

## Upgrade Information of MPE720 Version 7.60

### 1. Added and Improved Functions

#### 1.1 Version 7.60 Upgrade Information

Items added and features improved from MPE720 version 7.52 to version 7.60 are as follows.

No.	Feature	Classification
1	Added support for YRM-7.	New function
2	Added support for IoT unit.	New function
3	Added support for YERCPProfile.	New function
4	Added support for SNTP server setting.	New function
5	Added support for the new table data function.	New function
6	Improved the maximum register number of tuning panel.	Improving
7	Improved the problem that the ladder is being edited in Visual comparison.	Improving
8	Improved the problem that a branch is executed even if the condition is not satisfied in some ladder program.	Improving
9	Improved the problem that pasting the extended comment of the D register is reflected in another program.	Improving
10	Improved the problem that invalid else statement in Expression goes through compilation.	Improving
11	Improved the problem that the constant table of 200 lines is oversized in XCALL.	Improving
12	Improved the cross reference of CP ladder.	Improving
13	Improved writing SERVOPACK parameter.	Improving

(\*): When MPE720 Ver.7 before MPE720 Ver.7.11 is already installed in Windows Vista and Windows 7, it may not operate for the newest information of the servo model addition by the axial setup wizard function (the newest information added into the database) updated by after MPE720 Ver.7.13.

Please refer to the following page for operating procedures.

## 【About the restriction matter when using MPE720 Ver.7 in Windows Vista and Windows 7】

When MPE720 Ver.7 is used in Windows Vista and Windows 7, the following phenomena might be generated.

### <Phenomena>

When MPE720 Ver.7 before MPE720 Ver.7.11 is already installed in Windows Vista and Windows 7, it may not operate for the newest information of the servo model addition by the axial setup wizard function (the newest information added into the database) updated by after MPE720 Ver.7.13.

### <Measures>

Using a batch file, the following folder is deleted. (\*1)

C:\Users\UserName(\*2)\AppData\Local\VirtualStore\Program Files(\*3)\YASKAWA\MPE720 Ver7

### Procedure

1. The batch file enclosed by MPE720 Ver.7 installer is copied to a desktop.

#### 【Download Version】

MPE720Ver7\_xxx(\*4)\Tools\CleanUp\MPE720Ver7\_x86.bat (32bitOS)

MPE720Ver7\_xxx(\*4)\Tools\CleanUp\MPE720Ver7\_x64.bat (64bitOS)

#### 【DVD Media Version】

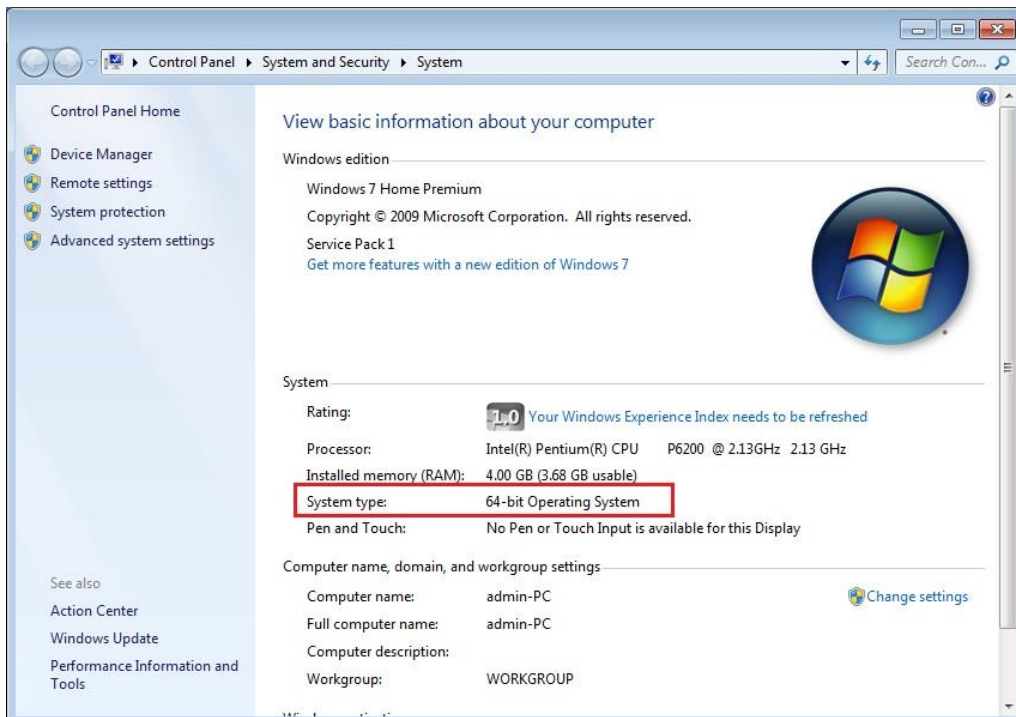
D(\*5):\Tools\CleanUp\MPE720Ver7\_x86.bat (32bitOS)

D(\*5):\Tools\CleanUp\MPE720Ver7\_x64.bat (64bitOS)

