

**Engineering Software** 

CW Configurator Operating Manual

-SW1DND-RCCPU-E



# SAFETY PRECAUTIONS

(Read these precautions before using this product.)

Before using this product, please read this manual and the relevant manuals carefully, and pay full attention to safety to handle the product correctly.

The precautions given in this manual are concerned with this product only. For the safety precautions for the programmable controller system, refer to the user's manual for the module used and MELSEC iQ-R Module Configuration Manual. In this manual, the safety precautions are classified into two levels: " WARNING" and " CAUTION".

 Indicates that incorrect handling may cause hazardous conditions, resulting in
death or severe injury.
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 "A 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]

### 

- To control the following operation, configure an interlock circuit in a user program to ensure that the entire system will always operate safely.
  - (1) Changing data in the running C Controller module from the connected personal computer
  - (2) Changing data in the running MELSECWinCPU module
  - (3) Changing the operating status
  - (4) Operating from the personal computer
- Especially, in the case of a control from an external device to a remote C Controller module or MELSECWinCPU module, immediate action cannot be taken for a problem on the C Controller module or MELSECWinCPU module due to a communication failure.
- To prevent this, configure an interlock circuit in a user program, and determine corrective actions to be taken between the external device and C Controller module or MELSECWinCPU module in case of a communication failure.

### [Security Precautions]

### 

To maintain the security (confidentiality, integrity, and availability) of a C Controller module, a MELSECWinCPU module, and the system against unauthorized access, denial-of-service (DoS) attacks, computer viruses, and other cyberattacks from external devices via the network, take appropriate measures such as firewalls, virtual private networks (VPNs), and antivirus solutions.

### [Startup and Maintenance Precautions]

### 

- To control the following operation, configure an interlock circuit in a user program to ensure that the entire system will always operate safely.
  - (1) Changing data in the running C Controller module from the connected personal computer
  - (2) Changing data in the running MELSECWinCPU module
  - (3) Changing the operating status
  - (4) Operating from the personal computer
- Especially, in the case of a control from an external device to a remote C Controller module or MELSECWinCPU module, immediate action cannot be taken for a problem on the C Controller module or MELSECWinCPU module due to a communication failure.
- To prevent this, configure an interlock circuit in a user program, and determine corrective actions to be taken between the external device and C Controller module or MELSECWinCPU module in case of a communication failure.

### [Startup and Maintenance Precautions]

### 

 Before performing online operations (especially, program modification, forced output, and operating status change) for the running C Controller module or MELSECWinCPU module from the peripheral devices connected, read relevant manuals carefully and ensure the safety. Improper operation may damage machines or cause 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 engineering software, MELSOFT series.

This manual describes the functions and parameter settings required when using CW Configurator.

Before using this product, please read this manual carefully, and develop familiarity with the functions and performance of CW Configurator to handle the product correctly.

Note that the menu names and operating procedures may differ depending on an operating system in use and its version.

When reading this manual, replace the names and procedures with the applicable ones as necessary.

## CONTENTS

SAFETY PRECAUTIONS	1
CONDITIONS OF USE FOR THE PRODUCT	3
INTRODUCTION.	4
RELEVANT MANUALS	8
TERMS	9
GENERIC TERMS AND ABBREVIATIONS.	

### PART 1 FUNDAMENTALS OF CW Configurator

СНА	CHAPTER 1    BEFORE USING THIS PRODUCT    12		
1.1	Main Functions of CW Configurator	12	
1.2	Learning Operation Methods of CW Configurator		
	Displaying HELP		
	Connecting to MITSUBISHI ELECTRIC FA Global Website		
	Checking the version of CW Configurator		
1.3	Connection Configurations between a Personal Computer and a Module	15	
СНА	APTER 2 SCREEN CONFIGURATION AND BASIC OPERATIONS	17	
2.1	Start and End		
2.2	Display Language Switching		
2.3	Screen Configuration		
	Main frame		
	Navigation window		
	Connection destination window		
	Element selection window		
2.4	Menu List		
2.5	Checking and Changing Shortcut Keys		
2.6	Checking and Changing Colors and Fonts2		
2.7	Option Setting for Each Function		
2.8	Printing Data		

### PART 2 SYSTEM DESIGN AND SETTING

СН	APTER 3 PROJECT MANAGEMENT	34
3.1	Project File and Data Configuration	
	File format	
	Data configuration	
3.2	Creating Project Files	
	Creating projects	
	Opening projects	
	Saving projects	
3.3	Managing Project Data	
	Adding new modules	
	Editing data	
	Property	
3.4	Verifying Projects	

	Verification	11
	Checking verification result	13
	Exporting data to a file	13
3.5	Managing Profiles	14

#### CHAPTER 4 CREATION OF MODULE CONFIGURATION DIAGRAM AND PARAMETER SETTINGS 45

4.1	Creating Module Configuration Diagram	
	Editor configuration when creating a module configuration diagram	46
	Placing objects	47
	Checking the module information	49
	Setting parameters on the module configuration diagram.	50
	Multiple CPU configuration	51
	Inputting the start XY in a batch	53
	Inputting default points in batch.	53
	Checking power supply capacity and I/O points	53
	Checking system configurations	53
	Operation for writing/reading data to/from a module	53
4.2	Setting Parameters	54
	Common operations for parameter settings	55
	Setting system parameters	56
	Setting parameters for a control CPU	57
	Setting parameters of modules	58
4.3	Other Settings of Intelligent Function Modules	65
	Setting with a module tool/drive tool	65
	Simple motion module setting function	68
	Motion control setting function	68
4.4	Change Module	69
СНА	PTER 5 REGISTERING LABELS	71

5.1	About Labels	71
5.2	Registering Labels	71
	Label editor	71
	Exporting data to a file	72
5.3	Registering Module Labels	72

### PART 3 OPERATION

СНА	CHAPTER 6 ROUTE SETTING 74		
6.1	Specification of Connection Destination	74	
6.2	Direct Connection	76	
	Ethernet connection	76	
	Virtual Ethernet connection	76	
	Specifying the Ethernet adapter on the personal computer side	77	
6.3	Accessing via Network	79	
	Single network	79	
	Co-existence network	79	
6.4	Accessing via Serial Communication Module	80	
6.5	Accessing via GOT (GOT Transparent Function)	81	
	Accessing via a GOT	81	

	Accessing via a GOT and a module	82
6.6	Accessing via QCPU (Q mode)	83
6.7	Connection to the Multiple CPU System	84
6.8	Considerations on Communication	
СНА	APTER 7 WRITING/READING DATA	87
7.1	Writing/Reading Data	87
	Configuration of Online Data Operation screen.	87
	Writing data to a module	89
	Reading data from a module	91
	Deleting data in a module	91
7.2	Verifying Data in a Module	
7.3	Deleting All Files (Initialization)	94
СНА	APTER 8 MODULE OPERATION CHECK	95
8 1	Monitoring Status	96
8.2	Checking Device/Buffer Memory in Batch	98
0.2	Checking Current Values of Registered Devices	
0.J 8 /	Checking Current Values in Intelligent Eurotion Modulo	100
0.4		100
СНА	APTER 9 MODULE DIAGNOSTICS	104
9.1	Module Status Check of a System	105
9.2	Module Diagnostics	106
9.3	Network Diagnostics	108
	CC-Link IE Controller Network diagnostics	108
	CC-Link IE TSN/CC-Link IE Field Network diagnostics.	110
	CC-Link IE Field Network Basic diagnostics	111
	MELSECNET diagnostics	112
	CC-Link diagnostics	113
9.4	Error History/Operation History Check	114
СНА	APTER 10 CHECKING/CHANGING OPERATION	115
10.1	Clock Setting	115
10.2	Remote Operation	116
10.3	Checking Memory Usage	118
10.4	Initializing/Clearing Memory	119
APF	PENDIX	120
Appe	endix 1 Unusable Character Strings (Reserved Words)	120
	Unusable character strings for a project name	120
	Unusable character strings for a path name	120
	Unusable character strings for a data name	120
Appe	endix 2 USB Driver Installation Procedure	
Appe	endix 3 Troubleshooting	122
Appe	endix 4 Additions and Changes from Previous Version	
	EY	120
		123
REVI	ISIONS	131
INFO	DRMATION AND SERVICES	132
TRA	DEMARKS	132

## **RELEVANT MANUALS**

Manual name [manual number]	Description	Available form
CW Configurator Operating Manual [SH-081382ENG] (this manual)	System configuration, parameter settings, and operation method for the online function in CW Configurator	e-Manual PDF
MELSEC iQ-R C Controller Module User's Manual [SH-082558ENG]	Procedures before operation, specifications, devices, memory, functions, parameters, and troubleshooting of a C Controller module	Print book e-Manual PDF
MELSEC iQ-R MELSECWinCPU Module User's Manual [SH-082431ENG]	Performance specifications, procedure before operation, and troubleshooting of a MELSECWinCPU module	Print book e-Manual PDF

#### Point P

e-Manual refers to the Mitsubishi Electric FA electronic book manuals that can be browsed using a dedicated tool.

e-Manual has the following features:

- Required information can be cross-searched in multiple manuals.
- Other manuals can be accessed from the links in the manual.
- Hardware specifications of each part can be found from the product figures.
- Pages that users often browse can be bookmarked.

## 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.
Ethernet port direct connection	A direct connection between a programmable controller and personal computer without using a hub
Intelligent function module	A module that has functions other than an input or output, such as an A/D converter module and D/A converter module
Multiple CPU system	A system where two to four CPU modules separately control I/O modules and intelligent function modules
Single CPU system	A system where a single CPU module controls I/O modules and intelligent function modules

### **GENERIC TERMS AND ABBREVIATIONS**

Unless otherwise specified, this manual uses the following generic terms and abbreviations.

Generic term/abbreviation	Description
CPU module	A generic term for MELSEC iQ-R series CPU modules
C Controller module	A generic term for MELSEC iQ-R series C Controller modules
MELSECWinCPU module	A generic term for MELSEC iQ-R series MELSECWinCPU modules
R12CCPU-V	An abbreviation for an R12CCPU-V C Controller module
R102WCPU-W	An abbreviation for an R102WCPU-W MELSECWinCPU module
RCPU	A generic term for MELSEC iQ-R series programmable controller CPU
Global label	A label which is valid for user programs of a C Controller module. Module labels (global labels) of a motion module can be used.
Module label	A label that represents one of memory areas (I/O signals and buffer memory areas) specific to each module in a given character string
Control CPU	A CPU module that controls connected I/O modules and intelligent function modules. In a multiple CPU system, a control CPU can be set for each module.

# PART 1

# FUNDAMENTALS OF CW Configurator

This part explains the screen configuration and basic operations of CW Configurator.

**1 BEFORE USING THIS PRODUCT** 

2 SCREEN CONFIGURATION AND BASIC OPERATIONS

# **1** BEFORE USING THIS PRODUCT

CW Configurator is a dedicated software package used for the parameter settings and monitoring of a C Controller module and MELSECWinCPU module.

The usability is much better since the functionality and appearance have been improved compared to existing configuration tools.

# **1.1** Main Functions of CW Configurator

CW Configurator manages module configuration data and parameters in each project for each module. CW Configurator has the functions shown below.

#### Parameter setting function

Parameters for each module can be set.

0000:RX10 Module Parameter			X		
Setting Item List	Setting Item				
Pre       Brain and setting         Image: Setting       Periods Setting	No.         input/int           7         input           3         input           4         input           5         input           6         input           7         input           8         input           10         input           11         input           13         input           13         input           Set an input signal for inp	R12CCPU-V CPU Parameter	Setting Item Item Item Title Setting Comment Setting Comment Setting Explanation Please set when set the title Please set when record the wine record the And if execute the setting, it network.	Setting Setting which is in the CPU module. Insome etc. will enable to display as a title when execute the CPU module find function at	
	III	Item List	Chec <u>k</u>	Restore the Default Settings	1
		1			

#### Writing to PLC/Reading from PLC function

The set parameters can be written to or read from a module with the 'Write to PLC' function or the 'Read from PLC' function.



#### Module operation check function

The operation of a module can be checked by connecting a personal computer to the module and monitoring its devices.

[Device/Buffer Me	emo	ny	Ba	tcł	n N	101	nit	or]	IN	or	nito	ori	ng	1									(
Oevice <u>N</u> ame			D	0	_				_		_						•						Monitoring Stop Monitoring
<u>B</u> uffermemory			U	nit													-	(HEX)	<u>A</u> ddress		- DEC	-	
Device Name	F	E	D	C	В	A	9	8	7	e	1 5	5	4	а	2	1	0		Current Value		String		
DQ	0	Q	0	0	a	Q	0	0	0	C	) (	3	0	a	Q	0	Γ			0.			
D1	0	û	0	0	0	û	0	0	0	0	) (	3	0	Q	û	0	0			0.			
			0	0	0	0	0	0	0	10	1 C	a în	0	0	0	0	0			0.			
D2	0	a	ч.	· •																			

#### **Diagnostic function**

The current error status and error history of a module or network can be diagnosed. The recovery time will be shortened by this function.

Detailed information on a module, such as an intelligent function module, can be acquired by using the System Monitor function. The recovery time will be much shortened by this function when an error occurs.

	Module Diagnostics(CPU (PLC No. 1) Start I/O No. 3E00)
Diagnosing the module status	Module Name         Production information         Supplementary Function         Monitoring           R12CCPU-V         R12C_         Dot matrix LED informative         Step Monitoring           Error Information         Module Information List         Execute         Step Monitoring
	No.       Occurrence Date       Status       Error Code       Overview         1       2015/02/03 11:47:22:375       2241       Parameter error (module)       Event History         Clear, Error       Clear, Error       Detail (x)
	Detailed Information       Parameter information         Type of parameter information       -         Parameter file       -         Parameter file       -         Parameter file       -         Cause       - The I/O numbers set in the system parameters differ from those of the module actually mounted.         - The target module is not mounted on the slot where the system parameters and module *

Diagnosing the module ("Module Diagnostics" screen)

# **1.2** Learning Operation Methods of CW Configurator

This section explains the operation methods of CW Configurator.

### **Displaying HELP**

Use Help to learn about operations and functions, and check error codes of a module.

#### Operating procedure

Select [Help]  $\Rightarrow$  [CW Configurator Help] (0). e-Manual Viewer starts and the manual appears.

#### Find HELP

Enter a search term in on the toolbar and press the Enter key to start searching it in e-Manual Viewer. The search is executed in the manuals registered in e-Manual Viewer.

### **Connecting to MITSUBISHI ELECTRIC FA Global Website**

Open the MITSUBISHI ELECTRIC FA Global Website in a web browser. Make sure your personal computer connect to the Internet in advance.

#### Operating procedure

Select [Help] ⇒ [Connection to MITSUBISHI ELECTRIC FA Global Website].

### Checking the version of CW Configurator

Display information such as the software version of CW Configurator.

#### Operating procedure

Select [Help] ⇒ [Version Information].

# **1.3** Connection Configurations between a Personal Computer and a Module

This section shows the configurations when connecting a personal computer and a module.

#### Connection through I/F boards



The following I/F boards are supported.

- Ethernet board: built-in to a personal computer or commercially available
- CC-Link IE TSN interface board, CC-Link IE Controller Network interface board, CC-Link IE Field Network interface board, CC-Link Ver.2 board: For details, refer to the manuals for each I/F board.

#### **Connection via USB port**

In a multiple CPU system configuration, access a module via another CPU module using a USB port.

For the connection using a USB port, refer to the following:

Page 84 Connection to the Multiple CPU System



The USB cables, of which the operations are ensured by Mitsubishi Electric Corporation, are shown below.

When using a USB cable for the first time, install the USB driver.

For details, refer to the following:

Page 121 USB Driver Installation Procedure

Product name	Model	Manufacturer
USB cable (USB A type — USB miniB type)	KU-AMB530	SANWA SUPPLY INC.
	KU-AMB550	
	MR-J3USBCBL3M	Mitsubishi Electric Corporation
	GT09-C30USB-5P	Mitsubishi Electric System & Service Co., Ltd.
USB adapter (USB B type — USB miniB type)	AD-USBBFTM5M	ELECOM Co., Ltd.

For the considerations when accessing a module with this configuration, refer to the following:

Page 86 Considerations on Communication

1

#### ■Configuration of USB connection

Only one RCPU can be connected to a personal computer at the same time. Connection with an RCPU in the following configurations is not applied.

<Inapplicable configurations>



# 2 SCREEN CONFIGURATION AND BASIC OPERATIONS

This chapter explains the screen configuration and basic operations of CW Configurator.

### 2.1 Start and End

This section explains the operation methods for starting and ending CW Configurator.

#### Start

#### Operating procedure

```
Start CW Configurator from "MELSOFT" in Windows® Start.
```

#### End

#### Operating procedure

Select [Project] ⇒ [Exit CW Configurator].

### 2.2 Display Language Switching

CW Configurator supports multiple languages, and therefore the display language such as one on the menu can be switched on a personal computer.

#### Window

[View] ⇒ [Switch Display Language]

Switch Display Language (	×
Display Language	
(English	•
It will be valid from next start.	
OK Cancel	

#### Precautions

- If the display language differs from the one for the operating system, texts may not displayed properly on the screen (Displayed texts may get cut.)
- When switching the display language in Windows 10 or later, supplemental fonts of the target language are required. The fonts can be added by the following operation:

Select [Apps] ⇒ [Apps & features] ⇒ [Optional features] ⇒ [Add a feature] in Windows settings.

# 2.3 Screen Configuration

This section explains the screen configuration when starting CW Configurator.

### Main frame

The main frame configuration is shown below.

The following screen includes a work window and docked windows displayed.

	State of the second sec								×
Title bar	Project Edit View Online Diag	nostics Tool	Window Help						. 0 ×
	i 🗋 😁 💾 🗁 😐 🔹	. 🔏 🖻 🖪	io ai 🚑 🖉 🕅	問題 [] 🐘 🕀 🔾 10	0% 💽 📰 💷 🕥 🕥	Max.:			
/.	12 8 8 8 8 8 8 W	iar .							
	·옯 평 @ / ㅁㅇㅌ먁,								
Manuhar //	Navigation 9 ×	Module Co	nfiguration ×			4 🗄 🛩	Element Selection		ų×
	off. or					^	(Find POU)	(約) 🚳 😭 👝 🗄	×
	- Project	-							
	Module Configuration	•					Display Target:	All	~
( <u> </u>	Global Label	- 197					iQ-R Series		^
loolbar	Structured Data Types	E 684					Main Base		
	Q Parameter						R33B	5 Slots (Type requiring p	owe
	System Parameter     Bi2CCPU-V						R388	8 Slots (Type requiring p	owe
	P CPU Parameter						R38RB-HT	8 Slots (Extended tempe	iratu
	Module Parameter						R3108-HT	10 Slots (Extended temp 10 Slots (Tupo requiring	rat
	Memory Card Paramete						R3128	12 Slots (Type requiring	pow
Work window							Extension Base		
							RQ Extension Base		~
							R33B (Outputer)		
							Main Base Unit		
A main screen used for							[Number of Mountable 3	e I/O Modules]	
oporations such as						~	[Specifications]		
operations such as		<				>	POU List Favorites H	listory Module	
programming, parameter		Watch 1							ų×
setting, and monitoring		-III-ON   -I I-O	F HON/OFF toggle	2) Update					
0, 0		Name	Current Value	Display Format	Data Type	Englis	h		
Status bar									
	Connection Destina								
					R12CCPU-V Host-19	2.168.3.3		CAPIN	UM at
			$\neg \frown$						
	Navigation w	indow		Watch wir	ndow etc	111	Element S	election wind	low
	l gamerre		JU			JU			
				Dealised					_
				LOCKED	WINDOW				

#### Window operation

#### Displaying docked windows

[View] ⇒ [Docking Window] ⇒ [(target item)]

#### Switching docked windows and a work window

Various windows or files can be switched by pressing the <u>Ctrl</u> + <u>Tab</u> keys. Select it by pressing the <u>Ctrl</u> key and <u>key</u>/<u>key</u>/<u>key</u>.

#### ■Arranging work windows

The list of open windows appears.

A specified window can be opened and arranged.

Arranging the windows improves display efficiency while opening multiple windows.

#### Window

[Window] ⇒ [Window]

Vindow	×
Select <u>W</u> indow:	
PR12CCPU-V CPU Parameter	Open( <u>A</u> )
	Casca <u>d</u> e
	Tile <u>H</u> orizontally
	Tile <u>V</u> ertically
	Minimize
	Close

#### Docking/floating dockable windows

• Docked display: Drag the title bar of a floating dockable window and drop it to the displayed icon (guidance) to dock the main frame.



Drag a dockable window to the guidance

A new tab appears after the window is docked.

• Floating display: Drag the title bar of a docked window and drop it to the arbitrary position to float from the main frame.

#### Docking/floating work windows

- Docked display: Select the floating work window and select [Window] ⇒ [Docking].
- Floating display: Select the docked work window and select [Window] ⇒ [Floating].

#### Point P

Docked windows can be switched between the docked display and the floating display by double-clicking the title bar.

#### **Customizing/resetting toolbars**

Set the types of tool buttons to be displayed on each toolbar. The selected tool buttons on the list are displayed on the tool bar.

#### Operating procedure

#### ■Customizing toolbar

- 1. Click , on the toolbar, and select [Show/Hide Buttons] ⇒ [(toolbar name)].
- 2. Select the tool button to be displayed from the list.

#### ■Resetting toolbar

Click - on the toolbar, and select [Show/Hide Buttons] ⇒ [Reset].

### **Navigation window**

The navigation window displays contents of a project in a tree format.

Operations such as creating new data and displaying editing screens can be performed on the tree.

For details, refer to the following:

S Page 34 PROJECT MANAGEMENT

#### Window

[View] ⇔ [Docking Window] ⇔ [Navigation] (")



(1) Toolbar

(2) Status icons

A project and global labels are displayed in the following colors:

Color	Data
White	Data that is exported to a header file
Red	Data that is not exported to a header file

#### Displayed items

Name	Description	Reference		
Status icons	To display icons indicating the status of a project.	Page 20 Status icons		
Point Page 28	or and the background color can be changed. Checking and Changing Colors and Fonts			

#### Simple display

An unused folder can be hidden by clicking 🛅 on the toolbar.

#### Status icons

The following table shows icons indicating the status of a project.

lcon	Status	Display timing	ltem	Description
×	Parameter mismatched	Offline	Module folder	This icon is displayed when a mismatch was detected between the system parameters and the property of a module.
A	Unconfirmed required settings		Module parameter	This icon is displayed when the [Apply] button has never been pressed on the module parameter (network) setting screen that includes a required setting.

### **Connection destination window**

The connection destination window displays the connection destination setting for a module in a list format.

#### Window

[View] ⇒ [Docking Window] ⇒ [Connection Destination] ( 🔄 )



For setting methods of a connection destination, refer to the following:

### **Element selection window**

The element selection window displays elements used for creating programs, such as instructions and standard functions/ function blocks, in a list format.

#### Window

```
[View] ⇒ [Docking Window] ⇒ [Element Selection] (Ⅲ)
```

(1)	(Find POU)	
	😭 🔄 🗙   🖅	
	Display Target: All	~
	iQ-R Series	^
	Main Base	
	Extension Base	
	RQ Extension Base	
	PLC CPU	
	Process CPU	
	SIL2 Process CPU	
	Safety CPU	
	C Controller	
	R12CCPU-V OS:VxWorks Version 6.9	
	MELSECWinCPU	
	Head Module	
	Motion CPU	
	NCCPU	
	Robot CPU	
	Power Supply	
	CPU Extension	~
	P12CCPULV	-
	Outline	
	C Controller	
	DOULLE Franker History Madula	_
	POU List Favorites History Module	

(1): Toolbar



For Windows 11, when a personal computer returns from the sleep mode, the color of a part of the element selection window may change.

#### Searching for elements

Elements that include an entered keyword in their names or descriptions can be searched for.

#### Operating procedure

- 1. Enter a character string in the text box of the toolbar.
- 2. Click 🏙 (Previous)/🌉 (Next).

The focus will move to an matching element.

#### Point P

By clicking 💑 (Find All) after entering a character string in the [POU List] tab, only the matching elements can be displayed.

#### Pasting elements

#### ■Pasting objects in a module configuration diagram

When the module configuration diagram is displayed, elements which can be pasted are displayed in the element selection window.

Elements can be pasted by dragging and dropping them from the list onto the module configuration diagram.

#### Favorites

Frequently used modules can be added in the [Favorites] tab for each category.

A new folder, which is for classification of elements, can be created by clicking **b** on the toolbar. The created folder can be moved by dragging and dropping and the folder name can also be changed.

#### Operating procedure

- 1. Select an element to add from the list in the element selection window, and click 😒 on the toolbar.
- **2.** Select a registration destination in the "Add to Favorites" screen, and click the [OK] button.

