

YASKAWA

Release Notes for MotionWorks IEC

Release 3.5.0.106

June 23, 2018

(v1.1 update August 27, 2018)

New Features		
Number	Summary	Release Notes
6694	Hardware Configuration: Changing Option Base type without removing option cards from the configuration is now supported.	Option bases for MP3200iec and MP3300iec controllers can now be changed in Hardware Configuration without removing cards from the controller. Existing card modules in option bases will be automatically exchanged to new option base when possible. If cards for unavailable slots or incompatible cards are detected, the Hardware Configuration will query whether to proceed with the change that would remove those devices.
7033	Global Replace replaces variables even if they are part of a structure and the name is too long	Global Replace functionality in MotionWorks IEC has been improved for very long names involving structure variables.
7186	User libraries are auto-compiled if required	The build menu now has an option called "Make Dependencies" which will compile all referenced user libraries if necessary.
7857	LIO-Y1 option card Supported	The LIO-Y1 option card is now supported by Hardware Configuration.
9187	Zipped (*.zwt) project now saves all nested user libraries	When zipping a project (*.zwt), all referenced libraries of all directly referenced libraries will be included.
10369	Users can restore parameter sort to default view	Sorting drive parameters in Hardware Configuration has been improved.
10506	Total number of Mechatrolink axis nodes is displayed.	Hardware Configuration now displays axis counts in the Mechatrolink page. The number of online axes, offline axes, and virtual axes are visible beneath the Mechatrolink grid. All simulated and missing axes are counted as offline axes.
10528	IP address settings to be set as part of archive / configuration transfer	In Hardware Configuration (HC), the option is added to change IP address of the target controller to match HC configuration. This is done with the "Query to Update IP Address" checkbox in the Controller Configurations Utilities dialog.
10721	MotomanSync EIP Adapter and Group configuration are supported in Hardware Configuration	Hardware Configuration now supports configuring an EtherNet/IP adapter device for MotomanSync robot controllers.
10762	Acknowledge button added to Logic Analyzer "Connected Variables" Clear function	There is now a confirmation prompt before clearing out the Logic Analyzer's connected variables in MotionWorks IEC to avoid accidental clearance.
10785	Logic Analyzer Improvements	MotionWorks IEC now handles nicely a download changes attempt while logic analyzer is actively recording. The application now prompts to stop recording or to cancel download changes. Previously versions of application would end up in an error state that was difficult to recover.
11097	MotionWorks IEC converts older versions of user libraries when converting old projects	When extracting user libraries from zipped projects, MotionWorks IEC now will prompt to automatically convert user libraries that were created in older versions of MotionWorks IEC. This behavior was present in versions prior to MotionWorks 3.4.0 but was inadvertently removed in version 3.4.0.

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New Features

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11137	Resource IP address displayed in Project Control Dialog	Project Control Dialog now displays resource name and IP address in MotionWorks IEC.
11156	XML file support for Exor Import / Export	The HMI Export feature for Exor JMobile software now exports in JMobile's XML format, which accepts additional information regarding the necessary byte swapping for a more seamless interoperation.
11158	PAIF (Pre-aligner) and 266IF (Profinet) option cards are supported in Hardware Configuration	Hardware Configuration now supports configuring the 266IF-02 option card (PROFINET communication slave module, JAPMC-CM2307-E) and PAIF option card (Pre-Aligner module, JAPMC-PA2300S-E) for MP3300iec controller.
11172	Oriental Multi-Axis Stepper Mechatrolink-III supported in Hardware Configuration	Mechatrolink-III steppers from Oriental Motor are now supported.
11297	Support libraries for MotomanSync added.	This release now includes the user libraries required to communicate with remote hosted robot controllers such as the YRC-1000.
11333	Added support for the 8-slot backplane required for the RM100 robot controller.	Hardware Configuration now supports option base part number JEMPC-BU3322-E for MP3300iec controllers. This option base is required for the RM100 MotomanSync robot control card module (part number JAPMC-RM3301R-E). (RM100 not fully supported in this release.)
11361	PLCopen Part 4 stub functions into PLCopenPart4 library.	This was a design change to reduce the number of libraries included in a PLCopen Part4 project which includes Mechatrolink based groups. The Group_Stub library is no longer necessary when using PLCopenPart4_v350.
11430	Added MC_CARTESIAN_REF_TO_VECTOR and VECTOR_TO_MC_CARTESIAN_REF function blocks to PLCopen Part 4 library.	These are functions to make it more convenient to switch between data types.
11561	Added Y_SelectTool for MotomanSync Groups	
11571	Added support for Sigma7 FT82 Mechatrolink-III drives	Sigma-7S FT82 option drive for special motors and SGM7D motor is now supported by Hardware Configuration.
11581	Improve Y_Jog* blocks so moves don't judder if used in relatively slow task.	Y_Jog* blocks have been updated to improve their performance when used in slower tasks.
11667	"Show Borders" feature set is no longer on as default.	Borders in the graphical editor have been turned OFF by default in MotionWorks IEC 3.5.0 due to borders (colors) affecting collision detection and TB mode display. The 3.4.0 release had turned borders ON by default. Show Borders can be configured at the 'Graphical Editor (2) tab' of the Options dialog.

