

FA Integrated Engineering Software

Let's start MELSOFT iQ Works Version 2

-SW2DND-IQWK-E





SAFETY PRECAUTIONS

(Read these precautions before using this product.)

Before using this product, please read this manual carefully and pay full attention to safety to handle the product correctly. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

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: " WARNING" and " CAUTION".

WARNING

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

A CAUTION

Indicates that incorrect handling may cause hazardous conditions, resulting in minor or moderate injury or property damage.

Under some circumstances, failure to observe the precautions given under " CAUTION" may lead to serious consequences.

Observe the precautions of both levels because they are important for personal and system safety.

Make sure that the end users read this manual and then keep the manual in a safe place for future reference.

[Design Precautions]

⚠WARNING

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

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

[Security Precautions]

WARNING

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

[Startup and Maintenance Precautions]

ACAUTION

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

CONDITIONS OF USE FOR THE PRODUCT

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

 MITSUBISHI ELECTRIC SHALL HAVE NO RESPONSIBILITY OR LIABILITY (INCLUDING, BUT NOT LIMITED TO ANY AND ALL RESPONSIBILITY OR LIABILITY BASED ON CONTRACT, WARRANTY, TORT, PRODUCT LIABILITY) FOR ANY INJURY OR DEATH TO PERSONS OR LOSS OR DAMAGE TO PROPERTY CAUSED BY the PRODUCT THAT ARE OPERATED OR USED IN APPLICATION NOT INTENDED OR EXCLUDED BY INSTRUCTIONS, PRECAUTIONS, OR WARNING CONTAINED IN MITSUBISHI ELECTRIC USER'S, INSTRUCTION AND/OR SAFETY MANUALS, TECHNICAL BULLETINS AND GUIDELINES FOR the PRODUCT. ("Prohibited Application")

Prohibited Applications include, but not limited to, the use of the PRODUCT in;

- Nuclear Power Plants and any other power plants operated by Power companies, and/or any other cases in which the public could be affected if any problem or fault occurs in the PRODUCT.
- Railway companies or Public service purposes, and/or any other cases in which establishment of a special quality assurance system is required by the Purchaser or End User.
- Aircraft or Aerospace, Medical applications, Train equipment, transport equipment such as Elevator and Escalator, Incineration and Fuel devices, Vehicles, Manned transportation, Equipment for Recreation and Amusement, and Safety devices, handling of Nuclear or Hazardous Materials or Chemicals, Mining and Drilling, and/or other applications where there is a significant risk of injury to the public or property.
- Notwithstanding the above restrictions, Mitsubishi Electric may in its sole discretion, authorize use of the PRODUCT in one or more of the Prohibited Applications, provided that the usage of the PRODUCT is limited only for the specific applications agreed to by Mitsubishi Electric and provided further that no special quality assurance or fail-safe, redundant or other safety features which exceed the general specifications of the PRODUCTs are required. For details, please contact the Mitsubishi Electric representative in your region.
- (3) Mitsubishi Electric shall have no responsibility or liability for any problems involving programmable controller trouble and system trouble caused by DoS attacks, unauthorized access, computer viruses, and other cyberattacks.

INTRODUCTION

Thank you for purchasing the FA integrated engineering software MELSOFT.

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

Before using this product, please read MELSOFT Navigator Version2 Help carefully, and develop familiarity with the functions and performance of MELSOFT iQ Works Version 2 to handle the product correctly.

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

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

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RELEVANT MANUALS

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



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
MELSOFT Navigator	An integrated development environment included in MELSOFT iQ Works

For the definitions of terms for redundant systems, refer to the following manual.

MELSEC iQ-R Process CPU Module User's Manual

GENERIC TERMS AND ABBREVIATIONS

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

Generic term/abbreviation	Description
GOT	Mitsubishi Electric Graphic Operation Terminal GOT1000 series, GOT2000 series
RnENCPU	R04ENCPU, R08ENCPU, R16ENCPU, R32ENCPU, R120ENCPU
RnPCPU	R08PCPU, R16PCPU, R32PCPU, R120PCPU
RnPSFCPU	R08PSFCPU, R16PSFCPU, R32PSFCPU, R120PSFCPU
RnSFCPU	R08SFCPU, R16SFCPU, R32SFCPU, R120SFCPU
Windows® 10 or later	Windows 11, Windows 10
Controller	CPU module, motion controller, GOT
System configuration diagram	Configuration diagrams such as network configuration and module configuration on which the configuration of respective devices are displayed graphically

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.

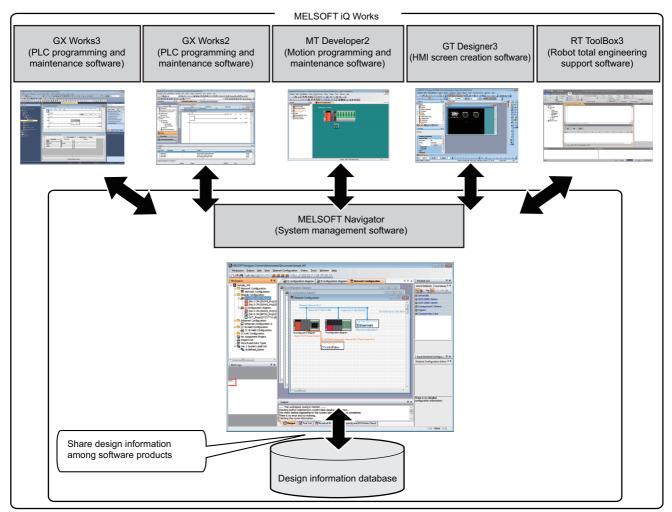
While sharing design information such as system designs and programming in the whole control system, the system designing and programming efficiency are improved, and thus the total programming cost is reduced.

This manual explains the system management method using MELSOFT Navigator.

Software included in MELSOFT iQ Works

MELSOFT iQ Works is a product into which MELSOFT Navigator, GX Works3, GX Works2, MT Developer2, GT Designer3, and RT ToolBox3^{*1} are integrated.

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



^{*1} When the product ID of MELSOFT iQ Works is used, RT ToolBox3 mini (simplified version) is installed. When RT ToolBox3 (with the simulation function) is required, purchase RT ToolBox3 and use the product ID for installation.

■Startup method

Start the following software from "MELSOFT" in Windows Start.

Software		
MELSOFT iQ Works	MELSOFT Navigator	
	GX Works3	
	GX Works2	
	MT Developer2	
	GT Designer3	
	RT ToolBox3	
	FR Configurator2	
	CW Configurator	

Supported MELSEC programmable controllers

MELSOFT Navigator supports the following MELSEC programmable controllers.

- · MELSEC iQ-R series
- MELSEC iQ-L series*1
- · MELSEC iQ-F series
- MELSEC-Q series
- MELSEC-L series
- · MELSEC-FX series
- *1 Only some functions are supported. For the operation methods of the supported functions, refer to the following:
 - Page 65 Operating project
 - Page 84 Editing Projects
 - Page 88 Reading/Writing/Verifying Controller Data
 - Page 138 CREATING SYSTEM BACKUP DATA

The operations on MELSEC iQ-R series or MELSEC-Q series are explained in this manual.

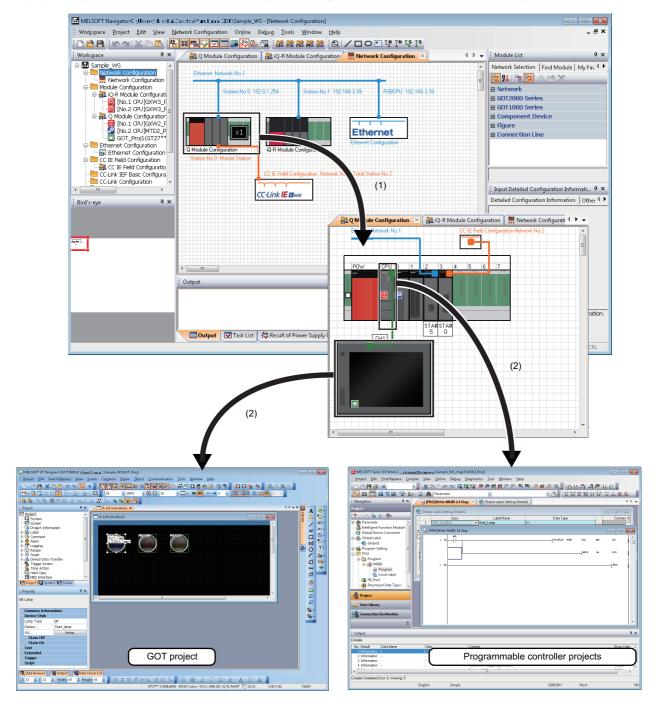
1.2 Features

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.



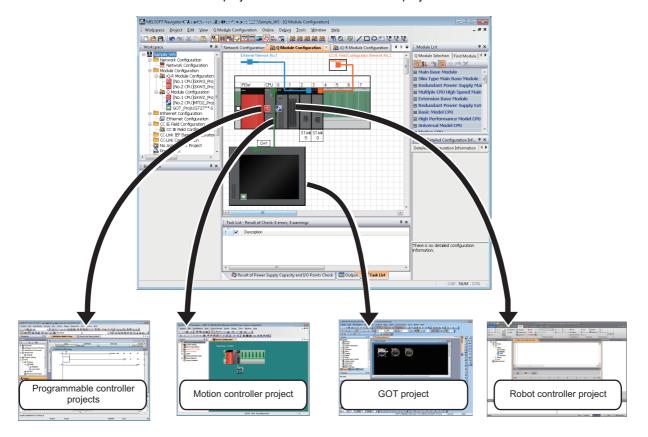
- (1) The module configuration window is displayed by double-clicking each module configuration on the network configuration window.
- (2) The project related to each module is activated by double-clicking each module on the module configuration diagram.

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.



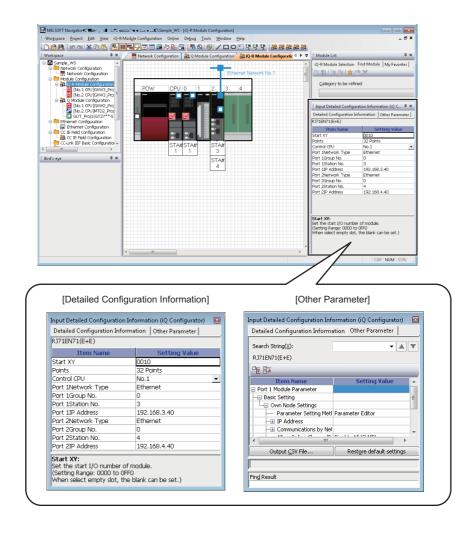
Simplified parameter settings

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

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

For details on the parameter setting function, refer to the following:

Page 21 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).

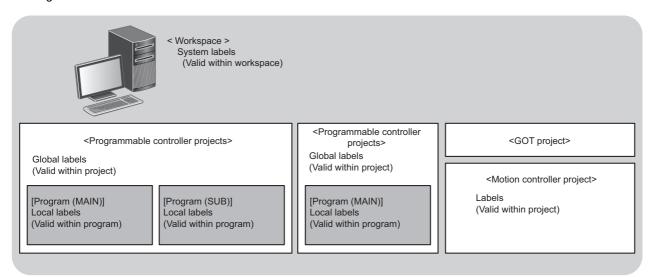
Programming (drawing) efficiency is improved by opening devices of the programmable controller projects and motion controller projects as system labels, and sharing them in multiple projects.

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 Version2 Help.

For the methods on how to use the system labels, refer to the following:

Page 96 USING SYSTEM LABELS



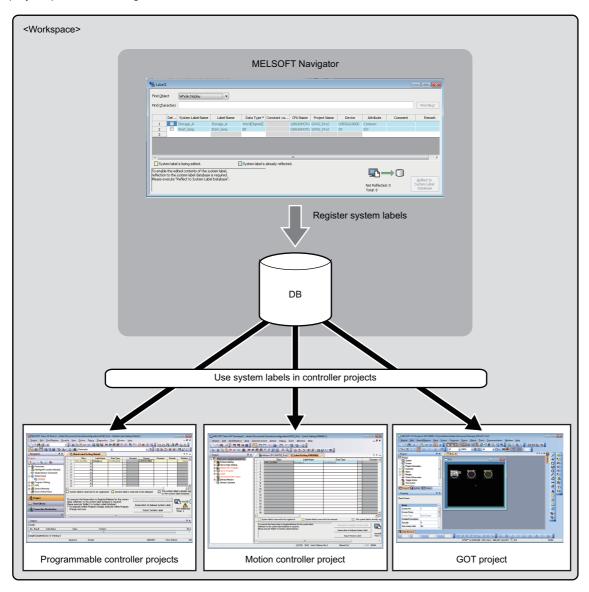
To use the system labels in MELSOFT iQ Works, the following two methods can be used:

- 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

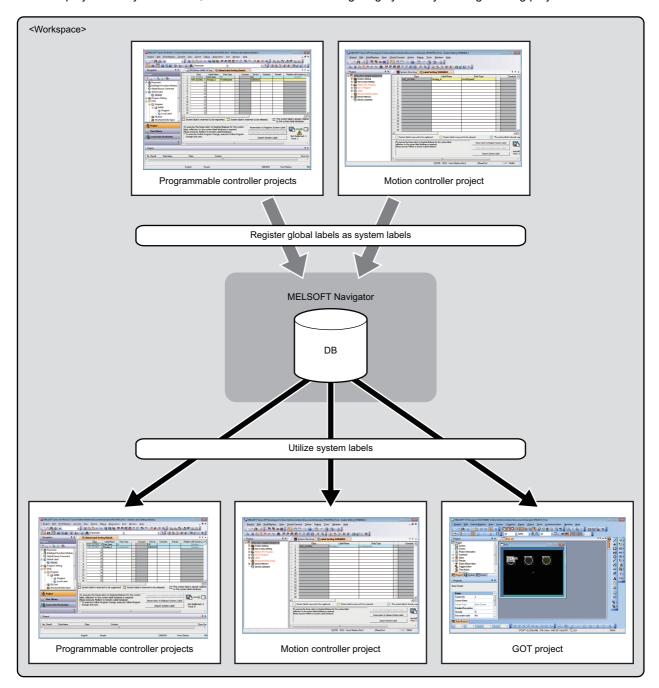
Design system labels for accessing GOT or communicating among the devices after designing network configuration in the upper process.

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

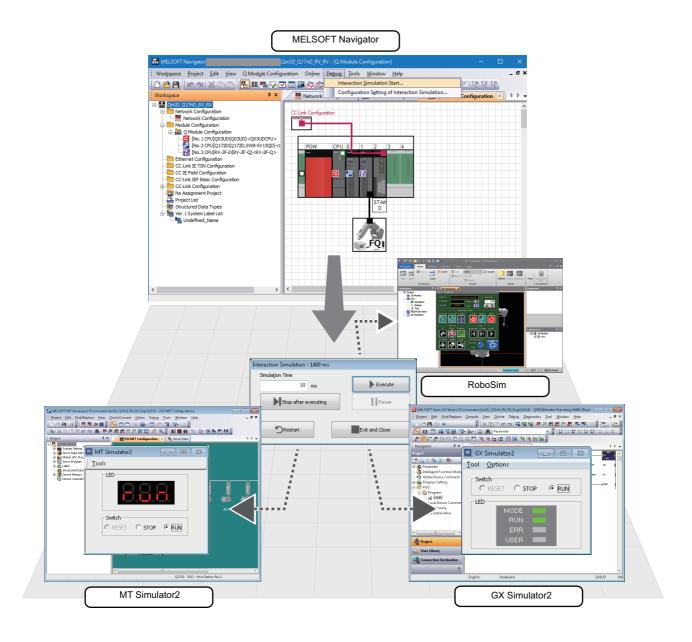
Design system labels for accessing GOT by using global labels which are registered to the DB (system label database) in controller projects as system labels, for a such case when configuring system by utilizing existing projects.