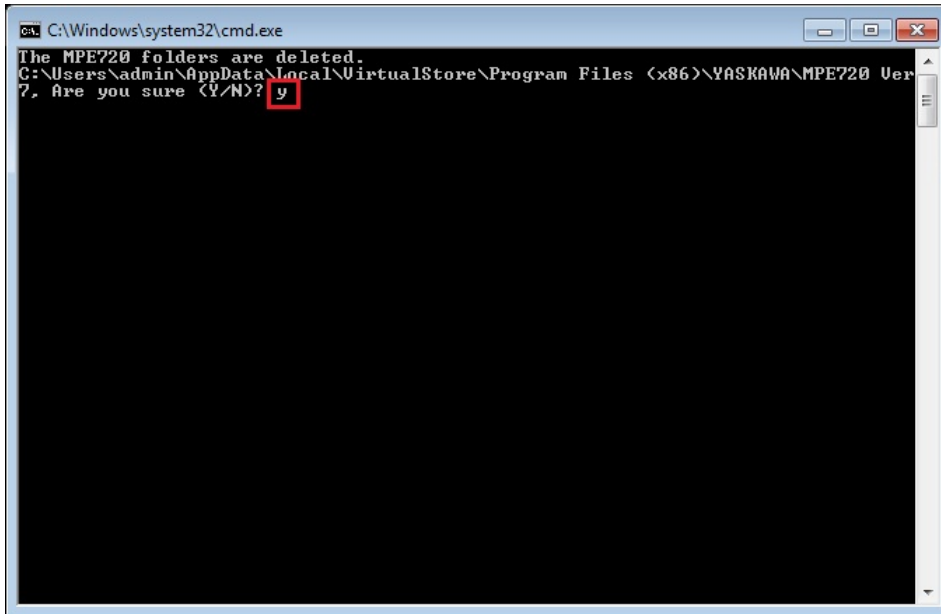
2. The copied batch file is performed.

MPE720Ver7\_x86.bat (32bitOS)

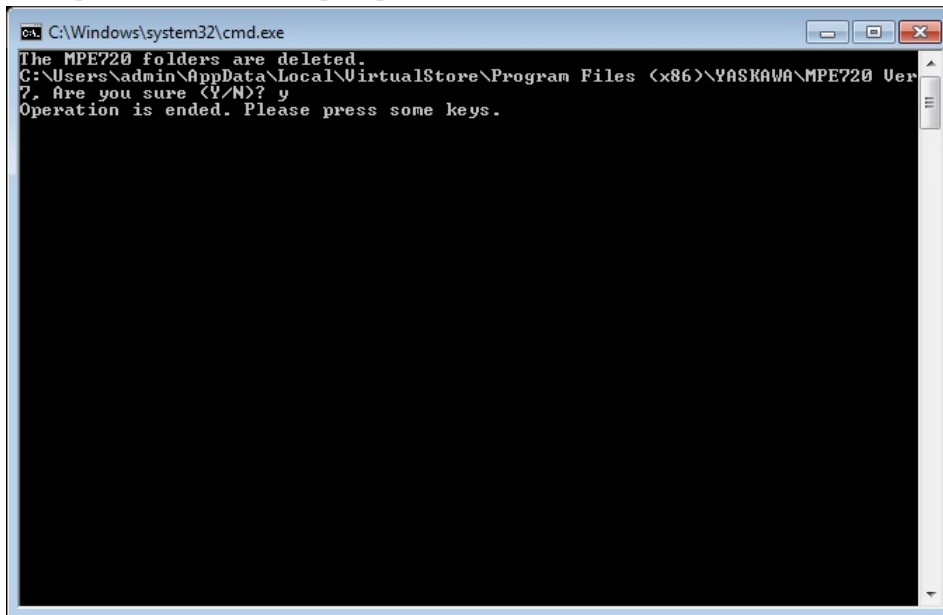
MPE720Ver7\_x64.bat (64bitOS)



3. “y” is inputted on a command prompt and the Enter button is pushed.



4. The Enter button is pushed on a command prompt after deletion.



- (\*1): When multi-user is using one set of PC, please operate it by each user.
- (\*2): The user account name that logs in enters.
- (\*3): The path changes by OS.
  - 32bitOS: Program Files
  - 64bitOS: Program Files (x86)
- (\*4): The path changes by version.
- (\*5): The path changes by DVD drive.
- (\*6): When an installation path is changed at the time of MPE720 Ver.7 installation, please delete the “MPE720 Ver7” folder which a folder subordinate has below manually according to the installed path.
  - C:\Users¥UserName(\*2)\AppData\Local\VirtualStore

## 【About compile of the parallel circuit】

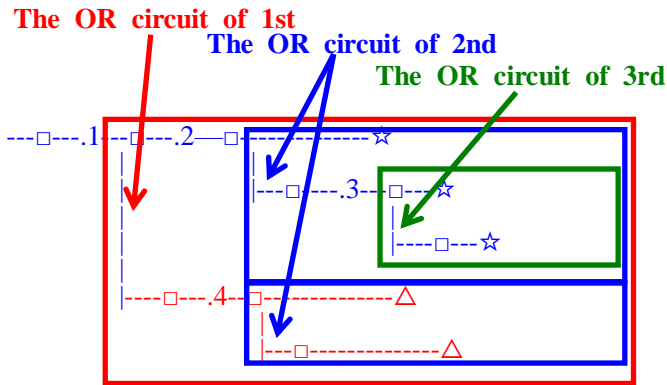
In the Ladder program of MPE720 Ver7 before MPE720 Ver7.23, when the parallel circuit is used, the following phenomena may occur.

<Phenomena>

When the circuit containing the following pattern was created, there was a phenomenon of operating without receiving the condition that the circuit below the OR circuit of 1<sup>st</sup> class must operate essentially in response to the conditional instruction before the OR circuit of 1<sup>st</sup> class.