Bug Fixes

Number	Identified Issue	Details
8042	Disallow adding a 218IF-Y1 option card to MP3200iec in Hardware Configuration	Hardware Configuration no longer allows configuring MP3200iec controllers with a 218IF-Y1 Communication card. Previously this configuration was allowed by Hardware Configuration even though such a configuration does not boot up correctly for MP3200iec controllers because the card is not supported by this controller.

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Bug Fixes

Number	Identified Issue	Details
8709	MotionWorks IEC open/save dialog should reference the last open/save folder, not the default project path.	Open Project and Save Project As dialogs for MotionWorks IEC now retain and use the last opened or saved directory.
10873	Ctrl-Scroll Wheel zooms backwards for variable worksheets	When using Ctrl+Scroll Wheel to zoom in a POU worksheet and a variable grid, the behavior was different. Scrolling the wheel up now zooms in (bigger) and scrolling the wheel down zooms out (smaller), the same as in POU worksheets.
10962	Internal Error! when global variables are assigned an incorrect datatype in %M Registers	Error handling for incorrect address prefixes assigned to user defined structure type variables has been improved. For example, assigning the address prefix 'X' to an AXIS_REF type variable's address (which is not a bit). The error is now specifically identified; "Go to error" functionality and double-clicking on this compile error will go to the source of the error.
10963	Accidentally putting a User-defined data type as an array index causes "Error During Generating native Code" compile error	Error handling when using non-integer array indexes has been improved. The error is now specifically identified; "Go to error" functionality and double-clicking on this compile error will point to the source of error.
10981	MotionWorks IEC crashes when zipping projects with 'Zip Pagelayouts' selected	This crash, which would only occur in MotionWorks IEC 3.4.0 on Windows 7 has been fixed.
11250	MotionWorks IEC crashes when an array variable with a variable index is added to the watch window or Logic Analyzer	This bug has been fixed. Example of variable added: "BoolArray2[Index]"
11266	Drag-and-Drop is not prohibited when project is set to "released"	Bug has been fixed where MotionWorks IEC would allow a project marked as "released" in the versioning to drag-and-drop items in the project tree to change the project structure order.
11267	Project is marked as "released" still allows Hardware Configuration to be changed.	Hardware Configuration no longer allows changes when the project is marked as 'Released' in the right click properties of the Project Tree Window. An error message will now be displayed in this scenario.
11305	Download Changes causes a PLC watchdog	This condition, which occurred frequently after being prompted to allow real-time violation, caused a watchdog. This problem has been corrected.
11328	VIPA SLIO: Runtime Exception: Invalid structure for reading or writing ProConOs I/O Driver	There were some VIPA SLIO configuration scenarios which could lead to incorrect Configuration Instance data in the configuration file "IO.XML", and cause a failure to start the driver communication with the VIPA device.
11356	Revert to allowing LD/FBD right power rail to be optional	The right power rail is optional again in ladder diagrams. MotionWorks IEC 3.4.0 unconditionally required the right power rail.
11357	Mechatrolink-III ServoPack input status incorrect. <i>Note: This may require programming changes if original project was done in v3.4.0.</i>	Default values for Mechatrolink-III ServoPack output signal monitor selection parameters (Pn868, Pn869, and Pn86A) have been modified to be 0x0000 (disable output signal monitors) to avoid conflict with input signal monitor selection parameters (Pn860 to Pn866). MotionWorks IEC 3.4.0 had enabled the Mechatrolink-III ServoPack output signal monitors, so project created in 3.4.0 with Mechatrolink-III ServoPacks should be modified to disable the Mechatrolink-III ServoPack output signal monitors whenever input signal monitors are used.
11390	Force Axis Names to be unique	Bug was fixed for Hardware Configuration allowing insertion of multi-axis drives where default axis name for secondary axis is already used in configuration.
11465	Group Stop caused by changing Y_GroupInputs.ControlMode input causes group to get stuck in GroupStopping state	This bug has been fixed, a group will no longer get stuck in the stopping state.

