

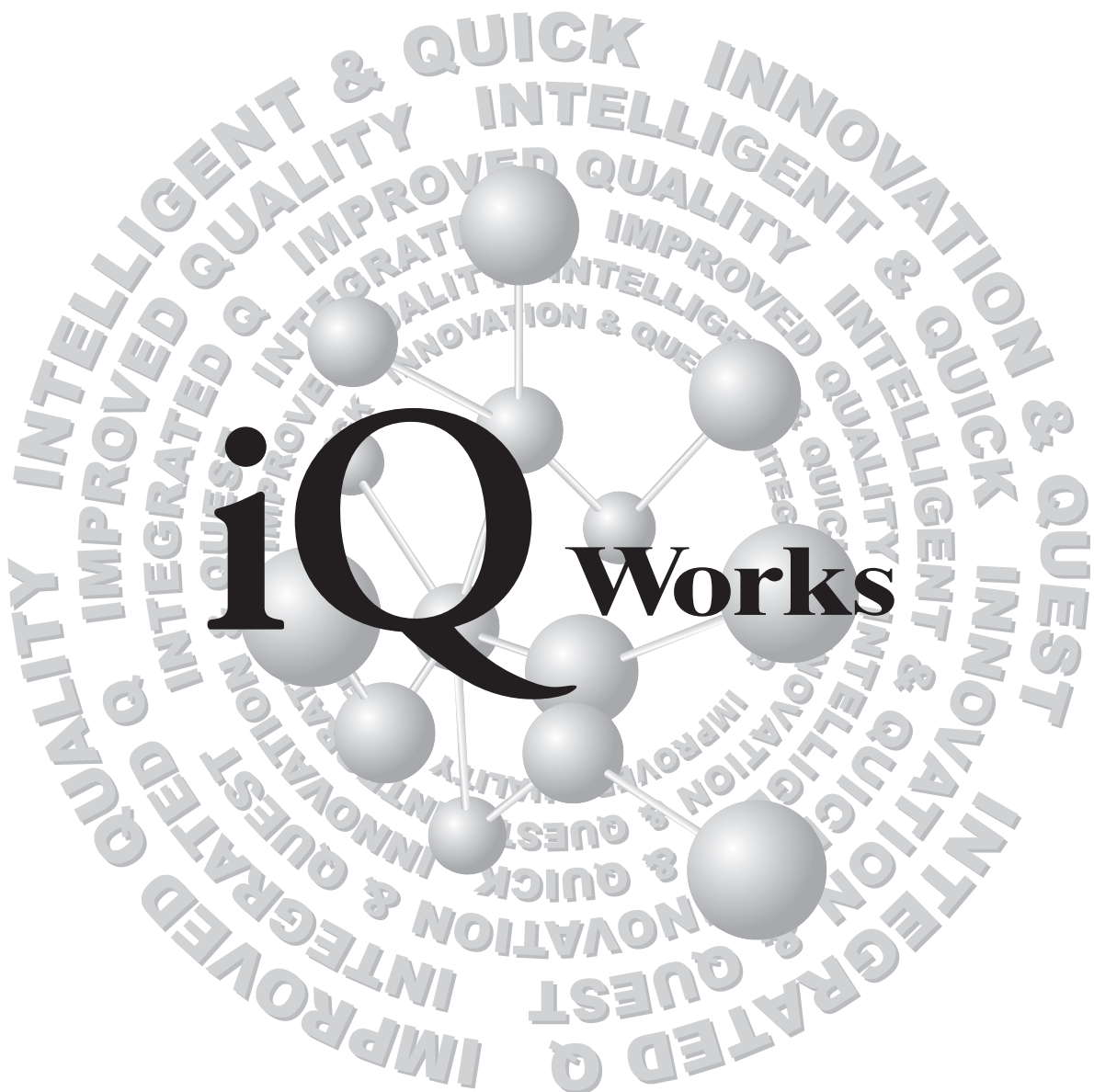
MITSUBISHI



iQ Platform compatible engineering environment

MELSOFT **iQ** Works

Beginner's Manual



MELSOFT
Integrated FA Software

● SAFETY PRECAUTIONS ●

(Always read these instructions before using this product.)

Before using this product, thoroughly read this manual and the relevant manuals introduced in this manual and pay careful attention to safety and handle the products properly.

The precautions given in this manual are concerned with this product. For the safety precautions of the system, refer to the User's Manual for each controller.

In this manual, the safety precautions are ranked as 'DANGER' and 'CAUTION'.




DANGER

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



CAUTION

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

Note that the  CAUTION level may lead to serious consequences according to the circumstances. Always follow the precautions of both levels because they are important for personal safety.

Please save this manual to make it accessible when required and always forward it to the end user.

[Design Instructions]

DANGER

- When data change, program change, or status control is performed from a personal computer to a running controller, 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, the corrective actions against a communication error due to such as a cable connection fault should be predetermined as a system.

[Startup/Maintenance Instructions]

CAUTION

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

REVISIONS

The manual number is written at the bottom left of the back cover.

Print date	Manual number	Revision
Jul., 2008	BCN-P5717-A	First edition

Japanese Manual Version BCN-P5705-A

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INTRODUCTION

Thank you for purchasing the Mitsubishi integrated FA software, MELSOFT series.
Before using the product, thoroughly read this manual to develop full familiarity with the functions and performance to ensure correct use.

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■ MANUALS

The manuals related to this product are shown below.
Refer to the following tables when ordering required manuals.

Related manuals

1) MELSOFT Navigator

For details of operations, refer to the HELP function of MELSOFT Navigator.

2) GX Works2

Manual name	Manual number (Model code)
GX Works2 Version1 Operating Manual (Common) Explains the system configuration of GX Works2 and the functions common to a Simple project and Structured project such as parameter setting, operation method for the online function. (Sold separately)	SH-080779 (13JU63)
GX Works2 Version1 Operating Manual (Simple Project) Explains operation methods such as creating and monitoring programs in Simple project of GX Works2. (Sold separately)	SH-080780 (13JU64)
GX Works2 Version1 Operating Manual (Structured Project) Explains operation methods such as creating and monitoring programs in Structured project of GX Works2. (Sold separately)	SH-080781 (13JU65)
GX Works2 Beginner's Manual (Simple Project) Explains fundamental operation methods such as creating, editing, and monitoring programs in Simple project for users inexperienced with GX Works2. (Sold separately)	SH-080787 (13JZ22)
GX Works2 Beginner's Manual (Structured Project) Explains fundamental operation methods such as creating, editing, and monitoring programs in Structured project for users inexperienced with GX Works2. (Sold separately)	SH-080788 (13JZ23)

3) GT Designer2

Manual name	Manual number (Model code)
GT Designer2 Version2 Basic Operation/Data Transfer Manual (For GOT 1000 Series) Explains common settings, object function specifications, setting methods, and arranging methods of GT Designer2. (Sold separately)	SH-080529ENG (1D7M24)
GT Designer2 Version2 Screen Design Manual (For GOT 1000 Series) (1/3, 2/3, 3/3) Explains the system configuration, screen configuration, basic operations for dialog boxes, methods such as creating new project and transferring data to GOT, and convenient screen editing operations of GT Designer2. (Sold separately)	SH-080530ENG (1D7M25)
GT Converter2 Version2 Operating Manual Explains the specifications and operation methods of GT Converter2. (Sold separately)	SH-080533ENG (1D7M27)
GT Simulator2 Version2 Operating Manual Explains the system configuration, screen configuration, and operation methods of GT Simulator2 used in GOT1000 series (GT15/GT11) and GOT-A900 series. (Sold separately)	SH-080546ENG (1D7M34)
GT SoftGOT1000 Version2 Operating Manual Explains the system configuration, screen configuration, and operation methods of monitoring software GT SoftGOT1000. (Sold separately)	SH-080602ENG (1D7M48)
GT Works2 Operating Manual (MELSOFT iQ Works) Explains the operation methods and precautions of GT Designer2, GT Simulator2, and GT SoftGOT1000 that are used in MELSOFT iQ Works. (Sold separately)	SH-080791ENG (1D7M89)

- 4) MT Developer2
Refer to the HELP function of MT Developer2.
- 5) Motion Controllers

Manual name	Manual number (Model code)
Q173HCPU/Q172HCPU Motion Controller (SV13/SV22) Programming Manual (Motion SFC) Explains the functions, programming, debugging, and error codes of Motion SFC. (Included in SV13/SV22)	IB-0300112 (1XB912)
Q173DCPU/Q172DCPU Motion Controller (SV13/SV22) Programming Manual (Motion SFC) Explains the functions, programming, debugging, and error codes of Motion SFC. (Included in SV13/SV22)	IB-0300135 (1XB929)

Point 

The Operating Manual is included in the CD-ROM with the software package.
Manuals in printed form are sold separately for single purchase. Order a manual by quoting the manual number (model code) listed in the table above.

● **Purpose of this manual**

This manual explains the features and operations of iQ Platform compatible engineering environment MELSOFT iQ Works.

Manuals and the HELP function for reference are listed in the following table according to their purpose.

For information such as the contents and number of each manual, refer to the list of 'Related manuals'.


Purpose		Manuals and HELP function for reference
Creating GX Works2 projects	Basic operation	GX Works2 Version1 Operating Manual (Common) GX Works2 Version1 Operating Manual (Simple Project) GX Works2 Version1 Operating Manual (Structured Project) GX Works2 Beginner's Manual (Simple Project) GX Works2 Beginner's Manual (Structured Project)
	Label setting	GX Works2 Version1 Operating Manual (Simple Project) GX Works2 Version1 Operating Manual (Structured Project) GX Works2 Beginner's Manual (Simple Project) GX Works2 Beginner's Manual (Structured Project)
Creating MT Developer2 projects	Operation	HELP function of MT Developer2
	Label setting	HELP function of MT Developer2
Creating GT Designer2 projects	Operation	GT Designer2 Version2 Screen Design Manual (For GOT 1000 Series) GT Works2 Operating Manual (MELSOFT iQ Works)
Using label linkage function		GX Works2 Version1 Operating Manual (Simple Project) GX Works2 Version1 Operating Manual (Structured Project) GX Works2 Beginner's Manual (Simple Project) GX Works2 Beginner's Manual (Structured Project) HELP function of MT Developer2
Using program jump function		Q173HCPU/Q172HCPU Motion Controller (SV13/SV22) Programming Manual (Motion SFC) Q173DCPU/Q172DCPU Motion Controller (SV13/SV22) Programming Manual (Motion SFC)

■ HOW TO READ THIS MANUAL

This section explains how to read this manual according to your purpose when using MELSOFT iQ Works.

Please use this manual with referring to the following descriptions.

- 1) To learn about the overview of MELSOFT iQ Works

 Chapter 1 OVERVIEW

Chapter 1 explains the features of MELSOFT iQ Works.

- 2) To learn about the screen configuration of MELSOFT iQ Works

 Chapter 2 SCREEN CONFIGURATION

Chapter 2 explains the screen configuration of MELSOFT Navigator.

- 3) To learn about the operating procedures of MELSOFT Navigator

 Chapter 3 CREATING WORKSPACES

Chapter 3 explains a sequence of the basic operation from start-up to creating and saving methods of workspaces and projects.

- 4) To learn about the label linkage function

 Chapter 4 USING LABEL LINKAGE FUNCTION

Chapter 4 explains the functions to utilize labels used in a project with other projects.

- 5) To learn about the program jump function

 Chapter 5 USING PROGRAM JUMP FUNCTION

Chapter 5 explains the function which can start motion SFC programs/servo programs, that are linked with motion controller programs, using the SFCS and SVST instructions of ladder programs.

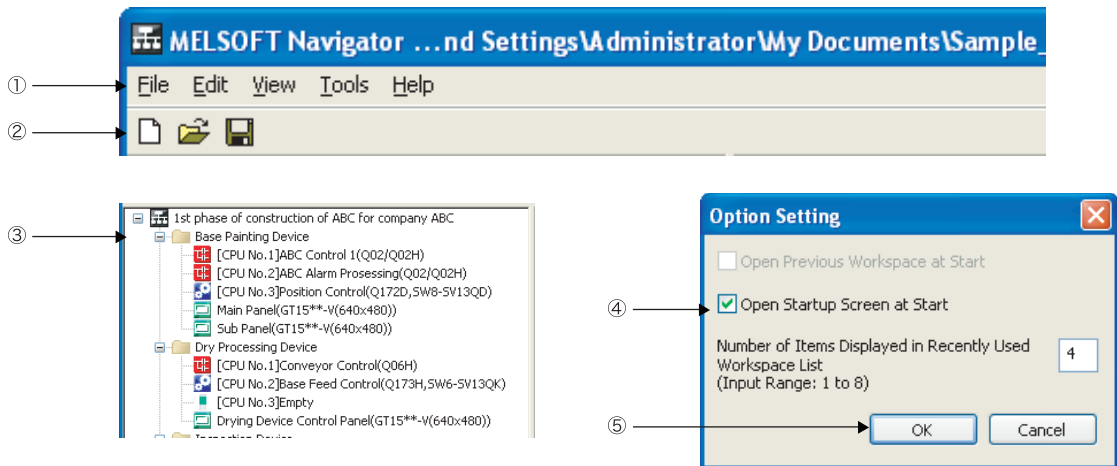
Point



This explains notes requiring attention or useful functions relating to the information given on the same page.

● **Symbols used in this manual**

The following shows the symbols used in this manual with descriptions and examples.



No.	Symbol	Description	Example
①	[]	Menu name on a menu bar	[File]
②		Toolbar icon	
③	" "	Item name in a workspace	"Base Painting Device"
④	" "	Item name in a screen	"Open Startup Screen at Start"
⑤		Button on a screen	
-		Keyboard key	

■ GENERIC TERMS AND ABBREVIATIONS IN THIS MANUAL

This manual uses the generic terms and abbreviations listed in the following table to discuss the software packages and programmable controller CPUs. Corresponding module models are also listed if needed.

Generic term and abbreviation	Description
MELSOFT Navigator	Generic product name of the integrated development environment for the SWnDNC-IQWK-E (iQ Platform compatible engineering environment MELSOFT iQ Works) (n: version)
GX Works2	Generic product name for the SWnDNC-GXW2-E (n: version) MELSOFT Navigator compatible GX Works2 is GX Works2 Version1.03D or later.
MT Developer2	Generic product name for the SWnDNC-MTW2-E (n: version) MELSOFT Navigator compatible MT Developer2 is MT Developer2 Version1.02C or later.
GT Designer2	Generic product name for the SWnD5C-GTD2-E (n: version) MELSOFT Navigator compatible GT Designer2 is GT Designer2 Version2.81K or later.
Controller	Generic terms for programmable controller, motion controller, and GOT
Network	Generic terms for CC-Link IE controller network, MELSECNET/H, Ethernet, and CC-Link
Personal computer	Generic term for personal computers on which Windows® operates
GOT	Generic term for Mitsubishi Graphic Operation Terminal GOT1000 series



1 OVERVIEW

This chapter explains the features of MELSOFT iQ Works.

