MPE720 improvement item and bug fix change

1. Function addition and improvement item

Items added and features improved from MPE720 version 5.37 to version 5.38 are as follows.

No.	Function item	Classification
1	MP2300S model addition	Function addition
2	MP2310 model addition	Function addition
3	The task manager's default display	Function addition
4	PC-LINK module addition	Function addition
5	AFMP-02-C module addition	Function addition
6	218IF-02 module addition	Function addition
7	New motion instruction addition	Function addition
8	For sequence program	Function addition
9	VersionUP in communication process	Function addition
10	Motion program preservation processing speed-up	Function addition
11	Change of display name of motion parameter	Function addition
12	The motion task manager's improvement	Function addition
13	Detaching from object of comparison of unnecessary packet	Function addition
14	Driving control panel	Function addition
15	Addition of program execution registration screen	Function addition
16	Review of screen composition of group definition screen	Function addition
17	Easy, connected function	Function addition
18	For quick watch	Function addition
19	The default of an online monitor is made effective.	Function addition
20	Setup parameter addition	Function addition
21	The motion alarm analysis screen is added.	Function addition
22	Group definition name check addition	Function addition
23	Limitation of register that can be used for MSEE/SSEE instruction	Unprevention
24	Deletion of unnecessary map information	Unprevention
25	Servo packing parameter warning display trouble	Unprevention
26	When the drawing is copied, the name check is defective.	Unprevention
27	Trouble when D register sizes 0 are compared	Unprevention
28	For motion program instruction value cancellation of significant digits	Unprevention
29	Trouble of operation of menu of quick watch	Unprevention
30	Flash saving in state to log on two or more CPU at the same time	Unprevention
31	Error message correction when motion program is saved	Unprevention
32	Quick reference display trouble	Unprevention
33	Trace trouble of motion program	Unprevention
34	MPE720 development securing area shortage of module composition	Bug fix
35	Trouble that cannot be forwarded in LHA32 latest version	Bug fix
36	When the application converter is used, "Function I/O" data remains in the drawing as garbage data.	Bug fix
37	"Program Composition error" generation trouble when motion program is made	Bug fix
38	The set size check of *****I/O is defective.	Bug fix
39	The data trace reading is defective.	Bug fix

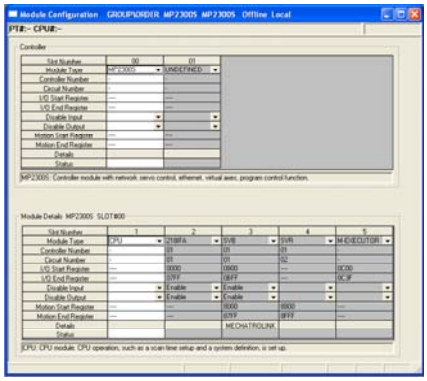
2. Correction content explanation

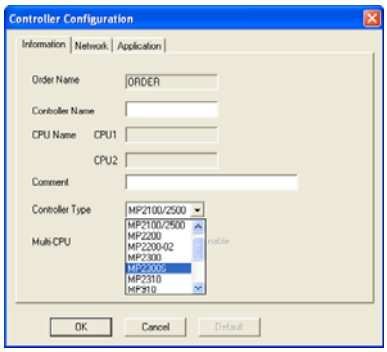
No.1 MP2300S model addition

MP2300S who was a new controller was added.

The following items were added by the new model addition.

1. New addition of sequence program
2. Addition of M-executor that is programmed control function
3. Addition of 218IFA that is Ethernet by 100M
4. For slave synchronous function of SVB
5. The option slot has one slot.



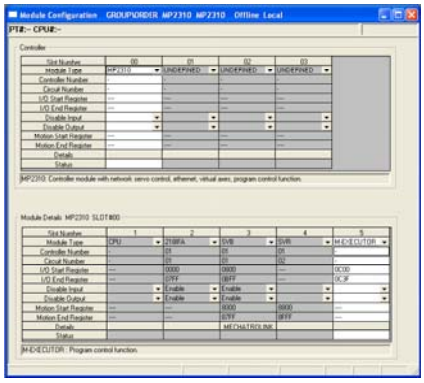


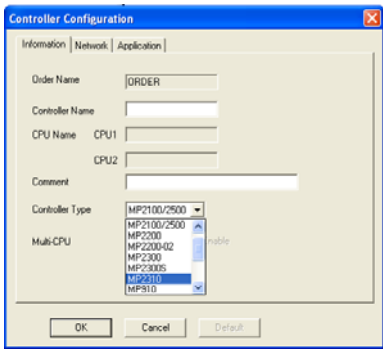
No.2 MP2310 model addition

MP2310 who was a new controller was added.

The following items were added by the new model addition.

1. New addition of sequence program
2. Addition of M-executor that is programmed control function
3. Addition of 218IFA that is Ethernet by 100M
4. For slave synchronous function of SVB
5. For table data area for battery backup
6. The option slot has three slots.



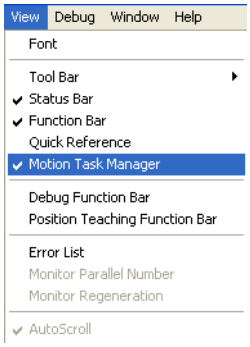


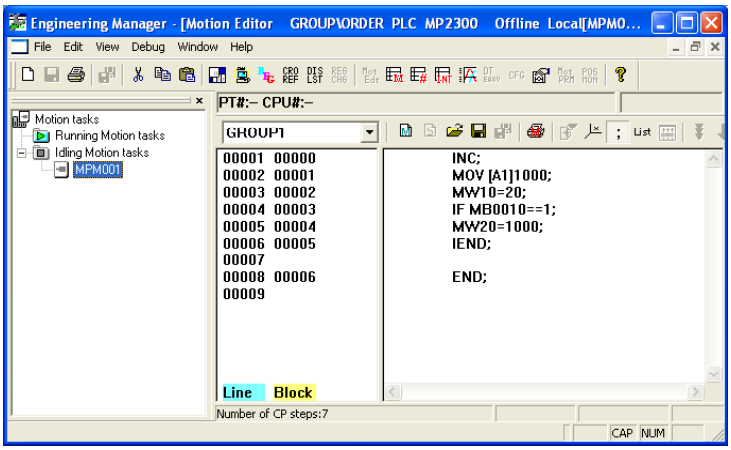
No.3 The task manager's default display

When newly installing it for the convenience improvement of the motion function, the motion task manager became effective by default.