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 Simulator 2, MT Simulator 2, or Robo Sim).

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.

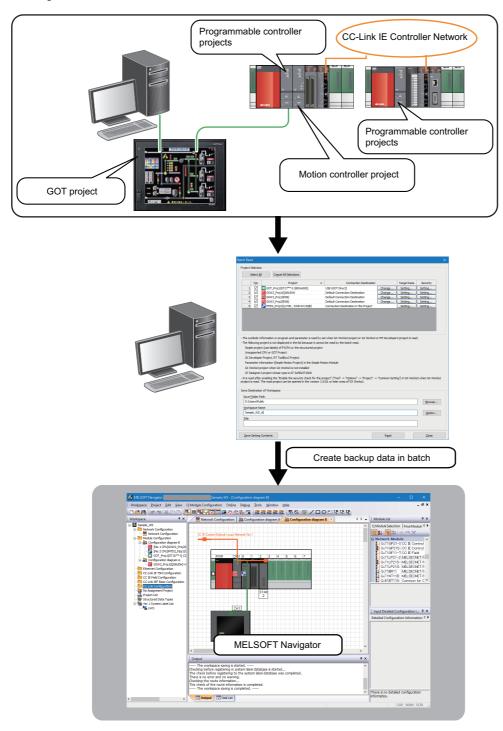
For details on the interaction simulation, refer to MELSOFT Navigator Version2 Help.

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, or GT Designer3).

For details on the Batch read function, refer to the following:

☐ Page 138 CREATING SYSTEM BACKUP DATA

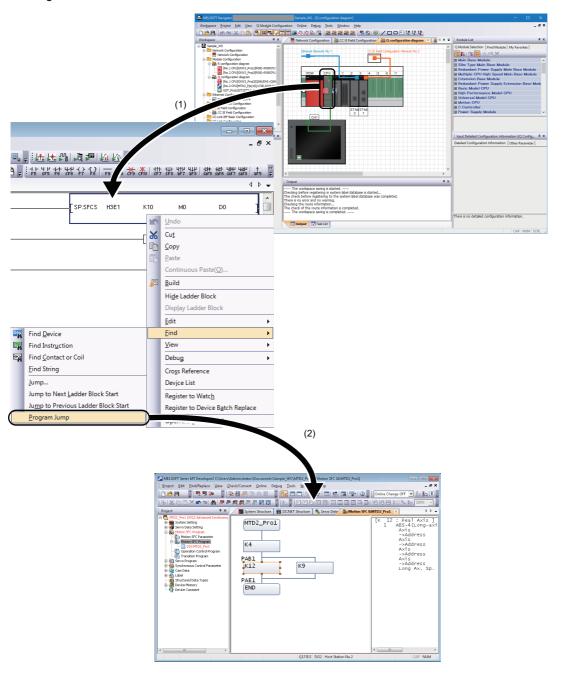


Improved programming efficiency by interacting with motion controller programs

For MELSEC-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:

Page 144 USING PROGRAM JUMP FUNCTION



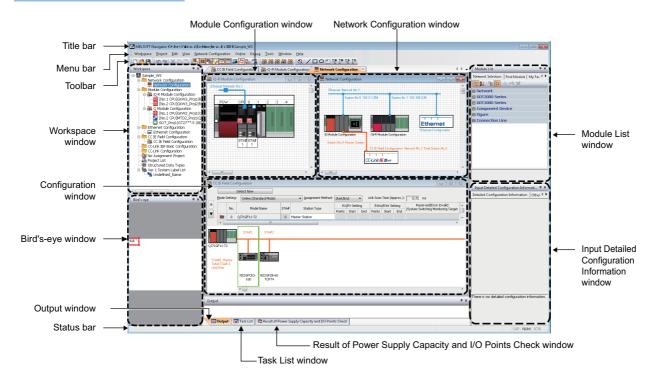
- (1) Activate the programmable controller project (GX Works2).
- (2) The motion controller project corresponds to the selected motion dedicated programmable controller instruction is activated.

2 SCREEN CONFIGURATION

This chapter explains the screen configuration of MELSOFT Navigator.

2.1 Screen Configuration

Window



Displayed items

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



MELSOFT Navigator Version2 Help is displayed by pressing the [1] key.

MEMO

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.

	Start	
	Φ	
or		

1. Start MELSOFT Navigator

Page 23 Starting MELSOFT Navigator

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2. Create a workspace

Page 24 Creating Workspaces

 Φ

3. Create a system configuration diagram

Create module configuration diagrams

Create a network configuration diagram

Create each module configuration such as CC IE Field configuration $% \left(1\right) =\left(1\right) \left(1\right)$

Page 27 Creating System Configuration Diagram

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4. Create projects

Create new projects

Allocate the projects to the controllers

Set parameters

Page 60 Creating Projects

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5. Check the system configuration

Check the system configuration

Check the power supply capacity and I/O points

Page 82 Checking Workspace

 Φ

6. Edit the created projects	
Edit the projects	
Utilize an existing project	
Perform controller data read/write/verification	
Page 84 Editing Projects	
	Φ
7. Save the created workspace	
Page 91 Saving Workspaces	
	Φ
8. Print the project	
Page 93 Printing Workspaces	
	Φ
9. Close the workspace	
Page 94 Closing Workspaces	
	Φ
10. Exit MELSOFT Navigator	
□ Page 95 Exiting MELSOFT Navigator	

Precautions

Do not change the storage location and the name of folders/files of a created workspace/project by using applications such as Windows Explorer.

3.2 Starting MELSOFT Navigator

Start MELSOFT Navigator.

Operating procedure

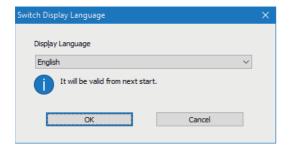
Start MELSOFT Navigator from "MELSOFT" in Windows Start.

Display Language Switching

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

Window

[View] ⇒ [Switch Display Language]



Precautions

- If the display language differs from the one for the operating system, texts may not displayed properly in the screen. (Displayed texts may get cut.)
- When switching the display language in Windows 10 or later, supplemental fonts of the target language are required. The fonts can be added by the following operation:
 - Select [Apps] ⇒ [Apps & features] ⇒ [Optional features] ⇒ [Add a feature] in Windows settings.
- A character entered arbitrarily is not switched even if the display language is switched.

3.3 Creating Workspaces

Creating new workspace

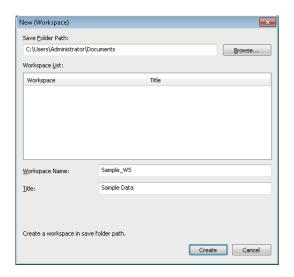
Create a new workspace.

Operating procedure



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





The "New (Workspace)" screen is displayed.

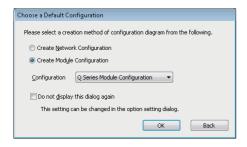
2. Set "Save Folder Path", "Workspace Name", and "Title" for the new workspace.

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

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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

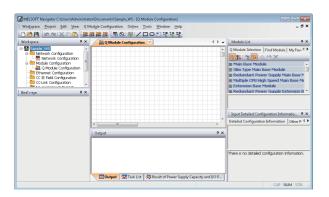


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The message shown on the left is displayed.

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

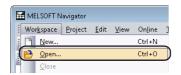


The new workspace is created.

Opening existing workspaces

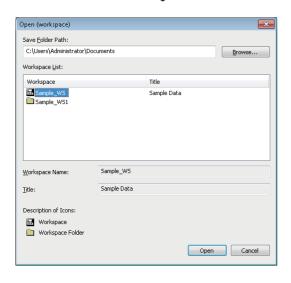
Open an existing workspace.

Operating procedure



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





The "Open (workspace)" screen is displayed.

2. 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 Explorer can also be selected.

Setting content (sample)

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

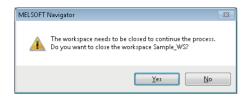
Creating workspaces for motion system

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.

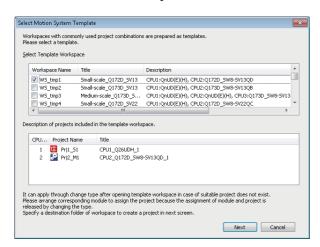
Operating procedure



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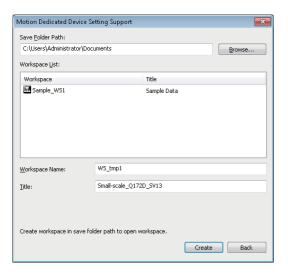
The message shown on the left is displayed.

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.

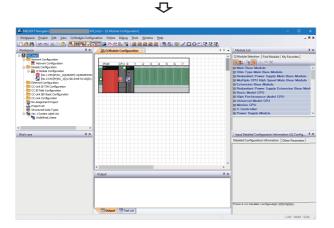
4. Set "Save folder path" and "Workspace name" for the template workspace.

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.



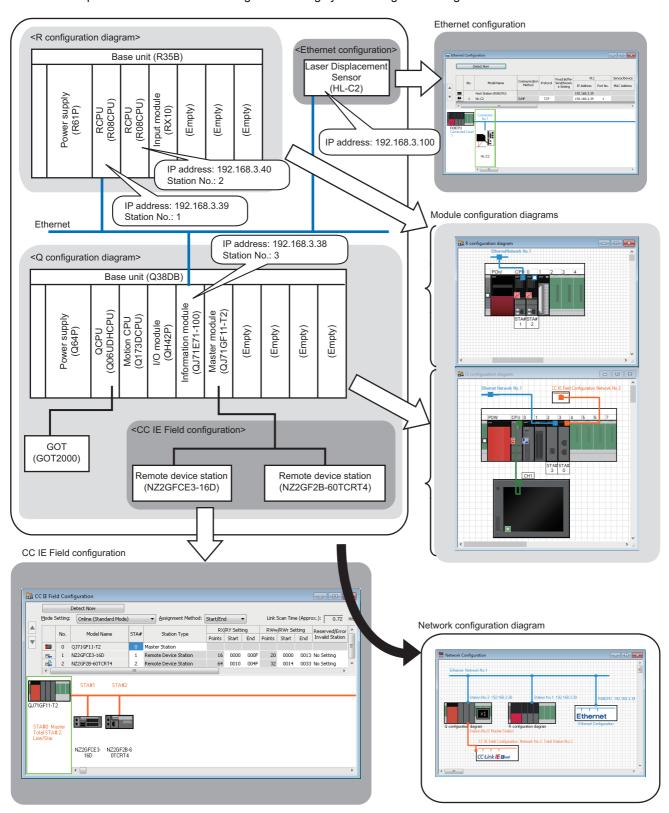
3.4 Creating System Configuration Diagram

Create a system configuration diagram.

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

System configuration to be created

This section explains the methods for creating the following system configuration diagrams.



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:

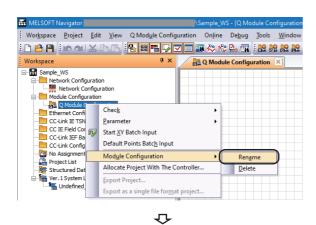
Page 32 Detecting actual system configuration of MELSEC iQ-R series

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:

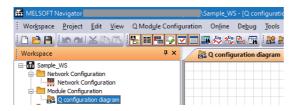
Page 81 Importing parameters configured in each project

Module configurations (iQ-R module configuration or iQ-F module configuration), network configurations (CC IE Field configuration or CC-Link configuration), and label information can be imported from an electrical CAD file created in AutomationML format. Data that can be imported depends on the versions of MELSOFT Navigator. For details, refer to MELSOFT Navigator Version2 Help.

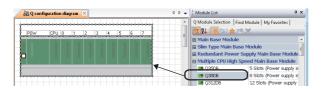
Operating procedure



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

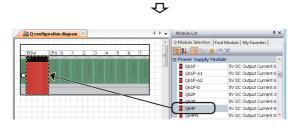


2. Enter 'Q configuration diagram' to change the module configuration name.



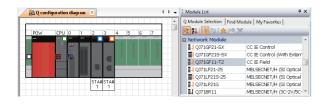
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 Select the base unit (Q38DB) from the Module List window, and drag and drop it onto the Module Configuration window.

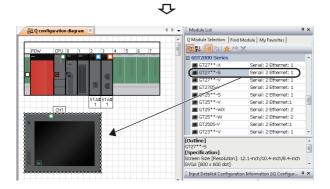


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4. Select the power supply module (Q64P) from the Module List window, and drag and drop it onto the base unit.



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".



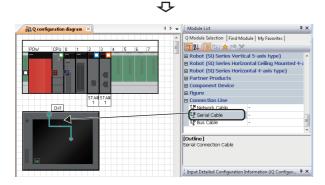
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6. Select the GOT unit (GT27**-S) from the Module List window, and drag and drop it onto the Module Configuration window.

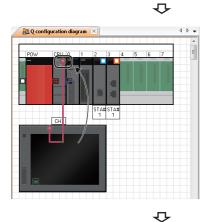


The message shown on the left is displayed.

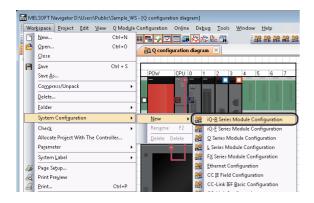
7. Read the message and click the [OK] button.



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

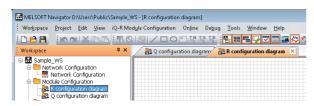


9. Drag and drop the edge of the connection line to the connection port of the connection target CPU module. The GOT unit is connected to the CPU module.

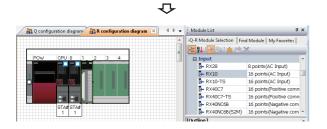


10. Select [Workspace] ⇒ [System Configuration] ⇒ [New] ⇒ [iQ-R Series Module Configuration] in the menu bar to create a module configuration, "iQ-R Module Configuration".



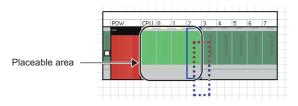


11. Change the module configuration name to 'R configuration diagram' following the same procedure in the step 1 and step 2.

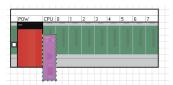


12. Select modules from the Module List window, and drag and drop them onto the base unit following the same procedure in the step 3 and step 4.

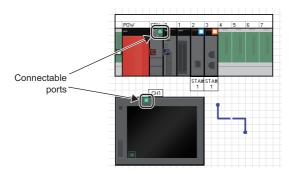
• When a module is dragged onto the base unit, the placeable areas on the base unit are displayed in light green as shown below.



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



• 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.



- 3 OPERATING PROCEDURE OF MELSOFT Navigator
- 3.4 Creating System Configuration Diagram

■When placing an RnENCPU

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

On the module configuration diagram, always use a CPU module representing the CPU part and a CPU extension module (RJ71EN71) representing the network part together.

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:

MELSEC iQ-R Module Configuration Manual

■When placing an RnPCPU (redundant mode)

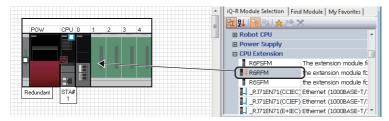
There are two operation modes in an RnPCPU: process mode and redundant mode. A project used for an RnPCPU (redundant mode) can be created by selecting "Redundant" for the operation mode when creating a new project. (Page 60 Creating Projects)

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

On the module configuration diagram, always use a CPU module (RnPCPU) and a CPU extension module (R6RFM) together. Place a CPU extension module (R6RFM) on the right side of RnPCPU.

