

VMM Software Release Notes (Version 7)

Version 7

Version 7.3.8.7159 (March 12, 2019, Case 54323)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.35
 - ▶ Minimum version supported: 2.32

Production release.

Changes from V7.3.255.7157

- ▶ Added [print preview](#) support for recently added ladder logic [print configurations](#). (Case 54197)
- ▶ Added [print configuration](#) confirmation to ladder logic printouts. (Case 54325)
- ▶ Fixed vertical margins of ladder logic printouts not working as intended. (Case 54429)

Version 7.3.255.7157 (February 28, 2019, Case 54145)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.35
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.7155

- ▶ Added support for different [print configurations](#) to ladder logic printouts. (Case 53576)
 - ▶ Supported paper sizes: Letter (8.5 x 11"), Legal (8.5 x 14"), Tabloid (11 x 17").
 - ▶ Supported orientations: Portrait, Landscape.
 - ▶ Configurable from the "General" page of the [Options Screen](#).

Version 7.3.255.7155 (February 1, 2019, Case 53557)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.35
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.7154

- ▶ Fixed ladder logic printouts to maintain aspect ratio. (Case 53148)
- ▶ Fixed math labels appearing on the wrong page in ladder logic printouts. (Case 53195)

Version 7.3.255.7154 (December 21, 2018, Case 52842)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.35
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.7.7153:

- ▶ Added "Backup" [option](#). (Case 52695)
- ▶ Added "Paste Symbols With Properties" [option](#). (Case 52696)
- ▶ Fixed "VMM SYSTEM" property not appearing in [I/O table view](#) for VMM1615. (Case 45737)
- ▶ Moved [Logic Explorer](#) to the bottom pane of the [Ladder Logic View](#). (Case 52699)

Version 7.3.7.7153 (November 28, 2018, Case 52571)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.35
 - ▶ Minimum version supported: 2.32

Production release.

Changes from V7.3.255.7152:

- ▶ Fixed newly placed non-terminator symbols containing a rung description. (Case 50580)
- ▶ Added VMM System property to VMM section of [IO view table](#). (Case 45737)
- ▶ Fixed broken custom rung ordering when "group" is selected in a [rung conflict](#). (Case 52386)
- ▶ Fixed [math](#) drawing issue. (Case 50574)

Version 7.3.255.7152 (November 16, 2018, Case 52388)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.35
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.6.7148:

- ▶ Fixed [math](#) drawing issues. (Case 51638)
- ▶ Fixed hidden vertices appearing in ladder logic, causing compilation to fail. (Case 51511)
- ▶ Added ability to download ladder logic with an invalid J1939 table. (Case 51411)
 - ▶ Users will still be warned when an invalid J1939 table is detected upon downloading logic.
- ▶ Fixed colouring of [heartbeat monitor](#) symbols in diagnostics mode. (Case 52078)
- ▶ Permanently enabled event logging for all beta releases. (Case 52411)
- ▶ Fixed [groups](#) occasionally disappearing after using the [group manager](#). (Case 51493)

Version 7.3.6.7148 (November 7, 2018, Case 48971)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.35
 - ▶ Minimum version supported: 2.32

Production release.

Changes from V7.3.255.7145:

- ▶ Updated printing section of [options](#) menu. (Case 51829)

Version 7.3.255.7145 (October 25, 2018, Case 51897)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.35
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.7144:

- ▶ Added "Only Use Global Margins" option to printing [options](#). (Case 51829)

Version 7.3.255.7144 (October 15, 2018, Case 51539)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.35
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.7143:

- ▶ Added "Print All" submenu to the "File" menu in the [Launch Bar](#). (Case 49022)
- ▶ Added vertical margins to I/O view table printouts. (Case 51436)

Version 7.3.255.7143 (September 27, 2018, Case 50989)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.35
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.7142:

- ▶ Updated default margins for ladder logic view printouts to allow room for hole punching. (Case 50369)
- ▶ Updated I/O view table printouts to become more readable. (Case 50369)
- ▶ Updated various warnings that appear when loading a file. (Case 50395)
 - ▶ Instead of appearing in a dialog box, warnings are now listed in the [Messages](#) pane.
 - ▶ Fatal errors and some warnings that require user input still remain as dialog boxes.