<Measures>

When a phenomenon occurs, please carry out re-compile about the Ladder program in MPE720 Ver7 after MPE720 Ver7.24. Or please carry out again “Compile All Programs” of “Compile” menu.



The OR circuit of 1st class: The OR circuit branched from the bus-bar of language.

The OR circuit of 2nd class: The OR circuit branched out of the OR circuit of 1st class.

The OR circuit of 3rd class: The OR circuit branched out of the OR circuit of 2nd class.

□(Conditional instruction): NO Contact, NC Contact, Coil, instruction(==, !=, >, <), power line (-----) etc.

☆(Output instruction): Coil, Block instruction(Expression, STORE, COPYW) etc

※However, when all ☆ is coil commands, a phenomenon does not occur.

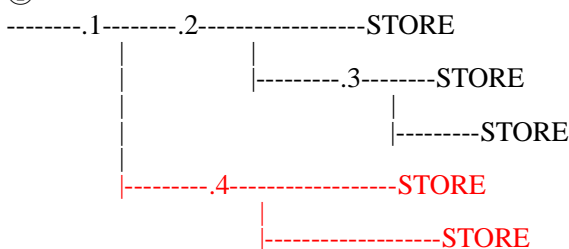
△(Output instruction): Coil, Block instruction(Expression, STORE, COPYW)etc

<Pattern>

Symbol	Instruction
[	NO Contact
STORE	STORE instruction
()	Coil

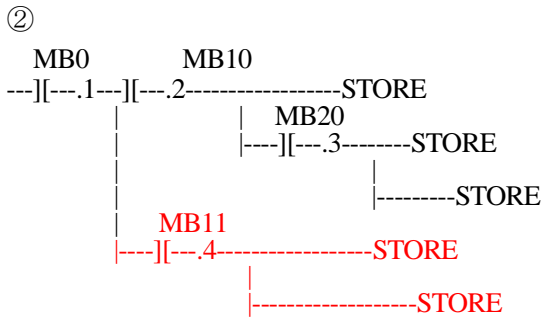
<NG Pattern>

①



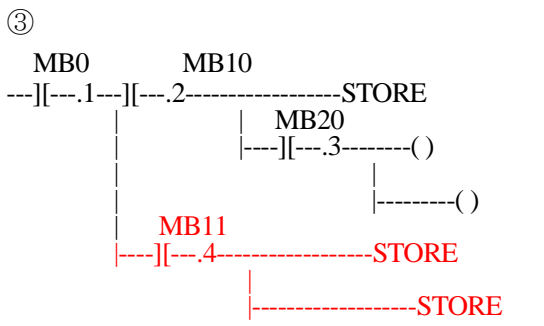
This pattern is minimum circuit pattern.

This is NG.



It is NG even if the minimum circuit pattern has conditional instructions (NO Contact etc.).

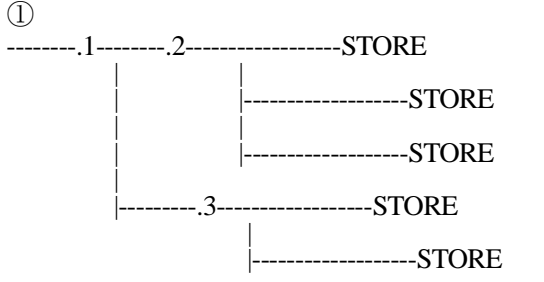
This is NG



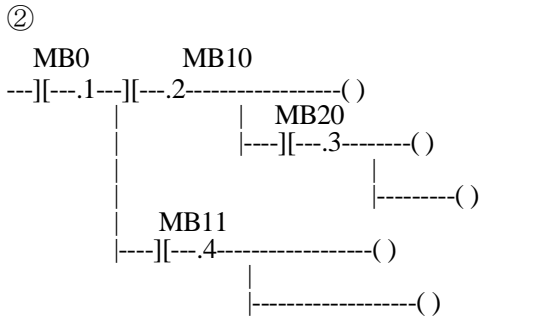
It is NG when there are at least one block commands (STORE command etc.) here.

This is NG

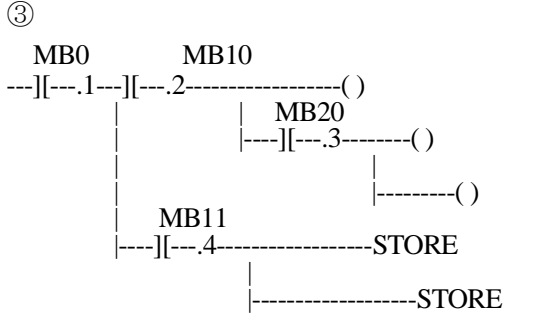
<OK Pattern>



Since it is the OR circuit of 2nd, it is OK.



Since it is the coil altogether, it is OK.



Since it is the coil altogether, it is OK.