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

When an RnPCPU (redundant mode) and R6RFM are placed on the module configuration diagram, "Redundant" appears 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:

MELSEC iQ-R Process CPU Module User's Manual

■When placing an RnPSFCPU

Always use an RnPSFCPU with a CPU extension module together.

On the module configuration diagram, always use a CPU module (RnPSFCPU), SIL2 function module (R6PSFM), and redundant function module (R6RFM) together.

Place the modules in the following order: RnPSFCPU, SIL2 function module (R6PSFM), and redundant function module (R6RFM).

"Redundant" appears on the bottom left of the base unit to indicate that it is a redundant system.

■When placing an RnSFCPU

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

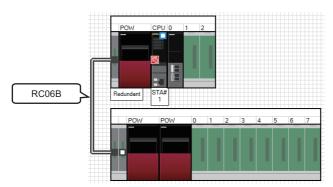
On the module configuration diagram, always use a CPU module (RnSFCPU) and a CPU extension module (R6SFM) together.

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

■When placing a redundant extension base unit

In the following cases, two extension cables are regarded as the same model and displayed with a double line on the module configuration:

- A redundant extension base unit is connected to a main base unit on which a redundant function module (R6RFM) is placed.
- · Redundant extension base units are connected to each other.



■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] ⇒ [Online] ⇒ [Module Configuration Detect Now] in the menu bar.

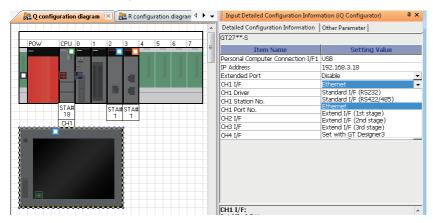
When detecting the actual system configuration on other than CPU No.1, right-click the target CPUs on the iQ-R module configuration diagram, and select [Online]

□ [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.



Precautions

■Corrective actions when profiles do not match

When displaying each configuration window, an error massage may appear if the following two profiles do not match:

- · Profile of a device used in a project
- · Profile of a device registered in MELSOFT Navigator

In this case, contact the manufacturer of the device for the profile that corresponds to "File Version" and "Device Version" displayed on the Output window.

An error can be cleared by restarting MELSOFT Navigator after registering an obtained profile to MELSOFT Navigator. For details on the registration methods of a profile, refer to MELSOFT Navigator Version2 Help.

Creating module configuration diagrams for MELSEC-L series

For MELSEC-L series, create module configuration diagrams by referring to this section.

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

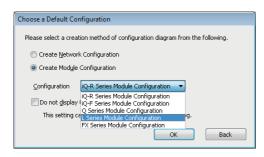
For the operations that differ from MELSEC iQ-R series or MELSEC-Q series, refer to the following:

Page 36 Attaching display unit

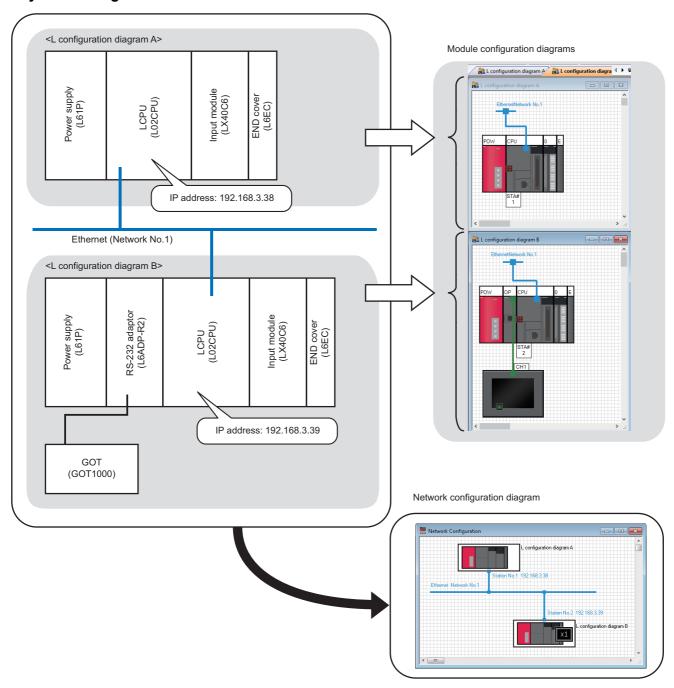


When creating workspaces of MELSEC-L series, select "L Series Module Configuration" in the "Choose a Default Configuration" screen. For the method of creating workspaces, refer to the following:

Page 24 Creating Workspaces

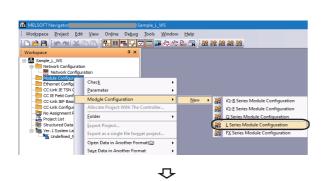


■System configuration to be created



■Creating module configuration diagrams

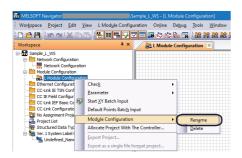
Operating procedure



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

 □ [New]

 □
 □ [L Series Module Configuration] in the shortcut menu.

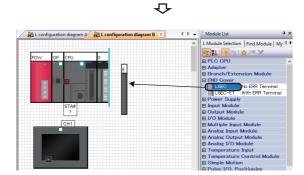


2. Right-click "L Module Configuration" on the Workspace window, and select [Module Configuration] ⇒ [Rename] in the shortcut menu.



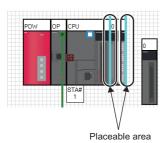


3. Enter 'L configuration diagram A' to change the module configuration name.

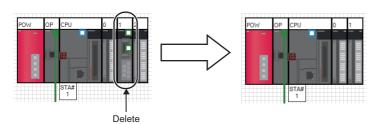


- **4.** Select modules from the Module List window, and drag and drop them onto the Module Configuration window following the same procedure as MELSEC-Q series in the step 4 through step 9.
- Page 28 Creating module configuration diagrams

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



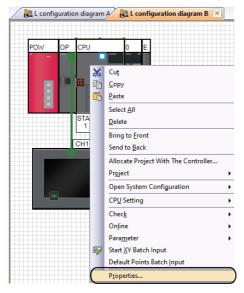
• When a placed module is deleted from the Module Configuration window, the modules adjacent to the deleted module are automatically placed as shown below.



■Attaching display unit

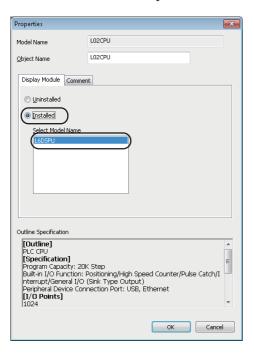
A display unit can be attached on MELSEC-L series CPU modules.

Operating procedure



1. Right click the CPU module on a module configuration diagram, and select [Properties] in the shortcut menu.





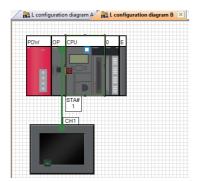
The "Properties" screen is displayed.

2. 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/MELSEC-FX series

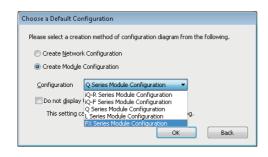
For MELSEC iQ-F series/MELSEC-FX series, create module configuration diagrams by referring to this section.

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



When creating workspaces of MELSEC iQ-F series or MELSEC-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:

Page 24 Creating Workspaces



■MELSEC-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 MELSEC-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

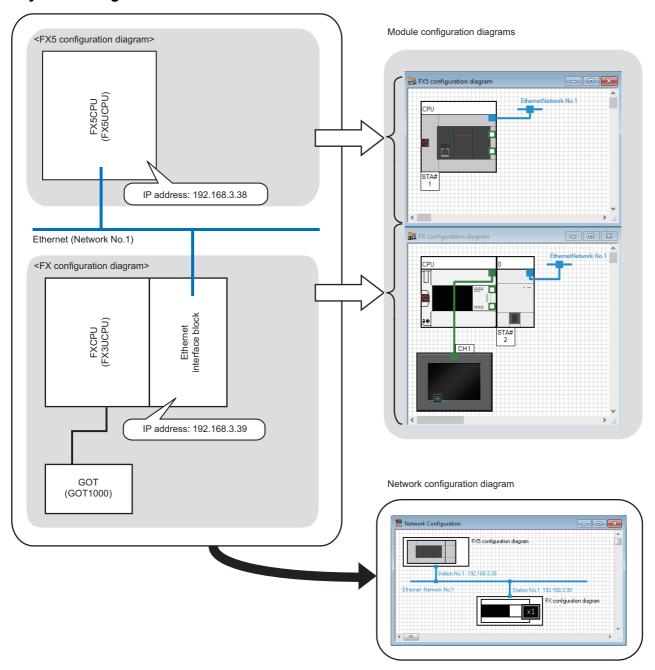
■Parameters of MELSEC-FX series special adapters

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:

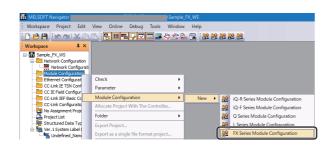
Page 71 Setting/Reflecting/Importing Parameters

■System configuration to be created

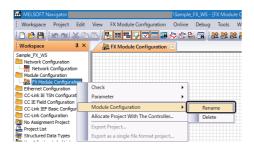


■Creating module configuration diagrams

Operating procedure



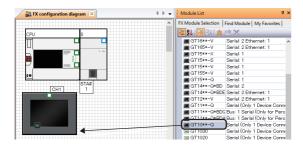
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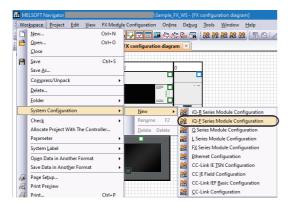
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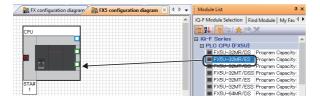
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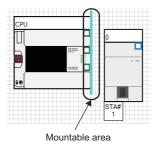


Right-click "FX Module Configuration" on the Workspace window, and select [Module Configuration]⇒ [Rename] in the shortcut menu.

- **3.** Enter 'FX configuration diagram' to change the module configuration name.
- **4.** Select modules from the Module List window, and drag and drop them onto the Module Configuration window following the same procedure as MELSEC-Q series in the step 4 through step 9.
- Page 28 Creating module configuration diagrams
- **5.** Select [Workspace] ⇒ [System Configuration] ⇒ [New] ⇒ [iQ-F Series Module Configuration] in the menu bar to create a module configuration, "iQ-F Series Module Configuration".

- **6.** Change the module configuration name to 'FX5 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 MELSEC-Q series in the step 3 and step 4.
- Page 28 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.



Precautions

■When using special blocks

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

*1 For information on obtaining the related software, please contact your local Mitsubishi Electric sales office or representative.

■Corrective actions when profiles do not match

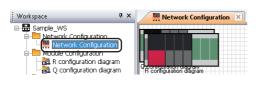
For details, refer to the following:

Page 32 Corrective actions when profiles do not match

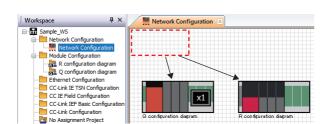
Creating network configuration diagrams

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

Operating procedure



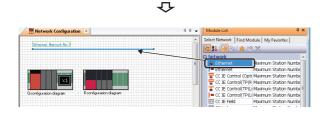
1. Double-click "Network Configuration" on the Workspace window.



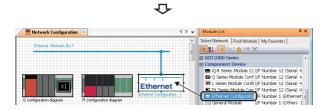
Q

The Network Configuration window is opened and all module configurations are displayed.

2. Drag and drop the module configurations to arbitrary positions.

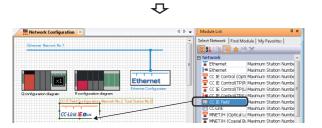


3. Select "Ethernet" in "Network" on the Module List window, and drag and drop it onto the Network Configuration window.



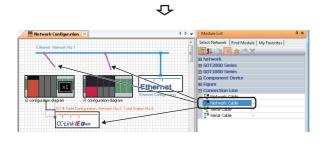
4. Select "Ethernet Configuration" in "Component Device" on the Module List window, and drag and drop it onto the Network Configuration window.

The Ethernet configuration is placed with Ethernet connected. Ethernet configuration is also added on the Workspace window.

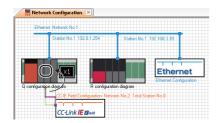


5. Select "CC IE Field" in "Network" on the Module List window, and drag and drop it onto the Network Configuration window.

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.



Workspace

Sample_US

Network Configuration diagram

Network Configuration diagram

Network Configuration diagram

Network Configuration

Network Configura



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

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



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

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 the connection line to the connection port of the connection target CC-Link IE Field Network module.

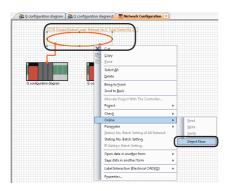
■Detecting actual system configuration of CC-Link IE Controller Network automatically

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 window, 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

• The Module Configuration window/CC-Link Configuration window opens by double-clicking the module configuration/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:

- Page 44 Creating Ethernet configurations
- Page 49 Creating CC-Link IEF Basic configurations
- The CC-Link IE TSN Configuration window opens by double-clicking the CC-Link IE TSN configuration on the Network Configuration window.

A supported module is required to be set as a master station in advance. For the setting method, refer to the following:

Page 55 Creating CC-Link IE TSN 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

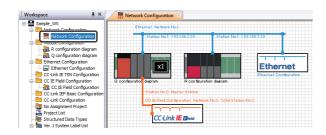
Right-click Ethernet on the Network Configuration window and select [IP Address Batch Setting] in the shortcut menu to set IP addresses of Ethernet in batch.

This function is not supported by GT SoftGOT2000.

Creating Ethernet configurations

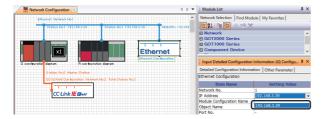
Create a configuration diagram by placing modules on the Ethernet Configuration window.

Operating procedure



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





The Network Configuration window is opened.

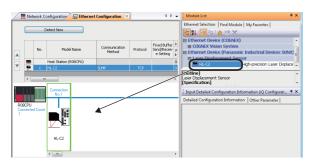
2. Select the Ethernet configuration and select the IP address of the Ethernet built-in CPU or Ethernet module which is handled as an own station on the Input Detailed Configuration Information window.

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



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



The Ethernet Configuration window is opened.

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





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:
 iQ Sensor Solution Reference Manual
 - 3 OPERATING PROCEDURE OF MELSOFT Navigator

■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
- Select [Ethernet Configuration]

 □ [Online]
 □ [Detect Now] in the menu

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

iQ Sensor Solution Reference Manual

■Reflecting communication settings of Ethernet devices

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

For details, refer to the following:

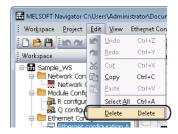
iQ Sensor Solution Reference Manual

■Deleting Ethernet devices



1. Select the row of the Ethernet device to be deleted. (Multiple rows can be selected.)





2. Select [Edit] ⇒ [Delete] in the menu bar.

Precautions

■Connecting to an Ethernet configuration

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.

