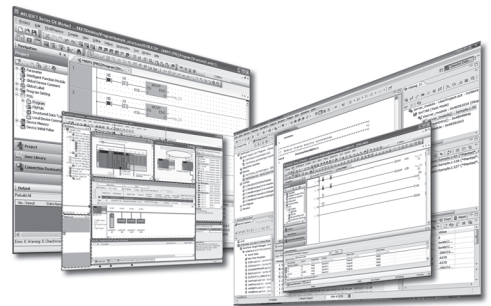


MELSOFT

Engineering Software

FieldDeviceConfigurator Operating Manual





SAFETY PRECAUTIONS

(Read these precautions before using this product.)

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

Note that these precautions apply only to this product. For the safety precautions of the programmable controller system, please read the User's Manual for the CPU module used.

In this manual, the safety precautions are classified into two levels: "⚠️ WARNING" and "⚠️ CAUTION".

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

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

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

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

CONDITIONS OF USE FOR THE PRODUCT

(1) Mitsubishi programmable controller ("the PRODUCT") shall be used in conditions;

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

(2) The PRODUCT has been designed and manufactured for the purpose of being used in general industries.

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

("Prohibited Application")

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

- Nuclear Power Plants and any other power plants operated by Power companies, and/or any other cases in which the public could be affected if any problem or fault occurs in the PRODUCT.
- Railway companies or Public service purposes, and/or any other cases in which establishment of a special quality assurance system is required by the Purchaser or End User.
- Aircraft or Aerospace, Medical applications, Train equipment, transport equipment such as Elevator and Escalator, Incineration and Fuel devices, Vehicles, Manned transportation, Equipment for Recreation and Amusement, and Safety devices, handling of Nuclear or Hazardous Materials or Chemicals, Mining and Drilling, and/or other applications where there is a significant risk of injury to the public or property.

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

INTRODUCTION

Thank you for purchasing the engineering software, MELSOFT series.

This manual describes the functions provided by FieldDeviceConfigurator.

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

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RELEVANT MANUALS

Manual name [manual number]	Description	Available form
FieldDeviceConfigurator Operating Manual [SH-081945ENG] (this manual)	Explains the functions and methods for operating FieldDeviceConfigurator.	e-Manual PDF

Point

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
CommDTM (Communication DTM)	A software module used to configure the communication setting required for communications between a personal computer and field devices via the master device.
Device DTM	A software module used to configure the parameter settings of field devices or monitor field devices.
DTM (Device Type Manager)	A software module used to configure the communication settings, set parameters of field devices, or monitor field devices when an FDT frame application is used.
FDC	An abbreviation for the MELSOFT FieldDeviceConfigurator.
FDT (Field Device Tool)	Software standard specifications for management, maintenance, adjustment, and development of field devices
FDT frame application	A generic term for applications to use a DTM. An FDT frame application complies with the FDT/DTM open standard
IODD DTM Configurator	A software program that operates the IODD file (device description file of IO-Link) as the DeviceDTM.
IODD(IO-Link Device Description)	This description consists of the XML file containing the IO-Link device information and the image file in the png format. This description is supplied from a manufacturer of an IO-Link device.
MELSOFT FieldDeviceConfigurator	Configuration Tool, which is developed by Mitsubishi Electric Corporation. MELSOFT FieldDeviceConfigurator complies with the FDT/DTM open standard and is used for parameter settings, maintenance, and adjustment of field devices as an FDT frame application.