Version 7.3.255.7142 (August 30, 2018, Case 50586)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.35
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.7141:

- ▶ Fixed option 'Rung Ordering > Automatic' to correctly order rungs in alphabetical order based on terminator name on file load. (Case 49544)

Version 7.3.255.7141 (July 18, 2018, Case 49762)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.35
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.5.7132:

- ▶ Increased the number of [CAN Router](#) entries supported by [VMM 1615](#) from 512 to 1024. (Case 47586)
 - ▶ Requires:
 - ▶ EMD version 2.35 or newer.
 - ▶ [VMM 1615 application](#) 935602 build 95 or newer.
- ▶ Added [option](#) to enable text wrapping in ladder logic view. (Case 49020)
 - ▶ Supports wrap after a "-", "_", "|", "/", ",", or ".".

Version 7.3.5.7132 (May 25, 2018, Case 45053)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.34
 - ▶ Minimum version supported: 2.32

Production release.

Changes from V7.3.4.7108:

- ▶ Increased the number of [CAN Router](#) entries supported by [VMM 1615](#) from 64 to 512. (Case 47682)

- ▶ Requires:
 - ▶ EMD version 2.34 or newer.
 - ▶ [VMM 1615 application](#) 935602 build 92 or newer.
- ▶ Updated default auto save to 5 minutes (instead of 1 minute). (Case 47050)
- ▶ Added [option](#) to enable event logging (default is disabled). (Case 47050)
- ▶ Updated to address issues with Windows 10. (Case 47050)
- ▶ Updated to eliminate warning "Please view J1939 table to resolve one or more conflicts." when there is a conflict during an autosave. (Case 48017)
- ▶ Updated to eliminate error reported when a RP1210 compatible device has not been installed. (Case 48016)
- ▶ Updated to address performance issue introduced in build 7104. (Case 46527)
- ▶ Updated to address issues with [search all diagrams](#). (Case 44831)
- ▶ Updated to address issue with autosave with modified ladder logic previously compiled with an older version of VMMS. (Case 45560)
- ▶ Updated [logic explorer](#) to report number of subgroups after the parent group name. (Case 45027)
- ▶ Added support for printing all groups (new menu item added to pop-up menu from the [logic explorer](#)). (Case 45171)
- ▶ Updated to address performance issues related to J1939 table. (Case 45024)
- ▶ Added button to [launch bar](#) to provide quick access to [compare files](#) function. (Case 45024)
- ▶ Added VMM 3120 11-bit [CAN message](#) support. (Case 45025)
 - ▶ Requires: [VMM 3120 application](#) 916607 build 30 or newer.

Version 7.3.4.7108 (November 29, 2017, Case 44499)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Production release.

Changes from V7.3.3.7105:

- ▶ Removed the warning previously generated when downloading ladder logic compiled with an older version of VMMS. (Case 44441)
 - ▶ Ladder logic compiled with an older version of VMMS can be downloaded or used to perform diagnostics without generating a warning. Note however that in this case the ladder logic will report the VMMS version that last saved the file (i.e. an older version of VMMS, not the current VMMS version).
 - ▶ An attempt to save ladder logic compiled with an older version of VMMS without first compiling with the current version of VMMS is not permitted and will generate a warning

Version 7.3.3.7105 (October 12, 2017, Case 33585)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Production release.

Changes from V7.3.255.7105:

- ▶ Removed the warning previously generated when EMD issue used in ladder logic file is older than VMMS trying to open the file. (Case 42758)
- ▶ Removed the warning previously generated when opening ladder logic compiled with an older version of

VMMS. (Case 42759)

- ▶ Ladder logic compiled with an older version of VMMS is reported as not compiled in the [launch bar](#).
- ▶ An attempt to download ladder logic file compiled with an older version of VMMS will generate a warning.
- ▶ Updated event logging to reduce the overhead while drawing ladder logic. (Case 43393)

Version 7.3.255.7104 (June 22, 2017, Case 40071)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.2.7100:

- ▶ Added additional J1939 Table checks including additional [JNU# errors codes](#) 101, 102, and 103. (Case 40065)
- ▶ Added additional slave configuration checks. (Case 40072)
- ▶ Updated [DPS70](#) settings. (Case 35750)
- ▶ Added internal VMMS event logger to log internal events to file "event.log" located in the logs folder. (Case 40252)
- ▶ Added new menu item 'Open Logs Folder' to [Launch Bar](#) Tools menu to locate log files created by VMMS.

