



Release Notes for MotionWorks IEC

Release 2.5.0 Build 78

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1. New Features

Number	Summary	Release Notes
6133	Allow saving and reusing Logic Analyzer setup.	Allows transferring the Logic Analyzer configuration between users as a way of communicating troubleshooting procedures. Logic Analyzer traces can be saved and recalled via *.lad files.
7094	Set Unit ID for Modbus Slaves	Previously, the UnitID was fixed at a value of 1, but some devices require another UnitID to communicate, so now this is a configurable setting.
7181	Timeout value added to axis.xml for linear axes without hall sensor	Linear motors without hall sensors must detect the pole phasing before running, which could take longer than the default 300 ms timeout. The user can now set the enable timeout appropriate for their motor using controller parameter 2008.
7288	Support JEPMC-MTD2310-E (MECHATROLINK-III 64-points I/O Module)	Added support for JEPMC-MTD2310-E I/O. The Hardware Configuration automatically allocates 64 inputs and 64 outputs in the IEC global variables.
7364	Reset Mechatrolink-III node response times	Improved Mechatrolink-III configuration to allow the user to better judge tradeoffs between performance and robustness to cabling changes. Changes include: (1) Displaying both the measured and the configured response times for all nodes. (2) Displaying the measured and configured bandwidth utilization (3) Allowing the user to set the default response times (4) Adding functionality to set all configured response times (a) to the measure response, (b) the maximum measured response time or (c) the default response time.
7399	Pn081 (Application Function Select Switch 81) added to Hardware Configuration	This parameter relates to the configuration of the encoder option card
7456	Support MP3200iec 3 slot rack JEPMC-BUB30003-E	Added support for JEPMC-BUB30003-E.
7467	Support M-Systems M-III IO modules	Added support for M-Systems Mechatrolink-III I/O. The Hardware Configuration automatically allocates 60 bytes of I/O memory in the PLC application. The M-Systems I/O module must be configured to communicate in 64 byte packet mode.
7468	Toolbar Icon added to create Archive.Zip file from PC project files without actual hardware	MotionWorks IEC now supports creating an archive.zip by the inclusion of a new toolbar icon on the Hardware Configuration toolbar.
7487	Warn users if LIO card I/O driver is run faster than 500 usec	Assigning option card I/O to an IEC task running faster than 2000 Hz is not allowed, and doing so will result in a warning.
7502	Modbus master activity timeout configuration	If the Modbus master has not made a request to the MPiec controller within the user settable time period, then the controller will automatically close the connection. The default timeout is 60 seconds, and the range is between 1 and 65335 seconds.



2. Bug Fixes

The following issues were identified and fixed for this release.

Number	Summary	Release Notes
6551	With MP2600iec continuous trace, no breaks in Logic Analyzer data when debug mode on/off if the project control dialog window is displayed	For MP2600iec (eCLR platform): When the project control dialog is closed, toggling debug mode on/off during continuous trace logging (Logic Analyzer) caused a break (disruption) in the logged data. This is expected. When the project control dialog is open, toggling debug mode on and off results in the data display being time delayed. The project control dialog window must be closed and then debug mode toggled for the display to catch up.
7040	Logic Analyzer stopped operating if the System Task was selected	MP2600iec only: The Logic Analyzer stopped working if a System task was chosen for the synchronization task. If a System Task was chosen and the red "start logging" icon was pressed, an "Invalid Trigger Condition" error occurred.
7421	Hardware Configuration display issues with TCP/IP settings on Chinese language installations	With Chinese language installations, TCP/IP settings inadvertently wrapped onto a second line and were only partially shown.
7453	Project Comparison: Drive Pn number formatting is inconsistent	Due to some number formatting issues, the project comparison feature was falsely identifying differences between the offline and servopack parameters.
7475	EIP: Configuration assembly -Optional data was saved incorrectly	Previously, any leading zeros were erroneously removed when saving the configuration



3. Known Issues

Number	Summary	Release Notes	Workaround
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.
886	User libraries must be added in specific order or cannot compile	If you add more than one user library to a project, they must be in a certain order if one uses datatypes declared in another. It is not currently possible to change the library order without deleting and re-adding them.	If you upgrade one user library (by deleting and reentering) and are referencing data types from that library in a another library, you will have to delete all of the following libraries that use that data type, to get them back in the correct order to compile. TIP: The entry point of the user library in the list is determined by where you right click in the Project tree. If you right click on the Libraries heading, the new library will be appended. If you right click on an existing library, the new library will be inserted.
920	Warn user if User Library contains FB with same name as found in main Project	If the programmer imports a user library that has functions or function blocks with the same name as the programmer created in his/her project, the function or function blocks in the imported user library will not appear in the edit window.	Use a naming convention for the library function to avoid conflicts with application code.
1034	Cannot connect to the controller from the Hardware Configuration 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 – Hardware Configuration fails to launch because configfiles directory is missing.	Cannot launch Hardware Configuration for project created with the project wizard	Create a project with one of the predefined templates for a controller model.
1165	Single Step debug does not always work	Single step debug mode does not work if multiple instances of a function block exist in the project (Editor will display the wrong instance with incorrect debug values.)	If other instances are unused, delete those instances of function blocks before debugging. Otherwise, debugging can proceed if you click on the correct tab for the proper instance after each time the code stops at a breakpoint.
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