It comes to be able to do the following operations easily by using this function.

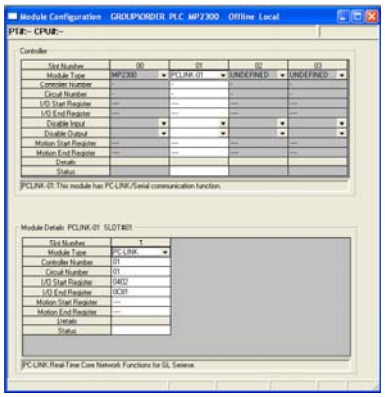
1) Display of Running Motion tasks/Idling Motion tasks
2) Task state display and debug operation while Debug mode.
3) Display of alarm information on task

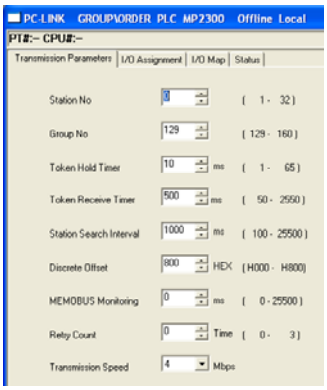




No.4 PC-LINK module addition

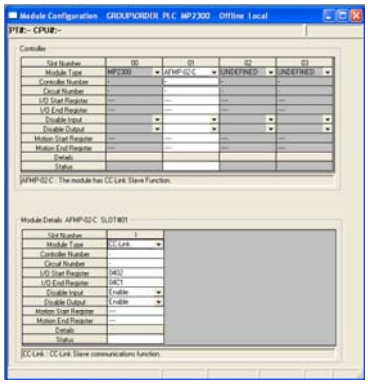
The PC-LINK function was added.

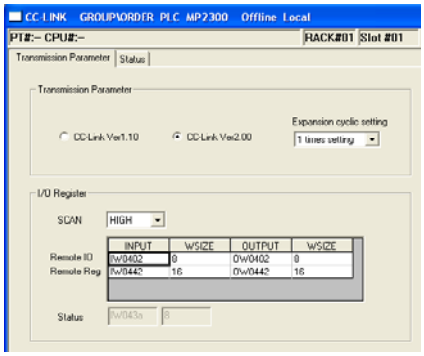




No.5 AFMP-02-C module addition

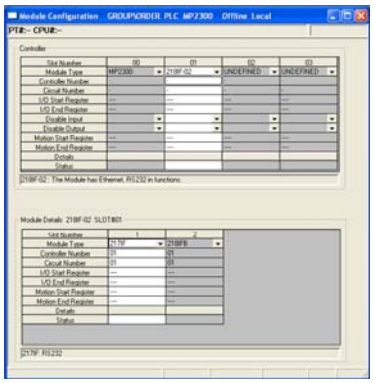
The AFMP-02-C module that was the CC-LINK module made by the Anywire Corporation was added.

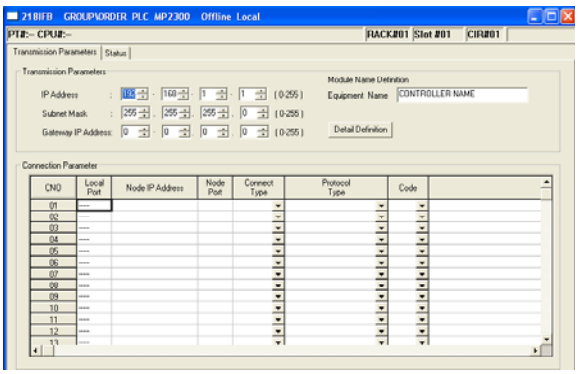




No.6 218IF-02 module addition

218IF-02 module was added. 218IF-02 module has serial communications function (217IF) and high-speed Ethernet function (218IFB).





No.7 New motion instruction addition

The ASCII/SSEE/FUNC/C-TSK/C-FUNC instruction was newly added as a motion instruction.

< Instruction explanation >

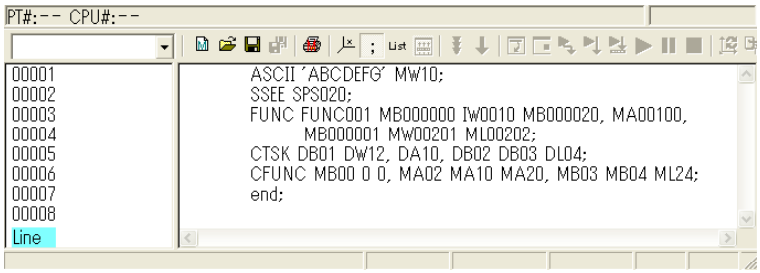
ASCII: ASCII character string is set to a specified register.

SSEE: The sequence subprogram is called.

