1 For the MELSEC iQ-F series CPU modules, "Watch1" and "Watch2" windows are usable.

Monitoring example

1. Enter the device area to be monitored and press Enter. When Enter is pressed, "Display Format", "Data Type", and "Current Value" are entered automatically.
2. Select a value for "Display Format" and "Data Type", and press Enter. The drop-down lists of "Display Format" and "Data Type" differ depending on the device.

Point

- Up to 32 lines can be displayed in one page.
- The current values of the device areas being monitored are refreshed automatically at the interval specified in "Display Update Interval" on the menu.

Available devices

■MELSEC iQ-R series

Device
X, Y, M, L, B, F, SB, V, T, ST, LT, LST, C, LC, D, W, SW, DX, DY, SM, SD, Jn\X*1, Jn\Y*1, Jn\B*1, Jn\SB*1, Jn\W*1, Jn\SW*1, Un\G, U3En\G*2, U3En\HG*2, Z, LZ, R, ZR, RD, BL, BLn\S

*1 The maximum numbers of link direct device points differ in the system Web page with version 1.02 or later.
· Jn\X/Jn\Y: 160K points
· Jn\B: 640K points
· Jn\W: 2560K points
· Jn\SB/Jn\SW: 5120 points

*2 The devices U3En\G and U3En\HG of another CPU module can be specified and the values can be changed in the Web server function, however, the changed values will not be reflected in the CPU module and an error will occur.

■MELSEC iQ-F series

All the devices can be monitored. However, the index modified devices, bit-specified word devices, or digit-specified bit devices cannot be monitored.

MELSEC iQ-F FX5 User's Manual (Communication)

Current value change

When the current value of a device area is clicked, the device test window appears and the value can be changed. (☞ Page 31 Device test).

When the device test is displayed from a "Watch" window, the current value at the timing when the device test appears is displayed.

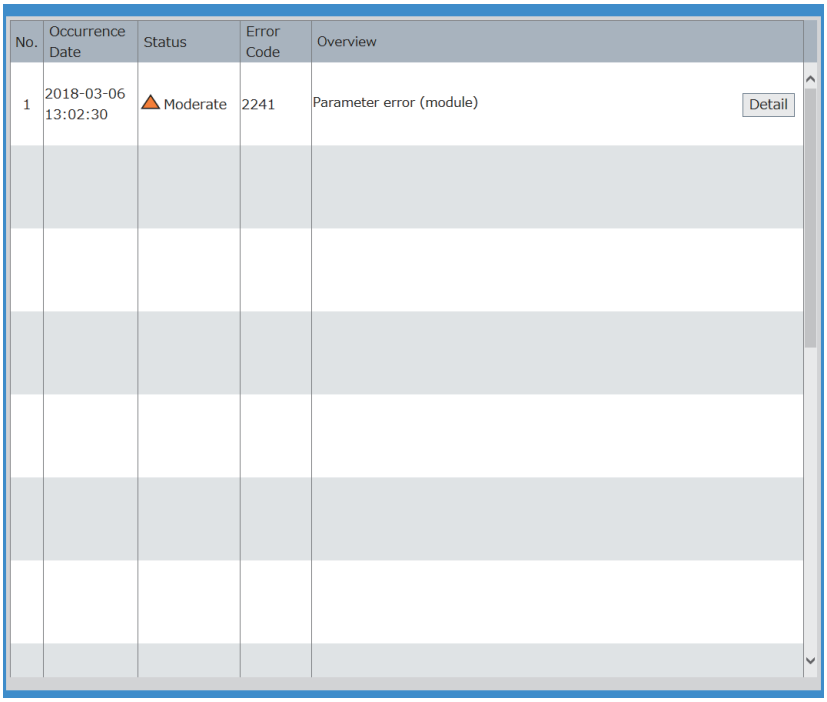
3.3 CPU Diagnostics

iQ-R iQ-F

Existing errors can be checked.

MELSEC iQ-R series

Up to 16 errors are displayed for the MELSEC iQ-R series CPU module.



Click the [Detail] button to check the detailed information of the error.

The following table lists the overview of the detailed information window for errors.

Item	Description
Overview	The overview (name) of the error is displayed.
Detailed Information	Up to three detailed information sets corresponding to the error code selected are displayed. "—" is displayed when no information to display exists.
Cause	The error details and error cause are displayed.

Point

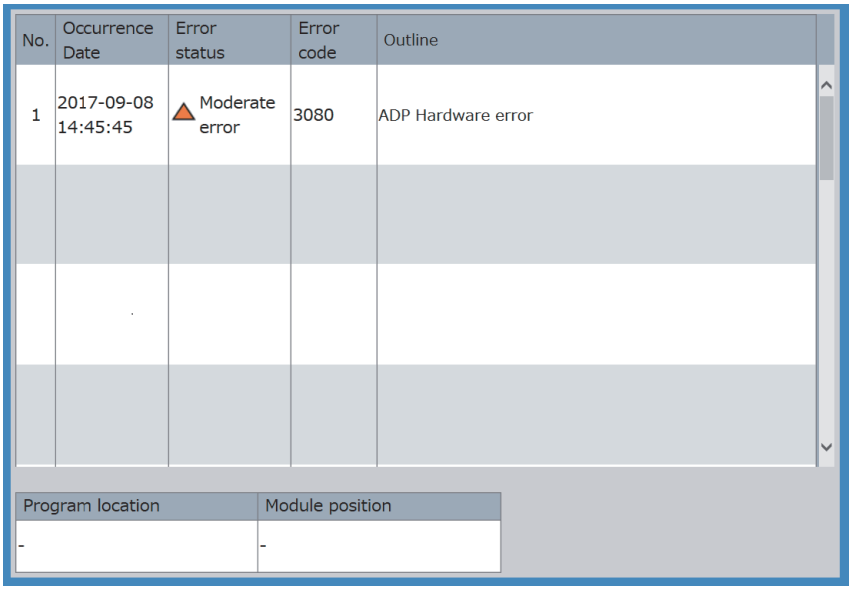
- The data in the CPU diagnostics is refreshed automatically at the interval specified in "Display Update Interval" on the menu.
- Since the date and time of error occurrence is based on the time set in the CPU module, it may be different from the time set in the personal computer used.

MELSEC iQ-F series

Up to 16 errors are displayed for the MELSEC iQ-F series CPU modules.

The detailed information of the error can be checked in "Program location" and "Module position". For details on the error codes, refer to the following.

MELSEC iQ-F FX5 User's Manual (Communication)



Item	Description
Program location*1	The sequence step number (decimal) and the name of the file where an error has occurred are displayed.
Module position*1	Information on the location of the module where the error has occurred is displayed.

*1 When the error has no detailed information, such as sequence step number, file name, and module location, "—" is displayed. If no error occurs, these fields are blank.

Point

The data in the CPU diagnostics is refreshed automatically at the interval specified in "Display Update Interval" on the menu.

3.4 Event History

iQ-R iQ-F

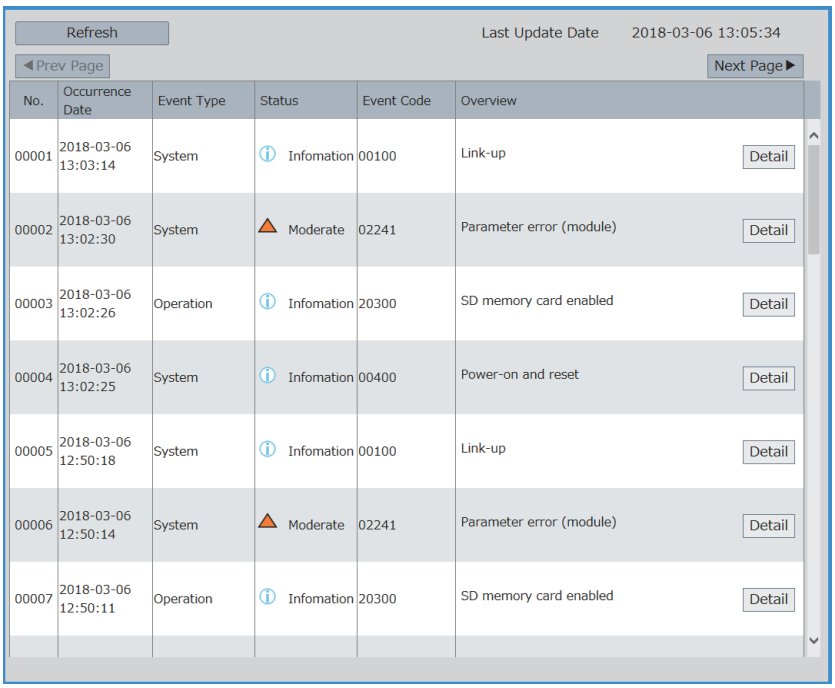
• For the FX5U CPU module and FX5UC CPU module, the ones with the firmware version 1.100 or later support this function.

The event history retrieved from the CPU module (such as the date and time of occurrence, event code, and detailed information) is displayed. Up to 32 records are displayed in one page.

MELSEC iQ-R series

The event history cannot be cleared in the Web server function. Clear it with the engineering tool.

