



Release Notes for MotionWorks IEC

Release 1.2.3 Build 14

Yaskawa America, Inc.

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Note: Known Issue 6557 was added on October 10, 2011

1. New Features

Number	Summary	Release Notes
954	Before a Variable Group is deleted, move non I/O addressed variables to another Variable Group	Variable Groups created by the Hardware Configuration which were moved the fixed address range or had to be removed because the device was removed or disabled, lost any variables that had been added by the user. Now these variables are detected under common conditions and moved to a new group, "User Variables."
1209	Provide better error handling for no gateway configuration (Must handle null values)	If the TCP/IP Settings had not been configured correctly for the MP2600iec, a non-specific error was reported while trying to connect with Hardware Configuration. This was caused by no (a null) Default Gateway Address setting on the controller.
1722	Support Pn824 and Pn825. Support use of Mechatrolink Option monitor 2.	The Hardware Configuration automatically configures controllers with Sigma III or Sigma V to allow use of option monitor 2 in the Mechatrolink packet. The data returned is configured by Pn825. The user can obtain the option monitor data through MC_ReadParameter 1312.
5776	Usability of New Variable rename / remapping for servopack improvement	Details: Existing projects with servo axes will have variables moved to a fixed address range. This could result in debugging errors. If this occurs, remove the axis variables from the 'User Variables' group.

2. Bug Fixes

Number	Summary	Release Notes
1272	Problem sending negative parameter values to Servopack	Previous versions did not allow a signed value to be set for Servopack parameters in Hardware Configuration. Resolution: Signed parameters are now supported.
1388	Renaming Configuration or Resource breaks Hardware Configuration	The Hardware Configuration would not load after renaming a Configuration or Resource in the Project tree window. The workaround to this was to close and reopen the MotionWorks IEC project. This issue has been fixed.
1431	Two logical inputs sometimes have the same ID in io.xml in the startup folder	Issue: Was possible to create a situation where LEDs on controller were overlapping with other I/O by varying combinations of adding/removing devices, saving and sending the offline configuration to the controller. Resolution: Bug was fixed.
1553	Return value for save configuration not checked	Issue: Was possible to get prompt to save twice if going online. If there was an error, going online continued anyway. Fix: If save fails, Hardware Configuration does not go online
1607	Simultaneous save in Hardware Configuration and compile in MotionWorks IEC causes MotionWorks IEC to crash	Issue: Prior versions allowed saving in Hardware Configuration at the same time as a compiling a project. This would cause MotionWorks IEC to crash with possible data loss.
1721	Converting from MP2300 to MP2600 the Hardware Configuration is defaulting the I/O drivers to the background task	Details: When converting from an MP2300 series controller to an MP2600, the controller I/O was set to the first task available instead of one of the CYCLIC tasks.
1723	Change choices for Pn511 digits 1, 2, & 3 (zero based)	The choices in the menu for Pn511 on digits 1, 2, & 3 were incorrect for selections 0-3 and 9-C. These selections have been updated to say 'Set Signal OFF'.
1732	Deleting a task in project converted to pro results in no task reassignment dialog	Improved seamlessness of Express to Pro project upgrade. After opening an Express project in Pro, without opening and saving in Hardware Configuration, deleting a task would not prompt to reassign I/O to another task. This would result in a compiler error to indicating that I/O was not initialized. In all other cases of deleting a task that has I/O assigned, a dialog prompted for I/O assignment selection. This issue has been corrected.
1761	Hardware Configuration not handling Move Aborted event for test moves	Details: Hardware Configuration Test Move form was not handling Move Aborted events from an external source. As a result, the software appeared to be in an unclear state, even though no additional move commands were being sent to the controller. This has been fixed.
1775	Sigma II and Sigma III ServoPack vars not same as Sigma 5	Sigma II, Sigma III and SMD variables were not identical to Sigma V variables for the same inputs or functions. After opening Hardware Configuration and Saving, the variable names will change to align with the Sigma-5 naming. The old variables will be moved to a group called 'User Variables.' You may need to change the name in POU's to match the corrected name. Yaskawa recommends deleting the old servopack variable names from the "User Variables" group and recompiling to be sure they are not inadvertently referenced in the project anymore.
1778	Customer variables are deleted by Hardware Configuration	Projects meeting the following criteria: Created with version 1.0.6 of MotionWorks IEC Configured with the controller was enabled as Modbus Slave and as an EtherNet/IP Adapter Containing a Phoenix Bus Coupler encountered an error when saved in a newer version of MotionWorks IEC. Under these circumstances, Variable Groups corresponding to the aforementioned devices were inappropriately moved to the new fixed address range. This bug has been fixed. These Variable Groups now retain their originally configured addresses.
5716	MP2600iec task priorities were not correctly mapped	IEC application task priorities 0, 1, 2, and 3 were internally mapped to the same priority. This issue has been fixed.