FUNC: Function drawing call from sequence program

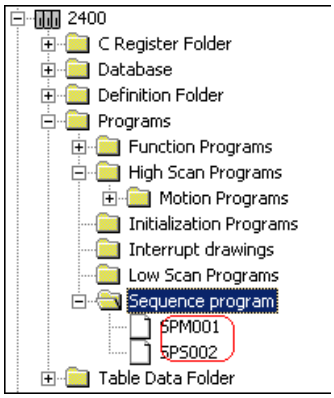
C-TSK: Call of C language task

C-FUNC: Call of C language function



No.8 For sequence program

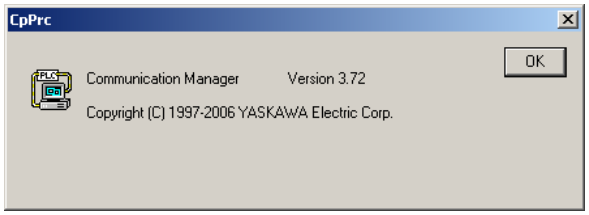
Sequence program (SPMxxx/SPSxxx) executed at each scanning was able to be made.



*: The sequence program can be used only with MP2310/MP2300S.

No.9 VersionUP in communication process

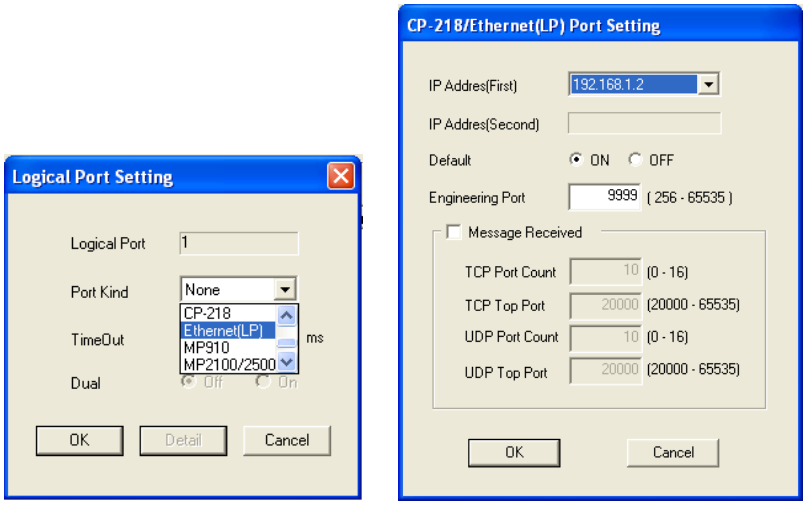
The communication process improved to Ver.3.72 in the version.



The content of the change is as follows.

1. Correction of specification of demand of sending again of PP command
2. R/W correspondence of sequence program
3. Change of specification of communication log data (The log is not output).
4. For Ethernet(LP) in communication process

Ethernet(LP) was added to the communication process as a port for high-speed Ethernet.This port can be used by built-in 218IFA module of MP2300S/MP2310 or 218IFB module of 218IF-02.



< Attention >

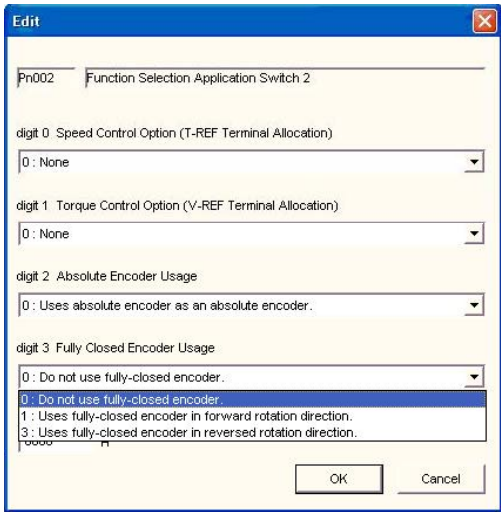
- When it accesses the controller by using the CP218 port and the Ethernet(LP) port that is an existing communication port at the same time, operation cannot be secured.
- Because this communication port is a port only for high-speed Ethernet, it is not possible to use it by an existing 218IF-01 module. Please connect it by using the CP218 port when you make them coexist with 218IF-01.

No.10 Motion program preservation processing speed-up

When the motion program was saved by the MP2000 series, it saved it at high speed. Because to have stopped reading unnecessary data.

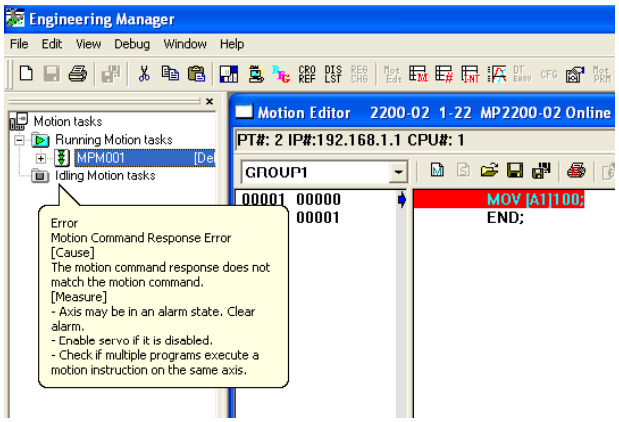
No.11 Change of display name of motion parameter

The mark of Pn002:nible3 of the SGDS servo was corrected.