# 2.4 Menu List

#### Basic menus

[Project]	
⇔ [New]	Page 35 Creating projects
⇔ [Open]	Page 36 Opening projects
⇔ [Close]	-
⇔ [Save]	Page 37 Overwriting projects
⇔ [Save As]	Page 37 Saving projects under the specified name
⇔ [Project Verify]	Page 41 Verifying Projects
⇔ [Data Operation] ⇔ [Delete Data]	Page 38 Deleting data
⇔ [Data Operation] ⇔ [Copy Data]	Page 38 Copying/pasting data
⇔ [Data Operation] ⇔ [Paste Data]	1
⇔ [Data Operation] ⇔ [Add New Module]	Page 45 Parameter settings Page 68 Simple motion module setting function
⇔ [Data Operation] ⇔ [Properties]	Page 39 Property
⇔ [Intelligent Function Module] ⇔ [Module Parameter List]	Page 58 Setting parameters of modules
⇔ [Printer Setup]	Page 30 Printing Data
⇔ [Page Setup]	]
⇔ [Print Preview]	1
⇔ [Print]	1
⇔ [Recent Projects] ⇔ [(recently used project 1 to 10)]	-
⇔ [Exit CW Configurator]	Page 17 End
[Edit]	1
•••• ⇔ [Undo]	_
⇒ [Redo]	-
⇒ [Cut]	-
⇒ [Copy]	-
⇒ [Paste]	-
	1
Dirocharl → [Standard]	Page 18 Main frame
→ [Toolbar] → [Otandard]	
→ [Toolbar] → [Nocking Window]	-
	-
	-
	Page 28 Checking and Changing Colors and Fonts
	Page 20 Nevigation window
Cooking Window] ⇒ [Navigation]     Connection Destination]	Page 21 Connection destination window
Connection Destination]	Page 21 Element selection window
Cooking Window] ⇒ [Clement Selection]	
	-
Cooking Window]      Progress	
[Docking Window]      [Input the Configuration Detailed Information]     [Decking Window]      [Decking Window]     [Result of Device Cumply Conscity and I/O Deinte Chaeld	-
Clocking Window C [Result of Power Supply Capacity and I/O Points Check]	Page 00 Checking Current Values of Desistand Deviace
⇒ [Docking window] ⇒ [(watch 1 to 4)] ⇒ [Decking Window] ⇒ [(watch 1 to 4)]	Page 99 Checking Current Values of Registered Devices
□ Docking Windowj ⇔ [intelligent Function Module Monitorj ⇒ [(intelligent Function Module Monitor 1 to 10)]	Page 100 Checking Current values in Intelligent Function Module
⇒ [Zoom] ⇒ [Set Zoom Factor]	
⇔ [Zoom] ⇔ [Zoom In]	4
⇔ [Zoom] ⇔ [Zoom Out]	
⇔ [Switch Display Language]	Page 17 Display Language Switching

Coninej		
⇔ [Current Connection Destination]	Page 74 Specification of Connection Destination	
⇔ [Read from PLC]	Page 87 Writing/Reading Data	
⇔ [Write to PLC]		
erify with PLC] Page 92 Verifying Data in a Module		
⇔ [Remote Operation]	Page 116 Remote Operation	
⇔ [CPU Memory Operation]	Page 118 Checking Memory Usage	
⇔ [Delete PLC Data]	Page 91 Deleting data in a module	
⇒ [Set Clock]	Page 115 Clock Setting	
⇔ [Monitor] ⇔ [Start Monitoring (All Windows)]	Page 96 Monitoring Status	
⇔ [Monitor] ⇔ [Stop Monitoring (All Windows)]		
⇔ [Monitor] ⇔ [Start Monitoring]		
⇔ [Monitor] ⇔ [Stop Monitoring]		
 ⇔ [Monitor] ⇔ [Change Value Format (Decimal)]	Page 96 Changing display format of word devices	
⇔ [Monitor] ⇔ [Change Value Format (Hexadecimal)]		
⇒ [Monitor] ⇒ [Device/Buffer Memory Batch Monitor]	Page 98 Checking Device/Buffer Memory in Batch	
⇒ [Watch] ⇔ [Start Watching]	Page 99 Checking Current Values of Registered Devices	
⇒ [Watch] ⇔ [Stop Watching]		
⇔ [System Monitor]	Page 105 Module Status Check of a System	
⇔ [Module Diagnostics (CPU Diagnostics)]	Page 106 Module Diagnostics	
⇔ [CC-Link IE Control Diagnostics (Optical Cable)]	Page 108 CC-Link IE Controller Network diagnostics	
⇔ [CC-Link IE Control Diagnostics (Twisted Pair Cable)]		
⇔ [CC-Link IE TSN/CC-Link IE Field Diagnostics]	Page 110 CC-Link IE TSN/CC-Link IE Field Network diagnostics	
⇔ [CC-Link IEF Basic Diagnostics]	Page 111 CC-Link IE Field Network Basic diagnostics	
⇔ [MELSECNET Diagnostics]	Page 112 MELSECNET diagnostics	
	Page 113 CC-Link diagnostics	
□ [CC-LINK Diagnostics]           [Tool]	Page 113 CC-LINK diagnostics Page 54 Setting Parameters	
□ [CC-LINK Diagnostics]          [Tool]	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list	
□ [CC-LINK Diagnostics]          [Tool]	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list	
▷ [CC-LINK Diagnostics]          [Tool]         ▷ [Check Parameter]         ▷ [Module Tool List]         ▷ [Drive Tool List]         ▷ [Circuit Trace]	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list —	
<ul> <li>▷ [CC-LINK Diagnostics]</li> <li>[Tool]</li> <li>▷ [Check Parameter]</li> <li>▷ [Module Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Circuit Trace]</li> <li>▷ [Profile Management] ⇔ [Register]</li> </ul>	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list Page 44 Registration	
<ul> <li>▷ [CC-LINK Diagnostics]</li> <li>[Tool]</li> <li>▷ [Check Parameter]</li> <li>▷ [Module Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Circuit Trace]</li> <li>▷ [Profile Management] ▷ [Register]</li> <li>▷ [Profile Management] ▷ [Delete]</li> </ul>	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list Page 44 Registration Page 44 Deletion	
<ul> <li>▷ [CC-LINK Diagnostics]</li> <li>[Tool]</li> <li>▷ [Check Parameter]</li> <li>▷ [Module Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Circuit Trace]</li> <li>▷ [Profile Management] ▷ [Register]</li> <li>▷ [Profile Management] ▷ [Delete]</li> <li>▷ [Shortcut Key]</li> </ul>	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list Page 44 Registration Page 44 Deletion Page 27 Checking and Changing Shortcut Keys	
<ul> <li>▷ [CC-LINK Diagnostics]</li> <li>[Tool]</li> <li>▷ [Check Parameter]</li> <li>▷ [Module Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Circuit Trace]</li> <li>▷ [Profile Management] ▷ [Register]</li> <li>▷ [Profile Management] ▷ [Delete]</li> <li>▷ [Shortcut Key]</li> <li>▷ [Options]</li> </ul>	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list Page 44 Registration Page 44 Deletion Page 27 Checking and Changing Shortcut Keys Page 29 Option Setting for Each Function	
▷ [CC-LINK Diagnostics]          [Tool]         ▷ [Check Parameter]         ▷ [Module Tool List]         ▷ [Drive Tool List]         ▷ [Circuit Trace]         ▷ [Profile Management] ▷ [Register]         ▷ [Profile Management] ▷ [Delete]         ▷ [Shortcut Key]         ▷ [Options]	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list Page 44 Registration Page 44 Deletion Page 27 Checking and Changing Shortcut Keys Page 29 Option Setting for Each Function	
▷ [CC-LINK Diagnostics]          [Tool]	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list Page 44 Registration Page 44 Deletion Page 27 Checking and Changing Shortcut Keys Page 29 Option Setting for Each Function	
<ul> <li>▷ [CC-LINK Diagnostics]</li> <li>[Tool]</li> <li>▷ [Check Parameter]</li> <li>○ [Module Tool List]</li> <li>○ [Drive Tool List]</li> <li>○ [Drive Tool List]</li> <li>○ [Circuit Trace]</li> <li>○ [Profile Management] ⇔ [Register]</li> <li>○ [Profile Management] ⇔ [Delete]</li> <li>○ [Shortcut Key]</li> <li>◇ [Options]</li> <li>[Window]</li> <li>◇ [Cascade]</li> <li>▷ [Tile Verticelly]</li> </ul>	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list Page 44 Registration Page 44 Deletion Page 27 Checking and Changing Shortcut Keys Page 29 Option Setting for Each Function	
▷ [CC-Link Diagnostics]          [Tool]         ▷ [Check Parameter]         ▷ [Module Tool List]         ▷ [Drive Tool List]         ▷ [Circuit Trace]         ▷ [Profile Management] ▷ [Register]         ▷ [Profile Management] ▷ [Delete]         ▷ [Shortcut Key]         ▷ [Options]         [Window]         ▷ [Cascade]         ▷ [Tile Vertically]	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list Page 44 Registration Page 44 Deletion Page 27 Checking and Changing Shortcut Keys Page 29 Option Setting for Each Function	
□ [CC-LINK Diagnostics]          [Tool]	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list Page 44 Registration Page 44 Deletion Page 27 Checking and Changing Shortcut Keys Page 29 Option Setting for Each Function	
<ul> <li>▷ [CC-LINK Diagnostics]</li> <li>[Tool]</li> <li>▷ [Check Parameter]</li> <li>▷ [Module Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Circuit Trace]</li> <li>▷ [Profile Management] ▷ [Register]</li> <li>▷ [Profile Management] ▷ [Delete]</li> <li>▷ [Shortcut Key]</li> <li>▷ [Options]</li> <li>[Window]</li> <li>▷ [Cascade]</li> <li>▷ [Tile Vertically]</li> <li>▷ [Arrange Icons]</li> <li>▷ [Clase All Windown]</li> </ul>	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list Page 44 Registration Page 44 Deletion Page 27 Checking and Changing Shortcut Keys Page 29 Option Setting for Each Function	
<ul> <li>▷ [CC-LINK Diagnostics]</li> <li>[Tool]</li> <li>▷ [Check Parameter]</li> <li>○ [Module Tool List]</li> <li>○ [Drive Tool List]</li> <li>○ [Drive Tool List]</li> <li>○ [Circuit Trace]</li> <li>○ [Profile Management] ▷ [Register]</li> <li>○ [Profile Management] ▷ [Delete]</li> <li>○ [Shortcut Key]</li> <li>○ [Options]</li> <li>[Window]</li> <li>○ [Cascade]</li> <li>○ [Tile Vertically]</li> <li>○ [Tile Horizontally]</li> <li>○ [Close All Windows]</li> <li>○ [Close All Windows]</li> </ul>	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list Page 44 Registration Page 44 Deletion Page 27 Checking and Changing Shortcut Keys Page 29 Option Setting for Each Function	
<ul> <li>▷ [CC-LINK Diagnostics]</li> <li>[Tool]</li> <li>▷ [Check Parameter]</li> <li>▷ [Module Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Circuit Trace]</li> <li>▷ [Profile Management] ▷ [Register]</li> <li>○ [Profile Management] ▷ [Delete]</li> <li>▷ [Shortcut Key]</li> <li>▷ [Options]</li> <li>[Window]</li> <li>▷ [Cascade]</li> <li>▷ [Tile Vertically]</li> <li>▷ [Close All Windows]</li> <li>▷ [Reset Window Layout Back to Initial Status]</li> <li>▷ [Tile Virtically]</li> </ul>	Page 113 CC-LINK diagnostics Page 54 Setting Parameters Page 65 Displaying the module tool list Page 67 Displaying the drive tool list Page 44 Registration Page 44 Deletion Page 27 Checking and Changing Shortcut Keys Page 29 Option Setting for Each Function	
<ul> <li>▷ [CC-Link Diagnostics]</li> <li>[Tool]</li> <li>▷ [Check Parameter]</li> <li>▷ [Module Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Drive Tool List]</li> <li>▷ [Circuit Trace]</li> <li>◇ [Profile Management] ▷ [Register]</li> <li>○ [Profile Management] ▷ [Delete]</li> <li>○ [Shortcut Key]</li> <li>○ [Options]</li> <li>[Window]</li> <li>○ [Cascade]</li> <li>○ [Tile Vertically]</li> <li>○ [Tile Horizontally]</li> <li>○ [Arrange Icons]</li> <li>○ [Close All Windows]</li> <li>○ [Reset Window Layout Back to Initial Status]</li> <li>○ [Floating]</li> </ul>	Page 113 CC-LINK diagnostics          Page 54 Setting Parameters         Page 65 Displaying the module tool list         Page 67 Displaying the drive tool list            Page 44 Registration         Page 27 Checking and Changing Shortcut Keys         Page 29 Option Setting for Each Function            Page 18 Screen Configuration	
<ul> <li>⇒ [CC-Link Diagnostics]</li> <li>[Tool]</li> <li>⇒ [Check Parameter]</li> <li>⇒ [Module Tool List]</li> <li>⇒ [Drive Tool List]</li> <li>⇒ [Drive Tool List]</li> <li>⇒ [Circuit Trace]</li> <li>⇒ [Profile Management] ⇒ [Register]</li> <li>⇒ [Profile Management] ⇒ [Delete]</li> <li>⇒ [Shortcut Key]</li> <li>⇒ [Options]</li> <li>[Window]</li> <li>⇒ [Cascade]</li> <li>⇒ [Tile Vertically]</li> <li>⇒ [Tile Vertically]</li> <li>⇒ [Arrange Icons]</li> <li>⇒ [Reset Window Layout Back to Initial Status]</li> <li>⇒ [Floating]</li> <li>⇒ [Docking]</li> </ul>	Page 113 CC-LINK diagnostics          Page 54 Setting Parameters         Page 65 Displaying the module tool list         Page 67 Displaying the drive tool list         —         Page 44 Registration         Page 27 Checking and Changing Shortcut Keys         Page 29 Option Setting for Each Function         —         Page 18 Screen Configuration	
<ul> <li>⇒ [CC-Link Diagnostics]</li> <li>[Tool]</li> <li>⇒ [Check Parameter]</li> <li>⇒ [Module Tool List]</li> <li>⇒ [Drive Tool List]</li> <li>⇒ [Circuit Trace]</li> <li>⇒ [Circuit Trace]</li> <li>⇒ [Profile Management] ⇒ [Register]</li> <li>⇒ [Profile Management] ⇒ [Delete]</li> <li>⇒ [Shortcut Key]</li> <li>⇒ [Options]</li> <li>[Window]</li> <li>⇒ [Cascade]</li> <li>⇒ [Tile Horizontally]</li> <li>⇒ [Arrange Icons]</li> <li>⇒ [Close All Windows]</li> <li>⇒ [Reset Window Layout Back to Initial Status]</li> <li>⇒ [Floating]</li> <li>⇒ [Docking]</li> <li>⇒ [Window information being displayed)]</li> <li>&gt; Mit = 1</li> </ul>	Page 113 CC-LINK diagnostics          Page 54 Setting Parameters         Page 65 Displaying the module tool list         Page 67 Displaying the drive tool list         —         Page 44 Registration         Page 27 Checking and Changing Shortcut Keys         Page 29 Option Setting for Each Function         —         Page 18 Screen Configuration	
<ul> <li>□ [CC-LINK Diagnostics]</li> <li>□ [Check Parameter]</li> <li>□ [Module Tool List]</li> <li>□ [Drive Tool List]</li> <li>□ [Drive Tool List]</li> <li>□ [Circuit Trace]</li> <li>□ [Profile Management] □ [Register]</li> <li>□ [Profile Management] □ [Delete]</li> <li>□ [Shortcut Key]</li> <li>□ [Options]</li> <li>[Window]</li> <li>□ [Cascade]</li> <li>□ [Tile Vertically]</li> <li>□ [Close All Windows]</li> <li>□ [Reset Window Layout Back to Initial Status]</li> <li>□ [Floating]</li> <li>□ [Docking]</li> <li>□ [Window]</li> </ul>	Page 113 CC-LINK diagnostics          Page 54 Setting Parameters         Page 65 Displaying the module tool list         Page 67 Displaying the drive tool list         —         Page 44 Registration         Page 27 Checking and Changing Shortcut Keys         Page 29 Option Setting for Each Function         —         Page 18 Screen Configuration	
<ul> <li>□ [CC-LInk Diagnostics]</li> <li>□ [Tool]</li> <li>□ [Check Parameter]</li> <li>□ [Module Tool List]</li> <li>□ [Drive Tool List]</li> <li>□ [Circuit Trace]</li> <li>□ [Profile Management] ⇒ [Register]</li> <li>□ [Profile Management] ⇒ [Delete]</li> <li>□ [Shortcut Key]</li> <li>□ [Options]</li> <li>[Window]</li> <li>□ [Cascade]</li> <li>□ [Tile Vertically]</li> <li>□ [Tile Horizontally]</li> <li>□ [Close All Windows]</li> <li>□ [Reset Window Layout Back to Initial Status]</li> <li>□ [Floating]</li> <li>□ [Docking]</li> <li>□ [Window]</li> <li>□ [Window]</li> <li>□ [Window]</li> <li>□ [Help]</li> </ul>	Page 113 CC-LINK diagnostics          Page 54 Setting Parameters         Page 65 Displaying the module tool list         Page 67 Displaying the drive tool list         —         Page 44 Registration         Page 27 Checking and Changing Shortcut Keys         Page 29 Option Setting for Each Function         —         Page 18 Screen Configuration	
<ul> <li>□ [CC-LInk Diagnostics]</li> <li>□ [Tool]</li> <li>□ [Check Parameter]</li> <li>□ [Module Tool List]</li> <li>□ [Drive Tool List]</li> <li>□ [Circuit Trace]</li> <li>□ [Profile Management] ⇒ [Register]</li> <li>□ [Profile Management] ⇒ [Delete]</li> <li>□ [Shortcut Key]</li> <li>□ [Options]</li> <li>[Window]</li> <li>□ [Cascade]</li> <li>□ [Tile Vertically]</li> <li>□ [Circuit Diagnostics]</li> <li>□ [Cose All Windows]</li> <li>□ [Reset Window Layout Back to Initial Status]</li> <li>□ [Floating]</li> <li>□ [Docking]</li> <li>□ [Window]</li> <li>□ [Window]</li> <li>□ [Window]</li> <li>□ [Cose All Window Help]</li> </ul>	Page 113 CC-LINK diagnostics          Page 54 Setting Parameters         Page 65 Displaying the module tool list         Page 67 Displaying the drive tool list         —         Page 44 Registration         Page 27 Checking and Changing Shortcut Keys         Page 29 Option Setting for Each Function         —         Page 18 Screen Configuration         Page 14 Displaying HELP	
<ul> <li>□ [CC-LInk Diagnostics]</li> <li>□ [Tool]</li> <li>□ [Check Parameter]</li> <li>□ [Module Tool List]</li> <li>□ [Drive Tool List]</li> <li>□ [Circuit Trace]</li> <li>□ [Profile Management] ⇔ [Register]</li> <li>□ [Profile Management] ⇔ [Delete]</li> <li>□ [Shortcut Key]</li> <li>□ [Options]</li> <li>[Window]</li> <li>□ [Cascade]</li> <li>□ [Tile Vertically]</li> <li>□ [Tile Horizontally]</li> <li>□ [Close All Windows]</li> <li>□ [Reset Window Layout Back to Initial Status]</li> <li>□ [Floating]</li> <li>□ [Docking]</li> <li>□ [Window]</li> <li>□ [Window]</li> <li>□ [Cocking]</li> <li>□ [Window]</li> <li>□ [Window]</li> <li>□ [Conection to MITSUBISHI ELECTRIC FA Global Website]</li> </ul>	Page 113 CC-LINK diagnostics         Page 54 Setting Parameters         Page 65 Displaying the module tool list         Page 67 Displaying the drive tool list         —         Page 44 Registration         Page 27 Checking and Changing Shortcut Keys         Page 29 Option Setting for Each Function         —         Page 18 Screen Configuration         Page 14 Displaying HELP         Page 14 Connecting to MITSUBISHI ELECTRIC FA Global Website	
<ul> <li>□ [CC-LIRK Diagnostics]</li> <li>□ [Crool]</li> <li>□ [Check Parameter]</li> <li>□ [Module Tool List]</li> <li>□ [Drive Tool List]</li> <li>□ [Drive Tool List]</li> <li>□ [Circuit Trace]</li> <li>□ [Profile Management] ⇔ [Register]</li> <li>□ [Profile Management] ⇔ [Delete]</li> <li>□ [Options]</li> <li>[Window]</li> <li>□ [Cascade]</li> <li>□ [Tile Vertically]</li> <li>□ [Close All Windows]</li> <li>□ [Close All Windows]</li> <li>□ [Floating]</li> <li>□ [Docking]</li> <li>□ [Window]</li> <li>□ [Version to MITSUBISHI ELECTRIC FA Global Website]</li> <li>□ [Version Information]</li> </ul>	Page 113 CC-LINK diagnostics         Page 54 Setting Parameters         Page 65 Displaying the module tool list         Page 67 Displaying the drive tool list         —         Page 44 Registration         Page 27 Checking and Changing Shortcut Keys         Page 29 Option Setting for Each Function         —         Page 18 Screen Configuration         Page 14 Displaying HELP         Page 14 Connecting to MITSUBISHI ELECTRIC FA Global Website         Page 14 Checking the version of CW Configurator	

24

### Available menus when editing a module configuration diagram

[Edit]	
⇔ [Delete]	_
⇔ [Select All]	
⇒ [Bring to Front]	
⇔ [Send to Back]	
⇒ [Module Status Setting (Empty)]	Page 46 Creating Module Configuration Diagram
⇔ [Display Module Information]	Page 49 Check model names on module objects
⇔ [Check] ⇔ [Power Supply Capacity and I/O Points]	Page 45 Module configuration diagram
⇔ [Check] ⇔ [System Configuration]	
⇔ [Parameter] ⇔ [Fix]	Page 50 Setting parameters on the module configuration diagram
⇒ [Parameter] ⇒ [Input Detailed Configuration Information Window]	-
⇔ [Start XY Batch Input]	Page 45 Module configuration diagram
⇔ [Default Points Batch Input]	
[Online]	
⇒ [Read Module Configuration from PLC]	Page 48 Reading the module configuration from an actual system
[View]	
⇔ [Toolbar] ⇔ [Module Configuration Diagram]	Page 46 Creating Module Configuration Diagram

#### Available menus when displaying a parameter editor

[Edit]	
⇔ [Set Maximum Value]	The menus to be displayed differ depending on the
⇔ [Set Minimum Value]	module.
⇔ [Copy Positioning Data]	
⇔ [Paste Positioning Data]	
⇔ [Channel Copy]	
⇔ [Copy Axis]	
⇔ [Refresh Batch Setting] ⇔ [Enable All]	
⇔ [Refresh Batch Setting] ⇔ [Disable All]	
Refresh Batch Setting] ⇔ [Back to User Default]	
⇔ [Automatic Device Assignment]	
⇔ [Setting Method] ⇔ [Start/End]	
⇔ [Setting Method] ⇔ [Points/Start]	
⇔ [Device Assignment Method] ⇔ [Start/End]	
⇔ [Device Assignment Method] ⇔ [Points/Start]	
⇔ [Word Device Setting Value Input Format] ⇔ [Decimal]	
⇔ [Word Device Setting Value Input Format] ⇔ [Hexadecimal]	
⇔ [IP Address Input Format] ⇔ [Decimal]	
⇔ [IP Address Input Format] ⇔ [Hexadecimal]	

# Available menus when displaying a label editor [Edit] \[Export to File] Page 72 Exporting data to a file

#### Available menus when displaying the verify result window

[Edit]	
⇔ [Export to File]	Page 43 Exporting data to a file
[View]	
⇔ [Return to Result List]	-
⇔ [Close Detailed Result]	
⇔ [Close All Detailed Result]	

#### Available menus when displaying the device/buffer memory batch monitor

# [View] [Display Format Detailed Setting]

# 2.5 Checking and Changing Shortcut Keys

Shortcut keys of each function can be checked and changed in the "Shortcut Key" screen.

Up to three shortcut keys can be assigned to one command.

#### Window

[Tool] ⇒ [Shortcut Key]

Comment		Key 1	 Kau 2	Key 2	Durad	
Command		Key I	Key 2	Key 5	Fixed	
Project		CL N				_
inew		Ctrl+IN Ctrl+IN				
Open		Ctri+O				
Close		Chilling .				
Save		Ctri+5				
Save As						
Project Verify						
Intelligent Functi	on Module					
🖉 Printer Setup						
📌 Page Setup						
Print Preview						

#### Operating procedure

- 1. Double-click a command cell to change the shortcut key.
- **2.** Press a key to assign on the keyboard.
- 3. Click the [Close] button.

#### Changing the default setting

The assignment of the shortcut keys can be changed to the default format by selecting the format from "Default" pull-down list. The available formats are as follows:

• Change to CW Configurator Format: Select this to reset the shortcut key assignment to the original one.



By importing an exported file (\*. gks), the setting can be utilized on other personal computers.

# 2.6 Checking and Changing Colors and Fonts

Colors and fonts used in each editor can be checked and changed in the "Color and Font" screen.

The changed color and font settings are saved for each user.