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Bug Fixes

Number	Identified Issue	Details
11480	Cannot copy and paste parameters from SGD7 400V	Bug has been fixed in Hardware Configuration that prevented parameter copy and paste between non-standard Sigma-7 drives.

Known Issues

Number	Known Issue	Details	Workaround
825	Project file name length is limited to 24 characters	File name length is limited to 24 characters which can cause issues when saving.	Use a filename with 24 characters or less.
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 Hardware Configuration if DNS reverse and forward lookups contain mismatching 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.
1165	Single Step debug does not always work	On MP2300Siec and MP2310 only, single step debug mode does not work if multiple instances of a function block exist. The 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.
1516	Project source code stored on controller has wrong extension in express (ZipFile.zwt, should be .zwe)	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 Zip File.zwt, change file extension to .zwe before opening it with MotionWorks IEC Express.
1693	Slow compilation when Symantec Antivirus is enables	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	Logic Analyzer does not upload data when toolbar button "Stop recording values" is pressed.	Logic Analyzer will not upload data after pressing the stop recording value button. The log buffer must fill up first for the data to be transferred.	Use continuous trace data logging.
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 reentering it.
6622	Project Wizard does not behave as expected.	In some circumstances, the Project Wizard will not create a new project.	For new projects, use the project templates instead of the Project Wizard.

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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.
6795	Unidentified Unicode text strings when using "Language for non-Unicode programs" setting	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.	1. Using Windows Update, install all the Asian language packs. 2. Set the language for non-Unicode programs to Japanese: Settings→Control Panel→Region and Language→Administrative→Change my system locale Use Japanese formats: Settings→Control Panel→Region and Language→Formats
7052	After Communication Time out, Controller Utilities is Unavailable	When online, if communication to the controller is lost the Online Menu has items enabled and disabled as if the controller is still online.	This can be corrected by attempting to go online again. Using the invalid menu items does not produce any negative result.
9868	Occasionally all keystrokes in a POU will stop working after using Hardware Configuration	On some computers, interacting with the Hardware Configuration window will cause all keystrokes in MotionWorks IEC to be intercepted, causing the keyboard to become nonfunctional within the program. Not all computers are affected. The problem can occur in computers with .NET 4.0 and 4.5.	Updating to the most recent .NET 4.5.1 framework resolves this issue.
11452	IMEMCPY, MEMCPY, MEMSET firmware function blocks moved from PROCONOS firmware library to LegacyProConOS firmware library	The MEMCPY and IMEMCPY function blocks are replaced by the MEMORY_COPY function block which is more stable than the older version. MEMSET function block is replaced with MEMORY_SET.	Replace old function blocks with MEMORY_COPY or MEMORY_SET FBs now in the PROCONOS library. (Alternately, include the firmware library LegacyProConOS in the project to continue using the older function blocks.)
11577	Hardware Configuration experiences significant slowdown on Windows 10 when using Controllers Configuration Utilities.	Closing the Controller Configuration Utilities box in Hardware Configuration takes several seconds longer when using Windows 10.	No workaround.
11766	MotionWorks IEC sometimes freezes if user uses "Create Global Variables from Externals" function.	There is a bug with multiple executions of the 'Create Global Variables from Externals' functionality in the same session that may cause MotionWorks IEC to freeze. The application needs to be killed and restarted to resume usage.	Close and restart MotionWorks IEC before executing again 'Create Global Variables from Externals'.