GX Works3 Operating Manual



Item	Description
[Prev Page] button, [Next Page] button	The 32 records before or after the records displayed in the current page are displayed.
[Refresh] button	The event history is retrieved from the CPU module and the window is refreshed. The latest 32 registered events are displayed in the first page after the refresh. The event history is retrieved from the save destination of the event history selected in "Event History Setting" of the engineering tool.
Last Update Date	The time retrieved from the CPU module is displayed when the window is switched from another window to the "Event History" window or when the [Refresh] button is clicked for the last time. When the event history has not been refreshed, it will be blank. The display format is as follows: YYYY-MM-DD hh: mm: ss (YYYY: year, MM: month, DD: day, hh: hour, mm: minute, ss: second)

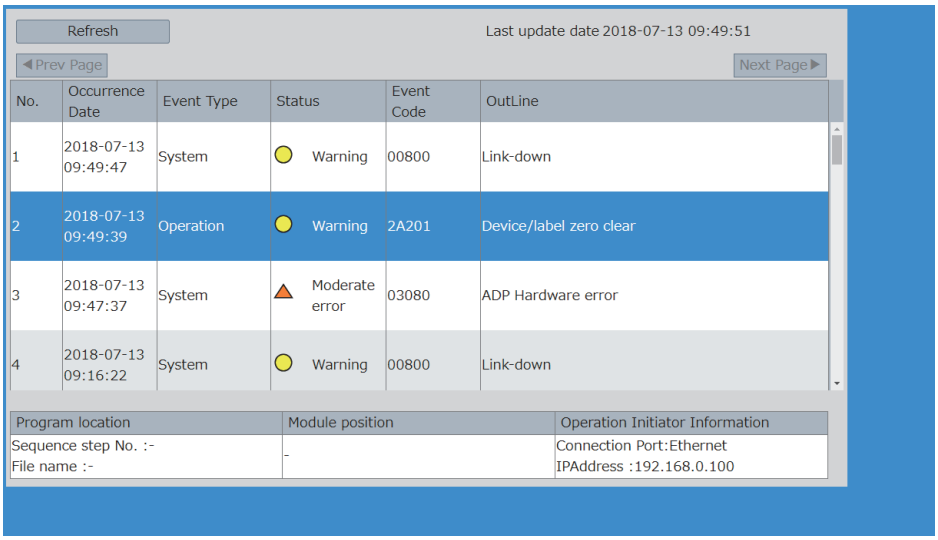
Click the [Detail] button to display the detailed information of the event. The following table lists the overview of the detailed information window.

Item	Description
Detailed Information	Up to three detailed information sets corresponding to the event code selected are displayed. "—" is displayed when no information to display exists.
Cause	The event description is displayed.

Point

- If any event was lost, it is displayed as "*HST LOSS*".
- The Web server function does not cover the event history of modules other than the CPU module. To check the event history of other modules, check it with the engineering tool.

MELSEC iQ-F series



Item	Description
[Prev Page] button, [Next Page] button	The 32 records before or after the records displayed in the current page are displayed.
[Refresh] button	The event history is retrieved from the CPU module and the window is refreshed. The latest 32 registered events are displayed in the first page after the refresh. The event history is retrieved from the save destination of the event history selected in "Event History Setting" of the engineering tool.
Last update date	The time retrieved from the CPU module is displayed when the window is switched from another window to the "Event History" window or when the [Refresh] button is clicked for the last time. When the event history has not been refreshed, it will be blank. The display format is as follows: YYYY-MM-DD hh: mm: ss (YYYY: year, MM: month, DD: day, hh: hour, mm: minute, ss: second)

The following table lists the detailed information.

Item	Description
Program location	The sequence step number (decimal) and the name of the file where an error has occurred are displayed.
Module position*1	Information on the location of the module where the error has occurred is displayed.
Operation Initiator Information	The connection port and the IP address of the CPU module are displayed.

*1 When the error has no detailed information, such as sequence step number, file name, and module location, "—" is displayed. If no error occurs, these fields are blank.

Point

- If any event was lost, it is displayed as "*HST LOSS*".
- The Web server function does not cover the event history of modules other than the CPU module. To check the event history of other modules, check it with the engineering tool.

Refresh timing of the event history

"Event History" is not refreshed at the interval specified in "Display Update Interval" on the menu.

"Event History" is refreshed when:

- "Event History" is selected on the menu.
- The [Refresh] button is clicked.

3.5 Access Log

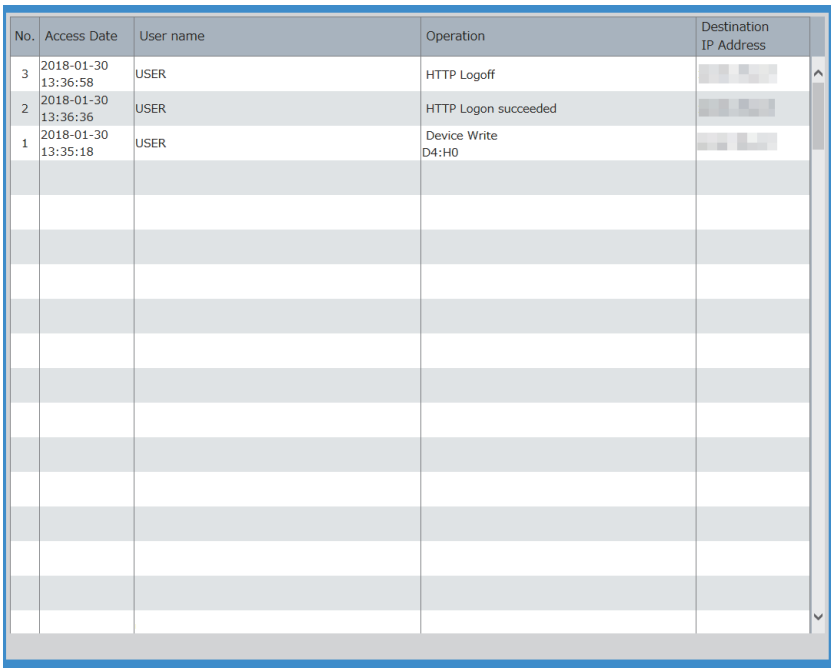
iQ-R iQ-F

The history of access to the Web server, operations performed to the Web server, and the IP address of the access source can be displayed. Thus, the access frequency, each operation, and unauthorized accesses to the Web server can be monitored. Displayed items and operations in the access log differ depending on the series of the CPU module used.

MELSEC iQ-R series

Restriction

Updating the major version of the system Web page clears the access log. (☞ Page 41 System Web Page Update)



No.	Access Date	User name	Operation	Destination IP Address
3	2018-01-30 13:36:58	USER	HTTP Logoff	
2	2018-01-30 13:36:36	USER	HTTP Logon succeeded	
1	2018-01-30 13:35:18	USER	Device Write D4:H0	

Item	Description
No.	Records are listed with the newest access date at the top. Up to 128 records are displayed.
User name	The user name who has performed the operation is displayed. (☞ Page 39 Operations displayed in the access log) When a logon fails, the user name which is input in the logon operation is displayed.
Operation	The operation performed by a user is displayed. (☞ Page 39 Operations displayed in the access log)
Destination IP Address	The IP address (decimal) of a user is displayed.

■Operations displayed in the access log

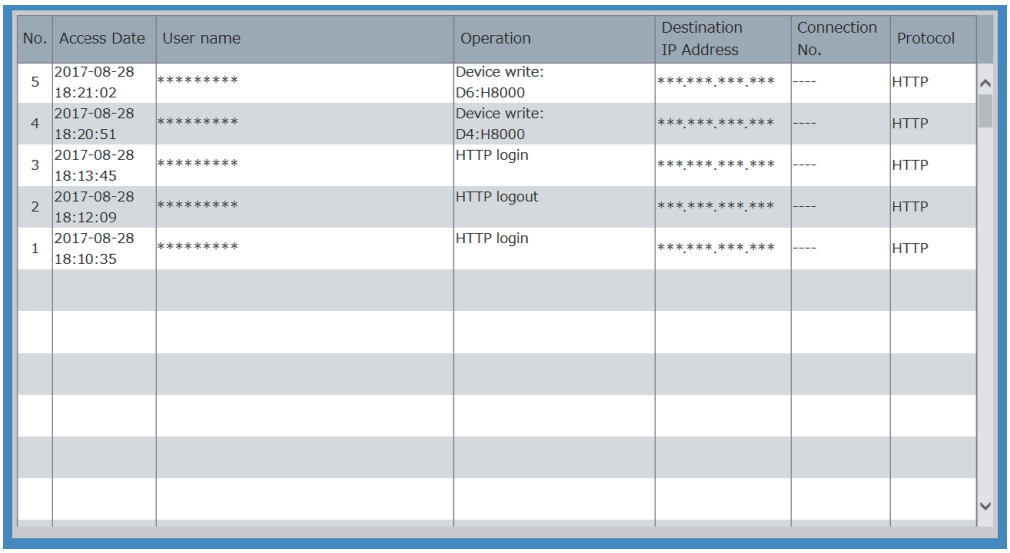
The following table lists the operations displayed in the access log with the MELSEC iQ-R series CPU module.

