YASKAWA

Release Notes for MotionWorks IEC

Release 3.7.4

June 16, 2022

New Features		
Number	**Summary**	**Release Notes**
12636	MotomanSync: Initialize SpeedOverride to 100% as part of MS_Driver function block initialize routine	This is to establish a known override, where previously there could have been an unknown override value in effect on the robot controller.
12907	MotomanSync: Improve error reporting when executing function blocks while key switch is in PLAY/TEACH	ErrorID 9219 was reported previously, which had a vague meaning. Now function blocks will report ErrorID 9725 to indicate that the key switch is in wrong position if the particular function cannot be used in that mode.
13144	Add function block for conversion between MC_CARTESIAN_REF and MC_COORD_REF	This is available in the PLCopenPart4v374 Toolbox (User Library), which is part of the MotionWorks IEC installation.
13432	MotomanSync: MC_MoveXXX, MC_TrackConveyorBelt Function block should return error 4370 if robot group is not servoed on	When using MotomanSync groups, motion functions now give ErrorID 4370 when servos are off.
13504	MotomanSync: enhance Y_GroupJogTCP to jog multiple directions simultaneously.	This requires a special value provided to the TCPCoordinate VAR_INPUT. Contact Yaskawa for details.
13770	MotomanSync: Allow SCARA robots to achieve 130% in acceleration	For SCARA robots, it is now possible to input acceleration and deceleration inputs up to 130% for motion functions such as MC_MoveLinearAbsolute, MC_MoveLinearRelative, MC_MoveDirectAbsolute, and MC_MoveDirectRelative. Other mechanisms are still limited to 100%.
13895	MotomanSync: Remove use of ConveyorConfig[].VelocityFeedFwdGain	Conveyor tracking with MotomanSync no longer supports VelocityFeedFwdGain as part of ConveyorConfig due to it causing excessive alarms.
13896	MotomanSync: New ConveyorConfig[].ManualOffset is improved to generate fewer alarms.	Offset changes will take effect on the next execution of MC_TrackConveyorBelt.
13928	MotomanSync: Turning Servos off while there is motion in buffer now clears the motion buffer before servo off	For MotomanSync groups, if the servos are turned off via Y_GroupPower while there are motion segments in the buffer, the motion segments are cleared to match behavior of MPiec Mechatrolink groups.
13955	MotomanSync: Y_SelectTool, Y_DefineTool, Y_GroupSetFrameOffset and Y_GroupWriteVectorParam are now buffered to allow multiple executions in the same task scan.	Previously it was not possible to use the same function block for another action until the first request was completed.

Bug Fixes

Number	Identified Issue	Details
12725	MotomanSync: Remove R_TRIG condition in MSync level functions that check for SystemState	Improves stability, some function blocks were getting stuck Busy.
13431	Group Parameter 2101 and 2102 are used twice	For MotomanSync groups, Group Parameter 2101 (VelFactor) and 2102 (AccelFactor) are now read correctly.
13661	MotomanSync: Buffer overrun not handled correctly for functions that use CommandBuffer.	For MotomanSync groups, buffer overrun now gives ErrorID 4369.
13698	MotomanSync: Conveyor tracking should write to AxesGroup.Part.Offset	For MotomanSync groups, conveyor tracking now correctly updates AxesGroupRef.Part.Offset.
13919	MotomanSync: Freecurve does not work with TransitionParameter[10] in the range of 50 to 100	Free curve (MoveOptions.PathMode=1) for MotomanSync groups now supports TransitionParameter values 50 to 100 correctly without alarms.
13937	MC_MoveLinearAbsolute / Y_MoveLinear.Error can stay high and cause residual alarm after condition corrected.	In certain situations, an error generated by MC_MoveLinearAbsolute could remain set, and generate the same error a second time when the MC_MoveLinear is re-tried again even after the original error situation has been resolved. Previously, attempting to run the motion sequence a third time resulted in successful motion.
13977	Parameterization errors on SLIO Analog Modules	The byte arrangement bug for EtherNet/IP configuration assembly data of SLIO modules has been fixed. This bug only affected the following analog input modules. If any of the affected modules are configured in existing projects, remove and reinsert the modules to correct the issue going forward. 031-1CB30 031-1CB40 031-1CB70 031-1CD30 031-1CD40 031-1CD70
13980	Variable addressing for SLIO modules 021-1BH00 and 022-1BH00 corrected.	The global variable addresses for SLIO modules 021-1BH00 and 022-1BH00 have been fixed. Support for these 2 modules was added in version 3.7.3, but incorrect addressing resulted in compile errors.

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Known Issues

Number	Known Issue	Details	Workaround
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.
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
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.
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.
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.