#### Window

[View] ⇒ [Color and Font]

Col	lo	or and Font				×
Ī	эr	get	Verify Result		•	
E	3	🎉 Font Setting				
		Font Setting		Aut	omatic	-
		Font		Bas	ed on System Settings	
E	3	🤯 Color Setting				
		Normal Text			Black	-
		Normal Backgrou	nd		White	-
		Mismatched Text			Black	-
		Mismatched Back	ground		Rose	-
		Text of Verify Sour	rce Only		Black	-
		Background of Ve	rify Source Only		Pale Blue	-
		Text of Verify Dest	ination Only		Black	-
		Background of Ve	rify Destination Onl		Light Green	-
		Background of No	Comparison Targe		Gray-25%	-
Import						
	E	Back to Default	ОК		Cancel App	ly

#### Operating procedure

- 1. Select "User Setting" from the pull-down list of "Font Setting".
- 2. Set each item in the "Font" screen, and click the [OK] button.
- 3. Select a color to be changed from "Color Setting", and click the [Apply] button.
- 4. Click the [OK] button.

#### Precautions

Some fonts may be displayed as garbled characters. If this happens, change the setting to another font.



By importing an exported file (\*.gcs), the setting can be utilized on other personal computers.

# **2.7** Option Setting for Each Function

Some functions and editors include the option settings. By changing the option settings, the screen display format can be changed and the detailed operation settings for each function can be set.

#### Window

[Tool] ⇒ [Options]

Options			<b>E</b>
Other Editor     Module Configuration Diagram     Monitor     Ponine     Intelligent Function Module	E Message Display Message when Open Mod	ule Configuration D Yes	5
		Import	Export
Back to Default Back to User Def	ault Set as Default	ок	Cancel

#### Operating procedure

Set each item and click the [OK] button.



By importing an exported file (\*.gos), the setting can be utilized on other personal computers.

# 2.8 Printing Data

This section explains the printing method of data created in CW Configurator.

#### Window

 $[Project] \Rightarrow [Print] ( \textcircled{B} )$ 

Print						×
Print Item  Print All (Common Setting)  Control CPU  Module Information  Project Contents List	Common Setting Color/Font Setting Color/Font Setting	Current Color/Font Se	itting v	* Please set it to default s	etting when printed con	tent is hard to see.
Set Print Order	Printer Setup	Page Setup	Print Preview	1	Close	Cancel

When no data exist or only read-protected data exist in "Print" and "Do Not Print" lists,  $\times$  is shown on the checkbox of print items.

#### Operating procedure

- **1.** Select data to print and set each setting.
- 2. Change the printer by clicking the [Printer Setup] button and set the page setting by clicking the [Page Setup] button.
- **3.** Click the [Print] button.

#### Module extended parameters

When installing other MELSOFT products after installing CW Configurator, the profile version registered at the installation of CW Configurator will be changed to a version included in a MELSOFT product which is installed after CW Configurator. If the profile version is different from that is registered at the installation of CW Configurator, the printed content of module extended parameters may become incorrect.

Register the profile included in CW Configurator again. (After the registration, the registered contents will also be applied to other MELSOFT products.)

The profile is stored on the product disk. (For download version installer, open (decompress) the '.exe' file.) After registering the profile, start CW Configurator again.

Product	Storage location
CW Configurator	SUPPORT\MSF\Common\ProfileManagement\IparData
Other MELSOFT products (GX Works3 and Navigator)	SUPPORT\MSF\Common\ProfileManagement\IparData\IparData.exe <sup>*1</sup>

\*1 To restore the profile, open (decompress) 'IparData.exe' and register the stored profile again.

#### Print image preview

The print image of each data can be checked.

#### Window

S Print Preview	
🕅 🖣 1 🔰 🎽 Pgint Item System Parameter 🔹 Data Name I/O Assignment Setting 💌 Digplay	
	E
System Parameter Data Name : I/O Assignment Setting Base/Power/Extension Cable Setting	2/2/2015
Base No.     Base Stota     Power Supply Module     Extansion Cable       Main     Extansion 1     Extansion 1     Extansion 2       Extansion 2     Extansion 3     Extansion 3	
3     Extansion 4       Extansion 5       Extansion 6       Extansion 7	
	Page: 1 / 4

#### Operating procedure

- **1.** Select [Project] ⇒ [Print Preview].
- 2. Click the [Print Preview] button in the "Print" screen.
- **3.** To change data to preview, select "Print Item" and "Data Name", and click the [Display] button.

#### Considerations

#### Displaying print previews and printing data

- In the following situations, neither displaying print preview nor printing data can be performed.
- The data to be printed do not exist.
- The print target screen is being monitored. (Stop monitoring before start printing.)

#### ■Printing a large amount of data

Large amount of data may not be printed at all or printed half way due to the limitations of printer driver or Windows print spooler. In this case, print the data by any of the following methods.

- Split the data by setting a print range
- Select "Print directly to the printer" in the [Advanced] tab of the property screen (select [View devices and printers] in the control panel of Windows).
- Set "Output by Item" for the print job output in the "Printer Setup" screen.

#### **Outputting the print contents on a file**

- When print contents are output to a file, the "Save As" screen may appear in the background of other screens. Press the Att + Tab keys or Att + [ESC] keys to bring the screen in the foreground.
- CW Configurator will not respond if it is operated while the "Save As" screen is being displayed.
   When the message appears, select "Wait for the program to respond". Selecting "Close the program" results in loss of unsaved data.

# PART 2

# SYSTEM DESIGN AND SETTING

This part explains the system design including project management and parameter settings.

**3 PROJECT MANAGEMENT** 

4 CREATION OF MODULE CONFIGURATION DIAGRAM AND PARAMETER SETTINGS

5 REGISTERING LABELS

# **3** PROJECT MANAGEMENT

This chapter explains basic operations and management of a project.

# **3.1** Project File and Data Configuration

Projects created in CW Configurator are saved in a single file format. The data created for projects is displayed in the navigation window.

### File format

#### Single file format

Projects can be managed regardless of the folder configuration and the file configuration by saving projects in a single file format.

Thereby, operations such as changing a project name, copying and pasting a project, and sending and receiving data can easily be performed using an application such as Windows Explorer.

### Data configuration

#### Data displayed in the navigation window

The following shows the data displayed in the navigation window in a tree. (Default data names are used.)

#### ■Module configuration data

Creation method: I Page 46 Creating Module Configuration Diagram

Image	Item	Description
Module Configuration	Module configuration diagram	Data that displays a target system of a project graphically.

#### ■Label data

Creation method: SP Page 71 Registering Labels

Image	Item	Description
🗉 🍈 Label	Global label	A label that is used to access an I/O signal or buffer memory of a module. (
💼 Global Label 🔃 Structured Data Types	Structure definition	Data that defines structure as a data type.

#### ■Parameter data

For a tree structure and creation methods, refer to the following:

Page 54 Setting Parameters
# 3.2 Creating Project Files

This section explains basic operations of CW Configurator such as creating, opening, and saving projects.

# **Creating projects**

Create a new project.

#### Window

 $[Project] \Rightarrow [New] (\square)$ 

New	
<u>S</u> eries	RCPU 🗸
<u>Т</u> уре	R12CCPU-V 👻
	OK Cancel

#### Operating procedure

Set each item and click the [OK] button.

#### Creating a new project by reading data from a module

A new project can be created by reading existing project from a module using the read data function without creating new project as shown above.

#### Operating procedure

- 1. Start CW Configurator, and select [Online] ⇒ [Read from PLC] (♣).
- **2.** Select the series to be read in the "Series Selection" screen, and click the [OK] button.
- **3.** Set the communication route to access the module in the "Specify Connection Destination" screen, and click the [OK] button.
- 4. Perform the Read from PLC function in the "Online Data Operation" screen.

For the method for performing the Read from PLC function on the "Online Data Operation" screen, refer to the following:

#### Precautions

When parameters are not read from a module with data to create a new project, default parameters will be set. Check the parameter setting.

3

# **Opening projects**

Read a project saved on a personal computer or another data storage device.

#### Window

#### [Project] ⇔ [Open] (≧)

Look jn:	🕌 CW Configura	tor Project	- 0	🌶 📂 🎹	
<b>H</b> a	Name	*	Size	Туре	Title
<u></u>	Project1.cp5		116 KB	CP5 File	
esktop braries	Project2.cp5		116 KB	CP5 File	
work	•	m			•
	File name:	Project1.cp5		-	<u>O</u> pen
	Files of type:	CW Configurator Project	(*.cp5)	•	Cancel
	Title(A):				

#### Operating procedure

Set each item and click the [Open] button.

#### Precautions

#### ■Opening a project being edited by another user

The project can be opened as a read-only project. However, the following function cannot be used.

Overwriting projects

#### ■Projects saved on a network drive or a removal media

Do not open the project directly. Open it after saving it to the personal computer.

# Saving projects

Save a project on a personal computer or another data storage device.

Depending on the setting for "MELSOFT iQ AppPortal information file output when saving project," an iQ AppPortal information file can be output when saving a project.

For details, refer to the following:

Settings for MELSOFT iQ AppPortal

#### Projects

#### ■Unusable character strings

Refer to the following:

Page 120 Unusable Character Strings (Reserved Words)

#### Saving projects under the specified name

#### Window

 $[\mathsf{Project}] \Leftrightarrow [\mathsf{Save}\,\mathsf{As}]$ 

🔮 Save as						
Save in:	🔒 CW Configura	tor Project	- G	🏚 📂 🛄 <del>-</del>		
(As)	Name	*	Size	Туре	Title	
2	Project1.cp5		116 KB	CP5 File		
Recent Places	Project2.cp5		116 KB	CP5 File		
Desktop						
Libraries						
Computer						
	1					
Network	•					
	File <u>n</u> ame:	Project3.cp5		•	Save	
	Save as type:	CW Configurator Project	(*.cp5)	•	Cancel	
	Title(A):	Title				

#### Operating procedure

Set each item and click the [Save] button.

#### **Overwriting projects**

Operating procedure

Select [Project] ⇔ [Save] (I).

# 3.3 Managing Project Data

This section explains how to edit data and properties.

#### Project data

■Unusable character strings for data name

Refer to the following:

#### ■Maximum number of data that can be created

Up to 800 data can be created in one project.

## Adding new modules

Add a new module to the project.

For the setting method, refer to the following:

Page 58 Setting parameters of modules, Page 68 Simple motion module setting function

## **Editing data**

#### Copying/pasting data

Utilize the data of project being edited or other projects. Data cannot be copied/pasted between projects with different module type.

#### Operating procedure

- 1. Select the data name of the copy source in the navigation window.
- 2. Select [Project] ⇔ [Data Operation] ⇔ [Copy Data] ( ).
- **3.** Select a folder to paste the data to (one-level upper hierarchy of the copy source data) in the navigation window or another project.
- **4.** Select [Project] ⇒ [Data Operation] ⇒ [Paste Data] (≧).

If the same data name exists in the folder where the data is to be pasted, the pasted data is named automatically.

#### **Deleting data**

Delete data from the open project.

#### Operating procedure

- 1. Select the data name to be deleted in the navigation window.
- 2. Select [Project] ⇒ [Data Operation] ⇒ [Delete Data].

# Property

Display the properties of data such as a folder and parameter. A title and comment can be added to each data.

#### Window

[Project] ⇒ [Data Operation] ⇒ [Properties] (National States)

General Comment         Data Name         Data Name         Data Name         Data Name         Project         Title         Last Change         2021/02/04 15:03:57         Detail         Setting for MELSOFT iQ AppPortal         MELSOFT iQ AppPortal information file output when saving project       Output only when information file exists         Version Information       Version         Help Path Information       Project File         Created Version       101111[Hin4(htt=1014)]         Oldest Saved Version       0Idest Saved Version	Prope			×
Data Name       Project         Data Name       Project         Title       2021/02/04 15:03:57         Detail       2021/02/04 15:03:57         Detail       MELSOFT iQ AppPortal information file output when saving project       Output only when information file exists         Version Information       Version       Help Path Information         Project File       Trite title       Trite title         Created Version       Trite title	Gen	eral Comment		
Data Name     Project       Title     2021/02/04 15:03:57       Last Change     2021/02/04 15:03:57       Detail     0utput only when information file exists       Setting for MELSOFT iQ AppPortal information file output when saving project     Output only when information file exists       Version Information     Version       Help Path Information     E       Project File     Created Version       Created Version     Sum #IcFine(Della Context)       Oldest Saved Version     Oldest Saved Version	🗆 D	ata Name		
Title     Image: Constraint of the second seco	Da	ata Name	Project	
Last Change 2021/02/04 15:03:57  Detail  Setting for MELSOFT iQ AppPortal MELSOFT iQ AppPortal information file output when saving project Version Information Version Help Path Information  Project File Created Version Latest Saved Version Oldest Saved Version	Ti	tle		
Detail      Setting for MELSOFT iQ AppPortal      MELSOFT iQ AppPortal information file output when saving project     Version Information      Version Information      Project File      Created Version     Didest Saved Version     Oldest Saved Version	La	ast Change	2021/02/04 15:03:57	
Setting for MELSOFT iQ AppPortal     MELSOFT iQ AppPortal information file output when saving project     Version Information     Version Information     Help Path Information     Project File     Created Version     Latest Saved Version     Oldest Saved Version	ΞD	etail		
MELSOFT iQ AppPortal information file output when saving project     Output only when information file exists       Version     Help Path Information       Project File     Created Version       Latest Saved Version     Saved Version       Oldest Saved Version     Oldest Saved Version	Ξ	Setting for MELSOFT iQ AppPortal		
Version Information       Version       Help Path Information       Project File       Created Version       Latest Saved Version       Oldest Saved Version		MELSOFT iQ AppPortal information file output when saving project	Output only when information file exists	-
Version       Help Path Information       Project File       Created Version       Latest Saved Version       Oldest Saved Version		Version Information		
Help Path Information  Project File Created Version Latest Saved Version Oldest Saved Version		Version		
Project File     Created Version     Latest Saved Version     Oldest Saved Version		Help Path Information		
Created Version 101가하[Hin4]Astmis#2] Latest Saved Version Oldest Saved Version	Ξ	Project File		
Latest Saved Version Oldest Saved Version		Created Version	noneh(Hons/Scences)	
Oldest Saved Version		Latest Saved Version		
		Oldest Saved Version		
Last Converted Version		Last Converted Version		
File Size Standard		File Size	Standard	•
			OK Cancel	

#### Operating procedure

Set each item and click the [OK] button.

#### Titles

The title set to data is displayed with a data name in the navigation window.

The title is also displayed in the "Online Data Operation" screen when writing/reading data to/from a module.

					Navigation		×			
Prope	rties	;	<		Berniect					
Gene	eral Comment				Module Configura	ation				
🗆 Da	ata Name				🖬 [ 🛅 Label					
Da	ata Name	0000:RJ71C24			🗏 🛃 Parameter					
Tit	tle	title			System Damme	tor	_			1
La	ist Change	2021/02/10 9:29:23			🏛 🛃 R12CCPU-V					
ΞM	odule Selection				🔳 🚵 Module Inform	ation 🗸				
M	odule Type	Information Module			😑 👔 0000:RJ71C2	l title				
M	odule Name	RJ71C24			🔗 Module P	aramete				
St	ation Type				🔗 Module E	xtended				
	etail									
	Mount Position									
	Mounting Base	Main Base								
	Mounting Slot No.	1		Module Name/Data Name	,		-	Detail	Title	
	Specify Start I/O No.	Specify		Date Untitled Project	F					
	Start I/O No.	0000								
	Number of Occupied Points per	r 1 S 32Point		🖃 🚮 Parameter						
-				- 🦑 System Pa	arameter/CPU Parameter					
Title	1			- 🙆 Module P	arameter					l l
				- 🔂 Module E:	xtended Parameter:000				title	
				Memory C	Card Parameter					
		OK Cancel								

#### Compressing a project file

When saving a project, whether or not to compress data can be set in the following procedure.

#### Operating procedure

- **1.** Select a project in the navigation window, then select [Project] ⇒ [Data Operation] ⇒ [Properties], or right-click it and select [Properties] from the shortcut menu.
- 2. Select "Compression" or "Standard" for "File Size" and click the [OK] button.

A project is saved according to the setting.

By selecting "Compression" for "File Size", the project file size decreases.

#### Precautions

Note the following points when "Compression" is selected.

- That project cannot be opened in CW Configurator Version 1.011M or earlier.
- That project may not be used in other MELSOFT products.
   In that case, change the setting to "Standard," or use another version of MELSOFT products which support that project.

The following table shows the applicable version of each product.

Product name	Version
GX Works3	1.070Y

#### Settings for MELSOFT iQ AppPortal

Set settings to output an iQ AppPortal information file.

It is output when saving a project or exporting a library.

For iQ AppPortal, refer to the following:

LiQ AppPortal Operating Manual

#### Operating procedure

- **2.** Select "Always output" for "MELSOFT iQ AppPortal information file output when saving project," and click the [OK] button.

# 3.4 Verifying Projects

Verify a open project with the data of another project. Use this function to compare the content of two projects.

# Verification

#### Window

[Project] ⇒ [Project Verify]

Project Verify		×
Verification Data Selection Options	Verification Target Project Verify Source: Data being Edited Source Project: (Untitled Project)	Verify Destination:
	Verification Target Data Verify the selected source data and the destin Users are able to change the verify destination	iation data. n.
	Verify Source	Verify Destination
	Image: System Parameter         Image: System Parameter	ter
	Module Extended Parameter shows only. Module Extended Parameter of motion m	available module for verification. dule is not Verification target.

#### Operating procedure

- 1. Specify a project to "Verify Destination" in [Verification Data Selection].
- **2.** Select the data to be verified, and click the [Verify] button.

Point P

The target project file can be specified by dragging and dropping.

#### Precautions

- Verification is available between the projects of a C Controller module and MELSECWinCPU module. Verification with a
  project of a programmable controller CPU cannot be performed.
- Module extended parameters can be verified when the start I/O No. and the module names match between the verification source and the verification destination. For a simple motion module, module extended parameters for which the module names mismatch can be selected as the verification targets.

#### Parameters

#### ■Verification target

Module extended parameters are excluded from a verification.

However, the module extended parameters of a simple motion module can be verified.

#### ■Verifying only specific intelligent function modules on RCPUs

Procedure is as follows:

- 1. Select "Module Parameter" on the [Result List] tab on the "Verify Result" screen after verifying projects, and double-click it or press the Enter key.
- 2. Click the [Stop] button on the "Verification Progress" screen immediately after verification starts.
- 3. Select a module to verify on the [Module Parameter] tab on the "Verify Result" screen, and double-click it or press the <u>Inter</u> key.

#### ■Verifying module parameters of CC-Link IE Controller Network modules

The following table shows the availability of module parameter verification with a version that supports (or does not support) the link points extended setting.

 $\bigcirc$ : Verification available,  $\times$ : Verification not available

Version <sup>*1</sup> of a	Version <sup>*1</sup> of a verification destination	on	
verification source	Version 1.011M or earlier	· Version 1.012N · Version 1.013P	Version 1.014Q or later
Version 1.011M or earlier	0	0	×*2
Version 1.012N     Version 1.013P	0	0	×*2
Version 1.014Q or later	0	0	0

\*1 Indicates the version of CW Configurator.

\*2 Use the latest version of CW Configurator.

#### ■Unsupported parameters are included in a verification destination

When verifying with a project which is created in CW Configurator with a version earlier than the one currently used,

### parameters which are not supported by the project are treated as if default values were set.

#### Module parameters are not matched

When verifying module parameters, the following message may appear.

• Message: Module parameters created through different versions are verified. For some items, mismatch results might be shown even if the same settings were set on the setting window.

To match the module parameters, perform the following operations to the projects of the verification destination and source, and then verify once again.

#### Operating procedure

- 1. Change the corresponding setting item in the parameter editor, and then restore it.
- 2. Save the project.

# **Checking verification result**

Check the details of mismatched data in the "Verify Result" screen.

The latest data of a verification source is displayed in the verification result.

Therefore, the verification result can be checked with the latest data of a verification source without verifying again after mismatched data is modified.

#### Operating procedure

- 1. Select and double-click a row of data to be displayed in detail in the "Verify Result" screen.

#### Point P

A font color, background color, and font can be changed.

#### Precautions

Up to 1000th mismatched parameters are displayed on the detailed verification result screen, and verification for 1001st or later is interrupted.

To verify parameters after interruption, correct the mismatched data before verifying again.

#### Parameters

When the same profiles are not registered to the verification destination and source, the verification result may be mismatched.

The details of verification target parameter are displayed in a table format by double-clicking the parameter displayed in the verification result.

#### Detailed display (table format)

The cursor jumps to corresponding setting items on a parameter editor by double-clicking a parameter in a table.

# Exporting data to a file

Export data, which is displayed on the "Verify Result" screen, to a file.

#### Operating procedure

Select [Edit] ⇒ [Export to File] (4).

# 3.5 Managing Profiles

The registration status of a profile can be managed.

A profile is data that stores information of a connected device (such as a model name.)

A profile is managed by each personal computer, and shared among CW Configurator and other MELSOFT products.

Therefore, a profile registered in CW Configurator is applied to other MELSOFT products.

Before registering/deleting a profile, log on to a personal computer as a user with the administrator authority, and close the project in advance.

#### Registration

Register a profile in CW Configurator.

#### Operating procedure

- **1.** Select [Tool] ⇒ [Profile Management] ⇒ [Register].
- **2.** Select the file in the "Register Profile" screen, and click the [Register] button.

#### Precautions

A profile is a compressed file (such as \*.zip, \*.ipar, and \*.cspp). Register a profile without decompressing.

#### Deletion

Delete a registered profile.

#### Operating procedure

- **1.** Select [Tool] ⇒ [Profile Management] ⇒ [Delete].
- 2. Select a model name to be deleted in the "Profile Delete" screen, then click the [Delete] button.

# 4 CREATION OF MODULE CONFIGURATION DIAGRAM AND PARAMETER SETTINGS

In CW Configurator, parameters for systems of a C Controller module and MELSECWinCPU module can be set on a module configuration diagram, as if to configure the actual system.

Parameters can also be set in the navigation window.

#### Module configuration diagram

The following operations can easily be performed on the module configuration diagram.

Item	Reference
Display an actual system configuration visually	Page 46 Creating Module Configuration Diagram
Set parameters for modules	Page 50 Setting parameters on the module configuration diagram
Enter start XYs in a batch	Page 53 Inputting the start XY in a batch
Enter default points in a batch	Page 53 Inputting default points in batch
Check a power supply capacity and I/O points	Page 53 Checking power supply capacity and I/O points
Check a system configuration	Page 53 Checking system configurations

#### Parameter settings

Parameters can be set by either of the following methods.

Method	Reference
Setting parameters in the "Input the Configuration Detailed Information" window that is displayed from a module configuration diagram.	Page 50 Setting parameters on the module configuration diagram
Setting parameters in a parameter editor that is displayed from the navigation window.	Page 54 Setting Parameters

#### ■Unusable character strings

Refer to the following:

Page 120 Unusable Character Strings (Reserved Words)

#### When an unsupported module exists in the system parameter

When a module meeting either of the following conditions exists in the system parameter, the module configuration diagram cannot be used: it is not supported by a C Controller module or MELSECWinCPU module, or it is not displayed in the element selection window of CW Configurator. To use the module configuration diagram, delete the module from the system parameter. ( Page 48 Reading the module configuration from an actual system, Page 56 Setting system parameters)

#### ■When setting a multiple CPU configuration

Set the parameters of a multiple CPU configuration in the environment where a multiple CPU configuration is constructed. Alternatively, install GX Works3 in the environment where CW Configurator is installed.

If a module with no profile is included in a multiple CPU configuration, the multiple CPU configuration setting may not be set because an error occurs when reading data from a programmable controller, opening a project file, or reading the mounting status.

# 4.1 Creating Module Configuration Diagram

A module part (object) can be placed in the same configuration as an actual system on the module configuration diagram. A module configuration diagram of CW Configurator can be created in the range of a system that is controlled by a module in a project.

# Editor configuration when creating a module configuration diagram

#### Point P

The display settings can be changed by setting the following option. [Tool] ⇔ [Options] ⇔ "Other Editor" ⇔ "Module Configuration Diagram"

#### Window

Double-click "Module Configuration" in the navigation window.



#### **Displayed items**

Screen name	Item	Description
Module	iQ-R series	An object of a MELSEC iQ-R series module.
Configuration	Q series	An object of a MELSEC-Q series module.
Diagram	General module	An object of a module for which the start XY and point can be set arbitrarily for each module type. The same points as empty slot points can be assigned as an initial value. Select this when using a module which is not displayed in the element selection window.
	Figure (Straight Line, Rectangle, Ellipse, Text Box)	An object that is used when adding information such as description on the module configuration diagram.
	Connection line	An object of a bus cable to be connected to a base unit.
	Connection point	A point to be connected with a connection line.
	Module status setting (empty)	A module to be used when operating a system by placing modules on the module configuration diagram without mounting actual modules. A module placed on the module configuration diagram and its related parameters will also be set as "(Empty)". (Reserved status)
	Object placement error	A module object which is not placed properly is highlighted.
Element select	ion window	A list of objects which can be used in the Module Configuration Diagram.
"Input the Cont	figuration Detailed Information" window	A window to enter the information such as start XY or station number of the module placed on the module configuration diagram.