Operation	Registration timing	Information to be added
HTTP Logon succeeded	When a user logs on	—
HTTP Logon failure	When a user logs on	—
HTTP Logoff	When a user logs off	—
Device Write	When a value is written to a device area	Target device area: Set value
System Webpage Update Succeeded	When writing the system Web page (minor version) succeeds	Version information of the system Web pages before and after the write
System Webpage Update Failed	When writing the system Web page (minor version) fails	—

Point

- The access log can store up to 128 records. When the number of records exceeds 128, the access log is cleared in the order from the oldest one.
- The access log of the MELSEC iQ-R series CPU module is retained by the battery even while the CPU module power is off. When no battery is used, the access log can be retained by using the battery-less option cassette. The R00CPU, R01CPU, and R02CPU can retain the access log without using the battery or the battery-less option cassette.
- Logoff with an operation other than clicking the [Log off] button such as powering off the CPU module and closing the browser is not stored in the access log.

MELSEC iQ-F series



No.	Access Date	User name	Operation	Destination IP Address	Connection No.	Protocol
5	2017-08-28 18:21:02	*********	Device write: D6:H8000	***.***.***.***	----	HTTP
4	2017-08-28 18:20:51	*********	Device write: D4:H8000	***.***.***.***	----	HTTP
3	2017-08-28 18:13:45	*********	HTTP login	***.***.***.***	----	HTTP
2	2017-08-28 18:12:09	*********	HTTP logout	***.***.***.***	----	HTTP
1	2017-08-28 18:10:35	*********	HTTP login	***.***.***.***	----	HTTP

Item	Description
No.	Records are listed with the newest access date at the top. Up to 128 records are displayed.
User name	The user name who has performed the operation is displayed. (☞ Page 40 Operations displayed in the access log). When a login fails, the user name that has been input for login is displayed.
Operation	The operation performed by a user is displayed. (☞ Page 40 Operations displayed in the access log).
Destination IP Address	The IP address (decimal) of a user is displayed.
Connection No.	The connection number is displayed.
Protocol	The protocol is displayed.

■Operations displayed in the access log

The following table lists the operations displayed in the access log with the MELSEC iQ-F series CPU modules.

Operation	Registration timing	Information to be added
HTTP login	When a user logs in	—
HTTP login failure	When a user logs in	—
HTTP logout	When a user logs out	—
Device write	When a value is written to a device area	Target device area: Set value

Point

- The access log can store up to 128 records. When the number of records exceeds 128, the access log is cleared in the order from the oldest one.
- The access log of the MELSEC iQ-F series CPU module is not retained while the CPU module power is off. For the FX5U CPU module and FX5UC CPU module, use the optional battery, FX3U-32BL, to retain the access log.
- Logout by an operation other than clicking the [Logout] button, such as powering off the CPU module and closing the browser, is not recorded in the access log.

3.6 User Web Page

iQ-R iQ-F

- For the FX5U CPU module and FX5UC CPU module, the ones with the firmware version 1.100 or later support this function.
- For the FX5UJ CPU module, the ones with the firmware version 1.020 or later support this function.

An original Web page can be created by users.

To use the user Web page, write the created Web page to the SD memory card. (☞ Page 46 USING USER WEB PAGE)

Restriction

- An SD memory card is required to display a user Web page. Therefore, the R00CPU does not support the user Web page.
- To use an SD memory card on an FX5S CPU module, use an SD memory card module.

3.7 System Web Page Update

iQ-R iQ-F

This function can be used with the MELSEC iQ-R series CPU modules.

Obtain the system Web page file (RWebFile_XX_YY.HVF/RnPCPUWebFile_XX_YY.HVF) from your local Mitsubishi representative.

Writing the system Web page file to the CPU module updates the system Web page.

Depending on the major version of the system Web page, updating the firmware version of the CPU module is required. (☞ Page 62 System Web Page Version)

File name of the system Web page	String	Description
• For programmable controller CPU: RWebFile_XX_YY.HVF • For process CPU: RnPCPUWebFile_XX_YY.HVF	RWebFile	Model name
	XX	Major version
	YY	Minor version
	HVF (Httpserver Versionup File)	Extension

The version of the system Web page and the firmware version of the CPU module can be checked in the "Detailed Module Info" window. (☞ Page 27 Detailed Module Information (Module Information))

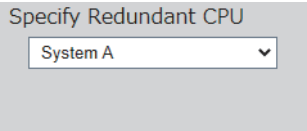
Point

Before updating the minor version, set "Update System Web Page" as "Enable" in the account setting of the engineering tool.

3.8 Specify Redundant CPU

iQ-R iQ-F

This function can be used with CPU modules that are compatible the MELSEC iQ-R redundant system.
By switching the displayed system without changing the connection destination Web server (IP address), the language and other settings configured on the Web page can be inherited and used on the Web page of the other system.
If both systems are logged on, the displayed system can be switched without logging on.



Item	Description	Setting range	Default
Specify Redundant CPU	Select the system to be displayed.	• Control system • Standby system • System A • System B	System A or System B

Point

Although the connection destination Web server can be switched by specifying the IP address of another Web server in the address bar of the Web browser, the logon information and various settings before the switch cannot be inherited and used, so logon and re-setting are required.

Content to be inherited at the time of switch

This section describes the content inherited to the Web page of the other system when the displayed system is switched with "Specify Redundant CPU".
When both systems are not logged on, the window transitions to the logon window, and some operations/settings are not inherited.

- Logon information*1
- Currently displayed window*1
- Device batch monitor device
- Watch device
- Specify Redundant CPU*1
- Display Update Interval
- Language settings

*1 These items are not inherited at the time of logon only to the connected system.

Redundant status notification

When an error occurs, "redundant status notification" is displayed directly under "Specify Redundant CPU" on the common menu window.

Redundant status notification includes the following.

- Redundant status
- Communication error notification
- System switching notification

Redundant status

An icon is displayed according to the content of the redundant status notification. If there are multiple notifications, the most important notification is displayed.

Importance	Notification content	Status	Icon	Display condition
High ↑ ↓ Low	Communication error	Moderate	▲	Unable to access the Web server of the system specified with Specify Redundant CPU
		Mild	△	Unable to access the Web server of the other system
	System switching	Warning	○	A system switch occurred.

Communication error notification

When a communication error occurs, an error message is displayed until the communication error has been cleared. If a moderate communication error occurs, the information displayed on the window is not updated and the user automatically logs off after 5 minutes.

System switching notification

When system switching occurs, a message notifying that system switching has occurred and the "Clear notification" button is displayed. To clear the system switching notification, press the "Clear notification" button.

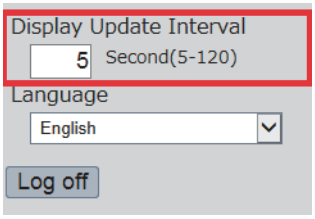
If system switching occurs while "Control System" or "Standby System" is selected for Specify Redundant CPU and the system is different from the displayed system, the "Clear notification" button is hidden and the "Show new control system" button or "Show new standby system" button is displayed.

If system switching occurs again while the "Show new control system" or "Show new standby system" button is displayed, the "Show new control system" or "Show new standby system" button is hidden and the "Clear notification" button is displayed.

3.9 Refreshing Cycle of Display

iQ-R iQ-F

Set the interval for refreshing monitor items of each function on the system Web page to the latest information.



Setting procedure

The setting procedure is as follows:

1. Enter a value in "Display Update Interval".
2. Press Enter. Pressing Enter refreshes the window and starts to refresh the display at the interval entered.

Without pressing Enter, the setting is not reflected, and therefore the display is refreshed at the interval before the change.

Items refreshed at the interval specified in "Display Update Interval"

The items refreshed at the interval specified in Display Update Interval" are as follows:

- LED indication
- Device Batch Monitor
- Watch
- CPU Diagnostics
- Access Log (excluding "HTTP Logon succeeded")

The event history is not refreshed at the interval specified in "Display Update Interval". (☞ Page 37 Refresh timing of the event history)

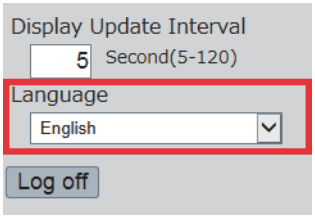
Point

- When another Ethernet communication or other processing whose communication load is high is being performed at the same time, the refreshing cycle may be longer than the set value.
- If the response is not received within the interval set in "Display Update Interval" due to high communication processing load in the CPU module or a problem in the communication path, information on the window is not refreshed. (☞ Page 58 TROUBLESHOOTING)

3.10 Language Switcher

iQ-R iQ-F

The display language of the system Web page can be switched to the selected language.



Series	Language
MELSEC iQ-R	• Japanese • English • Chinese (Simplified)
MELSEC iQ-F	• Japanese • English • Chinese (Simplified)*1

*1 Some firmware versions of the CPU module are not supported. (☞ Page 12 Functional Specifications)

4 USING USER WEB PAGE

iQ-R iQ-F

- For the FX5U CPU module and FX5UC CPU module, the ones with the firmware version 1.100 or later support this function.
- For the FX5UJ CPU module, the ones with the firmware version 1.020 or later support this function.