1.1	MELSOFT iQ Works.....	1-2
1.2	Features	1-3

1	OVERVIEW
2	SCREEN CONFIGURATION
3	CREATING WORKSPACES
4	USING LABEL LINKAGE FUNCTION
5	USING PROGRAM JUMP FUNCTION

1.2 Features

This section explains the features of MELSOFT iQ Works.

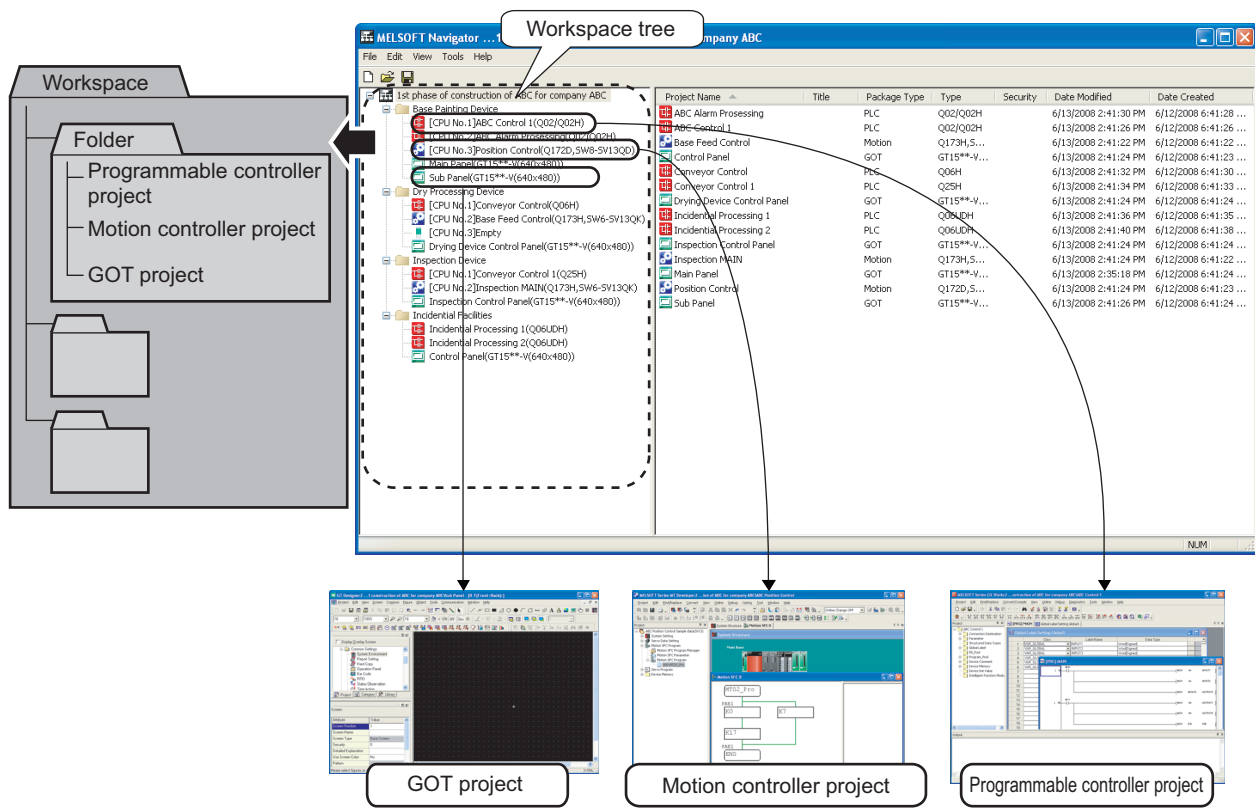
■ Improved project management efficiency

● Multiple project management using the workspace

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

Projects can be organized into the folder as a group by creating a folder in the workspace tree.

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



1 OVERVIEW
 2 SCREEN CONFIGURATION
 3 CREATING WORKSPACES
 4 USING LABEL LINKAGE FUNCTION
 5 USING PROGRAM JUMP FUNCTION

- Activating each engineering function

Operations such as program editing can easily be performed by selecting a project in the workspace individually.

The screenshot displays two windows from the MELSOFT iQ Works environment. The top window, 'MELSOFT Navigator', shows a project tree on the left and a table of projects on the right. The project 'CPU No. 1]ABC Control 1(Q02/Q02H)' is highlighted in the tree and circled in red. A callout box labeled 'Edit project' points to this project. The table below lists several projects:

Project Name	Title	Package Type	Type	Security	Date Modified	Date Created
ABC Alarm Processing		PLC	Q02/Q02H		6/13/2008 2:41:30 PM	6/12/2008 6:41:28 ...
ABC Control 1		PLC	Q02/Q02H		6/13/2008 2:41:26 PM	6/12/2008 6:41:26 ...
Main Panel		GOT	GT15**-V...		6/13/2008 2:35:18 PM	6/12/2008 6:41:24 ...
Position Control		Motion	Q172D,S...		6/13/2008 2:41:24 PM	6/12/2008 6:41:23 ...
Sub Panel		GOT	GT15**-V...		6/13/2008 2:41:26 PM	6/12/2008 6:41:24 ...

The bottom window, 'MELSOFT Series GX Works2', shows a ladder logic diagram for 'Device B'. The diagram includes several rungs with instructions like 'MOV' and 'END'. The status bar at the bottom indicates 'Simple', 'Q04UDEH', 'Host Station', and '(0)208sp'.

● Easy data handling with the archive and save function

By saving the workspace data or the project data as an archived file, the saved data can easily be transferred to other environment.

Development environment A



MELSOFT Navigator ... 1st phase of construction of ABC for company ABC

File Edit View Tools Help

1st phase of construction of ABC for company ABC

Project Name Title Package Type Type Security Date Modified Date Created

Project Name	Title	Package Type	Type	Security	Date Modified	Date Created
ABC Alarm Processing	Q002/Q00H	PLC	Q002/Q00H		6/13/2008 2:41:30 PM	6/12/2008 6:41:28 ...
ABC Control 1	Q002/Q00H	PLC	Q002/Q00H		6/13/2008 2:41:26 PM	6/12/2008 6:41:26 ...
Main Panel	GT15**V...	GOT	GT15**V...		6/13/2008 2:35:19 PM	6/12/2008 6:41:24 ...
Position Control	Q172D,S...	Motion	Q172D,S...		6/13/2008 2:41:24 PM	6/12/2008 6:41:23 ...
Sub Panel	GT15**V...	GOT	GT15**V...		6/13/2008 2:41:26 PM	6/12/2008 6:41:24 ...

Archive and save

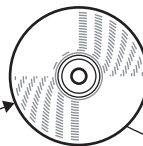
Save CAB files in a CD-ROM

MELSOFT Navigator BasePaintingDevice.cab

GT Designer2

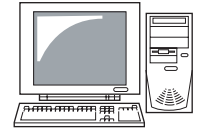
GX Works2

MT Developer2



Transfer the data to other development environment by handling media such as CD-ROMs.

Development environment B



1 OVERVIEW

2 SCREEN CONFIGURATION

3 CREATING WORKSPACES

4 USING LABEL LINKAGE FUNCTION

5 USING PROGRAM JUMP FUNCTION

■ Improved programming efficiency

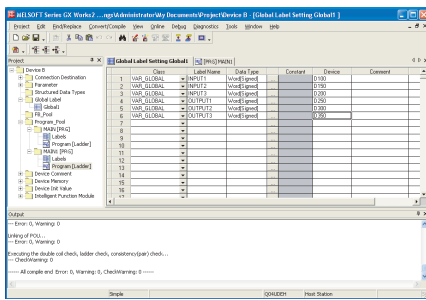
- Improvement of programming (drawing) efficiency by the label linkage function

Programming (drawing) efficiency is improved by defining and assigning global labels to devices of programmable controller projects and motion controller projects, and sharing them with multiple projects.

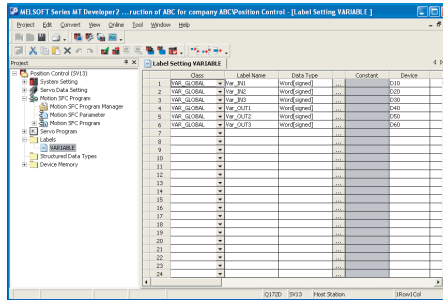
As the device assignment settings are changed in a batch, the graphics are not necessary to be changed.

For the label linkage function, refer to the following chapter.

☞ Chapter 4



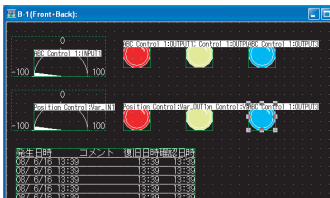
GX Works2



MT Developer2

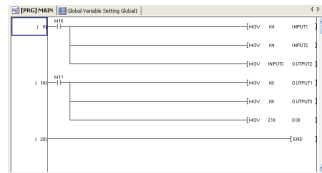


Create graphics using global labels that are set in the above projects.

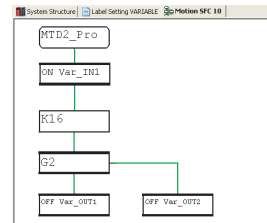


GT Designer2

Create programs using global labels that are set in the above projects.



GX Works2



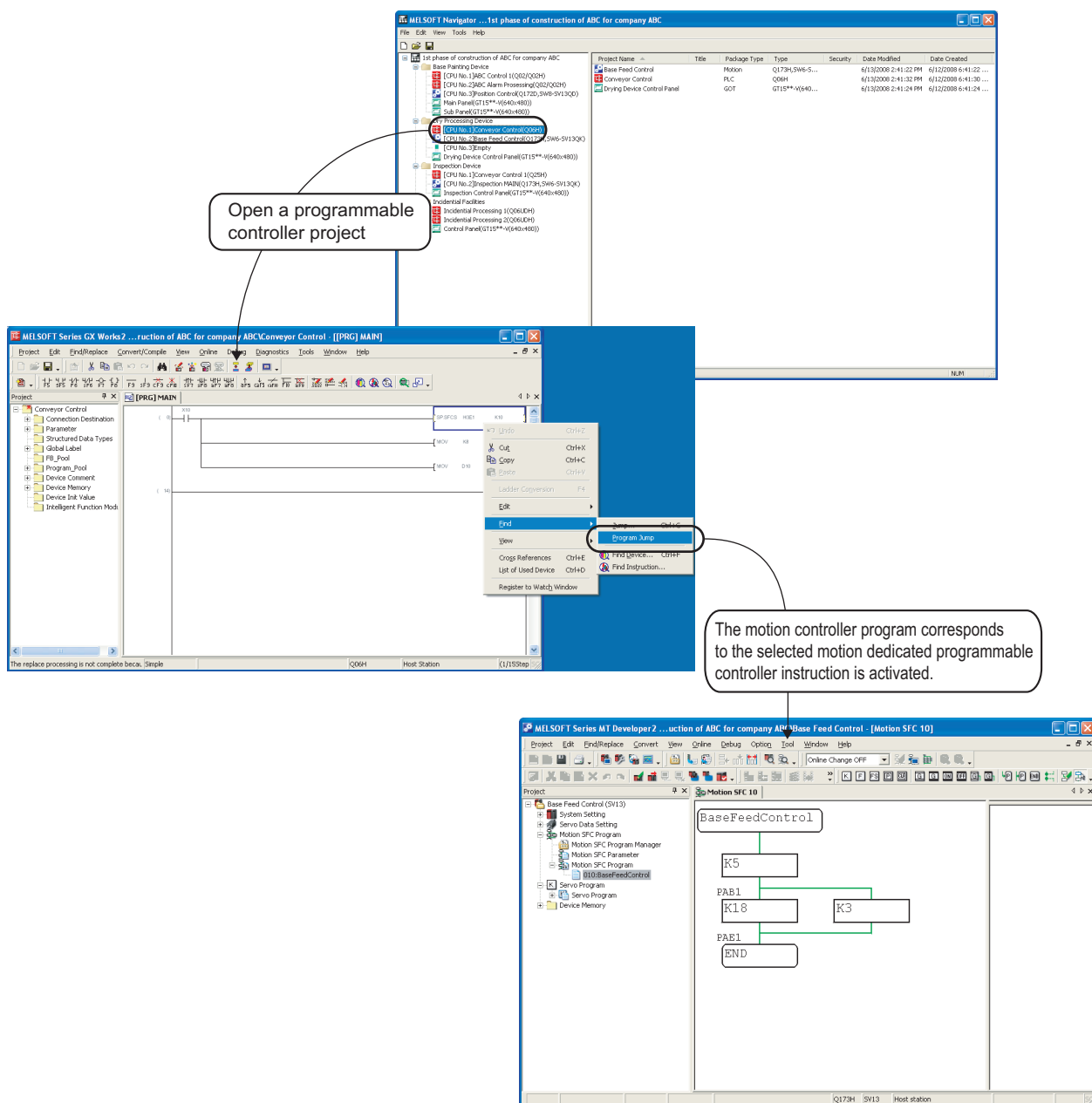
MT Developer2

- Improvement of programmable controller programming efficiency by linking with motion controller programs

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

For the program jump function, refer to the following chapter.

☞ Chapter 5



1	OVERVIEW
2	SCREEN CONFIGURATION
3	CREATING WORKSPACES
4	USING LABEL LINKAGE FUNCTION
5	USING PROGRAM JUMP FUNCTION



2 SCREEN CONFIGURATION

This chapter explains the screen configuration of MELSOFT Navigator.

