



## FA Integrated Engineering Software

## Let's start iQ Works Version 2

-SW2DND-IQWK-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 of the programmable controller system, refer to the user's manual for the module used and the MELSEC iQ-R Module Configuration Manual. In this manual, the safety precautions are classified into two levels: " A 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 "ACAUTION" 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 Instructions]

## 

• When data change, program change, or status control is performed from a personal computer to a running CPU module, create an interlock circuit outside the programmable controller system to ensure that the whole system always operates safely.

Furthermore, for the online operations performed from a personal computer to a CPU module, the corrective actions against a communication error due to such as a cable connection fault should be predetermined as a system.

## [Startup/Maintenance Instructions]

## 

- The online operations (Program change, operating status change such as RUN-STOP switching, and remote control operation) performed from a personal computer to a running CPU module have to be performed after the manual has been carefully read and the safety has been ensured.
- When changing a program while a CPU module is RUN, it may cause a program corruption in some operating conditions. Fully understand the precautions before use.

## **CONDITIONS OF USE FOR THE PRODUCT**

(1) Mitsubishi 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 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'S USER, 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 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 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 representative in your region.

## INTRODUCTION

Thank you for purchasing the FA integrated engineering software MELSOFT.

This manual describes programming and the functions required when using iQ Works Version 2.

Before using this product, please read MELSOFT Navigator Help carefully, and develop familiarity with the functions and performance of iQ Works Version 2 to handle the product correctly.

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#### 5

## **RELEVANT MANUALS**

Manual name [manual number]	Description	Available form
Let's start iQ Works Version 2	Explains fundamental methods for such as managing the system using	Print book
[SH-081261ENG] (this manual)	MELSOFT Navigator and using system labels for users inexperienced with iQ Works.	e-Manual PDF

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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.
- Sample programs can be copied to an engineering tool.

## TERMS

Unless otherwise specified, this manual uses the following terms.

Term	Description
Controller	A generic term for CPU module, motion controller, and GOT.
CW Configurator	A generic product name for SWnDND-RCCPU. ('n' indicates its version.)
FR Configurator2	A generic product name for SWnDND-FRC2. ('n' indicates its version.)
GOT	A generic term for Mitsubishi Graphic Operation Terminal GOT1000 series and GOT2000 series.
GT Designer3	A generic product name for SWnDNC-GTWK3. ('n' indicates its version.)
GX Works2	A generic product name for SWnDNC-GXW2. ('n' indicates its version.)
GX Works3	A generic product name for SWnDND-GXW3. ('n' indicates its version.)
iQ AppPortal	A generic product name for SWnDND-IQAPL-M. ('n' indicates its version.)
MELSOFT Navigator	A product name for the integrated development environment included in SWnDND-IQWK (MELSOFT iQ Works). ('n' indicates its version.)
MT Developer2	A generic product name for SWnDNC-MTW2. ('n' indicates its version.)
Network	A generic term for CC-Link IE controller network, MELSECNET/H, and Ethernet.
Personal computer	A generic term for personal computers on which Windows® operates.
RnENCPU	A generic term for R04ENCPU, R08ENCPU, R16ENCPU, R32ENCPU, and R120ENCPU.
RnPCPU	A generic term for R08PCPU, R16PCPU, R32PCPU, and R120PCPU.
RnSFCPU	A generic term for R08SFCPU, R16SFCPU, R32SFCPU, and R120SFCPU.
RT ToolBox3	A generic product name for 3F-14C-WINE/3F-15C-WINE/3F-16D-WINE.
System configuration diagram	A generic term for configuration diagrams such as network configuration and module configuration on which the configuration of respective devices are displayed graphically.
Windows <sup>®</sup> 8 or later	A generic term for Windows <sup>®</sup> 8, Windows <sup>®</sup> 8.1, and Windows <sup>®</sup> 10.

For the definitions of terms for redundant systems, refer to the following manual. MELSEC iQ-R CPU Module User's Manual (Application)

# 1 OVERVIEW

This chapter explains the purpose and features of MELSOFT iQ Works.

## 1.1 About MELSOFT iQ Works

MELSOFT iQ Works is an integrated engineering software product which includes GX Works3, GX Works2, MT Developer2, GT Designer3, and RT ToolBox3.

While sharing design information such as system designs and programming in the whole control system, the system designing and programming efficiency are improved, and thus the total programming cost is reduced.

This manual explains the system management method using MELSOFT Navigator.

MELSEC iQ-R series, MELSEC iQ-F series, Q series, L series, and FX series are supported by MELSOFT Navigator. This manual explains the operations on MELSEC iQ-R series or Q series.



 MELSOFT iQ Works includes FR Configurator2 (Mitsubishi inverter setup software) and CW Configurator (Setting/ monitoring tool for C Controller module).

- Start MELSOFT Navigator and engineering software products by selecting an item from Start on Windows<sup>®</sup> as follows:
- GX Works3: [MELSOFT]  $\Rightarrow$  [GX Works3]<sup>\*1</sup>  $\Rightarrow$  [GX Works3]
- GX Works2: [MELSOFT]  $\Rightarrow$  [GX Works2]<sup>\*1</sup>  $\Rightarrow$  [GX Works2]
- MT Developer2: [MELSOFT]  $\Rightarrow$  [MT Works2]<sup>\*1</sup>  $\Rightarrow$  [MT Developer2]
- GT Designer3: [MELSOFT]  $\Rightarrow$  [GT Works3]<sup>\*1</sup>  $\Rightarrow$  [GT Designer3]
- RT ToolBox3: [MELSOFT]  $\Rightarrow$  [RT ToolBox3]<sup>\*1</sup>  $\Rightarrow$  [RT ToolBox3]
- FR Configurator2: [MELSOFT] ⇔ [FR Configurator2]
- CW Configurator: [MELSOFT]  $\Rightarrow$  [CW Configurator]
- \*1 Does not appear in Windows  $^{\ensuremath{\mathbb{R}}}$  8 or later.

## 1.2 Features

This section explains the features of MELSOFT iQ Works.

#### Project management using graphical system configuration diagrams

Projects can be managed by using graphical diagrams of the actual hardware device configuration of the whole system, linking each device and project.

Only by placing the prepared elements, the configuration diagram as follows can be created easily.



(1) The module configuration window is displayed by double-clicking each module configuration diagram on the network configuration window.

(2) The project related to each module is displayed by double-clicking each module on the module configuration window.

#### 1

#### Improved project management efficiency

#### ■ Multiple project management using a workspace

Multiple project data (programmable controller projects, motion controller projects, GOT projects, and robot controller projects) can be managed totally using a workspace.

Created date and modified date of each project can be confirmed with the project list.



#### 1 OVERVIEW 1.2 Features **9**

#### Simplified parameter settings

Parameters, such as I/O assignment and network parameters can be configured without opening each engineering software (GX Works3, GX Works2, MT Developer2, and GT Designer3).

For multiple CPU configuration, parameters set to the project in CPU No.1 can be utilized for the project on CPU No.2 and later.

For details on the parameter setting function, refer to the following chapter.

Page 19 OPERATING PROCEDURE OF MELSOFT Navigator



#### Improved programming efficiency using system labels

System labels are the labels that can be used in any project in the workspace (in the devices allocated in the network configuration diagram or module configuration diagram).

Programming (drawing) efficiency is improved by opening devices of the programmable controller projects and motion controller projects as system labels, and sharing them in multiple projects.

As the device assignment settings are changed in batch, device assignment changes are not necessary on other projects or graphics.

There are two kinds of system labels; system label Ver.1 and system label Ver.2. For details on the functions of each system label, refer to MELSOFT Navigator Help.

For the method on how to use the system labels, refer to the following chapter.

Page 89 USING SYSTEM LABELS



To use the system labels in MELSOFT iQ Works, the following two methods can be used:

- Top-down design method which utilizes system labels registered in MELSOFT Navigator from each controller project.
- · Bottom-up design method which utilizes global labels (labels) defined as system labels in each controller project.

#### ■ Top-down design method

Design system labels for accessing GOT or communicating among the devices after designing network configuration in the upper process.

In the top-down design method, register system labels to the DB (system label database) using MELSOFT Navigator, import them to global labels of controller projects (such as programmable controller projects, motion controller projects, and GOT projects), and then assign devices.



#### Bottom-up design method

Design system labels for accessing GOT by using global labels which are registered to the DB (system label database) in controller projects as system labels, for a such case when configuring system by utilizing existing projects.



#### Debugging efficiency using the interaction simulation

The interaction simulation is a function that debugs different projects on the workspace efficiently by synchronizing the time in each simulator (GX Simulator2, MT Simulator2, RoboSim).

Programming efficiency is improved by debugging programs in different simulators simultaneously.



The interaction simulation function can be easily used by preparing the following.

- · Create an interaction simulation configuration setting file by specifying a target device from each project.
- Enable each simulator to interact.
- Specify the simulation time on the "Interaction Simulation" screen.

For details on the interaction simulation, refer to MELSOFT Navigator Help.

#### Simplified data backup operation

All controller projects in the workspace can be read and saved in batch without opening each engineering software (GX Works3, GX Works2, MT Developer2, and GT Designer3).

For details on the Batch read function, refer to the following chapter.

Page 131 CREATING SYSTEM BACKUP DATA



#### Improved programming efficiency by interacting with motion controller programs

For Q series, a motion controller program, which corresponds to the motion dedicated programmable controller instruction selected in the sequence program, can be activated by a simple mouse operation. This function significantly improves programming efficiency.

For details on the Program jump function, refer to the following chapter.

Page 136 USING PROGRAM JUMP FUNCTION



(1) Activate the programmable controller project (GX Works2).

(2) The motion controller project corresponds to the selected motion dedicated programmable controller instruction is activated.

## **2** SCREEN CONFIGURATION

This chapter explains the screen configuration of MELSOFT Navigator.

## 2.1 Screen Configuration

#### Window



#### Displayed items

Item	Description
Title bar	Displays a title of product name, workspace path, and active window.
Menu bar	Displays items of the basic menu.
Toolbar	Displays tool buttons for functions performed frequently.
Workspace window	Displays objects managed in a workspace in tree format.
Bird's-eye window	Displays a bird's eye view of the network configuration window.
Module Configuration window	Set the details of MELSEC iQ-R series/MELSEC iQ-F series/Q series/L series/FX series module configurations which are placed on the network configuration diagram graphically.
Network Configuration window	Set a network configuration graphically.
Configuration window	Set a configuration such as CC IE Field and Ethernet graphically.
Module List window	Displays modules used for MELSEC iQ-R series/MELSEC iQ-F series/Q series/L series/FX series in a list format.
Input Detailed Configuration Information window	Configure the various parameters, such as I/O assignment and network parameters.
Output window	Displays messages and log outputs being processed in the parameter reflection process in a list format.
Task List window	Displays a result of system configuration check, power supply capacity and I/O points check, and system label consistency check in a list format.
Result of Power Supply Capacity and I/O Points Check window	Displays a result of power supply capacity and I/O points check.
Status bar	Displays information about the selected project.

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MELSOFT Navigator Help is displayed by pressing the F1 key.

## **3** OPERATING PROCEDURE OF MELSOFT Navigator

This chapter explains the methods for creating workspaces and system configurations using MELSOFT Navigator.

## 3.1 Procedure

This section explains the procedure of MELSOFT Navigator from start to end.



6. Edit the created projects	
Edit the projects	
Utilize an existing project	
Perform controller data read/write/verification	
Page 77 Editing Projects	
4	С,
7. Save the created workspace	
Page 84 Saving Workspaces	
4	Ç
8. Print the project	
Page 86 Printing Workspaces	
4	С С
9. Close the workspace	
Page 87 Closing Workspaces	
	Ç
10. Exit MELSOFT Navigator	
Page 88 Exiting MELSOFT Navigator	

#### Precautions

Do not change the storage location and names of folders/files of a created workspace/project using the application such as Windows<sup>®</sup> Explorer.

Start MELSOFT Navigator.

#### Operating procedure



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Start MELSOFT Navigator from Start on Windows<sup>®</sup>.

MELSOFT Navigator is started.

#### Create new workspace

Create a new workspace.

#### Operating procedure



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New (Workspace)			×
Save <u>F</u> older Path:			
C:\Users\Administrator\Doci	uments		Browse
Workspace List:			
Workspace		Title	
Marian an Nama	Sample WS		
workspace Name:	Sampio_ws		
<u>T</u> itle:	Sample Data		
Create a workspace in save f	older path.		
			Create Cancel









**1.** Select [Workspace] ⇒ [New] in the menu bar.

"New (Workspace)" screen is displayed.

**2.** Set "Save Folder Path", "Workspace Name", and "Title" for the new workspace.

After setting the items, click the [Create] button.

Setting content (sample)

- Save Folder Path: C:\Users\(user name)\Documents
- Workspace name: Sample\_WS
- Title (option): Sample Data

The "Choose a Default Configuration" screen is displayed.

**3.** Select "Create Module Configuration" and click the [OK] button.

Setting content (sample)

Configuration: Q Series Module Configuration

The message shown on the left is displayed.

**4.** Read the message and click the [OK] button.

🜃 MELSOFT Navigator C:\Users\Administrat	or\Documents\Sample_WS - [Q Module Configuration]	
Workspace Project Edit View Q N	1odyle Configuration Online Tools <u>W</u> indow <u>H</u> elp	- 8 ×
Workspace 4 ×	A D -	Module List 4 X
Sample WS     Network Configuration	<u> </u>	Q Module Selection   Find Module   My Favi 4 +
		[[照]] 11 11 12 12 12 12 12 12 12 12 12 12 12
Module Configuration		Main Base Module
Ethernet Configuration		Sim Type Main Base Module     Perfundant Dower Supply Main Base N
CC IE Field Configuration		E Multiple CPU High Speed Main Base Mr
Bests Friday and Project		Extension Base Module
Bird's-eye 🛛 🗘 🗙		■ Redundant Power Supply Extension B *
		1
		Input Detailed Configuration Informatio 🎙 🗙
	۲ ۲	Detailed Configuration Information Other P 4
	Output 7 ×	
		There is no detailed configuration information
		There is no becaled configuration monitation.
	Output Task List A Result of Power Supply Capacity and I/O P	4
		GAP NUM SCRL

#### **Opening existing workspaces**

Open an existing workspace.

#### Operating procedure

🚮 ME	LSOFT N	avigator				
Wo	r <u>k</u> space	<u>P</u> roject	<u>E</u> dit	⊻iew	On <u>l</u> ine	1
1	<u>N</u> ew				Ctrl+N	
	<u>O</u> pen				Ctrl+O	
18	<u>C</u> lose					

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Open (workspace)				<b>×</b>
Save <u>F</u> older Path:				
C:\Users\Administrator\Do	cuments			Browse
Workspace List:				
Workspace		Title		
Sample_WS		Sample Data		
Workspace Name:	Sample_WS			
<u>T</u> itle:	Sample Data			
Description of Icons:				
🔜 Workspace				
📔 Workspace Folder				
		(	Open	Cancel

Creating workspaces for motion system

Create a workspace for motion system using templates consist of a combination of CPU module and motion controller, which are used for multiple CPU system configuration.

#### Operating procedure

\Users\Administrator\Documents\Sample_WS					
<u>E</u> dit <u>V</u> iew	<u>E</u> dit <u>V</u> iew On <u>l</u> ine <u>T</u> ools <u>W</u> indow <u>H</u> elp				
x B B	8 8	Motion <u>D</u> edicated Device Setting Support			
	₽×	Register Profile			
		Options			

The new workspace is created.

**1.** Select [Workspace] ⇒ [Open] in the menu bar.

The "Open (Workspace)" screen is displayed.

- Select "Save Folder Path" and "Workspace" for the workspace to be opened, and click the [Open] button.
   The workspace folder copied by the application such as Windows<sup>®</sup> Explorer can also be selected.
   Setting content (sample)
- Save Folder Path: C:\Users\(user name)\Documents
- Workspace Name: Sample\_WS

**1.** Select [Tools] ⇔ [Motion Dedicated Device Setting Support] in the menu bar.

3



Select Motio Workspace Please sele	on System T is with commo ict a template	emplate nly used project combinations '.	s are prepared as templates.	×
Select Tem	plate Worksp	ace		
Works	pace Name	Title	Description	
🔽 🚾	_tmp1	Small-scale_Q172D_SV13	CPU1:QnUD(E)(H), CPU2:Q172D_SW8-SV13QD	
📃 WS	_tmp2	Small-scale_Q173D_SV13	CPU1:QnUD(E)(H), CPU2:Q173D_SW8-SV13QB	
📃 WS	_tmp3	Medium-scale_Q173D_S	CPU1:QnUD(E)(H), CPU2:QnUD(E)(H), CPU3:Q173D_SW8-SV13	
WS WS	_tmp4	Small-scale_Q172D_SV22	CPU1:QnUD(E)(H), CPU2:Q172D_SW8-SV22QC	Ŧ
٠			۴. ا	
CPU	Project Na	me Title	pace.	
1	Prj1_S	I CPU1_Q26UDH_1		
2	er Prj2_M	1 CPU2_Q172D_SW8	-5413QD_1	
It can appl Please arra	y through cha ange correspo	ange type after opening temp inding module to assign the pr e type.	late workspace in case of suitable project does not exist. oject because the assignment of module and project is	

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Motion Dedicated Device S	Setting Support			<b>—</b>
Save <u>F</u> older Path:				
C:\Users\Administrator\Do	cuments			Browse
Workspace List:				
Workspace		Title		
🖼 Sample_WS1		Sample Data		
Workspace Name:	W5_tmp1			
<u>T</u> itle:	Small-scale_Q172	D_5V13		
Create workspace in save fr	older path to open w	orkspace.	Create	Back
		٦ ر	<b>,</b>	



The message shown on the left is displayed.

**2.** Read the message and click the [Yes] button.

The "Select Motion System Template" screen is displayed.

**3.** Select the workspace name from "Select Template Workspace", and click the [Next] button.

The "Motion Dedicated Device Setting Support" screen is displayed.

**4.** Set "Save folder path" and "Workspace name" for the template workspace.

After setting the items, click the [Create] button. Setting content (sample)

- Save Folder Path: C:\Users\(user name)\Documents
- Workspace Name: WS\_tmp1

The workspace for motion system is displayed.

## **3.4** Creating System Configuration Diagram

Create a system configuration diagram.

Created module configuration diagrams are reflected to the network configuration diagram.

#### System configuration to be created

Create the following system configuration diagram.



### Creating module configuration diagrams

Create a module configuration diagram by placing modules on the Module Configuration window.

For MELSEC iQ-R series, a module configuration diagram can be created by reading from the actual system configuration. For more details, refer to the following section.

IPage 29 Detecting actual system configuration of MELSEC iQ-R series

In addition, for MELSEC iQ-R series, module configuration diagram can also be created by importing parameters in each project after allocating a controller. For details on importing parameters, refer to the following section.

Page 74 Importing parameters configured in each project

#### Operating procedure



HELSOFT Navigator D:\Use	rs\Administrator\	Documents\Sampl	e_WS - [Q conf	iguration diagram]
Wor <u>k</u> space <u>P</u> roject <u>E</u> dit	<u>V</u> iew Q Mod	ule Configuration	On <u>l</u> ine <u>T</u> oo	ols <u>W</u> indow <u>H</u> elp
i 🗅 🖻 💾 i in al 🔏 🛙	b 6   👪 🎎	😹 😫 😹 🗄 🖷	0.101/	미이티박북법
Workspace	Ψ×	🛃 Q config	uration diagrar	n 🔀
Sample_WS	tion juration on diagram			



a Q configuration diagram 🔀	4 0 🗸	Module List 4	×
	*	Q Module Selection Find Module My Favorites	
1 POWCPU_012345671	=		
		Main Base Module	-
	_	Slim Type Main Base Module	
	_	Redundant Power Supply Main Base Module	
₽ ·   ·   ·   ·   ·   ·   ·   ·   ·   ·	_	Multiple CPU High Speed Main Base Module	
T	_	Slots (Power supply is required)	
1	$\sim$	Q38DB 8 Bots (Power supply is required)	
••••••••••••••••••••••••••••••••••••••		Q312D8 12 Slots (Power supply is required)	



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- **2.** Enter 'Q configuration diagram' to change the module configuration diagram name.
- **3.** Select the base unit ( **IIII Q38DB** ) from the Module List window, and drag and drop it onto the Module Configuration window.
- Select the power supply module ( Q64P ) from the Module List window, and drag and drop it onto the base unit.