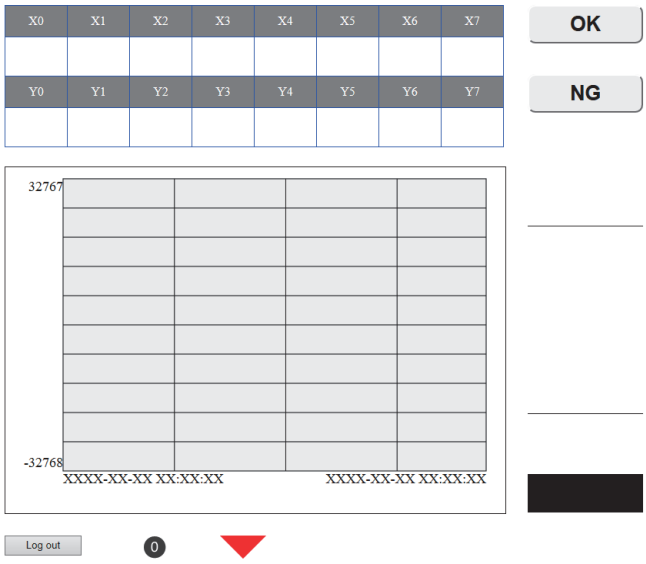
An original Web page created by users can be displayed on a Web browser by using HTML, JavaScript, and image files.

Restriction

- An SD memory card is required to display a user Web page. Therefore, the R00CPU does not support the user Web page.
- To use an SD memory card on an FX5S CPU module, use an SD memory card module.

Display example of a user Web page

The following figure shows a display example of a user Web page.



Procedure

The procedure for using the user Web page is as follows:

1. Consult your local Mitsubishi representative to get the library (zip file) of the user Web page. (☞ Page 48 Getting Library of User Web Page)
2. Configure CPU module parameters with the engineering tool. (☞ Page 16 Parameter Settings of CPU Module)
3. Power off and on or reset the CPU module to reflect the parameter settings. (☞ Page 19 Reflecting the parameters)
4. Decompress the library (zip file) of user Web page.
5. Edit the HTML file (index.html) of the user Web page in the USER folder of the library of the user Web page. (☞ Page 49 Editing User Web Page)
6. Write the user Web page to the SD memory card. (☞ Page 53 Storing User Web Page in SD Memory Card)
7. Access the user Web page. (☞ Page 56 Accessing User Web Page)
8. Log off from the user Web page.

Point

Before using the Web server function, enable JavaScript and cookies in settings of a Web browser.

■Redundant system

The procedure for using the user Web page in a redundant system is as follows:

1. Consult your local Mitsubishi representative to get the library (zip file) of the user Web page. (☞ Page 48 Getting Library of User Web Page)
2. Configure CPU module parameters with the engineering tool. (☞ Page 16 Parameter Settings of CPU Module)
3. Write data for the programmable controller to the CPU modules of both systems with the engineering tool, and then power off and on or reset the CPU modules to reflect the parameter settings. (☞ Page 19 Reflecting the parameters)
4. Specify the System A IP address to access the Web server. (☞ Page 20 How to access the Web server)
5. Write the system Web page to the System A CPU module.
6. Specify the System B IP address to access the Web server. (☞ Page 20 How to access the Web server)
7. Write the system Web page to the System B CPU module.
8. Decompress the library (zip file) of user Web page.
9. Edit the HTML file (index_R.html) of the user Web page in the USER folder of the user Web page library. (☞ Page 49 Editing User Web Page)
10. Write the user Web page to the SD memory card of both systems. (☞ Page 53 Storing User Web Page in SD Memory Card)
11. Access the user Web page. (☞ Page 56 Accessing User Web Page)
12. Log off from the user Web page.

4.1 Getting Library of User Web Page

Consult your local Mitsubishi representative to get the library of the user Web page.

Library of the user Web page

By editing the downloaded user Web page, users can create their original Web pages.

Description	Compressed file name
User Web page of the Web server function for the MELSEC iQ-R series (for programmable controller CPUs)	cpu-user_web_r_vXXX.zip (vXXX: Version)
User Web page of the Web server function for the MELSEC iQ-R series (for process CPUs)	cpu-user_web_rnpcpu_vXXX.zip (vXXX: Version)
User Web page of the Web server function for the MELSEC iQ-F series	cpu-user_web_f_vXXXX.zip (vXXXX: Version)

Restriction

The MELSEC iQ-R series CPU modules have restrictions on the combination of the user Web page version and the firmware version of the CPU modules. (☞ Page 63 User Web Page Version)

4.2 Parameter Settings of CPU Module

For the parameter settings of the CPU module, refer to the following.

☞ Page 16 Parameter Settings of CPU Module

Point

Before using the user Web page, set "Authority for Window Display" as "Permit Both Displays" or "User Web Page Only" in the account setting of the engineering tool.

4.3 Editing User Web Page

Edit the user Web page. Edit the HTML file (index.html, index_R.html) of the user Web page in the user Web page library to change the layout or to add or delete the objects.

Point

For the procedure for creating user Web pages for process CPUs, refer to the following.

☞ Page 64 User Web Page Creation Procedure

Available devices

Restriction

The number of device areas to be specified in one user Web page should be up to 32 points regardless of the device type. If the number exceeds 32 points, an error may occur.

■MELSEC iQ-R series

Device
X, Y, M, L, B, F, SB, V, T, ST, LT, LST, C, LC, D, W, SW, DX, DY, SM, SD, Jn\X*1, Jn\Y*1, Jn\B*1, Jn\SB*1, Jn\W*1, Jn\SW*1, Un\G, U3En\G*2, U3En\HG*2, Z, LZ, R, ZR, RD, BL, BLn\S

*1 For programmable controller CPUs, the maximum numbers of link direct device points differ in the user Web page with version 1.01 or later.
- Jn\X/Jn\Y: 160K points
- Jn\B: 640K points
- Jn\W: 2560K points
- Jn\SB/Jn\SW: 5120 points

*2 The devices U3En\G and U3En\HG of another CPU module can be specified and the values can be changed in the Web server function, however, the changed values will not be reflected in the CPU module and an error will occur.

■MELSEC iQ-F series

All the devices except the index modified devices, bit-specified word devices, and digit-specified bit devices are available.

MELSEC iQ-F FX5 User's Manual (Communication)

JavaScript objects

JavaScript objects enable device data to be read or written easily on the user Web page.

To use JavaScript objects, the library of JavaScript objects (RUserWebLib.js/FUserWebLib.js) is required. The library of JavaScript objects is included in the library of the user Web page. (☞ Page 48 Getting Library of User Web Page)

The following table lists the JavaScript objects that can be used in the user Web page.

Object name (function name)	Description
Data block (WSDatblk)	Displays the specified device data in a table format.
Level display (WSLevel)	Displays what percentage the device value accounts for of the whole (the range between the upper and lower limit values).
Figure display (WSFigure)	Displays the specified figure when the device value reaches the set value.
Image display (WSPicture)	Displays the specified image file when the device value reaches the set value.
Historical graph (WSHstgrp)	Displays the device data in a time-series line graph.
Write button (WSWrtBtn)	Writes the specified value to the specified device area.
Logoff/Logout button (WSLogoutBtn)	Performs the logoff operation.

For details on the JavaScript objects, refer to the following.

📖 MELSEC iQ-R Ethernet User's Manual (Application)

📖 MELSEC iQ-F FX5 User's Manual (Communication)

■Application example for JavaScript objects (index.html)

The following shows a sample for the default page (index.html) of the user Web page. In the following sample, objects of the data block (WSDatblk) and the logoff button (WSLogoutBtn) are used.

```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
	<head>
		<meta charset="UTF-8">
		<meta http-equiv="X-UA-Compatible" content="IE=edge"/>
		<title>Sample</title>
		<link href="./css/UserWebStyle.css" rel="stylesheet" media="all" />
		<script src="./UserWebLib.js"></script>
		<script>
			var updateInterval = 5;
			var dspLanguage = 'ja-JP';

			temp = [];
			for(var i = 0; i < 8; i++){
				temp.push({
					dsp:	'X' + i,
					name:	'X' + i,
					base:	'B',
					format: 6
				});
			}
			for(var i = 0; i < 8; i++){
				temp.push({
					dsp:	'Y' + i,
					name:	'Y' + i,
					base:	'B',
					format: 6
				});
			}
			dataBlockParam = {
				dev:			temp,
				direction:		1,
				blkSize:		8,
				devNamDisp:		1,
				devNamCol:		'white',
				devNamBkCol:	'#808080',
				devNamWidth:	100,
				devNamHeight:	40,
				devValCol:		'blue',
				devValBkCol:	'white',
				devValWidth:	80,
				devValHeight:	50,
				lnCol:			'blue',
				xPos:			20,
				yPos:			40
			}
			WSDatblk(dataBlockParam);
//-------------------------------------------------------------------------------
			logoutBtnParam = {
				xPos:		20,
				yPos:		250,
				btnHeight:	26,
				btnWidth:	100,
				btnTxt:		'logout'
			}
			WSLogoutBtn(logoutBtnParam);
//-------------------------------------------------------------------------------
		</script>
	</head>
	<body>
	</body>
</html>
```