## 1.2 Past Upgrade Information

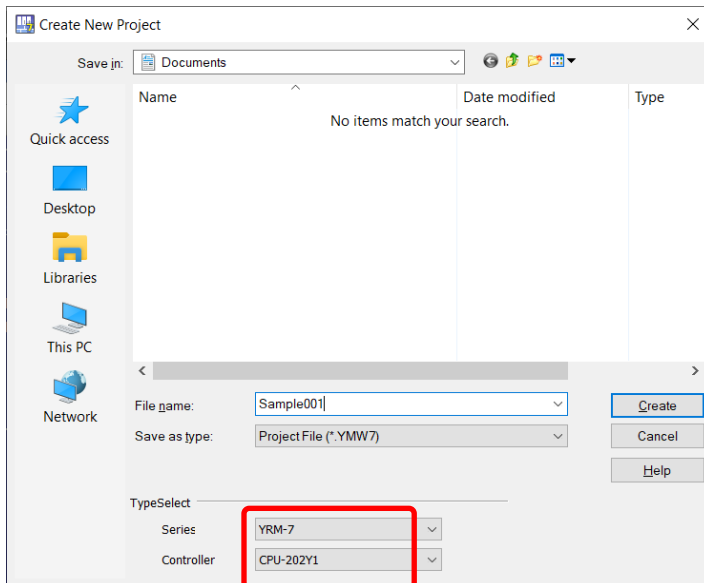
No.	Upgrade Information	Remarks
1	<a href="#">MPE720 version 7.11 upgrade information</a>	version 7.10→version 7.11
2	<a href="#">MPE720 version 7.13 upgrade information</a>	version 7.11→version 7.13
3	<a href="#">MPE720 version 7.14 upgrade information</a>	version 7.13→version 7.14
4	<a href="#">MPE720 version 7.20 upgrade information</a>	version 7.14→version 7.20
5	<a href="#">MPE720 version 7.21 upgrade information</a>	version 7.20→version 7.21
6	<a href="#">MPE720 version 7.23 upgrade information</a>	version 7.21→version 7.23
7	<a href="#">MPE720 version 7.24 upgrade information</a>	version 7.23→version 7.24
8	<a href="#">MPE720 version 7.26 upgrade information</a>	version 7.24→version 7.26
9	<a href="#">MPE720 version 7.27 upgrade information</a>	version 7.26→version 7.27
10	<a href="#">MPE720 version 7.28 upgrade information</a>	version 7.27→version 7.28
11	<a href="#">MPE720 version 7.29 upgrade information</a>	version 7.28→version 7.29
12	<a href="#">MPE720 version 7.30 upgrade information</a>	version 7.29→version 7.30
13	<a href="#">MPE720 version 7.31 upgrade information</a>	version 7.30→version 7.31
14	<a href="#">MPE720 version 7.33 upgrade information</a>	version 7.31→version 7.33
15	<a href="#">MPE720 version 7.34 upgrade information</a>	version 7.33→version 7.34
16	<a href="#">MPE720 version 7.35 upgrade information</a>	version 7.34→version 7.35
17	<a href="#">MPE720 version 7.36 upgrade information</a>	version 7.35→version 7.36
18	<a href="#">MPE720 version 7.37 upgrade information</a>	version 7.36→version 7.37
19	<a href="#">MPE720 version 7.38 upgrade information</a>	version 7.37→version 7.38
20	<a href="#">MPE720 version 7.39 upgrade information</a>	version 7.38→version 7.39
21	<a href="#">MPE720 version 7.40 upgrade information</a>	version 7.39→version 7.40
22	<a href="#">MPE720 version 7.41 upgrade information</a>	version 7.40→version 7.41
23	<a href="#">MPE720 version 7.42 upgrade information</a>	version 7.41→version 7.42
24	<a href="#">MPE720 version 7.43 upgrade information</a>	version 7.42→version 7.43
25	<a href="#">MPE720 version 7.44 upgrade information</a>	version 7.43→version 7.44
26	<a href="#">MPE720 version 7.45 upgrade information</a>	version 7.44→version 7.45
27	<a href="#">MPE720 version 7.46 upgrade information</a>	version 7.45→version 7.46
28	<a href="#">MPE720 version 7.47 upgrade information</a>	version 7.46→version 7.47
29	<a href="#">MPE720 version 7.50 upgrade information</a>	version 7.47→version 7.50
30	<a href="#">MPE720 version 7.51 upgrade information</a>	version 7.50→version 7.51
31	<a href="#">MPE720 version 7.52 upgrade information</a>	version 7.51→version 7.52

## 2. Description

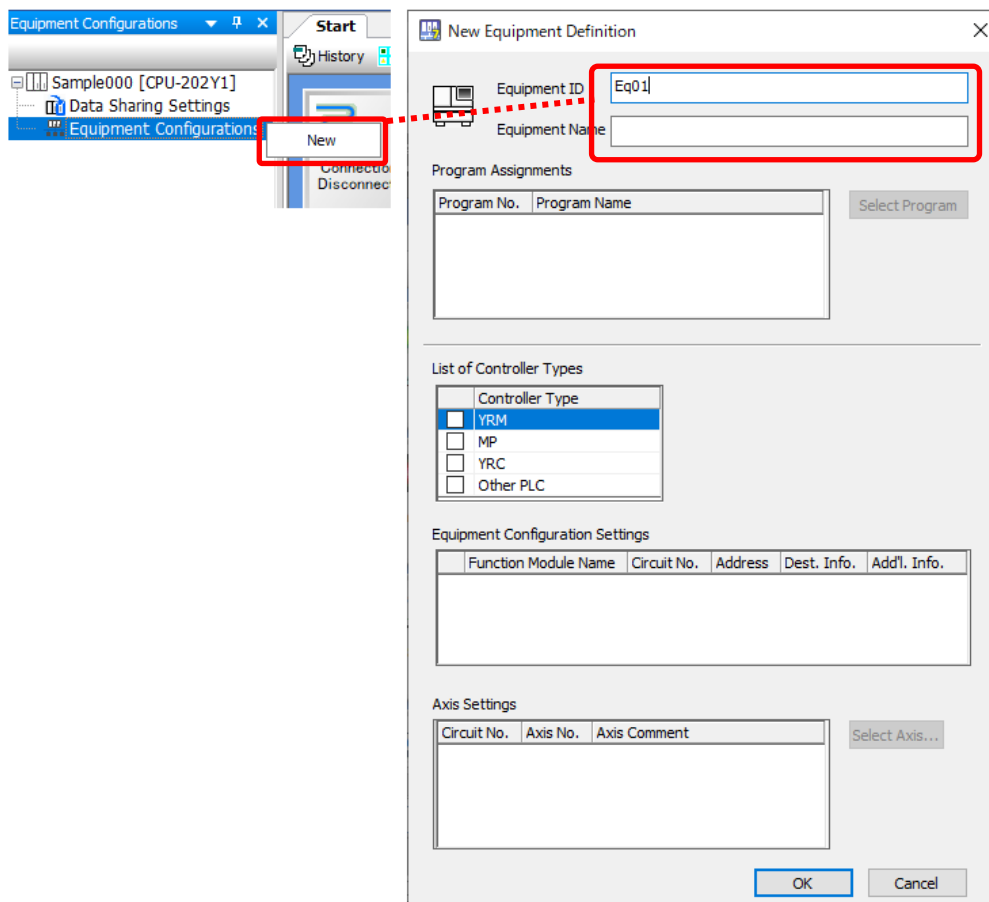
### No. 1 Added support for YRM-7.