🛃 Q conf	iguration diagr	am 🗵				4 ۵ 🗸	Module List		ά×
						<u> </u>	Q Module Selec	tion   Find Module	My Favorites
POW	CPU 0	1 2 3	4	5 6	7	=	R 91 - 8	□☆啓X	
-		_		_			QJ71GP2	1-SX CC IE Con	trol 🔺
			- 8				QJ71GP2	1S-SX CC IE Con	trol (With External
	8		- 8				QJ71GF1	1-T2 CC IE Field	đ
			- H - 1				QJ71LP2:	1-25 MELSECNE	ET/H (SI Optical Ca
							QJ71LP2:	1S-25 MELSECNE	ET/H (SI Optical Ca
			- 1				📙 QJ71LP2:	1G MELSECNE	ET/H (GI Optical Ci
		CTARS	TAR				QJ71BR1:	1 MELSECNE	ET/H (3C-2V/5C-2)
		1	1				📙 QJ71NT1	18 MELSECN	ET/H (Twist Pair Ci 👻

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Module Lis

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GT27

Input Detailed Config

Q Module Selection | Find Module | My Favorites |

|☆ 🖄 🗙 Mount Module

rmation (iQ Configura

- **5.** Select modules from the Module List window, and drag and drop them onto the base unit following the same procedure in the step 4, and complete the creation of "Q configuration diagram".
- **6.** Select the GOT unit ( **GT27**\*\*-**S** ) from the Module List window, and drag and drop it onto the Module Configuration window.

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STA#STA#

The message shown on the left is displayed.

**7.** Read the message and click the [OK] button.



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**8.** Select "Serial Cable" from the Module List window, and drag and drop it onto the connection port of the GOT unit.

9. Drag and drop the edge of connection line to the connection port of the connection target CPU module.The GOT unit is connected to the CPU module.





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 Image: Second guardian diagram

 Image: Second guardian diagram

🛃 Q configuration diagram 🦯 💦 R configuration diagr

**10.** Select [Workspace] ⇒ [System Configuration] ⇒ [New] ⇒ [iQ-R Series Module Configuration] in the menu bar to create a new module configuration diagram, "iQ-R Module Configuration".

- **11.** Change the module configuration diagram name to 'R configuration diagram' following the same procedure in the step 1 and step 2.
- **12.** Select modules from the Module List window, and drag and drop them onto the base unit following the same procedure in the step 3 and step 4.
- When a module is dragged onto the base unit, the placeable areas on the base unit are displayed in light green as shown below.



• If a module is not placed properly, the whole module is displayed in pink as shown below.

iQ-R Module Selection Find Module 4

16 points(AC Inp 16 points(Positivi 16 points(High-S 16 points(High-S 32 points(Positivi

🏗 원 ( 🔚 🎫 ) 🗙 🖻 >

■ C Controller
 ■ Motion CPU
 ■ Power Suppl
 ■ CPU Extension

Input RX10 RX40C7 RX40NC6H RX40PC6H RX40PC6H RX41C4



• When a connection line is dragged and dropped onto the Module Configuration window, the connectable ports of the respective controllers are displayed as shown below.



#### ■ Considerations when placing RnENCPU

RnENCPU consists of the two slots that are the CPU part and the network part.

The module configuration diagram shows the CPU module representing the CPU part and the CPU extension module (\_RJ71EN71) representing the network part in combination.

Place a CPU extension module (\_RJ71EN71) on the right side of RnENCPU.

For the considerations when using an RnENCPU as CPU No.1, refer to the following manual.

MELSEC iQ-R Module Configuration Manual

#### Considerations when placing an RnPCPU (redundant mode)

There are two operation modes in an RnPCPU: process mode and redundant mode. A project used for an RnPCPU (redundant mode) can be created by selecting "Redundant" for the operation mode when creating a new project. ( SP Page 52 Creating Projects)

In addition, two systems (both systems), control system and standby system, are managed in a project for an RnPCPU (redundant mode).

The module configuration diagram shows the CPU module (RnPCPU) and the CPU extension module (R6RFM) in combination.

Place a CPU extension module (R6RFM) on the right side of RnPCPU.

For an RnPCPU (redundant mode) configuration, create only a control system on the module configuration diagram.

When an RnPCPU (redundant mode) and R6RFM are placed on the module configuration diagram, "Redundant" is displayed on the bottom left of the base unit to indicate that it is a redundant system.



For details on a redundant system, refer to the following manual.

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

#### Considerations when placing RnSFCPU

RnSFCPU is a CPU module that provides safety control by combining with a safety function module.

The module configuration diagram shows the CPU module (RnSFCPU) and the CPU extension module (R6SFM) in combination.

Place a CPU extension module (R6SFM) on the right side of RnSFCPU.

#### ■ Detecting actual system configuration of MELSEC iQ-R series

The actual system configuration in a CPU No.1 can be reflected on the Module Configuration window by selecting [iQ-R Module Configuration]  $\Rightarrow$  [Online]  $\Rightarrow$  [Module Configuration Detect Now] in the menu bar.

When detecting the actual system configuration on other than CPU No.1, right-click the target CPUs on the iQ-R module configuration diagram, and select [Online] ⇔ [Module Configuration Detect Now] from the shortcut menu.

For automatic detection, a project which can be connected to MELSEC iQ-R series CPU module is required.

#### Connection ports of GOT unit

By setting parameters on the Input Detailed Configuration Information window, I/F type and number of connectable points of GOT unit can be changed.



#### Creating module configuration diagrams for L series

For L series, create module configuration diagrams refer to this section.

Basically, L series module configurations can be created in a similar way to MELSEC iQ-R series or Q series.

For the operations that differ from MELSEC iQ-R series or Q series, refer to the Point in this section.

Page 34 Attaching display unit

#### Point P

When creating workspaces of L series, select "L Series Module Configuration" in the "Choose a Default Configuration" screen. For the method of creating workspaces, refer to the following section.

Choose a Default Configurat	on
Please select a creation meth	od of configuration diagram from the following.
Create <u>N</u> etwork Configu	ration
Oreate Module Configure	ation
Configuration IO-R Se	ries Module Configuration
iQ-R Se	ries Module Configuration ies Module Configuration
Q Serie This setting ca <mark>L Series</mark>	Module Configuration Module Configuration
FX Serie	Module Configuration
	Duck

#### System configuration to be created



#### Creating module configuration diagrams

#### Operating procedure



 Right-click "Module Configuration" on the Workspace window, and select [Module Configuration] 

 ⇒ [New] 
 ⇒ [L Series Module Configuration] in the shortcut menu.



2. Right-click "L Module Configuration" on the Workspace window, and select [Module Configuration] ⇔ [Rename] in the shortcut menu.

- **3.** Enter 'L configuration diagram A' to change the module configuration diagram name.
- **4.** Select modules from the Module List window, and drag and drop them onto the Module Configuration window following the same procedure as Q series in the step 4 through step 9.
- Page 26 Creating module configuration diagrams
- When a module is dragged onto the Module Configuration window, the placeable areas are displayed in light blue as shown below.

No ERR Terminal With ERR Termina



• When a placed module is deleted from the Module Configuration window, the modules adjacent to the deleted module are automatically placed as shown below.



#### ■ Attaching display unit

Display unit can be attached on L series CPU modules.

#### Operating procedure

🛃 L configuration diagram A 🛛 🔂 L configuration diagram B 🔀 👘				
		1		
POW	OP	CPU 🔏	Cut	
		Ē	Сору	
			Paste	
l S			Select <u>A</u> ll	
8			Delete	
		STA#	Bring to <u>F</u> ront	
		2	Send to <u>B</u> ack	
		CH1	Allocate Project With The Controller	
			Pr <u>oj</u> ect	
			Open System Configuration	
			CP <u>U</u> Setting	
			Chec <u>k</u>	
			On <u>l</u> ine •	
			Para <u>m</u> eter	
		Σ¥2	Start ≚Y Batch Input	
		e	Default Points Batch Input	
			P <u>r</u> operties	

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Properties	×
Model Name	L02CPU
Object Name	LO2CPU
Display Module Commer	nt
O Uninstalled	
Select Model Name	
LEDSPU	
Outline Specification	
[Outline] PLC CPU	Â
[Specification] Program Capacity: 20	< Step
Built-in I/O Function: I nterrupt/General I/O	Positioning/High Speed Counter/Pulse Catch/I 🦰 (Sink Type Output)
Peripheral Device Con [I/O Points]	nection Port: USB, Ethernet
1024	<b>•</b>
	OK Cancel



 Right click the CPU module on the Module Configuration window, and select [Properties] in the shortcut menu.

The "Properties" screen is displayed.

 Select "Installed" in the [Display Module] tab and select the model name to be attached from "Select Model Name". After selecting them, click the [OK] button.
 Setting content (sample)

Select Model Name: L6DSPU

The display unit is attached on the CPU module.
### Creating module configuration diagrams for MELSEC iQ-F series/FX series

For MELSEC iQ-F series/FX series, create module configuration diagrams refer to this section.

Basically, MELSEC iQ-F series/FX series module configurations can be created in a similar way to MELSEC iQ-R or Q series.

### Point P

When creating workspaces of MELSEC iQ-F series or FX series, select "iQ-F Series Module Configuration" or "FX Series Module Configuration" in the "Choose a Default Configuration" screen. For the method of creating workspaces, refer to the following section.

Page 22 Creating Workspaces



### Precautions

The model name of special blocks of FX series that support MELSOFT iQ Works are displayed on the Module List window when the related software<sup>\*1</sup> is installed. When using special blocks, install the related software of the respective modules in advance.

\*1 For information on obtaining the related software, consult your local Mitsubishi representative.

### FX series modules that support MELSOFT iQ Works

Main unit

FX3S, FX3G, FX3GC, FX3U, FX3UC

- Special block
  - Ethernet special function block (FX-ENET series)
- · Special adapter

Ethernet communication special adapter (FX3U-ENET-ADP)

For FX series, special blocks and special adapters are attached to a main unit which combines power supply, CPU, and I/O module.

However, the following blocks and units are not supported: special blocks and special units which do not contain related project or configuration software, and extension blocks which do not support a function to check power supply capacity and I/ O points.

### Parameters of FX series special adapters

The parameters of special adapters can be set on the Input Detailed Configuration Information window.

The setting content is reflected to the parameter of a GX Works2 project by performing parameter reflection. For details on the parameter settings, refer to the following section.

Page 62 Setting/Reflecting/Importing Parameters

### System configuration to be created



### Creating module configuration diagrams

### Operating procedure

Workspace Project Edit	<u>View</u> Online <u>T</u> ools <u>W</u> indow <u>H</u> elp			
🗋 🔛 💾 💷 🖓 🗒				
Workspace	<del>ā</del> ×			
E Sample_FX_WS				
🖶 🛄 Network Configuratio	in l			
Network Configu	ation			
Ethernet Configu	Check	•		
	Parameter	•		
CC-Link Configura	- Madula Can Canadian			
No Assignment P	Module Configuration	• <u>N</u> ew	<u> </u>	iQ- <u>R</u> Series Module Configuration
Structured Data	Allocate Project With The Controller		<u>8</u>	iQ-E Series Module Configuration
E M Ver.1 System Lab	Eolder	•	8	Q Series Module Configuration
🗆 🏪 Undefined_Na	Export Project			L Series Module Configuration
	Evnort as 1 file format project			EX Series Module Configuration
	exported a me ronmet projection			



Right-click "FX Module Configuration" on the
 Workspace window, and select [Module Configuration]
 ⇒ [Rename] in the shortcut menu.

- **3.** Enter 'FX module configuration diagram' to change the module configuration diagram name.
- **4.** Select modules from the Module List window, and drag and drop them onto the Module Configuration window following the same procedure as Q series in the step 4 through step 9.
- Page 26 Creating module configuration diagrams
- Select [Workspace] ⇒ [System Configuration] ⇒ [New]
   ⇒ [iQ-F Series Module Configuration] in the menu bar to create a new module configuration diagram, "iQ-F Module Configuration".



MELSOFT Navigator D:\Users\Administrator\	Documents\Sample_FX_WS - [FX5 configuration diagram]
Wor <u>k</u> space <u>P</u> roject <u>E</u> dit <u>V</u> iew iQ-FM	odyle Configuration Online Iools Window Help
🗅 🖻 💾 🕪 🗠 🗶 🗈 🖪 🔡 😹	* * * * 이 / ㅁㅇ 티 백 막
Workspace 🛛 🛱 🗙	😹 FX configuration diagram 😹 FX5 configuration diagram 🗵
Grand Sample_FX_WS     Metwork Configuration     Metwork Configuration     Module Configuration     Module Configuration     Module Configuration	

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- **6.** Change the module configuration diagram name to 'FX5 module configuration diagram' following the same procedure in the step 2 and step 3.
- **7.** Select modules from the Module List window, and drag and drop them onto the Module Configuration window following the same procedure as Q series in the step 3 and step 4.
- Page 26 Creating module configuration diagrams

• When a module is dragged onto the Module Configuration window, the placeable areas are displayed in light blue as shown below.



Mountable area

### Creating network configuration diagrams

Create a network configuration diagram by placing and connecting the module configuration diagrams on the Network Configuration window.

### Operating procedure









**1.** Double-click "Network Configuration" on the Workspace window.

The Network Configuration window is opened. All module configuration diagrams created on the module configuration diagrams are displayed.

- **2.** Drag and drop the module configuration diagram to arbitrary positions.
- **3.** Select "Ethernet" in "Network" on the Module List window, and drag and drop it onto the Network Configuration window.
- Select "Ethernet Configuration" in "Configuration Device" on the Module List window, and drag and drop it onto the Network Configuration window.
   The Ethernet configuration is placed with Ethernet connected. Ethernet configuration is also added on the Workspace window.
- Select "CC IE Field" in "Network" on the Module List window, and drag and drop it onto the Network Configuration window.

CC IE Field configuration is added on the Workspace window.

**6.** Select "Network Cable" from the Module List window, and drag and drop it onto the Network Configuration window.



**7.** Drag and drop the edge of connection line to the connection port of the connection target module configuration diagram.

A connection port of CC IE Field configuration is added to the module configuration diagram that is connected to CC IE Field configuration.

Connection port of CC IE Field configuration



**8.** Double-click "Q configuration diagram" on the Workspace window.

Workspace



Network Configuration	Q configuration diagram	4 ۵ س	Module List	4 ×
	CCIE Field Configuration Network	No.2 *	Q Madule Selection   Find Madule   My Favorite:	d i
			122 段 122 221 🖈 🗠 🗙	
			GOT2000 Series	*
			GOT1000 Series	
			Robot (FQ Series Vertical 6-axis type)	
POW LPU 0 1			Robot (FQ Series Horizontal 4-axis type)	
and the second sec			Robot (SQ Series Vertical 6-axis type)	
			Robot (SQ Series Vertical 5-axis type)	
			Robot (SQ Series Horizontal Ceiling Mour	nted
			Robot (SQ Series Horizontal 4-axis type)	
			Partner Products	
			Component Device	

The Module Configuration window is displayed.

- **9.** Select "Network Cable" from the Module List window, and drag and drop it onto the Module Configuration window. Then connect it to the connection port of CC IE Field configuration.
- **10.** Drag and drop the edge of connection line to the connection port of the connection target CC-Link IE Field Network module.

### ■ Detecting actual system configuration of CC-Link IE Controller Network automatically

The actual system configuration can be reflected to the target module configuration with the following operation.

• Right-click the CC-Link IE Controller Network on the Network Configuration Diagram, and select [Online] ⇒ [Detect Now] in the shortcut menu.

For the automatic detection, a project which can be connected to the control station of CC-Link IE Controller Network is required.



### Network Configuration window

• A Module Configuration window/CC-Link Configuration window opens by double-clicking the module configuration diagram/ CC-Link configuration on the Network Configuration window.

For Ethernet/CC IE Field/CC-Link IEF Basic, each configuration window can be opened with the same operation as above. When opening Ethernet Configuration window/CC-Link IEF Basic Configuration window, the IP address of an Ethernet module or an Ethernet built-in CPU which is handled as an own station is required to be set in advance. For the setting method, refer to the following sections.

(
Page 42 Creating Ethernet configurations)

( Page 46 Creating CC-Link IEF Basic configurations)

• The whole system created on the Network Configuration window can be checked on the Bird's-eye window.

### Setting station No. in batch

Select [Network Configuration] ⇒ [Batch Setting All Network Station No.] in the menu bar to set the following network station No. in batch.

- Ethernet
- CC-Link IE Controller Network
- MELSECNET/H

### Setting IP addresses in batch

Right-click Ethernet on the Network Configuration window and select [IP Address Batch Setting] in the shortcut menu to set IP addresses of Ethernet in batch.

### **Creating Ethernet configurations**

Create a configuration diagram by placing modules on the Ethernet Configuration window.

### Operating procedure









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Input D





The Network Configuration window is opened.

2. Select the Ethernet configuration and select the IP address of the Ethernet built-in CPU or Ethernet module which is handled as an own station on the Input Detailed Configuration Information window.

"Module Configuration Name", "Object Name", and "Port No." are automatically displayed.

**3.** Double-click "Ethernet Configuration" on the Workspace window.

The Ethernet Configuration window is opened.

**4.** Select "HL-C2"<sup>\*1</sup> from the Module List window, and drag and drop it onto the Ethernet Configuration window.

Compution

 Detect Now

 No. Model Name Communication Protoci SeqUENCE PAddess Port No. Mod Address Por

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HL-C2

 Set "Port No." in "PLC" and "IP Address" in "Sensor/ Device".

Set the other items as necessary.

\*1 For details on the parameter processing of Ethernet devices, refer to the following manual.

### Detecting actual system configuration

The actual system configuration can be reflected to the Ethernet Configuration window with any of the following operations.

- Click the [Detect Now] button on the Ethernet Configuration window

For details on the automatic detection of the connected Ethernet devices, refer to the following manual.

III iQ Sensor Solution Reference Manual

#### Reflecting communication settings of Ethernet devices

Select [Ethernet Configuration]  $\Rightarrow$  [Online]  $\Rightarrow$  [Communication Setting Reflection of Ethernet Device] to reflect the communication settings of Ethernet devices.

For details, refer to the following manual.

III iQ Sensor Solution Reference Manual

#### Deleting Ethernet devices

Ethernet configuration A												
			Detect Now									
		No.	Model Name	Communication Method	Protocol	Fixed Buffer Send/Receive Setting	PLC IP Address					
	■ ₽	1 (	Host Station (L26CPU-P) HL-C2	)	TCP		192.168.3.39 192.168.3.39					

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📅 MELSOFT Navigator (	)\Use	rs∖Admini	strator\Docu
Wor <u>k</u> space <u>P</u> roject	Edit	⊻iew	Ethe <u>r</u> net Cor
i 🗅 🖻 🖪 🛯 ino ani	10	<u>U</u> ndo	Ctrl +Z
Workspace		<u>R</u> edo	Ctrl+Y
Sample WS	*	Cu <u>t</u>	Ctrl+X
📄 📒 Network Con	Đ	Copy	Ctrl+C
Module Confir	G	<u>P</u> aste	Ctrl+V
🛛 🖓 R configur		Select All	Ctrl+A
Q configu		<u>D</u> elete	Delete
	confic	uration A	

- **1.** Select the row of the Ethernet device to be deleted. (Multiple rows can be selected.)
- **2.** Select [Edit]  $\Rightarrow$  [Delete] in the menu bar.