# **Placing objects**

#### Placing module objects

#### Operating procedure

- 1. Select a main base from the element selection window, and drag and drop it onto the module configuration diagram.
- **2.** Select a module from the element selection window, and drag and drop it onto the base unit placed on the module configuration diagram in step 1.

The available locations are highlighted while dragging the module.

Point P

The names of module objects can be changed in the "Properties" screen. It makes easy to distinguish modules with the same model names.

#### Precautions

Only bus cables are available. Network connection and serial connection are not available.

#### Moving placed modules

If a module is removed from the main base or extension base, the object information such as start I/O and parameter information is retained. Therefore, when the removed module is placed on the base unit again, the retained parameter information will be set automatically.

The module removed from the module configuration diagram is deleted from the I/O assignment setting screen.

#### ■Deleting placed modules

When a module is deleted, the module information displayed in the navigation window after fixing parameters will be deleted as well.

#### Copying and pasting modules

The copy source parameter information is succeeded.

If a C Controller module or MELSECWinCPU module placed on the base unit in a multiple CPU configuration is copied, the CPU number will be unknown.

The objects can be copied to the module configuration diagram of other projects.

#### Placing figure objects

A figure and text box can be placed on the module configuration diagram.

A figure placed on the module configuration diagram is not written to a C Controller module or MELSECWinCPU module. It is saved only in the project.

#### Operating procedure

Select a figure in "Figure" in the element selection window, and drag and drop it onto the module configuration diagram. Change the text and color of a figure object in the "Properties" screen.

#### Module status setting (empty)

Set this when operating a system without mounting actual modules. The module is highlighted in a pale color.

#### Operating procedure

Select a module to be set to empty, and [Edit] ⇒ [Module Status Setting (Empty)].

#### Reading the module configuration from an actual system

The module configuration diagram can be configured by using the information read from a module.

#### Operating procedure

Select [Online] ⇒ [Read Module Configuration from PLC].

#### Precautions

- The actual module configuration cannot be read if a system contains a module that is not supported by a C Controller module or MELSECWinCPU module or that is not displayed in the element selection window of CW Configurator.
   (IP Page 56 Setting system parameters)
- The module configuration cannot be read when the number of extension base unit was set incorrectly.

#### Check on a balloon help

Place the cursor on the object (such as module and figure) to display a balloon help on the module configuration diagram.



#### Check model names on module objects

#### Operating procedure

Normal display

POW	CPU 0	1	2	3	4	5 6	7
			1				

# Module information display

#### Check on the "Properties" screen

A model name, object name, and outline of a specification can be checked in the "Properties" screen.

Additionally, a comment can be entered.

🛄 Module Configuration * 🗙	[	Properties			×
R38B		Model Name Object Name	R12CCPU-V R12CCPU-V		
		Profile Comment			]
		Outline Specification			
		[Outline] RCPU [Specification] OS:VxWorks Version 6. Peripheral connection p [I/O Points] 4096 [SVDC Current Consu 1.254	9 orts: Ethernet Imption (A)]		* III +
				ОК	Cancel

#### Operating procedure

Select a module on the module configuration diagram, right-click and select [Property] from the shortcut menu.

4

# Setting parameters on the module configuration diagram

Parameters of a control CPU and a module can be set on a module configuration diagram.

#### Operating procedure

- **1.** Select a module to edit the parameters.
- 2. Set each item in the "Input the Configuration Detailed Information" window.
- **3.** Select [Edit]  $\Rightarrow$  [Parameter]  $\Rightarrow$  [Fix] (2).

When setting details of the module, click the [Detailed Setting] button to display the parameter editor.

#### Operations that make parameters unfixed

When an object is edited on a module configuration diagram, the status of parameters may be unfixed. The following shows the list of operations that make parameters unfixed.

- Connecting modules
- Setting module status (empty)
- · Performing undo/redo
- Entering start XYs in a batch
- · Entering default points in a batch
- · Operations in the "Input the Configuration Detailed Information" window
- · Adding or deleting a module
- · Cutting and pasting modules
- · Changing the property of a module
- · Removing a module, or placing the same module to the slot of a base unit again.

#### Data updated after fixing parameters

The following data is updated after fixing parameters.

Navigation window

(When parameters of a newly placed module are fixed, the parameters of the module are added under "Module Information" in the navigation window.)

- · Parameter editor
- I/O assignment setting screen

#### Application of parameter information

The parameter information of a cut or copied module object can be utilized by pasting the module object onto a module configuration diagram and fixing the parameters.

#### Precautions

Parameter information cannot be utilized by the following operations. The parameter information of the pasted module object is returned to the default.

- Paste a cut or copied module object onto the module configuration diagram in another project.
- Before fixing parameters, change the station type of the module object in the "Input the Configuration Detailed Information" window.

#### Display for multiple CPU configuration

The multiple CPU configuration can be set on the module configuration diagram.



CPU modules

Item	Description
Host CPU module	For a multiple CPU configuration, only one project which is set as a host CPU can be set.
Another CPU module	Set a CPU module which is not set as a host CPU to another station. The module is highlighted in a pale color, same as when the module state setting (empty) is set.
Module controlled by the host CPU module	A module that is controlled by the CPU module set as a host CPU.
Module controlled by another CPU module	A module that is controlled by the CPU module set as other CPU. The module is highlighted in a pale color, same as when the module state setting (empty) is set.
Available slots for CPU modules	Up to four CPU modules can be placed on the CPU slot and slot 0 to 6. The placed CPU modules are assigned a number, CPU No.1 to CPU No.4 starting from the left.

#### Setting multiple CPU configuration

In a multiple CPU configuration, place two or more CPU modules on the base unit.

Change the control CPU of the module in the "Input the Configuration Detailed Information" window.

The following explains how to change a single CPU configuration to a multiple CPU configuration, and vice versa.

#### Changing a single CPU configuration to a multiple CPU configuration

Drag and drop a CPU module from the element selection window in a single CPU configuration (a state where one CPU is placed on the base unit), and place the second CPU module on the base unit.

#### Changing a multiple CPU configuration to a single CPU configuration

Delete one CPU module (or remove it from the slot) in a multiple CPU configuration (a state where two or more CPU modules are placed on the base unit), and keep only one CPU module on the base unit.

#### Changing CPU number of the CPU module set as a host CPU

For a multiple CPU configuration, the CPU number of a CPU module placed on the base unit is set in order from the left. To change the CPU number, change the position of the CPU module.

#### ■Operation for single CPU configuration

Move the CPU module placed on the CPU slot to an empty slot, and place a new CPU module on the empty CPU slot.



#### ■Operation for multiple CPU configurations

Exchange the CPU module on the CPU slot and the CPU module on other slot.

Since the parameter information of the modules removed from the base unit is retained, the retained information is succeeded when the removed modules are placed again.



# Inputting the start XY in a batch

The start XY of each module can be set in order of the slot number in a batch.

#### Operating procedure

Select [Edit] ⇔ [Start XY Batch Input] (1).

## Inputting default points in batch

For all modules and empty slots on the module configuration diagram, points including empty slots and on the empty slot side (for a module which occupies two or more slots) can be changed to the default in a batch.

#### Operating procedure

Select [Edit] ⇒ [Default Points Batch Input].

## Checking power supply capacity and I/O points

Whether the power supply capacity and I/O points in the configuration on the module configuration diagram exceed the upper limit can be checked.

#### Operating procedure

- Select [Edit] ⇒ [Check] ⇒ [Power Supply Capacity and I/O Points] (<sup>20</sup>/<sub>2</sub>).
- 2. Check the result displayed in the "Result of Power Supply Capacity and I/O Points Check" window.

## Checking system configurations

Whether the place of each module on the module configuration diagram is proper can be checked. The result is displayed in the output window.

#### Operating procedure

- Check the result displayed in the output window.

#### Highlighting display

A row displayed in the output window can be highlighted.

#### Operating procedure

Select a row and click <a>[Set/Clear Highlight]</a>) on the toolbar.

#### Point P

The color of a row to be highlighted can be selected by clicking rext to (Set/Clear Highlight) on the toolbar. Rows can be color-coded with this function.

Moreover, by clicking so (Previous Highlight) or so (Next Highlight), the cursor jumps to the previous or next highlighted row.

## Operation for writing/reading data to/from a module

Only parameters of the modules in the information of module configuration diagram can be read/written.

After reading data from a module, the coordinate position of the modules on the module configuration diagram is displayed by default status.

In addition, the figure information is deleted.

# 4.2 Setting Parameters

To operate a module, setting parameters for the modules is required.

This section explains the settings of parameters in the navigation window.

Image	Item	Description	Reference
E Parameter     Voystem Parameter     System Parameter     OPU Parameter     OPU Parameter     Module Parameter     Moduce Card Parameter	System parameter	Set the items required to configure a system such as a module configuration. The 'system' here indicates the system configured with a main base unit, extension base unit, and RQ extension base unit connected with an extension cable.	Page 56 Setting system parameters
■ Method y out a familie of the second statemeter ■ (2) Module Information ■ (2) Module Parameter (2) Module Extended Parameter	Parameter of a control CPU	Set the self operation function of a C Controller module and MELSECWinCPU module.	Page 57 Setting parameters for a control CPU
r Module Parameter Module Extended Parameter ₽ Module POU (Shortcut)	Module information (I/O module and intelligent function module)	<ul> <li>Parameters for an I/O module and an intelligent function module.</li> <li>The initial setting values are also included.</li> <li>There are two kinds of parameters, 'Module Parameter' and 'Module Extended Parameter.'</li> <li>Module parameter: Parameter for an I/O module and an intelligent function module. The initial setting values are included.</li> <li>Module extended parameter: Parameter for a specific intelligent function module. This is read and written separately with module parameters.</li> </ul>	Page 56 Setting parameters
	Module information (network module)	<ul> <li>Parameters for a network module.</li> <li>Module Parameter: Parameter for a network module. The initial setting values and refresh settings of each module are included.</li> <li>AnyWireASLINK Configuration: The network configuration window appears by double-clicking this item.</li> </ul>	Page 56 Setting parameters Page 61 Creating external device configuration/network configuration

# **Common operations for parameter settings**

#### Operation for a parameter editor

The items of the system parameter, control CPU parameter, and module information are displayed. Set the items with reference to the information displayed in "Explanation".

R12CCPU-V Module Parameter			Status icons
Setting Item List	Setting Item		
	Item Security P Filer Settings P Filer Settings P Filer Settings	Setting Not Use <detailed setting=""></detailed>	Changed from default
Base Lenge Dwn Node Settings Acpp Leaton Settings TP Server Settings ecurity elenet Server Settings	Disable Direct Connection with MELSOFT     Disable Direct Connection with MELSOFT     Do Not Respond to CPU Module Search     Do Not Respond to CPU Module Search     Dented Server     Login Name     Advanced Settings     Current Password     New Password     Confirm New Password Explanation	Enable Respond Use target	Status color [color/ background color] No errors Default setting: Blue/White Other than default: Black/White With errors: White/Red No settings required: Black/Gray
Item List			-

#### **Checking parameters**

Following are the two methods for checking parameters:

- Check if there is an input error in the parameter editor Click the [Check] button in the parameter editor.
- Check if there is an error related to parameter setting in the project Select [Tool] ⇒ [Check Parameter].

# Setting system parameters

Set the parameters of "I/O Assignment Setting", "Multiple CPU Setting", and "Inter-module Synchronization Setting" which affect an entire system.

For details on the setting items of the parameters, refer to the following:

Parameter	Reference
I/O assignment setting	CAMELSEC iQ-R Module Configuration Manual
Multiple CPU setting	MELSEC iQ-R C Controller Module User's Manual     MELSEC iQ-R MELSECWinCPU Module User's Manual
Inter-module synchronization setting	CAMELSEC iQ-R Inter-Module Synchronization Function Reference Manual

#### Setting parameters

#### Operating procedure

- 2. Select the items to be set in the [I/O Assignment] tab, [Multiple CPU Setting] tab, or [Inter-module Synchronization Setting] tab.
- **3.** Set each item and click the [OK] button.

#### When a module is deleted in the I/O assignment setting

"Unset" is displayed for the parameter of the deleted module in the navigation window. To restore the settings (to display them in the I/O assignment setting again), select the mounting position in the "Properties" screen.

#### When the I/O assignment setting is read from the read mounting status

- When reading the mounting status of a system containing a module that is not supported by a C Controller module or MELSECWinCPU module or that is not displayed in the element selection window of CW Configurator, the I/O assignment setting is read as "No Support Unit."
- The mounting status cannot be read when the number of extension base unit was set incorrectly.

Point P

The mounting status can be read to the I/O assignment setting by clicking the [Read Mounting Status] button.

#### When utilizing a system parameter including an unsupported module

If a module that is not supported by a C Controller module or MELSECWinCPU module is set to be controlled by either of the modules in the source project, the setting of the unsupported module may not be able to be changed in the I/O assignment setting after utilizing system parameters.

Correct the setting of the unsupported module in the source project, and utilize system parameters again to set the I/O assignment setting.

#### Default settings of inter-module synchronization setting

The following default setting is different from that in GX Works3.

Item		Default		
		CW Configurator	GX Works3	
Fixed Scan Interval Setting of Inter-module Synchronization	0.05ms Unit Setting	Not Set	Set	

#### Utilizing system parameters

System parameters of other projects created in GX Works3 and CW Configurator can be utilized.

#### Operating procedure

- **1.** Double-click "Parameter" ⇔ "System Parameter" in the navigation window.
- 2. Click the [System Parameter Diversion] button.
- **3.** Read the displayed message, and click the [OK] button.
- **4.** Select a project and click the [Open] button.

#### When utilizing a system parameter including an unsupported module

When utilizing the system parameter including a module that is not supported by a C Controller module or MELSECWinCPU module or that is not displayed in the element selection window of CW Configurator, the module is displayed as "No Support Unit."

When "No Support Unit" exists in the system parameter, the operations of CW Configurator are as follows:

- The module configuration diagram is not available.
- The control CPU setting of "No Support Unit" can not be changed to a C Controller module and MELSECWinCPU module.
- · A module can not be changed for "No Support Unit".
- "No Support Unit" is not displayed on the navigation window.
- "No Support Unit" can not be diagnosed.

## Setting parameters for a control CPU

Set the parameters related to a control CPU (the host CPU for a multiple CPU configuration).

For details on the setting items of the parameters, refer to the following:

#### C Controller module

Parameter	Reference
CPU parameter	MELSEC iQ-R C Controller Module User's Manual
Module parameter	
Memory card parameter	

#### MELSECWinCPU module

Parameter	Reference
CPU parameter	CAMELSEC iQ-R MELSECWinCPU Module User's Manual
Module parameter	

#### Setting parameters

#### Operating procedure

- **2.** Set each item in the parameter editor.
- **3.** Click the [Apply] button or [OK] button.

#### Point P

The setting screen can also be opened by double-clicking the object of a module on the module configuration diagram.

# Setting parameters of modules

Set parameters of an I/O module, intelligent function module, and network module of the following series supported by CW Configurator.

- MELSEC iQ-R
- MELSEC-Q

#### Precautions

The refresh function does not run in a module which does not support the function, even if refresh settings are set.

#### Adding a module

Add a module in the "Add New Module" screen in advance to set parameters of the module.

Window

- 1. Select "Parameter" ⇒ "Module Information" in the navigation window.
- **2.** Select [Project] ⇒ [Data Operation] ⇒ [Add New Module].

Alternatively, right-click it and select [Add New Module] from the shortcut menu.

M	odule Selection		
M	odule Type	🛃 PLC CPU	
Μ	odule Name	ROOCPU	
St	ation Type		
A	dvanced Settings		
	Mounting Position		
	Mounting Base	Main Base	
	Mounting Slot No.	1	
	Start I/O No. Specification	Not Set	
	Start I/O No.	3E10 H	
	Number of Occupied Points per 1 Sk	16 Points	
Nun Disp	nber of Occupied Points per 1 Slot lay occupied points of selection mod	ule.	

(1): Text box

Operating procedure

Select each item and click the [OK] button.

#### ■Searching for a module

The following shows the procedure to search for a module in the "Add New Module" screen.

#### Operating procedure

- 1. Enter any of the following keywords in the text box in the "Add New Module" screen, and click the [FIND] button.
- Module type
- Module name
- · Characteristics of a module
- **2.** Select the module in the "Find Module" screen, and click the [OK] button.

		. ()	
	<b>.</b>	- <i>G</i> -	
_			

In the "Characteristics" column, a character string shown in the [POU List] tab is displayed.

in module.			^	in the section	AA AA
				(Find POU)	(an ach that (201 / 20
KJ/1G	FIND			Display Target:	Al
				Energy Measuring Mod	ule
Module Type	Module Name	Characteristics	6	Information Module	
Network Module	RJ71GF11-T2	CC IE Field		Network Module	
Network Module	RJ71GF11-T2(LR)	CC IE Field(Redundant line system)		RJ51AW12AL	AnyWireASLINK
Network Module	RJ71GF11-T2(MR)	CC IE Field(Redundant master stations)		RJ61BT11	CC-Link
Network Module	RJ71GF11-T2(SR)	CC IE Field(Redundant device stations)		RI71BAC96	BACnet
Network Module	RJ71GN11-EIP(T+E)	CC-Link IE TSN/EtherNet_IP		PI71PR11	MELSECNET/H//
Network Module	RJ71GN11-SX	CC-Link IE TSN		N/IBKIT	MELSECIVE I/ H(C
Network Module	RJ71GN11-T2	CC-Link IE TSN		R071CN91	CANopen modu
Network Module	RJ71GP21-SX	CC IE Control		RJ71DN91	DeviceNet maste
Network Module	RJ71GP21-SX(R)	CC IE Control(Redundant system)		RJ71EIP91	EtherNet/IP(100
Network Module	RJ71GP21S-SX	CC IE Control (with external power supply function)	~	RJ71GF11-T2	CC IE Field
			OK Cancel	RJ71GF11-T2	
			ii.	[Outline]	
				CC-Link IE Field Networ	rk module
				POLITist Favorites Hist	tory Module

#### Setting parameters

Set parameters of a module in a parameter editor.

For details on the parameter items, refer to the user's manual for each module.

#### Operating procedure

- **1.** Double-click "Parameter" ⇔ "Module Information" ⇔ "(module name)" ⇔ "(module parameter)" or "(module extended parameter)" in the navigation window.
- **2.** Set each item in the parameter editor.
- **3.** Click the [Apply] button or [OK] button.
- For operations in a parameter editor, refer to the following:
- Page 55 Common operations for parameter settings

#### Point P

For some modules, "(module parameter)" and "(module extended parameter)" may not be displayed in the navigation window.

In that case, double-click "(module name)."

#### Modules in which a parameter error occurs with default settings

The following table shows the modules in which a parameter error occurs by default.

Series	Module type	Model
MELSEC-Q	Module type     I       Temperature control     0       0     0       0     0       0     0       0     0	Q64TCRTBWN
		Q64TCRTN
		Q64TCTTBWN
		Q64TCTTN
	Interrupt input	Q160

#### Module extended parameters

When installing other MELSOFT products after installing CW Configurator, the profile version registered at the installation of CW Configurator will be changed to a version included in a MELSOFT product which is installed after CW Configurator. If the profile version is different from that is registered at the installation of CW Configurator, the parameter setting screen may not be displayed.

In that case, register the profile included in CW Configurator again. (After the registration, the registered contents will also be applied to other MELSOFT products.)

The profile is stored on the product disk. (For download version installer, open (decompress) the '.exe' file.) After registering the profile, start CW Configurator again.

Product	Storage location
CW Configurator	SUPPORT\MSF\Common\ProfileManagement\IparData
Other MELSOFT products (GX Works3 and Navigator)	SUPPORT\MSF\Common\ProfileManagement\IparData\IparData.exe <sup>*1</sup>

\*1 To restore the profile, open (decompress) 'IparData.exe' and register the stored profile again.

#### Creating external device configuration/network configuration

Set the network configuration and the connection configuration for a target device in each configuration window. For details on the setting, refer to each user's manual.

#### Window

The following shows the operations to display each network configuration window.

Network type	Operation
Ethernet (CPU module)	<ul> <li>Obuble-click "Parameter" ⇔ "(CPU model name of the project)" ⇔ "Module Parameter" in the navigation window.</li> <li>Obuble-click "Basic Settings" ⇔ "External Device Configuration" ⇔ "<detailed setting="">" in the parameter editor.</detailed></li> </ul>
AnyWireASLINK	Double-click "Parameter" ⇔ "Module Information" ⇔ "(module name)" ⇔ "AnyWireASLINK Configuration" in the navigation window.
CC-Link IE TSN (mater station)	<ul> <li>ODouble-click "Parameter" ⇔ "Module Information" ⇔ "(module name)" in the navigation window.</li> <li>ODouble-click "Basic Settings" ⇔ "Network Configuration Settings" ⇔ "<detailed setting="">" in the parameter editor.</detailed></li> </ul>
CC-Link IE Field (master station)	<ul> <li>⑦ Double-click "Parameter" ⇔ "Module Information" ⇔ "(module name)" in the navigation window.</li> <li>② Double-click "Basic Settings" ⇔ "Network Configuration Settings" ⇔ "<detailed setting="">" in the parameter editor.</detailed></li> </ul>
CC-Link IE Field Network Basic	<ul> <li>⑦ Double-click "Parameter" ⇔ "(CPU model name of the project)" ⇔ "Module Parameter" in the navigation window.</li> <li>② Double-click "Basic Settings" ⇔ "CC-Link IEF Basic Settings" ⇔ "Network Configuration Settings" ⇔ "<detailed setting="">" in the parameter editor.</detailed></li> </ul>
CC-Link (master station)	<ul> <li>ODouble-click "Parameter" ⇔ "Module Information" ⇔ "(module name)" in the navigation window.</li> <li>ODouble-click "Basic Settings" ⇔ "Network Configuration Settings" ⇔ "<detailed setting="">" in the parameter editor.</detailed></li> </ul>

#### Point P

When using CC-Link IE Controller Network, assign link devices from "Network Range Assignment" in "Required Settings" of the module parameter. In addition, when a station number is not continuous, setting of reserved station is required.

Ex.

The following screen is an example for the CC-Link IE Field configuration setting.

<b>8</b> co	IE Field	d Con	figuration (Sta	rt I/O: 0040)													×
i cc	JE Field	Conf	iguration <u>E</u> d	lit ⊻iew Cl	ose wi	th Discardi <u>ng</u> the Setting C	lose with	<u>R</u> eflecti	ng the	Setting							
	Mode Se	etting:	Online (Stan	idard Mode)		- Assignment Method: Star	t/End	•	U	nk Scan	Time (Ap	prox.):	0.74 ms	Module List			×
							RX	/RY Setti	ng	RWw	/RWr Se	tting	Reserved/Err	Select CC IE Field	ind Mod	ule   My F:	4 ک
		NO.	Model	Name	SIA#	Station Type	Points	Start	End	Points	Start	End	' Invalid Statio	🖭 94   🖷 📴 📝	~ 四 >	<	
		0	Host Station		0	Master Station								CC IE Field Mod	ule (Mit	subishi Ele	9C 🔺
	-	2	RJ/1EN/1(E+C	(CIEF)	1	Local Station	32	0000	001F	16	0000	0001	No Setting	Master/Local	Module		
		3	MR-14-B-R 1010		3	Intelligent Device Station	10	0000	000P	0	0000	0007	No Setting	RJ71EN71(	E+CCIEF	) Master/Lo Master/Lo	x
	1.05						-							B RJ71EN710	CCIEF)	Master/Lo	x I
														🛄 QJ71GF11-	T2	Master/Lo	oc 👘
														LJ71GF11-1	12	Master/Lo	x
														QD77GF16		Master Mo	30
														E Servo Amplite	on neau or(MELS	FRVD-14 9	5
														Basic Digital I	nput M	odule	E
	4						-	-	-	-	-	-		Basic Digital 0	Jutput	Module	
_	1.0													Basic Analog	Input M	lodule	
			STA#1	STA#2	ST	4#3								Basic Analog     Basic topport	Output	Module entrol mod	
														Basic High-Sp	eed Co	unter Mod	h.
Host	Station													Extension Dig	jital Inp	ut Module	e
														Extension Dig	ital Out	put Modu	al 👘
ST	\#0 Ma	ster												■ GOT2000 Series	les		U
Tol Lin	al STA# s/Star	:3			-1									E 0011000 Sen	ies		•
			BJ71EN71(	GT27**X	MBJ	48.8.1											
			E+CCIEF)	arer m	Č	10											
			•										÷				
Out	put																×
	_	_			_				_		_	_					_
1																	

#### Precautions

#### AnyWireASLINK configuration setting

The AnyWireASLINK configuration setting is not written to a module. Therefore, the AnyWireASLINK configuration setting returns to the default after reading a module parameter from a module.

#### ■CC-Link IE TSN functions

The following functions can be used for CC-Link IE TSN supported devices:

- Connected/disconnected module detection
- · Parameter of device station
- · Command execution of device station

For details, refer to the following:

MELSEC iQ-R CC-Link IE TSN User's Manual (Startup)

MELSEC iQ-R CC-Link IE TSN User's Manual (Application)

#### ■Property

The image diagram can be changed using "Properties" for the particular selected module. Right-click and select [Properties] from the shortcut menu.