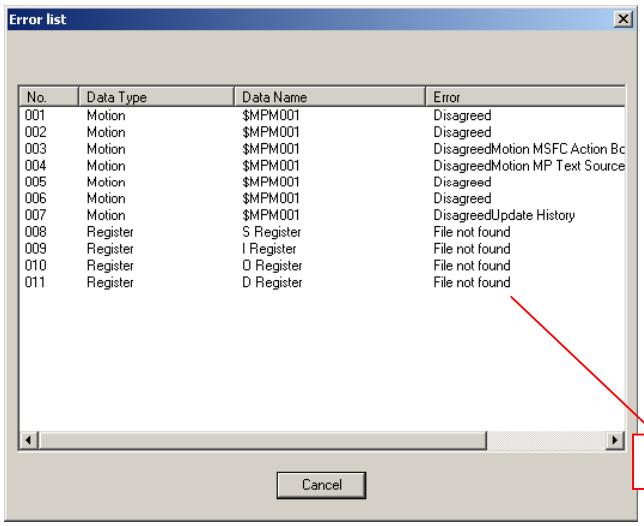
No.12 The motion task manager's improvement

For the motion task manager, when the mouse was moved to the tree when the error occurred while executing the motion program, the content of the error and measures were displayed by balloon help.



No.13 Detaching from object of comparison of unnecessary packet

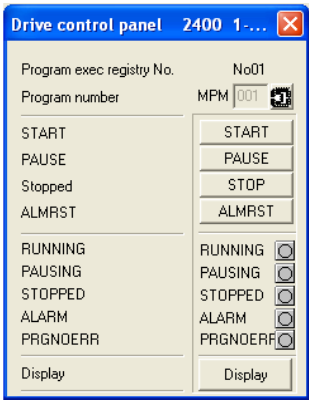
Because unnecessary packets of the program had been compared when the motion programs were compared, the error with an uncertain content was occasionally reported to the comparison result. Therefore, an unnecessary packet was removed from the object of comparison.



Comparison error list before version 5.37.

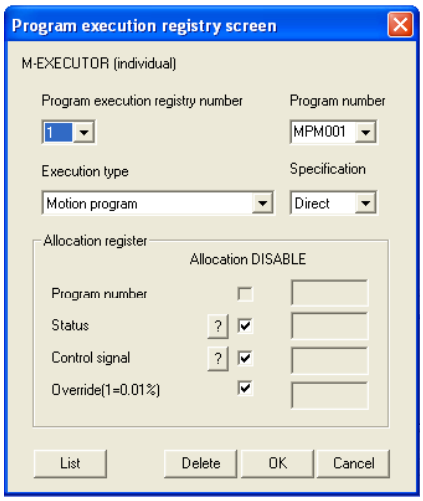
No.14 Driving control panel

In MP2300S/MP2310, the driving control panel to be able to control the motion program easily was added.



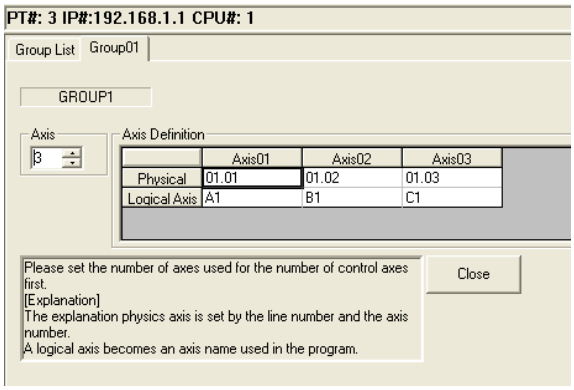
No.15 Addition of program execution registration screen

In MP2300S/MP2310, the function that the executed motion program/ sequence program was able to be registered to the system easily was added.



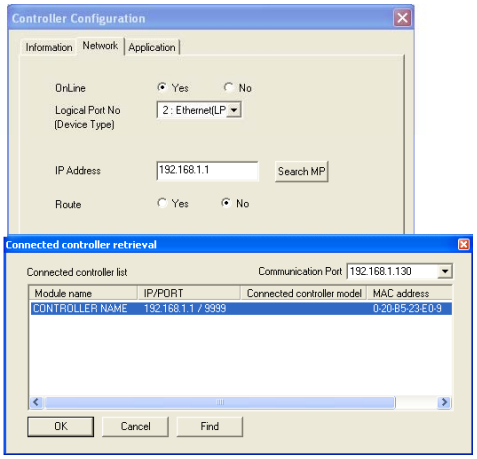
No.16 Review of screen composition of group definition screen

The content of the display of the group definition of the MP2000 series was reviewed, and only necessary minimum item was displayed. Moreover, if there was no group definition in the environment when the motion program was made, the definition of three axes was prepared by default, and the motion program was able to be made at once.



No.17 Easy-Connection function

Even if controller's IP address was not understood, an easy, connected function that the communication module connected with Ethernet was able to be retrieved was added. When Ethernet(LP) has been selected as a communication port, it is possible to use it.

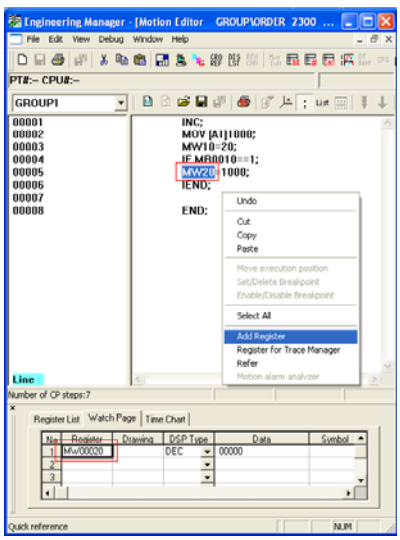


- Only 218IFA/218IFB of this function connected with Ethernet is effective.
- The retrieval module name, Internet Protocol address, the port number, the controller model, and the MAC address of the connected communication module can be acquired.
- When the retrieved list is selected, Internet Protocol address of the correspondence is set as a connection destination.
- The module name displayed on this screen can be set to an arbitrary name on the detailed definition screen of 218IFA/218IFB.