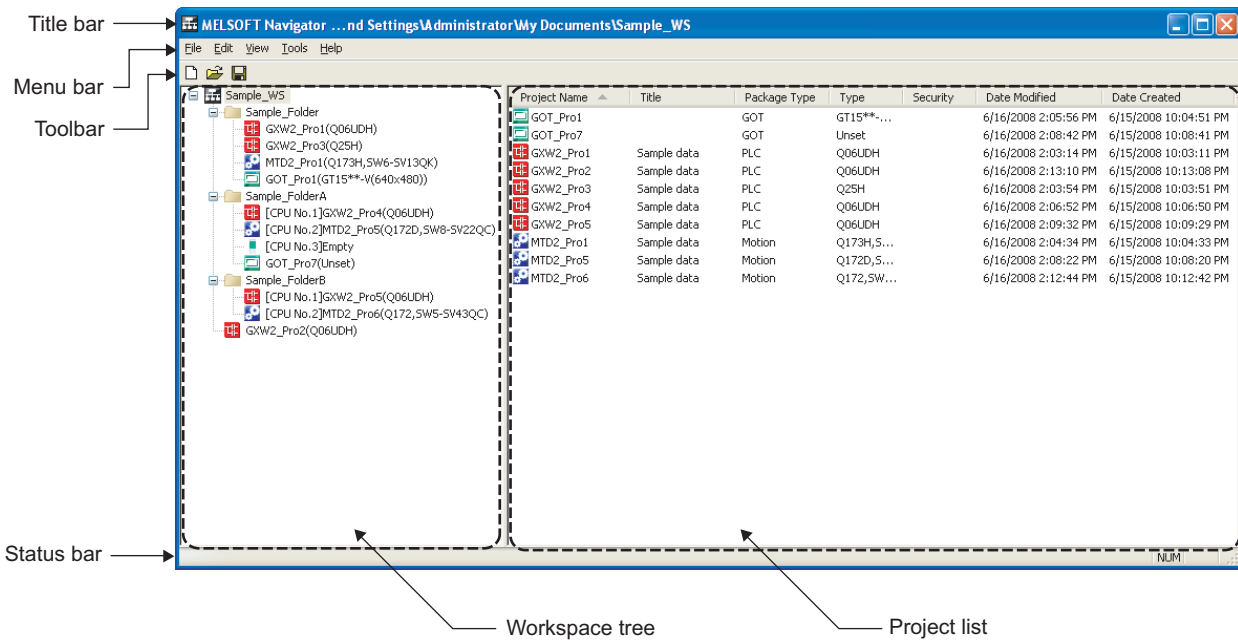
2.1 Screen Configuration 2-2

1	OVERVIEW
2	SCREEN CONFIGURATION
3	CREATING WORK-SPACES
4	USING LABEL LINK-AGE FUNCTION
5	USING PROGRAM JUMP FUNCTION

2.1 Screen Configuration

The following explains the screen configuration.

Screen display



Display contents

Name	Description
Title bar	Displays a title of product name, workspace path, and active window.
Menu bar	Displays items of the basic menu.
Toolbar	Displays tool buttons for executing functions that are used frequently.
Workspace tree	Displays the projects managed in a workspace in tree format.
Project list	Displays a list of projects contained in the selected item.
Status bar	Displays information about the selected workspace or project.



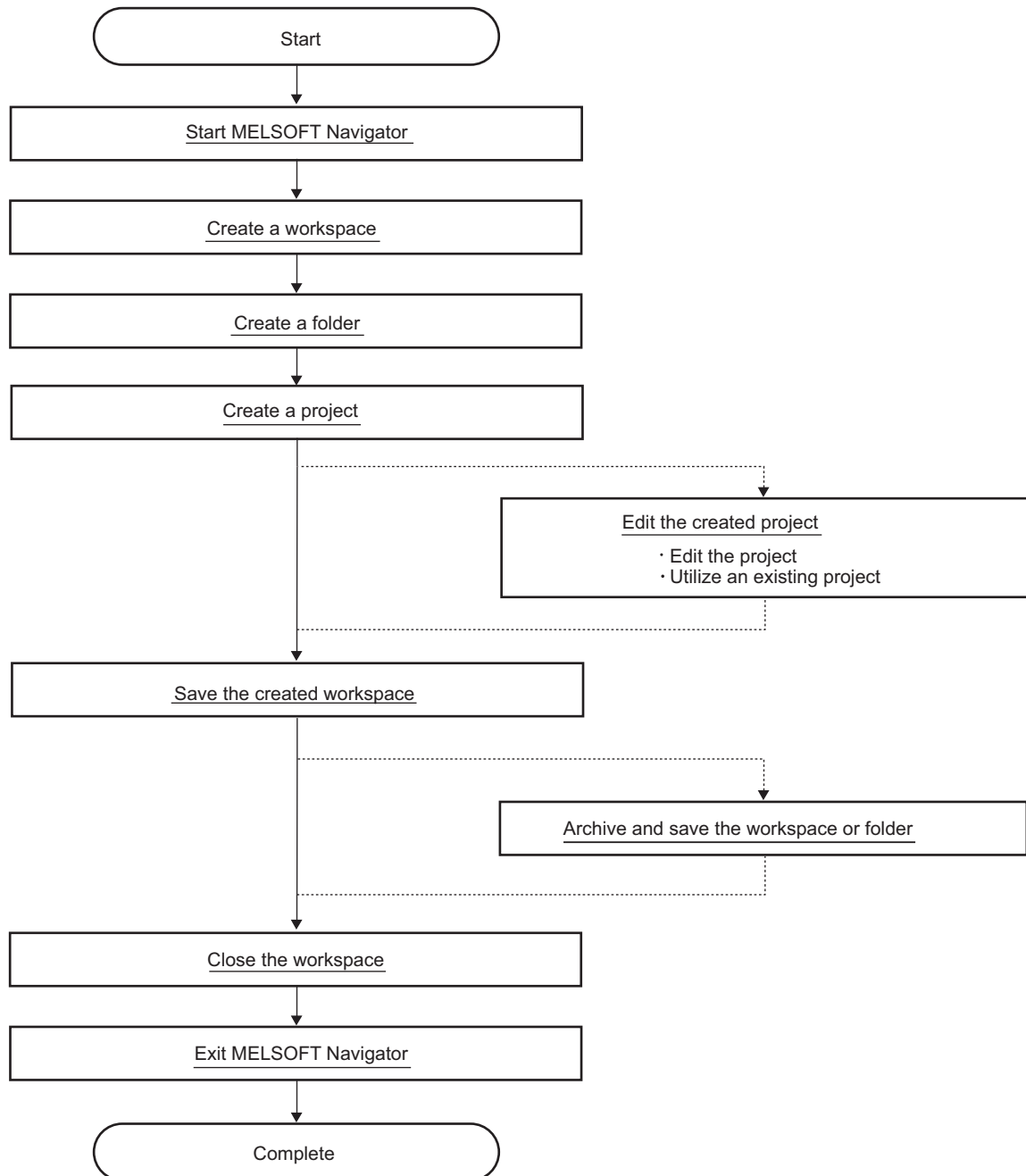
3 CREATING WORKSPACES

This chapter explains the method for creating workspaces using MELSOFT Navigator.

3.1	Procedure of MELSOFT Navigator from Start to End	3-2
3.2	Starting MELSOFT Navigator	3-3
3.3	Creating Workspaces	3-4
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3.10	Exiting MELSOFT Navigator	3-22

3.1 Procedure of MELSOFT Navigator from Start to End

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

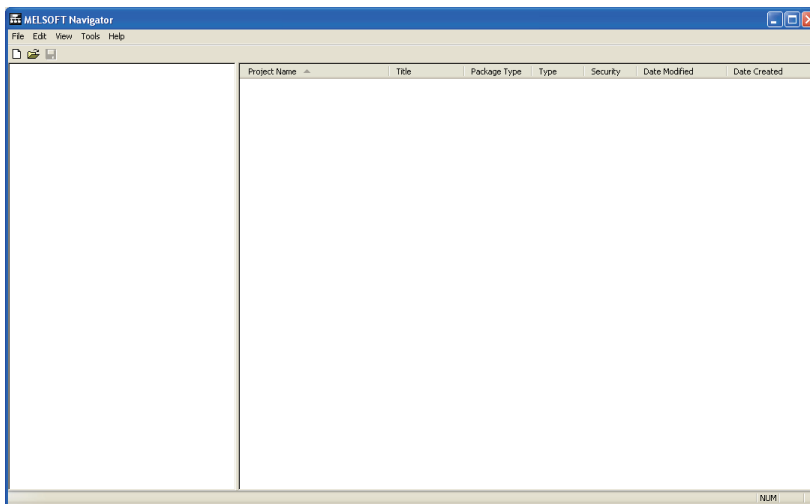
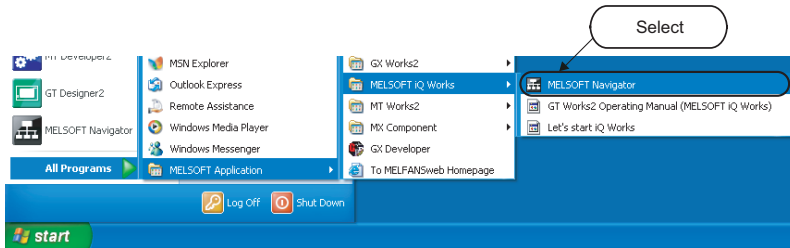


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For folders and files of created workspaces and projects, do not use Explorer to change the file name or storage location.

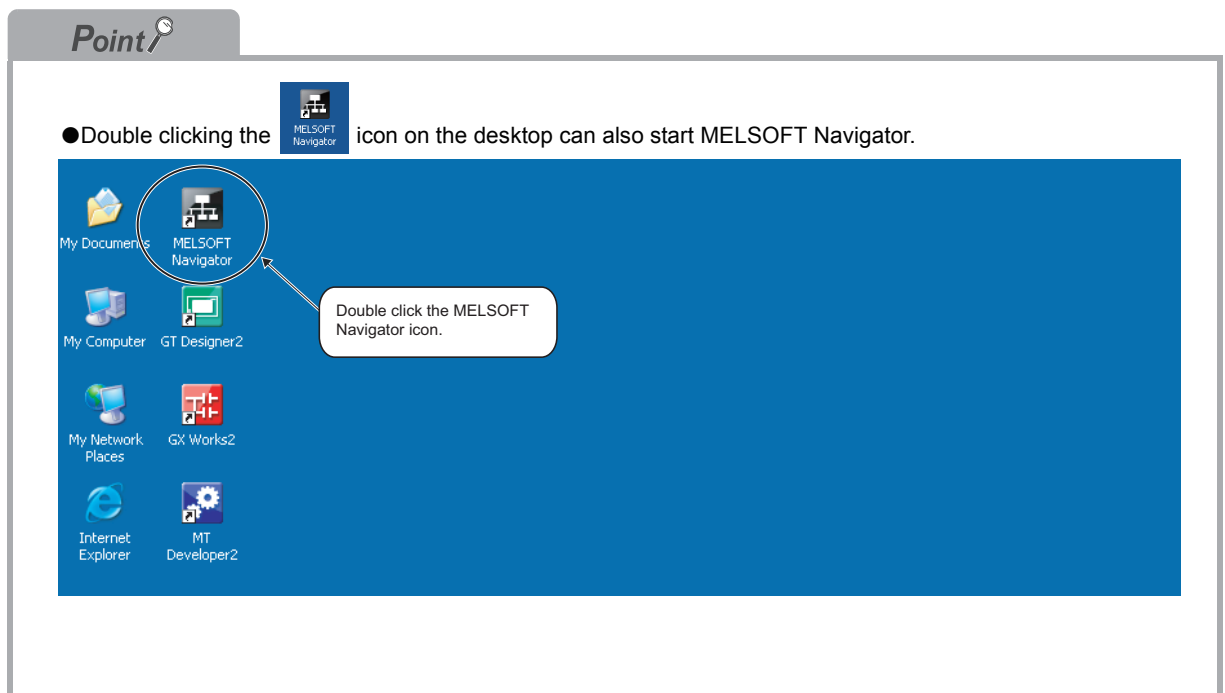
3.2 Starting MELSOFT Navigator

This section explains the method for starting MELSOFT Navigator.



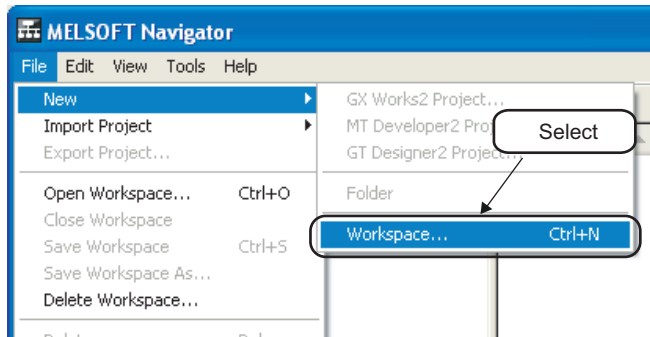
1. Start MELSOFT Navigator from Windows [Start] menu.


2. MELSOFT Navigator is activated.

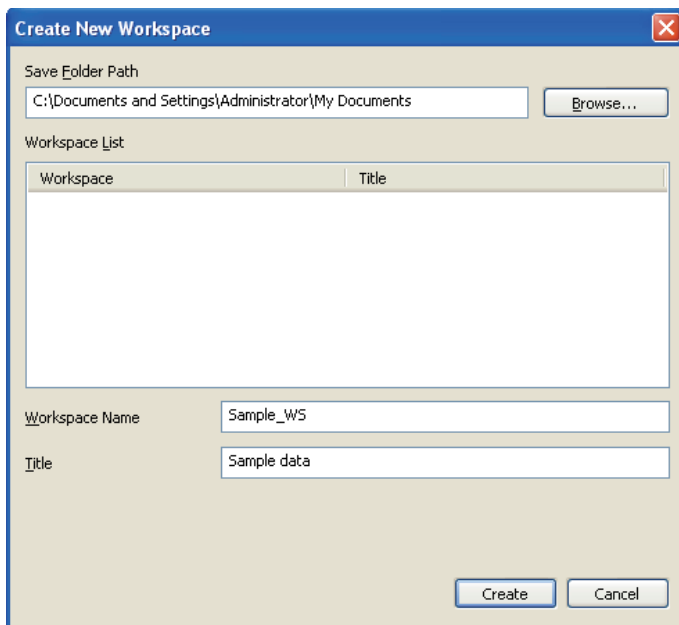


3.3 Creating Workspaces


This section explains the method for creating a new workspace.



1. Select [File] ⇒ [New] ⇒ [Workspace] () in the menu bar to display the "Create New Workspace" dialog box.



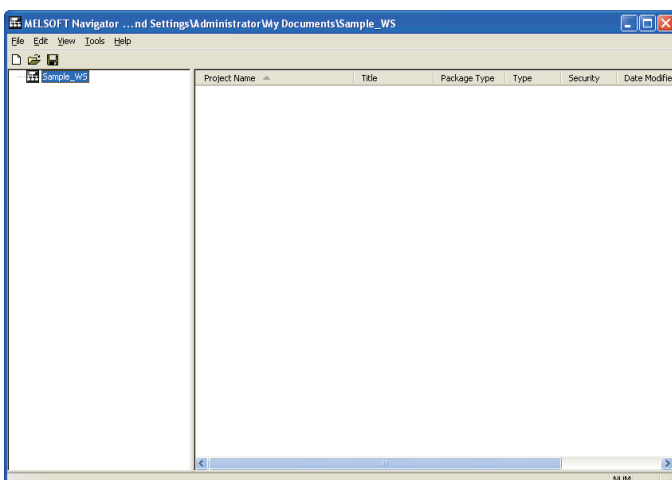
2. Enter "Save Folder Path", "Workspace Name", and "Title" of the new workspace.