Version 7.3.2.7100 (April 6, 2016, Case 26601)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Production release.

Changes from V7.3.255.798:

- ▶ Reworked file save function to prevent file save operation from being locked unexpectedly preventing future save file operations and returning the error message "Unable to save file. Try again." (Case 30588)
- ▶ Added check to detect case where ladder logic has been created that tries to receive an SPN in ladder logic in a VMM that is routing that SPN from CAN2 to CAN1. (Case 27727)
- ▶ Support HTML Help file (vmms.chm), instead of Windows Help file (vmms.hlp). (Case 31274)

Version 7.3.255.798 (February 1, 2016, Case 28402)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.797:

- ▶ Updated to address issues observed while testing version 7.3.255.797. (Cases 28403, 29869, 29843)
- ▶ Quadrature [frequency input](#) type on VMM0604 and VMM2404 re-enabled (disabled in V7.1.255.743). (Case 28478)
- ▶ Added configurable CAN 2 bit rates on the [VMM3120](#) (125 kbps, 250 kbps (default), 500 kbps). (Case 29836)

Version 7.3.255.797 (December 17, 2015, Case 28342)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.796:

- ▶ Updated to address issues observed while testing version 7.3.255.796. (Case 28357)

Version 7.3.255.796 (December 15, 2015, Case 28314)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.795:

- ▶ Updated to address issues observed while testing version 7.3.255.795. (Case 28315, 28322)

Version 7.3.255.795 (December 11, 2015, Case 28086)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.794:

- ▶ Updated to address issues observed while testing version 7.3.255.794. (Case 28087)
- ▶ Added [ladder logic file compare](#). (Case 28298)

Version 7.3.255.794 (November 30, 2015, Case 28037)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.

- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.793:

- ▶ Updated to address issues observed while testing version 7.3.255.793. (Case 28041)
- ▶ The name for a user-defined group can no longer be updated directly from the [logic explorer](#). Use the [group manager](#) to edit the group name. (Case 28041)

Version 7.3.255.793 (November 26, 2015, Case 27992)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.792:

- ▶ Updated to address issues observed while testing version 7.3.255.792. (Case 28015)
- ▶ Updated [logic explorer](#) to show number of rungs for all [groups](#) (module and user-defined groups). (Case 28034)
- ▶ Updated [ladder logic view](#) and [launch bar](#) to address issues observed when using a Windows font scaling other than 100%. (Case 27962)

Version 7.3.255.792 (November 24, 2015, Case 27871)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.791:

- ▶ Added [copy ladder logic conflict resolution](#) screen. (Case 26625)
- ▶ Updated [groups](#) to address an issue that caused a deleted group to reappear after compiling. (Case 27939)

Version 7.3.255.791 (November 16, 2015, Case 27763)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.790:

- ▶ Added support for copying and pasting user-defined groups ('Logic View - by Group' in the [Logic Explorer](#)). (Case 26625)
- ▶ Added the current ladder logic file name to the application title shown in Windows task bar to make it easier to differentiate between multiple instances of VMM Software open at the same time. For example the file "untitled.llf" is open in the VMM Software, the application title shown in the Windows task bar will be "untitled.llf - VMM Software". (Case 27850)

Version 7.3.255.790 (November 10, 2015, Case 27460)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.789:

- ▶ Updated ladder logic copy to include information about the attributes of the symbols copied so that they can be pasted into another ladder logic file without having to first define them. (Case 26625)
- ▶ Updated [DPS70](#) settings. (Case 24515)

Version 7.3.255.789 (October 8, 2015, Case 27294)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.788:

- ▶ Updated error check before compile to make it aware of how to correctly verify flags used in rungs terminated by telldates. (Case 27298)
- ▶ Updated default [option](#) settings. (Case 27297)