No.18 For Quick Watch

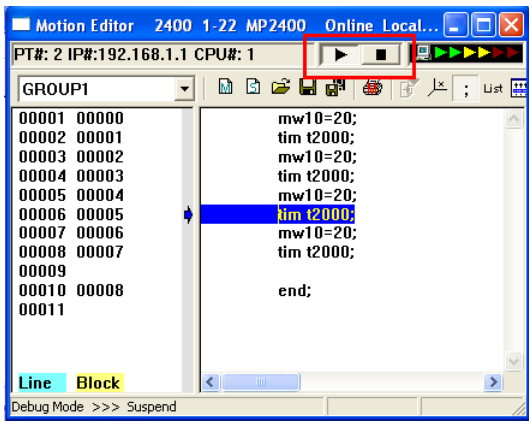
"Add Register" of the pop-up menu in the motion editor was made effective. When the watch page of a quick reference has been selected, this item becomes effective.

When the register is selected on the motion editor, and "Add Register " is executed, the selected register is registered on the watch page.



No.19 The default of an online monitor is made effective.

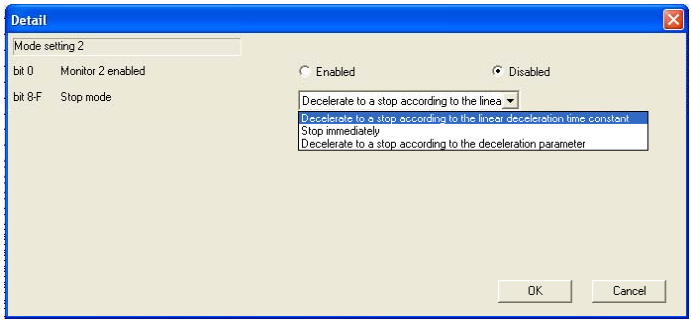
The monitor function of the motion editor of online made default effective.



No.20 Setup parameter addition

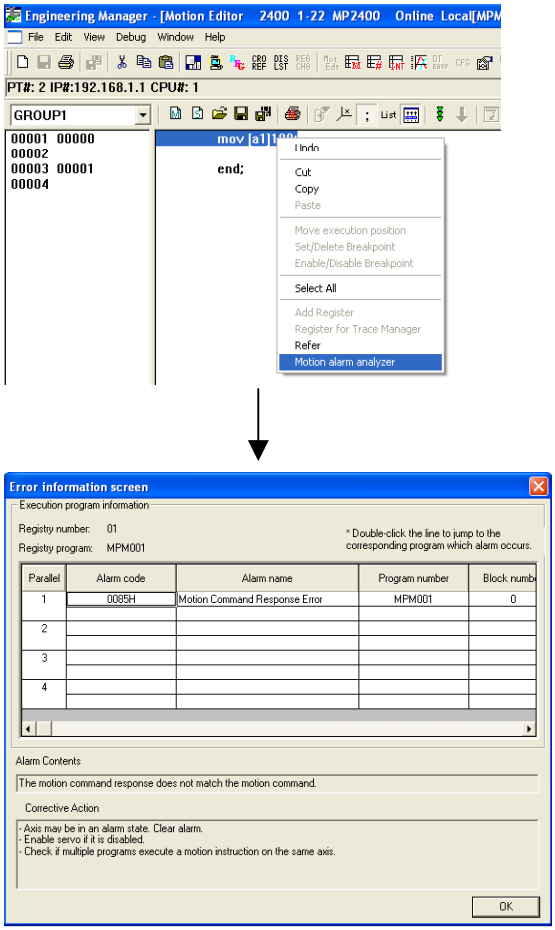
"Stop mode" was added to SVB setup parameter No.2.
Details of this item are as follows.

- "Decelerate to a stop according to the linear deceleration time constant"
- "Stop immediately"
- "Decelerate to a stop according to the deceleration parameter"



No.21 The motion alarm analysis screen is added.

An analytical function of the error that had occurred when the motion program was executed was added.
The trouble shoot of the alarm occurred when the program is executed can be easily done.

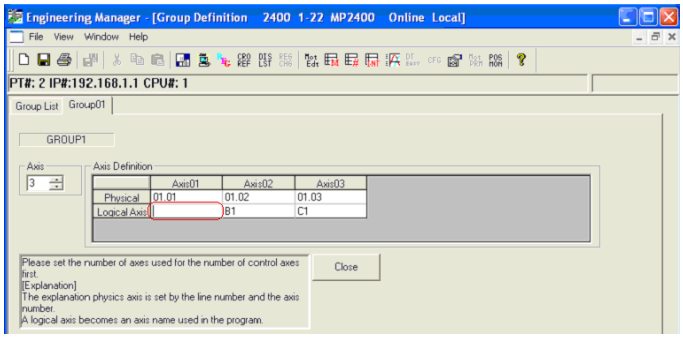


*: In this function, it is an effective function only to use the MP2000 series.

No.22 Group definition name check addition

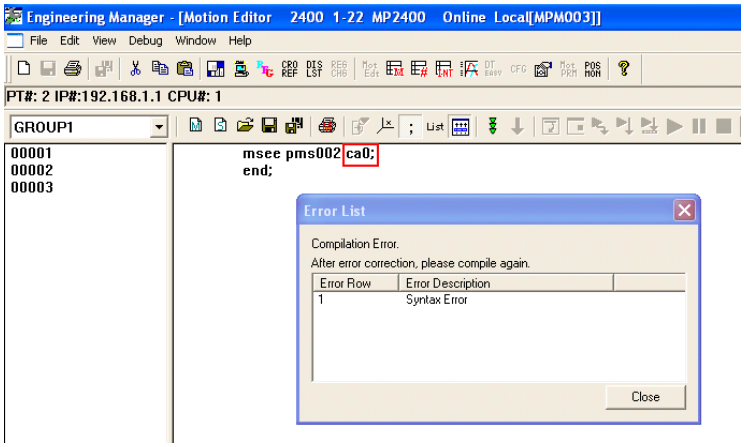
It was prohibited to input the following among names that were able to be set by the group definition as a logical axis name now.