Configuration applications, setting files, and manuals can be linked to the modules. Double-click the added module to open the linked application or file.

#### ■Module with no profile

For a module with no profile, place a general module instead. Alternatively, register a profile. ( 🖙 Page 44 Managing Profiles)

#### Checking/changing the number of intelligent function module parameters

Display the setting information of the start XY addresses and initial settings of an intelligent function module available in the list.

After intelligent function module parameters are written to a C Controller module and MELSECWinCPU module, the following operations are performed.

· Initial setting: The parameters of the individual intelligent function module data are set as an initial setting.

The data is registered in parameters of a C Controller module and MELSECWinCPU module, and written to the intelligent function module automatically when the C Controller module changed to RUN or the MELSECWinCPU module changed to Y OUT.

#### Window

[Project] ⇒ [Intelligent Function Module] ⇒ [Module Parameter List]

Start XY	Module Name	Initial Setting (Count)	Auto-refresh (Count)	
0040	RD62D2	Setting Exist(6)	No Setting	
0050	RD75P4	Setting Exist(17)	No Setting	
				1
				ч
		_		
		-		
		-		
		-		
Explanation				
copianation .				
Vineck the set	ting status of the module *) of module narameter if	and switch		
(				
(* Checked ite	ms will be created as mi	odule parameter)		
Module Parame	ter Setting Counto			
module i aranie				
Initial Catting	23 (May: 4006)	Auto Refresh Settine	r 0 (Max:2048	0

#### ■Enabling/disabling parameters

Set whether to enable/disable the initial setting of intelligent function module parameter.

The number of parameters that can be set has limits depending on the intelligent function module to be used. Check the setting information using this function and accordingly enable/disable the parameters so that the number of set parameters is within the allowable range.

For details on the number of the parameter settings, refer to the manuals for each intelligent function module.

#### Operating procedure

Set each item and click the [Close] button.

Item		Description
Initial Setting (Count)		Unselect the item if it is not set as an intelligent function module parameter. For a module with no initial settings, "-" is displayed.
Module Parameter Setting Counts	Initial Setting	Displays the number of initial settings set as intelligent function module parameters.

#### Checking property information

Check the setting information of an intelligent function module.

This operation changes the mounting slot number, start I/O number, and title (up to 32 characters).

#### Window

Select "Parameter"  $\Rightarrow$  "Module Information"  $\Rightarrow$  "(module name)" in the navigation window, and select [Project]  $\Rightarrow$  [Data Operation]  $\Rightarrow$  [Properties] ().

Properties 💌				
General Comment				
🗆 Data Name		-		
Data Name	0000:RJ71GF11-T2			
Title	Title			
Last Change	02/02/2015 6:10:57 PM			
Module Selection				
Module Type	Network Module			
Module Name	RJ71GF11-T2	E		
Station Type	Local Station			
🗆 Detail				
Mount Position				
Mounting Base	Main Base			
Mounting Slot No.	1	-		
Specify Start I/O No.	Specify	-		
Start I/O No.	0000	-		
Title				
	OK Can	cel		

#### Operating procedure

Set each item and click the [OK] button.

#### Module-specific menus for the parameter editor

Depending on the setting items of each module, the input format and device assignment method can be selected from one of the following menus.

- [Edit] ⇒ [IP Address Input Format] ⇒ [Decimal]/[Hexadecimal]
- [Edit] ⇒ [Device Assignment Method] ⇒ [Start/End]/[Points/Start]
- [Edit] ⇒ [Word Device Setting Value Input Format] ⇒ [Decimal]/[Hexadecimal]

# 4.3 Other Settings of Intelligent Function Modules

The settings except for the parameter setting of an intelligent function module can be configured with a module tool or dedicated tool.

## Setting with a module tool/drive tool

#### Displaying the module tool list

#### Window

#### [Tool] ⇒ [Module Tool List]

Sta	rt the selected module tool.	
Mor	dule Series Selection	
iQ-	R Series 🔹	
	Analog Input	*
	Offset/gain setting	
	Offset/gain setting (High-Speed Analog)	
	Analog Output	
	Offset/gain setting	
	Temperature Input	
	Offset/gain setting	=
	Temperature Control Module	
	Temperature trace	
	Pulse I/O/Positioning	
	Preset	
	Positioning monitor	
	Positioning test	-

For the functions of each module tool, refer to the user's manual for a target module.

#### Precautions

#### ■Unavailable module tools

The following module tools are not available in CW Configurator:

• R12CCPU-V

Module series	Module type	Тооі	
iQ-R Series	Analog Output	<ul><li>Offset/Gain Setting (High-Speed)</li><li>Create Wave Output Data</li></ul>	
	Information Module	Predefined Protocol Support Tool For Positioning	
Q Series Analog Module • Q61LD Two-Point Calibration Setting • Q61LD Default Setting • Create Wave Output Data		Q61LD Two-Point Calibration Setting     Q61LD Default Setting     Create Wave Output Data	

• R102WCPU-W

Module series	Module type	Тооі
iQ-R Series	Analog Output	Offset/Gain Setting (High-Speed)     Create Wave Output Data
	Information Module	Predefined Protocol Support Tool For Positioning     Service/account setting

#### ■If a module tool does not start

When installing other MELSOFT products after installing CW Configurator, the profile version registered at the installation of CW Configurator will be changed to a version included in a MELSOFT product which is installed after CW Configurator. If the profile version is different from that is registered at the installation of CW Configurator, a module tool may not start.

In that case, register the profile included in CW Configurator again. (After the registration, the registered contents will also be applied to other MELSOFT products.)

The profile is stored on the product disk. (For download version installer, open (decompress) the '.exe' file.) After registering the profile, start CW Configurator again.

Product	Storage location
CW Configurator	SUPPORT\MSF\Common\ProfileManagement\IparData
Other MELSOFT products (GX Works3 and Navigator)	SUPPORT\MSF\Common\ProfileManagement\IparData\IparData.exe <sup>*1</sup>

\*1 To restore the profile, open (decompress) 'IparData.exe' and register the stored profile again. Profiles supported by each module tool are as follows.

Module tool		Profile
Analog Input	Offset/gain setting	<ul> <li>0x10_0x0000_R60AD4_1.0_en.ipar</li> <li>0x10_0x0000_R60AD4_1.0_ja.ipar</li> <li>0x10_0x0000_R60ADV8_1.0_en.ipar</li> <li>0x10_0x0000_R60ADV8_1.0_ja.ipar</li> <li>0x10_0x0000_R60ADI8_1.0_en.ipar</li> <li>0x10_0x0000_R60ADI8_1.0_ja.ipar</li> <li>0x10_0x0000_R60AD8-G_1.0_en.ipar</li> <li>0x10_0x0000_R60AD8-G_1.0_ja.ipar</li> <li>0x10_0x0000_R60AD8-G_1.0_ja.ipar</li> <li>0x10_0x0000_R60AD16-G_1.0_en.ipar</li> <li>0x10_0x0000_R60AD16-G_1.0_ja.ipar</li> </ul>
	Offset/gain setting(High-Speed) Offset/gain setting(distributor)	• 0x10_0x0000_R60ADH4_1.0_en.ipar     • 0x10_0x0000_R60ADH4_1.0_ja.ipar     • 0x10_0x0000_R60AD6-DG_1.0_en.ipar
Analog Output	Offset/gain setting	<ul> <li>0x10_0x0000_R60AD6-DG_1.0_ja.ipar</li> <li>0x10_0x0000_R60DA4_1.0_en.ipar</li> <li>0x10_0x0000_R60DA4_1.0_ja.ipar</li> <li>0x10_0x0000_R60DAV8_1.0_en.ipar</li> <li>0x10_0x0000_R60DAV8_1.0_ja.ipar</li> <li>0x10_0x0000_R60DAI8_1.0_en.ipar</li> <li>0x10_0x0000_R60DAI8_1.0_ja.ipar</li> <li>0x10_0x0000_R60DA8-G_1.0_en.ipar</li> <li>0x10_0x0000_R60DA8-G_1.0_en.ipar</li> <li>0x10_0x0000_R60DA8-G_1.0_en.ipar</li> <li>0x10_0x0000_R60DA8-G_1.0_en.ipar</li> <li>0x10_0x0000_R60DA8-G_1.0_en.ipar</li> <li>0x10_0x0000_R60DA8-G_1.0_en.ipar</li> <li>0x10_0x0000_R60DA16-G_1.0_en.ipar</li> </ul>
Temperature Input	Offset/gain setting	<ul> <li>0x10_0x0000_R60TD8-G_1.0_en.ipar</li> <li>0x10_0x0000_R60TD8-G_1.0_ja.ipar</li> <li>0x10_0x0000_R60RD8-G_1.0_en.ipar</li> <li>0x10_0x0000_R60RD8-G_1.0_ja.ipar</li> </ul>
Temperature Control Module	Temperature trace	<ul> <li>0x10_0x0000_R60TCRT4BW_1.0_en.ipar</li> <li>0x10_0x0000_R60TCRT4BW_1.0_ja.ipar</li> <li>0x10_0x0000_R60TCRT4_1.0_en.ipar</li> <li>0x10_0x0000_R60TCRT4_1.0_ja.ipar</li> <li>0x10_0x0000_R60TCRT2TT2_1.0_ja.ipar</li> <li>0x10_0x0000_R60TCTRT2TT2_1.0_ja.ipar</li> <li>0x10_0x0000_R60TCTRT2TT2BW_1.0_en.ipar</li> <li>0x10_0x0000_R60TCTRT2TT2BW_1.0_ja.ipar</li> <li>0x10_0x0000_R60TCTRT2TT2BW_1.0_ja.ipar</li> <li>0x10_0x0000_R60TCTRT2TT2-TS_1.0_en.ipar</li> <li>0x10_0x0000_R60TCTRT2TT2-TS_1.0_ja.ipar</li> <li>0x10_0x0000_R60TCTRT2TT2-TS_1.0_en.ipar</li> <li>0x10_0x0000_R60TCRT4-TS_1.0_en.ipar</li> <li>0x10_0x0000_R60TCRT4-TS_1.0_ja.ipar</li> </ul>

Module tool		Profile
Pulse I/O, Positioning	Preset	<ul> <li>0x10_0x0000_RD62D2_1.0_en.ipar</li> <li>0x10_0x0000_RD62D2_1.0_ja.ipar</li> <li>0x10_0x0000_RD62P2_1.0_en.ipar</li> <li>0x10_0x0000_RD62P2_1.0_ja.ipar</li> <li>0x10_0x0000_RD62P2E_1.0_en.ipar</li> <li>0x10_0x0000_RD62P2E_1.0_ja.ipar</li> </ul>
	Positioning monitor	<ul> <li>0x10_0x0000_RD75D2_1.0_en.ipar</li> <li>0x10_0x0000_RD75D2_1.0_ja.ipar</li> <li>0x10_0x0000_RD75D4_1.0_en.ipar</li> <li>0x10_0x0000_RD75D4_1.0_ja.ipar</li> <li>0x10_0x0000_RD75P2_1.0_en.ipar</li> <li>0x10_0x0000_RD75P2_1.0_ja.ipar</li> <li>0x10_0x0000_RD75P4_1.0_en.ipar</li> <li>0x10_0x0000_RD75P4_1.0_en.ipar</li> <li>0x10_0x0000_RD75P4_1.0_ja.ipar</li> </ul>
	Positioning test	<ul> <li>0x10_0x0000_RD75D2_1.0_en.ipar</li> <li>0x10_0x0000_RD75D2_1.0_ja.ipar</li> <li>0x10_0x0000_RD75D4_1.0_en.ipar</li> <li>0x10_0x0000_RD75D4_1.0_ja.ipar</li> <li>0x10_0x0000_RD75P2_1.0_en.ipar</li> <li>0x10_0x0000_RD75P2_1.0_ja.ipar</li> <li>0x10_0x0000_RD75P4_1.0_en.ipar</li> <li>0x10_0x0000_RD75P4_1.0_en.ipar</li> </ul>

## Displaying the drive tool list

#### Window

[Tool] ⇒ [Drive Tool List]

ive T	ve Tool List		
Sta	rt the selected drive tool.		
⊟	Simple Motion Module		
	Monitor		
Ξ	Motion Module		
	Monitor		

For the functions of each drive tool, refer to the user's manual for a target module.

# Simple motion module setting function

This function is used to set parameters and positioning data of a simple motion module. For details on the operation methods and setting items, refer to Help for the simple motion module setting function. The following shows the operating procedure to start this function.

#### Operating procedure

- 1. Select "Parameter" ⇒ "Module Information" in the navigation window.
- 2. Select [Project] ⇒ [Data Operation] ⇒ [Add New Module].
- 3. Select "Simple Motion" from the pull-down list of "Module Type" in the "Add New Module" screen.
- 4. Set each item and click the [OK] button.
- **5.** Double-click the created "Simple Motion Module Setting (Module Extended Parameter)" or "Module Extended Parameter."

#### Precautions

The settings of simple motion module are also saved when saving the CW Configurator project.

# Motion control setting function

This function is used to set parameters of a motion module.

For details on the operation methods and setting items, refer to Help for the function. The following shows the operating procedure to start this function.

#### Operating procedure

- **1.** Select "Parameter" ⇒ "Module Information" in the navigation window.
- 2. Select [Project] ⇒ [Data Operation] ⇒ [Add New Module].
- 3. Select "Motion Module" from the pull-down list of "Module Type" in the "Add New Module" screen.
- **4.** Set each item and click the [OK] button.
- 5. Double-click the created "Module Extended Parameter."

#### Precautions

The settings of motion module are also saved when saving the CW Configurator project.

# 4.4 Change Module

This function changes the module type set in a CW Configurator project.

The module type, module name, and station type of a module set in a project can be changed to data for another module.

#### Operating procedure

- **1.** Select "Parameter" ⇒ "Module Information" ⇒ "(module name)" in the navigation window.
- 2. Right-click the selected module, and select [Change Module] from the shortcut menu.
- 3. Set each item in the change module screen, and click the [OK] button.

#### Precautions

#### When changing a CC-Link IE built-in Ethernet module or CPU extension module

- A module controlled by another CPU module cannot be changed.
- After changing a module, M (required settings unchecked) appears in the navigation window. Select [Tool] ⇒ [Check Parameter] to check parameters. ( 🖙 Page 55 Checking parameters)

#### Module

The combinations of module types, module names, and station types that can be changed for each of the following modules are as follows.

#### ■Another CPU module

Module type	Module name
PLC CPU	R00CPU, R01CPU, R02CPU, R04CPU, R08CPU, R16CPU, R32CPU, R120CPU
Process CPU	R08PCPU, R16PCPU, R32PCPU, R120PCPU
Safety CPU	R08SFCPU, R16SFCPU, R32SFCPU, R120SFCPU
Motion CPU	R16MTCPU, R32MTCPU, R64MTCPU
NCCPU	R16NCCPU
Robot CPU	R16RTCPU

#### ■CC-Link IE built-in Ethernet module

Module type	Module name	Station type
Information Module	RJ71EN71(E+CCIEC)	Control station, normal station, extended mode (control station), extended mode (normal station)
	RJ71EN71(E+CCIEF)	Master station, local station
	RJ71EN71(E+E)	-

#### Simple motion module

Module type	Module name			
Simple motion module <sup>*1</sup>	RD77MS2, RD77MS4, RD77MS8, RD77MS16, RD77GF4, RD77GF8, RD77GF16, RD77GF32			

\*1 Cannot be changed from RD77GF4, RD77GF8, RD77GF16, and RD77GF32 to RD77MS2, RD77MS4, RD77MS8, and RD77MS16.

69

#### Data to be changed

The following tables show the data that is changed by changing a module. For the changes on simple motion modules, refer to Help for the simple motion module setting function.

#### ■Another CPU module

Item		Description
"Parameter" ⇔ "Module Information" in	the navigation window	The settings are updated according to the changed module.
Module configuration diagram		
System parameter	I/O assignment setting	
	Multiple CPU setting	The settings are applied.
Properties	Title	
	Comment	
	Others	The settings are updated according to the changed module.

#### ■CC-Link IE built-in Ethernet module

Item		Description
"Parameter" ⇔ "Module Information" in	the navigation window	<ul><li>The settings are updated according to the changed module.</li><li>Module parameter (port 1): Applied.</li><li>Module parameter (port 2): Returned to the default.</li></ul>
Module configuration diagram		The settings are updated according to the changed module.
System parameter	I/O assignment setting	The settings are updated according to the changed module.
	Multiple CPU setting	The settings are applied.
	Redundant module group setting	Deleted.
Module parameter	Interlink transmission settings	Returned to the default.
Properties	Title	The settings are applied.
	Comment	
	Others	The settings are updated according to the changed module.
# **5** REGISTERING LABELS

This chapter explains the overview and registration method of labels.

## 5.1 About Labels

In CW Configurator, module labels (global labels) of a motion module are available. For details on module labels of a motion module, refer to the following:

## 5.2 Registering Labels

This section explains the method for registering global labels.

### Label editor

Module labels registered as global labels are displayed in a label editor.

For the method for registering module labels, refer to the following:

Page 72 Registering Module Labels

#### Window

"♡ Navigation window ⇔ "Label" ⇔ "Global Label" ⇔ "(global label)"

M+RD78_0000 [Global Label Setting] (Read Only)									
<filter></filter>		Easy Display 🔇 Display	/Setting Chec <u>k</u>	Warning) This file is system file. Please	do not edit.				
	Label Name	Data Type	Class	Assign (Device/Label)	Initial Valu				
1	RD78_0000	M+RD78_0000	VAR_GLOBAL	Detailed Setting					
2		1		<u>_</u>					
					×				
<					>				
Extended Display: Do Not Show Always									

Point P

- The items in the label list (1) can be displayed or hidden in the "Display Setting" screen that appears by clicking the [Display Setting] button.
- · Click the [Check] button to check errors before exporting labels.
- Use the motion control setting function to monitor a global label.

### Exporting data to a file

Data in a label editor can be exported as a header file.

#### Operating procedure

- 1. Open a label editor.
- 2. Select [Edit] ⇒ [Export to File].
- 3. Click the [Execute] button.

#### Precautions

The following characters cannot be used for a header file name:

• #, \$, &, ', (, ), :, =, `

#### Using multiple motion modules

To use multiple motion modules, set public labels and apply them to all the target motion modules. In addition, after registering module labels (applying public labels), make sure to check if the public labels set by the motion control setting function are applied to module labels by using a label editor of CW Configurator.

#### Point P

Export module labels just before writing them to a C Controller module. (The state when editing projects is all completed)

### 5.3 Registering Module Labels

This section explains the method for registering module labels.

#### Registering as global labels

Public labels can be registered in global labels of CW Configurator as module labels by selecting the following menu using the motion control setting function.

(Convert] ⇒ [Reflect Public Labels]

Refer to Help for the motion control setting function.

# PART 3 OPERATION

This part explains the communication route setting to access a module, writing/reading data, and monitoring the execution status.

**6 ROUTE SETTING** 

7 WRITING/READING DATA

**8 MODULE OPERATION CHECK** 

9 MODULE DIAGNOSTICS

**10 CHECKING/CHANGING OPERATION** 

# 6 ROUTE SETTING

This chapter the setting method of connection destination for accessing a C Controller module and MELSECWinCPU module with CW Configurator.

### 6.1 Specification of Connection Destination

This section explains the setting method of communication routes, including the interfaces both the personal computer and CPU module, and the routing networks, for accessing a module in the "Specify Connection Destination" screen. Up to 128 settings for connection destinations is created.

#### Changing connection destination settings

#### Window

Select data on the connection destination window and double-click it.

In another way, select [Online] ⇒ [Current Connection Destination] and change the current connection destination.



- · Double-click the items underlined on the screen to set the details of each item.
- The icons colored yellow indicate that the settings have been applied.

#### **Displayed items**

Item		Description
Other	No Specification	Specify this to access a module directly connected to a personal computer.
Station Setting	Other Station (Single Network) <sup>*1</sup>	Specify this to access a module on another station via only one kind of network (including a multi-tier system). Specify "Single Network" for a system in which Ethernet, CC-Link IE, and MELSECNET/10(H) are mixed since Ethernet is regarded as equivalent to CC-Link IE and MELSECNET/10(H).
	Other Station (Co-existence Network) *1	Specify this to access a module on another station via different network.
Network Communication Route		Select the network type, network number, station number, and start I/O number of the network to be routed through to access another station. The setting items differ depending on the selected network type.
Co-existence Network Route		Select the network type, network number, station number, and start I/O number of the network to be accessed. The setting items differ depending on the selected network type.
Target System	I	Specify the access target in the multiple CPU system.

\*1 To specify the own station, select "No Specification."

#### Precautions

Only connection destinations that can be set in the "Specify Connection Destination" screen are acceptable. However, MELSECNET/10 or MELSECNET/H cannot be routed.

#### Adding connection destination settings

Add a new setting of a connection destination.

#### Operating procedure

- **1.** Right-click on the connection destination window and select [Create New Connection Destination] from the shortcut menu.
- 2. Set each item and click the [OK] button.

#### Switching connection destinations

Switch a connection destination used as the default.

#### Operating procedure

- 1. Select a connection destination from "All Connection Destination" in the connection destination window.
- 2. Right-click and select [Set as Default Connection] from the shortcut menu.

#### Display the illustration of the connection route

Click the [System Image] button to display the set connection route in an illustration to check the route.

## 6.2 Direct Connection

This section shows the configuration for connecting a personal computer and a module directly.

Available access routes differ depending on a module to be connected directly. The following table shows the supported access routes.

○: Accessible,	$\triangle$ : Accessible	under specific	conditions
----------------	--------------------------	----------------	------------

Module	Connection method	
	Ethernet connection	Virtual Ethernet connection
C Controller module	0	Δ
MELSECWinCPU module	0	0

#### Point P

Click the [CPU Module Direct Coupled Setting] button in the "Specify Connection Destination" screen to change the settings to connect a module directly. For details, refer to the manual for a module used. MELSEC iQ-R C Controller Module User's Manual MELSEC iQ-R MELSECWinCPU Module User's Manual

#### Precautions

The virtual Ethernet connection is available only from CW Configurator installed on Windows of a MELSECWinCPU module.

### **Ethernet connection**

The following figure shows the configuration example to access a using Ethernet.



### Virtual Ethernet connection

The following figure shows the configuration example to access a MELSECWinCPU module by using CW Configurator installed on Windows in the MELSECWinCPU module.



Point *P* 

When a multiple CPU system consists of a MELSECWinCPU module and C Controller module, the C Controller module can be accessed via virtual Ethernet from CW Configurator installed on Windows in the MELSECWinCPU module.

### Specifying the Ethernet adapter on the personal computer side

The Ethernet adapter on the personal computer side, which is used when directly connecting to an Ethernet port, can be specified.

If there are multiple Ethernet adapters, make sure that the Ethernet adapter that is used for communication is specified.

#### Operating procedure

- 1. Click the [CPU Module Direct Coupled Setting] button in the "Specify Connection Destination" screen.
- 2. Select an adapter in the "CPU Module Direct Coupled Setting" screen, and click the [Yes] button.

CPU Module Direct Coupled	l Setting		
Please select the direc	t connection method w	rith CPU module.	
OUSB			
Ethernet			
Adapter Ali	x AX80777 1807.0 to 1	last I themet Adapter	~
IP Address 19	2.168.3.100		
Current setting conten continue?	it will be lost when new	/ items are selected. Are you s	sure you want to
	Yes	No	

#### Point P

The IP address assigned to a specified Ethernet adapter is saved in a project file. Even after changing adapters, if the IP address set for the adapter after the change is the same, the adapter name is applied to the settings.

#### Restriction (")

The settings for the specified Ethernet adapter are not applied to other MELSOFT products. In addition, the following tools cannot be started because they do not support connection which is established by specifying an Ethernet adapter.

- Module tool list
- Drive tool list
- Circuit trace

#### Precautions

#### When a warning message appears

A warning message may appear, which indicates that a function of CW Configurator is blocked by the Windows firewall. Click the [Allow access] button, and continue the operation.

#### When the same IP addresses are displayed

When the [Find] button is clicked in the "PLC side I/F Detailed Setting of PLC Module" screen, the same IP addresses may be displayed in the list of the connection destination CPU.

Two or more IP addresses may have been set to the [IP Settings] tab in the "Advanced TCP/IP Settings" screen of Windows network settings. Set only one IP address.

#### When communication with CW Configurator is not allowed by Windows Firewall

When Windows Firewall is enabled and communication with CW Configurator is not allowed, a timeout may occur. To allow the communication, refer to the following procedures.

When using other software with a firewall function, refer to the manual for the software used and allow the communication with CW Configurator.

#### Operating procedure

- **1.** Select [System and Security] ⇒ [Allow an app through Windows Firewall] in the control panel of Windows.
- 2. Click the [Change settings] button, and click the [Allow another app] button.
- **3.** Click the [Browse] button in the "Add an app" screen, and select "CWConfig.exe" in the folder where CW Configurator is installed, then click the [Add] button.