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1516	Project source code stored on controller has wrong extension in express (ZipFile.zwt, should be .zwe)	Issue: Project source code is saved with wrong extension for MotionWorks IEC Express usage. (ZipFile.zwt, should be .zwe) when downloading the source code to the controller.	After uploading from the project archive from 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.	
1693	Slow compilation when Symantec Antivirus is enabled	Compiler runs slowly when Symantec Antivirus is enabled.	Exclude MotionWorks IEC file types from virus scan. File types: cic, dbd, dip, dit, diw, st1, sto
5753	MP2600iec logging does not upload data when "stop" is pressed.	MP2600 Logic Analyzer will not upload data after pressing the stop button. The log buffer must fill up first for the data to be transferred.	
5833	I/O group address range does not match text in global variables I/O group name	Editing the name of EtherNet/IP or Modbus device, or adding and deleting devices with the same settings can cause a disconnect between I/O Groups and Variable Groups that can cause the variable addresses to be unrelated to I/O group address range.	Save the Hardware Configuration between deleting a device and re entering it.
5916	Hardware Configuration logging fixes the sample time at 10ms, should use the Mechatrolink cycle period		If faster sampling is desired, Create a task in the IEC application that runs at the same rate as the Mechatrolink cycle, add MC_ReadParameter function blocks to that task, and use the Logic Analyzer to record data.
5922	Zipped project size is larger than necessary	PageLayouts increase the zipped project or downloaded source size by about 1MB. These files are not necessary to be included.	<p>1) Go to C:\Documents and Settings\All Users\Documents\MotionWorks IEC Pro\Pagelayouts Delete all the .bmp files EXCEPT logo.bmp AND all three .plt files.</p> <p>2) When Save/Zippping a project, UNCHECK "Zip Pagelayouts", that will stop the bitmaps from getting included in a new zip archive.</p> <p>3) When download source code to a controller, UNCHECK "Include page layouts."</p>



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6029	The toolbar is slow to display and flashes with every mouse click in the editor	When running MotionWorks IEC 2 on Windows XP SP3, the toolbar can be slow to repaint and repaints on every mouse click, even in the ladder editor.	It has been found that on Windows XP machines using the NVIDIA Quadro video chips this problem is more likely to occur. A workaround in this case is to go to: Control Panel->Display->Settings Tab->Advanced->Troubleshoot tab->Hardware Acceleration. Change this setting from "Full" to "Disable cursor and bitmap accelerations". This is one step down from full. Press Apply and Ok.
6136	I/O Driver Initialization fails with 11 Modbus inputs and 11 Outputs	The maximum number of data blocks is 20 for Modbus TCP and 20 for Ethernet/IP.	
6163	Error Message: "Drive may be offline" for deleted drive	An Error message may be displayed indicating that parameters cannot be read when the Hardware Configuration connects to the controller. The drive may be listed in the controller's configuration files yet it cannot be found by the controller. It may be disconnected (the Mechatrolink cable could be unplugged or not seated properly), or it may be powered off.	Either connect or power up the missing drive, or remove the configuration files by choosing "Controller Configuration Utilities" from the Online menu and then selecting "Restore controller to factory defaults and reboot the controller". Note: this will remove the configuration from the controller, so ensure a backup copy exists.
6180	Error - cannot read drive parameters	This is believed to be related to CPU load when the axis count is high and the Mechatrolink rate is fast.	Turn off the RUN DIP switch, which will stop the IEC application code from executing, which will free up the CPU for other lower priority tasks such as handling requests from the Hardware Configuration software for reading drive parameters. Increase the Mechatrolink update rate.
6203	Old project with ProConOS firmware library included may not compile	ProConOS firmware library had a minor change. Older projects using this library may not compile.	Remove the ProConOS firmware library, compile the project and re-add the library. After this, the project should compile correctly.
6245	Status variable already exists message shows up even though it has been removed and the currently saved configuration does not have that variable	Status variable already exists message shows up even though it has been removed and the current saved configuration does not have that variable	Whenever information for a communication data block is deleted, save before reentering the information.