Point

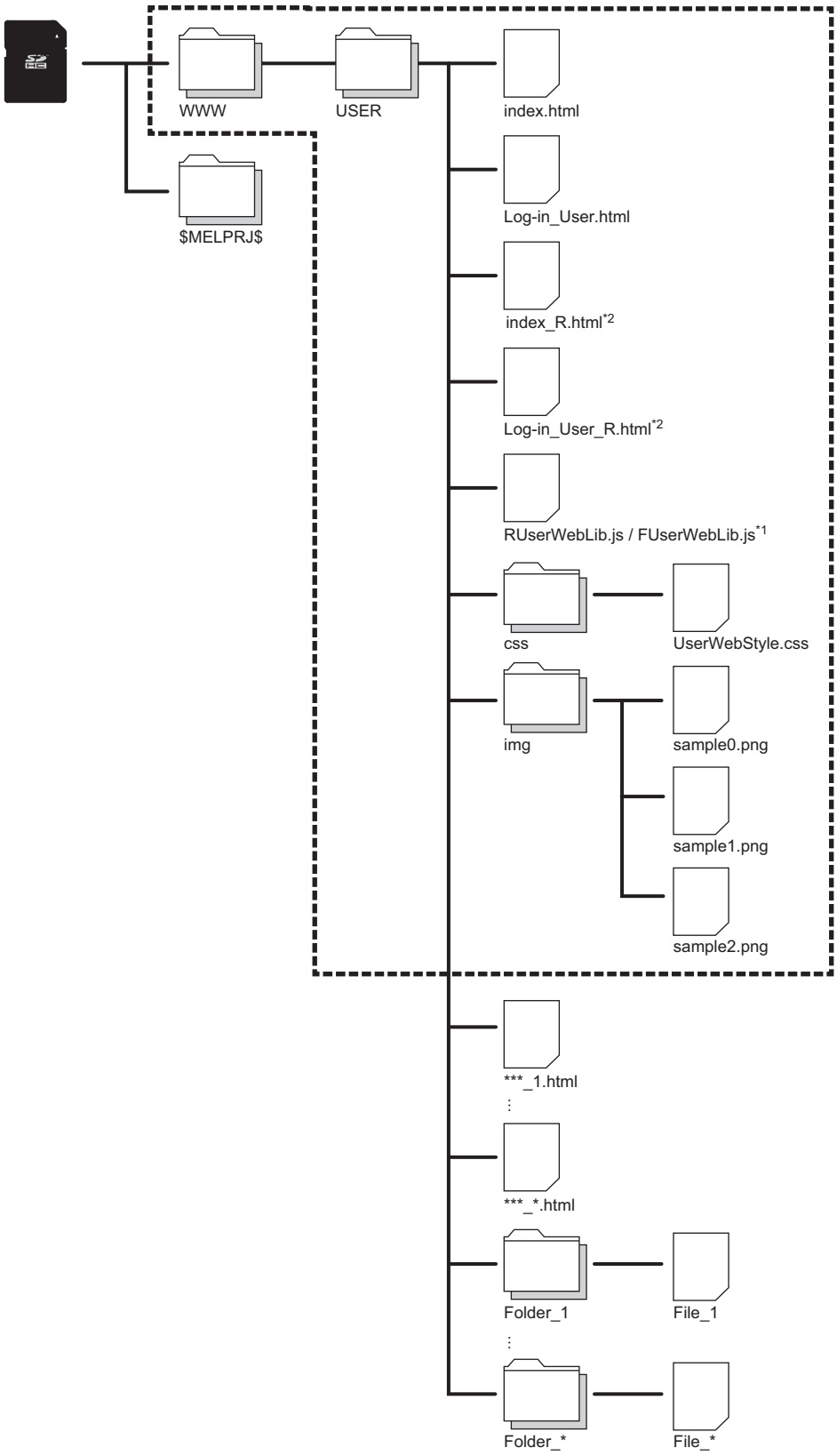
- If the automatic refreshing cycle of the user Web page is short, the refreshing cycle may be delayed or the current value may not be acquired correctly. In addition, refresh of the user Web page may not be performed according to the set cycle depending on the status of use of the Ethernet functions or the scan time.
- Refresh of the user Web page may not be performed according to the set cycle if the SD memory card is heavily accessed in the following cases; when the user Web page and a function that accesses the SD memory card are used simultaneously; or when simultaneous access from multiple HTTP clients occurs.
- When editing an HTML file of the user Web page, do not delete the logoff button (WSLogoutBtn).
- To log off from the Web server, always use the [Log off] or [Logout] button. Do not log off by using other methods such as the [×] button on a Web browser. If an account logs off without using the [Log off] or [Logout] button, the logon information remains for a certain time, and thus the other users may not be able to log on. (☞ Page 58 TROUBLESHOOTING)

4.4 Storing User Web Page in SD Memory Card

Store the WWW folder in the library of the user Web page to the root directory of the SD memory card.

Folder structure of the SD memory card

The folders and files surrounded by the dotted line in the following folder structure are provided in the library of the user Web page. Do not change the structure of the folders and files in the dotted line. If a file name or the folder structure is different from the following, an error occurs at access.



*1 The folder name varies depending on the library of the user Web page.
· cpu-user_web_r_vXXX.zip/cpu-user_web_rnpcpu_vXXX.zip: RUserWebLib.js
· cpu-user_web_f_vXXXX.zip: FUserWebLib.js

*2 Stored only in file for process CPUs (cpu-user_web_rnpcpu_vXXX.zip). This file is used for a redundant system.

Set the file name of the file to be stored in the SD memory card by using the ASCII code within 32 characters including the extension. For example, Menu_ja-JP.html is counted as 15 characters. (☞ Page 58 TROUBLESHOOTING)

Folder/file name	Description	Necessity for being stored	
		MELSEC iQ-R	MELSEC iQ-F
WWW	A folder where the USER folder is stored	Necessary	Necessary
USER	A folder for the user Web page	Necessary	Necessary
index.html	The default page of the user Web page	Necessary	Necessary
index_R.html	The default page of the user Web page	Necessary*3	—
Log-in_User.html	A sample of the user logon page	Necessary	Necessary
Log-in_User_R.html	A sample of the user logon page	Necessary*3	—
RUserWebLib.js	The library of JavaScript objects for the user Web page	Necessary	—
FUserWebLib.js		—	Necessary
css	A folder for the style sheet	Optional	Optional
UserWebStyle.css	The default style sheet for the user Web page	Optional	Optional
img	An image folder for the user Web page	Optional	Optional
sample0.png	A sample image file for the user Web page	Optional	Optional
sample1.png	A sample image file for the user Web page	Optional	Optional
sample2.png	A sample image file for the user Web page	Optional	Optional
***_1.html	An optional page*1*2	Optional	Optional
Folder_1	An optional folder for images*2	Optional	Optional
File_1	An optional image file*2	Optional	Optional

*1 The extension for the top page of the user Web page is fixed to .html.
*2 Store the created files or folders in the USER folder.
*3 Stored only in file for process CPUs (cpu-user_web_rnpcpu_vXXX.zip). This file is used for a redundant system.

Available files

The following table lists the file types that are available as objects of the user Web page.

File	Extension
HTML	.html
	.htm
JavaScript	.js
CSS	.css
GIF image	.gif
PNG image	.png
JPG/JPEG image	.jpg (.jpeg)

4.5 Accessing User Web Page

Access the user Web page from the Web browser.

Restriction

Since the communications of the Web server function does not support encrypted communications (SSL communications), do not access the Web server via the Internet. To access the Web server, use the LAN. The communications may be intercepted if the Web server is accessed via the Internet.

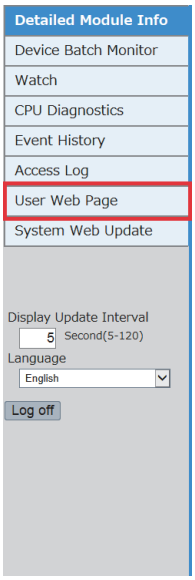
How to access the user Web page

Access the user Web page with one of the following methods.

When a MELSEC iQ-R series CPU module is used, writing the system Web page is required even when only the user Web page is used. (☞ Page 21 Procedure for writing the system Web page)

■Access from the system Web page

Click "User Web Page" on the system Web page to access the user Web page.



■Access by inputting the URL directly in the address bar

Input the following address in the address bar of a Web browser.

http://[IP address of the Web server (CPU module)]/USER/[Default page name]

If the own station port number has been changed from the default (80), input the following address.

http://[IP address of the Web server (CPU module)]:[Own station port number]/USER/[Default page name]

Point

Do not directly specify the URL of each page after logon to access the Web server. Doing so displays an incorrect window, and prevents collection of information from the Web server.

■Direct access to the user Web page after logon

Set "Initial Display Window" to "User Web Page" in the account setting to display the user Web page after logging on to the Web server.

Logoff from the user Web page

When the user logs off from the user Web page, the user logon page appears. If no user logon page exists, an error message appears. To log off from the user Web page, always use the [Log off] or [Logout] button. Do not log off by using other methods such as the [×] button on a Web browser. If an account logs off without using the [Log off] or [Logout] button, the logon information remains for a certain time, and thus the other users may not be able to log on. (☞ Page 58 TROUBLESHOOTING)

5 TROUBLESHOOTING

If an abnormal operation occurs while the Web server function is used, refer to the following table and take actions.