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5781	Attempting download to controller without auto discovered XML files in place files resulted in hardware error message	If the file system on the controller was modified outside of the Hardware Configuration or reset to factory defaults without rebooting, it is possible to be in a state that prevented project download. Now under these circumstances, a message is displayed at download time is given to reboot and correct the controller state.
5793	MP2600iec with Linear style Servopack missing Pn483 & 484, forward & reverse force limit on limits tab	Pn483 & Pn484 were only accessible from the All Parameters tab. Pn483 & Pn484 are now also displayed on the limits tab.
5840	Hardware Configuration generated Analog I/O in io.xml has <mask> field incorrectly set to 1, all outputs are ~0	Issue: In prior versions, configuration for analog output was not generated correctly by the Hardware Configuration. However, going online with a newly discovered project and saving in Hardware Configuration would yield the correct configuration. This problem has been fixed. The correct configuration can now be generated offline and sent to the controller.
5849	Multiple analog input cards have incorrect task assignment	Connecting to controller with multiple analog input cards, selecting the discovered configuration and saving, resulted in I/O configuration for analog cards in slots 2 & 3 being assigned to the Startup task, yet FastTask is displayed in Hardware Configuration.
5880	MP2600iec: Behavior of Set Coils is not predictable when bits are addressed as elements of words or bytes AND two contacts precede the set coil on the ladder rung	If a set coil (bit addressed as an element of a word or byte: Word.byte.bit) is used in a ladder rung with two contacts before the coil, the variable changes state when one of the contacts changes state. Set coil should only be cleared on a reset.
5885	Image file grows each time the bootproject is downloaded, download buttons behave differently	Issue: It was possible for the controller image file to grow and eventually break the controller. The only fix required returning the hardware to Yaskawa. This issue has been corrected.
5891	MP2600 allowed downloading files larger than the available flash	It is possible to write too much data to the flash file system if page layouts and source were included.
5908	Remove pagelayout bitmaps from Multiprog 4.8 and projects	These were unnecessary project components

3. Known Issues

Number	Summary	Release Notes	Workaround
638	Hardware Configuration Crash when MotionWorks IEC is not fully loaded	Issue: If blocked at a dialog box during MotionWorks IEC load, and you navigate to the Hardware Configuration executable to start up, the Hardware Configuration will display an error message.	Wait for MotionWorks IEC to finish loading and launch the Hardware Configuration from the tool bar.
875	Hardware Configuration does not run when launched by a user who did not install it and who does not have Administrator privileges	Administrative privileges are required to install on Windows Vista or higher	Login with Administrative privileges before installing.
1034	Cannot connect to the controller from the configuration tool if DNS reverse and forward lookups contain mis-matching entries	If the DNS reverse lookup for the controller IP address returns a host name that has a forward lookup to a different IP address, then connection with the Hardware Configuration will fail.	Use a different IP address for the controller or fix the DNS entries on the DNS server.
1041	Cannot create a MotionWorks IEC project using the Project Wizard - Config tool fails to launch because configfiles directory is missing.	Cannot launch Hardware Configuration for project created with the project wizard	Create projects with one of the templates.