■Corrective actions when profiles do not match

For details, refer to the following:

Page 32 Corrective actions when profiles do not match

Creating CC IE Field configurations

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

Operating procedure



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

 $\label{eq:cc} \mbox{CC IE Field Configuration window is opened.}$

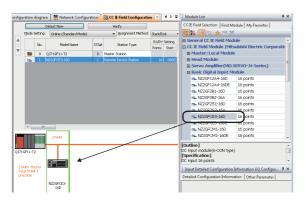
Change the name as necessary.





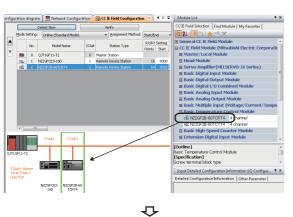
2. Change the "Station Type" to "Master Station" on the CC IE Field Configuration window.

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

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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.



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 device stations, refer to the following manual or manuals for each device 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

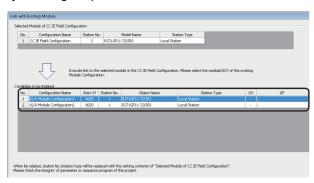
For details, refer to the following:

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.



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] ⇒ [Link with Existing Module] from the shortcut menu.

The "Link with Existing Module" screen is displayed.

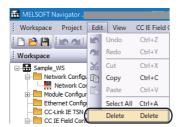
2. Select a module from "Candidate to be Related".

■Deleting device stations of CC IE Field



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





2. Select [Edit] ⇒ [Delete] in the menu bar.

Precautions

■Connecting to a CC IE Field configuration

Check that the master/local 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 for the added module is added.

■Corrective actions when profiles do not match

For details, refer to the following:

Page 32 Corrective actions when profiles do not match

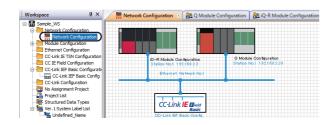
Creating CC-Link IEF Basic configurations

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

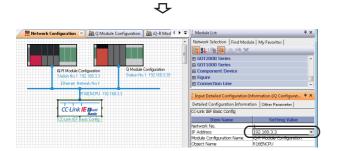
Add a CC-Link IEF Basic configuration on the network configuration diagram, and connect a CPU module on a module configuration diagram to the CC-Link IEF Basic configuration in advance.

Page 41 Creating network configuration diagrams

Operating procedure



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

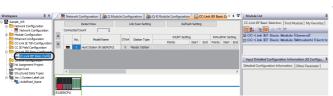


Q

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.



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



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The CC-Link IEF Basic Configuration window is opened.

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



Q

Set points for each module to "RX/RY Setting".Set the other items as necessary.

^{*1} For details on the parameter processing of remote stations, refer to the following:

CC-Link IE Field Network Basic Reference 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
- Select [CC-Link IEF Basic Configuration]

 □ [Online]
 □ [Detect Now] in the menu

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

CC-Link IE Field Network Basic Reference Manual

■Reflecting communication settings on remote 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 Remote Station] to reflect the communication settings on remote stations.

For details, refer to the following:

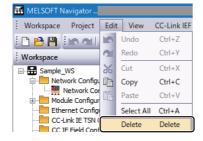
CC-Link IE Field Network Basic Reference Manual

■Deleting remote stations of CC-Link IEF Basic



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





2. Select [Edit] ⇒ [Delete] in the menu bar.

Precautions

■Connecting to a CC-Link IEF Basic configuration

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.

■Corrective actions when profiles do not match

For details, refer to the following:

Page 32 Corrective actions when profiles do not match

Creating CC-Link configurations

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

Add a CC-Link configuration on the network configuration diagram, and connect a CC-Link module on a module configuration diagram to the CC-Link configuration in advance.

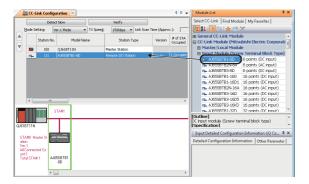
Page 41 Creating network configuration diagrams

Operating procedure



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

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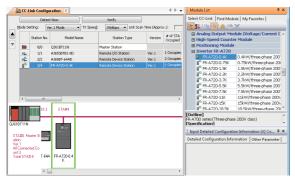


The CC-Link Configuration window is opened.

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

The CC-Link device is added on the Module Configuration window.





3. Select CC-Link devices 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]

 □ [Online]
 □ [Detect Now] in the menu

For details, refer to the following:

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]

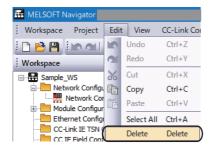
 [Verification of the Configuration with the Connected Module] in the menu
 For details, refer to the following:
- iQ Sensor Solution Reference Manual

■Deleting CC-Link devices



1. Select "Station No." or "Model Name" of a CC-Link device to be deleted. (Multiple rows can be selected.)





2. Select [Edit] ⇒ [Delete] in the menu bar.

Precautions

■Connecting to a CC-Link configuration

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 for the added module is added.

■Corrective actions when profiles do not match

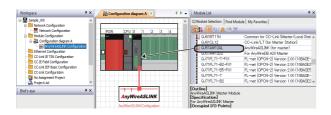
For details, refer to the following:

Page 32 Corrective actions when profiles do not match

Creating AnyWireASLINK configurations

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

Operating procedure



 Select "QJ51AW12AL" (AnyWireASLINK master module) from the Module List window, and drag and drop it onto the Module Configuration window.

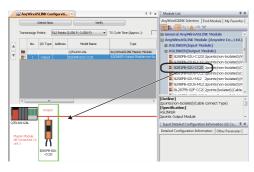
The AnyWireASLINK configuration diagram is created.





2. Double-click "AnyWireASLINK Configuration" on the Workspace window.



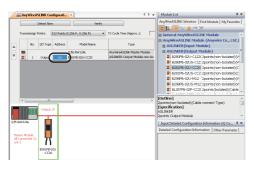


The AnyWireASLINK Configuration window is opened.

3. Select "B281PB-02U-CC20" (AnyWireASLINK remote module) from the Module List window, and drag and drop it onto the AnyWireASLINK Configuration window.

The remote module is added on the AnyWireASLINK Configuration window.





4. Set the address to the added remote module^{*1} in "Address" on the AnyWireASLINK Configuration window.

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

- *1 The address of the remote module can be set automatically. For details, refer to the following:
 - GX Works2 Version 1 Operating Manual (Intelligent Function Module)

■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]

 □ [Online]

 □ [Detect Now] in the menu

For details, refer to the following:

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:

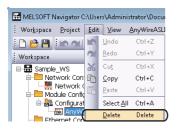
iQ Sensor Solution Reference Manual

■Deleting AnyWireASLINK remote modules



1. Select the row of the AnyWireASLINK remote module to be deleted. (Multiple rows can be selected.)





2. Select [Edit] ⇒ [Delete] in the menu bar.

Precautions

■Corrective actions when profiles do not match

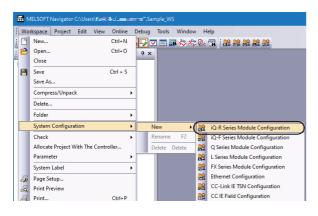
For details, refer to the following:

Page 32 Corrective actions when profiles do not match

Creating CC-Link IE TSN configurations

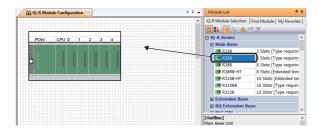
The following shows the procedure from creating an iQ-R series module configuration diagram, in which a CC-Link IE TSN module is placed, to edit the CC-Link IE TSN configuration.

Operating procedure



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

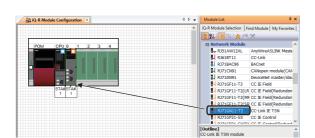
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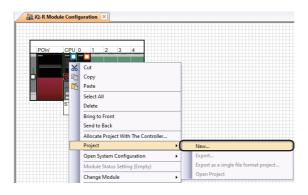
The Module Configuration window is opened.

Select "R35B" in "Main Base" on the Module List window, and drag and drop it onto the Module Configuration window.



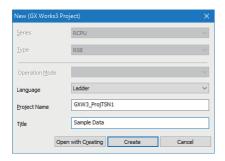
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- **3.** Select the following in the Module List window, and drag and drop each onto the base unit.
- "R61P" for "Power Supply"
- "R08CPU" for "PLC CPU"
- "RJ71GN11-T2" for "Network Module"

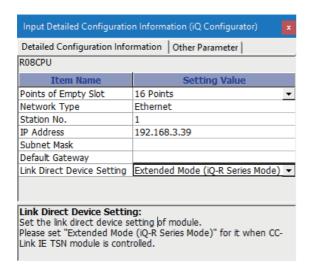


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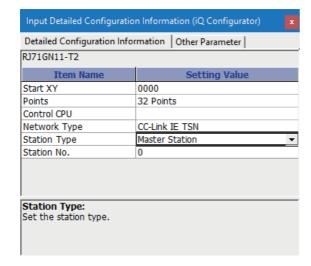
4. Right-click the CPU module on the module configuration diagram, and select [Project] ⇒ [New] in the shortcut menu.



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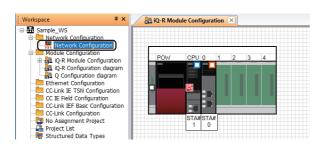


The "New (GX Works3 Project)" screen is displayed.

- **5.** Set "Language", "Project Name" and "Title" for the new project.
- **6.** After setting the items, click the [Create] button. For details on creating a new project, refer to the following: Page 60 Creating new projects
- 7. Select the CPU module and set "Extended Mode (iQ-R Series Mode)" for "Link Direct Device Setting" in the [Detailed Configuration Information] tab of the Input Detailed Configuration Information window.

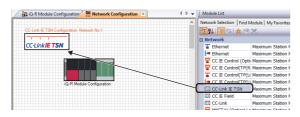
8. Select the CC-Link IE TSN module and set "Master Station" for "Station Type" in the [Detailed Configuration Information] tab of the Input Detailed Configuration Information window.

9. Double-click "Network Configuration" on the Workspace window.

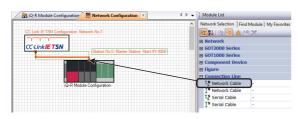


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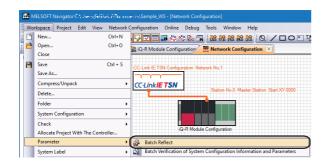
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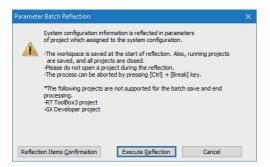
The Network Configuration window is opened.

- 10. Select "CC-Link IE TSN" from the Module List window, and drag and drop it onto the Network Configuration window.
- **11.** Select "Network Cable" from the Module List window, and connect it to the CC-Link IE TSN configuration and the iQ-R Module Configuration.

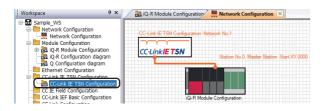
The identification name of the connection line "Station No.0 Master Station Start XY0000" is displayed.

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

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The message shown on the left is displayed.

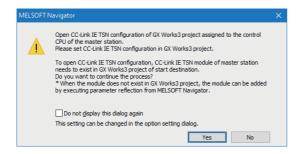
13. Read the message and click the [Execute Reflection] button.

For details on reflecting parameters, refer to the following:

Page 79 Reflecting parameters to projects

14. Double-click the "CC-Link IE TSN Configuration" on the Workspace window.

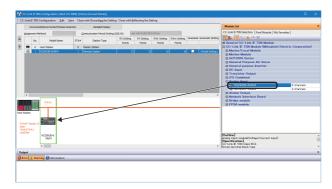
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The message shown on the left is displayed.

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

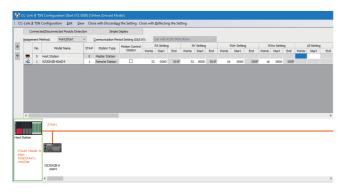




The CC-Link IE TSN Configuration window is opened.

16. Select "NZ2GN2B-60AD4"*1 from the Module List window, and drag and drop it onto the CC-Link IE TSN Configuration window.





17. Click the [Detailed Display] button and set points for the master station to "LB Setting" and "LW Setting".
Set the other items as necessary.

*1 For details on the parameter processing of device stations, refer to the following:

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

■Detecting a connected/disconnected module

A connected device station can be detected and reflected to the CC-Link IE TSN Configuration window by the following operation.

- · Click the [Connected/Disconnected Module Detection] button on the CC-Link IE TSN Configuration window.
- Select [CC-Link IE TSN Configuration] → [Online] → [Connected/Disconnected Module Detection] in the menu. For details, refer to the following:

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

■Deleting device stations of CC-Link IE TSN



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

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2. Select [Edit] ⇒ [Delete] in the menu bar.

Precautions

■Corrective actions when profiles do not match

For details, refer to the following:

Page 32 Corrective actions when profiles do not match

3.5 Creating Projects

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

Creating new projects

Programmable controller projects

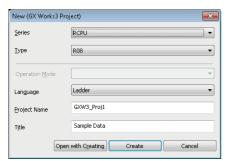
■GX Works3 projects

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

Operating procedure







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

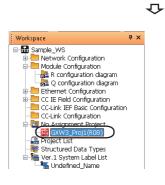
· Language: Ladder

• Project Name: GXW3_Proj1

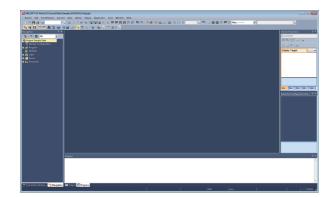
• Title (option): Sample Data

The new project is created.

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







GX Works3 is started.

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

GX Works3 Operating Manual



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

Precautions

• When a GX Works3 project is saved in the compressed format

Open the project with MELSOFT Navigator version 2.54G or later and GX Works3 version 1.050C or later. Alternatively, save the GX Works3 project without compressing the data.

• When a GX Works3 project is saved with the security version '2'

In MELSOFT Navigator, a project saved with the security version '2' cannot be opened.

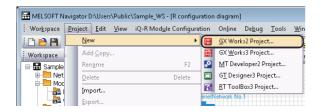
Open the project the security version of which is '2' with GX Works3 version 1.096A or later.

Save the GX Works3 project with the security version '1' when using it in MELSOFT Navigator.

■GX Works2 project

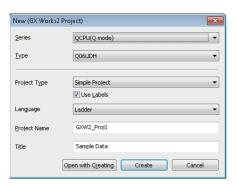
Create GX Works2 projects for MELSEC-Q series/MELSEC-L series/MELSEC-FX series programmable controller CPU.

Operating procedure



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





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

2. 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_Proj1Title (option): Sample Data

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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 the GX Works2 projects, refer to the following:

- 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

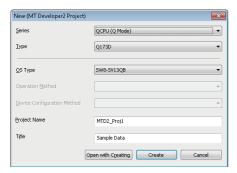
Create MT Developer2 projects for motion controller.

Operating procedure



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

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

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

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

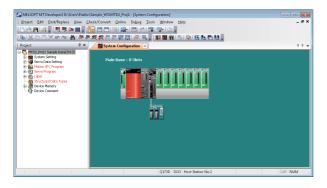
The new project is created.

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

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The MT Developer2 project is started.

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

HELP function of MT Developer2

GOT projects

Create GT Designer3 projects for GOT.

Operating procedure

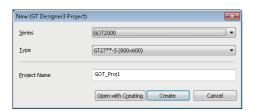


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the menu bar.