#### Precautions

Check that the Ethernet module on the module configuration diagram is connected to the connection port of an Ethernet configuration.

If not, the Ethernet Configuration window cannot be opened.

3

### **Creating CC IE Field configurations**

Create a configuration diagram by placing modules on the CC IE Field Configuration window.

### Operating procedure



 Double-click "CC IE Field Configuration" on the Workspace window.
 CC IE Field Configuration window is opened.

Change the name as necessary.

**2.** Change the "Station Type" to "Master Station" on the CC IE Field Configuration window.





**3.** Select "NZ2GFCE3-16D"<sup>\*1</sup> from the Module List window, and drag and drop it onto the CC IE Field Configuration window.



**4.** Select modules to be connected from the Module List window, and drag and drop them onto the CC IE Field Configuration window following the same procedure in the step 3.

			Detect Now									
. !	Mode Setting: Online (Standard Mode		de)	Assignment Method:	Start/End 🔹			Link Scan Time (Approx.):			ox.): 0.72	
			Madel Name			RX/RY Setting			RWW/RWr Setting			Reserved/Erro
1		NO.	Piquei Nallie	5144	Station type	Points	Start	End	Points	Start	End	Invalid Statio
	10	0	QJ71GF11-T2	0	Master Station	_					_	
	-	1	NZ2GFCE3-16D	1	Remote Device Station	16	0000	000F	20	0000	0013	No Setting
	1	2	NZ2GF2B-60TCRT4	2	Remote Device Station	64	0010	004F	32	0014		No Setting

5. Set "RX/RY Setting" and "RWw/RWr Setting" of each module.

Set the other items as necessary.

\*1 For details on the parameter processing of slave stations, refer to the following manual or manuals for each slave station used. GX Works2 Version 1 Operating Manual (Common)

### Detecting actual system configuration

The actual system configuration can be reflected to the CC IE Field Configuration window with any of the following operations.

- · Click the [Detect Now] button on the CC IE Field Configuration window
- Select [CC IE Field Configuration] ⇒ [Online] ⇒ [Detect Now] in the menu

For details, refer to the following manual.

III iQ Sensor Solution Reference Manual

### Detecting actual system configuration (redundant system)

For a redundant system, the actual system configuration of the control system can be reflected on the CC IE Field Configuration window by using the automatic detection function of connected devices.

To reflect the module of the standby system on the CC IE Field Configuration window, link the existing device with the project by following the procedure below.

## Old Module to be Rel No. Configuration Name Station No. Model Name 1 CC IE Field Configuration 1 RJ71GF11-T2(SR) elation to the selected module in the CC IE Fi When be related, station No./station type will be replaced with the setting co Please check the integrity of parameter or sequence program of the project.

- 1. Select the module of the control system which is detected from the connected device on the CC IE Field Configuration window, and select [Change Module] ⇒[Old Module to be Related] from the shortcut menu.
- The "Old Module to be Related" screen is displayed.
- 2. Select a module from "Candidate to be Related".

### Deleting slave stations of CC IE Field

đ	🚰 CC IE Field configuration A 📃 🗖 💌												
		Mode S	Setting	Online (Norn	nal Moo	de)   Assignment Method: Start/End					•]	Link S	
		Ni-		Mandal Mana		Challing Turns	RX,	RY Setti	ng	RWw/RWr Setting			
			NU.	mouermane	51A#	Station Type	Points	Start	End	Points	Start	End	
			0	OJ71GF11-T2	0	Master Station							
		<b>E</b>	1	NZ2GF2B1-16D	1	Remote Device Station	16	0000	000F	20	0000	0013	
	Ŀ	<b>E</b>	1	NZ2GF2B1-16D	1	Remote Device Station	16	0000	000F	20	0000	0013	

Ctrl+Y

Ctrl+C

Ctrl+∆

Delete

Select All

Delete

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- **1.** Select the row of the slave station to be deleted. (Multiple rows can be selected.)
- **2.** Select [Edit]  $\Rightarrow$  [Delete] in the menu bar.

### Precautions

🚟 MELSOFT Navigator C:\Users\Administrator\Docu Wor<u>k</u>space <u>P</u>roject <u>E</u>dit <u>V</u>iew CCIE<u>F</u>ield C

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 Network Con
 Dopy
 Module Config
 Paste

😹 Configurat

Ethernet Co

Workspace

🖃 🔠 Sample\_WS

Check that the CC-Link IE Field module on the module configuration diagram is connected to the connection port of a CC IE Field configuration.

If not, the modules are not displayed on the CC IE Field Configuration window.

When a master/local module or head module is added on the CC IE Field Configuration window, the module configuration diagram for the added module is added.

### **Creating CC-Link IEF Basic configurations**

Create a configuration diagram by placing modules on the CC-Link IEF Basic Configuration window.

### Operating procedure



**1.** Double-click "Network Configuration" on the Workspace window.

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- The Network Configuration window is opened.
- Select the CC-Link IEF Basic configuration and select the IP address of the Ethernet built-in CPU which is handled as an own station on the Input Detailed Configuration Information window.

"Module Configuration Name" and "Object Name" are automatically displayed.

 Workspace
 9 ×

 Image: State S

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**3.** Double-click "CC-Link IEF Basic Configuration" on the Workspace window.

The CC-Link IEF Basic Configuration window is opened.

**4.** Select "FR-A800-E"<sup>\*1</sup> from the Module List window, and drag and drop it onto the CC-Link IEF Basic Configuration window.





<u> </u>	<u>а</u> сс-і	ink IE	F Basic Config 🗵 🛄 N	etwork (	Configuration	💑 Q Module Configurat	ion 🚦	iQ-R	Module	Config	uration	]	
			Detect Now		Link Scan Setting	Refre	sh Setti	ng					
	Conne	cted G	punt 1										
		Alo.	Model Name	STOP	Station Tuna	RX/RY Setting	,		R₩w	/RWr Se	tting	Group No.	DEUD STA
		140.	Prodol Indillo	5100	scoolinype	Points	Start	End	Points	Start	End	group No.	KOVD JIH
	-	0	Host Station (R16ENCPU)	0	Master Station								
		1	FR-A800-E	1	Slave Station	64 (1 Occupied Station)	0000	003F	32	0000	001F	1	No Setting

- **5.** Set points for each module to "RX/RY Setting". Set the other items as necessary.
- \*1 For details on the parameter processing of slave stations, refer to the following manual.

### Detecting actual system configuration

The actual system configuration can be reflected to the CC-Link IEF Basic Configuration window with any of the following operations.

- · Click the [Detect Now] button on the CC-Link IEF Basic Configuration window

For details on the automatic detection of the connected CC-Link IEF Basic modules, refer to the following manual.

CC-Link IE Field Network Basic Reference Manual

### Reflecting communication settings on stave stations

Configure the refresh setting by clicking the [Refresh Setting] button on the CC-Link IEF Basic Configuration window. Select [CC-Link IEF Basic Configuration] ⇒ [Online] ⇒ [Communication Setting Reflection of Slave Station] to reflect the communication settings on slave stations.

For details, refer to the following manual.

CC-Link IE Field Network Basic Reference Manual

### Deleting slave stations of CC-Link IEF Basic



Ctrl+Z

Ctrl+Y

Ctrl+X

Ctrl+C Ctrl+V

Delete

Select All Ctrl+A Delete

**1.** Select the row of the slave station to be deleted. (Multiple rows can be selected.)

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### Precautions

HELSOFT Navigator C:\WS\Sample\_WS - [CC-Link Workspace Project Edit View CC-Link IEF B

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Network Con 👔 Copy

🗄 🖻 💾 🗽 🗠 🗠 Undo

는 Module Confid Good Control
 Good Contro
 Good Control
 Good Control
 Good Control
 Go

Workspace

Sample\_WS

Check that the module which can be used as the master station of CC-Link IE Field Network Basic on the module configuration diagram is connected to the connection port of a CC-Link IEF Basic configuration. If not, the CC-Link IEF Basic Configuration window cannot be opened.

### **Creating CC-Link configurations**

Create a configuration diagram by placing modules on the CC-Link Configuration window.

When creating CC-Link configuration, add a CC-Link configuration on the Network Configuration Diagram and connect it to CC-Link configuration on the module configuration diagram in advance.

Page 39 Creating network configuration diagrams

### Operating procedure



**1.** Double-click "CC-Link Configuration" on the Workspace window.



The CC-Link Configuration window is opened.

**2.** Select "AJ65SBTB1-8D" from the Module List window, and drag and drop it onto the CC-Link Configuration window.

CC-Link configuration is added on the Module Configuration window.



**3.** Select modules to be connected from the Module List window, and drag and drop them onto the CC-Link Configuration window following the same procedure in the step 2.

### Detecting actual system configuration

The actual system configuration can be reflected to the CC-Link Configuration window with any of the following operations.

- Click the [Detect Now] button on the CC-Link Configuration window
- Select [CC-Link Configuration]  $\Rightarrow$  [Online]  $\Rightarrow$  [Detect Now] in the menu

For details, refer to the following manual.

iQ Sensor Solution Reference Manual

### ■ Verifying CC-Link configuration against the actual system configuration

The CC-Link configuration can be verified against the actual system configuration by performing one of the following operations.

Click the [Verify] button on the CC-Link Configuration window

• Select [CC-Link Configuration] ⇔ [Online] ⇔ [Verification of the Configuration with the Connected Module] in the menu For details, refer to the following manual.

III iQ Sensor Solution Reference Manual

### Deleting CC-Link modules

🚮 C	C-Link	configurat	ion A						
		Det	ect Now	) [w	erify				
	Mode Se	etting: (	Ver.1 Mode	▼ TX Spee <u>d</u> : 15	iókbps 🔻	Link Scan Time	(Approx.):	15.45 m	s
		Station No	. Model Name	Station Type	Version	# of STA Occupied	Expanded Cyclic Setting	Remote Station Points	Reserved/Err Invalid STA
		0/0	QIGIBTIIN	Master Station					
	<b>E4</b>		AJ655BTB2N-8A	emote I/O Station	Ver.1	1 Station Occup	Single	32 Points	No Setting
	e 🏠	2/2	A365BT-64AD	Remote Device Stati	Ver.1	2 Stations Occu	Single	64 Points	No Setting
	10	3/4	FR-A720-0.4K	Remote Device Stati	Ver.1	1 Station Occup	Single	32 Points	No Setting



- **1.** Select "Station No." or "Model Name" of the CC-Link module to be deleted.
- **2.** Select [Edit]  $\Rightarrow$  [Delete] in the menu bar.

#### Precautions

Check that the CC-Link module on the module configuration diagram is connected to the connection port of a CC-Link configuration.

If not, the modules are not displayed on the CC-Link Configuration window.

When a master/local module is added on the CC-Link Configuration window, the module configuration diagram for the added module is added.

### **Creating AnyWireASLINK configurations**

Create a configuration diagram by placing modules on the AnyWireASLINK Configuration window.

### Operating procedure



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- Select "QJ51AW12AL" (AnyWireASLINK master module) from the Module List window, and drag and drop it onto the Module Configuration window.
   The AnyWireASLINK configuration diagram is created.
- **2.** Double-click "AnyWireASLINK Configuration" on the Workspace window.









\*1 The address of the slave module can be set automatically.
 For details, refer to the following manual.
 CX Works2 Version 1 Operating Manual (Intelligent Function Module)

The AnyWireASLINK Configuration window is opened.

- Select "B281PB-02U-CC20" (AnyWireASLINK slave module) from the Module List window, and drag and drop it onto the AnyWireASLINK Configuration window.
   The slave module is added on the AnyWireASLINK Configuration window.
- **4.** Set the address to the added slave module<sup>\*1</sup> in "Address" on the AnyWireASLINK Configuration window.

For the general-purpose AnyWireASLINK module, set the I/O type, address, and number of occupied I/O points.

### Detecting actual system configuration

The actual system configuration can be reflected to the AnyWireASLINK Configuration window with any of the following operations.

- · Click the [Detect Now] button on the AnyWireASLINK Configuration window
- Select [AnyWireASLINK Configuration]  $\Rightarrow$  [Online]  $\Rightarrow$  [Detect Now] in the menu

For details, refer to the following manual.

iQ Sensor Solution Reference Manual

### ■ Verifying AnyWireASLINK configuration against the actual system configuration

The AnyWireASLINK configuration can be verified against the actual system configuration by performing one of the following operations.

- · Click the [Verify] button on the AnyWireASLINK Configuration window
- Select [AnyWireASLINK Configuration] ⇒ [Online] ⇒ [Verification of the Configuration with the Connected Module] in the menu

For details, refer to the following manual.

III iQ Sensor Solution Reference Manual

### Deleting AnyWireASLINK slave modules



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- **1.** Select the row of the AnyWireASLINK slave module to be deleted. (Multiple rows can be selected.)
- **2.** Select [Edit]  $\Rightarrow$  [Delete] in the menu bar.

🚟 MELSOFT Navigator C:\Users\Administrator\Docu											
Wor <u>k</u> space	<u>P</u> roject	<u>E</u> dit	⊻iew	<u>A</u> nyWireASL							
i 🗅 🖻 💾	in al	10	<u>U</u> ndo	Ctrl+Z							
Workspace		21	<u>R</u> edo	Ctrl+Y							
: 	WS	Ж	Cu <u>t</u>	Ctrl+X							
📄 🛄 Net	work Con	Đ	<u>C</u> opy	Ctrl+C							
i i i i i i i i i i i i i i i i i i i	Network ( Jule Confir	Ē.	<u>P</u> aste	Ctrl+V							
😑 🛃	Configurat		Select <u>A</u> ll	Ctrl+A							
	📰 AnyW		<u>D</u> elete	Delete							

## 3.5 Creating Projects

Create a project data (programmable controller projects, motion controller projects, GOT projects).

### **Creating new projects**

### Programmable controller projects

#### GX Works3 projects

Create GX Works3 project for MELSEC iQ-R/MELSEC iQ-F series programmable controller CPU.

### Operating procedure





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 Select [Project] ⇒ [New] ⇒ [GX Works3 Project] in the menu bar.

The "New (GX Works3 Project)" screen is displayed.

**2.** Set "Series", "Type", "Language", "Project Name", and "Title" for the new project.

After setting the items, click the [Create] button.

Setting content (sample)

- Series: RCPU
- Type: R08
- Language: Ladder
- Project Name: GXW3\_Proj1
- Title (option): Sample Data

The new project is created.

**3.** Double-click the created project on the Workspace window.



The GX Works3 project is started.

For the method of editing GX Works3 projects, refer to the following manual.

GX Works3 Operating Manual

### Point P

• When RnPCPU is selected in "Type"

Select "Redundant" on "Operation Mode" to configure a redundant system.

When do not configure a redundant system, select "Process" on "Operation Mode".

• When RnSFCPU is selected in "Type"

The user registration is required since a user information for the User Authentication function is needed. Enter each items in the "Add New User" screen, and click the [OK] button.

### ■ GX Works2 project

Create GX Works2 projects for Q series/L series/FX series programmable controller CPU.

### Operating procedure



New (GX Works2	Project)
Series	QCPU(Q mode)
<u>T</u> ype	Q06UDH 🗸
Project Type	Simple Project
Language	Ladder
Project Name	GXW2_Proj1
Tįtle	Sample Data
	Open with Creating Create Cancel

**1.** Select [Project] ⇔ [New] ⇔ [GX Works2 Project] in the menu bar.

The "New (GX Works2 Project)" screen is displayed.

 Set "Series", "Type", "Project Type", "Language", "Project Name", and "Title" for the new project. After setting the items, click the [Create] button.

Setting content (sample)

- Series: QCPU (Q mode)
- Type: Q06UDH
- Project Type: Simple Project
- Use Labels: Select
- Language: Ladder
- Project Name: GXW2\_Proj1
- Title (option): Sample Data

3

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MELSOFT Series GX Works2	rs\Administrator\Documer	nts\/Sample_W	SVGXW2_Proj1					
Project Edit Eind/Replace	Compile View Onlin	ne De <u>b</u> ug	Diagnostics Tool	Window	Help			
i 🗅 🖻 💾 🍪 💌	a , 🐹 🗈 🖪	in al 🖽	태 태 부 문 전	<b>2</b> 2 2 2	🛼 🕾   🔊 🎽	🖉 🔍 🚽 🛃	生き 作 ほう	"脸脸。
1 🔁 🔁 🚟 🚟 🖼	🗄 🙀 🔍 👘 Paran	neter	×			• 3 .		
Navigation # ×								
Project								
1* Do 1% Pr (2) 4**								
🗄 🚱 Parameter								
- 🚳 Intelligent Function Modu								
Global Device Comment     Global Label								
🗄 🚾 Program Setting								
🗄 📶 POU								
Orvice Memory								
- M Device and Londe								
Project								
User Library								
Connection Destination								
- <b>E</b>								
1								
Output								9 ×
No. Result Data Name	Class		Content					Error Code
		_		_	_		_	,
	Foolish	Simple				ONIDH	Host	N
						2		

The new project is created.

**3.** Double-click the created project on the Workspace window.

The GX Works2 project is started.

For the method of editing GX Works2 projects, refer to the following manuals.

GX Works2 Version 1 Operating Manual (Common) GX Works2 Version 1 Operating Manual (Simple Project)

GX Works2 Version 1 Operating Manual (Structured Project)

GX Works2 Beginner's Manual (Simple Project)

GX Works2 Beginner's Manual (Structured Project)

### Motion controller projects

Create MT Developer2 projects for motion controller.

### Operating procedure





New (MT Developer2	Project)
Series	QCPU (Q Mode)
Type	Q173D 💌
OS Type	SW8-SV13QB
Operation Method	<b></b>
Project Name	MTD2_Proj1
Title	Sample Data
Op	en with Creating Create Cancel









**1.** Select [Project] ⇔ [New] ⇔ [MT Developer2 Project] in the menu bar.

The "New (MT Developer2 Project)" screen is displayed.

**2.** Set "Series", "Type", "OS Type", "Project Name", and "Title" for the new project.

After setting the items, click the [Create] button.

Setting content (sample)

- Series: QCPU (Q mode)
- Type: Q173D
- OS Type: SW8-SV13QB
- Project Name: MTD2\_Proj1
- Title (option): Sample Data

The new project is created.

**3.** Double-click the created project on the Workspace window.

The MT Developer2 project is started.

For the method of editing the MT Developer2 projects, refer to the following function.

HELP function of MT Developer2

### GOT projects

Create GT Designer3 projects for GOT.

### Operating procedure

🚟 MELSOFT N	laviga	ator C	:\User	s∖Admin	istrati	or\D	ocumen	ts\Sample_	ws
: Wor <u>k</u> space	Pro	ject	<u>E</u> dit	<u>V</u> iew	0n <u>l</u> i	ne	Tools	<u>₩</u> indow	<u>H</u> elp
i 🗅 🖻 🖪		<u>N</u> ev	N	×	œ	<u>G</u>	(Works2	Project	
Workspace		Add	d <u>C</u> opy		16	G)	( <u>W</u> orks3	Project	
🗉 📅 Sample		Rer	<u>a</u> me	F2	<b>.</b> 0	М	T Develo	per2 Projec	t
🗄 📜 Net		Del	ete D	elete 🕻		G]	[ Design	er3 Project	
Eth		Imp	ort		3	RT	ToolBo	x2 Project	
		<u>E</u> xp	ort						

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New (GT Designer3 Project)	×
Series	GOT2000
<u>Т</u> уре	GT27**-5 (800×600)
Project Name	GOT_Proj1
	Open with Creating Create Cancel

Workspace



V T T O C O J T A



**1.** Select [Project] ⇔ [New] ⇔ [GT Designer3 Project] in the menu bar.

The "New (GT Designer3 Project)" screen is displayed.