Version 7.3.255.788 (September 28, 2015, Case 27293)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.787:

- ▶ Updated ladder logic rung drawing to address an issue which prevents ladder logic from being drawn when

[option](#) 'Draw On Request' is not enabled. (Case 27125)

Version 7.3.255.787 (July 29, 2015, Case 22289)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.1.780:

- ▶ Updated [download ladder logic](#) to prevent an issue which could leave VMM(s) in reprogram mode. (Case 23825)
- ▶ Updated error check before compile to make it aware of how to correctly verify slave inputs used in rungs terminated by telltales. (Case 21893)
- ▶ Updated the Ladder Logic [Rung Manager](#) to prevent buttons from being hidden. (Case 22877)
- ▶ Removed the 'DLA Protocol' [option](#). The DLA protocol is now always set to RP1210. (Case 24016)
- ▶ Updated with some dialog boxes to ensure they are displayed correctly to the user. (Case 26211)
- ▶ Updated [upload logic](#) to prevent issues as a result of cancelled or unsuccessful uploads. (Case 23173)
- ▶ Updated ladder logic rung drawing to address issues with certain rung configurations. (Case 23159, Case 26390)
- ▶ Updated symbol label maximum size (increased from 20 to 200 characters long). (Case 8344)
- ▶ Updated ladder logic rung drawing to address an issue which prevents ladder logic from being drawn when [option](#) 'Draw On Request' is not enabled. (Case 27125)

Version 7.3.1.780 (February 06, 2013)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Production release.

Changes from V7.3.0.779:

- ▶ Ladder Logic changes:
 - ▶ Updated the maximum size calculation for [downloading ladder logic](#). (Case 18910)
 - ▶ Added support for 125 kbps on [VMM1615](#) CAN2. (Case 19265)

Version 7.3.0.779 (December 09, 2013)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Production release.

Changes from V7.3.0.778:

- ▶ Ladder Logic changes:
 - ▶ Updated the [Upload ladder logic](#) feature for [heartbeat monitoring](#) symbols so ensure all information is converted. (Case 13989)

Version 7.3.0.778 (December 03, 2013)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Production release.

Changes from V7.3.255.777:

- ▶ Ladder Logic changes:
 - ▶ Added a check to ensure that the [VMM](#)'s are sending out their forced state messages in [diagnostics mode](#) even when the unit is powered off and on again. (Case 18197)

Version 7.3.255.777 (November 05, 2013)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.776:

- ▶ Ladder Logic changes:
 - ▶ Updated the mouse wheel to have better error checking.
 - ▶ Added the clean up of the old jtf, llf, and ini files when using [Save As](#) and providing a different file name.
 - ▶ Updated the handling of the [Slave I/O tab](#) to have better error checking. (Case 18158)
 - ▶ Updated the slave [diagnostics](#) to default to the correct values when parameters are missing. (Case 16530)
 - ▶ Updated the [error checking](#) to jump to the correct Rung when the error references a particular Rung. (Case 15772)
 - ▶ Updating the handling of [telltale](#) messages in [diagnostics](#) mode to more accurately reflect the [VMM](#) behavior. (Case 18197)

Version 7.3.255.776 (October 16, 2013)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.775:

- ▶ Ladder Logic changes:
 - ▶ Updated handling of the [frequency input](#) value in [diagnostics](#) mode when displayed in the [Math symbol](#). (Case 16529)
 - ▶ Updated mouse wheel handling to use a different method of determining the mouse position relative to the window control.
 - ▶ Updated the [Slave Outputs](#) for the [DPS70 Slave](#). (case 16527)

Version 7.3.255.775 (August 27, 2013)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.774:

- ▶ Ladder Logic changes:
 - ▶ Updated [saving/loading](#) of [uncompiled ladder logic](#) to be compatible with older versions. (Case 16529)
 - ▶ Updated the undo/redo action to center text on [math symbols](#). (Case 16529)
 - ▶ Updated [J1939 messages](#) to display their label in [math symbols](#) from the [J1939 table](#). (Case 16529)
 - ▶ Updated the initial state of [Frequency inputs](#) in [math symbols](#) when using [diagnostics mode](#). (Case 16528)
 - ▶ Updated mouse wheel handling to scroll the form the mouse is hovering.
 - ▶ Updated the form maximize to be compatible with windows 7.