After entering the items, click the  button.

Setting example

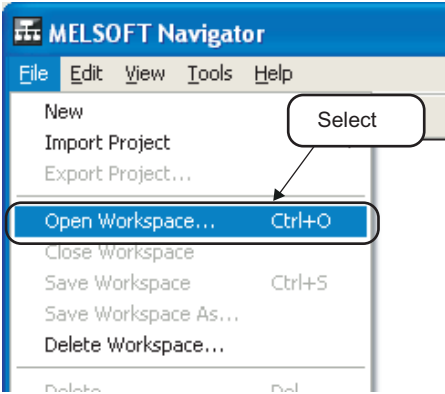
- Save Folder Path : C:\Documents and Settings\
Administrator\
My Documents
- Workspace Name: Sample_WS
- Title (option) : Sample data

3. The new workspace has been created.

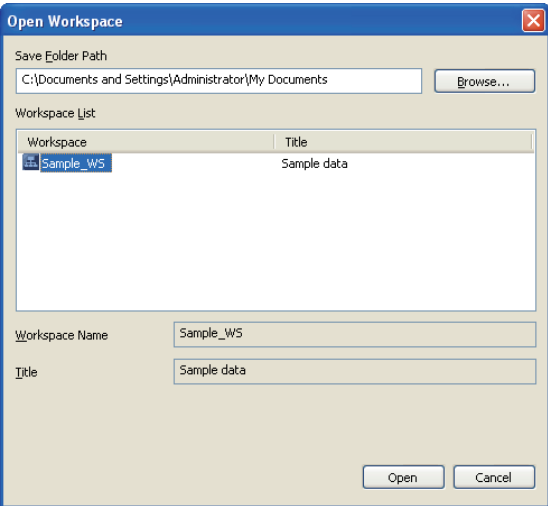


Point

● **Opening existing workspaces**
An existing workspace can be opened by the following procedure.





The screenshot shows the MELSOFT Navigator application window. The 'File' menu is open, and the 'Open Workspace...' option is highlighted. A callout box labeled 'Select' points to this option. Other menu items include 'New', 'Import Project', 'Export Project...', 'Close Workspace', 'Save Workspace Ctrl+S', 'Save Workspace As...', and 'Delete Workspace...'. A downward arrow indicates the next step.



The 'Open Workspace' dialog box is shown. It has a 'Save Folder Path' field with the text 'C:\Documents and Settings\Administrator\My Documents' and a 'Browse...' button. Below is a 'Workspace List' table:

Workspace	Title
Sample_WS	Sample data

At the bottom, there are fields for 'Workspace Name' (containing 'Sample_WS') and 'Title' (containing 'Sample data'). 'Open' and 'Cancel' buttons are at the bottom right.

1. Select [File] ⇒ [Open Workspace] () in the menu bar to display the "Open Workspace" dialog box.
2. Select "Save Folder Path" and "Workspace" for the workspace to be opened.
After selecting the items, click the  button to open the workspace.

Setting example

- Save Folder Path : C:\Documents and Settings\
Administrator\
My Documents
- Workspace Name: Sample_WS

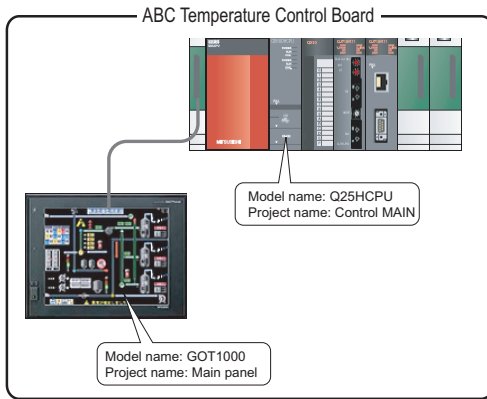
Point!

Set a workspace name, folder name, and project name in the workspace tree according to the system configuration.

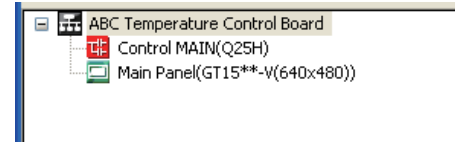
The followings are setting examples of workspace name, folder name, and project name.

- 1 CPU configuration

System configuration

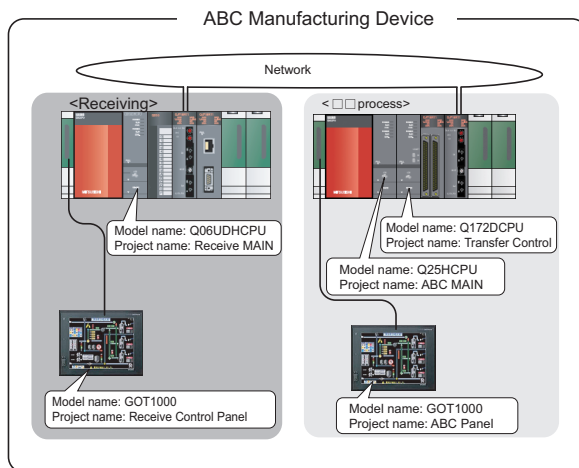


Workspace tree

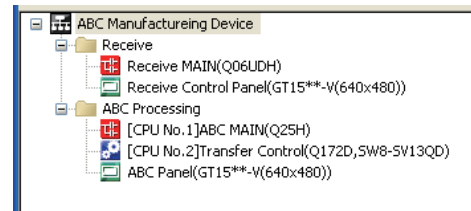


- Multiple CPU configuration

System configuration

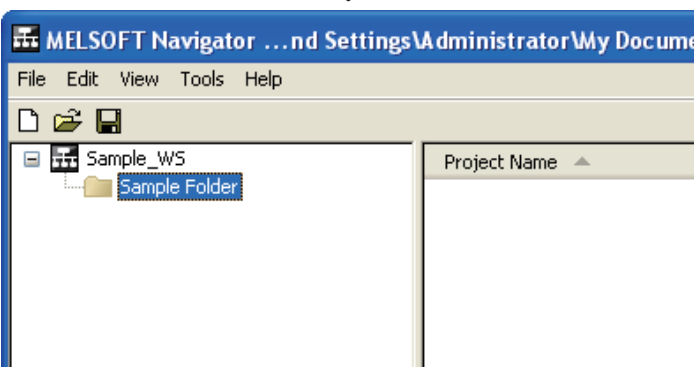
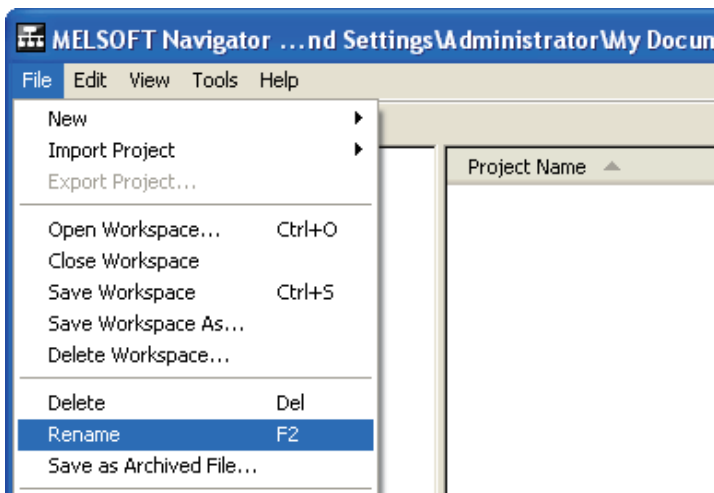
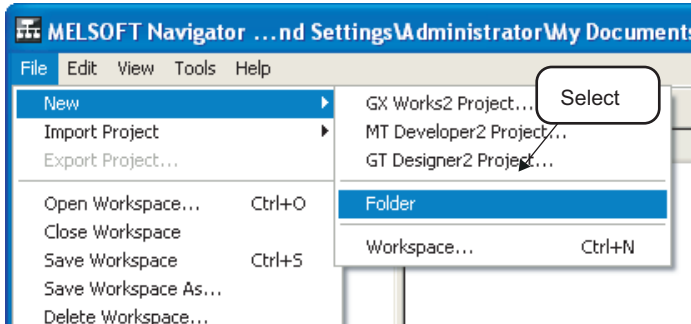


Workspace tree



3.4 Creating Folders

This section explains the method for creating a new folder in the workspace tree.



1. Select [File] ⇒ [New] ⇒ [Folder] in the menu bar to create a new folder in the workspace tree.

2. Change the created folder name.

Select the folder, and select [File] ⇒ [Rename] in the menu bar.

Setting example

- Folder name: Sample Folder

3. The folder name has been changed.

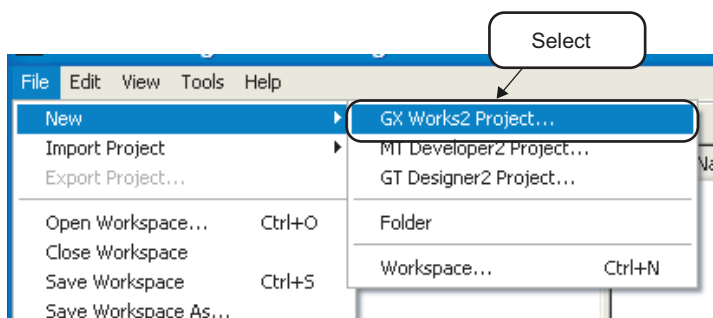
3.5 Creating Projects

This section explains the method for creating project data (programmable controller projects, motion controller projects, and GOT projects).

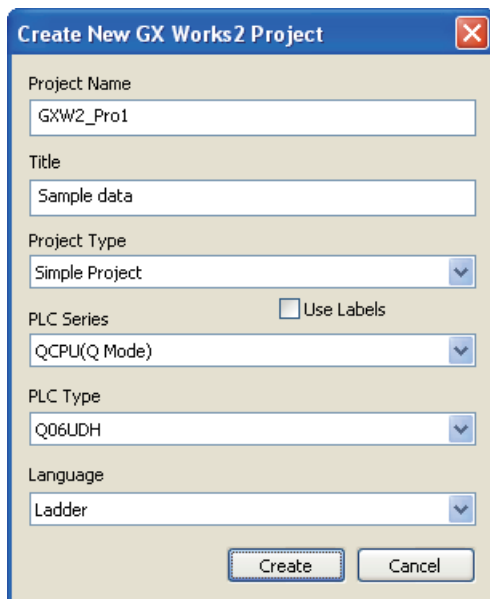
3.5.1 Creating new projects

■ Programmable controller projects

This section explains the method for creating a new programmable controller project.



1. Select [File] ⇒ [New] ⇒ [GX Works2 Project] in the menu bar to display the "Create New GX Works2 Project" dialog box.



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

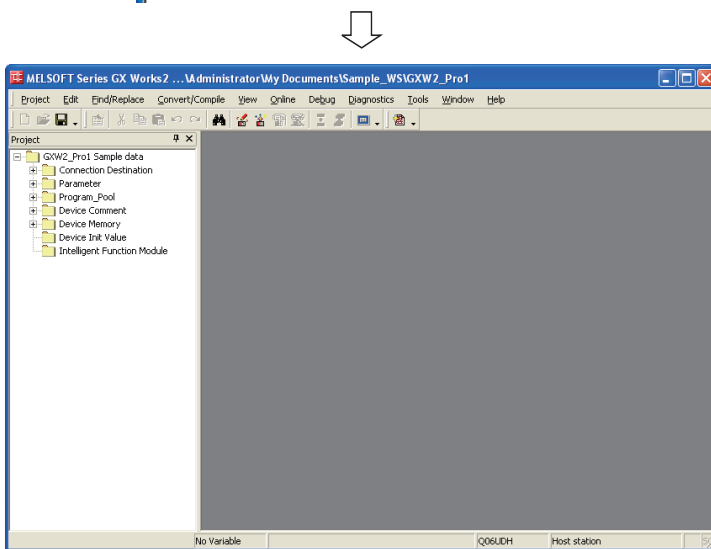
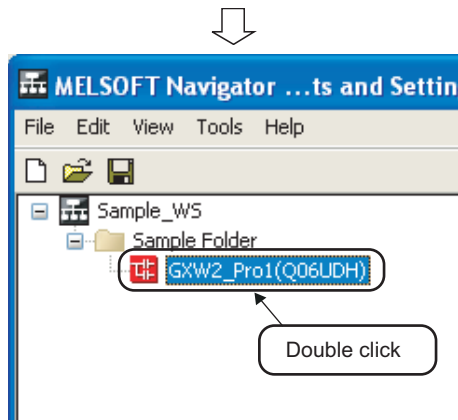
After setting the items, click the button.

Setting example

- Project Name : GXW2_Pro1
- Title (option) : Sample data
- Project Type : Simple Project
- Use Labels : No
- PLC Series : QCPU (Q mode)
- PLC Type : Q06UDH
- Language : Ladder

(To the next page)

(From the previous page)



3. The new project has been created.

After creating the new project, double click it in the workspace tree.

4. The programmable controller project is activated.

For the method for editing programmable controller projects, refer to the following manuals.

- ☞ • GX Works2 Version1 Operating Manual (Common)
- ☞ • GX Works2 Version1 Operating Manual (Simple Project)
- ☞ • GX Works2 Version1 Operating Manual (Structured Project)
- ☞ • GX Works2 Beginner's Manual (Simple Project)
- ☞ • GX Works2 Beginner's Manual (Structured Project)

1
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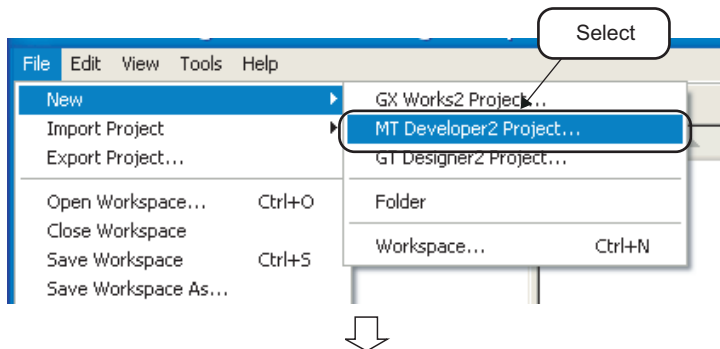
3
CREATING WORKSPACES

4
USING LABEL LINKAGE FUNCTION

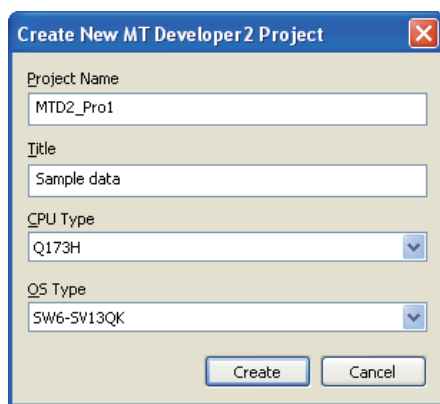
5
USING PROGRAM JUMP FUNCTION

■ Motion controller projects

This section explains the method for creating a new motion controller project.