When an installation folder is not changed at the installation, the installation folder is as follows:

- 64-bit version operating system: C:\Program Files (x86)\MELSOFT\RCCPU
- 32-bit version operating system: C:\Program Files\MELSOFT\RCCPU
- **4.** Select the checkboxes of "Name," "Domain," "Private," and "Public" for CW Configurator<sup>\*1</sup> added to the list, and click the [OK] button.
- \*1 'CWConfig' may be displayed when a CPU/Ethernet module is searched for on the network and access through the Windows firewall is set to allow before Ethernet port direct connection.

#### When opening a project in another personal computer

The settings for the specified Ethernet adapter are not applied to other MELSOFT products.

When opening a project specifying an Ethernet adapter in another personal computer, the set content for "Adapter" in the "PC side I/F Detailed Setting of Ethernet Board" screen is changed to "Not Specified".

Set the connection destination again.

When an adapter name is not displayed on the pull-down list of "Adapter," the following causes can be considered:

- An Ethernet adapter has been disabled in "Change Adapter Settings" on Windows.
- A LAN cable is not connected.
- An error has occurred in the power supply.
- A failure or malfunction has been detected.

Take corrective actions such as checking the setting contents, Ethernet board connection, and the power supply status, or replacing the Ethernet board.

#### When accessing a MELSECWinCPU module that is resetting the bus

The Ethernet connection cannot be established while a MELSECWinCPU module is resetting the bus. Attempting the connection may cause a wait time to be different from the timeout time.

## 6.3 Accessing via Network

This section explains the configuration for accessing a module on another station via network.

### Single network

The following figure shows the configuration example to access a module via single network from a personal computer.



### **Co-existence network**

The following figure shows the configuration example to access a module via a co-existence network from a personal computer.



MELSEC iQ-R C Controller Module User's Manual MELSEC iQ-R MELSECWinCPU Module User's Manual

> 6 ROUTE SETTING 6.3 Accessing via Network **79**

## 6.4 Accessing via Serial Communication Module

This section explains the configuration example to access a module on the own station or another station via a serial communication module.

Point P

In a multiple CPU configuration, the access via serial communication module controlled by programmable controller CPU other than a C Controller module and MELSECWinCPU module is available.

#### Connection on a 1:1 bases

The following figure shows the configuration example to access a C Controller module on another station via a serial communication module by connecting a personal computer and a serial communication module.



#### Connection on a 1:n basis

The following explains the method for accessing a module on another station from CW Configurator in a system composed of multiple CPU modules.

#### ■Accessing via a serial communication module

The following figure shows the configuration example to access a C Controller module on another station via a serial communication module.



To connect via a serial communication module, the module parameters for MELSOFT connection are required.

For details, refer to the following:

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

#### Direct connection of a programmable controller CPU

The following figure shows the configuration example for direct access of a C Controller module on another station via a serial communication module by connecting a personal computer and a programmable controller CPU.



## 6.5 Accessing via GOT (GOT Transparent Function)

This section explains the setting method for accessing a module from CW Configurator using the GOT transparent function.

#### Restriction (")

To access via a serial communication module or an Ethernet module, configure a multiple CPU system and access from the module that is controlled by a programmable controller CPU.

#### Precautions

#### When performing online operations from CW Configurator

During the online operation from CW Configurator to a module using the GOT transparent function, do not perform online operations (such as downloading project data) on GOT from GT Designer2 or GT Designer3.

#### When GOT does not monitor normally

The GOT transparent function cannot be used in the following cases.

- When a GOT does not perform normal monitoring due to a module error or communication error between the module and the GOT
- During the period of time between turning the power ON or reset a module or GOT and start of monitoring on GOT
- Check the following items if monitoring on GOT is not normal.

Item	Reference
Does a module operate normally?	Page 104 MODULE DIAGNOSTICS
Is a module connected to GOT normally?	Annual for GOT to be used

### Accessing via a GOT

A personal computer can access a module via a GOT.



- \*1 The connection between a personal computer and a GOT is differ depending on the GOT used. (
- \*2 For information about cables connecting GOT and a module, GOT settings, and considerations, refer to the manual for GOT to be used.

#### Connection

O: Connectable, -: Unconnectable

Connection	GOT					
	GOT2000 series	GOT1000 series				
RS-232 connection	-	0				
USB connection	0	0				

### Accessing via a GOT and a module

A personal computer can access a CPU module via a GOT and another module (serial communication module, CC-Link IE Controller Network module, CC-Link IE Field Network module, and Ethernet module).



\*1 The connection between a personal computer and a GOT is differ depending on the GOT used. (🖙 Page 81 Connection)

\*2 For information about cables connecting GOT and a module, GOT settings, and considerations, refer to the manual for GOT to be used.

#### Connection

○: Connectable, —: Unconnectable

Connection	GOT					
	GOT2000 series GOT1000 series					
RS-232 connection	—	0				
USB connection	0	0				

## 6.6 Accessing via QCPU (Q mode)

This section explains the setting method for accessing a module from a personal computer via a QCPU (Q mode). The QCPUs (Q mode) that can be used as a PLC side I/F are as follows.

· · ·	
Item	Available QCPU (Q mode)
PC side I/F: Serial communication (USB)	Built-in USB port QCPU (Q mode) Note that remote I/O modules (QJ72LP25 and QJ72BR15) are excluded.
PC side I/F: Ethernet board	Built-in Ethernet CPU

The following shows the configuration example for accessing a C Controller module via a QCPU (Q mode) from a personal computer.



#### Precautions

- A module cannot be accessed via a MELSECNET/10 network module or a MELSEC-Q series MELSECNET/H network module.
- A remote password that has been set for the Ethernet port of a QCPU (Q mode) cannot be unlocked in CW Configurator. Delete the remote password using GX Works2 in advance.

## 6.7 Connection to the Multiple CPU System

This section explains the setting method for accessing the host CPU connected to a personal computer or another CPU in the multiple CPU system.

The setting method for accessing a multiple CPU system on another station via a network is also explained.

#### Accessing host CPU

The setting for accessing the host CPU is the same as that for accessing a module on the own station. (See Page 76 Direct Connection)

#### Accessing another CPU

To access a module that is not directly connected to a personal computer in the multiple CPU system, specify the CPU number (PLC No.1 to 4) of the access target module in "Multiple CPU Setting."

The setting for accessing CPU (PLC) No.4 (C Controller module) by connecting a personal computer to CPU (PLC) No.1 (RCPU) is shown in the figure below.



No.	Item	Item to be selected	Internal setting	Input value
(1)	PC side I/F	Serial/USB	USB	-
(2)	PLC side I/F	PLC Module	PLC Mode	RCPU
	Other Station Setting	No Specification	Check at Communication Time	30 seconds
			Retry Times	0 time
(3)	Target System	Multiple CPU Setting	Target PLC	PLC No.4

#### Accessing via network

The following explains the setting methods for accessing a CPU module in a multiple CPU system on another station via a network.

#### ■Relay station

Set the parameters so that the module mounted on the relay station is controlled by the same CPU module.

#### Access target station

Set the CPU number in "Multiple CPU Setting" in the "Specify Connection Destination" screen when the access target station is configured in the multiple CPU system.

#### Ex.

The following figure shows the configuration example to access a C Controller module (CPU (PLC) No.4) in the multiple CPU system via a network.



## 6.8 Considerations on Communication

This section explains the considerations on communication with a module. Refer to the considerations described in each section as well as the descriptions in this section.

#### Communication via network system (single/multiple)

When accessing a module via a network system, all the connected stations must be C Controller modules, MELSECWinCPU modules, RCPUs, or QCPUs (Q mode). In that case, an RCPU must be used for a relay station. A C Controller module and MELSECWinCPU module cannot be the control CPU of a relay station.

- · Connected station: Station directly connected from a personal computer
- · Relay station: Stations to be routed on network system

#### Communication with a module using a USB cable

### Connecting/disconnecting a USB cable, resetting a CPU module, and turning the power ON or OFF

A communication error may occur and it may not be recovered if connecting and disconnecting a USB cable, resetting the CPU module, or turning the power ON or OFF is performed frequently during communication.

Therefore, set CW Configurator to offline as much as possible during these operations. 'Offline' indicates the state other than below.

· Writing/reading data to/from a module, and performing monitoring or diagnostics

If the operation is not recovered from an error, remove the USB cable. Then, connect it again after five seconds or later. (Even after this operation, an error may occur at initial communication. However, communication will be successful after that.) Click the [OK] button on the warning message, and remove a USB cable from the personal computer.

#### Combination of personal computer models and USB cables

A communication error may occur depending on the combination of personal computer models and USB cables. If an error occurs, take appropriate actions in accordance with the message displayed in the screen.

#### Other considerations

### Resume function, suspend setting, power saving function, and standby mode of the personal computer

A communication error may occur during communication with a module when any of the settings shown above is enabled. Disable these settings for communication with a module.

# **7** WRITING/READING DATA

This chapter explains the following operations: writing/reading data to/from the built-in memory of a C Controller module/ MELSECWinCPU module or an SD memory card, and verifying data.

For the methods for writing the clock setting to a module, refer to the following:

Page 115 Clock Setting

### 7.1 Writing/Reading Data

Created data can be written/read in the "Online Data Operation" screen.

### **Configuration of Online Data Operation screen**

#### Window

 $[Online] \Rightarrow [Write to PLC] \Rightarrow (\textcircled{P})/[Read from PLC] (\textcircled{P})/[Delete PLC Data]$ The following screen is an example when writing data.

e Data Operation											
lay Setting Related	Functions										
Urite		9	1	Verify		Delete					
Parameter( <u>F</u> )	Select <u>A</u> ll	Legend									
Open/Close All( <u>T</u> )	Deselect All( <u>N</u> )	CPU E	Built-in Me	mory	SD	Memory Card	🛅 Inte	elligent Function Module			
Module Name/Data Name		*	5		Detail	Title		Last Change	Size (Byte)		
📲 Untitled Proje	ct										
😑 🛃 Parameter											
- P System P	Parameter/CPU Parameter							2021/02/15 10:46:45	Not Calculat	ed	
- 🙆 Module P	arameter							2021/02/15 10:46:45	Not Calculat	ed	
Memory Memory	Card Parameter							2021/02/15 10:46:45	Not Calculat	ed	
Display Memory Capi	achy 😵				ļ						
Display Memory Capi mory Capacity	achy 😧									Free	
Display Memory Capi mory Capacity Sije Calculation	achy 😧 Program Memory									Free 7827/7829K0	8
Display Memory Capi mory Capacity Spe Calculation spend	acky 😧 Program Memory Data Memory									Free 7827/7829K0 Free	Β
Display Memory Capi mory Capacity Spe Calculation spend Used	acky 😧 Program Memory ——— Data Memory ———									Free 7827/7829K Free 7624/7798K	8
Display Memory Capa mory Capacity Spe Calculation ugend Used Increased	acity 😮	age Area) —								Free 7827/7829K Free 7624/7798K Free	B
Display Memory Capi mory Capacity Spe Calculation sgend Used Urreased Decreased	acty 💽 Program Memory Data Memory Device/Label Memory (File Stor	age Area) —								Free 7827/7829K Free 7624/7798K Free 0/3584KB	B
Display Memory Capa mory Capacity Size Calculation ogend Used Increased Decreased Percessed Free: 5% or Less	acty 😮	age Area) —								Free 7827/7829K/ Free 7624/7796K/ Free 0/3584KB Free	8
Display Memory Capa nory Capacity Size Calculation gend Used Increased Decreased Free: 5% or Less	acity  Program Memory Data Memory Data Memory Device/Label Memory (File Stor SD Memory Card	age Area) —								Free 7827/7829Ki Free 7624/7798Ki Free 0/3584KB Free 3871552/39	B B 13792KB
Display Memory Capi mory Capacity Spie Calculation igend Used Increased Decreased Free: 5% or Less	acity 😵	age Area) —								Free 7827/7829Ki Free 7624/7798Ki Free 38371552/39	B B 13792KB

- When data is written to a module, the target memory capacity may be displayed smaller than the actual file size.
- Graphs for each memory capacity can be updated by clicking the [Size Calculation] button.
- The following menus are available in the "Online Data Operation" screen:

Menu	Description	Reference
[Display] ⇔ [Display File Size]	To display the size of data to be written in the "Size (Byte)" column and in graphs for memory capacity.	Page 88 How to check the data size to be written Page 88 Graph display of memory capacity
[Setting] ⇔ [Set Favorites]	To set data to be displayed in the "Online Data Operation" screen. In addition, data to be selected by clicking the [Select Favorites] button can be set.	Page 88 Set favorites screen
[Related Functions] ⇔ [CPU Memory Operation]	To initialize a memory or clear it to zero.	Page 119 Initializing/Clearing Memory
[Related Functions] ⇔ [Remote Operation]	To change the execution status of a module.	Page 116 Remote Operation
[Related Functions] ⇔ [Set Clock]	To set the clock on a module.	Page 115 Clock Setting

#### How to check the data size to be written

The size of write data can be displayed in the "Size (Byte)" column by enabling the file size display. Select [View] ⇔ [Display File Size] in the "Online Data Operation" screen to enable the file size display.

#### ■Graph display of memory capacity

The display content differs depending on the setting file size display.

Disabled: The current capacity of memory for writing on target is displayed.

Enabled: The capacity of memory to which the size of data to be written/deleted is displayed.

#### Set favorites screen

The "Set Favorites" screen appears by selecting the following menu in the "Online Data Operation" screen:

• [Setting] ⇒ [Set Favorites]

Only data for which the checkbox in the "Show" column is selected is displayed in the "Online Data Operation" screen.

#### Device/label memory (file storage area)

C Controller module

No free space is left in the device/label memory (file storage area) of a C Controller module because all the area is assigned as file registers.

#### MELSECWinCPU module

The device/label memory (file storage area) is not available because a MELSECWinCPU module does not have such memory.

In the "Online Data Operation" screen, the memory is displayed as if no free space is left.

#### Data to be written and writing destinations

C Controller module

 $\bigcirc$ : Writable,  $\times$ : Not writable

Data name	Writing destination			
	CPU built-in memory	SD memory card	Intelligent function module	
System parameter/CPU parameter	0	0	×	
Module parameter	0	0	×	
Module extended parameter	0	0	0	
Memory card parameter	×	0	×	

#### MELSECWinCPU module

#### ○: Writable, ×: Not writable

Data name	Writing destination		
	CPU built-in memory	Intelligent function module	
System parameter/CPU parameter	0	×	
Module parameter	0	x	
Module extended parameter	0	0	

### Writing data to a module

Write data to a module.

#### Operating procedure

- 1. Select the [Write] tab in the "Online Data Operation" screen.
- 2. Select a file to be written and a write target.
- **3.** Click the [Detail] button to set the details such as a range to be written.
- 4. Click the [Execute] button.

#### Parameter

Ex.

Write parameters according to the operations and changes of the system.

### ■Relation between module parameters in the navigation window and module parameters in a module

Module parameters are written as the data which integrates the parameters displayed in the navigation window into one file. Therefore, when a module parameter file exists in a module, the file is overwritten.

For example, when writing four module parameters to a C Controller module in which module parameters of five modules exist, the settings of five modules are overwritten with the settings of four modules, and one setting that does not exist in the project will be deleted.

Relation between module parameters in the navigation window and module parameters in a module Online Data Operation CPU (SD card, module) Display Setting Related Functions CPU built-in memory SD card Module Write ąх Navigation Select Eavorites Select <u>Al</u>l System paramete Open/Close All(T) Deselect All(N) 🖃 🔚 Parameter . Module Name/Data Name 🐠 System Paramete 💷 🐴 Untitled Proje CPU parameter 🔳 🛃 R12CCPU-V Parameter 🝠 CPU Parameter 🛷 System Paramete CPU Paramet -Module Parameter Memory card parameter - 🚮 Module Extended Pa . n 000 🔳 🚳 Module Information - Module Extended Parameter:002. 🔳 🔂 0000:RD75D2 Module Extended Parameter:004. Module parameter 💣 Module Parameter Module Extended Parameter:006... 🔗 Module Extended Parameter -📒 Module POU (Shortcut) 🔳 🚮 0020:RD75P2 Module extended parameter 0000: RD75D2 💣 Module Parameter 🔗 Module Extended Parameter 🚛 Module POU (Shortcut) Module extended parameter ■ 💼 0040:RD75D4 0020: RD75P2 💣 Module Parameter 🔊 Module Extended Parameter 📕 Module POU (Shortcut) 🗖 🚮 0060:RD75P4 Module extended param 0040: RD75D4 💣 Module Parameter 🔗 Module Extended Parameter 舞 Module POU (Shortcut) Module extended param 0060: RD75P4

#### ■Consistency of parameters

When writing a part of the parameters additionally or writing modified parameters, the consistency of the parameters are required. Consistency means matching the information such as the I/O assignment setting (start I/O number, slot number, etc.) between the system parameters and each parameter.

#### ■Modules with start I/O number unset

The unset module parameters cannot be written to a module.

#### ■Parameters of a remote I/O module (device station) on CC-Link IE TSN

When writing parameters of a device station to a module, the parameters can be set to the device station by the following procedure:

#### Operating procedure

- **1.** Select the checkbox of "Parameter Automatic Setting" of a device station, and set "<Detail Setting>" in the "CC-Link IE TSN Configuration" screen.
- 2. Select the checkbox of "Device Station Setting" under "CC-Link IE TSN Configuration" in the "Online Data Operation" screen.
- **3.** Click the [Detail] button.
- **4.** Select a device station to which the parameters are to be written in the "CC-Link IE TSN Configuration Device Station Setting" screen.

For details on "Parameter Automatic Setting," refer to the following:

MELSEC iQ-R CC-Link IE TSN User's Manual (Application)

#### ■Module extended parameters

When installing other MELSOFT products after installing CW Configurator, the profile version registered at the installation of CW Configurator will be changed to a version included in a MELSOFT product which is installed after CW Configurator. If the profile version is different from that is registered at the installation of CW Configurator, the parameters may not be written to a module.

In that case, register the profile included in CW Configurator again. (After the registration, the registered contents will also be applied to other MELSOFT products.)

The profile is stored on the product disk. (For download version installer, open (decompress) the '.exe' file.) After registering the profile, start CW Configurator again.

Product	Storage location
CW Configurator	SUPPORT\MSF\Common\ProfileManagement\IparData
Other MELSOFT products	SUPPORT\MSF\Common\ProfileManagement\IparData\IparData.exe*1
(GX Works3 and Navigator)	

\*1 To restore the profile, open (decompress) 'lparData.exe' and register the stored profile again.

### Reading data from a module

Read data from a module.

#### Operating procedure

- 1. Select the [Read] tab in the "Online Data Operation" screen.
- 2. Select the files to be read and read destination.
- 3. Click the [Detail] button to set the details such as a range to be read.
- **4.** Click the [Execute] button.

#### Point P

Data can be read even when a project is not open.

IP Page 35 Creating a new project by reading data from a module

#### Precautions

During the frequent access of an SD memory card, the response to the reading operation from a module (until the "Online Data Operation" screen is displayed) could be slow.

#### Parameters

#### ■Unsupported modules

When a system contains a module that is not supported by a C Controller module or MELSECWinCPU module or that is not displayed in the element selection window of CW Configurator, the data in the module cannot be read.

#### ■Parameters of a remote I/O module (device station) on CC-Link IE TSN

Whether or not to read parameters of a device station can be selected in the [Read] tab in the "Online Data Operation" screen. The operating procedure is the same as the one to write parameters of a device station to a module. ( Page 90 Parameters of a remote I/O module (device station) on CC-Link IE TSN)

#### Module extended parameters

When installing other MELSOFT products after installing CW Configurator, the profile version registered at the installation of CW Configurator will be changed to a version included in a MELSOFT product which is installed after CW Configurator. If the profile version is different from that is registered at the installation of CW Configurator, the parameters may not be read from a module.

In that case, register the profile included in CW Configurator again. (After the registration, the registered contents will also be applied to other MELSOFT products.)

The profile is stored on the product disk. (For download version installer, open (decompress) the '.exe' file.) After registering the profile, start CW Configurator again.

Product	Storage location
CW Configurator	SUPPORT\MSF\Common\ProfileManagement\IparData
Other MELSOFT products (GX Works3 and Navigator)	SUPPORT\MSF\Common\ProfileManagement\IparData\IparData.exe <sup>*1</sup>

\*1 To restore the profile, open (decompress) 'IparData.exe' and register the stored profile again.

### Deleting data in a module

Delete data such as parameters in a module.

#### Operating procedure

Select the file to be deleted from the list in the "Online Data Operation" screen, and click the [Execute] button.

## 7.2 Verifying Data in a Module

This section explains the method to verify data between the open project and data in a module.

Use this function to compare the content of two projects.

To verify data between two projects, use the Project Verify function.

For details, refer to the following:

Page 41 Verifying Projects

#### Window

[Online] ⇒ [Verify with PLC]

Online Data Operation					
Display Setting Related Functions					
	🏢 Read 🔜 🥂 🕅 V	/erify			
Select <u>F</u> avorites Select <u>A</u> ll		Select Favorites Select All			Refresh( <u>W</u> )
Open/Close All( <u>T</u> ) Deselect All( <u>N</u>	2	Open/Close All Deselect All(B)	Legend CPU Bui	ilt-in Memo	ry SD Memory Card
Module Name/Data Name	🔹 Title	Module Name/Data Name	*		Title
💷 🦷 Untitled Project		E R12CCPU-V			
- 🚱 Parameter		- 🛃 Parameter			
System Parameter/CPU Param	neter 🗌	System Parameter/CPU Paramete	1		
Module Parameter(Ethernet /	CC 🗆	- Module Parameter(Ethernet / CC	🗆		
<	Þ.	< III			۰.
Display Memory Capacity 😵					
Size Calculation Program Memory	/				
					7513/7515KB
Legend Data Memory					
Used					7380/7515KB
Increased Device/Label Me	mory (File Storage Area)				Free
Decreased					0/3584KB
5% or Less SD Memory Card	J				Free
					0/0KB
				<u>E</u> xe	Close

#### Operating procedure

Select the data to be verified, and click the [Execute] button.

The operation method for displaying the verification result is the same as that of project verification. For mode details, refer to the following:

Page 41 Verifying Projects

#### Parameters

#### ■Verification of module parameters

Module extended parameters are excluded from a verification. However, the module extended parameters of a simple motion module can be verified.

#### ■Verifying module parameters of CC-Link IE Controller Network modules

The following table shows the availability of module parameter verification with a version that supports (or does not support) the link points extended setting.

O: Verification available, X: Verification not available

Version <sup>*1</sup> of a	Version <sup>*2</sup> of a verification destination			
verification source	14	15	16	
Version 1.011M or earlier	0	0	×*3	
Version 1.012N     Version 1.013P	0	0	×*3	
Version 1.014Q or later	0	0	0	

\*1 Indicates the version of CW Configurator.

\*2 Indicates the firmware version of a C Controller module. For the firmware version of a C Controller module, refer to the following: MELSEC iQ-R C Controller Module User's Manual

\*3 Use the latest version of CW Configurator.

#### **Unsupported parameters are included in a verification destination**

When verifying with a module which supports CW Configurator with a version earlier than the one currently used, parameters which are not supported by the module are treated as if default values were set.

For supported versions of CW Configurator and modules, refer to the following:

MELSEC iQ-R C Controller Module User's Manual

#### ■Module parameters are not matched

When verifying module parameters, the following message may appear.

• Message: Module parameters created through different versions are verified. For some items, mismatch results might be shown even if the same settings were set on the setting window.

To match the module parameters, perform the following operation, and then verify once again.

Project	Operation
Verification source	<ul><li>Change the corresponding setting item in the parameter editor, and then restore it.</li><li>Save the project.</li></ul>
Verification destination	<ul> <li>Start another CW Configurator, and read the project from a CPU module ( Page 91 Reading data from a module)</li> <li>Write the read project to the CPU module once again. ( Page 89 Writing data to a module)</li> </ul>

## 7.3 Deleting All Files (Initialization)

Perform initialization to delete files in a module or an SD memory card.

The process of "Initialization" is used when using a module or SD memory card for the first time or clearing all data stored in a module or an SD memory card.

Once initialized, the following processing on memory is performed.

- Data memory: All folders/files in the data memory are deleted.
- SD memory card: All folders/files in the SD memory card are deleted.

### Point P

After deletion (initialization) of all files, the parameter files stored on data memory are deleted, and the default parameters are set.

#### Operating procedure

To delete all files on the "CPU Memory Operation" screen, refer to the following:

Page 119 Initializing/Clearing Memory

This chapter explains the method for checking the execution status of modules by connecting a personal computer and a C Controller module or MELSECWinCPU module.

The functions to check the execution status are as follows:

Purpose	Function name	Reference
To check the current values of devices or buffer memory in a batch	Device/buffer memory batch monitor	Page 98 Checking Device/Buffer Memory in Batch
To check the current values of registered devices.	Watch	Page 99 Checking Current Values of Registered Devices
To check the I/O signals and the current value of buffer memory by registering the module information of an intelligent function module.	Intelligent function module monitor	Page 100 Checking Current Values in Intelligent Function Module

#### Changing current values

Check the operation by changing the current value of devices, and buffer memory using the Change Current Value function. This function turns bit devices forced ON/OFF on a module. The current values of the word device and buffer memory can also be changed forcibly.