1 OVERVIEW

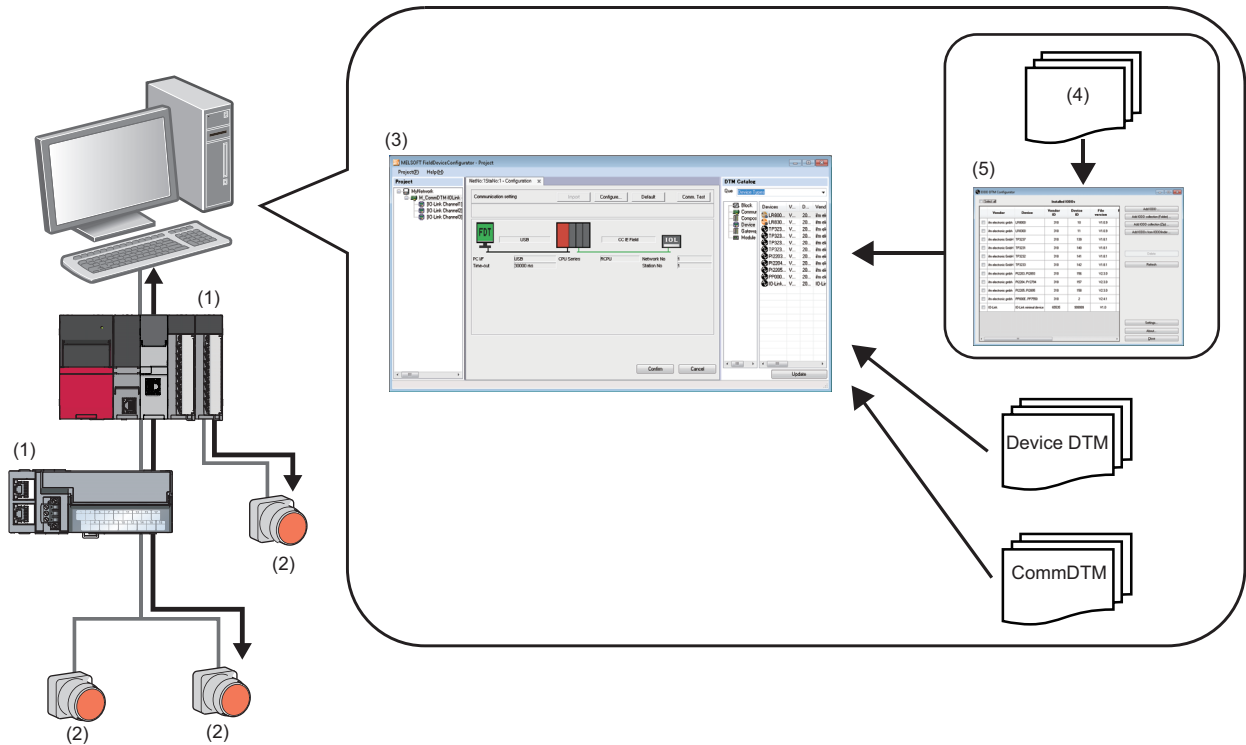
MELSOFT FieldDeviceConfigurator (abbreviated as FDC below) is Mitsubishi Electric's FDT frame application which complies with the open standard, FDT/DTM. It provides configuration, maintenance, and adjustment for field devices.

2 SYSTEM CONFIGURATION

In FDC, configuration, maintenance, and adjustment of field devices can be performed by using DTM modules (CommDTM and Device DTM), which are used for communication settings and parameter settings for field devices.

The information of CommDTM and Device DTM can be displayed in FDC by installing CommDTM and Device DTM, and importing them to FDC.

For information on obtaining DTMs, refer to the manual of each product.



No.	Item	Description
(1)	Master	A master of field devices.
(2)	Slave	A slave of field devices.
(3)	FDC	A tool for setting, maintaining, and adjusting field devices.
(4)	IODD file	An XML file including information of IO-Link sensors.
(5)	IODD DTM Configurator	A software module for setting parameters and monitoring field devices by importing an IODD. The operation is the same as a Device DTM.