2. Set "Series", "Type", and "Project Name".

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

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

1. Select [Project] ⇒ [New] ⇒ [GT Designer3 Project] in

Setting content (sample)

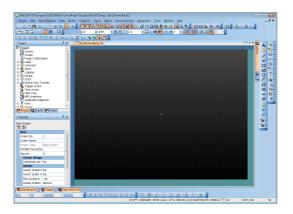
Series: GOT2000

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:

GT Designer3 Version 1 Screen Design Manual (Fundamentals)

GT Designer3 Version 1 Screen Design Manual (Functions)

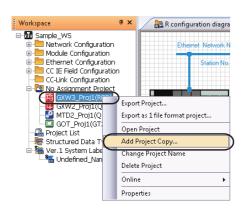
GT Designer3 (GOT2000) Screen Design Manual

Operating project

Copying projects

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

Operating procedure



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



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The "Add Project Copy" screen is displayed.

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

Setting content (sample)

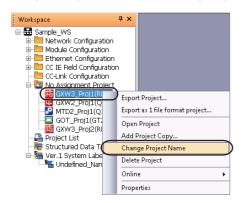
• Project Name: GXW3_Proj2



The copied project is displayed in the Workspace window.

Changing project names

Change a project name of an existing project.

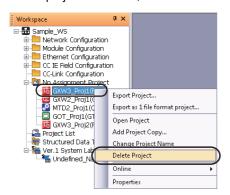


Right-click the project name on the Workspace window, and select [Change Project Name] in the shortcut menu to change the project name.

Deleting projects

Delete a project.

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



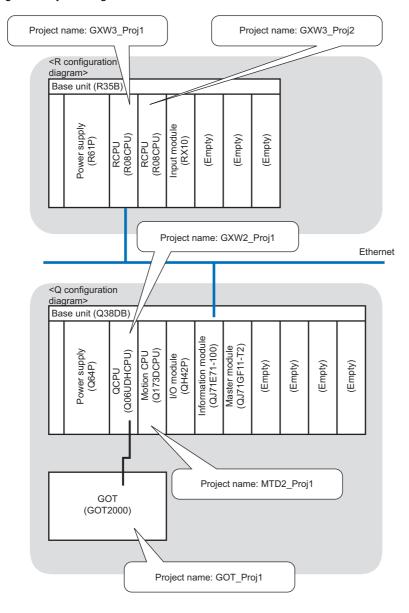
Right-click the project name on the Workspace window, and select [Delete Project] in the shortcut menu to delete the project.

Allocating projects to controllers

Allocate projects in the workspace to controllers on a module configuration diagram.

This section explains the methods for allocating projects on each controller on the following module configuration diagrams. The assignment status of a project can be checked on a module configuration diagram. If the assignment status of the project is not displayed, set the item by referring to the following section.

Page 70 Project assignment status



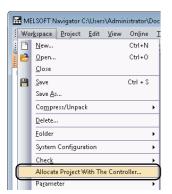
Precautions

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

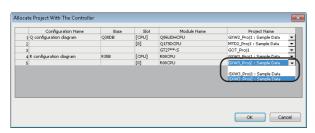
■Batch allocation

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



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





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

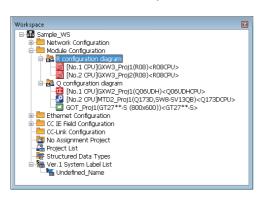
2. Select a project name to be allocated for all controllers, and click the [OK] button.

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

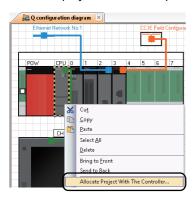
The allocated projects are displayed under the Module Configuration folder on the Workspace window.





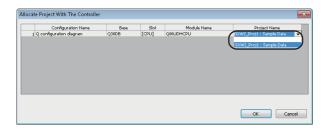
■Individual allocation

Allocate a project in the workspace to the controller selected on a module configuration diagram.



1. Right-click the controller on a module configuration diagram, 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

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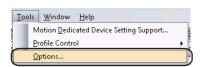


The allocated project is displayed under the Module Configuration folder on the Workspace window.

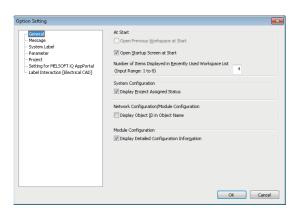
Project assignment status

The project assignment status can be checked by selecting the item in the "Option Setting" screen.

Operating procedure





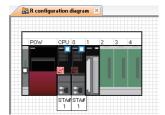


1. Select [Tools] ⇒ [Options] in the menu bar.

The "Option Setting" screen is displayed.

 Select "General".
 Select the checkbox of "Display Project Assigned Status".





The assignment status of a project can be checked on the module configuration diagram.

The following shows an example of GX Works3 project assignment status.

E: A project is assigned.

: No project is assigned.

3.6 Setting/Reflecting/Importing Parameters

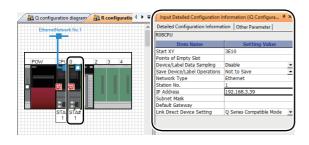
Set the I/O assignment, network parameters, and multiple CPU parameters and reflect them to each project. For MELSEC iQ-R series/MELSEC iQ-F series, the parameters configured in each project can be imported to MELSOFT Navigator. For the import method, refer to the following:

Page 81 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.

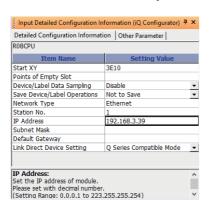
Operating procedure



Q

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1. Select a module on the module configuration diagram of "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, or GT Designer3).



Unable to change 'Base/Power/Extension Cable Setting' if users use inter-module synchronization function. To change this, please change 'Use Inter-module

■Setting start I/O in batch

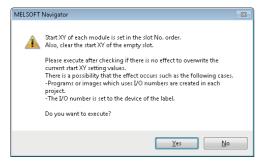
Assign start XY consecutively to modules or empty slots in the order of slot number.

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



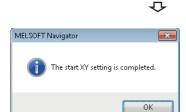
1. Select [Q Module Configuration]/[iQ-R Module Configuration] ⇒ [Start XY Batch Input] in the menu bar.





The message shown on the left is displayed.

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

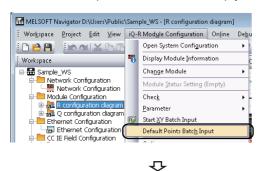


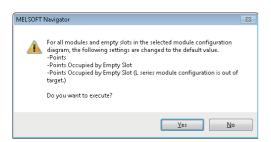
The message on the left is displayed, and start XY is set.

3. Click the [OK] button.

■Setting default points in batch

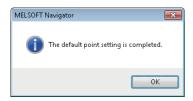
Set default to all points of modules or empty slots on the base unit.





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

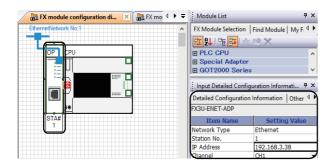
Station No. or IP address for the network parameter can be set in batch in the Network Configuration window. For the setting method and target networks, refer to the following:

Page 41 Creating network configuration diagrams

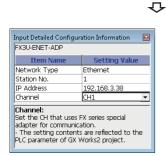
Setting parameters of MELSEC-FX series special adapter

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



1. Click "FX3U-ENET-ADP" on the module configuration diagram of "FX module configuration diagram A".



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: 192.168.3.38

· Channel: CH1

3. Set the parameters of module configuration of "FX module configuration diagram B" following the same procedure in the step 1 and step 2.

Setting content (sample)

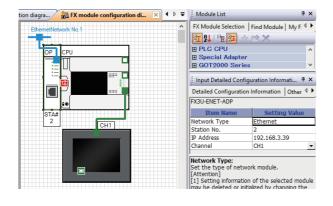
· Station No.: 2

• 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:

Page 79 Reflecting parameters to projects



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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.

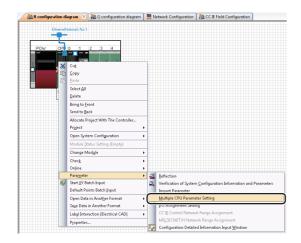
To retain the settings in GX Works2 project, backup the project before reflecting the parameters.

Configuring multiple CPU parameters

Multiple CPU parameters for MELSEC iQ-R series

For MELSEC iQ-R series, configure the multiple CPU parameters in 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.

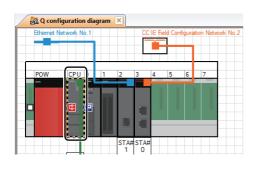
Multiple CPU parameters for MELSEC-Q series

For MELSEC-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.

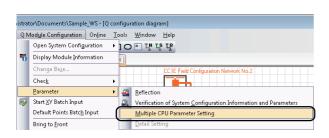
The following is an example when utilizing parameters of programmable controller project (GX Works2) for a motion controller project.

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 a module configuration diagram.



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



Displays the Multiple CPU Parameter Setting screen.

Please confirm the following before setting the multiple CPU parameter.

-Please set the multiple CPU parameter to projects with already reflected parameters.

-Please confirm previously if the multiple CPU configuration is correct in the system configuration check.

-Please Import Multiple CPU Parameter to No.2 to 4 CPU after the Multiple CPU Parameter Setting is completed in the No.1 CPU.

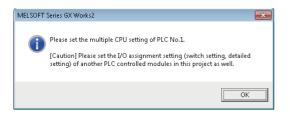
Do you want to display the Multiple CPU Parameter Setting screen?

The message shown on the left is displayed.

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

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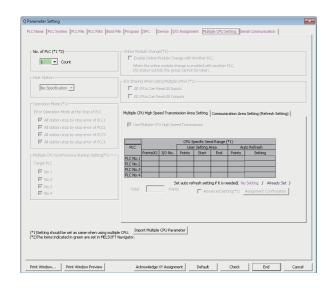
Yes <u>N</u>o



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

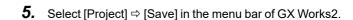
4. Read the message and click the [OK] button.

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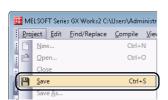
The "Q Parameter Setting" screen is displayed. For the method of setting multiple CPU parameters, refer to the following:

- QCPU User's Manual (Multiple CPU System)
- HELP function of MT Developer2



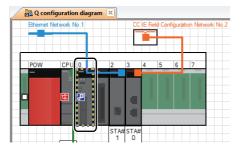
6. Select the CPU No.2 controller on a module configuration diagram.

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

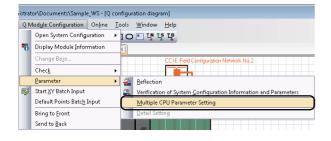




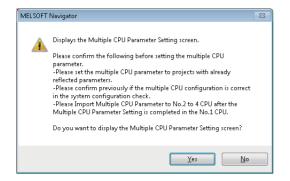
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The message shown on the left is displayed.

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

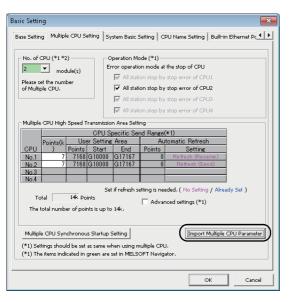
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MT Developer2 is activated and the message shown on the left is displayed.

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

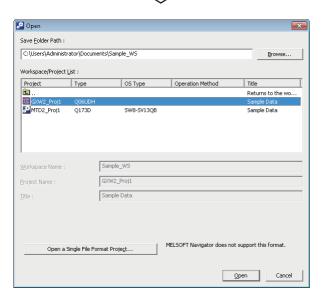
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The "Basic Setting" screen is displayed.

10. Click the [Import Multiple CPU Parameter] button.

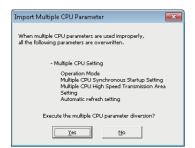
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The "Open" screen is displayed.

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





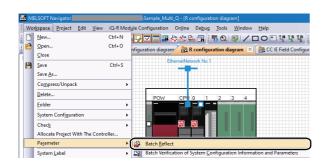
The message shown on the left is displayed.

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

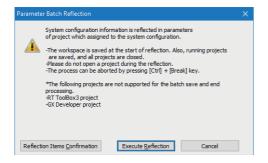
Reflect parameters set in MELSOFT Navigator to each project.

Operating procedure



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

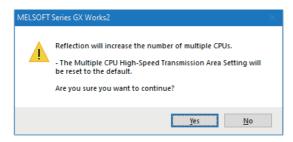




The message shown on the left is displayed.

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

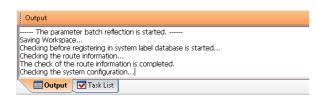




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The message shown on the left is displayed.

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

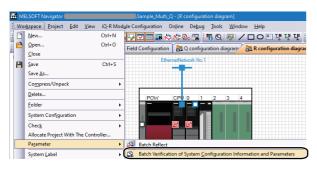


The parameters are reflected to the projects.

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.

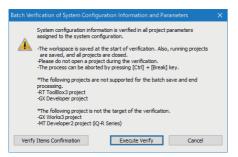
■Verifying system configuration information with parameters

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.



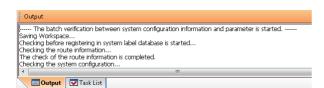
1. Select [Workspace] ⇒ [Parameter] ⇒ [Batch Verification of System Configuration Information and Parameters] in the menu bar.





The message shown on the left is displayed.

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



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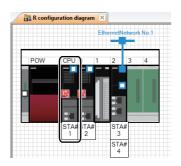
The verification is performed.

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.

Importing parameters configured in each project

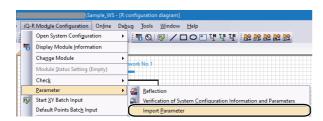
Import the parameters which are configured in a programmable controller project (GX Works3) or motion controller project of MELSEC iQ-R series in MELSOFT Navigator.

Operating procedure



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



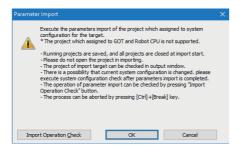


2. Select [iQ-R Module Configuration]

□ [Parameter]

□ [Import Parameter] in the menu bar.





The message shown on the left is displayed.

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

Precautions

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

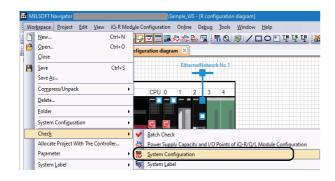
3.7 Checking Workspace

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

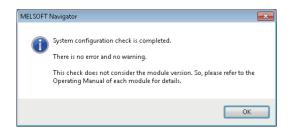
Checking system configuration

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

Operating procedure







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.

For details on the check target, refer to MELSOFT Navigator Version2 Help.

Precautions

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

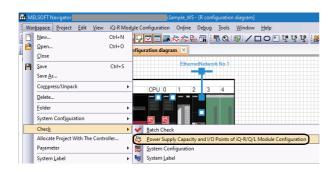
Checking power supply capacity and I/O points

Check power supply capacity and I/O points of system configurations created by MELSEC iQ-R series/MELSEC-Q series/MELSEC-L series module configurations in batch.

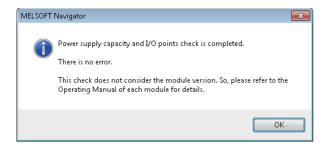
For MELSEC iQ-F series module configurations, check the power supply capacity and I/O points individually. For details on the individual check, refer to MELSOFT Navigator Version2 Help.

Note that this function is not supported by MELSEC-FX series module configurations.

Operating procedure







The message shown on the left is displayed.

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

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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 Current Consumption" 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 Current Consumption" may be different from the total current consumption of module with latest version.

For the total current consumption 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.

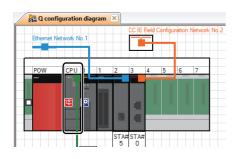
Editing projects

Activate the created project for editing.