**2.** Set "Series", "Type", and "Project Name". After setting the items, click the [Create] button.

Setting content (sample) • Series: GOT2000

- Type: GT27\*\*-S (800× 600)
- Project Name: GOT\_Proj1

The new project is created.

**3.** Double-click the created project on the Workspace window.

The GT Designer3 project is started.

For the method of editing the GT Designer3 projects, refer to the following manuals.

GT Designer3 Version 1 Screen Design Manual (Fundamentals)

GT Designer3 Version 1 Screen Design Manual (Functions)

GT Designer3 (GOT2000) Screen Design Manual

### **Operating project**

### **Copying projects**

Copy a project created in the workspace to create a new project.

### Operating procedure

Workspace	Ψ×	📓 R configuration diagra
Sample_WS     Network Configuration     Nodule Configuration     Ethernet Configuration     C LE Field Configuration     C Link Configuration     Got Link Configuration     GW2_Proj1(Q     GW2_Proj1(Q	Expor Expor Open Add I Chan Delet Onlin Prope	t Project t Project t Project Project Name e Project Name e Project e Project Name e Project Name e Project Name e Project Name

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Add Project Copy			×
Project Name	GXW3_Proj2		
Title	Sample Data		
Package Type	PLC		
Туре	R08		
		ОК	Iancel

Workspace

### Changing project names

Change a project name of an existing project.



**1.** Right-click the project name on the Workspace window, and select [Add Project Copy] in the shortcut menu.

The "Add Project Copy" screen is displayed.

**2.** Enter the project name of the copied project, and click the [OK] button.

Setting content (sample)

Project Name: GXW3\_Proj2

The copied project is displayed in the Workspace window.

Right-click the project name on the Workspace window, and select [Change Project Name] in the shortcut menu to change the project name.

### **Deleting projects**

#### Delete a project.

Once a project is deleted, it cannot be restored again.



Right-click the project name on the Workspace window, and select [Delete Project] in the shortcut menu to delete the project.

### Allocating projects to controllers

This section explains how to allocate projects in the workspace to controllers on the Module Configuration windows. This section explains the methods for allocating projects on each controller on the following module configuration diagram.



### Precautions

A project cannot be allocated if the name of the placed controller and type of the created project does not match. Check the module name of the respective controllers, and allocate projects.

### Operating procedure

### Batch allocation

Allocate projects in the workspace to all controllers on the Module Configuration windows.

	E ME	LSOFT N	avigator (	:\Users	:\Admii	nistrator\[	Doc
1	Wo	r <u>k</u> space	<u>P</u> roject	<u>E</u> dit	<u>V</u> iew	0n <u>l</u> ine	Ι
1		<u>N</u> ew				Ctrl+N	
	B	<u>O</u> pen				Ctrl+O	
H		<u>C</u> lose					
	P	<u>S</u> ave				Ctrl + S	
		Save <u>A</u> s					
		Co <u>m</u> pr	ess/Unpac	k			۶
		<u>D</u> elete					
		<u>F</u> older					۲
		System	Configura	ation			۲
	_	Chec <u>k</u>					Ł
		Allocat	e Project V	Vith Th	e Contr	oller	
		Parame	ter				٢

**1.** Select [Workspace] ⇒ [Allocate Project With The Controller] in the menu bar.

₽

Consignation reame	Base	Slot	Module Name	Project Name
1 Q configuration diagram	Q38DB	[CPU]	Q06UDHCPU	GXW2_Proj1 : Sample Data
2		[0]	Q173DCPU	MTD2_Proj1 : Sample Data
3			GT27***-S	GOT_Proj1
4 R configuration diagram	R35B	[CPU]	R08CPU	GX063 Proi1 : Sample Data
s		[0]	RISCPU	GXW3_Proj2 : Sample Data
				GYW3 Proj2 : Sample Data

The "Allocate Project With The Controller" screen is displayed.

**2.** Select a project name to be allocated for all controllers, and click the [OK] button.

Setting content (sample)

Module Name	Project Name
R08CPU	GXW3_Proj1: Sample Data
R08CPU	GXW3_Proj2: Sample Data
Q06UDHCPU	GXW2_Proj1: Sample Data
Q173DCPU	MTD2_Proj1: Sample Data
GT27**-S	GOT_Proj1

The allocated projects are displayed under the Module Configuration folder on the Workspace window.



### Individual allocation

Allocate a project in the workspace to the controller selected on the Module Configuration window.



**1.** Right-click the controller on the Module Configuration window, and select [Allocate Project With The Controller] in the shortcut menu.





The "Allocate Project With The Controller" screen is displayed.

**2.** Select a project name for the selected controller, and click the [OK] button.

Setting content (sample)

Module Name	Project Name
Q06UDHCPU	GXW2_Proj1: Sample Data

₽



The allocated project is displayed under the Module Configuration folder on the Workspace window.

## **3.6** Setting/Reflecting/Importing Parameters

Set the I/O assignment, network parameters, and multiple CPU parameters and reflect them to each project. For MELSEC iQ-R series/MELSEC iQ-F series, the parameters configured in each project can be imported to MELSOFT Navigator. For the import method, refer to the following section.

Page 74 Importing parameters configured in each project

# Configuring parameters on the Input Detailed Configuration Information window

Configure the parameters such as start input/output number of each controller and network parameters without opening each parameter setting screen.

### Operating procedure



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Input Detailed Configuration In	formation (iQ Configurator) 📧
<b>Detailed Configuration Inform</b>	ation Other Parameter
ROBCPU	
Item Name	Setting Value
Start XY	3E10
Points of Empty Slot	
Network Type	Ethernet
Station No.	2
IP Address	192.168.3.40
IP Address: Set the IP address of module. Please set with decimal number. (Setting Range: 0.0.0.1 to 223.255.255.254)	

₽

Input Detailed Configuration Inf	ormation (iQ Configurator) 📧	
Detailed Configuration Informa	ation Other Parameter	
Search String( $\underline{X}$ ):	•	
R08CPU		
Item Name	Setting Value 🔺	
System Parameter		
Base/Power/Extension Cable		
Basic	0.050	
Base	R35B	
Dower Supply Medule	5	
Power Supply Module	ROIP	
· · · · · · · · · · · · · · · · · · ·	4	
Output <u>C</u> SV File	Restore default settings	
Set base model name.		Ĩ
Unable to change this setting synchronization function that f supply/extension cable setting To change the setting, please	if users use inter-module ixes base/power setting 'Use Inter-module +	
Fin <u>d</u> Result		

1. Select a module on "R configuration diagram".

The parameters are displayed on the Input Detailed Configuration Information window.

**2.** Configure the parameters in the [Detailed Configuration Information] tab on the Input Detailed Configuration Information window.

"Station No." and "IP Address" are set on the screen shown on the left as an example.

Set "Station No." and "IP Address" of QJ71E71-100 on "Q configuration diagram" as well.

For details of parameter configurations, refer to the user's manual of each module.

**3.** For MELSEC iQ-R series, configure the detailed parameters in the [Other Parameter] tab on the Input Detailed Configuration Information window.

For details of parameter configurations, refer to the user's manual of each module.

For the parameters which cannot be configured on the Input Detailed Configuration Information window, use each engineering software (GX Works3, GX Works2, MT Developer2, GT Designer3).

### Setting start I/O in batch

Assign start XY consecutively to modules or empty slots in the order of slot number.

Reconfiguration of the start XY to each module is not required when replacing modules or changing number of points.



1.	Select [Q Module Configuration]/[iQ-R Module
	Configuration] ⇒ [Start XY Batch Input] in the menu bar

 MELSOFT Navigator
 Image: Constraint of the solution of the solut



**2.** Read the message and click the [Yes] button.



The message on the left is displayed, and start XY is set.

3. Click the [OK] button.

### Setting default points in batch

Set default to all points of modules or empty slots on the base unit.

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 MELSOFT Navigator
 Image: Second S

The message shown on the left is displayed.

2. Read the message and click the [Yes] button.



The message shown on the left is displayed, and default points are set.

**3.** Click the [OK] button.

### Setting station No. or IP addresses in batch

Station No. or IP address for the network parameter can be set in batch in the Network Configuration window. For the setting method and target networks, refer to the following section.

Page 39 Creating network configuration diagrams

### Setting parameters of FX series special adapter

The parameters of special adapters can be set without opening the parameter setting screen of GX Works2 project. The following shows an example when using FX3U-ENET-ADP.

### Operating procedure



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 Click "FX3U-ENET-ADP" on "FX module configuration diagramA".

The parameters are displayed on the Input Detailed Configuration Information window.

**2.** Set the parameters on the Input Detailed Configuration Information window.

Setting content (sample)

- Station No.:1
- IP address: 192.138.3.38
- Channel: CH1
- **3.** Set the parameters of "FX module configuration diagramB" following the same procedure in the step 1 and step 2.

Setting content (sample)

- Station No.:2
- IP address: 192.168.3.39
- Channel: CH1

For the reflection method for the set parameters to a GX Works2 project, refer to the following section.

Page 70 Reflecting parameters to projects







### Precautions

When "Channel" has already been set to [PLC System (2)] tab of the "PLC parameter" screen in the target program, the settings of [PLC System (2)] tab will be initialized.

To retain the settings in GX Works2 project, backup the project before reflecting the parameters.

3

### Multiple CPU parameters for MELSEC iQ-R series

For MELSEC iQ-R series, configure the multiple CPU parameters in a batch using MELSOFT Navigator. The configured multiple CPU parameters on each CPU can be automatically reflected to other CPUs.

### Operating procedure







The "Multiple CPU Parameter Setting" screen is displayed.

**2.** Set the multiple CPU parameters.

For the configuration of multiple CPU parameters, refer to the manual for each CPU module or motion controller.

### Multiple CPU parameters for Q series

For Q series, configure the multiple CPU parameters by activating the multiple CPU settings of each controller project from MELSOFT Navigator. Set the parameters on CPU No.1, and the utilize them for CPU No.2.

The following is an example when utilizing parameters of programmable controller project (GX Works2) for a motion controller project.

When setting parameters on a motion controller project, follow the same procedure as shown below.

### Operating procedure



**1.** Select the CPU No.1 controller on the Module Configuration window.

strator\Documents\Sample\_WS - [Q configuration diagram] Q Module Configuration Online Tools Window Help Open System Configuration 🔸 ] 〇 🖭 댁 댝 댁 17 Display Module Information Chec<u>k</u> Parameter <u>R</u>eflection -91 Start 🛛 Batch Input Verificati Default Points Batch Input <u>M</u>ulti Bring to Front





**2.** Select [Q Module Configuration] ⇒ [Parameter] ⇒ [Multiple CPU Parameter Setting] in the menu bar.

The message shown on the left is displayed.

**3.** Read the message and click the [Yes] button.

₽ MELSOFT Series GX Works2 Please set the multiple CPU setting of PLC No.1. [Caution] Please set the I/O assignment setting (switch setting, detailed setting) of another PLC controlled modules in this project as well.

(i

GX Works2 is activated and the message shown on the left is displayed.

**4.** Read the message and click the [OK] button.

OK

arameter Setting								
CName PLC System PLC File PLC RAS  Book	File IProgram ISEC Device	11/O Assignt	ent Multi	nie CPU S	etting 35e	rial Communication	1	
	the property of the second	1	A.C.C.				1	
No. of PLC (*1 *2)	Online Module Change(*1) -							
1 Count	<ul> <li>Enable Unine Module Linange with Another FLC.</li> </ul>							
	I/O status outside the group cannot be taken.							
Host Station								
No Specification	Al CPLIs Can Read Al Tonuts							
	Al CPUs Can Read Al Orimits							
- Operation Mode (*1)								
Error Operation Mode at the Stop of PLC	Multiple CPU High Speed Tra	nsmission Are	a Setting	Conrouni	ication Area	Setting (Refresh)	Setting)	
All station stop by stop error of PLC1			- 1					
🔽 All station stop by stop error of PLC2	Use Multiple CPU High	Speed Trans						
☑ All station stop by stop error of PLC3								
₩ All station stop by stop error of PLC4		CPU Specific Send Range (*1)						
	Points(K) I/O N	o. Points	Start	End	Points	Setting		
Tarret PLC	PLC No.1	_						
E and a	PLC No.3							
V No.2	PLC No.4							
₩ No.3		Set auto re	afresh settir	ng if it is n	eeded( No	Setting / Alrea	dy Set )	
₩ No.4	iota /		E Adva	enced Set	ting(*I)	Assignment Confin	mation	
	Import Multiple CRUP	w annat ar						
(*1)Setting should be set as same when using mult (*2)The items indicated in green are set in MELSOF	T Navigator.	ardilectr						
							_	
Print Window Preview	Acknowledge XY Ass	grment	Default		Check	End	Cancel	

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🔁 Q configuration diagram 🛛 🗙

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ork N

The "Q Parameter Setting" screen is displayed.

For the method of setting multiple CPU parameters, refer to the following manual and function.

QCPU User's Manual (Multiple CPU System)

HELP function of MT Developer2

- **5.** Select [Project] ⇒ [Save] in the menu bar of GX Works2.
- **6.** Select the CPU No.2 controller on the Module Configuration window.

Ŷ istrator\Documents\Sample\_WS - [Q configuration diagram] Q Module Configuration Online Tools Window Help Open System Configuration 🔸 🕽 🔿 🖭 낙 북 북 6 Display Module Information Change Ba<u>s</u> Chec<u>k</u> Parameter Reflection **1** Start XY Batch Input Verificatio Default Points Batch Input Bring to Front Send to <u>B</u>ack

STA#STA# 1 0

₽

 Select [Q Module Configuration] ⇒ [Parameter] ⇒ [Multiple CPU Parameter Setting] in the menu bar.



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Open				<b>.</b>
ave Eolder Path :				
C:\Users\Administ	Browse			
Workspace/Project	List :			
Project	Туре	OS Type	Operation Method	Title
<b>L</b>				Returns to the wo
GXW2_Proj1	Q06UDH	5110 51400D		Sample Data
MID2_Proj1	Q173D	5W8-5V13QB		Sample Data
<u>V</u> orkspace Name :		Sample_WS		
Project Name :		GXW2_Proj1		
Telo y		Sample Data		
jue,		annino o aca		
			MELCOET NUMERICA deser	
Open a	Single File Fo	rmat Proje <u>c</u> t	MELSOFT Navigator does r	not support this format.
Open a	Single File Fo	rmat Proje <u>c</u> t	MELSOFT Navigator does n	not support this format.
Open a	Single File Fo	rmat Proje <u>c</u> t	MELSOFT Navigator does r	not support this format.

The message shown on the left is displayed.

**8.** Read the message and click the [Yes] button.

MT Developer2 is activated and the message shown on the left is displayed.

**9.** Read the message and click the [OK] button.

The "Basic Setting" screen is displayed.

**10.** Click the [import Multiple CPU Parameter] button.

The "Open" screen is displayed.

**11.** Check that the project name allocated to the CPU No.1 is selected, and click the [Open] button.



The message shown on the left is displayed.

**12.** Read the message and click the [Yes] button. The multiple CPU parameter of CPU No.1 is utilized for CPU No.2.

### **Reflecting parameters to projects**

Reflect parameters set in MELSOFT Navigator to each project. For MELSEC iQ-F series, refer to the following section.

### Operating procedure



**1.** Select [Workspace] ⇒ [Parameter] ⇒ [Batch Reflect] in the menu bar.

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 The message shown on the left is displayed.

**2.** Read the message and click the [Execute Reflection] button.

The message shown on the left is displayed.

**3.** Read the message and click the [Yes] button.
Output	X
The parameter batch reflection is started, Swing Workspace Checking before registering in system label database is started Checking the route information The check of the route information is completed.	<b>•</b> III
	•

The parameters are reflected to the projects.

Error or Warning is displayed on the Output window when the reflection result contains an error. Check the error description on the Task List window and correct the error.

### Verifying system configuration information with parameters

After parameters are reflected to projects, check for differences between parameters (system configuration information) set in MELSOFT Navigator and parameters of project assigned to the respective controllers.

E	M	ELSOFT Navigator C:\Users\Administrator\Doc	cuments\Sample_WS - [Q configuration diagram]
	Wo	r <u>k</u> space <u>P</u> roject <u>E</u> dit <u>V</u> iew Q Mod <u>u</u> le	Configuration Online Iools Window Help
1		New Ctrl+N	😹 🖷 🕲 🕼 🖊 🗖 🖸 🖸 🖸 🖬 🖓 명 명
	B	Open Ctrl+O	rk Configuration 🛛 🔚 CC IE Field Configuration 🖉 🔂 Q configuration diagram
ñ		Close	Ethemet Network No.1 DC IE Field Configuration Network N
	H	Save Ctrl + S	
		Save As	
		Compress/Unpack	
		Delete	
		Eolder •	
		System Configuration	
		Chec <u>k</u>	
		Allocate Project With The Controller	
		Pagameter •	Batch Reflect
		System Label	Batch Verification of System Configuration Information and Parameters
		•	

 Select [Workspace] 

 ⇒ [Parameter] 
 ⇒ [Batch Verification of System Configuration Information and Parameters] in the menu bar.

₽



The message shown on the left is displayed.

**2.** Read the message and click the [Execute Verify] button.

 $\mathbf{r}$ 

Output	X
The batch verification between system configuration information and paramister is star	
Checking before registering in system label database is started	
Checking the route information The check of the route information is completed.	
Checking the system configuration	Ŧ
· · · ·	
Output Task List	

The verification is performed.

Error or Warning is displayed on the Output window when the verification result contains an error. Check the error description on the Task List window and correct the error.

### **MELSEC iQ-F series**

Reflect parameters set in MELSOFT Navigator to each project. For GOT projects, refer to the following section.

### Operating procedure



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**1.** Select the module to which the reflection target project has been allocated on the module configuration diagram.

2. Select [iQ-F Module Configuration] ⇔ [Parameter] ⇔ [Reflection] in the menu bar.



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The message shown on the left is displayed.

**3.** Read the message and click the [Execute Reflection] button.



The message shown on the left is displayed.

**4.** Read the message and click the [Yes] button.

### Precautions

After the parameter reflection, the parameters (except for system parameter) set to GX Works3 will be initialized. To retain the parameters in GX Works3 project, backup the project before reflecting the parameters.

### Importing parameters configured in each project

Import the parameters which are configured in a programmable controller project (GX Works3) or motion controller project of MELSEC iQ-R series in MELSOFT Navigator.

### Operating procedure



**1.** Select the module to which the import target project has been allocated on the module configuration diagram.

rator\Documents\Sample\_WS - [R configuration diagram] View iQ-R Module Configuration Online Tools Window Help Open System Configuration 16 › D 🖪 댁 똑 먁 🐴 Display Module Information ą Change Module ion ration Check fiarram Parameter 🗿 Reflection diagram chagram ion V Start XY Batch Input uration A Default Points Batch Input ation Import Para

₽

₽ Parameter Import Execute the parameters import of the project which assigned to syste configuration for the target. \* The project which assigned to GOT is not supported. - running projects are saved, and all projects are closed at import start. - Please do not open the project in importing. - The project of import target can be checked in output window. - There is a possibility that current system configuration is changed, please execute system configuration check after parameters import is completed. - The operation of parameter import can be checked by pressing "Import Operation Check" button. - The process can be aborted by pressing [Ctrl]+[Break] key.

OK Cancel

- [Import Parameter] in the menu bar.

**2.** Select [iQ-R Module Configuration] ⇒ [Parameter] ⇒

The message shown on the left is displayed.

**3.** Read the message and click the [OK] button.

#### Precautions

Import Operation Check

When the parameters are imported, the module configurations configured on each project are reflected on the module configuration of MELSOFT Navigator.

## 3.7 Checking Workspace

Check the system configurations created in the workspace, power supply capacity, and I/O points.

### **Checking system configuration**

Check the conditions such as; module configurations of created system configuration and project allocation status.