- The input of the em-size space is prohibited.
- The input of 2BYTE code is prohibited.
- There is no character string setting.



No.23 Limitation of register that can be used for MSEE/SSEE instruction

When addressing was done by the MSEE/SSEE instruction used in the motion program and the sequence program, the specification of C register was prohibited.

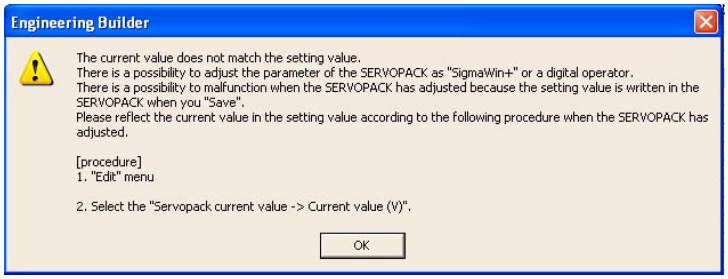


No.24 Deletion of unnecessary map information

Map information on the same program number was occasionally registered more than once by the map file of the motion program. And, this was corrected.

No.25 Servo packing parameter warning display trouble

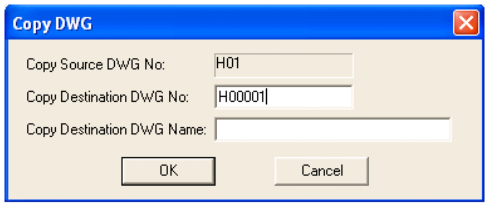
When a value and a set value are now different when the servo packing parameter screen is opened online, the warning display is done. However, the alert message was not displayed afterwards when the alert message was displayed once when the axis was switched and the servo packing was operated. And, when the axis was switched, it displayed it.



No.26 When the drawing is copied, the name check is defective.

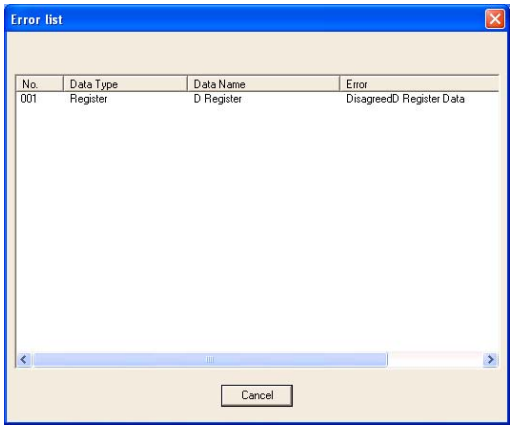
When the drawing name set to the copy destination was done, it judged it as a drawing name different excluding a complete agreement. (For example
, H01.01 and H1.001, etc.) Under such a condition, there was a problem that a copy former drawing is deleted when the copy was executed. And, after the input drawing name had been changed to a correct name when the drawing name was checked, it compared it.

Example



No.27 Trouble when D register sizes 0 are compared

When D register size in the drawing was set to 0, it was detected as disagreement in the comparison. Therefore, when the comparison was executed, it did not make it to the object of comparison when 0 settings of D register.



No.28 For motion program instruction value cancellation of significant digits

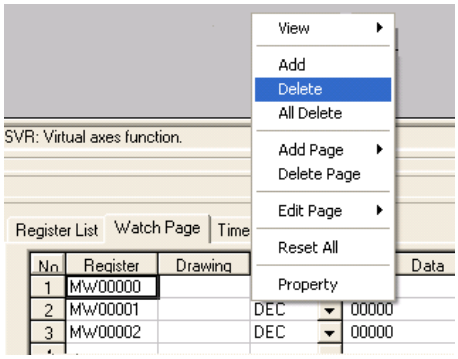
The instruction value is by the Cast of the operation in the compiler processing when a specific value is set in the motion program and the digit has falling what. Therefore, it corresponded to this.

Example) [MPM002]
MVS[S]450 [X]1.15 [Y]-0.9 [Z]14.6 FML1675 PFN;

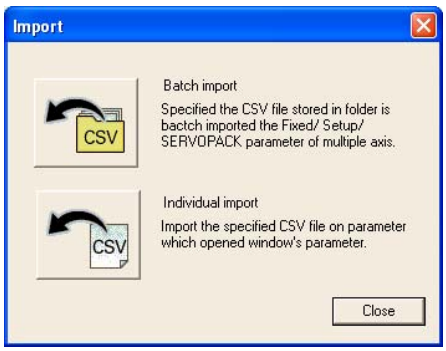
*: The movement zone of [X] axis was 1.14 for the above-mentioned.

No.29 Trouble of operation of menu of quick watch

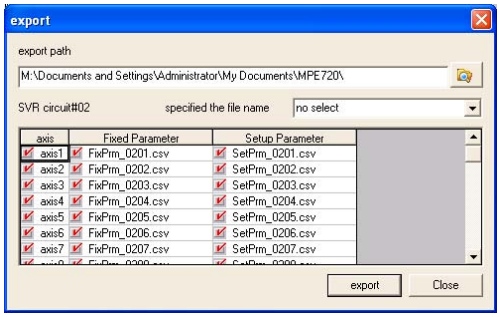
Because the motion parameter import function had started when the addition and the deletion of a quick watch were executed when a quick watch and the motion parameter screen were opened, it corrected it.