Description	Cause	Action
The Web page is not displayed.	The firmware version does not support the Web server function.	Update the firmware to a version that supports the Web server function.
	The Web server function is disabled.	Enable the Web server function with parameter settings of the engineering tool and then write the parameters. Or, update the software version of the engineering tool to a version that supports the Web server function, enable the Web server function, and then write the parameters.
	The URL (IP address) is incorrect.	Check that the IP address in the URL matches the CPU module IP address.
	The port number specified in the URL is incorrect.	Check that the port number in the URL matches the own station port number of the CPU module.
	The URL is specified as "https://".	Specify the URL as "http://".
	The Ethernet cable is disconnected.	Check that the Ethernet cable is correctly connected.
	The CPU module subnet mask is incorrect.	Check that the CPU module subnet mask is correctly set.
	The CPU module default gateway is incorrect.	Check the router on the CPU module side, and check that the CPU module default gateway is set.
	The LAN is set to use a proxy server.	Check the LAN settings, and disable the proxy server.
The following is displayed. 400 Bad Request	The request path length (path length after http://(IP address)/) is longer than 256 characters.	Check the request path length.
The following is displayed. 403 Forbidden	A folder is specified with a URL or a resource reference from the HTML of the user Web page.	Check the URL or the resource reference from the HTML of the user Web page.
	The account that has logged on attempted to display a page for which the account does not have the display authority.	Check the display authority of the account (setting in the module parameter), and log on to the page as an account that has the display authority of the page.
The following is displayed. 404 Not Found	The URL (folder path) is incorrect.	Check that the URL (folder path) is correct. To access the user Web page, check that an SD memory card where the index.html and Log-in_User.html are stored is inserted to the CPU module. If the restoration is in execution, operate the window after the restoration processing is finished.
The following is displayed. 405 Method Not Allowed	CGI is requested by a method other than POST on the user Web page.	Check if CGI is requested by a method other than POST.
The following is displayed. 501 Not Implemented	ContentType is not implemented in the HTTP request.	Check that the recommended browser is used.
The following is displayed. 505 HTTP Version not supported	The HTTP version supported by the browser is earlier than 1.0.	
A message indicating that JavaScript is disabled is displayed.	JavaScript is disabled.	Enable JavaScript in the browser.
A message indicating that cookies are disabled is displayed.	Cookies are disabled.	Enable cookies in the browser.
Communication speed is slow.	The number of simultaneous connections to the Web server has exceeded the limit.	Access the Web server again after a while.
The following is displayed. Since the number of simultaneous connections to the Web server has exceeded the limit, the Web server cannot be connected. Connect to the Web server again after a while.	While the CPU module is logged in from four clients, a new login has been accepted. The CPU module has received login requests consecutively.	Access the Web server again after a while.
The page is not displayed correctly, or the page layout is disrupted.	The Web browser does not support the HTML or CSS mounted with the Web server function.	Use a supported Web browser.

Description	Cause	Action
Characters are corrupted.	The Web browser character encoding setting is incorrect.	Check the Web browser character encoding setting.
A message indicating that the device name is incorrect is displayed.	The device name is incorrect.	Check that the device name is correct.
A message indicating that the device number is out of range is displayed.	The device number is out of range.	Check that the device number is within the specified range.
A message indicating that the setting value for the device is out of range is displayed.	The setting value for the device is out of range.	Check that the device setting value is within the specified range.
A login is denied and the following message is displayed. The user name or password is incorrect. Please check the user name or password and try again.	The user name or password is incorrect.	Check the user name or password.
The following is displayed. Can't open page on Web site. HTTP 500 Internal server error	The system Web page file in the Web server is corrupt. Or, it is not present.	Upload the system Web page file again. If the page still does not open, please consult your local Mitsubishi representative.
A message indicating that the request source is incorrect is displayed.	The HTTP request received by the Web server includes no referer header field or the one which is illegal.	Check the settings of the browser or firewall and ensure that the referer is correctly sent.
Images or figure display objects are not displayed on the user Web page.	The file name written in the HTML file of the user Web page is incorrect. An unsupported file format is used. The file size is too large. The description of HTML or JavaScript of the user Web page is incorrect. The parameter settings of the user Web page objects are incorrect.	Check that the file name written in the HTML file of the user Web page matches the name of the file stored in the SD memory card. Check that the format of the image file is the same as that described in the following. (☞ Page 55 Available files) Check the file size. Check the description of HTML and JavaScript of the user Web page. Check the parameter settings of the user Web page objects.
Items are not refreshed at "Display Update Interval".	The communication load of the CPU module is high.	Reduce the communication load of the CPU module.
	The line status is unstable.	Check the line status (such as PING). To perform a PING test from the engineering tool, refer to the following. 📖 MELSEC iQ-R Ethernet User's Manual (Application) 📖 MELSEC iQ-F FX5 User's Manual (Communication) The PING test can also be performed from the Microsoft® Windows® command prompt.
	The CPU module has been powered off.	Power on the CPU module.
The user Web page is loading slow.	Files in the SD memory card are fragmented.	Back up the files in the SD memory card, format the SD memory card, and put the files back to the SD memory card. Use another SD memory card.
Logon to both systems is denied. (Logon is possible only to one connected system.) Or the Web page of the other system is not displayed. (The Web page of the connected system is displayed.)	The other system is a version that does not support the Web server function.	Update the other system to a version that supports the Web server function.
	The Web server function of the other system is disabled.	Enable the Web server function with the parameters of the engineering tool and then write the parameters.
	Tracking cable is broken or disconnected.	Check that the tracking cable is correctly connected.
	The system Web page is not written to the other system. Or the major version of the system Web page is different.	Access the Web server from the IP address of the other system and write the system Web page of the same version as the own system.
	System information of both systems (system A, system B, control system, standby system) is not correct.	Check system information of both systems (system A, system B, control system, standby system) and restart the CPU modules of the both systems.
"Update System Web Page" is not displayed in the system Web page menu.	A Web page of a system different from the connected system is displayed.	Check Specify Redundant CPU. Select the system connected with Specify Redundant CPU.
Specify Redundant CPU cannot be selected.	The system whether it is System A or System B has not been set.	Set the system whether it is System A or System B from the engineering tool and restart the CPU module.

6 PRECAUTIONS

This chapter describes precautions.

Response performance of Web pages

The response performance of Web pages varies according to the following causes.

- Load factor of an Ethernet line (Congestion degree of a line)
- Number of connections that are used simultaneously (Refresh processing of other connections)

Response performance of CPU modules

When a new HTTP client tries to connect the CPU module while the CPU module is connected by the maximum number of HTTP clients that can simultaneously log on, the response performance may deteriorate.

Web server access

If the file reading has not completed successfully or a message that requests to reload the page appears while the Web server function is used, read the file again.

Communication timeout time

Since the communication timeout time depends on the browser specifications, it may not be the same as the timeout time of the Web server (five minutes). The design of the error window differs depending on the browser.

Unsupported connection

Operation is not guaranteed for connections using the following. Check the operation before use.

- Internet (the public Internet) (Internet-access service offered by an Internet service provider or a telecommunications carrier)
- Firewall device(s)
- Broadband router(s)
- Wireless LAN

Redundant system

- When a new connection is made to a different Web server (IP address), the device batch monitor device settings are not shared.
- When a new connection is made to a different Web server (IP address), the logon information remains for a certain period of time. To make a new connection to a different Web server, do so after logging off.
- If a user who is logging on only to one system switches the displayed system to the system to which the user is not logging on and then logs on to both systems, the logon information in the Web browser will be overwritten. (The logon information of the first user who logs on remains for a certain period of time, which reduces the number of users who can log on.)

MEMO

APPENDICES

Appendix 1 System Web Page Version

The MELSEC iQ-R series CPU modules have restrictions on the combination of the system Web page version and the firmware version of the CPU modules.

R00CPU, R01CPU, R02CPU

System Web page version	CPU module firmware version
1.00	"05" or later
1.01	"08" or later
1.02	"11" or later
1.03	"14" or later
1.07	"24" or later
1.09	"30" or later
1.14	"41" or later

Programmable controller CPU (except for R00CPU, R01CPU, and R02CPU)

System Web page version	CPU module firmware version
1.00	"35" or later
1.01	"40" or later
1.02	"43" or later
1.03	"46" or later
1.07	"57" or later
1.09	"63" or later
1.14	"78" or later

Process CPU

System Web page version	CPU module firmware version
1.00	"37" or later
1.01	"39" or later
1.03	"46" or later
1.04	"49" or later

Appendix 2 User Web Page Version

The MELSEC iQ-R series CPU modules have restrictions on the combination of the user Web page version and the firmware version of the CPU modules.

R00CPU

The user Web page is not available to the R00CPU.

R01CPU, R02CPU

User Web page version	CPU module firmware version
1.00	"05" or later
1.01	"11" or later
1.03	"30" or later

Programmable controller CPU (except for R00CPU, R01CPU, and R02CPU)

User Web page version	CPU module firmware version
1.00	"35" or later
1.01	"43" or later
1.03	"63" or later

Process CPU

User Web page version	CPU module firmware version
1.00	"37" or later

Appendix 3 User Web Page Creation Procedure

This section describes the procedure for creating user Web pages for process CPUs.

Overview

Obtain the library of user Web page (ZIP file) for process CPUs from your local Mitsubishi representative and replace the files and folders with those created with the user Web Page Design Tool.

Point

To create a user Web page, the User Web Page Design Tool is required.

User Web Page Design Tool Operating Manual

Obtain the latest version of the User Web Page Design Tool from your local Mitsubishi representative.