### Operating procedure

: Wo	r <u>k</u> space <u>P</u> roject <u>E</u> dit <u>V</u> iew	iQ-R Mo	d <u>u</u> le Configuration Online <u>T</u> ools <u>W</u> indow <u>H</u> elp
	<u>N</u> ew <u>O</u> pen	Ctrl+N Ctrl+O	號 : 鄂 Q I ☞ / ロ O 프 및 또 말 짧R configuration diagram ×
8	Close Save Save	Ctrl + S	met Network filo: 1
	Compress/Unpack	,	P0W CPU 0 1 2 3 4
	Eolder System Configuration	•	
	Check	eollox	Batch Check
	Pagameter	•	System Configuration
	System Label	•	System Label

**1.** Select [Workspace] ⇔ [Check] ⇔ [System Configuration] in the menu bar.

Ŷ



The message shown on the left is displayed.

**2.** Read the message and click the [OK] button. Error or Warning is displayed on the Output window when the check result contains an error. Check the error description on the Task List window and correct the error.

#### The check targets are as follows:

- Common to MELSEC iQ-R series, MELSEC iQ-F series, Q series, L series, FX series module configurations
- Unplaced modules
- Matching of project type and CPU module model name of module configuration
- · Allocation of projects in the workspace to CPU modules or other modules of module configuration

■MELSEC iQ-R series/Q series module configuration

- · Power supply placing condition
- CPU module configuration (multiple CPU system)
- · Configuration of main base unit and extension base unit or GOT
- Number of placed modules (For details, refer to MELSOFT Navigator Help.)
- Consumption current within the range
- I/O points within the range
- L series module configuration
- · Power supply and END cover attaching condition
- · Configuration of main block and extension blocks, and GOT
- Consumption current within the range
- I/O points within the range
- Common to Ethernet configurations/CC IE Field configurations/CC-Link IEF Basic configurations/CC-Link configurations/AnyWireASLINK configurations
- Device configuration of the Ethernet configuration, CC IE Field configuration, CC-Link IEF Basic configuration, CC-Link configuration, and AnyWireASLINK configuration

Note that, CPU module versions, module versions, and GOT model names are not checked.

#### Precautions

When installing the first GOT at the position more than 13.2 m in distance, a bus extension connector box is required.

3

### Checking power supply capacity and I/O points

Check power supply capacity and I/O points of created system configuration. This functions is not supported by MELSEC iQ-F series/FX series.

### Operating procedure

	MB	LSOFT Navigator C:\Users\Admir	iistrator\Do	cuments\Sample_WS - [R configuration diagram]
1	Wo	r <u>k</u> space <u>P</u> roject <u>E</u> dit <u>V</u> iew	iQ-R Mod	ule Configuration Online <u>T</u> ools <u>W</u> indow <u>H</u> elp
	C 2	New Open	Ctrl+N Ctrl+O	融 : 백 Q / 郧 / ロ O 트 나 또 또 A configuration diagram ×
	H	Save	Ctrl + S	rmet Network No.1
	I	Compress/Unpack	٠	POW CPU 0 1 2 3 4
	I	Eolder System Configuration	+	
		Chec <u>k</u>	•	Satch Check
	1	Allocate Project With The Contr	oller	2 Power Supply Capacity and I/O Points of iQ-R/Q/L Module Configuration
	1	Parameter	•	System Configuration
		System <u>L</u> abel	•	System Label

 Select [Workspace] 

 ⇒ [Check] 
 ⇒ [Power Supply Capacity and I/O Points of iQ-R/Q/L Module Configuration] in the menu bar.

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The message shown on the left is displayed.

2. Read the message and click the [OK] button.

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Result of Power Supply Capacity and	I/O Points Check						8
Result of Check:No Error							
Display Error Configurations Only							
Module Configuration Diagram	Base/Block/Cable	Slot	Module Name	Current Consumption	Total Current	Total Voltage Drop	Total I/O Points
1 Q configuration diagram	Q38DB	-	Q38DB	0.23A	3.35A / 8.5A		160 Points / 4096 Points
2		[Power Supply]	Q64P				
3		[CPU]	Q06UDHCPU	0.39A			
4		[0]	Q173DCPU	1.25A			
5		[1]	QH42P	0.13A			
6		[2]	QJ71E71-100	0.5A			
7		[3]	QJ71GF11-T2	0.85A			
8 R configuration diagram	R35B	-	R358	0.58A	2.03A / 6.5A		64 Points / 4096 Points
9		[Power Supply]	R61P				
10		[CPU]	REBCPU	0.67A			
11		[0]	ROBCPU	0.67A			
12		[1]	RX10	0.11A			

The "Result of Power Supply Capacity and I/O Points Check" screen is displayed.

3. Check for errors in the check result.

When an error exists in the check result (items displayed in red), modules for re-selection are displayed by clicking "Total Output Current" or "Total I/O Points".

A message is displayed by clicking "Total Voltage Drop". Read the message and correct the module configuration diagrams.

### Precautions

Values displayed under "Total Output Current" may be different from the total output current of module with latest version. For the total output current of module with latest version, check the latest manuals of the respective modules.

## 3.8 Editing Projects

Edit created projects and utilize them for other workspace.

### **Editing projects**

Activate the created project for editing.

The following is an example of activating a programmable controller project (GX Works2).

When activating a programmable controller project (GX Works3), motion controller project, or GOT project, follow the same procedure as shown below.

### Operating procedure





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MELSOFT Series GX Works2r:	\Administrator\Do	cuments\Sample	_WS\GXW2_Pro	1					
Project Edit Eind/Replace	Compile View	<u>Online</u> De <u>b</u> ug	<u>Diagnostics</u>	Tool	Window	<u>H</u> elp			
in 19 🖪 🕘 🔘		i lib io ai i 🛙	s 💷 🗠   💵	an 🙉	0.0.0	1 🐘 🐘 I	, 🕸 🖓	9 🔋 🗠	法 日
	- 16- 10 M	Parameter						- P.	
Navigation 9 X									
Designet									
rioject									
E Parameter									
Global Device Comment									
🗄 💼 Global Label									
🖶 😼 Program Setting									
e 👩 POU									
Orice Memory									
- Conce Inder Forde									
4 ( III ) b									
Project									
📖 User Library									
Connection Destination									
*									
	English	Simpl						Q06UDH	NU

On the Module Configuration window, double-click the controller to which a programmable controller project (GX Works2) is allocated.

The GX Works2 project is started.

For the method of editing GX Works2 projects, refer to the following manuals.

GX Works2 Version 1 Operating Manual (Common)

Project)

GX Works2 Version 1 Operating Manual (Structured Project)

CA Works2 Beginner's Manual (Simple Project)

GX Works2 Beginner's Manual (Structured Project)



· Projects can also be activated from the Workspace window or Project List window.

• The related software is activated by double-clicking the module on the FX Module Configuration window.

### Utilizing existing projects (import)

Utilize a project created in other workspace with MELSOFT Navigator.

The projects created with an engineering software (GX Works3, GX Works2, MT Developer2, GT Designer3, and RT ToolBox3) and GX Developer can be imported to the workspace created with MELSOFT Navigator.

GX Developer projects are converted to GX Works2 format and imported to MELSOFT Navigator.

However, depending on the programmable controller type, some projects are not supported for import, or not converted to GX Works2 format. For details, refer to MELSOFT Navigator Help.

In addition, a project imported in GX Developer format cannot be allocated to a controller etc. on the Module Configuration window.

The following operation is an example when utilizing a GX Works2 project.

For utilizing GX Works3 projects, MT Developer2 projects, or GT Designer3 projects, follow the same procedure as shown below.

### Operating procedure

### Importing projects



**1.** Select [Project] ⇒ [Import] in the menu bar.

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Import			×
Save <u>F</u> older Path:			
C:\Users\Administrator\Do	cuments		Browse
Workspace/Project List:			
Workspace/Project	Туре	Title	
Sample_WS		Sample Data	
Workspace Name:	Sample		
Project Name:			
<u>T</u> itle:			
Multiple projects can be imp	orted simultaneously.		
Project Tune List which car	be Imported		
		- Europha	Creat 1
		Execute	Cancel

₽

The "Import" screen is displayed.

**2.** Set "Save Folder Path" for the project to be utilized, and double-click the workspace name of the project to be imported.

Setting content (sample)

- Save Folder Path: C:\Users\(user name)\Documents
- Workspace Name: Sample



Selecting the workspace displays the list of GX Works2 projects.

**3.** Select the project to be utilized, and click the [Execute] button.

Setting content (sample)

Project Name: GXW2\_Proj1

- Configuration
   Ver 1 System Label List
   Ver 1 S
  - file format, open it in each engineering software and save it in workspace format, and then import it.Projects in several workspaces can be organized into one workspace by importing the projects. For details, refer to MELSOFT Navigator Help.

### Exporting projects

Export a project of an open workspace, and add it to a new or existing workspace.





**1.** Select the project to be exported on the Workspace window.

**2.** Select [Project]  $\Rightarrow$  [Export] in the menu bar.

Export				<b>—</b>
Save <u>F</u> older Path:				
C:\Users\Administrator\Do	cuments			Browse
Workspace List:				
Workspace		Title		
Sample_WS		Sample Data Sample Data		
Workspace Name:	Sample_WS_A			
<u>T</u> itle:				
History information is succe	eeded.			
			Execute	Cancel

Point P

In the step 2, select [Export as 1 file format project] from the menu bar to export the project in 1 file format. When importing the project exported in 1 file format, open the project once in each engineering software and save it in workspace format.

The "Export" screen is displayed.

**3.** Select "Save Folder Path" to be saved, and click the [Execute] button.

Setting content (sample)

- Save Folder Path: C:\Users\(user name)\Documents
- Workspace Name: Sample\_WS\_A

## **3.9** Reading/Writing/Verifying Controller Data

Read/write/verify project data (programmable controller project, motion controller project, GOT project) from/to/with each controller.

#### Operating procedure

#### Programmable controller projects



On the Module Configuration window, right-click the controller to which a programmable controller project is allocated, and select [Online] ⇔ [Read]/[Write]/[Verify] in the shortcut menu.

The screen shown on the left is an example when [Write] is selected. Perform the same operation for [Read] and [Verify].

	Bead • Write	C Ve	ifv	C	lelete		
	True Thurs	Europhics T		- No.			
I PLC Module	telligent Function Module	EXOCUTION	rget bat	at reo	/ (65 )		
Title							
🔢 Edit Data	Parameter+Program	Select All	Canc	el All Se	lections	0	ption Display Sige
Module Na	me/Data Name	Title	Target	Detail	Last Change	Target Memory	Size
= 📴 GXW/2_Proj1							
	1					Program Memory/De	
Symbolic Informa	tion						2995 Bytes
PLC Data	(D) )					Program Memory/De	
Man Program (Program	Fiej		M	Deter	0014 80 100 40 00 40		0150.0
MAIN COMPANY					2014/10/30 10:30:15		2152 Bytes
Parameter	Description Descriment (Caribala Carib)				2014/00/20 10:20:15		ACA Dutes
Gibbal Davice Co	melliole nasswolur switch sett.	•			2014/10/30 10:30.15		404 Byles
COMMENT	ATTEMPT K			Dated	2014/10/20 10:20:16		
- Device Methodu				Detail	2014/10/30 10:30 10		
- A MAIN			Π		2014/10/30 10:30:16		
Clear the device ranges on	t in the Draine II shell Autom	atic Accime col	ting to	0 at tim	on of FLC write		
Necessary Setting 1	In Setting / Alexade Set 1	Collection and a second	dedf No.	Cating .	Alcode Cat 1		
Necessary Second	to Setting / Aneddy Set (	3611 616 166	ueut no.	Journy 2	Alloady Jer 1		
Writing Size				-	Free Volume Us	e Volume	
5.612Bytes				_	240,920	4,840Bytes	Refrest
Related Functions < <						Exec	ute Close
Control Concording of a						100	0.00

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The "Online Data Operation" screen is displayed.

For the operation method, refer to the following manuals.

GX Works2 Version 1 Operating Manual (Common)

GX Works2 Version 1 Operating Manual (Simple Project)

GX Works2 Version 1 Operating Manual (Structured Project)

GX Works2 Beginner's Manual (Simple Project)

GX Works2 Beginner's Manual (Structured Project)

### Motion controller projects



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Transfer Information Connecting Interface : USB Target CPU : Network No. Part Model 21/205 CPU2 OS Type 5/222(LVER300D Operation Method Refared Synchronous Control Method Control Method Control Method Control Servo parameter File selection Servo parameter / Program Select All Select None Target Memory Card (SD) ▼ Program Select All Select None Target Memory Card (SD) ▼ Program (Control Code/Text)) Servo Program (Control Parameter Vision system parameter Vision system parameter	Write to CPU	
Delail Setting Target (filmory Program memory	Transfer Information Conneting Interface : USB Target CPU : Network No. O O Operation	PLC Module           Model         Q172DS           S Type         SV22QL VER3000           Method         R4rwared Synchronous Control Method
Label/Structure     Target memory     QnLD([]):CPU(No.1) Memory card (SD)       Program     Motion SPC program (Control Code/Text)       Servo Program (Context)       Servo Program (Control Code/Text)	Detail Setting Target Memory Program memory  File selection Servo parameter Device data Parameter + Program Select All Select None	Write Data to CPU C Delete CPU Data
	Label/Structure Target memory  Program Motion SPC Parameter Servo Program (Control Code/Text) Servo Program (Control Code/Text) Servo Program (Control Code/Text) Servo Parameter Servo parameter System Setting, Servo Data Setting (Parameter Block/Serv Servo parameter Vision system parameter	on Data Linit Output Data)

On the Module Configuration window, right-click the controller to which a motion controller project is allocated, and select [Online] ⇔ [Read]/[Write]/ [Verify] in the shortcut menu.

The screen shown on the left is an example when [Write] is selected. Perform the same operation for [Read] and [Verify].

The "Write to CPU" screen is displayed. For the operation method, refer to the following function.

### ■ GOT projects



On the Module Configuration window, right-click the controller to which a GOT project is allocated, and select [Online] ⇔ [Read]/[Write]/[Verify] in the shortcut menu. The screen shown on the left is an example when [Write] is selected. Perform the same operation for [Read] and [Verify].



17.1.6
21 Information
Detai
GOT Write

The "Communicate with GOT" screen is displayed. For the operation method, refer to the following manuals. GT Designer3 Version 1 Screen Design Manual (Fundamentals)

GT Designer3 (GOT2000) Screen Design Manual Connection manuals for GOT1000 series (Mitsubishi Products), (Non-Mitsubishi Products 1), (Non-Mitsubishi Products 2), (Microcomputer, MODBUS Products, Peripherals)

Connection manuals for GOT2000 series supported by GT Works3 Version 1 (Mitsubishi Products), (Non-Mitsubishi Products 1), (Non-Mitsubishi Products 2), (Microcomputer, MODBUS Products, Peripherals)

## 3.10 Saving Workspaces

Save a created workspace.

By saving workspaces with compression, the saved data can be passed easier.

Also, the compressed workspace can be opened with decompression. For details, refer to MELSOFT Navigator Help.

### Saving workspaces with specified names

Save an open workspace with a specified name.

### Operating procedure

📅 M	ELSOFT N	lavigator (	:\User:	s∖Admir	nistrator\Do
Wo	r <u>k</u> space	<u>P</u> roject	<u>E</u> dit	⊻iew	Q Mod <u>u</u> le
: 🗅	<u>N</u> ew				Ctrl+N
1 🖻	<u>O</u> pen				Ctrl+O
5	<u>C</u> lose				
A	Save				Ctrl + S
$\square$	Save <u>A</u> s	5			

₽

Save As (Workspace)			×
Save <u>Folder</u> Path: C:\Users\Administrator\Doci	uments		Browse
Workspace List:			
Workspace		Title	
E Sample_WS Sample_WS_A		Sample Data Sample Data	
Workspace Name:	Sample_Workspa	:e	
<u>T</u> itle:	Sample Data		

**1.** Select [Workspace] ⇒ [Save As] in the menu bar.

The "Save As (Workspace)" screen is displayed.

**2.** Set "Save Folder Path", "Workspace Name", and "Title" for the workspace.

After setting the items, click the [Save] button.

Setting content (sample)

- Save Folder Path: C:\Users\(user name)\Documents
- Workspace Name: Sample\_Workspace
- Title (option): Sample Data

### **Overwriting workspaces**

Save an open workspace with the same name.

### Operating procedure

E	🗄 MB	LSOFT N	lavigator (	:\User:	s∖Admir	nistrator\Doc
	Wo	r <u>k</u> space	<u>P</u> roject	<u>E</u> dit	⊻iew	Q Mod <u>u</u> le
	0	<u>N</u> ew				Ctrl+N
Ē	B	<u>O</u> pen				Ctrl+O
		<u>C</u> lose				
(	H	<u>S</u> ave				Ctrl + S

Select [Workspace] ⇒ [Save] in the menu bar.

### Settings for MELSOFT iQ AppPortal

A saved workspace can be registered in iQ AppPortal. (L iQ AppPortal Operating Manual) The feature information (title of the workspace, the components of the system configuration, the version of MELSOFT Navigation, etc.) saved in the MELSOFT iQ AppPortal information file (.iqap) is displayed in the iQ AppPortal. The MELSOFT iQ AppPortal information file (.iqap) is output when saving the workspace. The output condition can be selected on the "Option Setting" screen.

### Operating procedure

ſ	Too	ls <u>W</u> indow <u>H</u> elp	
		Motion Dedicated Device Setting Support	2
1		Profile Control	<u> </u>
(		Options	
Ľ	1-1-1		



The "Option Setting" screen is displayed.

 Select "Setting for MELSOFT iQ AppPortal". Select an output condition from "MELSOFT iQ AppPortal Information file output when saving workspace".

in setting	MELSORT IO AppRoxtal Information file output when cauloo workspace
General Message	Outruit Alwaye
System Label Parameter	Couple manage
Project Setting for MELSOFT (0 AppPortal)	Only output when information file gxists
	Not Output (Delete information file)

## 3.11 Printing Workspaces

Print a created workspace.

By selecting "File" for "Target", data can be saved in a CSV format file or a text format file. For details, refer to MELSOFT Navigator Help.

### Operating procedure

÷	a Me	LSOFT N	avigator (	:\User:	s\Admir	nistrator\	Doc
	Wo	r <u>k</u> space	<u>P</u> roject	<u>E</u> dit	<u>V</u> iew	Q Mod	<u>u</u> le
1		<u>N</u> ew				Ctrl+N	
Ē	2	<u>O</u> pen				Ctrl+O	
E		<u>C</u> lose					
	8	<u>S</u> ave				Ctrl + S	
		Save <u>A</u> s					
		Compre	ess/Unpac	k			۲
		<u>D</u> elete					
		<u>F</u> older					۲
		System	Configura	ation			۲
		Chec <u>k</u>					۲
		Allocate	e Project V	Vith Th	e Contr	oller	
		Pa <u>r</u> ame	ter				•
		System	<u>L</u> abel				۲
	4	Page Se	tup				
	1	Print Pr	eview				
(	8	<u>P</u> rint				Ctrl+P	

**1.** Select [Workspace] ⇒ [Print] in the menu bar.

₽







**2.** Select the items for print and click the [Print] button.

The "Print" screen is displayed.

**3.** Set a printer and click the [OK] button.

3 OPERATING PROCEDURE OF MELSOFT Navigator

## 3.12 Closing Workspaces

Yes <u>N</u>o

Close an open workspace.





When the workspace is not saved, the following message is displayed. Click the [Yes] button to save the workspace. Click the [No] button to close the workspace without saving it.

MELSOFT Navigator	<b>•••</b>
🛕 Do you want to sa	ve the workspace Sample_WS?
<u>Y</u> es	No Cancel

3

## 3.13 Exiting MELSOFT Navigator

Exit a MELSOFT Navigator.