1. Select [File] ⇒ [New] ⇒ [MT Developer2 Project] in the menu bar to display the "Create New MT Developer2 Project" dialog box.

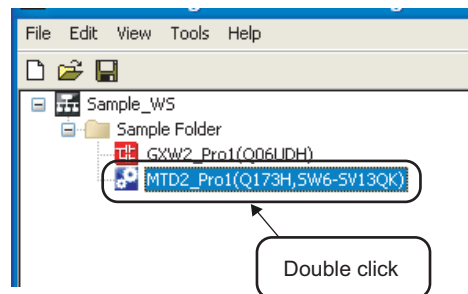


2. Set "Project Name", "CPU Type", and "OS Type" for the new project.

After setting the items, click the button.

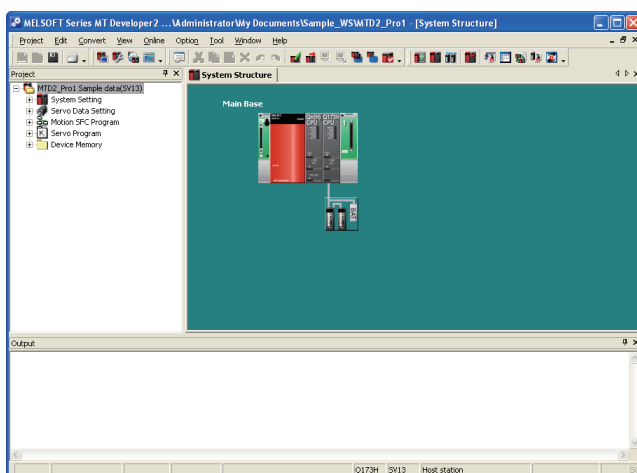
Setting example

- Project Name : MTD2_Pro1
- Title (option) : Sample data
- CPU Type : Q173H
- OS Type : SW6-SV13QK



3. The new project has been created.

After creating the new project, double click it in the workspace tree.

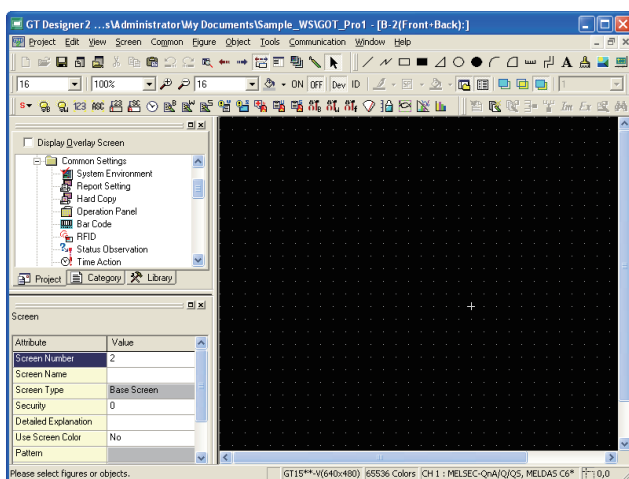
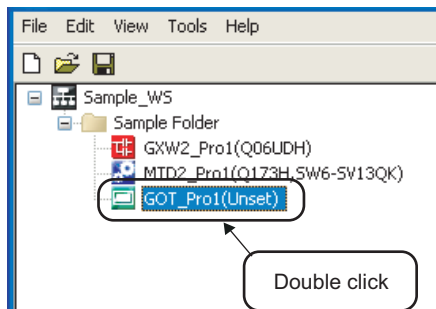
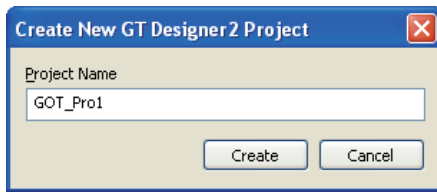
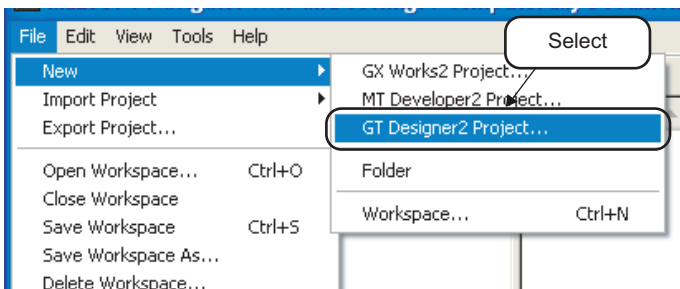


4. The motion controller project is activated.

For the method for editing motion controller projects, refer to the HELP function of MT Developer2.

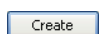
■ GOT projects

This section explains the method for creating a new GOT project.



1. Select [File] ⇒ [New] ⇒ [GT Designer2 Project] in the menu bar to display the "Create New GT Designer2 Project" dialog box.

2. Set "Project Name" for the new project.

After setting the item, click the  button.

Setting example







- Project Name: GOT_Pro1

3. The new project has been created.

After creating the new project, double click it in the workspace tree.

4. The GOT project is activated.

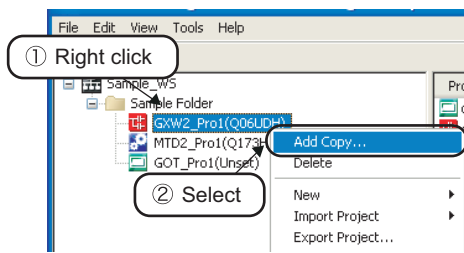
For the method for editing GOT projects, refer to the following manuals.

-  GT Designer2 Version2 Basic Operation/Data Transfer Manual (For GOT1000 Series)
-  GT Designer2 Version2 Screen Design Manual (For GOT1000 Series)
-  GT Converter2 Version2 Operating Manual
-  GT Simulator2 Version2 Operating Manual
-  GT SoftGOT1000 Version2 Operating Manual
-  GT Works2 Operating Manual (MELSOFT iQ Works)

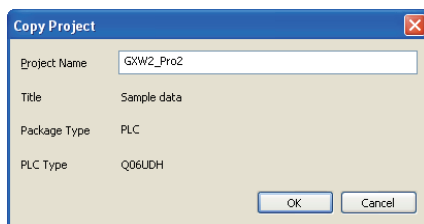
Point

● Copying projects

The following shows the method for copying a created project in the workspace to create a new project.



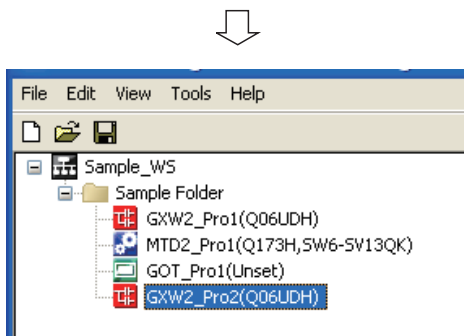
1. Right click a project name in the workspace tree, and select [Add Copy] in the shortcut menu to display the "Copy Project" dialog box.



2. Enter "Project Name" for the copied project, and click the button.

Setting example

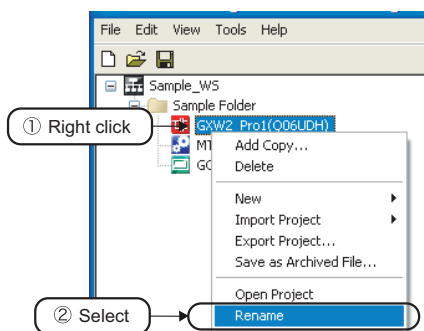
- Project Name: GXW2_Pro2



3. The project has been copied in the workspace tree.

● Changing project names

The following shows the method for changing a project name of an existing project.

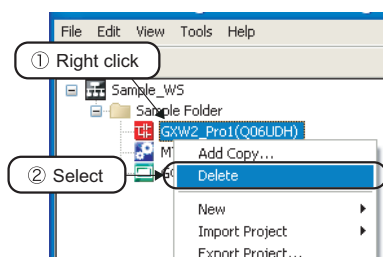


- Right click a project name in the workspace tree, select [Rename] in the shortcut menu, and change the project name.

● Deleting projects

The following shows the method for deleting a project.

Once a project is deleted, it can not be restored again.



- Right click a project name in the workspace tree, and select [Delete] in the shortcut menu. The project is deleted.

3.6 Editing Existing Projects

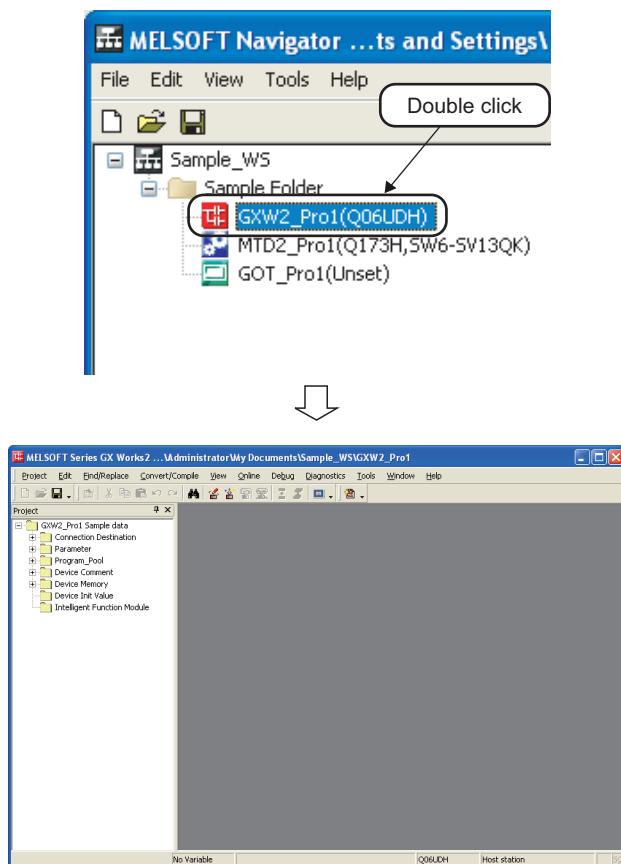
This section explains the method for editing created projects and utilizing them to other workspace.

3.6.1 Editing existing projects

This section explains the method for starting and editing a created project.

The following is an example of starting a programmable controller project.

This operation is also performed to start a motion controller project and a GOT project.



1. Double click a programmable controller project in the workspace tree.

2. The programmable controller project is activated.

For the method for editing a programmable controller project, refer to the following manuals.

- ☞ • GX Works2 Version1 Operating Manual (Common)
- ☞ • GX Works2 Version1 Operating Manual (Simple Project)
- ☞ • GX Works2 Version1 Operating Manual (Structured Project)
- ☞ • GX Works2 Beginner's Manual (Simple Project)
- ☞ • GX Works2 Beginner's Manual (Structured Project)

3.6.2 Utilizing existing projects (import)

This section explains the method for utilizing a created project in other workspace using MELSOFT Navigator.

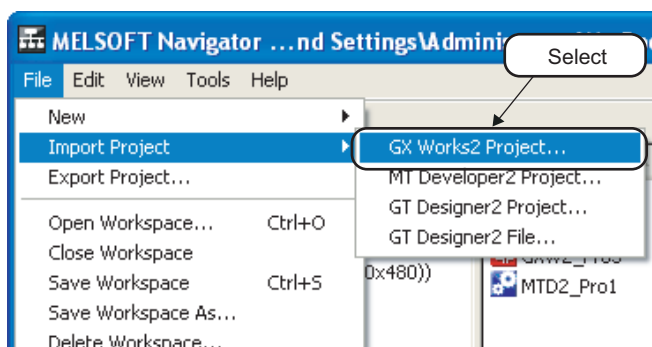
Point

● Importing projects

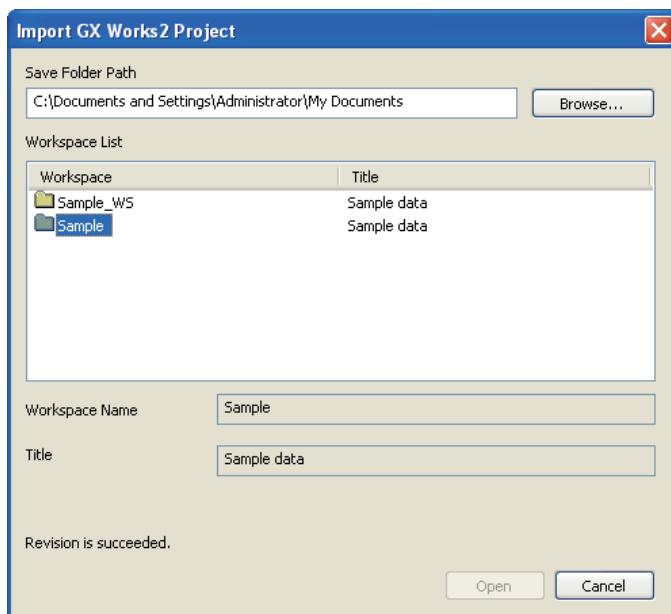
Projects in a workspace created using each engineering software product (GX Works2, MT Developer2, and GT Designer2), can be imported to a workspace created using MELSOFT Navigator.

The following operation is an example of utilizing the GX Works2 projects.

This operation is also performed to utilize the MT Developer2 or the GT Designer 2 projects.



1. Select [File] ⇒ [Import Project] ⇒ [GX Works2 Project] in the menu bar to display the "Import GX Works2 Project" dialog box.



