Release Notes for MotionWorks IEC

Release 2.3.0 Build 66

Yaskawa America, Inc.

August 22, 2012

The major addition to version 2.3 is support for the MP3200iec. Additional new features and bug fixes are included below.

1. New Features

Number	Summary	Release Notes
6400	Support Sigma 5 Mini (SGMMV) Mechatrolink-II and III drive	At the end of Summer 2012, Yaskawa will release the Sigma-5 mini, Mechatrolink-II and III versions. These products are supported by the MP2300Siec, MP2310iec and MP3200iec controllers.
6845	Support Fanless ServoPack(SGDV-******B)	There is a new fanless version of the sigma-5 servopack.
6929	Advise users to upgrade their software when a configuration cannot be opened	When a configuration was saved in a more recent version, the behavior was changed to suggest updating to a newer version of the MotionWorks IEC software. In prior versions, users may have seen the "Please call 1-800 YASKAWA for support" message. User will now receive the following message: "The Hardware Configuration failed to open. It was saved by a more recent version, x.x.x.x. Please update MotionWorks IEC to the newer version and try to open the Hardware Configuration again."
n/a	Added support for "Sealed Project"	There is a new file extension option when saving a project, called a Sealed Project. When using this method, the project will become locked (read-only). Once a project is saved as a sealed project, the project name must be changed (revision control) to remove the read only restriction. The Sealed Project contains the compiled code, so when a sealed project is extracted, compilation is not necessary to debug the machine. This is good for maintenance technicians, and assisting with version control.

Number	Summary	Release Notes
1602	Add ability to link a CHM help file for a user library	Context sensitive help for a user library (or Toolbox) is now possible. This provides the ability to right click on a user created function block and display the appropriate help from a CHM file. YAI is planning to release a "Toolbox Installer" which will include the extracted versions of each toolbox, and include a copy of the help documentation. Coming Autumn 2012. Alternatively, to enable the use of the new help file system for User Libraries, put a CHM copy of the toolbox manual in the POE directory of User Library. C:\Documents and Settings\All Users\Documents\MotionWorks IEC 2 Pro\Libraries\Cam_Toolbox_v201 Several directories exist under the User Library project directory: C DT HW LIB POE Rename the help file (example) TM.MWIEC.01_MotionWorksIEC Toolbox 2012_02_10.CHM -> info001.chm Place it in the POE directory: C:\Documents and Settings\All Users\Documents\MotionWorks IEC 2 Pro\Libraries\Cam_Toolbox_v201\POE\info001.chm For countries other than the U.S, the numeric code in the filename if the same as the international area code: U.S. = info001.chm. In case of a German user interface use '049', Spanish = '034', French = '033', Japanese = '081' and Chinese = '086', however the User Library help is only available in English.

2. Bug Fixes

The following issues were identified and fixed for this release.

Number	Summary	Release Notes
6997	Hardware Configuration shows "Failed to write drive parameters" error	In certain circumstances, it was talking longer than a hard coded 4 second timeout to read data from drives that had alarms, such as A.810. The timeout was increased, so this error should not appear.
7002	SGDV Pn121 had incorrect units	SGDV Pn121 displayed the wrong units but was saving correctly. The units now show % instead of Hz.

3. Known Issues

Number	Summary	Release Notes	Workaround
638	Hardware Configuration Crashes 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.
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
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

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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.	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. 2) When Save/Zipping a project, UNCHECK "Zip Pagelayouts", that will stop the bitmaps from getting included in a new zip archive. 3) When download source code to a controller, UNCHECK "Include page layouts."
5935	How to export current values from the watch window in MotionWorks IEC	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.

Number	Summary	Release Notes	Workaround
5939	Changing a Task Interval may result in "… must be a multiple" message related to interval and watchdog multiple	This affects MP2600iec projects only.	The warnings are caused by a entering a value which is non-divisible-by-100 for the ScheduleInterval setting in eCLRResourceSettings.set in the project.
5987	Conversion of projects with a space in a user library name results in "invalid node name" errors.	If a MotionWorks IEC 1.x project includes libraries with spaces in the name, such as "Cam Toolbox v002", then an error occurs after opening in MotionWorks IEC 2: 'library 1' is an invalid node name. Spaces are not allowed in project names in MotionWorks IEC 1.x or 2.x. The project will compile and run, but the error will become a nuisance if the space characters are not removed.	Rename the libraries before converting to remove all spaces.
6001	Access violation occurs	Sometimes an access violation occurs when the following sequence is performed: 1. Unzip a project that asks to extract firmware libraries. 2. Move "Extracting Firmware Libraries" dialog to near upper right corner of MotionWorks IEC. 3. Close "Extracting Firmware Libraries" then close MotionWorks IEC immediately afterward. 4. Zip|unzip in progress dialog displays. 5. Close message, then close MotionWorks IEC. If Zip|unzip in progress dialog displays again, keep closing the message then close MotionWorks IEC afterward. 6. Access Violation occurs.	After opening or saving a project, wait a little time before closing the application.
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.

Number	Summary	Release Notes	Workaround
6086	Get the error message "SCG could not be started!" when compiling for an MP 2600iec	MP2600iec projects created in MotionWorks IEC 1.2.2 and earlier containing the ProConOS firmware library may not recompile correctly in 1.2.3 and later. There may be a "SCG could not be started!" error. This is caused because the ProConOS firmware libraries for MP2600iec in MotionWorks IEC versions 1.2.2 and later have the same version number (1.5) but are different.	1. Remove the ProConOS library from project. 2. Remove all ProConOS objects (functions or function blocks that are found in the library) until the project recompiles successfully (change ProConOS types to other types; remove or comment out ProConOS objects) This is important because all traces of the old ProConOS library will only be eliminated by a successful compile without the library. 3. Add ProConOS library back in. 4. Add the ProConOS objects back into the project.
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. |
| 6188 | Hardware Configuration cannot connect to an MP2300 controller when run as a Windows standard user, Initial Connectivity problem from Windows 7 | Sometimes, especially on the first time run, the Hardware Configuration will fail to connect to the controller when using Windows 7 when logged in as a standard user. | Open Internet explorer and browse to the controllers web page: http://[controller ip] and then click on "Alarm Reference". After doing this the Hardware Configuration will be able to connect successfully. |
| 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. |

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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.
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.
6394	Controller Parameter 1310 (Velocity Feedforward) is missing from 'All Parameters' tab in Hardware Configuration for a 2600 project		It's not possible to set the value from the Hardware Configuration, however, the parameter exists in the firmware and does operate as intended. Use MC_WriteParameter to set and MC_ReadParameter to verify the value.
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.	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

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6551	With MP2600iec continuous trace, no breaks in log on 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 causes a break 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.	When using continuous trace logging and toggling the debug mode on and off, close the project control dialog.
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.#QNAN0 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.#QNAN0" will appear when the data is exported. For a more accurate trace use non-continuous mode.	
6646	Uninstalling 2.0.0 with 2.1.0 setup displays error about .NET 3.5	.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. http://download.microsoft.com/download/2/0/e/20e90413-712f-438c-988e-fdaa79a8ac3d/dotnetfx35.exe	