### Operating procedure

📅 ME	LSOFT	lavigator (	:\User:	s∖Admir	nistrator\Doc
Wo	r <u>k</u> space	<u>P</u> roject	<u>E</u> dit	<u>V</u> iew	Q Mod <u>u</u> le
: 🗅	<u>N</u> ew				Ctrl+N
i 🖻	<u>O</u> pen				Ctrl+O
2	<u>C</u> lose				
8	<u>S</u> ave				Ctrl + S
	Save <u>A</u> s				
	Compr	ess/Unpac	k		•
	<u>D</u> elete.				
	<u>F</u> older				•
	System	Configura	ation		۲
	Chec <u>k</u>				•
	Allocat	e Project V	Vith Th	e Contr	oller
	Parame	ter			•
	System	<u>L</u> abel			۲
4	Page Se	tup			
Æ	Print Pr	e⊻iew			
8	<u>P</u> rint				Ctrl+P
	<u>1</u> Samp	le_WS			
	E⊻it				Alt+F4

Select [Workspace] ⇒ [Exit] in the menu bar.

The MELSOFT Navigator is exit.



When the workspace is open, the following message is displayed. Click the [Yes] button to close the workspace. Click the [No] button to abort the operation of exiting MELSOFT Navigator.

MELSOFT Navigator	83
Do you want to close the workspace Sample_WS?	
Yes <u>N</u> o	

# **USING SYSTEM LABELS**

This chapter explains the methods for using system labels which are shared within workspace of programmable controller projects (GX Works3, GX Works2), motion controller projects, and GOT projects.

#### 4.1 **Using System Label Ver.2**

System label Ver.2 has the following features:

- · Extension of the number of characters such as system label name
- · Extension of the number of applicable system labels
- · Projects that are referenced to system labels can be used regardless of the change of devices which are assigned for system labels
- · Multiple device comments can be set for one system label
- · Structures which have structure elements can be registered as system labels

System label Ver.2 is supported by the following devices:

- MELSEC iQ-R series
- · GOT2000 series

For details on the system label Ver.2, refer to MELSOFT Navigator Help.

Point P

- . When the system is configured with only the devices which are supported by system label Ver.2, system labels can be changed from system label Ver.1 to Ver.2. However, system label Ver.2 cannot be restored to system label Ver.1.
- · For a system configuration in which a system label Ver.2 unsupported device is used, use system label Ver.1.

### Precautions

After the registered system label Ver.1 is changed to system label Ver.2, the changed content is required to be imported in the projects in which the system labels are used.

To import the changed content, right-click the System label notification icon which is displayed on the status bar, and select [Check the changes of the System Label Database]/[Check the changes of the System Label Data Base]/[Confirm Update of System Label Database]/[Show System Label Differences and perform Update/Check] in the shortcut menu.

Additionally, the registered system label Ver.1 may not be changed to system label Ver.2.

### **Registering system label Ver.2 in MELSOFT Navigator**

This section explains a method for using system label Ver.2 with the top-down design method in the following system configuration.



### Registering system label Ver.2 in MELSOFT Navigator

Create and register system label Ver.2 in MELSOFT Navigator.

### Operating procedure





**1.** Select [Workspace] ⇔ [System Label] ⇔ [Use System Label Ver.2] in the menu bar.

The message shown on the left is displayed.

**2.** Read the message and click the [Yes] button.





Ver, 2 System Label List

The "Ver.1 System Label List" is changed to "Ver.2 System Label List".

- **4.** Enter 'List1' to change the system label name.

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🏪 List1										- • ×
Find Obje	ct	Whole Display	-	•						System Label Ver.2
Find Char	acters									Find Next
	Delete	System Label Name	Label N	Data Type	Constant	CPU Name	Project N	Assignm	attn	Comment
1		Start_lamp		Bit						Start_lamp Comment
2										





Execute Reflection Cancel

Do not display this dialog again

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5. Double-click 'List1' on the Workspace window.

The system label list window is displayed.

- 6. Set "System Label Name", "Data Type", and "Comment" for the system label Ver.2 to be registered. Setting content (sample)
- System Label Name: Start\_lamp
- · Data Type: Bit
- Comment (option) : Start\_lamp comment
- 7. Click the [Reflect to System Label Database] button.

The message shown on the left is displayed.

8. Read the message and click the [Execute Reflection] button.

The system label Ver.2 is registered to the system label database, and the cell color turns light blue.

### Deleting system label Ver.2

List1									- (	×
=ind <u>Q</u> bje	sct	Whole Display	-					<u>S1</u>	stem La	bel Ver.2
Find <u>C</u> har	racters								Find	Next
	Delete	System Label Name	Label N	Data Type	Constant	CPU Name	Project N	Assignm.+	Attri	Con
1	Delete	System Label Name Start_lamp	Label N	Data Type Bit	Constant	CPU Name	Project N	Assignm.+	Attri	Con Start_la

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🔚 List1									-	×
Find Obje	ect	Whole Display	•					Si	stem Lab	el Ver.2
Find ⊆har	racters								Find	Ne <u>x</u> t
	Delete	System Label Name	Label N	Data Type	Constant	CPU Name	Project N	Assignm.+	Attri	Corr
1		Start_lamp		Bit						Start_lar
•							•			Þ
🗌 Syste	em label	is being edited.		Sy	stem label is	already refl	ected.			
To enable reflection Please ex When the the chang * System	the edi to the s ecute "F assigne ge of ref label Ve	ted contents of the sy: ystem label database i teflect to System Labe ted device is changed in er side project does no r.2 is only used in IO-R	stem label, s required. I Database" system lab st need. series/GOT	el Ver.2, 2000 series.		Not		0	Refle System	ct to Label

- **1.** Select a system label Ver.2 to be deleted.
- **2.** Click the [Reflect to System Label Database] button.

### Point P

- System labels can also be registered to the system label database by saving the workspace after setting the system label Ver.2 to be registered.
- The system label Ver.2 created in CSV format or text format can be imported to the workspace. Also, system label Ver.2 created in the workspace can be exported in CSV format or text format. For details, refer to MELSOFT Navigator Help.

### Assigning devices to system label Ver.2

Import system label Ver.2 registered in MELSOFT Navigator to global labels of the programmable controller project (GX Works3) and assign devices to system label Ver.2 so that they can be utilized in other projects. For importing system label Ver.2 to motion controller project, follow the same procedure as described below.

### Operating procedure



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1. Double-click "GXW3\_Proj1" on the Workspace window.

The GX Works3 project is opened.

The global label editor is displayed.

**3.** Click the [Import System Label] button.

2. Double-click "Global" on the Navigation window of GX Works3.

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The "Import System Labels to Project" screen is displayed.

4. Select a system label Ver.2 to be imported, and click the [Import] button.

The system label Ver.2 registered in MELSOFT Navigator is registered to global label of GX Works3.

5. Assign a device to the imported system label Ver.2. (If the "Assign (Device/Label)" column is not displayed, click the [Show Details] button.)

Setting content (sample)

Assign (Device/Label): X0





- Control (Calculated Section)
   The control (Calculated Section)
  - ₽

MELSOFT	GX Works3	3
	The edited System Label is reflected to the System Label Database. When it is reflected, the following is executed. - When the global label is unconverted Rebuild All operation is executed. - After the reflection, the project is saved. Are you sure you want to continue? [Caution] - Executing Rebuild All operation disables Online Program Change. - When you don't execute, execute Rebuild All and Save operations separately.	
	<u>Y</u> es <u>N</u> o	

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**6.** Click the [Reflect to System Label Database] button.

The message shown on the left is displayed.

7. Read the message and click the [Yes] button.
The Build and Save the project are performed.
For details on the compilation, refer to the following manual.
GX Works3 Operating Manual

The "Check before registering in system label database" screen is displayed.

Contents to be registered are displayed in red.

**8.** Check the contents and click the [Register] button.

The system label notification icon is displayed on the status bar of MELSOFT Navigator.

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1	Wo	r <u>k</u> space	<u>P</u> roject	<u>E</u> dit	View	Online	I
1		<u>N</u> ew				Ctrl+N	
Ē	B	<u>O</u> pen				Ctrl+O	
P		<u>C</u> lose					
(	H	<u>S</u> ave				Ctrl + S	
		Save <u>A</u> s	·				

Point P

**9.** Select [Workspace] ⇒ [Save] in the menu bar of MELSOFT Navigator.

The "Ver.2 System Label List" of MELSOFT Navigator is updated.

After checking registration of system labels to the system label database in the step 9, system label Ver.2 in MELSOFT Navigator can also be updated by selecting [Workspace] ⇔ [System Label] ⇔ [System Label Database] ⇔ [Import Changed Contents] in the menu bar of MELSOFT Navigator and save the project.
 The system label Ver.2 of GX Works3 imported to each project can be used as global labels.

### Using system labels in GT Designer3

Use system label Ver.2 to which devices are assigned in a programmable controller project (GX Works3) for a GOT project. In GOT projects, system label names can be specified when setting devices to created objects.

For the method on how to draw objects in GOT projects, refer to the following manuals.

GT Designer3 Version 1 Screen Design Manual (Fundamentals)

GT Designer3 Version 1 Screen Design Manual (Functions)

### Operating procedure



1. Double-click "GOT\_Proj1" on the Workspace window.

The message shown on the left is displayed when a GX Works2, GX Works3, or MT Developer2 project is open.

**2.** Read the message and click the [Yes] button.

The GOT project is opened.

**3.** Double-click the created object.







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The "Bit Lamp" screen is displayed.

4. Click the [...] button.



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The "Select CH No." screen is displayed.

5. Click the [Select System Label] button.

The "Import System Labels to Project" screen is displayed.

**6.** Select a system label Ver.2 to be used and click the [Import] button.

After the settings are completed, the system label name is displayed on the object.

**7.** Select [Project]  $\Rightarrow$  [Save] in the menu bar.

The message shown on the left is displayed.

**8.** Read the message and click the [Yes] button.

The system label Ver.2 is ready to be referenced.



B-1:(Front+Back)

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Pro	ject	Edit	Search/ <u>R</u> eplace	⊻iew	<u>S</u> creen	Co <u>m</u> mon
	<u>N</u> et	N				+
	<u>О</u> р	en				Ctrl+O
	<u>C</u> lo	se				
H	<u>S</u> av	e				Ctrl+S
	Sav	e As				F12





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- After saving GT Designer3 project by clicking [No] button on the message in the step 8, system label Ver.2 can be used by selecting [Workspace] ⇔ [System Label] ⇔ [Route Information/Routing Parameters] in the menu bar of MELSOFT Navigator to create the route information/routing parameters.
- An error which occurs when referenced to system label Ver.2 can be checked on the "System Label Update/ Check" screen of GT Designer3. For details, refer to the following manual.

GT Designer3 Version 1 Screen Design Manual (Fundamentals)

### **Utilizing Existing Labels as System Label Ver.2**

This section explains a method for using system label Ver.2 with the bottom-up design method in the following system configuration.

The following is an example of utilizing system label Ver.2 registered in the programmable controller project (GX Works3) for the motion controller project.

System label Ver.2 can also be utilized among programmable controller projects (GX Works3) or among motion controller projects.



\*1 CPU buffer memory access device

### Registering labels as system label Ver.2

Register the global labels which has been set in the programmable controller project (GX Works3) as system label Ver.2, and reflect them to MELSOFT Navigator.

The following is an example of registering global labels of programmable controller project (GX Works3) as system label Ver.2.

The labels of motion controller projects can be registered as system label Ver.2 with the same procedure as described below.

### Operating procedure

44.0	r <u>k</u> space <u>P</u> roject <u>E</u> dit <u>V</u> iew	v On <u>l</u> ine	Tools	₩indow	Help	
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B	Open	Ctrl+O	×	,		
	<u>C</u> lose		.EI			
A	Save	Ctrl + S				
	Save <u>A</u> s					
	Compress/Unpack		•			
	Delete					
	Folder		,			
	System Configuration		•			
	Check		,			
	Allocate Project With The Cor	troller				
	Parameter		•			
_	System <u>L</u> abel		•	System <u>L</u> ab	el List	
P	Page Setup			Structured	Data Types	
é#	Print Pre <u>v</u> iew			System Lab	el <u>D</u> atabase	
₽ R						

**1.** Select [Workspace] ⇔ [System Label] ⇔ [Use System Label Ver.2] in the menu bar.

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- The "Ver.1 System Label List" is changed to "Ver.2 System Label List".
- **3.** Double-click "GXW3\_Proj2" on the Workspace window.

The GX Works3 project is opened.

**4.** Double-click "Global" on the Navigation window of GX Works3.

The message shown on the left is displayed.

**2.** Read the message and click the [Yes] button.

Navigation 4 × Pt Project Module Configuration # EPFGIAN # FB/FUN # Galabel

-Link Configuration ) Assignment Project pject List ructured Data Types ar.2 System Label List ₽



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1 Global [Global Label Setting]	- • •
(Filer) Easy Display (K) Di	splay Setting Check
Label Name Data Type Class 1 Strage_A Word [Unsigned//81 String [16-bitVAR_GLOBALU	Assign Initial Value Constant Comment Remark System Label Relation System Label Na A 36/0/G10000
<u>د</u>	#
Ext	tended Display: Automatic
System label is reserved to be registered.	ad to be released. 🛛 🔲 The system label is already registered to the system label database.
To execute the Reservation to Register/Release for the system label, reflection to the system label database is required. Please execute Neffect to System Label Database . It is unnecessary to change reference side project when	Reservation to Register System Label Reservation to Release System Label
assigned device is changed in system label Ver.2. * Only IQ-R series/GOT 2000 series is available for system label Ver.2. * To execute Online Program Change, execute Online Program Change and save.	Import System Label Not Reflected: 0 Total: 0

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The global label editor is displayed.

- **5.** Select "Access from External Device" of a global label which is to be registered as system label Ver.2.
- **6.** Select the global labels to be registered as a system label Ver.2, and click the [Reservation to Register System Label] button.

The cell color of the selected global label turns yellow.

7. Click the [Reflect to System Label Database] button.

The message shown on the left is displayed.

**8.** Read the message and click the [Yes] button.

The Build and Save the project are performed.

For details on the compilation, refer to the following manual.

The "Check before registering in system label database" screen is displayed.

9. Click the [Register] button.

The system label Ver.2 is registered and the cell color turns light blue.



The system label notification icon is displayed on the status bar of MELSOFT Navigator.

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Wo	r <u>k</u> space	<u>P</u> roject	<u>E</u> dit	⊻iew	On <u>l</u> ine	]
: 🗅	<u>N</u> ew				Ctrl+N	
i 🖻	<u>O</u> pen				Ctrl+O	
•	<u>C</u> lose					
	<u>S</u> ave				Ctrl + S	
	Save <u>A</u> s					

**10.** Select [Workspace] ⇒ [Save] in the menu bar of MELSOFT Navigator.

The system label Ver.2 created in GX Works3 project is reflected to MELSOFT Navigator.

### Using system label Ver.2 in motion controller projects

Use system label Ver.2 registered in the programmable controller project (GX Works3) for a motion controller project.

### Operating procedure



Reflect to System Lab

1. Double-click "MTD2 Proj1" on the Workspace window.

The motion controller project is opened.

2. Double-click "VARIABLE" on the Navigation window of MT Developer2.

The label setting editor is displayed.

3. Click the [Import System Label] button.

The "Import System Labels to Project" screen is displayed.

4. Select a system label to be imported, and click the [Import] button.

The system label is registered to the label setting editor.

**5.** Select [Check/Convert] ⇒ [Label Conversion] in the menu bar of MT Developer2.

The message shown on the left is displayed.

6. Read the message and click the [OK] button.



**7.** Select [Project]  $\Rightarrow$  [Save] in the menu bar.

The message shown on the left is displayed.

**8.** Read the message and click the [Yes] button.

The "Check before registering in system label database" screen is displayed.

**9.** Click the [Register] button.

The system label Ver.2 is registered and the cell color turns light blue.

#### Precautions

When referencing system label Ver.2, assign the devices of which attribute can be referenced from programmable controller projects (GX Works3) or motion controller projects. For details, refer to MELSOFT Navigator Help.

### Changing devices of system label Ver.2

Change the devices assigned for system label Ver.2.

The following is an example of changing system label Ver.2 which is registered in a programmable controller project (GX Works3) and referenced from GOT projects.

For the system configuration, refer to the following section.

Page 90 Registering system label Ver.2 in MELSOFT Navigator

### Operating procedure



**1.** Double-click "GXW3\_Proj2" on the Workspace window.











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The GX Works3 project is opened.

**2.** Double-click "Global" on the Navigation window of GX Works3.

The global label editor is displayed.

- **3.** Change the devices of the registered system label Ver.2.
- **4.** Click the [Reflect to System Label Database] button.

The message shown on the left is displayed.

5. Read the message and click the [Yes] button.
The Build and Save the project are performed.
For details on the compilation, refer to the following manual.
GX Works3 Operating Manual
| i berore registenni | g in system tool doublest   |                                       |   |                |          |          |              |                           |      |
|---------------------|---|---------------------------------------|---|----------------|----------|----------|--------------|---------------------------|------|
| ind Subject         | Whole Display   | Find C                                | haracters   |                |          |          |              | Find Next                 |      |
| Registration (      | Co System Label List Name   | System Label Name                     | Label Name  | Data Type      | Constant | CPU Name | Project Name | Assignment (Device/Label) | 1    |
| t Change            | List1   | Start_lamp                            | Start_lamp  | Bit            |          | R04CPU   | GKW3_Proj1   | 20                        | 1/0  |
|                     |   |                                       |   |                |          |          |              |                           |      |
|                     |   |                                       |   |                |          |          |              |                           |      |
|                     |   |                                       |   |                |          |          |              |                           |      |
|                     |   |                                       |   |                |          |          |              |                           |      |
|                     |   |                                       |   |                |          |          |              |                           |      |
|                     |   |                                       |   |                |          |          |              |                           |      |
|                     |   |                                       |   |                |          |          |              |                           |      |
|                     |   |                                       |   |                |          |          |              |                           |      |
|                     |   |                                       |   |                |          |          |              |                           |      |
|                     |   |                                       |   |                |          |          |              |                           |      |
|                     | п   |                                       |   |                |          |          |              |                           |      |
|                     | 77  |                                       |   |                |          |          |              |                           |      |
|                     |   |                                       |   |                |          |          |              |                           |      |
| ationship degram b  | m<br>retween system label database (  | *1) and project (*2)                  |   |                |          |          |              | Register C                | -    |
| istorship dagram b  | m<br>retween system label database (  | *1) and project (*2)<br>Re            | gister g  |                |          |          |              | Register                  | ance |
| istorchip diagram b | IT  | *1) and project (*2)<br>Re            | date to the second  | 1              |          |          |              | Register Ga               | 800  |
| ationship clagram b | =:<br>setween system label database (<br>d at bits carse time<br>to be sovern bind database | *1) and project (*2)<br>Re<br>MELSOFT | ,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>, | A State of the | AMT      | GT       | -1           | Register G                | snce |

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 Image: Save Administrator C:Users'Administrator/Doc

 Workspace
 Project

 Image: Save Administrator
 Ctrl + N

 Image: Save Administrator
 Ctrl + S

The "Check before registering in system label database" screen is displayed.

Contents to be changed are displayed in red.

**6.** Check the contents and click the [Register] button.

The system label notification icon is displayed on the status bar of MELSOFT Navigator.

 Select [Workspace] ⇔ [Save] in the menu bar of MELSOFT Navigator.

The "Ver.2 System Label List" of MELSOFT Navigator is updated.

Point P

• After changing the content of system label Ver.2, importing the change of system labels in the projects in which the system labels are referenced is not required.

• The changed content of system label Ver.2 can be checked on the "Display Change History" screen displayed by selecting [Workspace] ⇔ [System Label] ⇔ [System Label Database] ⇔ [Display Change History] in the menu bar of MELSOFT Navigator.