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

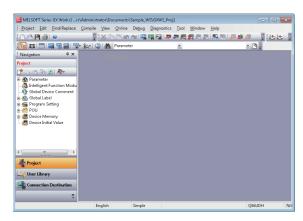
When activating a programmable controller project (GX Works3), motion controller project, or GOT project, follow the same procedure as shown below.

Operating procedure



On a module configuration diagram, 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 the GX Works2 projects, refer to the following:

- 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)



- 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 diagram.

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, or 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 Version2 Help.

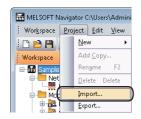
In addition, a project imported in GX Developer format cannot be allocated to a controller on the module configuration diagram.

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.

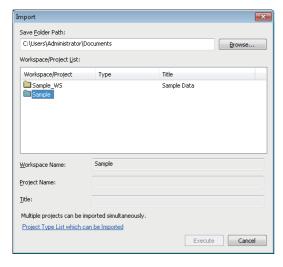
Operating procedure

■Importing projects



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



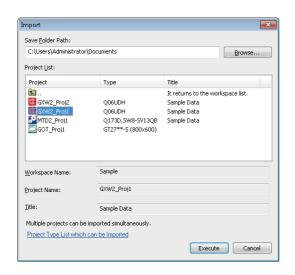


The "Import" screen is displayed.

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





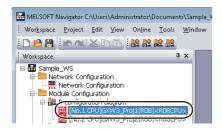
The project is imported in the Workspace window.



- Only the project in workspace format can be imported in MELSOFT Navigator. For the project exported in a single file format, open it in each engineering software, 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 Version2 Help.

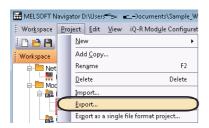
■Exporting projects

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



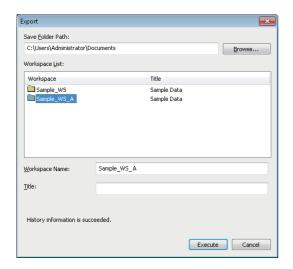
 Select the project to be exported on the Workspace window.





2. Select [Project] ⇒ [Export] in the menu bar.





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



In the step 2, select [Export as a single file format project] from the menu bar to export the project in a single file format.

When importing the project exported in a single file format, open the project once in each engineering software and save it in workspace format.

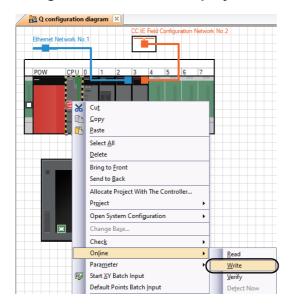
3.9 Reading/Writing/Verifying Controller Data

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

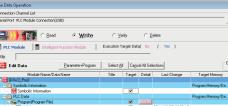
This function is not supported by GT SoftGOT2000.

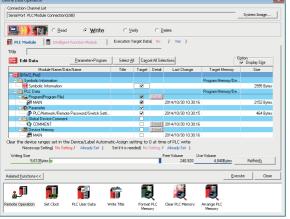
Operating procedure

■Programmable controller projects



On a module configuration diagram, 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].

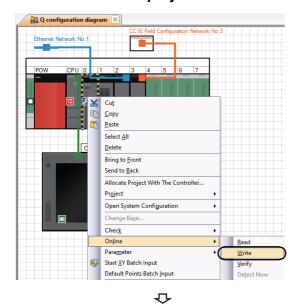




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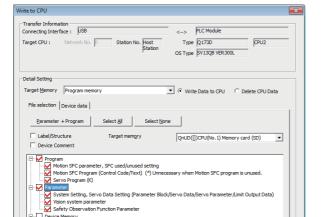
The "Online Data Operation" screen is displayed. For the operation method, refer to the following: GX Works3 Operating Manual GX Works2 Version 1 Operating Manual (Common) GX Works2 Version 1 Operating Manual (Simple Project) GX Works2 Version 1 Operating Manual (Structured GX Works2 Beginner's Manual (Simple Project) GX Works2 Beginner's Manual (Structured Project)

■Motion controller projects



On a module configuration diagram, 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].



Execute

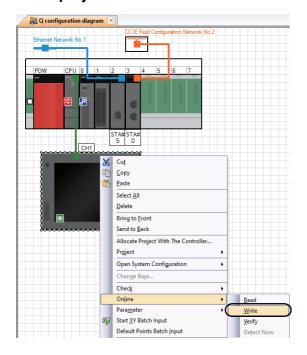
The "Write to CPU" screen is displayed.

For the operation method, refer to the following:

HELP function of MT Developer2

■GOT projects

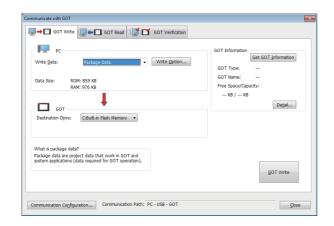
Related Eunctions <<



On a module configuration diagram, 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].

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The "Communicate with GOT" screen is displayed.
For the operation method, refer to the following:

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 2), (Mon-Mitsubishi Products 1), (Non-Mitsubishi Products 2), (Microcomputers,

MODBUS/Fieldbus Products, Peripherals)



Project data can also be read/written/verified by right-clicking on a project in the Workspace window or the Project List window, and select [Read]/[Write]/[Verify] in the shortcut menu.

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 by decompressing the file. For details, refer to MELSOFT Navigator Version2 Help.

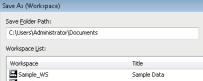
Saving workspaces with specified names

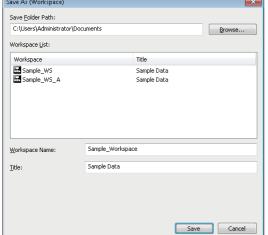
Save an open workspace with a specified name.

Operating procedure



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





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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.

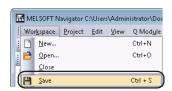
Setting content (sample)

- 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



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

Settings for MELSOFT iQ AppPortal

A saved workspace can be registered in iQ AppPortal. (QQ iQ AppPortal Operating Manual)

The feature information (title of the workspace, the components of the system configuration, the version of MELSOFT Navigator, etc.) saved in the MELSOFT iQ AppPortal information file (.iqap) is displayed in the iQ AppPortal.

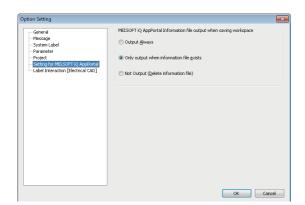
The MELSOFT iQ AppPortal information file (.iqap) is output when saving the workspace.

The output condition can be selected on the "Option Setting" screen.

Operating procedure



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1. Select [Tools] ⇒ [Options] in the menu bar.

The "Option Setting" screen is displayed.

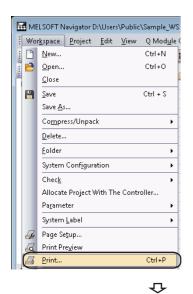
2. Select "Setting for MELSOFT iQ AppPortal". Select an output condition from "MELSOFT iQ AppPortal Information file output when saving workspace".

3.11 Printing Workspaces

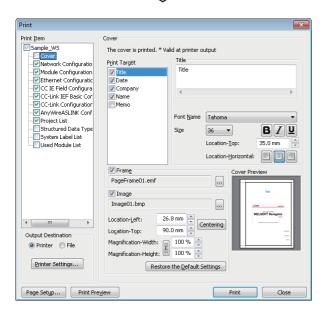
Print a created workspace.

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 Version2 Help.

Operating procedure

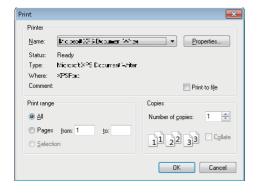


1. Select [Workspace] ⇒ [Print] in the menu bar.



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





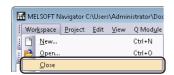
The "Print" screen is displayed.

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

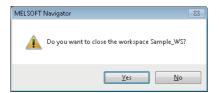
3.12 Closing Workspaces

Close an open workspace.

Operating procedure



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1. Select [Workspace] ⇒ [Close] in the menu bar.

The message shown on the left is displayed.

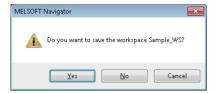
2. Click the [Yes] button.



When the workspace is not saved, the following message is displayed.

Click the [Yes] button to save the workspace.

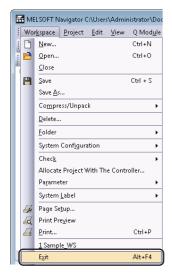
Click the [No] button to close the workspace without saving it.



3.13 Exiting MELSOFT Navigator

Exit a MELSOFT Navigator.

Operating procedure



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

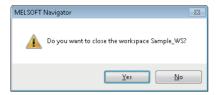
The MELSOFT Navigator is exit.



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.



4 USING SYSTEM LABELS

This chapter explains the methods for using system labels which are shared within workspace of programmable controller projects (GX Works3 or 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 Version2 Help.



- 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

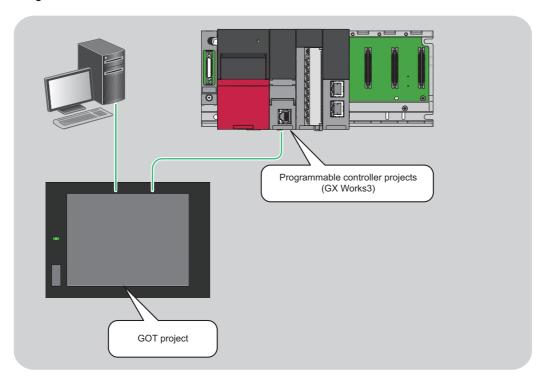
After the registered system label Ver.1 is changed to system label Ver.2, the changed content is required to be imported in the projects in which the system labels are used.

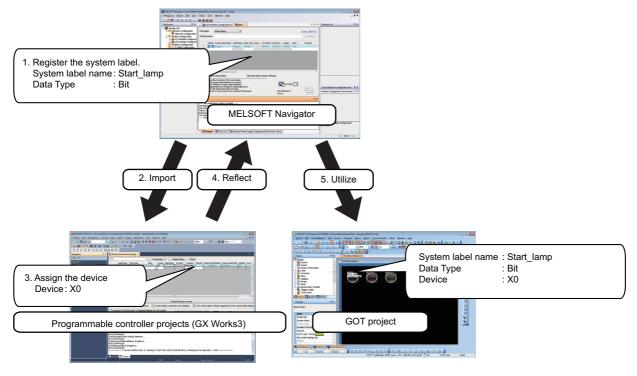
To import the changed content, right-click the System label notification icon which is displayed on the status bar, and select [Check the changes of the System Label Database]/[Check the changes of the System Label Data Base]/[Confirm Update of System Label Database]/[Show System Label Differences and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

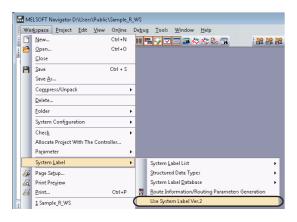




Registering system label Ver.2 in MELSOFT Navigator

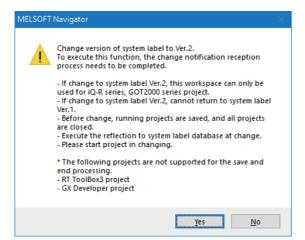
Create and register system label Ver.2 in MELSOFT Navigator.

Operating procedure



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

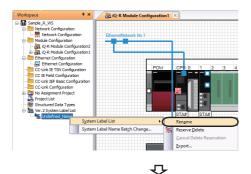
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The message shown on the left is displayed.

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

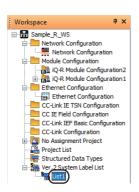




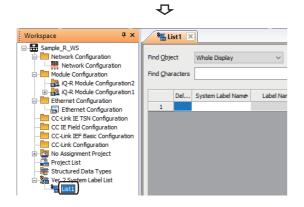
The "Ver.1 System Label List" is changed to "Ver.2 System Label List".

3. Right-click "Undefined_Name" under "Ver.2 System Label List" on the Workspace window, and select [System Label List] ⇒ [Rename] in the shortcut menu.

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



- 4 USING SYSTEM LABELS
- 4.1 Using System Label Ver.2

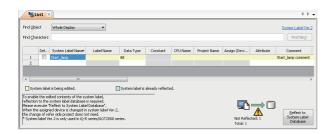


5. Double-click 'List1' on the Workspace window.





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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.

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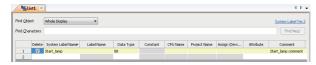


The message shown on the left is displayed.

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

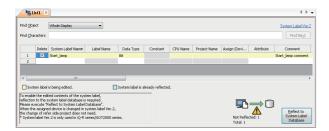
The system label Ver.2 is registered to the system label database, and the cell color turns light blue.

■Deleting system label Ver.2



1. Select a system label Ver.2 to be deleted.

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



- 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. The system label Ver.2 created in the workspace can be exported in CSV format or text format. For details, refer to MELSOFT Navigator Version2 Help.

Assigning devices to system label Ver.2

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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



1. Double-click "GXW3_Proj1" on the Workspace window.



The GX Works3 project is opened.

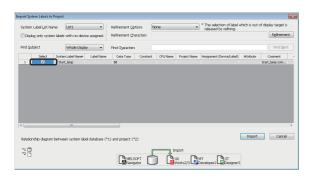
2. Double-click "Global" on the Navigation window of GX Works3.



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The global label editor is displayed.

3. Click the [Import System Label] button.



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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)

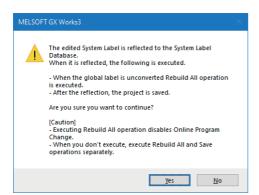
• Assign (Device/Label): X0

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



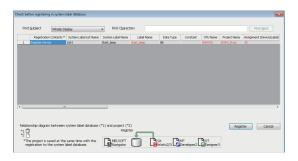


The message shown on the left is displayed.

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:

GX Works3 Operating Manual



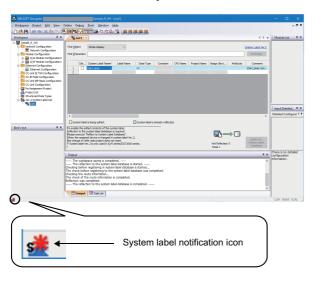


The "Check before registering in system label database" screen is displayed.

Contents to be registered are displayed in red.

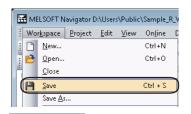
8. Check the contents and click the [Register] button.





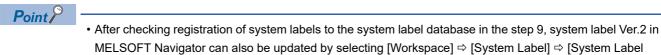
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The system label notification icon is displayed on the status bar of MELSOFT Navigator.



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

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



• 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 methods on how to draw objects in GOT projects, refer to the following:

- 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.

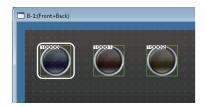


The message shown on the left is displayed when a GX Works2, GX Works3, or MT Developer2 project is open.

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



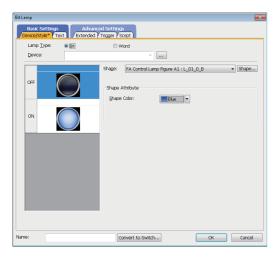
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The GOT project is opened.

3. Double-click the created object.





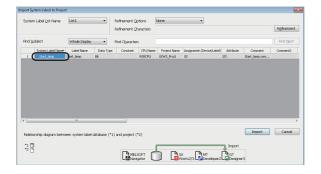
The "Bit Lamp" screen is displayed.