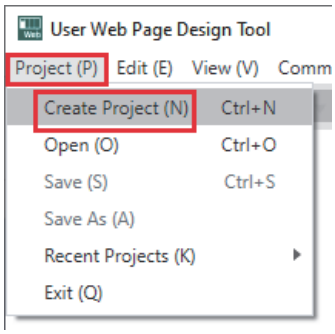
Creation procedure

This section describes how to create a user Web page using the User Web Page Design Tool.

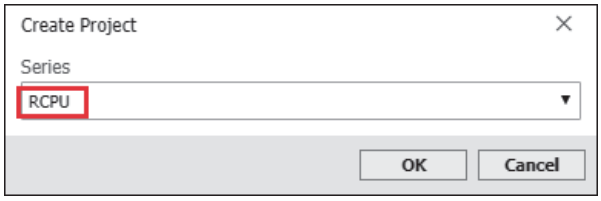
1. Obtain the library of user Web page for process CPUs (ZIP file) from your local Mitsubishi representative.

2. Create a process CPU project.

[Project] ⇨ [Create Project]



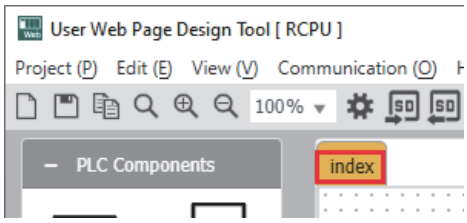
3. Select "RCPU" in the "Create Project" window.



4. Edit the user Web page.

[Process CPU (process mode)]

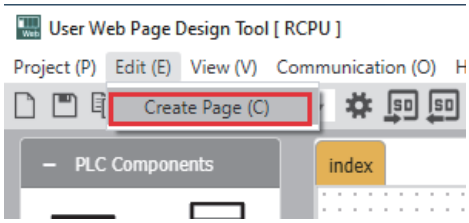
The initial window of the user Web page is created on the "index" page.

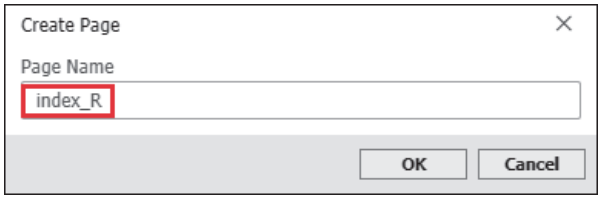


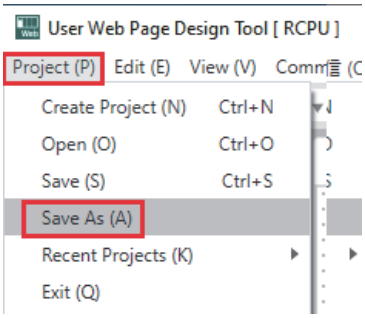
[Process CPU (redundant mode)]

The initial window of the user Web page is created on the "index_R" page.

To create the "index_R" page, select [Edit] ⇨ [Create Page] from the menu of the User Web Page Design Tool and create the "index_R" page.







5. Save the created project.

[Project] ⇨ [Save As]

6. Copy the designed file to an SD memory card. (In Step 5, copy the folder structure of the saved project to the SD memory card.)

7. Copy the library of user Web page for process CPUs to the SD memory card. Replace the following files/folders among the those stored in Step 6 with the library of user Web page obtained.

Folder name			File name	Replacement	Description
cpu-user_web_rnpcpu_v***	WWW	USER	index.html	Not required	The default page of the user Web page in the case of process CPU (process mode)
			index_R.html	Not required	The default page of the user Web page in the case of process CPU (redundant mode)
			Log-in_User.html	Required	The user login page in the case of process CPU (process mode)
			Log-in_User_R.html	Required	The user login page in the case of process CPU (redundant mode)
			RUserWebLib.js	Required	The library of JavaScript objects for the user Web page for process CPUs
			UserWebStyle.css	Required	The default style sheet for the user Web page for process CPUs
			***.png	Not required	Sample image object for user Web pages

Point

The User Web Page Design Tool creates user Web pages using the library of user Web page for the programmable controller CPU. Therefore, it is necessary to replace some files/folders of the created user Web page with the library of user Web page for process CPUs obtained from your local Mitsubishi representative.

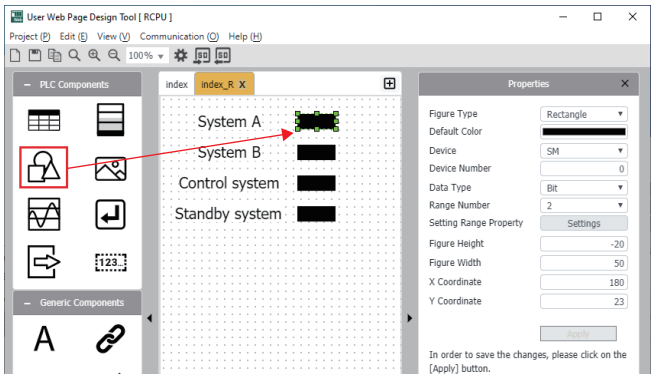
8. Insert the SD memory card in the CPU module.

Design example of process CPU (redundant mode)

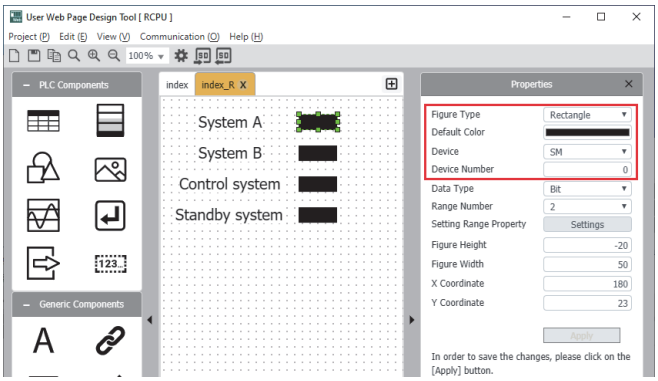
A design example of a user Web page to be used for a process CPU (redundant mode) is shown below.

Objects for checking whether the displayed system is System A or B, or control or standby system

■When using LED (rectangular shape)

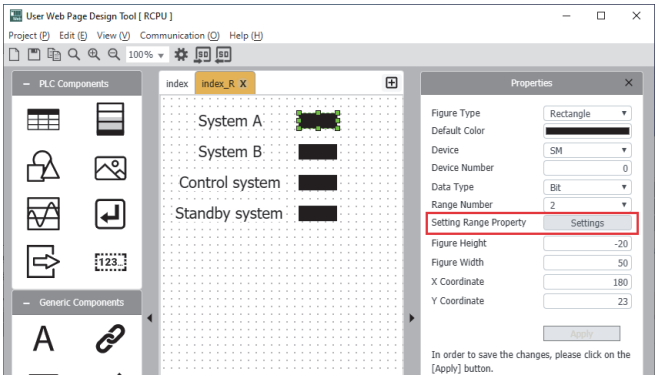


1. Drag the figure display of PLC Components to the design window.



2. Set the following in Properties.

- Figure Type: Rectangle
- Device: SM
- Device Number: 1632 (System A)/1633 (System B)/1634 (Control system)/1635 (Standby system)

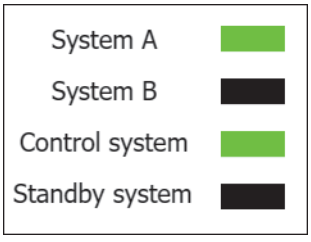


3. Click the "Settings" button of Setting Range Property in Properties, make the following settings on the setting range window, and then click the "OK" button.

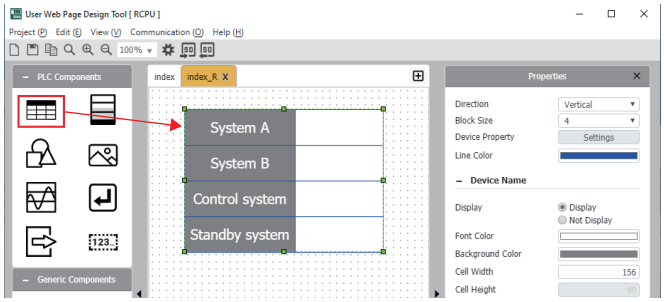
- Lower limit: 0, Upper limit: 0, Color: Any color (color when off)
- Lower limit: 1, Upper limit: 1, Color: Any color (color when on)

4. Click the "Apply" button in Properties.

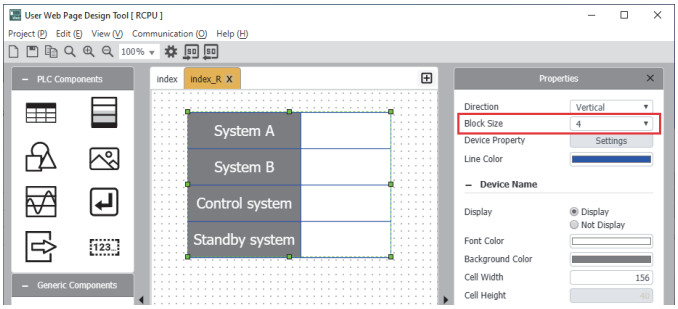
- Display example when the displayed system is System A/Control system



■When using data block

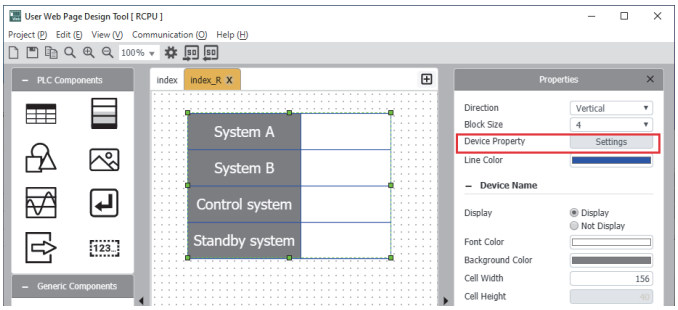


1. Drag the data block in PLC Components to the design window.



2. Set the following in Properties.

- Block size: 4



3. Click the "Settings" button of Device Property in Properties, make the following settings on the device properties window, and then click the "OK" button.