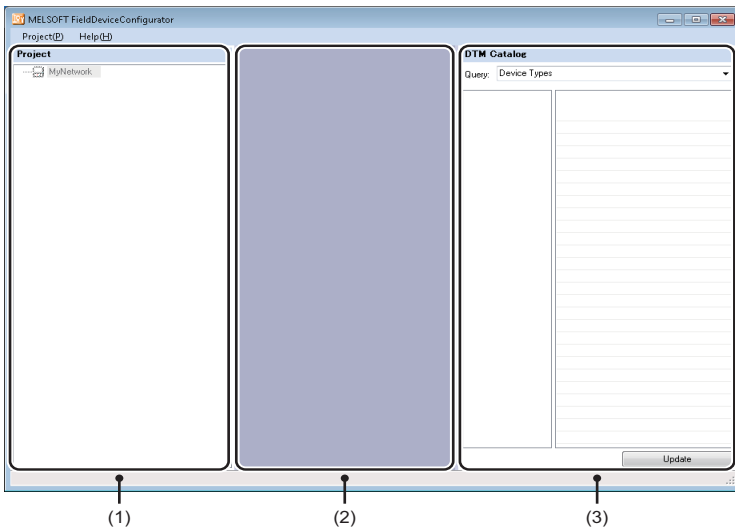
3 SCREEN CONFIGURATION AND BASIC OPERATIONS

This chapter explains the screen configuration and basic operations of FDC.

3.1 Screen Configuration

This section explains the screen configuration of FDC.

Window



Displayed items

No.	Item	Description	Reference
(1)	Project view	Displays the configuration of the DTM.	Page 14 Operations in the Project view
(2)	DTM UI view	Displays the details of the DTM selected in the Project view. The display contents vary depending on the DTM. For details, refer to the manual for each product.	Page 15 Operations in the DTM UI view
(3)	DTM catalog view	Displays a list of installed DTMs.	Page 16 Operations in the DTM catalog view

3.2 Menu List

The following show the lists of menus.

[Project]	Description	Reference
⇒ [New]	To create a new project.	Page 13 Creating a project
⇒ [Open]	To open an existing project.	Page 13 Opening a project
⇒ [Save]	To overwrite an existing project.	Page 13 Saving a project
⇒ [Close]	To close the open project.	Page 13 Closing a project
⇒ [Delete]	To delete an existing project.	Page 13 Deleting a project
⇒ [Exit]	To end the application.	Page 12 End

[Help]	Description	Reference
⇒ [Manual]	To start e-Manual Viewer and display the manual.	—
⇒ [About]	To display the version information of FDC.	—

3.3 How To Obtain FDC

For information on how to obtain an FDC, please consult your local Mitsubishi representative.

3.4 Start and End

This section explains the methods for starting and ending FDC.

Start

Operating procedure

Select [MELSOFT] ⇒ [MELSOFT FieldDeviceConfigurator]^{*2} ⇒ [MELSOFT FieldDeviceConfigurator] from Windows Start^{*1}.

*1 Select [All apps] on the Start screen or [Start] ⇒ [All Programs]/[All apps].

*2 Does not appear in Windows 8 or later.

Point

FDC can be started by double-clicking a slave station displayed in a CC IE Field configuration in an engineering tool. Only a slave module which can be started from a CC IE Field configuration can be started. When FDC is started from an engineering tool, start I/O numbers, network numbers, station numbers of slave stations, and connection destination setting information of the master station set in the CC IE Field configuration can be applied to a CommDTM by the function of a DTM. Connection destination setting information can be applied only when FDC is started from MELSOFT Navigator or GX Works3.

End

Operating procedure

Select [Project] ⇒ [Exit].

3.5 Project Management

Creating a project

Create a new project.

Operating procedure

1. Select [Project] ⇒ [New]
2. Enter a project name in the "New Project" screen, and click the [OK] button.

Opening a project

Open an existing project.

Operating procedure

1. Select [Project] ⇒ [Open].
2. Select a project to open, and click the [Open] button in the "Open Project" screen.

Saving a project

Overwrite an existing project.

Operating procedure

Select [Project] ⇒ [Save].

Closing a project

Close the open project.

Operating procedure

Select [Project] ⇒ [Close].

Deleting a project

Delete an existing project.