The current values can be changed in the following screens.

- Device/Buffer Memory Batch Monitor screen
- · Watch window
- · Intelligent function module monitor window

#### Available devices and buffer memory

For the devices and buffer memory that can be used for a C Controller module, refer to the following:

MELSEC iQ-R C Controller Module User's Manual

For the devices and buffer memory that can be used for a MELSECWinCPU module, refer to the following:

MELSEC iQ-R MELSECWinCPU Module User's Manual

8

## 8.1 Monitoring Status

To check the operating status of a module, connect a personal computer to the module and start monitoring.

#### Starting/stopping monitoring

Start/stop monitoring by selecting one of the following menus.

- [Online] ⇒ [Monitor] ⇒ [Start Monitoring (All Windows)]/[Stop Monitoring (All Windows)]
- [Online] 
   □ [Monitor] 
   □ [Start Monitoring]/[Stop Monitoring]
- [Online] ⇒ [Watch] ⇒ [Start Watching]/[Stop Watching]

#### When monitoring multiple projects using a single personal computer

• If an communication error occurred in one of the projects, the monitoring speed of the other projects may become slow. The operation speed will be back to normal after closing the error message displayed in the project in which the communication error occurred.

#### Changing display format of word devices

Select [Online] ⇔ [Monitor] ⇔ [Change Value Format (Decimal)] / [Change Value Format (Hexadecimal)] to change the display format of the monitored values.

#### Status monitoring

Status is displayed during monitoring on the monitor status bar.

#### Window

At the start of monitoring



Connection status

#### Displayed items

Item	Description	lcon	Detail
Connection status	The connection status with a C Controller module or MELSECWinCPU module is displayed. The "Specify Connection Destination" screen appears by clicking the icon. For details about the connection destination specification, refer to the following:	<b>₩</b> ↔₩ <b>₩</b> ↔₩	When connected to a module
CPU operating status	The operating status of a C Controller module or MELSECWinCPU module is		RUN/Y OUT
	displayed.		STOP/Y STOP
	<ul> <li>Prine status can be changed by using the following switches of performing a female operation in CW Configurator.</li> <li>RESET/STOP/RUN switch of a C Controller module</li> <li>BUS RESET/Y STOP/Y OUT switch of a MELSECWinCPU module</li> <li>The "Remote Operation" screen appears by clicking the icon.</li> <li>For details about the remote operation, refer to the following:</li> <li>Page 116 Remote Operation</li> </ul>		PAUSE
ERROR status	The ERROR LED status of a C Controller module or MELSECWinCPU module is		ERROR is OFF.
	displayed. The "Module Diagnostice" screen appears by clicking the icon		ERROR is ON.
	For details about the module diagnostics, refer to the following:	<b>!</b>	ERROR is flashing.

Item	Description	lcon	Detail
USER status/ INFORMATION status	The USER LED status of a C Controller module or the INFORMATION LED status of a MELSECWinCPU module is displayed. The "Module Diagnostics" screen appears by clicking the icon.		USER/ INFORMATION is OFF.
For details al 🖙 Page 10	tails about the module diagnostics, refer to the following: age 106 Module Diagnostics	()↔9	USER/ INFORMATION is ON.
		<b>!</b> ↔ <b>!</b> ↔ <b>!</b>	USER/ INFORMATION is flashing.
Fixed cycle processing time	The current value, maximum value, and minimum value of the fixed cycle processing til the pull-down list.	me can be displayed by	switching them from

## 8.2 Checking Device/Buffer Memory in Batch

Check the devices and buffer memory in a batch using the device/buffer memory batch monitor function.

When the multiple monitoring screens are opened, lead time to start monitoring and monitoring intervals may become longer. The CPU buffer memory of a multiple CPU system can be monitored only with the Device/Buffer Memory Batch Monitor function.

Â

#### Window

[Online] ⇔ [Monitor] ⇔ [Device/Buffer Memory Batch Monitor] (
В)

<ul> <li>Toolbar</li> </ul>						
b-₩+ <u>16</u>	• Uni •	0- 💷	Ŧ			
Device/Buffe	er Memo	ory Batch scre	en			
1 [Device/Buffer Mer	mory Batch N	Monitor] Monitoring	I			
Device <u>Name</u> Device <u>Name</u> Device <u>Name</u>	D0 <u>U</u> nit		▼ (HEX)	Address	Monitorii Stop Monit	1 <u>0</u>
Device Name	FEDCB	B A 9 8 7 6 5 4	3 2 1 0	Current Value	String	
DQ	0 0 0 0		0 0 0 0	0.		
D1	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	Q .		
D2	0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	0.		
D3	0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	0.		
D4	0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	Q .		
DS	0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	۹.		
D6	0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	۹.		
07	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	Q .		
Da	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	Q .		
D9	0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	0.		
D 10	0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	0.		
D11	0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	Q .		
D12	0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	۹.		
D13	0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	۹.		
D14	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0	۵.		

Up to 64 monitoring screens can be displayed at once. The numbers are displayed at the start of the screen title.

#### Operating procedure

#### ■Monitoring devices in a batch

Enter the device (start number) to be monitored in "Device Name".

#### ■Monitoring buffer memory in a batch

Enter the start I/O number and address of the intelligent function module.

Item	Description
Unit	Enter the start I/O number of the intelligent function module to be monitored in hexadecimal format. • For multiple CPU configuration Specify the CPU module to be monitored. CPU No.1: 3E00, CPU No.2: 3E10, CPU No.3: 3E20, CPU No.4: 3E30
Address	Enter the address of buffer memory to be monitored in decimal/hexadecimal format.

Point

Fonts can be changed.

Page 28 Checking and Changing Colors and Fonts

#### Changing current values

The current value can be changed by double-clicking the cell of the device or pressing the Enter during monitoring.

Digit specification (example: K4DX0) cannot be applied for the following devices, and their current values can be changed only when "Bit and Word" or bit order of '0-F' is specified in the display format (I).
 DX, DY, FX, FY, JD\XD, JD\BD, JD\SBD

## 8.3 Checking Current Values of Registered Devices

Check the current values of registered devices using the Watch function. Register the target devices in a watch window. Once devices are registered and the project is saved, the registered devices are displayed in the registered state when the project is opened again.

#### Window

[View]  $\Rightarrow$  [Docking Window]  $\Rightarrow$  [Watch 1] to [Watch 4] ("")

Watch 1								
- III-ON   + I-OFF   샤ON/OFF toggle   📓 Update					Right-click			
Name	Current Value	Display Format	Data Type		Name			
					Current Value			
				~	Display Format			
				~	Data Type			
					Class			
					Assign (Device)			

The display format can be selected per row from the pull-down list displayed when selecting the display format.

#### Operating procedure

- **1.** Register the devices to be monitored. (Page 99 Registering to a watch window)
- 2. Select [Online] ⇒ [Watch] ⇒ [Start Watching]. "[Watching]" is added in a watch window title while monitoring.

#### Registering to a watch window

Register devices to be monitored in a watch window.

#### Operating procedure

- **1.** Open a watch window.
- 2. Enter a device to be registered in the "Name" column, and press the Enter key.

#### Precautions

When a device that cannot be used for a module is registered, "--" is displayed for the current value, display format, data type, and comment of the registered device.

#### Changing current values

A value can be directly entered in the "Current Value" column during monitoring.

For a bit device, the current value can be changed by selecting a row and double-clicking it while pressing the selection of pressing the selection of the sele

#### Importing to/exporting from file

Export/import the information displayed on the watch window to/from a file.

#### Operating procedure

Select [Edit] ⇒ [Import File]/[Export to File].

# 8.4 Checking Current Values in Intelligent Function Module

Check the current value of I/O signals and buffer memory of an intelligent function module using the Intelligent Function Module Monitor function.

#### Window

[View]  $\Rightarrow$  [Docking Window]  $\Rightarrow$  [Intelligent Function Module Monitor]  $\Rightarrow$  [Intelligent Function Module Monitor 1] to [Intelligent Function Module Monitor 1] to [Intelligent Function Module Monitor 1]

Intelligent Function Module Monitor	/	Right-click				
Name	Current Value	Assign (Device)	Data Type	$\sim$		^
I/O Signal Monitor				$\square$	Name	
Input Signal(X):				$\checkmark$	Current Value	
Module READY		X0	Bit	~	Assign (Device)	
🚱 Warning Output Signal		X8	Bit	~	Data Type	
Operating Condition S		Х9	Bit	-		1
Offset/Gain Setting M		XA	Bit			
🚱 Channel Change Compl		XB	Bit			
🚱 Input Signal Error Det		XC	Bit			
🚱 Maximum/Minimum Val	-	XD	Bit			~

#### Operating procedure

- 1. Register an intelligent function module to be monitored. ( Page 102 Registering intelligent function modules)
- **2.** Select [Online]  $\Rightarrow$  [Watch]  $\Rightarrow$  [Start Watching].

"[Watching]" is added in the watch window title while monitoring.

Point P

Select and right-click the module information, and then select [Copy] from the shortcut menu to paste it to a text file.

#### Customizing monitoring items

Select the items in an intelligent function module monitor window, and right-click and select [Cut]/[Copy]/[Paste]/[Delete] from the shortcut menu to customize the items.

If the customized project is saved, the customized items will not be retained when the project is opened next time. The customized items cannot be restored again.

#### Precautions

The cut/copied items can only be pasted to the same project in the same window.

#### Detailed display of log information

Display the details of log information during monitoring.

Double-click a row in which "Detail Dialog" is displayed in "Data Type" column, or right-click and select [Detailed Dialog] from the shortcut menu.

When the menu is not selectable, it is not supported by the module.

#### Detailed display of error codes/alarm codes

Display the details of an error code/alarm code in intelligent function module monitor windows or detailed dialog. Double-click a row in which an error code/alarm code is displayed, or right-click and select [Detail Display] from the shortcut menu.

#### Customizing multiple intelligent function module monitor windows

Each axis of the positioning module can be monitored by activating multiple intelligent function module monitor windows and customizing each window.

#### Precautions

The Intelligent Function Module Monitor updates current values only within the range displayed in the window for monitoring acceleration.

When performing operation such as copy and paste on Excel<sup>®</sup>, "--" or the previously monitored current value is displayed for the data outside the range displayed on the window.

#### Registering intelligent function modules

Register an intelligent function module to be monitored in an intelligent function module monitor window.

#### Operating procedure

#### ■Drag-and-drop (navigation window)

- 1. In the navigation window, select a module to be registered.
- 2. Drag and drop it onto an intelligent function module monitor window.

#### Shortcut menu (navigation window)

- 1. In the navigation window, select a module to be registered in an intelligent function module monitor window.
- 2. Right-click it and select [Register to Intelligent Function Module Monitor] from the shortcut menu.

#### Shortcut menu (intelligent function module monitor window)

- **1.** Right-click on an intelligent function module monitor window and select [Register Module Information] from the shortcut menu.
- 2. Select a module to be registered in "Module List," and click the [OK] button.

When a positioning module is selected in "Module List," select the item displayed in "Monitor Item Category List."

Point P

Select and right-click the module information in the "Intelligent Function Module Monitor" window, and then select [Copy] from the shortcut menu to paste it to a text file.

#### **Registering device stations**

Register a device station on CC-Link IE TSN to be monitored in an intelligent function module monitor window.

#### Operating procedure

#### ■Drag-and-drop (navigation window)

- 1. In the navigation window, select a master station.
- 2. Drag and drop it onto an intelligent function module monitor window.
- 3. Select the master station in "Module List" and a device station in "Monitor Item Category List," then click the [OK] button.

#### Shortcut menu (navigation window)

- 1. In the navigation window, select a master station.
- 2. Right-click it and select [Register to Intelligent Function Module Monitor] from the shortcut menu.
- 3. Select the master station in "Module List" and a device station in "Monitor Item Category List," then click the [OK] button.

#### Shortcut menu (intelligent function module monitor window)

- **1.** Right-click on an intelligent function module monitor window and select [Register Module Information] from the shortcut menu.
- 2. Select the master station in "Module List" and a device station in "Monitor Item Category List," then click the [OK] button.

#### Precautions

Match the network configuration settings and parameters for refresh devices between the actual system and a project. Otherwise, the refresh devices and buffer memory addresses are not set correctly in the intelligent function module monitor and a device station cannot be monitored properly.

# **9** MODULE DIAGNOSTICS

This function displays the status of modules, networks, and entire system. At the time of error, it displays the error contents and the corrective action.

The diagnostics functions of CW Configurator are as follows:

Function	Reference			
System monitor	Page 105 Module Status Check of a System			
Module diagnostics	Page 106 Module Diagnostics			
Network diagnostics	Page 108 CC-Link IE Controller Network diagnostics			
	Page 110 CC-Link IE TSN/CC-Link IE Field Network diagnostics			
	Page 111 CC-Link IE Field Network Basic diagnostics			
	Page 112 MELSECNET diagnostics			
	Page 113 CC-Link diagnostics			

### 9.1 Module Status Check of a System

The system monitor function displays the module configuration of the system in operation and detailed information of each module.

In addition, the error status can be checked and the module in which the error occurred can be diagnosed.

#### Window

[Diagnostics] ⇒ [System Monitor]



- For a MELSEC-Q series power supply module, the model name is displayed as "Power" instead of their model name. Additionally, for MELSEC-Q series module, the network information and IP address are not displayed.
- '?' appears on the image of a module with no profile.
- "No Support Unit" can not be diagnosed. ( I Page 56 Setting system parameters)
- If the number of extension base units is set incorrectly, the base unit configuration will not be displayed in the order of the connection.

#### ■Display setting

Click the [Display Setting] button for the following operations:

- · Displaying the network information and IP address of port 2 of a module having two ports
- · Switching the display format of an error code

#### Check of the module firmware version and product information

The firmware version and product information can be checked in the "Product Information List" screen which is displayed after [Product Information List] button is clicked.

## 9.2 Module Diagnostics

This section explains the method for displaying the module status and the error information.

#### Window

#### ■CPU module diagnostics

[Diagnostics] ⇒ [Module Diagnostics (CPU Diagnostics)]

#### I/O module and intelligent function module diagnostics

Select the module to be diagnosed from the module configuration of the "System Monitor" screen and double-click one of the cells on the same column to display the "Module Diagnostics" screen.



For MELSEC-Q series module, '-' is displayed in Occurrence Date, Status, and Overview.
### Error information

Display the error history registered in the diagnostic target module in the [Error Information] tab.

#### ■Display content

The displayed information will differ depending on the module.

- CPU module: Up to 16 current errors will be displayed in the order of occurrence. The 17th and succeeding errors are not displayed.
- Other than CPU module: Up to 16 current errors are displayed.

If a same error with error code has occurred which has already been displayed, then display content will not be updated. For the errors of MELSEC-Q series module, occurrence date is not displayed.

#### ■Event history

Page 114 Error History/Operation History Check

#### ■Clearing errors

After the errors displayed in the "Module Diagnostic" screen are cleared, click the [Clear Error] button to clear the error status of the module. (The LED that indicates error status on the front of the module turns OFF.) The error content are also deleted from the list of the error information.

### Module information list

The current LED information and switch information of a target module are displayed in the [Module Information List] tab.

### Precautions

The SD memory card status of a MELSECWinCPU module is not displayed in "Module Information List."

# 9.3 Network Diagnostics

This section explains the method for diagnosing various networks.

### **CC-Link IE Controller Network diagnostics**

The following are performed: monitoring the network information, diagnosing the network status, and testing the network. For details, refer to the following:

MELSEC iQ-R CC-Link IE Controller Network User's Manual (Application)

### Window

### ■Optical cable

[Diagnostics] ⇒ [CC-Link IE Control Diagnostics (Optical Cable)]



### Twisted pair cable

[Diagnostics] ⇒ [CC-Link IE Control Diagnostics (Twisted Pair Cable)]



### **CC-Link IE TSN/CC-Link IE Field Network diagnostics**

The following are performed: monitoring the network information, diagnosing the network status, and testing the network. For details, refer to the following:

MELSEC iQ-R CC-Link IE Field Network User's Manual (Application)

### Window

[Diagnostics] ⇒ [CC-Link IE TSN/CC-Link IE Field Diagnostics]



### **Displaying product information**

The product information of a module can be checked by the following operation.

Select and right-click a module, and select [Production information] from the shortcut menu.

Note that this function cannot be used when a selected module does not support displaying the product information or an error occurs on a connected station.

For details, refer to the manual for each module.

### Displaying an error history

An error history in a device station can be checked by the following operation.

C Select and right-click a module, and select [Production information] from the shortcut menu.

This function is available only when a remote device station or intelligent device station which can read an error history is selected.

### **CC-Link IE Field Network Basic diagnostics**

The following are performed: monitoring the network information and diagnosing the network status.

For details, refer to the following:

MELSEC iQ-R C Controller Module User's Manual

### Window

[Diagnostics] ⇒ [CC-Link IEF Basic Diagnostics]

C-Link IEF Basic Diagnostics												
<u>((-)</u>	nk IF	Eielo			Change IF	Address Displ	ау	Monitor St	tatus			
		Basic			DEC	© <u>H</u> EX			Moni	itoring	Start Monitoring	Stop Monitoring
Master St	ation Status	5										
Total Slave (Parameter)	Stations	2	IP Addre	ess	192.168.3.3	Err	or Code	No Error				Error Details
Network Status												
- Rough Di	agnostics —											
Link Scan	Time/Error St	ations										
Grou	0 No.1	Present	116	ms	Maximum	116	ms	Minimum	116	ms	Error Stns: 0 U	nfixed Stns: 2
Grou	No.2	Present		ms	Maximum		ms	Minimum		ms		
Grou	0 No.3	Present		ms	Maximum		ms	Minimum		ms		
Grou	0 No.4	Present		ms	Maximum		ms	Minimum		ms		
Diagnostics	Target Grou	p Group 1	No.1	•								
Station No.	Occpd Stns	Reserved St	ation IF	P Add	ess	Transmission S	Status	Disconnections	s Time-	out Count	The Latest Error	Error Details
1	1	No Setting	19	92.16	8.3.1	Unfixed		0	0		No Error	Error Details
2	1	NO Setting	1	92.10	8.3.2	Unixed		U	U		NO EITOI	Error Details
			-									
Clear Late	st Error Code											Close

### **MELSECNET** diagnostics

The following are performed: monitoring the network information, diagnosing the network status, and testing the network of each station.

When performing MELSECNET diagnostics, refer to the considerations when using MELSECNET/H network modules described in the following:

MELSEC iQ-R Module Configuration Manual

For the operation method, refer to the following:

GX Works2 Version 1 Operating Manual (Common)

### Window

[Diagnostics] ⇒ [MELSECNET Diagnostics]

MELSECNET Diagnostics	(Host Station Informatior	1)			
Module 1   Module 2   M	Iodule 3 Module 4				
Network Information	1000)	Network No.	2	Monitoring	
Type Normal	Net Station, PLC-PLC	Group No. Station No.	0	<u>S</u> top Monitoring Network Diagnostics	
Link Information		_		<u>N</u> etwork Test	
Mode F Loop Status	Online Data Link not Possible	Link Scan Time Max. n Min n	ns	Loop Test	
R Loop Status	Data Link not Possible	Current n	ns	Setting Check Test( <u>V</u> )	
Communication Inform	Communication Information				
BWY from Master Sta BW from Host Master	Communication Test				
Error <u>H</u> istory Monitor	Circuit Monitor <u>D</u> etails	Othe <u>r</u> Station I	nfo	Close	

### **CC-Link diagnostics**

The following are performed: monitoring the network information, diagnosing the network status, and testing the network of each station.

For details, refer to the following:

MELSEC iQ-R CC-Link System Master/Local Module User's Manual (Application)

### Window

[Diagnostics] ⇒ [CC-Link Diagnostics]

Monitoring       Stop Monitoring         Diagnostics Result       System normal.         Image: Stop 000000000000000000000000000000000000
Stop Monitoring         Diagnostics Result System normal.         Bore Mol Excitent 1       System normal.         Image: Strip 1       Image: Strip 1       Image: Strip 1       Image: Strip 1         Master ST       Intel ST       Intel ST       Image: Strip 1
Diagnostics Result       System normal.         Bound Nother Result       System normal.         Rester ST       Intel ST         Intel ST       Intel ST
Bord No1 FRSEET1         Bord No1 FRSEET1         Rester ST Intel ST         Intel ST
Bowd No.1 (YO O FECH STND 0       Intel ST       Inte
Boord Not Excitent       Image: State of the state of th
Exstention         Intel ST
Image: State Stat
Master ST       Intell ST       I/O ST       I/O ST       I/O ST <td< td=""></td<>
Omester ST         Intel ST
Image: Second
Image: Second
Inters         Inters<
12         13         14         15         16         1/0 ST         17         18         19         1/0 ST
Intellist
Return to the original       Previous<       Next>>       Display Al
Return to the original     Previous<     Next>>     Display Al
Return to the original     Previous <     Display All
Return to the original Previous << Next>> Display Al
Return to the original         Previous<         Display All
Connecting Station Information Selected Station Information Selected Station Error Information
Station No. 0
0 Number of Occupied stations 1 Master Station Master Station
Company MITSUBISHI ELECTRIC CORPORATION
Connecting Module PLC
(Comment
Related Eurotions<< Legend Close

# 9.4 Error History/Operation History Check

The module's error information, history of operation, and system information can be displayed using the event history function. The detailed information of the error history can be displayed when a CPU module and an intelligent function module supports the module error history collection function.

For the versions of modules that support this function, refer to the user's manual for each module.

### Operating procedure

Click the [Event History] button in the "Module Diagnostics" screen or "System Monitor" screen.

# **10** CHECKING/CHANGING OPERATION

The operation status of a C Controller module and MELSECWinCPU module can be checked, and its operation can be changed.

Purpose	Function name	Reference
To set the clock on a module	Clock setting	Page 115 Clock Setting
To change the operating status of a CPU module connected to CW Configurator	Remote operation	Page 116 Remote Operation
To check the usage of data memory	Memory management	Page 118 Checking Memory Usage
To clear values in data memory	Clear values	Page 119 Initializing/Clearing Memory

# 10.1 Clock Setting

This section explains the setting method of the clock on a module.

A MELSECWinCPU module operates with the clock set on Windows. Therefore, its clock cannot be set in CW Configurator.

For details on a MELSECWinCPU module, refer to the following:

MELSEC iQ-R MELSECWinCPU Module User's Manual

### Window

#### [Online] ⇒ [Set Clock]

Set Clock PLC Time Zone Time Zone UTC+09:00 Comment	
Date Time $12$ $1$ June, 2016 $1$ $12$ $3$ $4$ $5$ $6$ $7$ $8$ $9$ $10$ $11$ $12$ $13$ $14$ $15$ $15$ $17$ $18$ $19$ $20$ $21$ $22$ $23$ $24$ $25$ $26$ $27$ $28$ $29$ $30$ $1$ $2$ $3$ $4$ $5$ $6$ $7$ $8$ $9$ $1$ $12$ $13$ $14$ $15$ $15$ $17$ $18$ $19$ $20$ $21$ $22$ $23$ $24$ $25$ $26$ $27$ $28$ $29$ $30$ $1$ $2$ $3$ $4$ $5$ $6$ $7$ $8$ $9$ $1$ Today: 6/16/2016	Explanation From Get Time from PC setting, users are able to get the time coupled with the time zone set in PC. To set the setting, please execute it after matching the time zone of DC and DC
6/16/2016 Get Time from PC Get Time from PLC	From Get Time from PLC setting, users are able to get the Set Clock setting.  Execute  Close

### Operating procedure

Set each item and click the [Execute] button.

### Precautions

- In the clock setting, a time-lag may occur due to the transfer time.
- The same time is set even if different time zones are specified between a connected station and other stations.

# **10.2** Remote Operation

This section explains the method for switching the operating status of a module from CW Configurator. The remote operation screen displays different contents depending on the module used.

### Window

[Online] ⇒ [Remote Operation]

### ■For a C Controller module



### ■For a MELSECWinCPU module

Remote Operation	×
Operation	
CPU Operation Status (LED)	OY OUT(R)
	Operation in the Y OUT State
	Device/Label Memory
	Not Cleared $\sim$
OS	• Y STOP(O)
Y STOP 💳	OPAUSE
	O BUS RESET(T)
<u>L</u>	
	Execute Close

### Operating procedure

Select an operating status of a module, and click the [Execute] button.

### Remote operation and switch

#### C Controller module

When the operation to a C Controller module differs between the remote operation and RESET/STOP/RUN switch, the C Controller module operates according to the priority shown below:

Operation to a C Controller module	Priority
STOP	1
PAUSE	2
RUN	3

The following table shows the RESET/STOP/RUN switch status on a C Controller module and the actual operating status of the module when performing each remote operation.

Remote operation	Switch status of a C Controller module			
	RUN	STOP		
RUN	RUN	STOP		
STOP	STOP	STOP		
PAUSE	PAUSE	STOP		
RESET <sup>*1</sup>	Inoperable *2	RESET		

\*1 The remote reset needs to be enabled in "Operation Related Setting" of the CPU parameter in CW Configurator.