4. Click the [...] button.

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

The "Select CH No." screen is displayed.

5. Click the [System Label] button.

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.

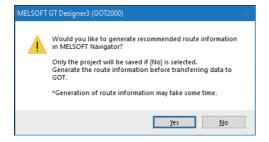
The system label Ver.2 is ready to be referenced.



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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 Generation] 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.

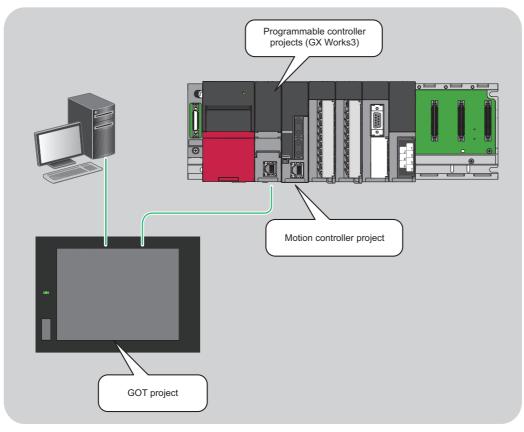
GT Designer3 Version 1 Screen Design Manual (Fundamentals)

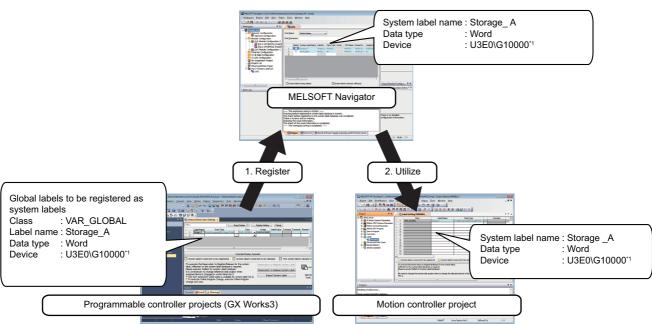
Utilizing Existing Labels as System Label Ver.2

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

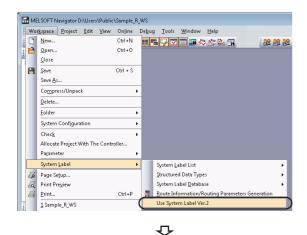
Registering labels as system label Ver.2

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

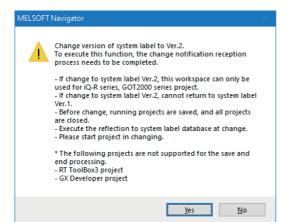
The following is an example of registering global labels of programmable controller project (GX Works3) as system label Ver.2.

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

Operating procedure



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



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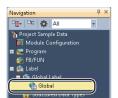
The message shown on the left is displayed.

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



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

3. Double-click "GXW3_Proj2" on the Workspace window.

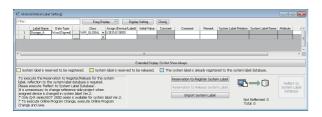


The GX Works3 project is opened.

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



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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.

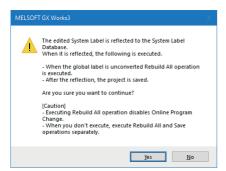
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The cell color of the selected global label turns yellow.

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

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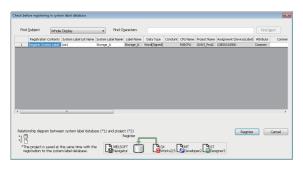


The message shown on the left is displayed.

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:

GX Works3 Operating Manual

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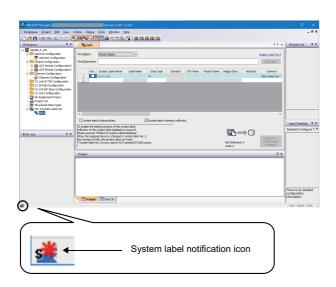


The "Check before registering in system label database" screen is displayed.

9. Click the [Register] button.

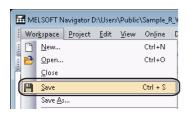
The system label Ver.2 is registered and the cell color turns light blue.

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





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



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.



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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.

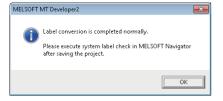


5. Select [Check/Convert] ⇒ [Label Conversion] in the menu bar of MT Developer2.



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The message shown on the left is displayed.



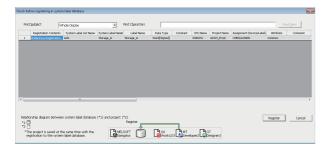
6. Read the message and click the [OK] button.



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7. Select [Project] ⇒ [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

For referencing system label Ver.2, assign the devices whose attribute can be referenced from programmable controller projects (GX Works3) or motion controller projects. For details, refer to MELSOFT Navigator Version2 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:

Page 97 Registering system label Ver.2 in MELSOFT Navigator

Operating procedure



1. Double-click "GXW3_Proj2" on the Workspace window.



The GX Works3 project is opened.

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



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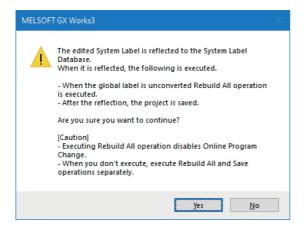
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The global label editor is displayed.

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



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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:

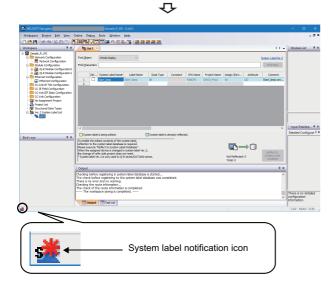
GX Works3 Operating Manual



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

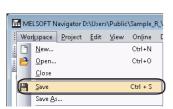
Contents to be changed are displayed in red.

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



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



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

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



- 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
- MELSEC-Q series
- MELSEC-L series
- MELSEC-FX series
- · GOT2000 series
- GOT1000 series

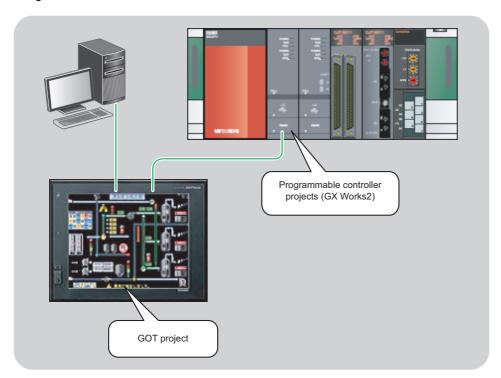
For details on the system label Ver.1, refer to MELSOFT Navigator Version2 Help.

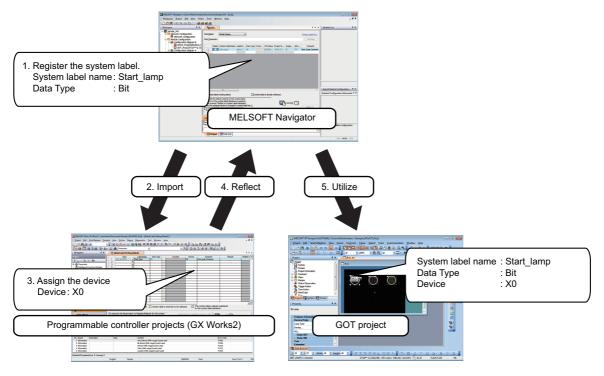


- When a system is configured using only MELSEC iQ-R series and GOT2000 series, system label Ver.1 can be changed to system label Ver.2. However, system label Ver.2 cannot be restored to system label Ver.1.
- For a system configuration in which a system label Ver.2 unsupported device is used, use system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

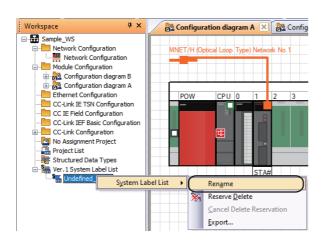




Registering system label Ver.1 in MELSOFT Navigator

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

Operating procedure

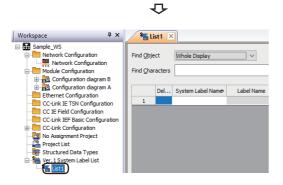


Q

 Right-click "Undefined_Name" under "Ver.1 System Label List" on the Workspace window, and select [System Label List] ⇒ [Rename] in the shortcut menu.



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



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



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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)

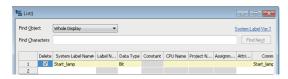
- System Label Name: Start_lamp
- · Data Type: Bit
- · Comment (option) : Start_lamp comment



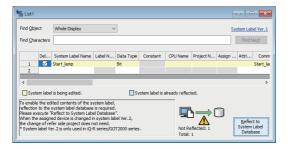
₽



■Deleting system label Ver.1



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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.



- 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. The system label Ver.1 created in the workspace can be exported in CSV format or text format. For details, refer to MELSOFT Navigator Version2 Help.

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



1. Double-click "GXW2_Proj2" on the Workspace window.

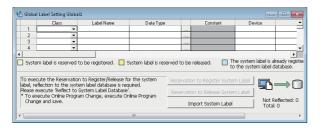


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The GX Works2 project is opened.

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

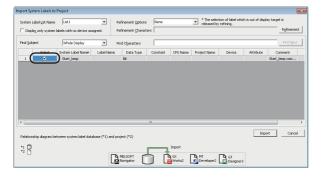




The global label setting editor is displayed.

3. Click the [Import System Label] button.

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

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

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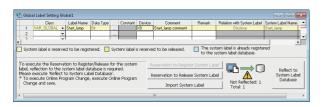


The message shown on the left is displayed.

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.



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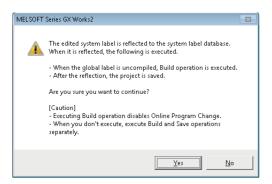


6. Assign a device to the imported system label Ver.1. Setting content (sample)

• 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.

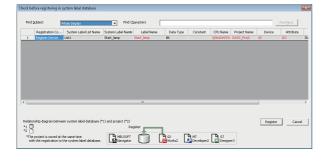
The Build and Save the project are performed.

For details on the compilation, refer to the following:

GX Works2 Version 1 Operating Manual (Simple Project)

GX Works2 Version 1 Operating Manual (Structured Project)



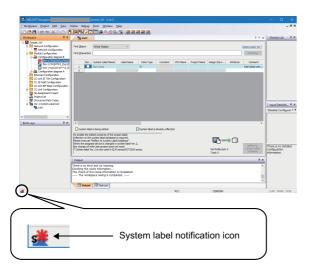


The "Check before registering in system label database" screen is displayed.

Contents to be registered are displayed in red.

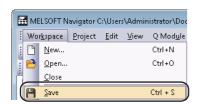
9. Check the contents and click the [Register] button.





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





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

The Ver.1 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.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:

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.

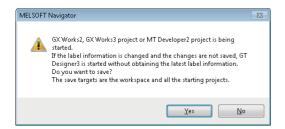
For the methods on how to draw objects in GOT projects, refer to the following:

- 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.



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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.

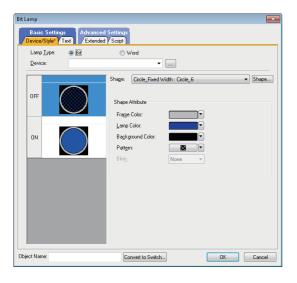


The GOT project is opened.

3. Double-click the created object.



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The "Bit Lamp" screen is displayed.

4. Click the [...] button.



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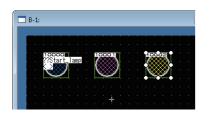
The "Import System Labels to Project" screen is displayed.

The "Select CH No." screen is displayed.

5. Click the [Select System Label] button.

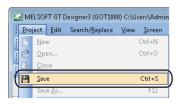
6. Select a system label Ver.1 to be used, and click the [Import] button.

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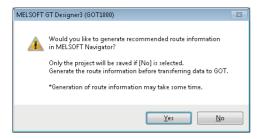
After the settings are completed, the system label name is displayed on the object.

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7. Select [Project] ⇒ [Save] in the menu bar.

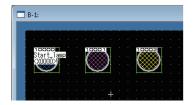
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The message shown on the left is displayed.

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

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

Point P

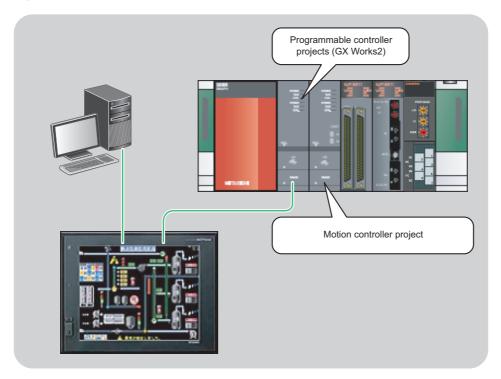
- After saving GT Designer3 project by clicking [No] button on the message in the step 8, system label Ver.1 can be used by selecting [Workspace] ⇒ [System Label] ⇒ [Route Information/Routing Parameters Generation] in the menu bar of MELSOFT Navigator to create the route information/routing parameters.
- 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:
- GT Designer3 Version 1 Screen Design Manual (Fundamentals)

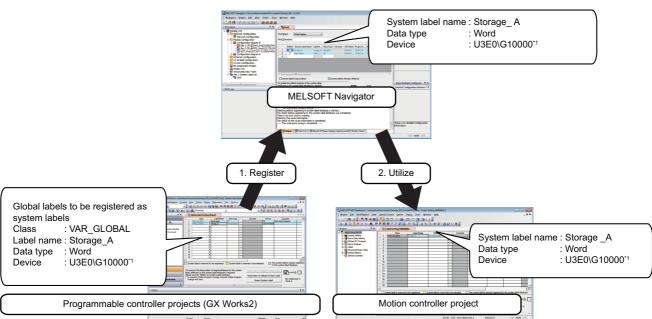
Utilizing Existing Labels as System Label Ver.1

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.





*1 CPU buffer memory access device

Registering labels as system label Ver.1

Register the global labels 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.

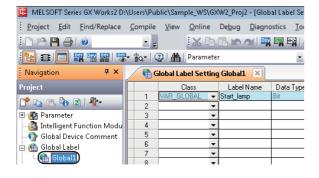
The labels of motion controller projects can be registered as system label Ver.1 with the same procedure as described below.

Operating procedure



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.

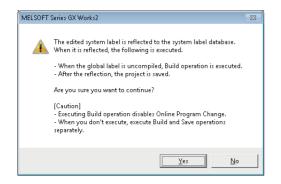
3. Select the global labels to be registered as a system label Ver.1, and click the [Reservation to Register System Label] button.





The cell color of the selected global label turns yellow.

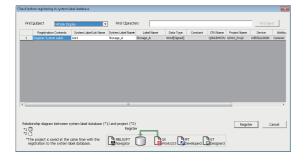
4. Click the [Reflect to System Label Database] button.



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:
GX Works2 Version 1 Operating Manual (Simple Project)
GX Works2 Version 1 Operating Manual (Structured Project)

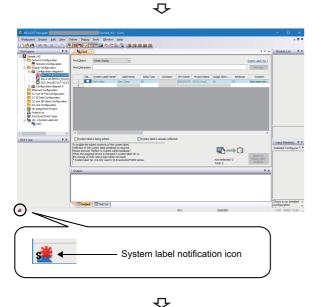
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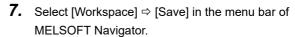
The "Check before registering in system label database" screen is displayed.