- Display name: System A, Device: SM1632
- Display name: System B, Device: SM1633
- Display name: Control system, Device: SM1634
- Display name: Standby system, Device: SM1635

4. Click the "Apply" button in Properties.

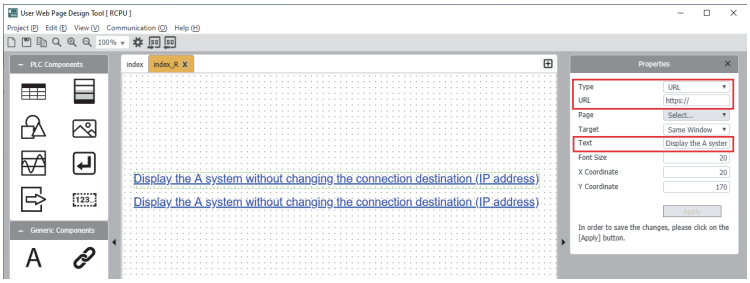
- Display example when the displayed system is System A/Control system

System A	1
System B	0
Control system	1
Standby system	0

Objects for switching the displayed system

■When not changing the connected system (IP address)

1. Drag the hyperlink in Generic Components to the design window.



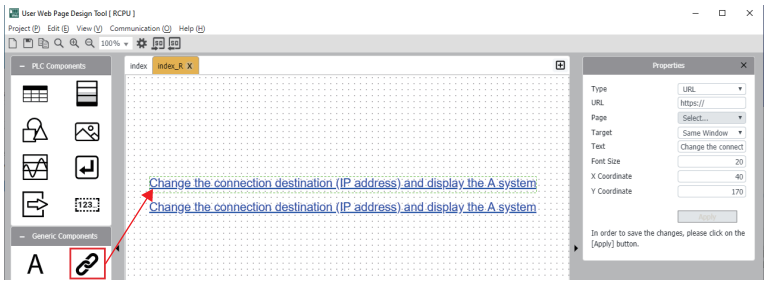
2. Set the following in Properties.

- Type: URL
- URL: /[system to be displayed]/USER/[html file name of page to be displayed] (Example: "/A/USER/index_R.html")
- Text: Optional (Example: Display the A system without changing the connection destination (IP address))

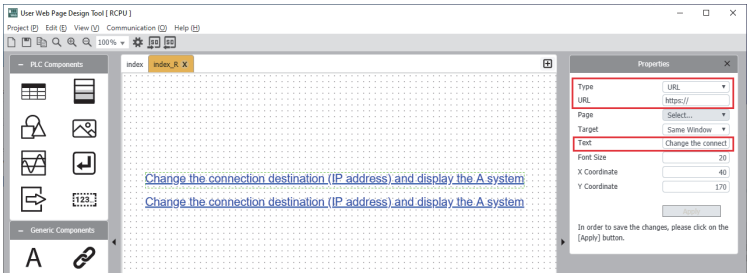
Point

To switch the displayed system without changing the connection destination (IP address), specify a relative path. If both systems are logged on, it is not necessary to log on again when the displayed system is switched.

■When changing the connected system (IP address)



1. Drag the hyperlink in Generic Components to the design window.



2. Set the following in Properties.

- Type: URL
- URL: http://[IP address of system to be displayed]:[port number*1]/[system to be displayed]/USER/[html file name of page to be displayed] (Example: "http://192.168.1.1:2000/A/USER/index_R.html")
- Text: Optional (Example: Change the connection destination (IP address) and display the A system.)

*1 This is unnecessary if the port number has not been changed in the web server settings.

Point

To switch the displayed system by changing the connection destination (IP address), specify the absolute path. If the connection destination (IP address) is changed, it is necessary to log on again.

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REVISIONS

*The manual number is given on the bottom left of the back cover.

Revision date	*Manual number	Description
April 2018	SH(NA)-081982ENG-A	First edition
October 2018	SH(NA)-081982ENG-B	■Added functions Event history (MELSEC iQ-F), user Web page (MELSEC iQ-F) ■Added or modified parts SAFETY PRECAUTIONS, RELEVANT MANUALS, Chapter 1, Section 1.1, 2.1, Chapter 3, Section 3.1, 3.4, 3.6, 3.9, Chapter 4, Section 4.1, 4.4, 4.5, Appendix 1
April 2019	SH(NA)-081982ENG-C	■Added or modified parts Section 1.1, 3.2, Chapter 4, Section 4.1, 4.3, 4.4, 4.5, Appendix 1, 2
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April 2021	SH(NA)-081982ENG-E	■Added or modified part Appendix 1
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April 2023	SH(NA)-081982ENG-H	■Added or modified parts CONDITIONS OF USE FOR THE PRODUCT, RELEVANT MANUALS, Chapter 1, Section 1.1, 1.2, 1.3, Chapter 2, Section 2.2, 2.3, Chapter 3, Section 3.8, Chapter 4, Section 4.1, 4.4, 4.5, Chapter 5, 6, Appendix 1, 2, 3
October 2023	SH(NA)-081982ENG-I	■Added or modified parts Appendix 1
July 2024	SH(NA)-081982ENG-J	■Added or modified parts RELEVANT MANUALS, Section 1.3, Chapter 3, Section 4.3, Chapter 5
April 2025	SH(NA)-081982ENG-K	■Added or modified parts RELEVANT MANUALS, Appendix 1
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WARRANTY

Please confirm the following product warranty details before using this product.

1. Gratis Warranty Term and Gratis Warranty Range

If any faults or defects (hereinafter "Failure") found to be the responsibility of Mitsubishi occurs during use of the product within the gratis warranty term, the product shall be repaired at no cost via the sales representative or Mitsubishi Service Company.

However, if repairs are required onsite at domestic or overseas location, expenses to send an engineer will be solely at the customer's discretion. Mitsubishi shall not be held responsible for any re-commissioning, maintenance, or testing on-site that involves replacement of the failed module.

[Gratis Warranty Term]

The gratis warranty term of the product shall be for one year after the date of purchase or delivery to a designated place. Note that after manufacture and shipment from Mitsubishi, the maximum distribution period shall be six (6) months, and the longest gratis warranty term after manufacturing shall be eighteen (18) months. The gratis warranty term of repair parts shall not exceed the gratis warranty term before repairs.

[Gratis Warranty Range]

(1) The range shall be limited to normal use within the usage state, usage methods and usage environment, etc., which follow the conditions and precautions, etc., given in the instruction manual, user's manual and caution labels on the product.

(2) Even within the gratis warranty term, repairs shall be charged for in the following cases.

1. Failure occurring from inappropriate storage or handling, carelessness or negligence by the user. Failure caused by the user's hardware or software design.
2. Failure caused by unapproved modifications, etc., to the product by the user.
3. When the Mitsubishi product is assembled into a user's device, Failure that could have been avoided if functions or structures, judged as necessary in the legal safety measures the user's device is subject to or as necessary by industry standards, had been provided.
4. Failure that could have been avoided if consumable parts (battery, backlight, fuse, etc.) designated in the instruction manual had been correctly serviced or replaced.
5. Failure caused by external irresistible forces such as fires or abnormal voltages, and Failure caused by force majeure such as earthquakes, lightning, wind and water damage.
6. Failure caused by reasons unpredictable by scientific technology standards at time of shipment from Mitsubishi.
7. Any other failure found not to be the responsibility of Mitsubishi or that admitted not to be so by the user.

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(1) Mitsubishi shall accept onerous product repairs for seven (7) years after production of the product is discontinued. Discontinuation of production shall be notified with Mitsubishi Technical Bulletins, etc.

(2) Product supply (including repair parts) is not available after production is discontinued.

3. Overseas service

Overseas, repairs shall be accepted by Mitsubishi's local overseas FA Center. Note that the repair conditions at each FA Center may differ.

4. Exclusion of loss in opportunity and secondary loss from warranty liability

Regardless of the gratis warranty term, Mitsubishi shall not be liable for compensation to:

(1) Damages caused by any cause found not to be the responsibility of Mitsubishi.

(2) Loss in opportunity, lost profits incurred to the user by Failures of Mitsubishi products.

(3) Special damages and secondary damages whether foreseeable or not, compensation for accidents, and compensation for damages to products other than Mitsubishi products.

(4) Replacement by the user, maintenance of on-site equipment, start-up test run and other tasks.

5. Changes in product specifications

The specifications given in the catalogs, manuals or technical documents are subject to change without prior notice.

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TRANSLATION OF THE ORIGINAL INSTRUCTIONS

SH(NA)-081982ENG-M(2603)
MODEL: RAFCPU-GUIDE-WB-E

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