Supports YRM-7 controller.

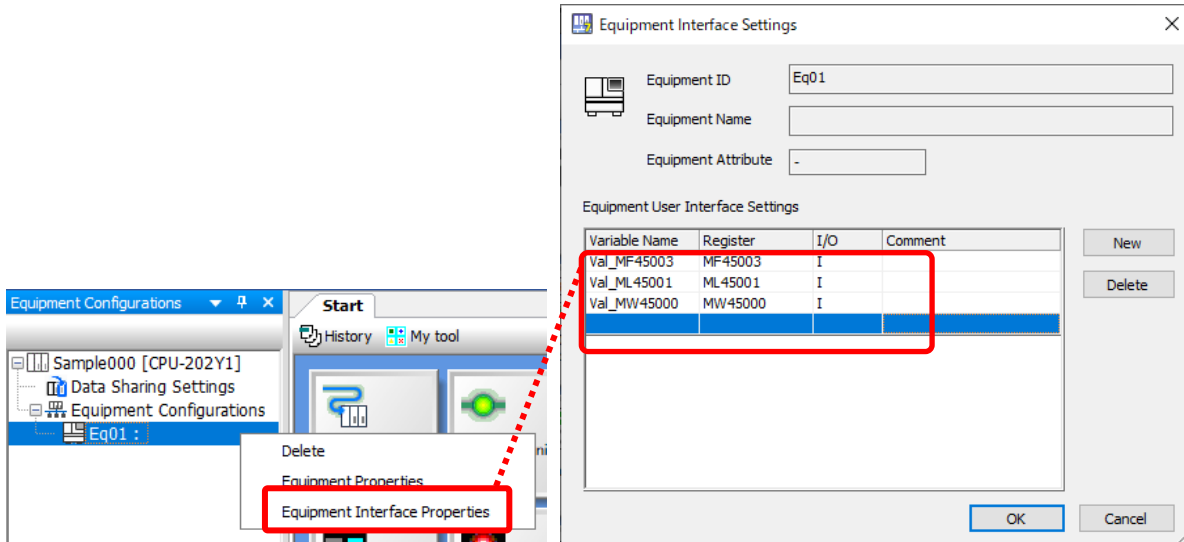
1) A project file can be created by specifying the series name "YRM-7" and model "CPU-202Y1".



2) Equipment configuration is available so that manage multiple machine controllers and SERVOPACKs that are connected to YRM-7 via a network.