Version 7.3.255.774 (August 16, 2013)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.773:

- ▶ Ladder Logic changes:
 - ▶ Added extra [math symbol](#) information in [ladder logic view](#). The symbols will now display the symbol name and/or label for both source A and source B. (Case 16529)
 - ▶ Added an [option](#) to choose if the name or label or both should be displayed. (Case 16529)

Version 7.3.255.773 (July 12, 2013)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33

- ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.772:

- ▶ Ladder Logic changes:
 - ▶ Updated [diagnostic](#) colours for [SPN](#) and [CAN](#) messages. (Case 16528)
 - ▶ Removed [diagnostic](#) colours for [log symbols](#). (Case 16528)
 - ▶ Added hover text for [slave outputs](#) and updated data to correspond more closely with the actual values. (Case 16530)

Version 7.3.255.772 (July 03, 2013)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.771:

- ▶ Ladder Logic changes:
 - ▶ Updated the [slave input](#) and [output](#) settings to dynamically be able to increase and decrease the maximum amount of inputs and outputs. (Case 16838)
 - ▶ Added additional IO for the [DPS70](#). (Case 16527)

Version 7.3.255.771 (June 20, 2013)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.770:

- ▶ Ladder Logic changes:
 - ▶ Increased the delay to wait after [programming](#) a ladder logic file to ensure the VMM is in a state that can respond to the VMM status request. (Case 15625)
 - ▶ Updated the descriptions for the [DPS70](#) inputs to provide more information such as pin names. (Case 16527)
- ▶ New Features:
 - ▶ Added [Diagnostic](#) colours to [Math Boxes](#) with heartbeat monitoring operations. (Case 16528)

Version 7.3.255.770 (June 05, 2013)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):

- ▶ Version included with installer: 2.33
- ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.769:

- ▶ Ladder Logic changes:
 - ▶ Updated the way popups are displayed to ensure they are displayed on top of all the other windows. (Case 9943)
 - ▶ Updated the [Edit Properties](#) window to not allow editing the name of [Black Box](#). (Case 15455)
 - ▶ Updated the error checking when saving as a previous version when using a [VMM 3120](#) which is not compatible with the older version. (Case 15394)
 - ▶ Updated the switch from [Diagnostics](#) to prevent crashing in [VMMS](#). (Case 15657)
- ▶ New Features:
 - ▶ Added processing of [Slave Inputs](#) and [Slave Outputs](#) in [Diagnostic Mode](#). (Case 16530)
 - ▶ Added new message dialog to set the default button to "No" or "Cancel". (Case 12382)
 - ▶ Added [Diagnostic](#) colours to [Math Boxes](#) with logical operations. (Case 16528)
 - ▶ Added new error message for when an input other than a [CAN Message](#) or [SPN](#) is used with heartbeat monitoring. (Case 15777)
 - ▶ Added new [Slave](#) type [DPS70](#) to [VMMS](#). (Case 16527)

Version 7.3.255.769 (March 01, 2013)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33
 - ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.3.255.768:

- ▶ Ladder Logic changes:
 - ▶ Changed the memory allocation around to assist in reducing memory usage. (Case 15379)
 - ▶ Modified the exceeded amount calculation to give a positive number for the J1939 CAN parameters check. (Case 8078)
 - ▶ Modified the text input fields to prevent using the separator character in the Product Key Selector. (Case 9433)
 - ▶ Changed the Save As dialog for the [uploading/downloading](#) form to report the file name typed/selected in the dialog box correctly. (Case 12348)
 - ▶ Updated the message text for the amount of ladder logic space used. (Case 14362)
 - ▶ Updated the maximum ladder logic sizes for each VMM. (Case 14367)
 - ▶ Changed the way the progress bar for drawing ladder logic is handled to be more representative. (Case 9943)
 - ▶ Updated the [Edit Properties](#) form to go on top of all the windows when it is shown. (Case 9943)
- ▶ New Features:
 - ▶ Added help button code and context number for the [Rung Manager](#). (Case 14934)

Version 7.3.255.768 (January 10, 2013)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.3.
- ▶ [External Model Database \(EMD\)](#):
 - ▶ Version included with installer: 2.33

- ▶ Minimum version supported: 2.32

Prototype release.