Add

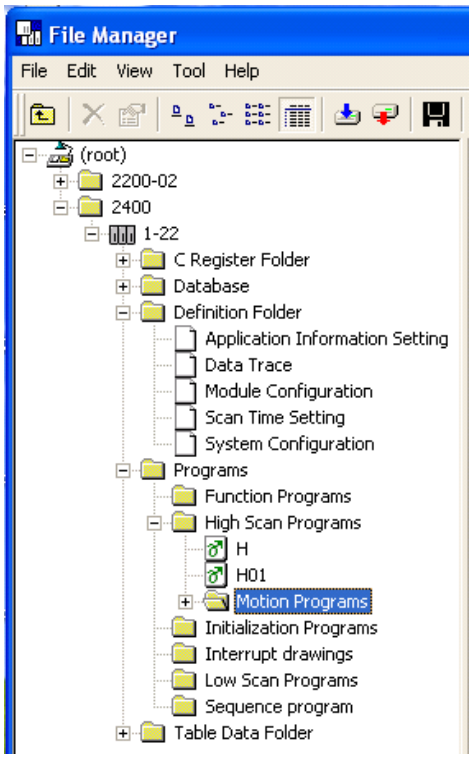


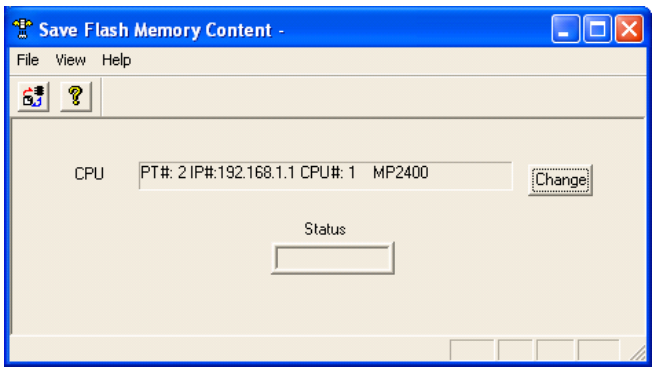
Delete



No.30 FLASH Saving in state to log on two or more CPU at the same time

When the FLASH saving by a simultaneous logon condition was executed, controller information might not be able to be read in two or more CPU correctly by the focus position in the file manager. Therefore, when two or more PLC folders were logged on online, the FLASH preservation was occasionally done to a controller different from the controller who started preserving FLASH. Therefore, this was corrected.

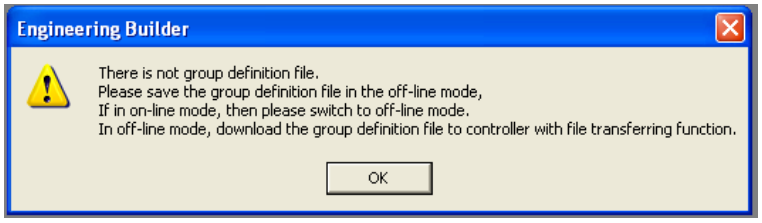




No.31 Error message correction when motion program is saved

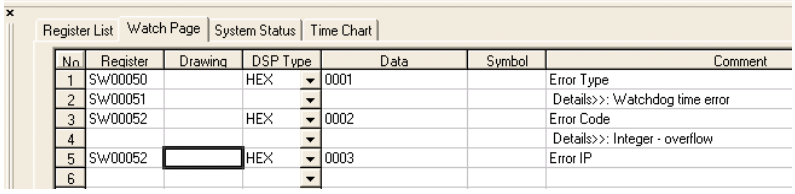
Because the alert message displayed for the group definition not to exist when the motion program was saved in an English version had been garbled, it corrected it.

It corrected it like the following dialogs' being displayed.



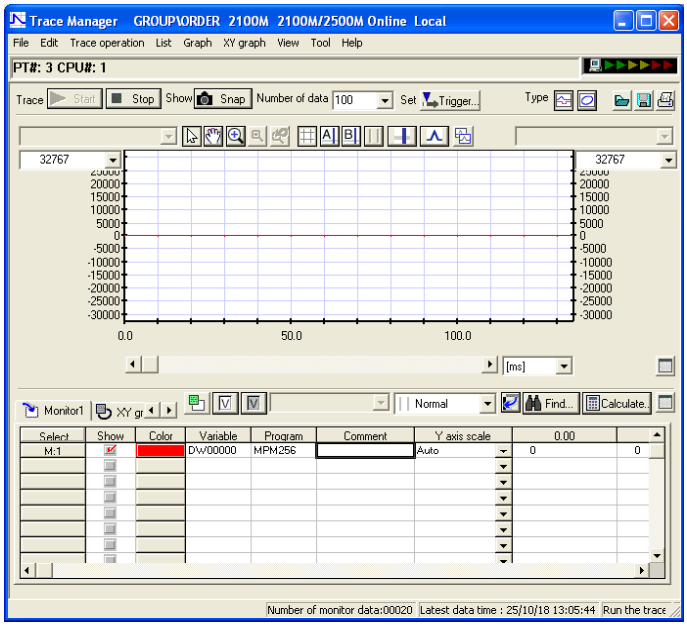
No.32 Quick reference display trouble

Because the register registered by the quick watch display of online and trouble to which the position where the value was displayed shifted now had occurred when MP900Series controller was used, this was corrected.



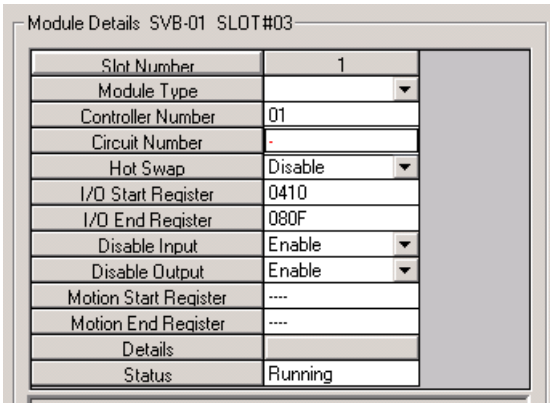
No.33 Trace trouble of motion program

This was corrected because it failed in saving the data trace definition when the program number was MPM/MPS256 when the trace of the data of the motion program was executed.