6. Click the [Register] button.

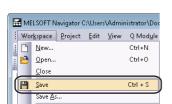
The system label Ver.1 is registered and the cell color turns light blue.



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



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



Using system label Ver.1 in motion controller projects

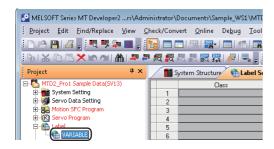
Use system label Ver.1 registered in the programmable controller project (GX Works2) for a motion controller project.

Operating procedure



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

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The motion controller project is opened.

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

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The label setting editor is displayed.

3. Click the [Import System Label] button.

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

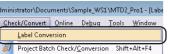
Select a system label Ver.1 to be imported, and click the [Import] button.

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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.

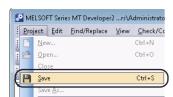
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The message shown on the left is displayed.

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





7. Select [Project] ⇒ [Save] in the menu bar.

Precautions

For referencing system label Ver.1, assign the devices whose attribute can be referenced from programmable controller projects (GX Works2) or motion controller projects. For details, refer to MELSOFT Navigator Version2 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.

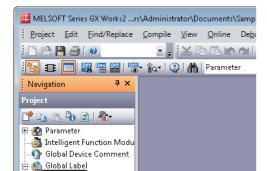
For the system configuration, refer to the following:

Page 116 Registering and Using System Label Ver.1 in MELSOFT Navigator

Operating procedure



1. Double-click "GXW2_Proj2" on the Workspace window.



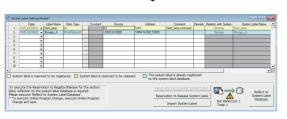
₽

The GX Works2 project is opened.

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

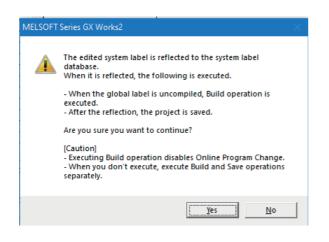


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The global label setting editor is displayed.

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



The message shown on the left is displayed.

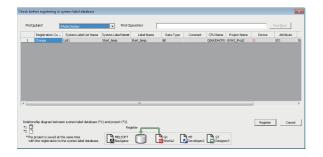
5. Read the message and click the [Yes] button.

The Build and Save the project are performed.

For details on the compilation, refer to the following:

- GX Works2 Version 1 Operating Manual (Simple Project)
- GX Works2 Version 1 Operating Manual (Structured Project)

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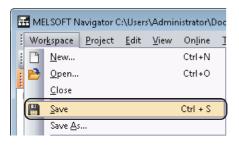
The "Check before registering in system label database" screen is displayed.

Contents to be changed are displayed in red.

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

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



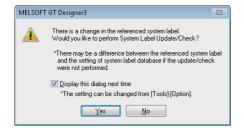


7. Select [Workspace] ⇒ [Save] in the menu bar of MELSOFT Navigator.

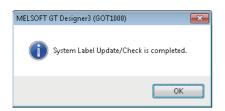
The system label of GX Works2 project is reflected to MELSOFT Navigator.



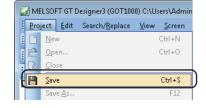
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8. Double-click "GOT_Proj1" on the Workspace window.

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

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

The message shown on the left is displayed.

10. Click the [OK] button.

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

11. Select [Project] ⇒ [Save] in the menu bar.



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.

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.

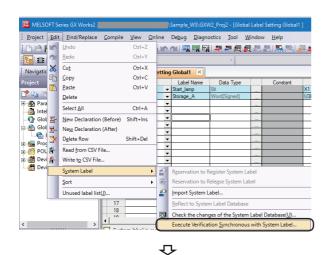
After editing the project on other personal computer, importing the project to the original workspace and performing verification and synchronization are required. To import the project, the versions of the system labels in the workspace must be the same as that of the import source project. For details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

Page 85 Utilizing existing projects (import)

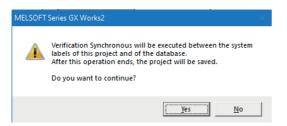
The following is an example when performing the verification and synchronization function on the system labels of programmable controller project (GX Works2).

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

Operating procedure

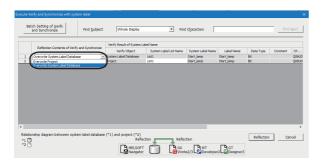


1. Select [Edit] ⇒ [System Label] ⇒ [Execute Verification Synchronous with System Label] in the menu bar of GX Works2.



The message shown on the left is displayed.

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



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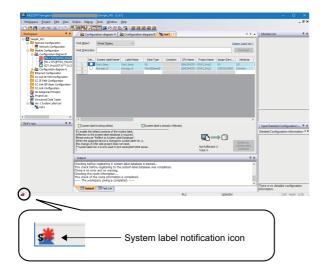
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The "Execute Verification Synchronous with system label" screen is displayed.

3. Select an item under "Reflection Contents of Verify and Synchronize", and click the [Reflection] button.



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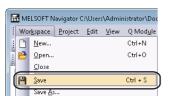


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The message shown on the left is displayed.

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

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



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

4.4 Checking System Labels

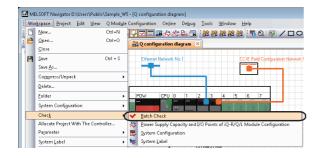
Check the conditions such as; module configurations of created system configuration, project allocation status, and system label consistency in batch.

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:

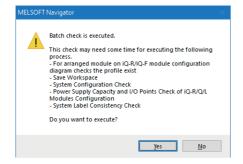
Page 96 Using System Label Ver.2

Operating procedure



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

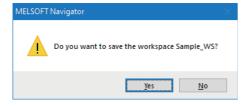
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The message shown on the left is displayed.

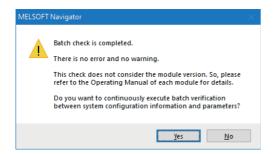
2. Read the message and click the [Yes] button.

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

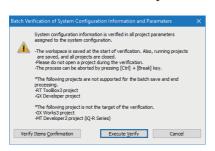
3. Read the message and click the [Yes] button.



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.

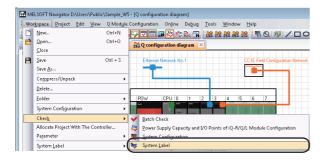




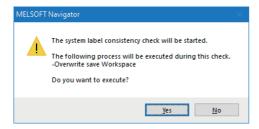
The verification is performed.

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.

■Checking only system label consistency

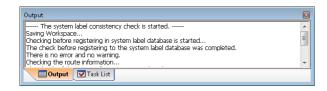






The message shown on the left is displayed.

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



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 function is not supported by GT SoftGOT2000.

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.

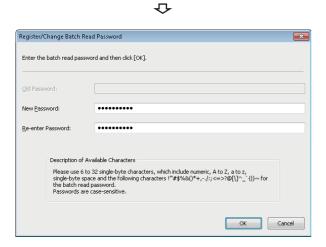
Operating procedure



 Select [Online]

 □ [Password Setting]

 □ [Register/ Change] in the menu bar.



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 : MITSUBISHI09Re-enter Password: MITSUBISHI09

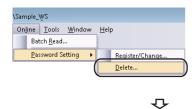
₽

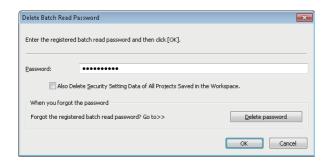


The message shown on the left is displayed.

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

■Deleting batch read password

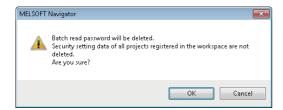




The "Delete Batch Read Password" screen is displayed.

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

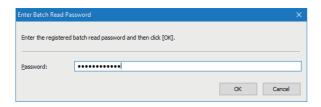
Read projects from controllers in batch and save them as backup data.

Operating procedure



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





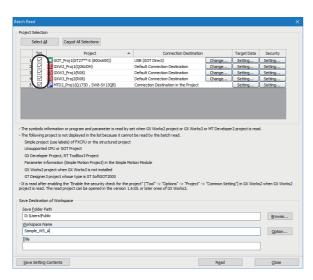
The "Enter Batch Read Password" screen is displayed.

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

Setting content (sample)

• Password: MITSUBISHI09





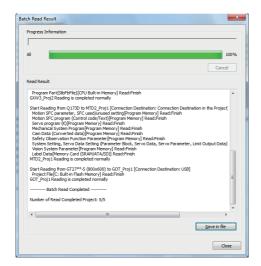
The "Batch Read" screen is displayed.

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".



• GX Works3 project is read as a project in which "Standard" is set for "File Size".

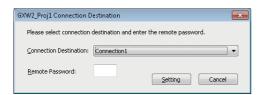
■Changing connection destination

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.



 \triangle

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 [Setting] 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:

GX Works2 Version 1 Operating Manual (Common)

■Specifying data to be read

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

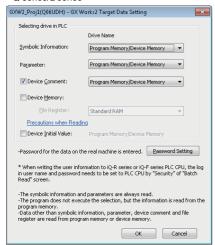
When specifying programmable controller project (GX Works3) data, motion controller project data, or GOT project data, follow the same procedure as shown below.



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



<Q series/L series>



<FX series>



The screen to set the target data is displayed.

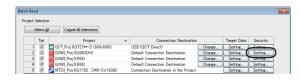
2. Specify data to be read, and click then [OK] button. For details, refer to MELSOFT Navigator Version2 Help.

■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.



 \triangle

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.

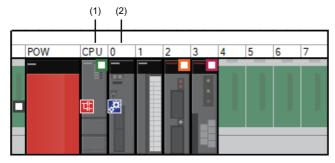
For details, refer to MELSOFT Navigator Version2 Help.

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 MELSEC-Q series.

6.1 Example of System Configuration

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



- (1) QCPU (CPU No.1)
- (2) Motion controller (CPU No.2)

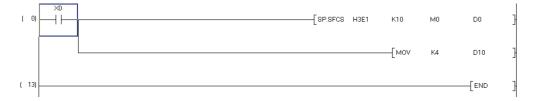
Motion controller start-up programs

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.

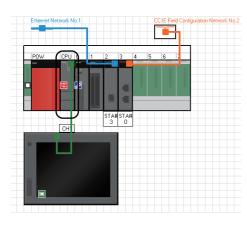


6.2 Program Jump Function

The following is an example of using the program jump function in the SFCS instruction.

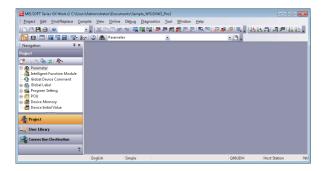
When using the program jump function in the SVST instruction, follow the same procedure as shown below.

Operating procedure



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





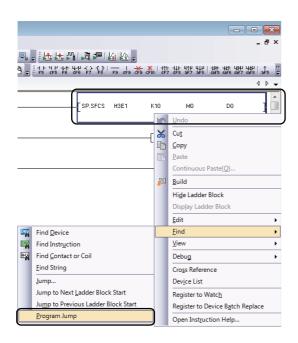
The GX Works2 project is started.



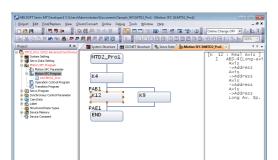


2. Select "POU" ⇒ "Program" ⇒ "MAIN" ⇒ "Program" on the Project window.

The ladder program window is displayed.



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



Q

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

7

CSP+ FILE FOR MACHINE GENERATION FUNCTION

This chapter explains the function of generating a CSP+ file for machine by using information such as label names and comments.

CSP+ for machine is a specification for writing machine information to facilitate the following:

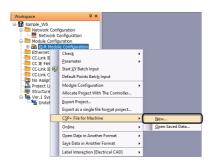
- · Application software development which manages, monitors, and control devices
- · Application settings by device users

For details on the CSP+ file for machine, refer to 'CSP+ Specification for Machine' that can be downloaded from the homepage of the CC-Link Partner Association (www.cc-link.org).

7.1 Creating a New CSP+ File for Machine

Generate a CSP+ file for machine.

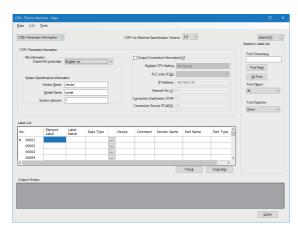
Operating procedure



 Right-click "iQ-R Module Configuration" on the Workspace window, and select [CSP+ File for Machine]

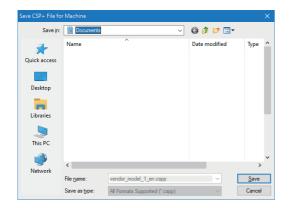
 □ [New] in the shortcut menu.





The "CSP+ File for Machine" screen is displayed.

- 2. Edit "CSP+ Parameter Information" and "Label List."
- **3.** Click the [Output] button.



The "Save CSP+ File for Machine" screen is displayed.

4. Specify the output destination of the CSP+ file for machine and click the [Save] button.

The generated CSP+ file for machine is saved in the specified folder.

REVISIONS

*The 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		
March 2015	SH(NA)-081261ENG-C	■Added or modified parts TERMS, Section 1.1, Section 2.1, Section 3.1, Section 3.4, Section 3.5, Section 3.6, Section 3.7, Section 4.1, Section 4.2, Chapter 5		
September 2015	SH(NA)-081261ENG-D	■Added or modified parts TERMS, Section 1.1, Section 2.1, Section 3.2, Section 3.4, Section 3.5, Section 3.6, Section 3.8		
February 2016	SH(NA)-081261ENG-E	■Added or modified parts INTRODUCTION, RELEVANT MANUALS, Section 1.1, Section 1.2, Section 2.1, Section 3.7, Section 3.8, Section 3.10, Section 3.11, Section 4.1, Section 4.2, Section 5.2		
July 2016	SH(NA)-081261ENG-F	■Added or modified parts TERMS, Section 1.1, Section 3.4, Section 3.5, Section 3.10		
July 2017	SH(NA)-081261ENG-G	■Added or modified parts TERMS, Section 1.1, Section 1.2, Section 3.4, Section 3.7, Section 3.8		
February 2018	SH(NA)-081261ENG-H	■Added or modified part Section 3.4		
December 2018	SH(NA)-081261ENG-I	■Added or modified parts Section 3.4, Section 3.5, Section 3.6, Section 3.9, Chapter 5, Section 5.2		
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December 2019	SH(NA)-081261ENG-K	■Added or modified parts Section 1.1, Section 3.4, Section 3.9, Chapter 7		
July 2020	SH(NA)-081261ENG-L	■Added or modified parts Section 3.4, Section 3.7		
December 2020	SH(NA)-081261ENG-M	■Added or modified parts SAFETY PRECAUTIONS, CONDITIONS OF USE FOR THE PRODUCT, Section 3.4		
June 2021	SH(NA)-081261ENG-N	■Added or modified parts TERMS, GENERIC TERMS AND ABBREVIATIONS, Section 3.4		
June 2022	SH(NA)-081261ENG-O	■Added or modified parts GENERIC TERMS AND ABBREVIATIONS, Section 3.2, Section 5.2, COPYRIGHTS		
December 2022	SH(NA)-081261ENG-P	■Added or modified parts SAFETY PRECAUTIONS, Section 1.2		
May 2023	SH(NA)-081261ENG-Q	■Added or modified part Section 3.4		
November 2023	SH(NA)-081261ENG-R	■Added or modified part Section 3.5		
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Japanese manual number: SH-081260-S

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SH(NA)-081261ENG-S(2405)KWIX MODEL:IQWK-VER2-HOW-O-E

MODEL CODE: 13JZ79

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