Changes from V7.2.255.767:

- ▶ Ladder Logic changes:
 - ▶ Changed the I/O symbol check to report errors more accurately. (Case 13944)
 - ▶ Changed the [rung manager](#) to read the compiled state more accurately. (Case 13901)
 - ▶ Added the CAN ID FORMAT field on VMMs other than the VMM1615. (Case 13104)
 - ▶ Updated the "[DPS Cluster](#)" slave configuration information. (Case 9680)
- ▶ New Features:
 - ▶ Added error checking for [frequency inputs](#) with flags or logs used as the counter and/or duty cycle. (Case 14934)
 - ▶ Added error checking to verify that the maximum number of J1939 and CAN parameters have not been exceeded. (Case 8078)

Version 7.2.255.767 (December 7, 2012)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.2.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.32

Prototype release.

Changes from V7.2.255.766:

- ▶ Ladder Logic changes:
 - ▶ Changed the I/O error check to not compare across modules when two [CAN Messages](#) have the same SPN and CAN ID. (Case 13944)
 - ▶ Added a prompt to switch from automatic rung order to custom rung order when I file is loaded having custom rung order set in the [options](#). (Case 13901)
- ▶ VMMS changes
 - ▶ Change the main form height to dynamically adjust based on the current windows theme. (Case 9943)

Version 7.2.255.766 (December 03, 2012)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.2.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.32

Prototype release.

Changes from V7.2.255.765:

- ▶ VMMS changes:
 - ▶ Added some additional error checking to prevent access violations. (Case 9680)
 - ▶ Added a function to change old style file names to their expanded full file name. (case 10553)
 - ▶ Changed the file Save As to report the file name typed/selected in the dialog box correctly. (Case 12348)
- ▶ New Features:
 - ▶ Added the [option](#) to enable partially or in full the active state of [digital inputs](#). (Case 6094)
 - ▶ Added an [option](#) to enable/disable the auto reorder feature and the [Rung Manager](#) to reorder the rungs when auto reorder is disabled. (Case 13901)
 - ▶ Added an additional 32 digital [flags](#) for the VMM3120 and VMM1615. (Case 13890)
 - ▶ Added an error message for when two [CAN messages](#) with the same CAN ID are using the same SPN.

(Case 13944)

- ▶ Added additional error checking to catch the error that was giving a LNU27 error message when the ladder logic was downloaded to the VMM. (Case 13943)
- ▶ Increased the maximum ladder logic size for downloading to the VMM to 256KB for all the VMMs that support it. (Case 14367)
- ▶ Added additional information when [compiling](#) and downloading about the size of the ladder logic file and the percent of flash used. (Case 14362)

Version 7.2.255.765 (October 25, 2012)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.2.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.30

Prototype release.

Changes from V7.2.1.764:

- ▶ Ladder logic changes:
 - ▶ When loading .vmm files, the optional and required parameter is set properly now. (Case 14098)
 - ▶ Ensured that when selecting a [frequency input](#), the [edit properties](#) window shows the Duty Cycle field. (Case 14061)
 - ▶ Set the number precision to double in the [diagnostic status](#) window. (Case 13113)
- ▶ New Features:
 - ▶ Added the OEM ID to the [launch bar](#). (Case 9761)
 - ▶ Added new slave type [DPS Cluster](#) to the [slave](#) selection. (Case 9680)
 - ▶ Added the active state of [digital inputs](#) to the [ladder logic viewer](#). (Case 6094)
 - ▶ Removed the slave types "6 Button Switch Panel" and "10 Button Switch Panel". (Case 10741)
 - ▶ Added an error message to the VMM query when [module security](#) is enabled and the OEM ID does not match the one of the VMM. (Case 9042)
 - ▶ Added reverse heartbeat monitoring support. (Case 13989)
 - ▶ Increased the maximum ladder logic size for downloading to the VMM to 256KB (Case 14367)
 - ▶ Added more information when [compiling](#) and downloading about the size of the ladder logic file and the percent of flash used. (Case 14362)

Version 7.2.1.764 (September 11, 2012)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.2.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.30

Production release.