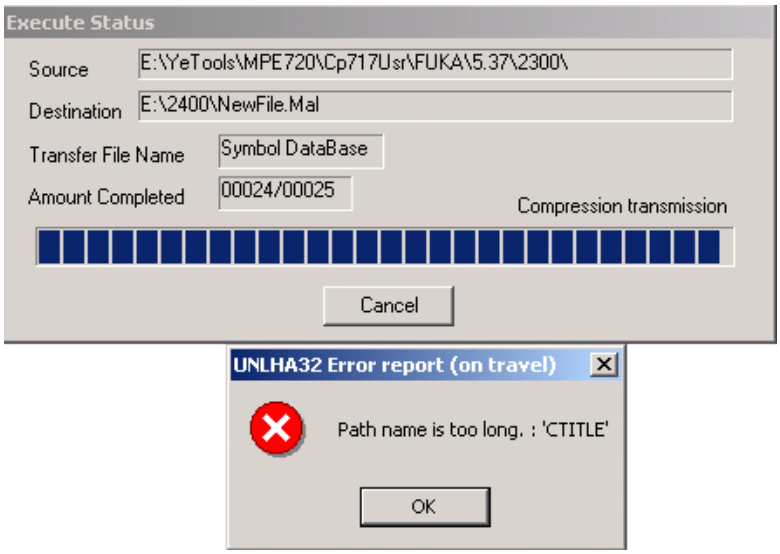
No.34 MPE720 development securing area shortage of module composition

When correspondence module information on the controller who connected it exceeded 30, the module was not able to be displayed. Therefore, to progress as much as 100 module information, the area was expanded.



No.35 Trouble that cannot be forwarded in LHA32 latest version

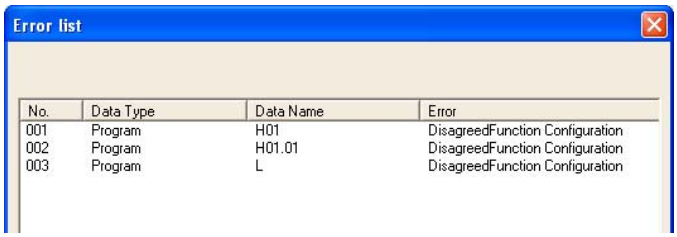
It corresponded to this because the error occurred when forwarding was executed if latest LHA was installed in the environment before MPE720 version 5.37 and forwarding failed.



No.36 When the application converter is used, "Function I/O" data remains in the drawing as garbage data.

"Function I/O definition" data was in the converted drawing when the application converter was used in the environment before MP720 version 5.37 and there were problem that remains to be solved as garbage. When the function existed together to the drawing in the PLC folder in the conversion origin.

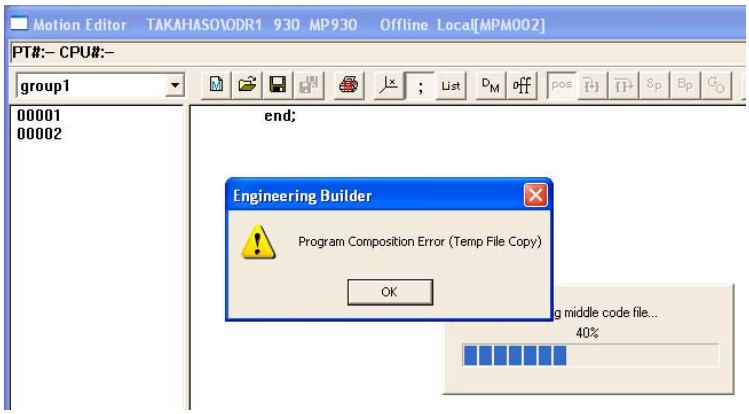
Under such a condition, if the comparison operation in the drawing was done, "Disagreement function I/O definition" is generated according to the operation. Therefore, it planned it so that such data should not remain even if the application change was executed.



However, there is already a possibility that "Function I/O definition" has already remained in drawing in the environment before MPE720 version 5.37 about the data of the execution of the application converter. However, it influences, it doesn't exist, and use it as controller operation, please ignore it, and please use it.

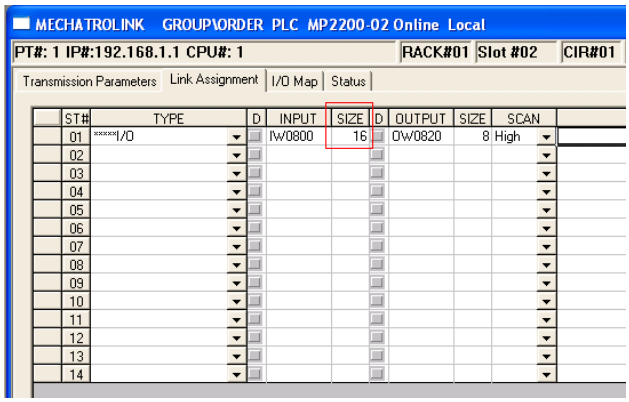
No.37 "Program Composition error" generation trouble when motion program is made

There was a thing that the program composition error (Temp File Copy) occurs according to use environment when the motion program was made by the MP900 series. Therefore, it coped to this.



No.38 The set size check of *****I/O is defective.

As the upper limit of register layout size of *****IO, MECHATROLINK (17 byte mode) is selected to 8word and MECHATROLINK (32 byte mode) is selected to 16word. Therefore, the input size was changed according to the specification.



No.39 The data trace reading is defective.

When the trace data was displayed by using the trace manager, data was missed according to the acquisition data size and it was displayed occasionally. Therefore, this was corrected.