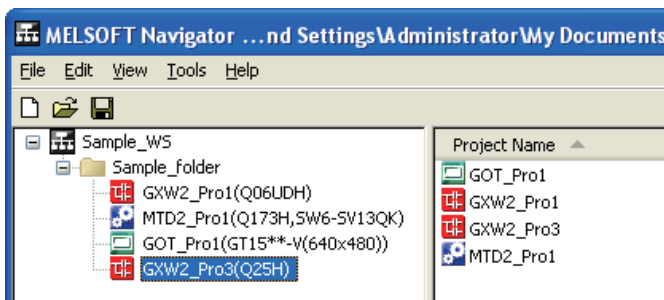
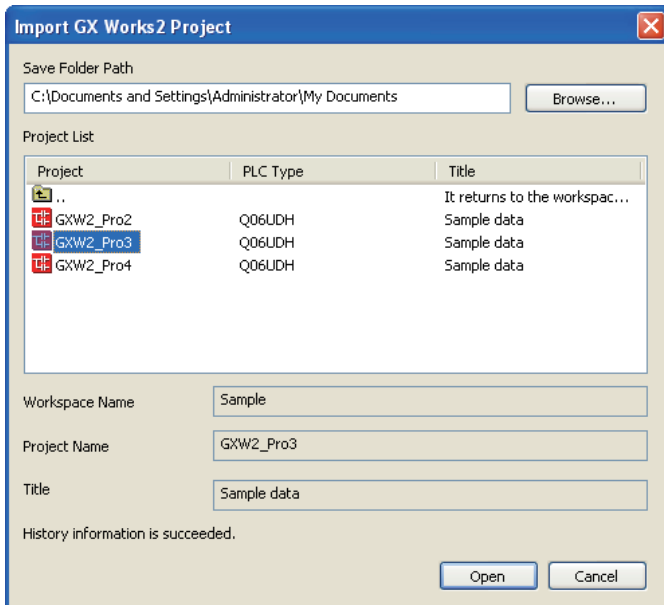
2. Select "Save Folder Path" and "Workspace" for the project to be utilized.

Setting example

- Save Folder Path : C:\Documents and Settings\Administrator\My Documents
- Workspace Name : Sample

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(From the previous page)



3. Select a workspace to display the list of registered GX Works2 projects.

Set "Project Name" for the project to be utilized, and click the button.

Setting example

- Project Name: GXW2_Pro3

4. The project has been imported in the workspace tree.

Point

● Importing projects

The projects in several workspaces can be organized into one workspace. For details, refer to the HELP function of MELSOFT Navigator.

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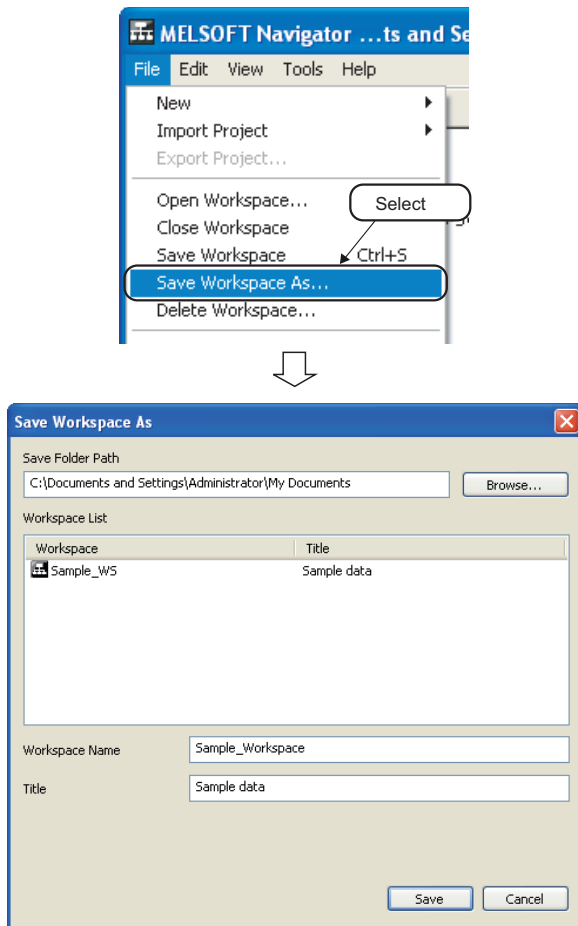
5 USING PROGRAM JUMP FUNCTION

3.7 Saving Workspaces

This section explains the method for saving the created workspaces.

■ Saving workspaces with the specified name

This section explains the method for saving the open workspace with the specified name.



1. Select [File] ⇒ [Save Workspace As] in the menu bar to display the "Save Workspace As" dialog box.

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

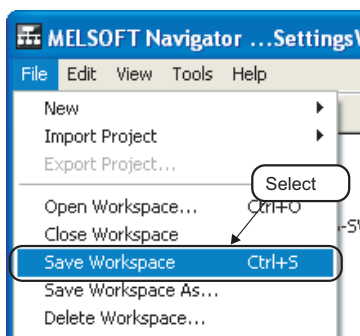
After setting the items, click the button to save the project.


Setting example

- Save Folder Path : C:\Documents and Settings\
Administrator\
My Documents
- Workspace Name: Sample_Workspace
- Title (option) : Sample data

■ Overwriting workspaces

This section explains the method for saving the open workspace with the same name.



- Select [File] ⇒ [Save Workspace] () in the menu bar to overwrite and save the workspace.

3.8 Saving Archived Workspaces and Projects

This section explains the method for saving the archived workspaces or projects as CAB files.

Point

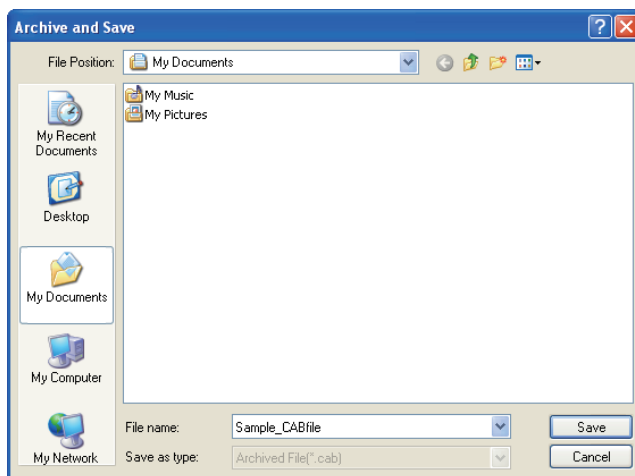
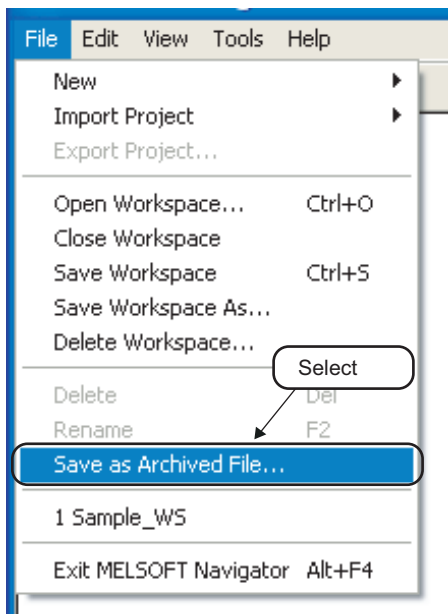
- **Saving archived files**

The archived and saved workspaces or project data are portable.

■ Saving archived workspaces and projects

The following operation is the example of saving an archived workspace.

This operation is also performed to save an archived projects.



(To the next page)

1. Select a workspace name to be archived, and select [File] ⇒ [Save as Archived File] in the menu bar to display the "Archive and Save" dialog box.

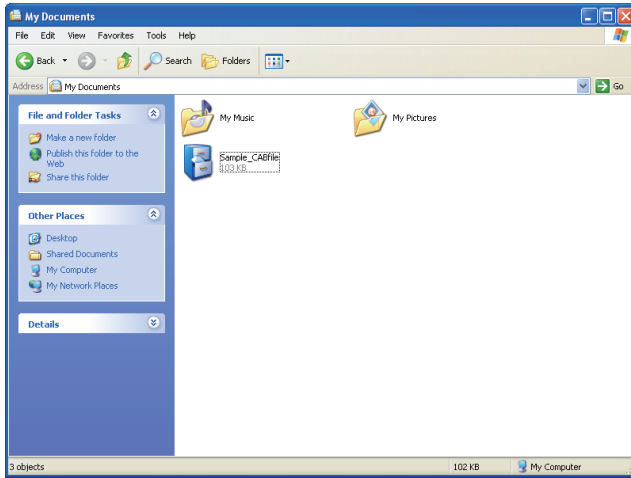
2. Set "File Position" and "File name" for the archived file.

After setting the items, click the button to archive and save the file.

Setting example

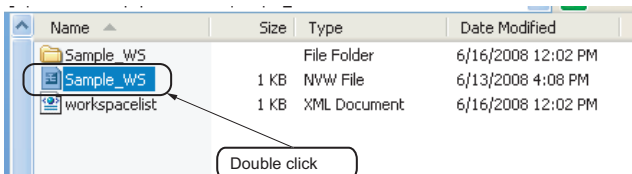
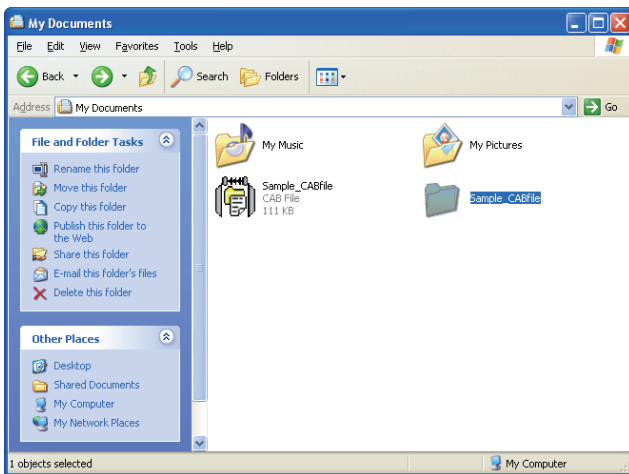
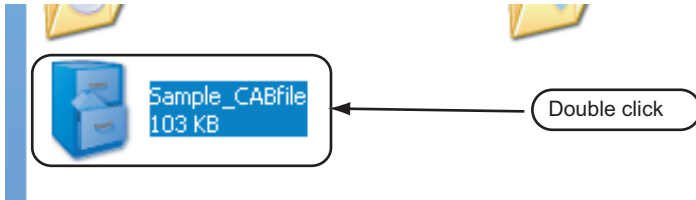
- File Position : My Documents
- File name : Sample_CABfile

(From the previous page)



3. A CAB file has been created in the specified location.

Decompressing archived files



1. Double click the archived file (CAB file).

(When performing the above operation, associating the CAB file with a decompressing application is necessary.)

2. The file is decompressed in the same folder where the archived file is in.

3. Double click "Sample_WS" in the decompressed file to open the workspace.

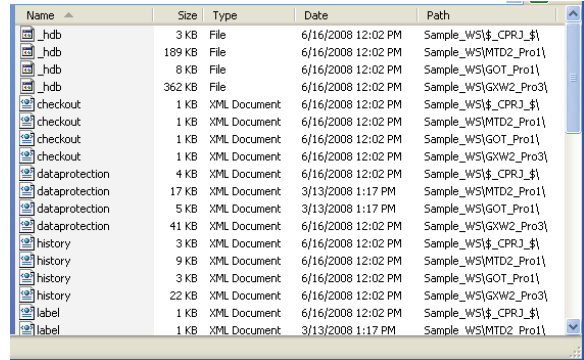
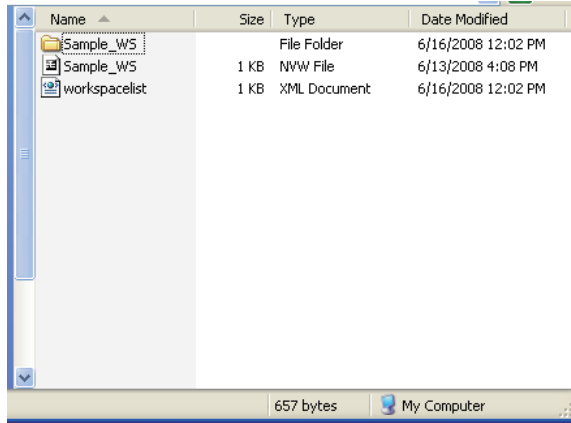
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● **Decompressing files**

For decompressing the CAB files, use the application which can recover the folder structure.

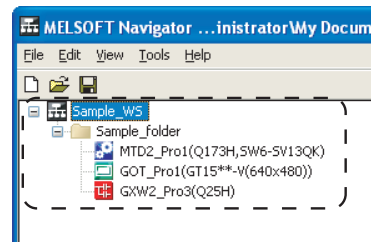
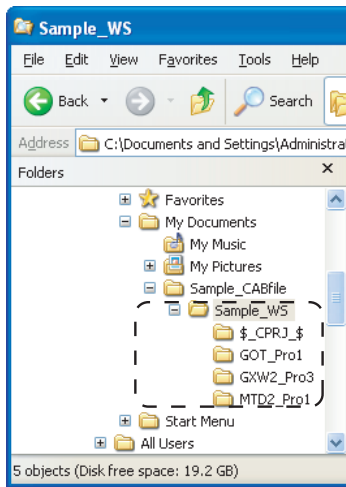
- Using the application which can recover the folder structure
- Using the application which cannot recover the folder structure



● **Decompressed files**

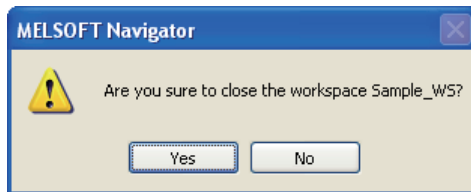
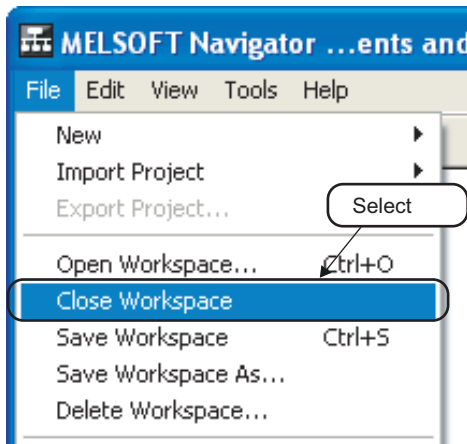
For the decompressed files, the folder structure in the workspace tree cannot be maintained as before decompressing, and the files are decompressed in a project basis. Be sure to enter the correct save folder path when using each engineering software product to open the project.

- Structure of decompressed file
- Workspace tree display



3.9 Closing Workspaces

This section explains the method for closing the open workspace.