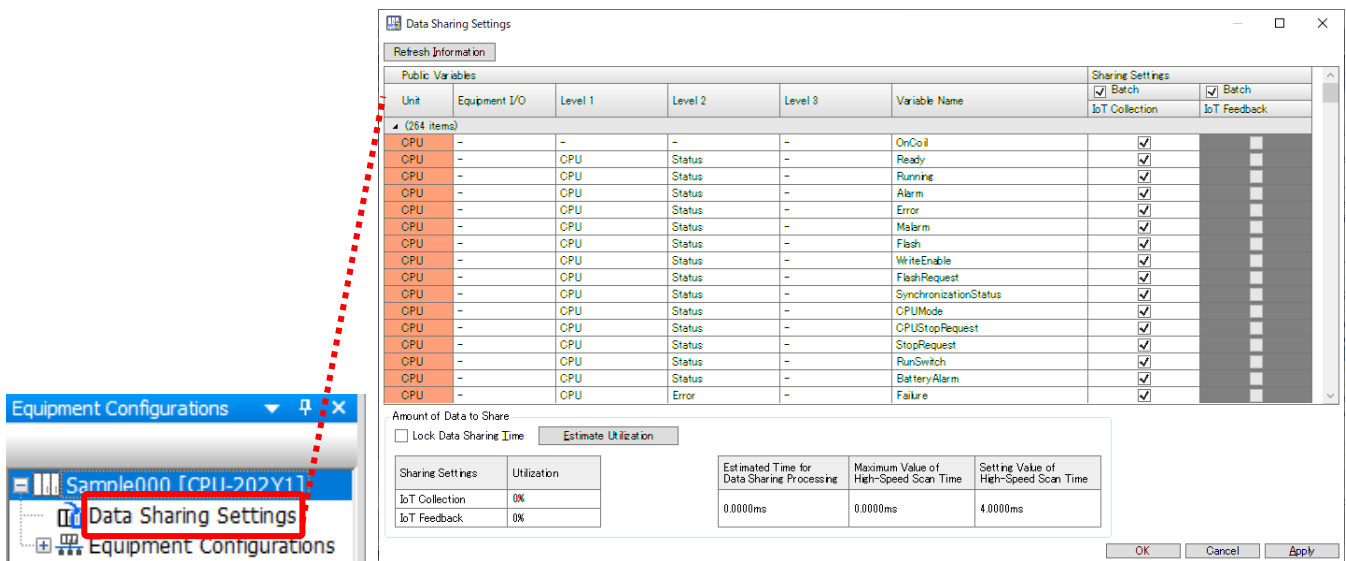


3) By registering variables as I/F properties, data can be managed for each device.



4) The data handled by the CPU unit of YRM-7 can be shared with the IoT unit. Thereby, the data can be collected from YASKAWA Cockpit and fed back to.

[Lock Data Sharing Time] is an operation to lock the scan time used for data sharing. This eliminates the need to worry about scan time fluctuations due to the number of data collections or feedbacks.



[Supported Versions]

○Controller

Controller	Supported Firmware Version
YRM Series	1.00
MP3000 Series	Not available.
Σ-7 Series	Not available.
MP2000 Series	Not available.

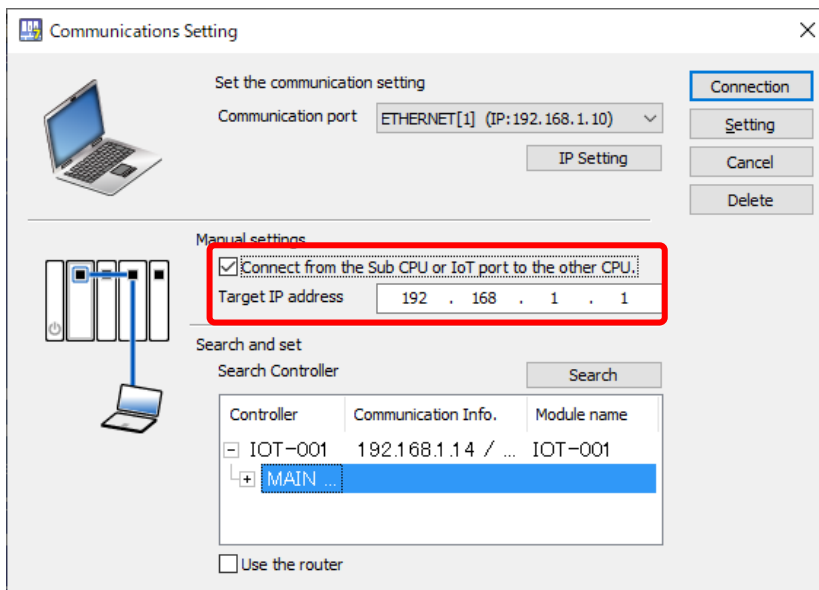


## No. 2 Added support for IoT unit.

1) You can configure the IoT unit from MC-Configurator.

Module	Function Module/Slave	Status	Circuit No./Axis	
			Start	
01 [CPU-202Y1] : ---				
-- UNDEFINED --				
-- UNDEFINED --				
00 CPU-202Y1 00 CPU202[-----]	01 CPU	----		
	02 218IFD	----	☐	Circuit No1
	03 + SVC32	----	☐	Circuit No1
	04 + SVR32	----	☐	Circuit No3
	05 M-EXECUTOR	----		
	06 -- UNDEFINED --	----		
	07 -- UNDEFINED --	----		
IOT 01 IOT-001[-----]	01 IOT	----	☐	Circuit No1

2) You can set the relay connection via IoT unit in the communications setting. You can edit the data sharing settings by using MPE720 on the PC installed YASKAWA Cockpit.



### [Supported Versions]

#### oController

Controller	Supported Firmware Version
YRM Series	1.00
MP3000 Series	Not available.
Σ-7 Series	Not available.
MP2000 Series	Not available.

#### oUnit

Controller	Supported Firmware Version
IoT unit	1.00

### No. 3 Added support for YERCProfile.

- 1) In the detailed definition screen of SVK, you can select YERCProfile connection. Thereby, you can control, monitor, and collect data from the robot controller using the interface that connects the YRM controller and RC (robot controller). With this setting, the data structure of YERCProfile is assigned to the specified start address, and it can be handled as variable name on the MPE720.