Operating procedure

1. Select [Project] ⇒ [Delete].
2. Select a project to delete, and click the [Delete] button in the "Delete Project" screen.

3.6 Basic Operations

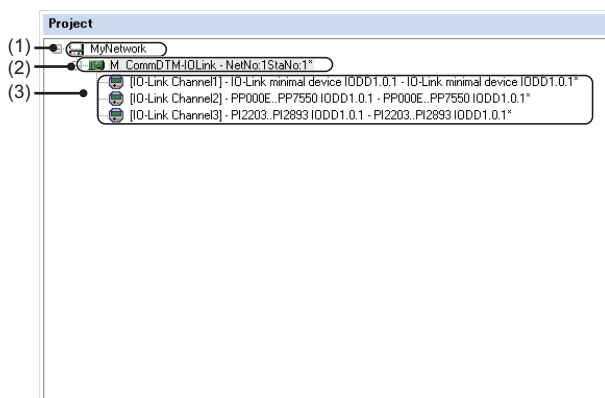
Operations in the Project view

This section explains the operations in the Project view.

DTM operations can be performed by selecting and right-clicking a DTM in the Project view.

A DTM can be added to/deleted from/changed in the Project view.

Window



Displayed items

No.	Item	Description
(1)	MyNetwork	Displays the configuration of the DTM.
(2)	DTM	Displays a CommDTM added to the project.
(3)	Block	Displays a Device DTM added to the project.

Right-click menus

The following shows the shortcut menus displayed by right-clicking an item under "MyNetwork" in the Project view.

Menu name	Description
⇒ [Add DTM]	To make the "Add" screen appear. Add a DTM selected in the "Add" screen to the Project view.
⇒ [Properties]	To display project information.

The following shows the menus displayed by right-clicking a DTM or Block in the Project view.

Menu name	Description
⇒ [Add DTM/Block]	To make the "Add" screen appear. Add a DTM or Block selected in the "Add" screen to the Project view.
⇒ [Remove DTM/Block]	To delete a selected DTM.
⇒ [Change DTM/Block]	To make the "Change" screen appear. Change a DTM or Block to the one selected in the "Add" screen.
⇒ [Edit TAG]	To edit the name of a selected DTM or Block.
⇒ [Detect Now] ⇒ [Execute to All Channels]	To detect all the connected devices, and automatically add DTMs for the detected devices to the Project view. If multiple DTMs for a detected device are detected, a DTM which is different from the actual one may be displayed.
⇒ [Detect Now] ⇒ [Execute to Selected Channels]	To detect devices connected to the channel selected in the "Execute after specify the channel" screen, and automatically add DTMs for the detected devices to the Project view. If multiple DTMs for a detected device are detected, a DTM which is different from the actual one may be displayed.
⇒ [(DTM function menu)]	A menu name differs depending on the specification of the DTM. For details, refer to the manual for each product.
⇒ [Properties]	To display the property information of a DTM. The version of FDT can be checked.

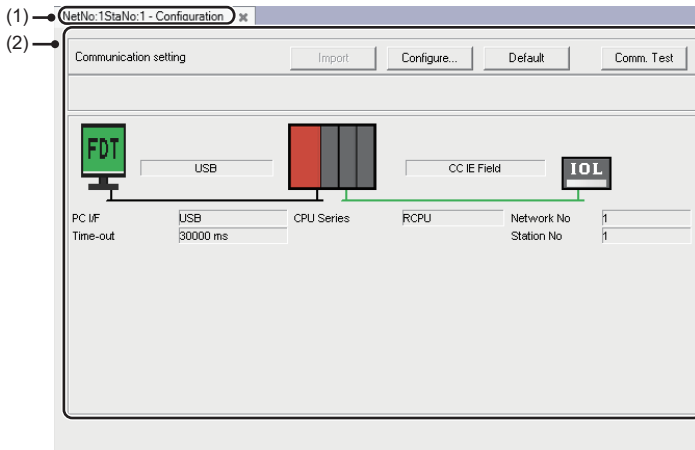
Point

For details on the error message displayed when a DTM function is performed, please contact the manufacturer.