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

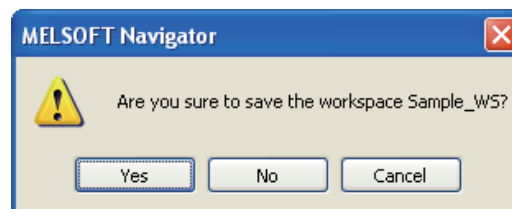
2. Click the button to close the workspace.

Point!

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

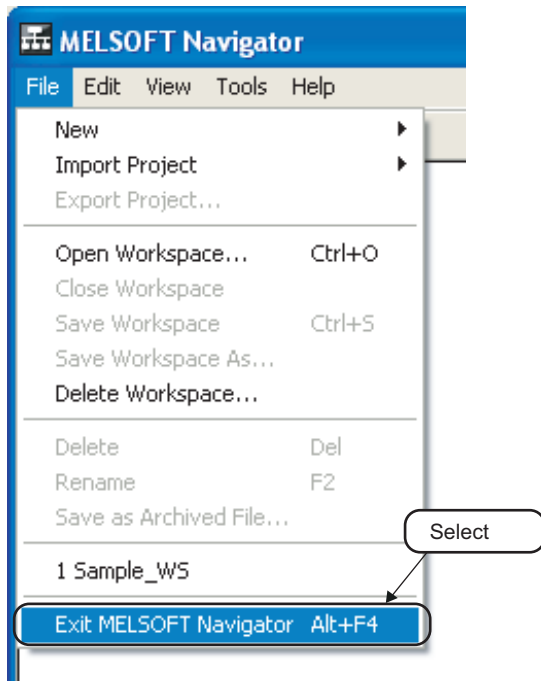
Click the button to save the workspace.

Click the button to not save the workspace and close it.



3.10 Exiting MELSOFT Navigator

This section explains the method for exiting MELSOFT Navigator.



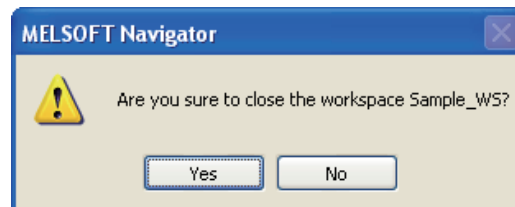
- Select [File] ⇒ [Exit MELSOFT Navigator] in the menu bar to exit MELSOFT Navigator.

Point

When the workspace is being opened, the following message is displayed.

Click the button to close the workspace.

Click the button to stop the operation of exiting MELSOFT Navigator.





4 USING LABEL LINKAGE FUNCTION

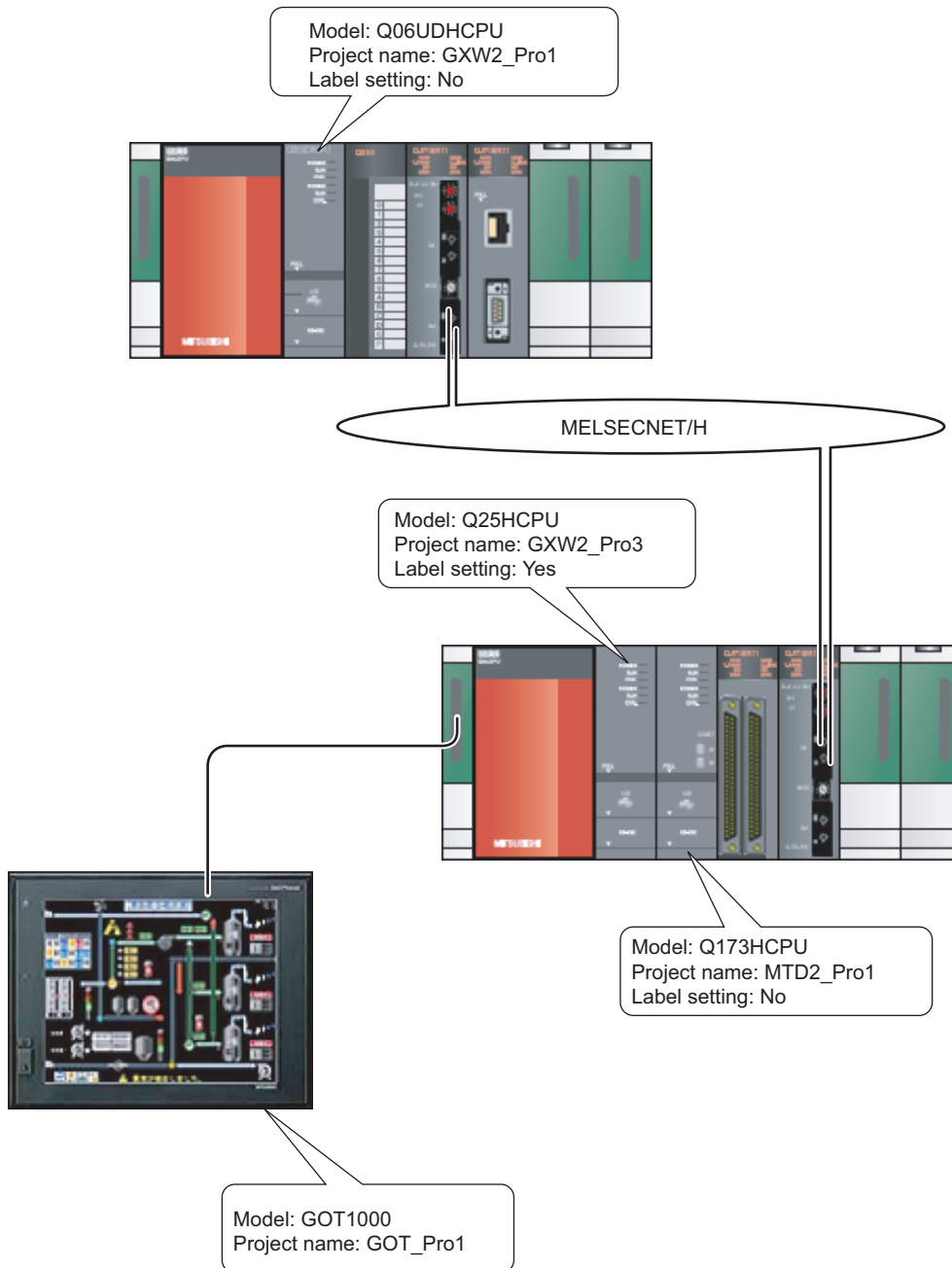
This chapter explains the label linkage function which enables the labels defined in a programmable controller project or a motion controller project to utilize in a GOT project.

4.1	Example of System Configuration	4-2
4.2	Selecting Reference Programs	4-3
4.3	Specifying Labels	4-5
4.4	Updating Labels.	4-7

1	OVERVIEW
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5	USING PROGRAM JUMP FUNCTION

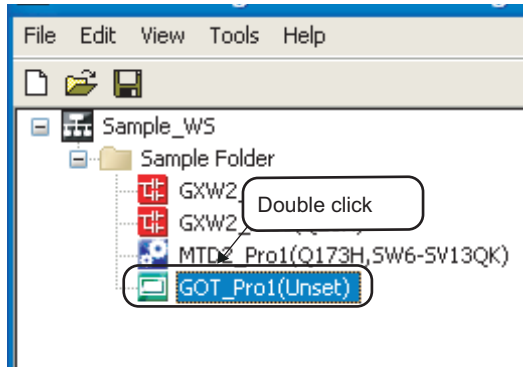
4.1 Example of System Configuration

This section explains the method for using the label linkage function in the following system configuration.

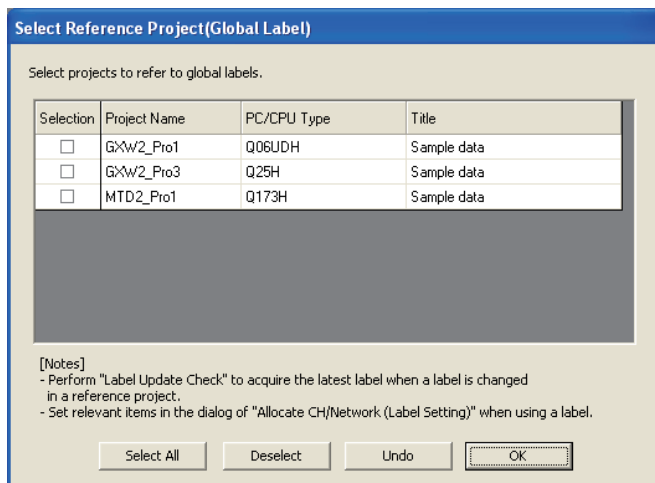


4.2 Selecting Reference Programs

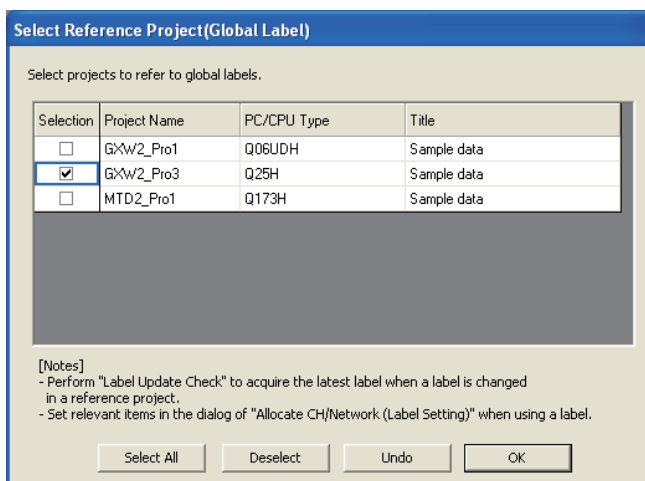
This section explains the method for utilizing the labels, which are defined in a programmable controller project or a motion controller project, in a GOT project.



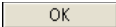
1. Double click a GOT project in the workspace tree.



2. The "Select Reference Project" dialog box is displayed after the GOT project has been activated.



3. Select a reference project.

After selecting the item, click the  button.

Setting example

- Project Name: GXW2_Pro3

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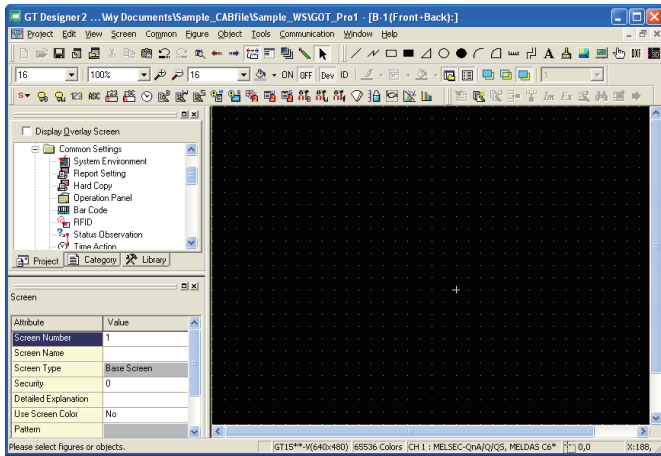
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5 USING PROGRAM JUMP FUNCTION

(From the previous page)



4. When the button is clicked, the labels are checked, and the GT Designer2 programming screen is displayed.

Point

- **Saving archived files**

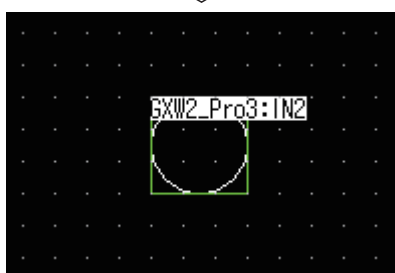
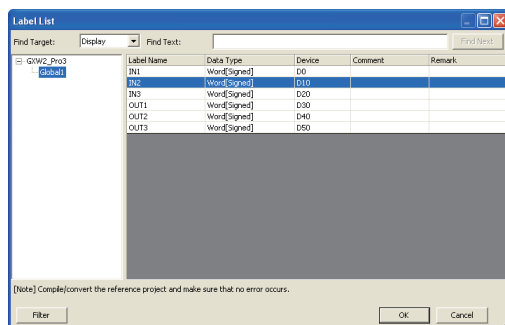
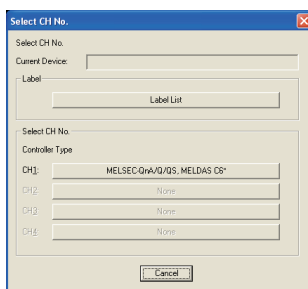
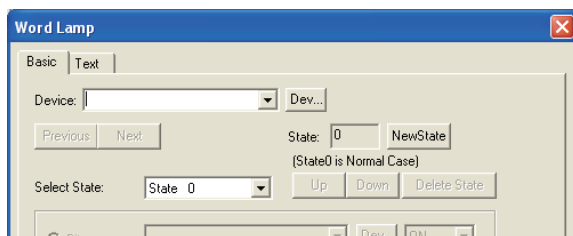
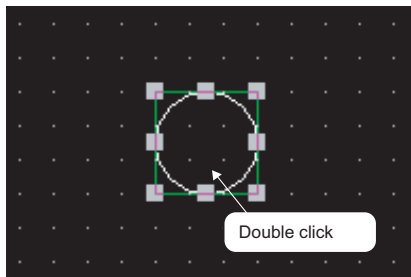
When GOT projects, which use the label linkage function, are archived and saved, archive and save the project data that has been selected in the procedure 3.

4.3 Specifying Labels

Label names of the programmable controller project or the motion controller project can be specified when setting devices for the graphics created using GOT.

For creating graphics using GOT, refer to the following manual.

☞ • GT Designer2 Version2 Screen Design Manual (For GOT 1000 Series)



1. Double click the created graphic to display the setting screen.


2. Click the **Dev...** button to display the "Select CH No." dialog box.

3. After the "Select CH No." dialog box is displayed, click the **Label List** button to display the "Label List" dialog box.

4. Select a label to be used from the "Label List" dialog box, and click the **OK** button.

5. After the setting has been completed, the label name is displayed.

Point **● Setting screen**

In the procedure 2, if a device has been entered in the "Device" field, delete the device first, and then click the  button.

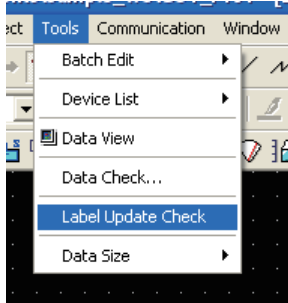
If the  button is clicked before deleting the device, the "Select CH No." dialog box is not displayed.

For displaying the "Select CH No." dialog box always, refer to the following manual.