No.	System Configuration	Transmission Type	Start Register No.	End Register No.	Watchdog timer setting (ms)
1	YERCProfile Connection 1	Built-in Ethernet	MW00000	MW04691	100

Connection No.	Local Port	Robot Controller IP Address	Robot Controller Port	Connection Type	Protocol Type	Code
1	1001	192.168.1.2	502	UDP	Modbus/TCP	BIN
2	None					1000
3	None					1000

#### [Supported Versions]

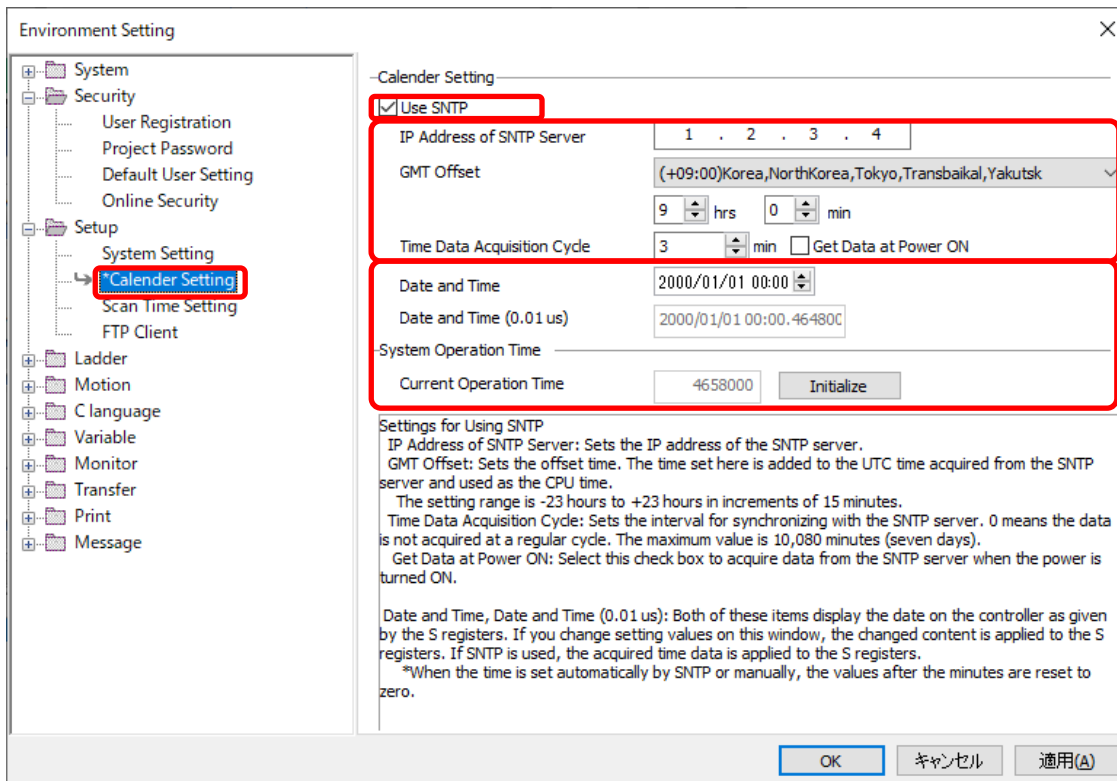
##### ○Controller

Controller	Supported Firmware Version
YRM Series	1.00
MP3000 Series	Not available.
Σ-7 Series	Not available.
MP2000 Series	Not available.

## No. 4 Added support for SNTP server setting.

SNTP server setting is available for time synchronization.

1) You can configure the SNTP server settings from Calendar setting in Environment Setting.



[Supported Versions]

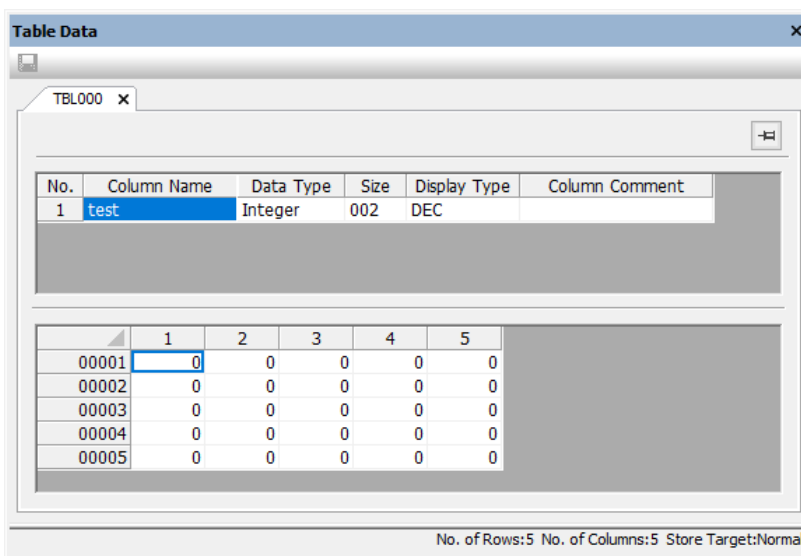
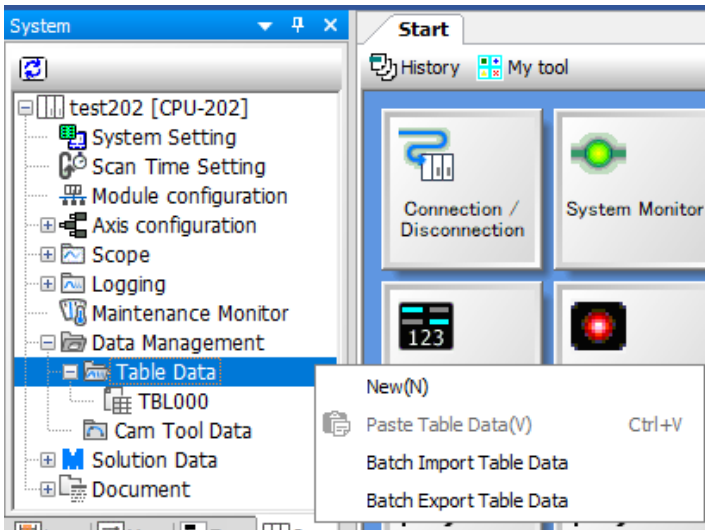
○Controller

Controller	Supported Firmware Version
YRM Series	1.00
MP3000 Series	Not available.
Σ-7 Series	Not available.
MP2000 Series	Not available.