# 4.2 Using System Label Ver.1

The system label Ver.1 is supported by the following devices.

- MELSEC iQ-R series
- MELSEC iQ-F series
- Q series
- L series
- FX series
- GOT2000 series
- GOT1000 series

For details on system label Ver.1, refer to MELSOFT Navigator Help.

### Point P

- When a system is configured using only MELSEC iQ-R series and GOT2000 series, system label Ver.1 can be changed to system label Ver.2. However, system label Ver.2 cannot be restored to system label Ver.1.
- For a system configuration in which a system label Ver.2 unsupported device is used, use system label Ver.1.

### **Registering and Using System Label Ver.1 in MELSOFT Navigator**

This section explains a method for using system label Ver.1 with the top-down design method in the following system configuration.



### Registering system label Ver.1 in MELSOFT Navigator

Create and register system label Ver.1 in MELSOFT Navigator.

#### Operating procedure



2. Enter 'List1' to change the system label name.

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Find Object	(	Whole Display	-	)						System Label Ver.1
Find ⊆haract	ters									Find Ne <u>x</u> t
De	elete	System Label Name	Label N	Data Type	Constant	CPU Name	Project N	Assignm	Attri	Comment
1		Start_lamp		Bit						Start_lamp Comment
2										

**3.** Double-click 'List1' on the Workspace window.

The system label list window is displayed.

**4.** Set "System Label Name", "Data Type", and "Comment" for the system label Ver.1 to be registered.

Setting content (sample)

- System Label Name: Start\_lamp
- Data Type: Bit
- Comment (option) : Start\_lamp comment



![](_page_112_Picture_1.jpeg)

Reflect to	System Label Database
<u>^</u>	Reflects to the system label database. -The workspace is saved at the reflection. -When a change notification is received, the change contents are imported. -When a system label includes changes on which the change notification is applied, the contents of the change notification are given priority in overwriting. * Also, when a workspace is saved, the edited contents can be reflected to the system label database. Do not gisplay this dialog again
	Execute Reflection Cancel

### Deleting system label Ver.1

![](_page_112_Figure_4.jpeg)

![](_page_112_Picture_5.jpeg)

### Point P

- System labels can also be registered to the system label database by saving the workspace after setting the system label Ver.1 to be registered.
- System label Ver.1 created in CSV format or text format can be imported to the workspace. Also, system labels created in the workspace can be exported in CSV format or text format. For details, refer to MELSOFT Navigator Help.

**5.** Click the [Reflect to System Label Database] button.

The message shown on the left is displayed.

**6.** Read the message and click the [Execute Reflection] button.

The system label Ver.1 is registered to the system label database and the cell color turns light blue.

- **1.** Select "Delete" of a system label Ver.1 to be deleted.
- **2.** Click the [Reflect to System Label Database] button.

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### Assigning devices to system label Ver.1

Import system label Ver.1 registered in MELSOFT Navigator to global labels of the programmable controller project (GX Works2) and assign devices to system label Ver.1 so that they can be utilized in other projects.

For importing system label Ver.1 to motion controller project, follow the same procedure as described below.

### Operating procedure

![](_page_113_Picture_4.jpeg)

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🐏 Global	Label Setting Global1					-	
	Class	Label Name	Data Type		Constant	Device	<b></b>
1	<b>*</b>						
2	*						
3	*						
4	•						<b></b>
•							•
Syster	m label is reserved to	be registered. 🔲 Sy	stern label is res	erved to be r	eleased. 🔲 Th to	the system label is the system label	already register database.
To exec label, ret	ute the Reservation f flection to the system	to Register/Release for habel database is regu	the system ired.	Reservation	n to Register Syster	n Label 🛛 🕞	
Please e * To ex	ecute 'Reflect to Sy ecute Online Program	stem Label Database'. Change, execute Onl	ne Program	Reservatio	n to Release System	n Label	,0
Chang	je and save.			Im	port System Label	Not Tota	Reflected: 0 al: 0
•			m	_			Þ

![](_page_113_Picture_7.jpeg)

![](_page_113_Figure_8.jpeg)

![](_page_113_Figure_9.jpeg)

**1.** Double-click "GXW2\_Proj2" on the Workspace window.

The GX Works2 project is opened.

**2.** Double-click "Global1" on the Navigation window of GX Works2.

The global label setting editor is displayed.

**3.** Click the [Import System Label] button.

The "Import System Labels to Project" screen is displayed.

**4.** Select a system label Ver.1 to be imported, and click the [Import] button.

The message shown on the left is displayed.

**5.** Read the message and click the [OK] button.

The system label Ver.1 registered in MELSOFT Navigator is registered to global labels of GX Works2.

![](_page_114_Picture_0.jpeg)

![](_page_114_Picture_1.jpeg)

![](_page_114_Picture_2.jpeg)

![](_page_114_Picture_3.jpeg)

**6.** Assign a device to the imported system label Ver.1. Setting content (sample)

Device: X0

7. Click the [Reflect to System Label Database] button.

The message shown on the left is displayed.

**8.** Read the message and click the [Yes] button.

The Build and Save the project are performed.

For details on the compilation, refer to the following manuals. GX Works2 Version 1 Operating Manual (Simple Project) 4

GX Works2 Version 1 Operating Manual (Structured Project)

![](_page_114_Picture_12.jpeg)

![](_page_114_Picture_13.jpeg)

![](_page_114_Figure_14.jpeg)

 Image: Sector and Sector

The "Check before registering in system label database" screen is displayed.

Contents to be registered are displayed in red.

**9.** Check the contents and click the [Register] button.

The system label notification icon is displayed on the status bar of MELSOFT Navigator.

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Wo	r <u>k</u> space	<u>P</u> roject	<u>E</u> dit	⊻iew	Q Mod <u>u</u> le
: 🗅	<u>N</u> ew				Ctrl+N
1 🖻	<u>O</u> pen				Ctrl+O
	<u>C</u> lose				
B	Save				Ctrl + S
	Save <u>A</u> s				

**10.** Select [Workspace] ⇔ [Save] in the menu bar of MELSOFT Navigator.

The Ver.1 System Label List of MELSOFT Navigator is updated.

### Point *P*

After checking registration of system labels to the system label database in the step 9, system label Ver.1 of MELSOFT Navigator can also be updated by selecting [Workspace] ⇔ [System Label] ⇔ [System Label Database] ⇔ [Change Contents of System Label Database] in the menu bar of MELSOFT Navigator and save the project.

#### Precautions

The system label Ver.1 of GX Works2 imported to each project can be used as global labels.

System label Ver.1 cannot be used when using a project without labels in GX Works2. Change the project type from 'without labels' to 'with labels'. For details of changing project type, refer to the following manual.

GX Works2 Version 1 Operating Manual (Common)

### Using system label Ver.1 in GT Designer3

Using system label Ver.1 to which devices are assigned in a programmable controller project (GX Works2) for a GOT project. In GOT projects, system label names can be specified when setting devices to created objects.

For the method on how to draw objects in GOT projects, refer to the following manuals.

GT Designer3 Version 1 Screen Design Manual (Fundamentals)

GT Designer3 Version 1 Screen Design Manual (Functions)

### Operating procedure

![](_page_116_Picture_6.jpeg)

1. Double-click "GOT\_Proj1" on the Workspace window.

The message shown on the left is displayed when a GX Works2, GX Works3, or MT Developer2 project is open.

2. Read the message and click the [Yes] button.

![](_page_116_Picture_10.jpeg)

The GOT project is opened.

**3.** Double-click the created object.

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BitLamr Text Lamp Type Bit Devi -▼ Shape... Shage: Circle\_Fixed Width : Circle\_6 OFF Frame Color: **-**Lamp Color . Background Colo ON Pattern: 1-Object Name OK Cancel Convert to Switch ...

The "Bit Lamp" screen is displayed.

4. Click the [...] button.

Select CH No.	
Select CH No. of	Controller Type for device entry.
Current Device:	
Select Label	
	Select System Label
	Ţ

System Label List Name	Al		finement Option	None		•			
		Re	finement Ghara	cters					Refinement
Find Subject	Whole Display	• Br	nd Characters						Find Next
Sustem Label M	Label Name	Data Type	Constant	CPU Name	Project Name	Device	Attribute	Comment	Remark
1 Start_lamp	tart_lamp	Bit		QOSUDHCPU	GXW2_Proj2	X1	I/O	Start_lamp.com	
Relationship diagram bet	ween system label datab	ase (*1) and pro	ject (*2)					Import	Cancel

₽

The "Select CH No." screen is displayed.

**5.** Click the [Select System Label] button.

The "Import System Labels to Project" screen is displayed.

**6.** Select a system label Ver.1 to be used, and click the [Import] button.

After the settings are completed, the system label name is displayed on the object.

**7.** Select [Project]  $\Rightarrow$  [Save] in the menu bar.

The message shown on the left is displayed.

**8.** Read the message and click the [Yes] button.

The system label Ver.1 is ready to be referenced.

![](_page_117_Picture_11.jpeg)

MELSOFT GT Designer3 (GOT1000) C:\Users\Admir
 Project Edit Search/<u>R</u>eplace <u>V</u>iew <u>S</u>creen

New

Open.

💾 <u>S</u>ave

![](_page_117_Picture_12.jpeg)

Ctrl+0

Ctrl+S

Ŷ

![](_page_117_Picture_14.jpeg)

![](_page_118_Picture_0.jpeg)

- After saving GT Designer3 project by clicking [No] button on the message in the step 8, system label Ver.1 can be used by selecting [Workspace] ⇔ [System Label] ⇔ [Route Information/Routing Parameters] in the menu bar of MELSOFT Navigator to create the route information/routing parameters.
- In GX Works2, when assigning devices to labels by using the Device/label automatic-assign setting function, the devices are assigned from the end of the device range which has been set to PLC parameter.
   If the devices are outside the applicable range in GT Designer3, the monitor cannot be performed in GOT.
   Check that the devices to be assigned to system label are within the applicable range.
- An error which occurs when referenced to system label Ver.1 can be checked on the "System Label Update/ Check" screen in GT Designer3. For details, refer to the following manual.

GT Designer3 Version 1 Screen Design Manual (Fundamentals)

### **Utilizing Existing Labels as System Label Ver.1**

This section explains a method for using system label Ver.1 with the bottom-up design method in the following system configuration.

The following is an example of utilizing system label Ver.1 registered in the programmable controller project (GX Works2) for the motion controller project.

System label Ver.1 can also be utilized among programmable controller projects (GX Works2) or among motion controller projects.

![](_page_119_Figure_4.jpeg)

\*1 CPU buffer memory access device

### Registering labels as system label Ver.1

Register the global labels, which have been set in the programmable controller project (GX Works2), as system label Ver.1, and reflect them to MELSOFT Navigator.

The following is an example of registering global labels of programmable controller project (GX Works2) as system label Ver.1.

The labels of motion controller projects can be registered as system label Ver.1 with the same procedure as described below.

### Operating procedure

![](_page_120_Picture_5.jpeg)

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![](_page_120_Picture_7.jpeg)

₽

~	Glob	al Label Setting Glo	obal1							
		Class	Label Name	Data Type	0	instant De	vice Comment	Remark.	Relation with System Label	System La 🔺
+	1	VAR GLOBAL -	Start_lamp	Bit		×0	Sample_WS		Disclose	Start_lamp -
	2	VAR_GLOBAL -	korage_A	Word[Signed]		U3E	1\G10			
	3									
	4	-								-
4										•
System label is reserved to be registered. System label is reserved to be released. To execute the Reservation to Register/Release for the system Reservation to Register/Release for the system										
	io exe ibel, r	ecute the Reserva reflection to the s	tion to Regist ystem label da	er/Release for t Itabase is requin	he systen iid.	Reser	vation to Registe	r System Lab	╝┗┓━∩	
	io exe Ibel, r fease	ecute the Reserva effection to the s execute Reflect	tion to Regist ystem label da to System Lab	er/Release for t Itabase is requin pel Database'.	he systen ed.	Rese	vation to Registe	r System Lab 9 System Lab		Reflect to System Label
	o exe Ibel, i lease To e Char	ecute the Reserva reflection to the s execute Reflect execute Online Pro nge and save.	tion to Regist ystem label da to System Lab ogram Change	er/Release for t itabase is requin pel Database', , execute Onlin	he systen id. e Program	Reser	vation to Registe vation to Release Import System	r System Lab 9 System Lab 1 Label	el Not Reflected: 0 Total: 0	Reflect to System Label Database
	o exe ibel, i fease ' To e Char	ecute the Reserva reflection to the s execute Reflect xecute Online Pro nge and save.	tion to Regist ystem label da to System Lab gram Change	er/Release for t itabase is requin sel Database'. , execute Onlin	he systen id. e Program	Reser	vation to Registe vation to Release Import System	r System Lab 9 System Lab 1 Label	el Di Contra di	Reflect to System Label Database
	o exe bel, r fease ' To e Char	ecute the Reserva reflection to the s execute Reflect xecute Online Pro nge and save.	tion to Regist ystem label da to System Lab gram Change	er/Release for t itabase is riquin pel Database'. , execute Onlin	he systen id. e Program	Reser	vation to Registe vation to Release Import System	r System Lab 9 System Lab 1 Label	el Not Reflected: 0 Total: 0	Reflect to System Label Database

![](_page_120_Figure_10.jpeg)

![](_page_120_Figure_11.jpeg)

![](_page_120_Figure_12.jpeg)

**1.** Double-click "GXW2\_Proj2" on the Workspace window.

The GX Works2 project is opened.

**2.** Double-click "Global1" on the Navigation window of GX Works2.

The global label setting editor is displayed.

**3.** Select the global labels to be registered as a system label Ver.1, and click the [Reservation to Register System Label] button.

The cell color of the selected global label turns yellow.

**4.** Click the [Reflect to System Label Database] button.

![](_page_121_Picture_0.jpeg)

![](_page_121_Picture_1.jpeg)

![](_page_121_Figure_2.jpeg)

![](_page_121_Figure_3.jpeg)

![](_page_121_Figure_4.jpeg)

**5.** Read the message and click the [Yes] button.

The Build and Save the project are performed.

For details on the compilation, refer to the following manuals. GX Works2 Version 1 Operating Manual (Simple Project)

GX Works2 Version 1 Operating Manual (Structured Project)

The "Check before registering in system label database" screen is displayed.

6. Click the [Register] button.

The system label Ver.1 is registered and the cell color turns light blue.

The system label notification icon is displayed on the status bar of MELSOFT Navigator.

![](_page_121_Figure_13.jpeg)

![](_page_121_Picture_14.jpeg)

![](_page_121_Picture_15.jpeg)

 Select [Workspace] ⇒ [Save] in the menu bar of MELSOFT Navigator.

The system label Ver.1 created in GX Works2 project is reflected to MELSOFT Navigator.

### Using system label Ver.1 in motion controller projects

Use system label Ver.1 registered in the programmable controller project (GX Works2) for a motion controller project.

### Operating procedure

![](_page_122_Picture_3.jpeg)

![](_page_122_Picture_4.jpeg)

![](_page_122_Picture_5.jpeg)

![](_page_122_Figure_6.jpeg)

![](_page_122_Picture_7.jpeg)

![](_page_122_Figure_8.jpeg)

![](_page_122_Figure_9.jpeg)

![](_page_122_Figure_10.jpeg)

![](_page_122_Picture_11.jpeg)

![](_page_122_Picture_12.jpeg)

1. Double-click "MTD2\_Proj1" on the Workspace window.

The motion controller project is opened.

 Double-click "VARIABLE" on the Navigation window of MT Developer2.

The label setting editor is displayed.

**3.** Click the [Import System Label] button.

The "Import System Labels to Project" screen is displayed.

**4.** Select a system label Ver.1 to be imported, and click the [Import] button.

The system label Ver.1 is registered to the label setting editor.

**5.** Select [Check/Convert] ⇒ [Label Conversion] in the menu bar of MT Developer2.

![](_page_123_Picture_0.jpeg)

The message shown on the left is displayed.

**6.** Read the message and click the [OK] button.

**7.** Select [Project]  $\Rightarrow$  [Save] in the menu bar.

### Precautions

When referring to system label Ver.1, assign the device with attribute which can be referenced from a programmable controller project (GX Works2) or a motion controller project. For details, refer to MELSOFT Navigator Help.

### Changing devices of system label Ver.1

Change the devices assigned for system label Ver.1.

The following is an example of registering system label Ver.1 which is registered in a programmable controller project (GX Works2) and referenced from GOT projects.

For the system configuration, refer to the following section.

Page 109 Registering and Using System Label Ver.1 in MELSOFT Navigator

### Operating procedure

![](_page_124_Picture_6.jpeg)

![](_page_124_Picture_7.jpeg)

![](_page_124_Picture_8.jpeg)

![](_page_124_Picture_9.jpeg)

The GX Works2 project is opened.

**2.** Double-click "Global1" on the Navigation window of GX Works2.

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![](_page_124_Picture_13.jpeg)

![](_page_124_Picture_14.jpeg)

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The global label setting editor is displayed.

- 3. Change the devices of registered system label Ver.1.
- **4.** Click the [Reflect to System Label Database] button.

![](_page_125_Picture_0.jpeg)

Check before registering an system block database Prod Soldes: Prod So

Ð

₽

 Important Status
 Important Status

 Important Status

₽

![](_page_125_Picture_4.jpeg)

The message shown on the left is displayed.

**5.** Read the message and click the [Yes] button.

The Build and Save the project are performed.

For details on the compilation, refer to the following manuals. GX Works2 Version 1 Operating Manual (Simple Project)

GX Works2 Version 1 Operating Manual (Structured Project)

The "Check before registering in system label database" screen is displayed.

Contents to be changed are displayed in red.

**6.** Check the contents and click the [Register] button.

The system label notification icon is displayed on the status bar of MELSOFT Navigator.

The system label of GX Works2 project is reflected to MELSOFT Navigator.

![](_page_126_Figure_1.jpeg)

The GOT project is opened and the message shown on the left is displayed.

4

**9.** Read the message and click the [Yes] button.

The "Change Contents of System Label Database" screen is displayed.

**10.** Check the content and click the [Import] button.

The message shown on the left is displayed.

**11.** Click the [OK] button.

The changed content in GX Works2 is reflected to GT Designer3.

**12.** Select [Project] ⇒ [Save] in the menu bar.

![](_page_126_Figure_10.jpeg)

E 💾 🔤 Save

New

Open..

Save As

B

The changed content of system label Ver.1 can be checked on the "Display Change History" screen displayed by selecting [Workspace] ⇒ [System Label] ⇒ [System Label Database] ⇒ [Display Change History] in the menu bar of MELSOFT Navigator.

![](_page_126_Picture_12.jpeg)

Ctrl+N

Ctrl+O

Ctrl+S

![](_page_126_Picture_13.jpeg)

[No.1 CPU]GXW2\_Proj2(Q06UDH)
[No.2 CPU]MTD2\_Proj1(Q173D,SV
GOT\_Proj1(GT10\*\*-Q (320x240))

₽

Workspace

Network Configuration
 Module Configuration
 Module Configuration
 Amount Configuration

**φ** χ

![](_page_126_Picture_14.jpeg)

# 4.3 Using System Labels on Other Personal Computer

This section explains a method for utilizing created system labels on other personal computers than where the source workspace exists.

When utilizing system labels on other personal computer, create a workspace in MELSOFT Navigator, copy it to a media such as USB memory, and then edit the project.

After editing the project on other personal computer, importing the project to the original workspace and performing verification and synchronization are required. To import the project, the versions of the system labels in the workspace must be the same as that of the import source project. For details on the Import function, refer to the following section.

The following is an example when performing the verification and synchronization function on the system labels of programmable controller project (GX Works2).

When performing the verification and synchronization function on motion controller projects, follow the same procedure as described below.