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1241	LREAL_to_DINT incorrect conversion is incorrect	The LREAL_To_DINT function block truncates values. The help file indicates that it rounds values.	
1390	CrypKey license manager breaks if Parker CTC InteractX 3.0 is installed.	Issue: If Parker CTC InteractX 3.0 is installed after MotionWorks IEC, MotionWorks IEC will not function.	Workaround options: 1. Install InteractX before installing MotionWorks IEC or 2. Run SetupEx.exe from the MotionWorks IEC install directory then reboot
1516	Project source code stored on controller is saved with wrong extension in express (ZipFile.zwt, should be .zwe)	Issue: Project source code is saved with wrong extension in MotionWorksIEC Express (ZipFile.zwt, should be .zwe) after downloading the source code to the controller.	After uploading from the project archive on the web interface, extract ZipFile.zwt, change file extension to .zwe, then open it with MotionWorks IEC Express.
1593	Function block outputs are not retained on warm start	The outputs of function blocks like CTU (counter up), CTD, TON etc do not get retained on a warm start even though they are checked to be retained.	
1608	Error "No suitable converter error for projects create with the version '2.0' of MotionWorks IEC Pro"	No suitable converter error can occur with old MotionWorks IEC express projects. The cause of this error is unknown.	<ol style="list-style-type: none"> 1. Open the .zwe project (this will extract the .mwe project but fail to open it) 2. Delete the .mwe file. 3. Copy and paste any .mwe file to where deleted .mwe file was located 4. Rename the pasted .mwe file 5. Open project 6. Compile
1621	MP2600iec - No values available for functions	While debugging functions on the MP2600 it is not possible to see variable values inside functions.	
1693	Slow compilation when Symantec Antivirus is enabled	Comiler runs slowly when Symantec Antivirus is enabled.	Exclude MotionWorks IEC file types from virus scan. File types: cic, dbd, dip, dit, diw, st1, sto
1736	Attaching ENO output variable on conversion blocks (eg. LREAL_TO_REAL) messes up the converted output value	If an ENO variable is attached to a data type conversion block like LREAL_TO_REAL, the conversion is incorrect.	
5412	PLC type (MP2600iec) does not support EN/ENO	Details: On the MP2310iec and MP2300Siec, function could optionally have EN input and ENO output. On the MP2600iec, this option is not available.	Use the Math Toolbox available from www.yaskawa.com for equivalent functionality.
5751	MP2600iec Logic Analyzer does not return data when synchronized with fast scan rates of 2 or 4 mSec	When the CPU is heavily loaded, the logic analyzer does not return data.	Reduce the cpu load by increasing the update period or the task time.
5834	Order of summand in ADD block is critical	The order in which summands are used in an add block is critical for the block to function. For example var1 (type: LREAL) + LREAL#0.5 = var1 is the operation that needs to be carried out. If var1 is the first summand it works OK. However if var1 is used as the second summand and LREAL 0.5 is the first summand, there are no results.	

Number	Summary	Release Notes	Workaround
5864	e-License transfer not working		Transfer the license using a file with a USB key.
5911	Multiple bits referenced from a located DWORD used on contacts in a ladder rung causes program to not compile	If more than 3 implicit addressed contacts are connected together then the compiler error "Error during generating native code!" can occur. Example: EIP_Inputs.X0 & EIP_Inputs.X1 & EIP_Inputs.X2 ...	Put the contacts on separate rungs.
5935	How to export current values from the watch window in MotionWorksIEC	The way to import and export current values is not obvious to the user. See "workaround" for the correct steps.	To export the current values of variables: 1) Add variables to the watch window 2) Right click and choose "Read recipe" (reads the current value into the default value) 3) Right click and choose Export (the default value) To overwrite the current values reverse the procedure: 1) Import into the watch window to read in new default values. 2) Write recipe to overwrite the current value with the default value.
6557	If the servopack has an AC90 alarm (encoder not connected), the hardware configuration does not go online with the controller (MP2300Siec, MP2310iec and MP2600iec)	After the connect button is presses and the desired configuration is chosen, it starts writing parameters and then suddenly disconnects	This has been fixed in MotionWorks IEC v 2.0