## No. 5 Added support for the new table data function.

Enabled to create and edit table data from the system sub window.

- 1) You can create, save, and edit table data from the system sub window. The table data can be edited in the new table data screen. The created data can be used from ladder program as well as the conventional table data.



- 2) Supports multiple import/export of table data.  
Just only existing table data can be imported. The CSV file have to be same name to the table data.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM Series	Not dependent on the controller version.
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

## No. 6 Improved the maximum register number of tuning panel.

The maximum number of register for one program in the tuning panel is expanded from 100 to 500.

Variable	Com...	View def...	Current v...	Unit	Visual monitor
MB000497		ON/OFF	OFF		<input type="radio"/>
MB000498		ON/OFF	OFF		<input type="radio"/>
MB000499		ON/OFF	OFF		<input type="radio"/>
The 500 variables or more cannot be registered.					
Please input Program No....					

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM Series	Not dependent on the controller version.
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

## No. 7 Improved the problem that the ladder is being edited in Visual comparison.

When comparing ladder programs with Visual comparison, some ladder program may be in the editing state. It has been improved so that it is not in the editing state.

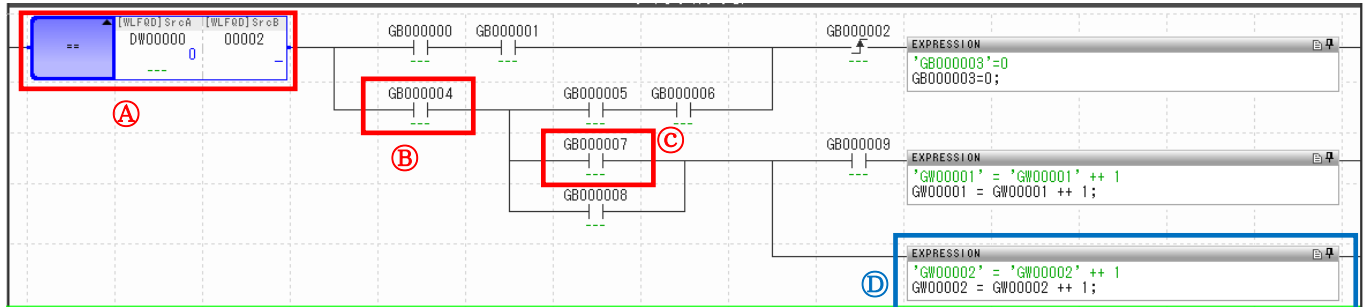
[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM Series	Not dependent on the controller version.
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

**No. 8 Improved the problem that a branch is executed even if the condition is not satisfied in some ladder program.**

In the following ladder program, Expression of D was executed only by satisfying the conditions of A and C even though the condition of B was not satisfied. There was an error in the block judgment of the ladder branch, so it has been improved.



[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM Series	Not dependent on the controller version.
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

**No. 9 Improved the problem that pasting the extended comment of the D register is reflected in another program.**

When pasting extended comment of multiple programs' D register continuously, the comment of one program was copied to another program after the project file was reopened. So, it has been improved.

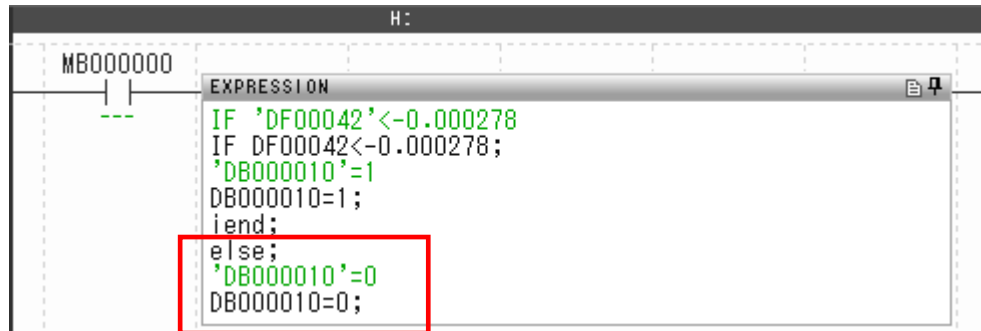
[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM Series	Not dependent on the controller version.
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

**No. 10 Improved the problem that invalid else statement in Expression goes through compilation.**

When there is an else statement without a corresponding IF statement in Expression as shown below, no compile error occurs and the else statement is executed according to the input condition of Expression. There was an error in the processing of the IF-ELSE statement, so it has been improved.



[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM Series	Not dependent on the controller version.
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

**No. 11 Improved the problem that the constant table of 200 lines is oversized in XCALL.**

When using XCALL instruction in the MP ladder, the constant table with 200 lines was oversized. (Just only about 100 lines was OK) So, it has been improved that 200 lines constant table can be used.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM Series	Not dependent on the controller version.
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

## No. 12 Improved the cross reference of CP ladder.

When cross reference was executed in CP ladder, the cursor did not jump to the register and the cursor was always at the beginning of the program, so it has been improved.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM Series	Not dependent on the controller version.
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

## No. 13 Improved writing SERVOPACK parameter.

When writing into controller, depending on the SERVOPACK model, writing the servo parameters could fail. It has been improved.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM Series	Not dependent on the controller version.
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.