### Operating procedure

![](_page_127_Picture_7.jpeg)

 Select [Edit] ⇒ [System Label] ⇒ [Execute Verification Synchronous with System Label] in the menu bar of GX Works2.

![](_page_127_Picture_9.jpeg)

The message shown on the left is displayed.

**2.** Read the message and click the [Yes] button.

![](_page_127_Picture_12.jpeg)

![](_page_127_Picture_13.jpeg)

The "Execute Verification Synchronous with system label" screen is displayed.

**3.** Select an item under "Reflection Contents of Verification Synchronous", and click the [Reflection] button.

![](_page_128_Picture_0.jpeg)

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![](_page_128_Picture_2.jpeg)

The message shown on the left is displayed.

**4.** Read the message and click the [OK] button.

The system label notification icon is displayed on the status bar of MELSOFT Navigator.

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📅 MI	ELSOFT N	lavigator (	:\User:	s∖Admir	nistrator\Do
Wo	r <u>k</u> space	<u>P</u> roject	<u>E</u> dit	⊻iew	Q Mod <u>u</u> le
: 🗅	<u>N</u> ew				Ctrl+N
1 🖻	<u>O</u> pen				Ctrl+O
2	<u>C</u> lose				
P	<u>S</u> ave				Ctrl + S
	Save <u>A</u> s				

**5.** Select [Workspace] ⇒ [Save] in the menu bar. The system label database of MELSOFT Navigator is updated.

## 4.4 Checking System Labels

Check the conditions such as; module configurations of created system configuration, project allocation status, and system label consistency in batch.

A project in which the changed content of system labels is not imported can also be checked.

For details on importing the changed content, refer to the following section.

Page 89 Using System Label Ver.2

### Operating procedure

₩o	r <u>k</u> space <u>P</u> roject <u>E</u> dit <u>V</u> iew	Q Mod <u>u</u> le	Configuration Online Tools Window Help
	<u>N</u> ew	Ctrl+N	👷 🖪 🕲 🖉 / 🗆 O 🖻 대 약 명
8	Open	Ctrl+O	Configuration diagram P
	Close		
9	Save	Ctrl + S	MNET/H (Optical Loop Type) Network No.1
1	Save <u>A</u> s		
	Compress/Unpack	•	
	Delete		
1	Eolder	•	
	System Configuration	÷	
	Chec <u>k</u>	•	Batch Check
	Allocate Project With The Con	roller	20 Power Supply Capacity and I/O Points of IQ-R/Q/L Module Configura
1	Pagameter	•	System Configuration
	Contrast I shall		Ser Surtam Jahal

**1.** Select [Workspace] ⇔ [Check] ⇔ [Batch Check] in the menu bar.

MELSOFT Navigator 

MELSOFT Navigator

Mathematic Rescuted.

Subserver Configuration check

System configuration check

System configuration check

System configuration check

System Label Consistency Check

Do you want to execute?

Yes
No

The message shown on the left is displayed.

**2.** Read the message and click the [Yes] button.

![](_page_129_Picture_11.jpeg)

![](_page_129_Picture_12.jpeg)

The message shown on the left is displayed when a project is open in the workspace.

**3.** Read the message and click the [Yes] button.

![](_page_130_Picture_0.jpeg)

![](_page_130_Figure_1.jpeg)

![](_page_130_Picture_2.jpeg)

Output	
The batch verification between system configuration information and parameter is starter	1. 🔺
Checking before registering in system label database is started	
Checking the route information The check of the route information is completed	-
Output Task List	

### Checking only system label consistency

![](_page_130_Figure_5.jpeg)

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![](_page_130_Picture_7.jpeg)

₽

The batch check is completed, and the message shown on the left is displayed.

**4.** When performing the batch verification of parameters, click the [Yes] button.

- The message shown on the left is displayed.
- **5.** Read the message and click the [Execute Verify] button.

The verification is performed.

Error or Warning is displayed on the Output window when the verification result contains an error. Check the error description on the Task List window and correct the error.

The message shown on the left is displayed.

**2.** Read the message and click the [Yes] button.

C	Dutput	X
	The system label consistency check is started Saving Workspace Checking before registering in system label database is started The check before registering to the system label database is completed. There is no error and no warning. Checking the route information	* III +
ų	Output Task List	

The system label consistency check is performed. Error or Warning is displayed on the Output window when the check result contains an error. Check the error description on the Task List window and correct the error.

# **5** CREATING SYSTEM BACKUP DATA

This chapter explains the methods for reading and saving programmable controller project, motion controller project, and GOT project in batch using MELSOFT Navigator.

This functions is not supported by MELSEC iQ-F series.

### 5.1 Setting Batch Read Password

Set a batch read password. This function limits users who can perform the batch read function. Change the batch read password on the "Register/Change Batch Read Password" screen.

### Operating procedure

![](_page_132_Picture_6.jpeg)

₽

Register/Change Batch Rea	d Password	×
Enter the batch read passwo	rd and then click [OK].	
<u>O</u> ld Password:		
New Password:	•••••	
Re-enter Password:	•••••	
Description of Av Please use 6 to single-byte spa the batch read Passwords are r	aliable Characters 32 single-byte characters, which include numeric, A to Z, a to Z, te and the following characters !"#\$%&()*+,-,{;;<=>?@{\]^_`{}}- password. aae-sensitive.	
	OK	cel

The "Register/Change Batch Read Password" screen is displayed.

**2.** Enter the password for "New Password" and "Re-enter Password", and click the [OK] button.

Setting content (sample)

- New Password : MITSUBISHI09
- Re-enter Password: MITSUBISHI09

![](_page_132_Picture_15.jpeg)

![](_page_132_Picture_16.jpeg)

### Deleting batch read password

![](_page_132_Figure_18.jpeg)

The message shown on the left is displayed.

- **3.** Read the message and click the [OK] button.

![](_page_133_Picture_0.jpeg)

![](_page_133_Picture_1.jpeg)

![](_page_133_Picture_2.jpeg)

The "Delete Batch Read Password" screen is displayed.

**2.** Enter the registered batch read password, and click the [OK] button.

The message shown on the left is displayed.

**3.** Read the message and click the [OK] button.

### 5.2 Performing Batch Read Function

Read projects from controllers in batch and save them as backup data.

#### Operating procedure

![](_page_134_Picture_3.jpeg)

心

Enter Batch Read Pa	issword	×
Enter the registered	batch read password and then click [OK].	
Password:	•••••	
		OK Cancel

Ð

Project Selection				
Select All Cagcel All Selections				
Broinet	Connection Dectinatio	0	Target Data	Conurity
1 GOT Droit(GT3722 6 (000+600))	LIER (GOT Direct)	Change	Farger Data	Setting
GVI/2 Drott (ODELIDH)	Default Connection Dectination	Change	Setting	Setting
2 V GVW2_H0J1(Q0000H)	Default Connection Destination	Change	Setting	Setting
GVIN/3_PR0/2(R00)	Default Connection Destination	Change	Setting	Setting
5 MTD2 Proi1(0173D_SW8.SV130B)	Connection Destination in the Proj	ect act	Setting	Setting
<ul> <li>The following project is not displayed in the list because it cannot Simple project (use labels) of FXCPU or the structured project</li> </ul>	t be read by the batch read.			
Unsupported CPU or GOT Project GX Developer Project, RT ToolBox2 Project				
Unsupported CPU or GOT Project GX Developer Project, RT ToolBox2 Project Parameter information (Simple Motion Project) in the Simple Mo	tion Module			
Unsupported CPU or GOT Project GX Developer Project, RT ToolBox2 Project Parameter information (Simple Motion Project) in the Simple Mo GX Works3 project when GX Works3 is not installed	tion Module			
Unsupported CPU or GOT Project GX Developer Project, RT TooBox2 Project Parameter information (Simple Motion Project) in the Simple Mo GX Work3 project when GX Work3 is not installed Save Destination of Workspace	tion Module			
Unsupported CPU or GOT Project GX Developer Project, PT Toollow2 Project Parameter information (Simple Motion Project) in the Simple Mo GX Works3 project when GX Works3 is not installed Save Deder Noth	tion Module			
Unsupported CPU or GOT Project GY Developer Project, RT TodeRo2 Project Parameter information (Single Moden Project) in the Single Mo GY WorkS project when GY WorkS is not installed Save Detertation of Workspace Save Edet Park C1(bers/jakkalu)Documents	tion Module			Browse
Unsupported CRU or GOT Protect GT Geneticem Protect. RT Toelloo: Z Project Parameter Information (Single Motion Project) in the Single Mo GT Works protect when GT Works's not installed Save Editer Tash C Water Viel Media/Uncomments Workspace Name	ton Module			- Browse
Unsupported GRU or GOT Project GR Developer Project, PT TodBios 2 Project Parameter Information (Single Motion Project) in the Single Mo GR Works) project when GR Works in and installed Save Editor Ratio Marka Cultures of Joshidau (Documents Workspace Name Sample, WS, A	ton Module			Browse. Option
Unapported CRU or GOT Project GT Developer Project, Program Parameter Information (1 Single Molos Project) in the Single Mo GY WorkS project when GY WorkS in oct installed Save Eddarf Roth C-(1)sters/falkelu/Documents Workspace Name Sample_WS_A Table	ton Module			Browse Option
Unsported CPU or COT Project CF Devices Project A To Selecc 2 Wright Parameter Information (Shapk Moton Project) in the Single Ma CF Works2 project when CF Works2 in not installed Save Edit Path CF Ulter of Vield-MultiComments Workspace Name SameE_WCS_A Ible	tion Module			Browse. Option
Unsported GPU or GOT Project GC Developer Project, PT TodBios Z Project Parameter Information (Single Motion Project) in the Single Mo GX Works) project when GX Works are not installed Save Edit Path C-(Literof)-alk-alu(Documents Workspace Name Sample_VS_A Ible	eon Module			Erowse. Option
Unspected GPU or GOT Project GPU Center Information, BT toelloo, Carl Project Parameter Information, Gimph Motion Project) is the Single Mo GPU Works project when GPU Works are not installed Save Decktmaterial Workspace Save Edder Path Cityber #19/abid/Jocuments Workspace Isame Sample_WS_A Table	ton Module			Browse. Option
Unsported GPU or GOT Protect GC Geneticem Protect, RT Toellooz Onjoint Parameter Information (Single Motion Project) in the Single Mo GC Works protect when GC Works are installed Save Edit Path (C) Users/Web/Web/Society Save Setting Contents Save Setting Contents	ton Module	Read		Browse Option Close

₽

Progress Information		
		100%
		Cancel
Read Result		
Hogann Ja Light-The Kotti January Caracterian Notion SFC provance: Notion SFC provance: Notion SFC provance: Servo program (O)Pro- Mechanical System Porame: System Setting, Servo Vision System Paramet: Label Data[Memory Cara MTD2_Proj Reading is: Serva Paramet Notion SFC Serva Paramet Setting Serva Serva Paramet Setting Serva Setting Serva Serva Setting Section Setting Section Setting Section	120-0-Date (17) Read-Final 20 De MTD, Proj. [Connection Detailed 20 De MTD, Proj.] Connection Detailed 20 De MTD, Proj.] 20 De MTD, Proj. 20 De MTD, P	2001: Connection Destination in the Project may Practifyingh addFinish addFinish Ista, Serve Parameter, Limit Output Data) :tion Destination: USB]
•	m	
		Save in file

**1.** Select [Online] ⇒ [Batch Read] in the menu bar.

The "Enter Batch Read Password" screen is displayed.

**2.** Enter the registered batch read password, and click the [OK] button.

Setting content (sample)

• Password: MITSUBISHI09

The "Batch Read" screen is displayed.

**3.** Select the projects to be read, and click the [Read] button.

Setting content (sample)

- Selected Project: GOT\_Proj1, GXW2\_Proj1, GXW3\_Proj1, GXW3\_Proj2, MTD2\_Proj1
- Workspace Name: Sample\_WS\_A

The batch read is completed, and the "Batch Read Result" screen is displayed.

The result is displayed under "Read Result".

### Changing connection destination

The following is an example of changing the connection destination of the programmable controller project (GX Works2). When specifying programmable controller project (GX Works3) data, motion controller project data, or GOT project data, follow the same procedure as shown below.

		Project 4	Connection Destination	Target Data	Security
1		GOT_Proj1(GT27**-S (800x600))	USB (GOT Direct)	Setting	Setting
2	V	GXW2_Proj1(Q06UDH)	Default Connection Destination ( Change.	. Setting	Setting
3	V	GXW3_Proj1(R08)	Default Connection Destination	Setting	Setting
4	V	GXW3_Proj2(R08)	Default Connection Destination Change.	. Setting	Setting
5	V	MTD2_Proj1(Q173D , SW8-SV13QB)	Connection Destination in the Project	Setting	Setting

<b>×</b>
e remote password.
▼
Setting Cancel

**1.** Click the [Change] button under "Connection Destination" on the "Batch Read" screen.

The screen to set the connection destination is displayed.

**2.** Select a connection destination, and click the [Set] button.

If a remote password is set for the selected connection destination, enter 4-digit remote password. For details on the remote password, refer to the following manual.

### Specifying data to be read

<0 series/L series>

The following is an example of specifying a programmable controller project (GX Works2) data. When specifying programmable controller project (GX Works3) data, motion controller project data, or GOT project data, follow the same procedure as shown below.

ject S	ielectio	in				
c	alart d	Cascal All Selections				
	our E	Colifer Managements				
		Project A	Connection Destination	n	Target Data	Security
1		GOT_Proj1(GT27**-S (800x600))	USB (GOT Direct)	Change	Setting	Setting
2	V	GXW2_Proj1(Q06UDH)	Default Connection Destination	Change	Setting	Setting
3	4	GXW3_Proj1(R08)	Default Connection Destination	Change	Setting	Setting
4		GXW3_Proj2(R08)	Default Connection Destination	Change	Setting	Setting
5	V	MTD2 Proi1(0173D , SW8-SV130B)	Connection Destination in the Proj	ect	Settina	Settina

Ð

**1.** Click the [Setting] button under "Target Data" on the "Batch Read" screen.

The screen to set the target data is displayed.

**2.** Specify data to be read, and click then [OK] button. For details, refer to MELSOFT Navigator Help.

XW2_Proj1(Q060DH) - GX \	Works2 Target Data Setting
Selecting drive in PLC	Derive Menue
	Drive Name
Symbolic Information:	Program Memory/Device Memory 🔹
Parameter:	Program Memory/Device Memory
Device <u>C</u> omment:	Program Memory/Device Memory
Device Memory:	
Eile Register:	Standard RAM 👻
Precautions when Read	ling
Device Initial Value:	Program Memory/Device Memory
-Password for the data on t -The symbolic information a -The program does not exe program memory. -Data other than symbolic in register are read from prog	the real machine is entered. <u>Eassword Setting</u> ind parameters are always read. cute the selection, but the information is read from information, parameter, device comment and file ram memory or device memory.
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#### When the security is set for projects

When the security is set for projects of controllers, reset the security before performing the batch read function.

The following is an example of resetting the security of a programmable controller project (GX Works2).

When specifying programmable controller project (GX Works3) data, motion controller project data, or GOT project data, follow the same procedure as shown below.

Rear	d					
lect S	ielectio	in				
_						
2	eaorr 5	Califer will paracronic				
		Project 4	Connection Destinatio	n	Target Data	Security
1		GOT_Proj1(GT27**-S (800x600))	USB (GOT Direct)	Change	Setting	Cotting
2	V	GXW2_Proj1(Q06UDH)	Default Connection Destination	Change	Setting	Setting
3	V	GXW3 Proj1(R08)	Default Connection Destination	Change	Setting	Setting
4	V	GXW3_Proj2(R08)	Default Connection Destination	Change	Setting	Setting
E	1	MTD2 Proi1(0173D SW8-SV130B)	Connection Destination in the Proj	ect	Setting	Setting

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Æ	ŀ
	-

GXW2_Proj1 Security	×				
Please enter the user name and password for authenticating the security set project. User name of Administrator authority and its password are required for batch read.					
User Name:	MITSUBISHITARO				
Password:	••••••••				
	OK Cancel				

**1.** Click the [Setting] button under "Security" on the "Batch Read" screen.

The screen to set the security is displayed.

**2.** Enter a user name and a password, and click the [OK] button.

For details, refer to MELSOFT Navigator Help.

# **6** USING PROGRAM JUMP FUNCTION

This chapter explains the program jump function which can start the motion SFC programs/servo programs that are linked with the motion controller programs, using the SFCS instruction/SVST instruction of the ladder programs in the multiple CPU system of Q series.

### 6.1 Example of System Configuration

This section explains a method for using the program jump function under the following system configuration.

![](_page_137_Figure_4.jpeg)

(1) QCPU (CPU No.1)

(2) Motion controller (CPU No.2)

### Motion controller start-up programs

The instructions which start motion controller programs used in ladder programs are as follows:

• SFCS instruction (Motion SFC program start-up)

• SVST instruction (Servo program start-up)

For details of the instructions, refer to the motion controller programming manuals of Q173D/Q172D, Q173H/Q172H, and Q173/Q172.

This section explains the program jump function using the following ladder program.

![](_page_137_Figure_13.jpeg)

# 6.2 Program Jump Function

The following is an example of using the program jump function in the SFCS instruction. When using the program jump function in the SVST instruction, follow the same procedure as shown below.

### Operating procedure

![](_page_138_Picture_3.jpeg)

 On the module configuration window, double-click the controller to which a programmable controller project (GX Works2) is allocated.

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![](_page_138_Picture_6.jpeg)

 $\mathbf{r}$ 

E MELSOFT Series GX Works2 CAUs	sers\Administrator\Documents\Sample_WS\GXW2_Pro2 - [[PRG]Write	MAIN 14 Step]
<u>Project</u> <u>Edit</u> <u>Find/Replace</u>	Compile View Online Debug Diagnostics Tool Window	Help _ # ×
i 🗅 🖻 💾 🚭 🔍	📲 🐹 (h)	195 195 19 19 19 19 19 19 19 19 19 19 19 19 19
1 🖬 🖬 🖼 🖼 🐨	io A Parameter ·	<ul> <li>・ (4) はははなないこと。</li> </ul>
Nevigetion 9 ×	PRGjWrite MAIN 14 Step 🔀	4 5 🗸
Project	( 0)	{{\$#5#С5 ка£1 к13 из во }
E S Parameter		[8079 56 0.11]
- Global Device Comment	( 13)	[80 ]
🖶 🚾 Program Setting 📑		
E D Program		
- Program		

₽

The GX Works2 project is started.

The ladder program window is displayed.

→ 4 P → 4						
[SP.SFCS H3E1	K10	мо	DO	]		
		Undo Cut Gopy Paste Continuous P Build Hige Ladder	<sup>i</sup> aste( <u>O</u> ) Block			
Find Device		Display Ladde Edit Eind	er Block	•		
Find Instruction Find Contact or Coil Find String		View Debug Cross Referen	ice	•		
Jump Jump to Next Ladder Block Start Jump to Previous Ladder Block Start		Device List Register to W Register to De	'atc <u>h</u> evice B <u>a</u> tch Rej	place		
Program Jump		Open Inst <u>r</u> uc	tion Help			

**3.** Right-click the SFCS instruction on the ladder program window and select [Find] ⇒ [Program Jump] in the shortcut menu.

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![](_page_139_Picture_3.jpeg)

The motion controller project, which is allocated to CPU No.2 on the module configuration window, is activated and the target motion SFC program is displayed.

### REVISIONS

me manual number is given on the bottom left of the back cover.				
Revision date	*Manual number	Description		
July 2014	SH(NA)-081261ENG-A	First edition		
November 2014	SH(NA)-081261ENG-B	■Added or modified parts Chapter 1, Chapter 2, Section 3.1, Section 3.4, Section 3.5, Section 3.6, Section 3.7, Section 3.8, Section 3.9, Section 4.1, Section 4.2, Section 4.3, Section 4.4, Chapter 5, Section 6.1		
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