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6278	All firmware libraries not extracted when set to include in ZWT project	When a project contains a user library, library A, which contains an additional user library, library B, where library B is not directly referenced in the project. A compiler message indicates a that user libraries must be recompiled. At this point, it may be the case, that library B is not in the project.	Manually import the missing user library
6312	Setting a breakpoint in a MP2600iec project causes a watchdog	Single step debug and breakpoints will cause a watchdog on the MP2600iec (eCLR)	For MP2600iec (eCLR), disable the watchdogs on the tasks when using breakpoints or set WDT to at least 4-10ms.
6377	MotionWorks IEC 2.x does not install correctly when Avira virus scanner installed	MotionWorks IEC 2 will not work with Avira virus software installed due to Avira detecting CrypKey (the license registration software) as malware, http://www.avira.com/en/support-threats-description/tid/3488/tlang/en	Disable Avira, or exclude CrypKey files from the antivirus scanner. The CrypKey files to exclude are: *.rst,*.ent, *.key, *.41s, *.ind, cks*.tmp *.ngn.
6410	Function blocks with a structure input will not compile without a connected variable	The Y_CamIn & Y_CamOut blocks will not compile on a MP2600 project if the EngageData or DisengageData inputs are not connected. This did not occur in MotionWorks IEC version 1.x.	Connect a variable to the EngageData or DisengageData inputs.
6480	Cannot install MotionWorks IEC if multiple "All Users" folders exist	Sometimes a computer has an "All Users.Windows" folder or "All Users _Windows" folder in addition to the original "All Users" folder within "Documents and Settings" parent folder, which may cause the installer to abort and uninstall itself. when there are multiple "All Users" folders, the original folder is usually no longer active and is a backup used by Windows. Error message near installation's end says: Unable to complete MotionWorks IEC Pro installation. Please rerun setup from the beginning.	<ol style="list-style-type: none"> 1. While error message is still opened, save a backup copy of the "Yaskawa\MotionWorks IEC Pro\[#_#_#_#]" application data folder from "All Users.Windows" or whichever is the active folder (e.g. C:\Document and Settings\All Users.Windows\Application Data\Yaskawa\MotionWorks IEC Pro\1_2_3_14_481) 2. Close the error message -> installer will uninstall 3. Copy the backed up folder to "All Users" 4. Install again -> installer passes check for MWIEC application data folder and finishes
6579	The SEL_LREAL function causes "Error during generating native code!"	Using the SEL_LREAL function in a eCLR (MP2600) project will cause the project to not compile, issuing a "Error during generating native code!" message.	Create your own code to select between two LREAL values by using a Boolean on two Move blocks.
6622	Project Wizard does not behave as expected.	In MotionWorks IEC 2 Express, the Project Wizard will not create a new project.	For new projects, use the project templates instead of the Project Wizard.
6628	Continuous trace mode shows a value of -1.#QNANO if debugging mode is stopped and restarted	Continuous trace mode cannot guarantee that samples will not be dropped. When samples are dropped due to cpu overload or other reasons, a value of "-1.#QNANO" will appear when the data is exported. For a more accurate trace use non-continuous mode.	

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6646	Uninstalling 2.0.0 with 2.1.0 setup displays error about .NET 3.5	<p>.Net 3.5 is required for MotionWorks IEC 2.1.0. This installer for .Net 3.5 is over 230 MB, so Yaskawa decided not to include it in the MotionWorks IEC installer package. Please download it from Microsoft as needed for Win XP.</p> <p>http://download.microsoft.com/download/2/0/e/20e90413-712f-438c-988e-fdaa79a8ac3d/dotnetfx35.exe</p>	
6795	Unidentified Unicode text strings when using "Language for non-Unicode programs" setting	<p>This occurs when the MotionWorks IEC language is set to Japanese or Simplified Chinese on an English language OS. There are some situations where the displayed text is unidentifiable; a series of question marks are displayed instead.</p>	<p>To display the correct Japanese characters in Windows 7 do the following 3 things:</p> <ol style="list-style-type: none"> 1. Install all the Asian language packs (Japanese, Chinese Traditional, Chinese Simplified) Do this using windows update. 2. Set the language for non-Unicode programs to Japanese (Settings->Control Panel->Region and Language->Administrative->Change my system locale... set to Japanese and restart) 3. Use Japanese formats: Settings->Control Panel->Region and Language->Formats, Select Japanese.
7049	Maximum size of a POU or global variables for MP3200iec is 4MB	<p>The MP3200iec controller has 20 MB of non-retain data memory, however the maximum amount of data in one POU or the global variables table is 4MB.</p>	
7052	After Communication Time out - Controller Utilities is Unavailable	<p>When online, if communication to the controller is lost the Online Menu has items enabled and disabled as if the controller is still online.</p>	<p>This can corrected by attempting to go online again. Using the invalid menu items does not produce any negative result.</p>
7444	Axis is taken offline when trying to enable with alarm present	<p>This issue applies to the Hardware Configuration. When on the Tuning or Test Move tabs, and the Enable Axis icon is pressed while there is a servopack alarm, the axis will be switched to "Offline" status in the Configuration Tree.</p>	<p>Switch the Hardware Configuration offline and then back to online. Clear the servopack alarm before attempting to enable the axis.</p>