 • GT Designer2 Version2 Screen Design Manual (For GOT 1000 Series)

4.4 Updating Labels

This section explains the method for updating the labels used in a GOT project when the labels of the programmable controller project or the motion controller project are changed and saved.



- Select [Tools] ⇒ [Label Update Check] in the menu bar to update the labels.

Point

● Updating labels

For the GOT project in which labels are specified, the Label Update Check function is performed automatically when the GOT project is activated.

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3 CREATING WORKSPACES

4 USING LABEL LINKAGE FUNCTION

5 USING PROGRAM JUMP FUNCTION



5 USING PROGRAM JUMP FUNCTION

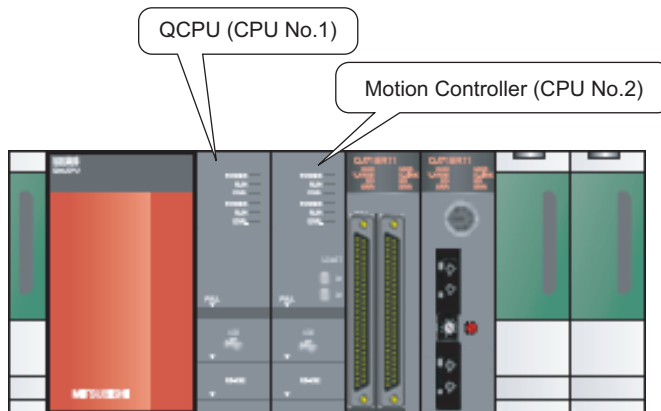
This chapter explains the program jump function which can start the motion SFC programs/servo programs that are linked with the motion controller programs, using the SFCS instructions/SVST instructions of the ladder programs in the multiple CPU system.

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1	OVERVIEW
2	SCREEN CONFIGURATION
3	CREATING WORKSPACES
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5	USING PROGRAM JUMP FUNCTION

5.1 Example of System Configuration

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



■ Motion controller start-up programs

The followings are the instructions which start the motion controller programs used in the ladder programs.

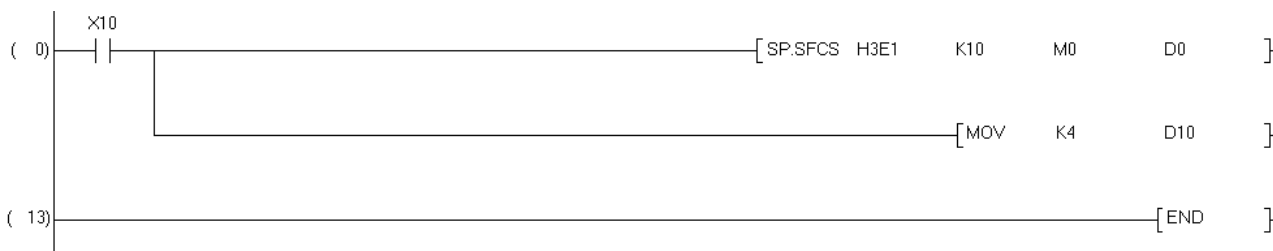
- SFCS instruction (Motion SFC program start-up)
- SVST instruction (Servo program start-up)

For details, refer to the following manuals.

☞ • Q173HCPU/Q172HCPU Motion Controller (SV13/SV22) Programming Manual (Motion SFC)

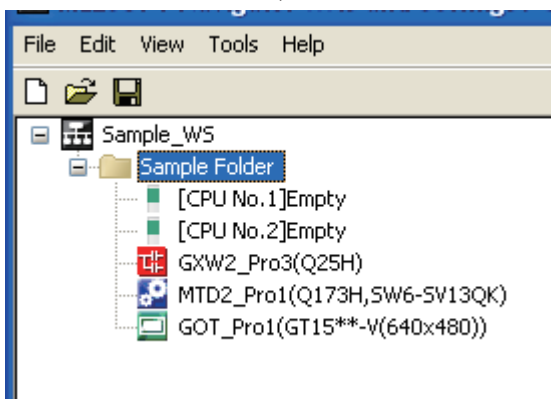
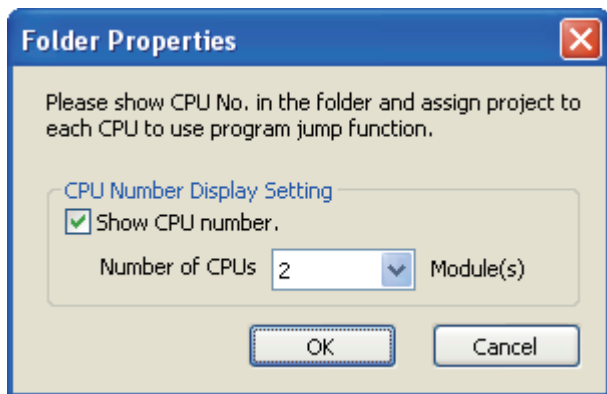
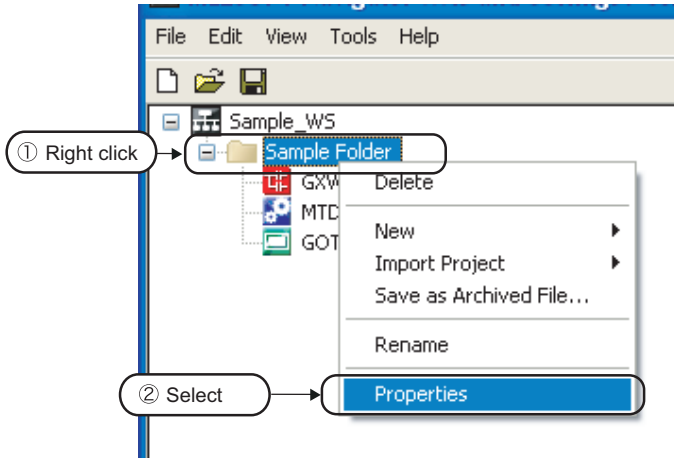
☞ • Q173DCPU/Q172DCPU Motion Controller (SV13/SV22) Programming Manual (Motion SFC)

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



5.2 Folder Properties

This section explains the method for setting the property of a folder in the workspace tree. If the properties of folders have not been set, the program jump function cannot be used.



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1. Right click a folder in the workspace tree and select [Properties] in the shortcut menu to display the "Folder Properties" dialog box.

2. Check the "Show CPU number." item, and then set "Number of CPUs" to be assigned with the project.

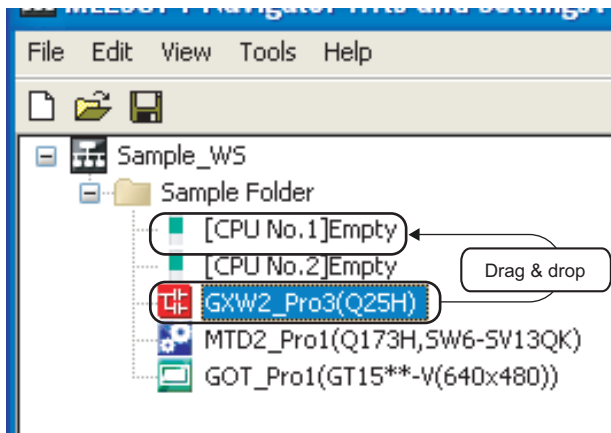
After setting the items, click the button.

Setting example

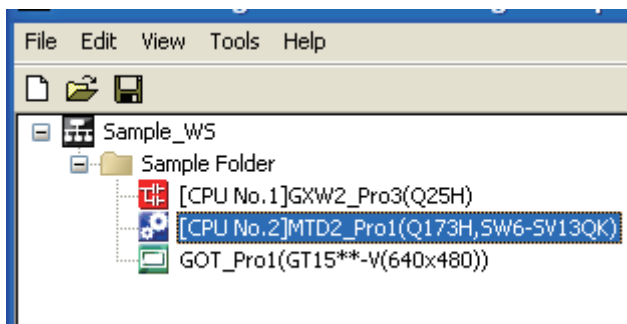
- Number of CPUs: 2

3. "[CPU No.1] Empty" and "[CPU No.2] Empty" are created in the folder.

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4. Select a project in the folder in the workspace tree, and drag and drop it onto "[CPU No.1] Empty".



5. As same as the procedure 4, select another project in the folder in the workspace, and drag and drop it onto the "[CPU No.2] Empty".

Point

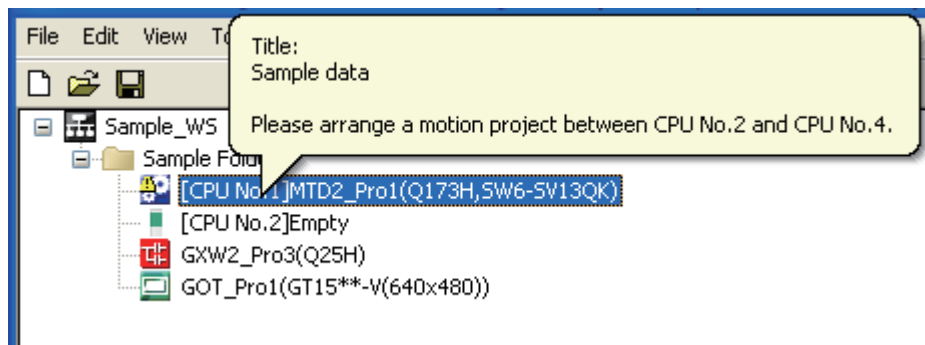
- **Project assignments**

When assigning a project to "[CPU No. n] Empty", the assignment can be performed if the "[CPU No. n] Empty" and the project are in the same folder.

- **Project assignment errors**

When assigning a project to "[CPU No. n] Empty", the error check function is performed.

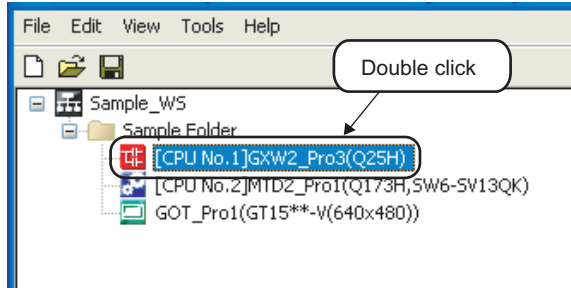
If there is a project assignment error, the warning icon and the error message are displayed as shown below.



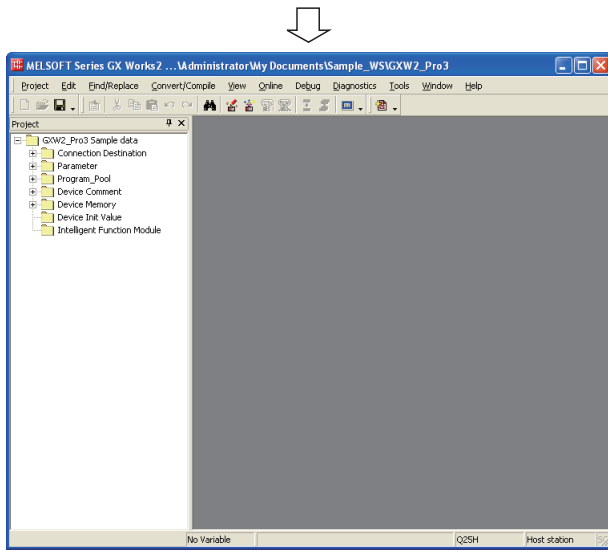
However, the error check function is not performed between multiple CPUs.

5.3 Program Jump Function

The following explains the method for using the program jump function with the SFCS instruction. Follow the same procedure shown below when using the program jump function with the SVST instruction.

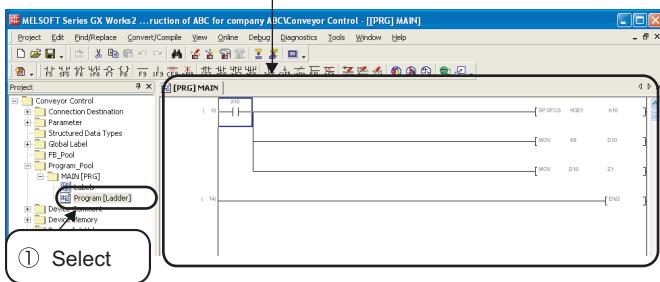


1. Double click a programmable controller project in the workspace tree.



2. The programmable controller project is activated.

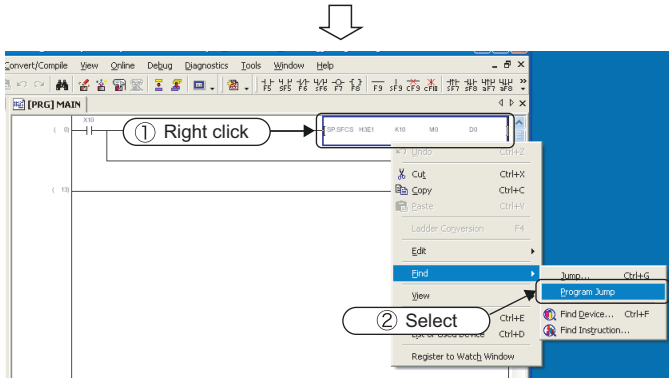
② Ladder program window is displayed



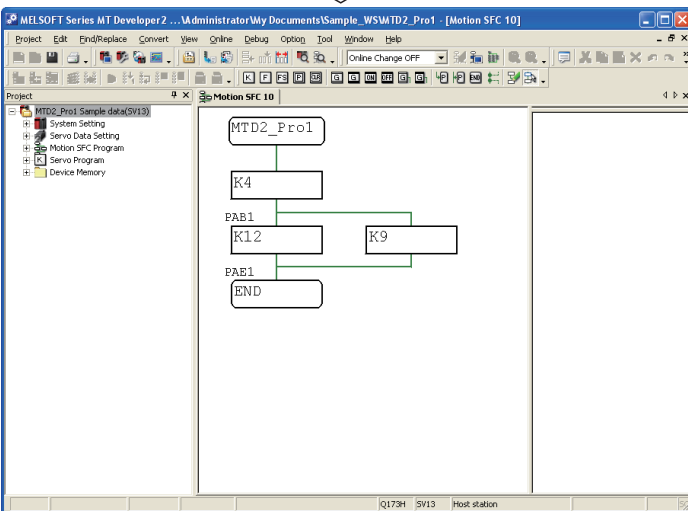
3. Select "Program_Pool" ⇒ "MAIN" ⇒ "Program [Ladder]" in the Project window to display the ladder program window.

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



5. The motion controller project is activated and the target motion SFC program is displayed.

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Beginner's Manual

MODEL	MELWK1-HOW-O-E
MODEL CODE	—
BCN-P5717-A(0807)KWIX	



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