Operations in the DTM UI view

The UI of a DTM can be displayed by double-clicking a DTM in the Project view.
The display contents differ depending on the specification of the DTM.
For the DTM specification, refer to the manual for each product.

Window



Displayed items

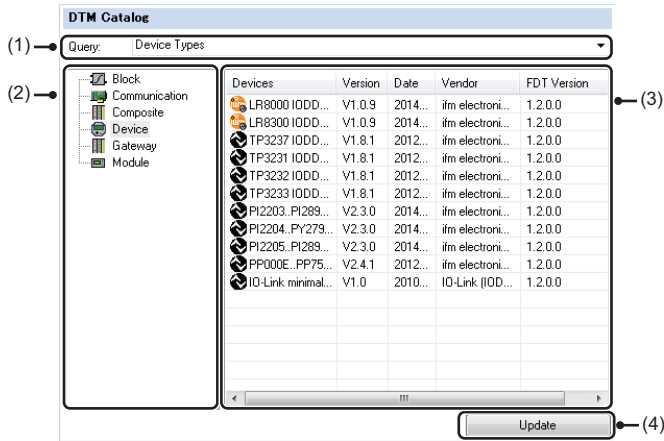
No.	Item	Description
(1)	Tab	Displays the name set in the DTM and a menu name for executing a DTM function.
(2)	DTM UI display area	Displays the setting contents of the DTM.

Operations in the DTM catalog view

A list of installed DTMs can be displayed.

A DTM can be added in the Project view by dragging and dropping a DTM from the DTM list to the Project view.

Window



Displayed items

No.	Item	Description
(1)	Query	Select a display format in the type list.
(2)	Type list	Displays the types of the DTM in a list format.
(3)	DTM list	Displays the DTMs of the type selected in the type list in a list format.
(4)	[Update] button	Click this button to update the DTM catalog.

APPENDIX

In this manual, the FDT version 2.0 released in April 2013 or later is referred to as 'new 2.0 DTM', and the one released in April 2013 or earlier is referred to as 'previous 2.0 DTM'.

Appendix 1 Additions and Changes from Previous Version

This section shows the additions and changes with upgrade.

Version 1.01B

Item	Description	Reference
Japanese version	Japanese version is released.	—

Version 1.02C

Item	Description	Reference
Startup from a CC IE Field configuration	FDC can be started from a CC IE Field configuration in an engineering tool.	Page 12 Start
Automatic detection of connected devices	After detecting all connected devices, DTMs for the detected devices can automatically be set.	Page 14 Right-click menus
New 2.0 DTM	New 2.0 DTMs are supported by FDC.	Page 18 Using a project in an earlier version

Appendix 2 Using a Project in a Different Version

This section explains the considerations for using a project in a different version of FDC from the one with which the project was created. Note the following contents to use a project.

Using a project in a later version

A project saved in a previous version can be used in a new version.

Using a project in an earlier version

Using a project, which was created in version 1.02C or later, in version 1.01B or earlier

Item	Considerations
New 2.0 DTM	A project including a new 2.0 DTM cannot be opened.

Appendix 3 Resolution

The following shows the setting values for "Change the size of text, apps, and other items" and the supported display resolution for each setting value in Windows 10 (version 1703 or later).

Value setting for "Change the size of text, apps, and other items"	Resolution
100%	1024 × 768 dots or more
125%	1900 × 1200 dots or more
150%	
175%	
200%	2880 × 1620 dots or more
225%	
250%	
	3840 × 2160 dots or more



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REVISIONS

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

Revision date	*Manual number	Description
April 2018	SH(NA)-081945ENG-A	First edition
November 2018	SH(NA)-081945ENG-B	■Added or modified parts Chapter 2, Section 3.6

Japanese manual number: SH-081944-B

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SH(NA)-081945ENG-B(1811)

MODEL: FDC-O-E

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