 $^{\ast}2$   $\,$  Operable when the C Controller module is switched to STOP by remote operation.

#### ■MELSECWinCPU module

When the operation to a MELSECWinCPU module differs between the remote operation and the BUS RESET/Y STOP/Y OUT switch, the MELSECWinCPU module operates according to the priority shown below:

Operation to a MELSECWinCPU module	Priority
Y STOP	1
PAUSE	2
YOUT	3

The following table shows the BUS RESET/Y STOP/Y OUT switch status on a MELSECWinCPU module and the actual operating status of the module when performing each remote operation.

Remote operation	Switch status of a MELSECWinCPU module			
	YOUT	Y STOP		
YOUT	YOUT	Y STOP		
Y STOP	Y STOP	Y STOP		
PAUSE	PAUSE	Y STOP		
BUS RESET <sup>*1</sup>	Inoperable <sup>*2</sup>	BUS RESET		

\*1 The remote reset needs to be enabled in "Operation Related Setting" of the CPU parameter in CW Configurator.

\*2 Operable when the MELSECWinCPU module is switched to Y STOP by remote operation.

# 10.3 Checking Memory Usage

This section explains the method for checking the usage of the memory built in a module.

Built-in memories of which the usage can be checked differ depending on the module used. The following table shows the details.

 $\bigcirc:$  Can be checked,  $\times:$  Cannot be checked

Module	CPU built-in memory	SD memory card
C Controller module	0	0
MELSECWinCPU module	0	×

### Window

#### [Online] ⇒ [CPU Memory Operation]

Memory Management		×
<ul> <li>Memory Management</li> <li>CPU Built-in Memory</li> <li>SD Memory Card</li> </ul>	CPU Built-in Memory	
	Data Memory ·	Use Volume
	L	137/7515KB
	Device/Label	
	File Storage Area	Use Volume
		3584/3584KB
	Initialization(F) Clear Value Refresh(N)	
		Close

### ■Device/label memory (file storage area)

Since all of the area in the device/label memory (file storage area) is assigned as file registers, it does not have any free space left.

# 10.4 Initializing/Clearing Memory

This section explains the methods for initializing a memory and clearing values.

For details about the initialization and clearing value, refer to the following:

MELSEC iQ-R C Controller Module User's Manual

MELSEC iQ-R MELSECWinCPU Module User's Manual

### Initializing data

The data memory or an SD memory card can be initialized.

Once the data memory or an SD memory card is initialized, folders and files stored there are deleted.

Memories that can be initialized differ depending on the module used. The following table shows the details.

#### $\bigcirc$ : Can be initialized, $\times$ : Cannot be initialized

Module	CPU built-in memory	SD memory card
C Controller module	0	0
MELSECWinCPU module	0	×

### Operating procedure

**1.** Select [Online] ⇔ [CPU Memory Operation]. ( Select [Online] ⇔ [CPU Memory Usage)

**2.** Select "Data Memory" or "File Storage Area" in the "Memory Management" screen, and click the [Initialization] button. When initializing an SD memory card, select "SD Memory Card" displayed on the left of the screen.

Point P

After deletion (initialization) of all files, the parameter files stored on memory are deleted, and the default parameters are set.

#### Precautions

Format an SD memory card to be used for C Controller modules by using this function.

If a memory card is formatted using the function such as Windows format function, it may not be used on a C Controller module.

### **Clearing values**

The values of devices or file registers can be cleared.

Values to be cleared differ depending on the module used. The following table shows the details.

O: Can be cleared, X: Cannot be cleared

Module	Device	File register
C Controller module	0	0
MELSECWinCPU module	0	x*1

\*1 A MELSECWinCPU module cannot use file registers. (ImmeLSEC iQ-R MELSECWinCPU Module User's Manual)

#### Operating procedure

- 1. Select [Online] ⇔ [CPU Memory Operation]. (I Page 118 Checking Memory Usage)
- 2. Select "Device/Label Memory" in the "Memory Management" screen, and click the [Clear Value] button.
- 3. Set each item in the "Clear Value" screen, and click the [Execute] button.

# APPENDIX

# Appendix 1 Unusable Character Strings (Reserved Words)

Character strings used for application function names, common instruction names, special instruction names, instructions and so on are referred to as the reserved words.

These reserved words cannot be used for data names.

If the character string defined as a reserved word is used for a data name, an error occurs during registration or conversion.

### Point P

For data names, CPU parameters, and module parameters, use characters in the Unicode Basic Multilingual Plane. If an input language is different from the language set in the regional settings on Windows, some functions may not operate properly. In that case, unify these languages. If the characters outside the Unicode Basic Multilingual Plane are specified, the program may not operate

### Precautions

Characters are not case-sensitive.

properly.

### Unusable character strings for a project name

Category		Character string
Invalid	Symbol	Space, ", %, ', *, /, ., :, <, >, ?,   , j, ¢, £, ¤,  ¦, §, ¨, ©, a, «, ¬, <sup>®</sup> , <sup>-</sup> , °, ±, ², ³, ´, μ, ¶, ·, ,, ¹, °, », ¼, ½, ¾, ¿, DEL()
character	Surrogate pair	0xD800 to 0xDBFF, 0xDC00 to 0xDFFF
	Control code	0x007F, U+0000 to U+001F, U+0080 to U+009F, U+00A0, U+00AD, U+FFFE, U+FFFF
Windows reserve	ed word	COM1, COM2, COM3, COM4, COM5, COM6, COM7, COM8, COM9, LPT1, LPT2, LPT3, LPT4, LPT5, LPT6, LPT7, LPT8, LPT9, AUX, CON, PRN, NUL, CLOCK\$, END_MARK

### Unusable character strings for a path name

Category		Character string
Invalid	Symbol	", *, /, ,, ;, <, >, ?,  , i, ¢, £, ¤,   , §, ¨, ©, ª, «, ¬, <sup>®</sup> , <sup>−</sup> , °, ±, ², ³, ΄, μ, ¶, ·, ,, ¹, °, », ¼, ½, ¾, ¿
character	Surrogate pair	0xD800 to 0xDBFF, 0xDC00 to 0xDFFF
	Control code	0x007F, U+0000 to U+001F, U+0080 to U+009F, U+00A0, U+00AD, U+FFFE, U+FFFF
Windows reserve	ed word	COM1, COM2, COM3, COM4, COM5, COM6, COM7, COM8, COM9, LPT1, LPT2, LPT3, LPT4, LPT5, LPT6, LPT7, LPT8, LPT9, AUX, CON, PRN, NUL, CLOCK\$, END_MARK

### Unusable character strings for a data name

Category		Character string
Invalid character	Symbol	Space, ", \$, %, &, ', *, +, /, ,, ., :, ;, <, =, >, ?, @, [,  ], ^, {, , , , ;, ¢, £, $\mathbf{x}$ , $\mathbf{x}$ , $\mathbf{x}$ , $\mathbf{x}$ , $\mathbf{y}$ , $\mathbf{x}$ , $\mathbf{x}$ , $\mathbf{y}$ , $\mathbf{x}$ , $\mathbf{x}$ , $\mathbf{y}$ , $\mathbf{x}$ , $\mathbf{x}$ , $\mathbf{x}$ , $\mathbf{x}$ , $\mathbf{x}$ , $\mathbf{y}$ , $\mathbf{x}$ , $\mathbf$
	Surrogate pair	0xD800 to 0xDBFF, 0xDC00 to 0xDFFF
	Control code	0x007F, U+0000 to U+001F, U+0080 to U+009F, U+00A0, U+00AD, U+FFFE, U+FFFF
Windows reserve	ed word	COM1, COM2, COM3, COM4, COM5, COM6, COM7, COM8, COM9, LPT1, LPT2, LPT3, LPT4, LPT5, LPT6, LPT7, LPT8, LPT9, AUX, CON, PRN, NUL, CLOCK\$, END_MARK

## Appendix 2 USB Driver Installation Procedure

To communicate with a C Controller module and MELSECWinCPU module by accessing another CPU that is a USBconnected programmable controller CPU or motion CPU in a multiple CPU system configuration, installing a USB driver is required.

### Operating procedure

- **1.** Connect a personal computer and a programmable controller CPU or a motion CPU with a USB cable, and turn the power of the programmable controller ON.
- 2. Right-click "Unknown Device" and click "Update driver" in Windows Device Manager.
- **3.** Select "Browse my computer for drivers" in the "Update Drivers" screen, and specify 'Easysocket\USBDrivers' in the folder where CW Configurator is installed on the next screen.

When an installation folder is not changed at the installation, the installation folder is as follows:

- 64-bit version operating system: C:\Program Files (x86)\MELSOFT\Easysocket\USBDrivers
- 32-bit version operating system: C:\Program Files\MELSOFT\Easysocket\USBDrivers

If multiple MELSOFT products are already installed, specify 'Easysocket\USBDrivers' which is in the folder of the first product installed.

If 'Easysocket\USBDrivers' does not exist, search for 'USBDrivers' in the Windows explorer.

# Appendix 3 Troubleshooting

This section shows the errors which may occur when using CW Configurator and their corrective actions.

Symptom	Check point	Corrective action
Contents in the screen are not displayed properly. (For example, overlapping of icons, text overflowing from the frame of a button, etc.)	Is the size of the text and other items in the screen set to a value other than 100% (96 DPI, 9 pt etc.) in Windows settings?	<ul> <li>Set the value to 100% (96 DPI, 9 pt etc.).</li> <li>For Windows 10 (version 1703 or later) or later<sup>*1</sup>, the display of CW Configurator can be displayed with high DPI scaling by using a function of the operating system.<sup>*2</sup></li> <li>Perform the following procedure:</li> <li>Select and right-click 'CWConfig.exe<sup>*3</sup>, and select [Properties] from the shortcut menu.</li> <li>Click the [Change high DPI settings] button in the [Compatibility] tab.</li> <li>Select the checkbox of "Override high DPI scaling behavior. Scaling performed by:," then select "System" from the pull-down list.</li> <li>Click the [OK] button.</li> </ul>
CPU modules on the network cannot be found.	Is there a response within a response waiting time?	Extend the response waiting time and search CPU modules again.
	Are the modules connected via a router?	CPU modules connected via a router cannot be found. To search them, change the connection route.
	Is the subnet mask correct?	Set the subnet mask so that it matches with the one used for CPU modules.
	Is "Do Not Respond to CPU Module Search" set as "Do Not Respond" in the module parameter?	Change the setting of "Do Not Respond to CPU Module Search" to "Respond" in the module parameter.
	Are there multiple network interfaces? Is the priority of the network interface connected to the CPU module lower than that of other network interfaces?	Open the property of the network interface connected to the CPU module, and set '1' for the interface metric in the advanced TCP/IP settings. By this setting, CPU modules can be searched. (CP Page 123 Setting an interface metric)
	A CPU search has no response even though PING is successful.	When using security software with a firewall function, refer to the manual for the software used and allow the communication with CW Configurator. Alternatively, if any software has been installed during a period when the symptom occurs, refer to the manual for the software and check if the communication with CW Configurator is not restricted.
	Are multiple Ethernet ports (network interfaces) enabled in a MELSECWinCPU module?	Refer to the "Ethernet port" section of the following manual to take corrective actions:

\*1 The Windows version can be checked by the following procedure.

• Enter "winver" in the search box of Windows, and select it from the menu.

Output: Check the version in the displayed screen.

\*2 The display of CW Configurator will be blurred by enlarging.

The following lists the setting values for "Change the size of text, apps, and other items" and the recommended display resolution for each setting value in Windows 10 or later.

Setting value: 100%, display resolution: 1024  $\times$  768 dots or more

Setting value: 125%, display resolution: 1900  $\times$  1200 dots or more

Setting value: 150%, display resolution: 1900  $\times$  1200 dots or more

Setting value: 175%, display resolution:  $2880 \times 1620$  dots or more

Setting value: 200%, display resolution: 2880  $\times$  1620 dots or more

Setting value: 225%, display resolution: 3840  $\times$  2160 dots or more

Setting value: 250%, display resolution:  $3840 \times 2160$  dots or more

\*3 'CWConfig.exe' is stored in the folder where CW Configurator has been installed. The following is an example of a storage location.
64-bit version operating system: C:\Program Files (x86)\MELSOFT\RCCPU\CWConfig.exe
32-bit version operating system: C:\Program Files\MELSOFT\RCCPU\CWConfig.exe

### Setting an interface metric

The following shows the method for setting an interface metric.

- **1.** Select [Network and Internet] ⇒ [Network and Sharing Center] ⇒ [Change adapter settings] in the control panel of Windows.
- 2. Select and right-click the network connection that is connected to the CPU module, and select [Properties] in the shortcut menu.
- **3.** Select "Internet Protocol Version 4(TCP/IPv4)", and click the [Properties] button in the property screen for network connection.
- 4. Click the [Advanced] button in the [General] tab in the "Internet Protocol Version 4 (TCP/IPv4) Properties" screen.
- 5. Unselect "Automatic metric" in the [IP Settings] tab in the "Advanced TCP/IP Settings" screen.
- 6. Set '1' for "Interface metric".

# Appendix 4 Additions and Changes from Previous Version

The following table shows the main functions added/changed along with the upgrade.

Version 1.001B			
Item	Description	Reference	
System parameter utilization	Utilization of the system parameter including modules unsupported by C Controller module is supported.	ে Page 56 Setting system parameters	

### Version 1.002C

Item	Description	Reference	
Network	CC-Link IE Controller Network using RJ71EN71 is supported.	—	

### Version 1.004E

Item	Description	Reference
Operating environment	Windows 10 is supported.	—
Q series MELSECNET/H network module	Q series MELSECNET/H network module is supported. MELSECNET diagnostics is supported.	CP Page 112 MELSECNET diagnostics

### Version 1.006G

Item	Description	Reference
Configuration devices	The following modules are supported: • DC high-speed input module (RX61C6HS) • Transistor high-speed output module (RY41NT2H) • Flexible high-speed I/O control module	Configuration Manual
Module tool list	Only modules supported by C Controller modules can be displayed in the module tool list.	Page 65 Other Settings of Intelligent Function Modules
Module configuration diagram System parameter Reading data from a C Controller module	A C Controller module can be selected as a host CPU only for modules supported by C Controller modules.	Page 45 CREATION OF         MODULE CONFIGURATION         DIAGRAM AND PARAMETER         SETTINGS         Page 56 Setting system         parameters         Page 91 Reading data from a         module

Version 1.007H			
Item	Description	Reference	
CC-Link IE Field Network Basic function	The CC-Link IE Field Network Basic function is supported.	Page 104 MODULE DIAGNOSTICS	
Connection destination	<ul> <li>The GOT transparent function performed via CC-Link IE Control Network is supported.</li> <li>The GOT transparent function performed via CC-Link IE Field Network is supported.</li> </ul>	Series Page 81 Accessing via GOT (GOT Transparent Function)	
	The connection that relays the following network interface boards is supported.     CC-Link IE Controller Network interface board     CC-Link IE Field Network interface board     CC-Link Ver.2 board	Series Page 15 Connection Configurations between a Personal Computer and a Module	
Verification	<ul> <li>Module parameters of a C Controller module can be verified.</li> <li>Module extended parameters of a simple motion module can be verified.</li> <li>The module information of an intelligent function module can be verified.</li> </ul>	Series Page 41 Verifying Projects Page 92 Verifying Data in a Module	

Version 1.008J			
Item	Description	Reference	
Operating environment	Windows 10 IoT Enterprise 2016 LTSB is supported.	—	

### Version 1.009K

Item         Description         Reference           Configuration devices         The following modules are supported: • Power supply modules (R62P, R64P) • DC high-speed input modules (RX40PC6H, RX40NC6H) • High speed data logger module (RD81DL96) • C intelligent function module (RD5UP06-V) • Device net master/slave module (RJ71DN91) • CANopen module (RJ71CN91)         Configuration Manual			
Configuration devices       The following modules are supported:       Image: Configuration devices         Power supply modules (R62P, R64P)       Configuration Manual         DC high-speed input modules (RX40PC6H, RX40NC6H)       High speed data logger module (RD81DL96)         C intelligent function module (RD55UP06-V)       Device net master/slave module (RJ71DN91)         C ANopen module (RJ71CN91)       Or intelligent function device (DP72051 DP720510	Item	Description	Reference
Simple motion modules (RD//GF4, RD//GF4, RD//GF16, RD//GF32)	Configuration devices	The following modules are supported: • Power supply modules (R62P, R64P) • DC high-speed input modules (RX40PC6H, RX40NC6H) • High speed data logger module (RD81DL96) • C intelligent function module (RD55UP06-V) • Device net master/slave module (RJ71DN91) • CANopen module (RJ71CN91) • Simple motion modules (RD77GF4, RD77GF8, RD77GF16, RD77GF32)	Configuration Manual

### Version 1.012N

Itom	Programming	Peference
		Reference
Operating environment Configuration devices	<ul> <li>Windows XP<sup>®</sup> and Windows Vista<sup>®</sup> are no longer supported.</li> <li>The following modules are supported: <ul> <li>CC-Link IE TSN module (RJ71GN11-T2)</li> </ul> </li> <li>Motion modules (RD78G4, RD78G8, RD78G16, RD78G32, RD78G64, RD78GHV, RD78GHW)</li> <li>MES interface module (RD81MES96N)</li> <li>High speed data communication module (RD81DC96)</li> <li>Laser displacement sensor control modules (R60MH112, R60MH112NA)</li> <li>CC-Link IE Controller Network module (RJ71GP21S-SX)</li> <li>GP-IB interface module (RJ71GB91)</li> <li>Channel isolated analog-digital converter modules (R60AD6-DG, R60AD6-DG(Q))</li> <li>C intelligent function module (RD55UP12-V)</li> <li>Main base unit (R33B)</li> </ul>	Defiguration Manual
	<ul> <li>The following modules are supported in CC-Link IE Field Network:</li> <li>CC-Link IE Field Network remote I/O modules (NZ2GFCE3N-32D, NZ2GFCE3N-32T, NZ2GFCE3N-32DT, NZ2GF12A-60IOLH8, FCU8-EX564, FR-A8NCE)</li> <li>MELIPC (MI5122-VW)</li> <li>DC safety I/O module (NZ2GFS12A2-14DT, NZ2GFS12A2-16DTE)</li> <li>CC-Link IE Field Network block type remote IO-Link module (NZ2GF2S-60IOLD8)</li> <li>DC input module (NZ2GN2S1-32D)</li> <li>Transistor output modules (NZ2GN2B1-32TE, NZ2GN2B1-32TE, NZ2GN2B1-32DT, NZ2GN2S1-32TE)</li> <li>DC input/transistor output combined modules (NZ2GN2B1-32DT, NZ2GN2B1-32DTE, NZ2GN2B1-32DT, NZ2GN2B1-32DTE, NZ2GN2B1-32DT, NZ2GN2S-60AD4, NZ2GN2S-60AD4)</li> <li>Analog output modules (NZ2GN2B-60DA4, NZ2GN2S-60DA4)</li> </ul>	
	<ul> <li>The following modules are supported in CC-Link IE Field Network Basic:</li> <li>CC-Link IE Field Network Basic remote I/O modules (NZ2MF2S1-32D, NZ2MF2S1-32T, NZ2MF2S1-32TE1, NZ2MF2S1-32DT, NZ2MF2S1-32DTE1)</li> <li>Vision sensor VS70 (VS70M-600-E/VS70M-600-ER, VS70M-800-E/VS70M-800-ER, VS70M-802-E/VS70M-802-ER)</li> <li>Vision sensor VS80(VS80M-100-E, VS80M-200-E/VS80M-200-ER, VS80M-400-E/VS80M-400-ER, VS80M-202-E/VS80M-202-ER, VS80M-402-E/VS80M-402-ER, VS80M-402-D)</li> </ul>	_
Saving a project	A file compression function that reduces the size of a project file is supported.	েল Page 40 Compressing a project file
Navigation window	<ul><li>The navigation window is improved as follows:</li><li>The layers of the module parameter are reduced.</li><li>A module tool can be opened.</li><li>The background color and font color can be changed.</li></ul>	SP Page 20 Navigation window
Module configuration diagram	The module parameters for multiple ports can be opened in a module configuration diagram.	Page 50 Setting parameters on the module configuration diagram
Parameter	<ul> <li>The following operations are available when setting parameters.</li> <li>Changing the network type on the port 2 of an Ethernet (RJ71EN71) with the setting on the port 1 retained</li> <li>Pasting a module with module parameters of the copy source when copying and pasting the module on a module configuration diagram</li> </ul>	CP Page 69 Change Module CP Page 50 Application of parameter information
	An error message that appears when the IP addresses of CH1 and CH2 are duplicate is improved so that it is easier to troubleshoot the error.	—
Connection destination setting	A connection destination specification function is enhanced as follows: • The adapter of an Ethernet board can be selected.	Page 76 Ethernet connection
Docking window	In the output window, any displayed row can be highlighted.	Page 53 Highlighting display
Watch	The operability and visibility are improved in a watch window.	_
Diagnostic	The error history of a selected station can be displayed from the screen for a CC-Link IE Field diagnostic.	-
	The description of an error in a remote station and its corrective action can be checked in a CC-Link IE Field Network Basic diagnostic.	_

Item	Description	Reference
Printing data	<ul><li>The following improvements are made in printing:</li><li>Unset parameters are no longer printed.</li><li>The color and font in printing can be changed from the one displayed in an editor.</li></ul>	েঁজ Page 30 Printing Data
Label function	<ul><li>Public labels of a motion module can be applied.</li><li>Labels can be exported.</li></ul>	Page 71 REGISTERING LABELS

### Version 1.013P

em Description Reference		Reference
Operating environment	Windows 10 IoT Enterprise LTSC 2019 is supported.	
Configuration devices       The following module is supported:       Image: Configuration devices         • MELSEC WinCPU module (R102WCPU-W)       Configuration Mage: Configuration		CIMELSEC iQ-R Module Configuration Manual

### Version 1.014Q

Item	Description	Reference
Module parameter	The "Link points extended setting" of CC-Link IE Controller Network modules can be set for an R12CCPU-V project.*1	_

\*1 To use this function, it is required that the firmware of a C Controller module supports the function. For information on the firmware versions, refer to the following:

MELSEC iQ-R C Controller Module User's Manual

### Version 1.016S

Item	Description	Reference
Operating environment	Windows 11 is supported.	
Intelligent function module monitor	A device station can be monitored in a project in which a CC-Link IE TSN module (RJ71GN11-T2) is used.	Series Page 103 Registering device stations

### Version 1.017T

Item	Description	Reference
Operating environment	Windows 7, Windows 8, and Windows 8.1 are no longer supported.         Lac         CW Configurator Installa           Instructions         I	
Configuration devices	The following module is supported: <pre></pre>	
Connection destination	The connection that relays the following network interface board is supported. • CC-Link IE TSN interface board	ে Page 15 Connection through I/ F boards
	<ul> <li>When using CC-Link IE TSN modules (RJ71GN11-T2, RJ71GN11-SX), a module name displayed in the "Specify Connection Destination" screen is changed as follows:</li> <li>Before change: RJ71GN11-T2</li> <li>After change: RJ71GN11</li> </ul>	_
CC-Link IE TSN configuration window	In a project using a CC-Link IE TSN module (RJ71GN11-SX), a CC-Link IE TSN system can be configured using this window.	_
	When the following parameter of a CC-Link IE TSN module (RJ71GN11-SX) is set to "Extend," "Communication Period Setting (LB/LW)" of a master station can be selected. • "Application Settings" ⇔ "LB/LW Points Extended Setting"	_
CC-Link IE TSN diagnostics	The following module can be diagnosed: • CC-Link IE TSN module (RJ71GN11-SX)	_
Others	MELSOFT Update Manager is supported.	-

Version 1.018U			
Item	Description	Reference	
Configuration devices	The following modules are supported: • AC input module (RX10-TS) • DC input modules (RX40C7-TS, RX41C4-TS) • Contact output module (RY10R2-TS) • Transistor output modules (RY40NT5P-TS, RY40PT5P-TS, RY41NT2P-TS, RY41PT1P-TS) • Temperature control modules (R60TCTRT2TT2-TS, R60TCRT4-TS)	Canfiguration Manual	
Adding new modules	A module can be searched for in the "Add New Module" screen.	Page 58 Adding a module	

### INDEX

B	8	
	BUS RESET/Y STOP/Y OUT switch 1	17
С	;	
	Clearing value       1         Clock       1         Color       1         Color value       1         Current value       1	19 15 28 99
		07
F	Data	87
	-	4.4
		14
F		
-	Font	28
	T Ont	20
I		
	I/O assignment setting	56
	Initialization	19
	Inter-module synchronization setting	56
N	1	
	Monitoring function	96 56
N	1	
-	Network configuration	61
D		
		44
P		
		47
	Remote operation	17
		.,
S	6	
	Shortcut key	27
	Single file format.	<u>3</u> 4
	System monitor	05
Т		
	Title	39
U	l	
	USB driver	21

### W

## REVISIONS

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SH(NA)-081382ENG-Q(2406) MODEL: SW1DND-RCCPU-O-E

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