Changes from V7.2.255.759:

- ▶ Ladder logic view changes:
 - ▶ Corrected issue introduced in build 500: when the Busbar Voltage gets updated while in the Block I/O View, the image doesn't refresh to reflect the change. (Case 13159)
 - ▶ Corrected issue introduced in build 700: the "Auto Reset After Fault" field does not hold the changed setting. (Case 13279)
- ▶ New Feature (case 12664):
 - ▶ [Math symbol](#) change: added heartbeat monitoring support for the VMM1615 CAN Parameter and SPN Message reception.

Version 7.2.255.759 (June 11, 2012)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.2.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.30

Prototype release.

Changes from V7.2.0.757:

- ▶ Ladder logic save change: corrected issue introduced in build 757 when case 9951 was resolved. Issue resulted in newly created ladder logic for a non-VMM1615 containing a CAN message symbol to fail when trying to save. (Case 12941)

Version 7.2.0.757 (May 15, 2012)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.2.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.30

Production release.

Changes from V7.1.255.753:

- ▶ Ladder logic compile change: corrected issue introduced in build 742 when case 7388 was resolved. Issue resulted in large positive and negative numbers being altered unexpectedly. (Case 12398)
- ▶ New Features: (Case 9951)
 - ▶ [CAN message symbol](#) change: added support to configure VMM1615 CAN ID format (J1939 or standard CAN) for both CAN 1 and CAN 2.
 - ▶ [Edit Property - VMM 1615](#) change: added support to configure VMM1615 CAN 2 bit rate (250kbps or 500kbps).
 - ▶ [I/O view](#) change: updated to display the new CAN configuration info.

Version 7.1.255.753 (January 27, 2012)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.1.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.30

Prototype release (expected production release version 7.1.2.7xx).

Changes from V7.1.255.752:

- ▶ Ladder logic view change: corrected an issue introduced in V7.1.255.750 that resulted in the value -1.0 entered in a math box being converted to -0.9. (Case 10651)

Version 7.1.255.752 (December 22, 2011)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.1.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.30

Prototype release (expected production release version 7.1.2.7xx).

Changes from V7.1.255.751:

- ▶ Ladder logic compile change: corrected an issue related to SPN and DTC messages not functioning correctly in rungs terminated by telltales or slave outputs. (Case 11231)

Version 7.1.255.751 (December 14, 2011)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.1.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.30

Prototype release (expected production release version 7.1.2.7xx).

Changes from V7.1.255.750:

- ▶ Ladder logic compile change: corrected an issue related to CAN messages not functioning correctly in rungs terminated by telltales or slave outputs. (Case 11152)

Version 7.1.255.750 (December 8, 2011)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.1.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.30

Prototype release (expected production release version 7.1.2.7xx).

Changes from V7.1.255.749:

- ▶ Ladder logic view change: corrected an issue that resulted in the value 2.3 entered in a math box being converted to 2.2. (Case 10651)

Version 7.1.255.749 (August 22, 2011)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.1.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.30

Prototype release (expected production release version 7.1.2.7xx).

Changes from V7.1.255.746:

- ▶ [I/O view](#) changes:
 - ▶ "VMM1615 D2V40S1DA" "I/O View: Block Diagram" added. (Case 6804)
 - ▶ "VMM3120 3420D2V3A" "I/O View: Block Diagram" added. (Case 6804)

Version 7.1.255.746 (June 16, 2011)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.1.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.30

Prototype release (expected production release version 7.1.2.7xx).

Changes from V7.1.255.743:

- ▶ [CAN Message](#) symbol change: supports up to 200 CAN messages per VMM. (Case 8061)
- ▶ [Diagnostics Status](#) screen changes:
 - ▶ Shows more output fault information, if available. (case 8875)
 - ▶ Ability to refresh output faults added, and default fault info changed from "YES" to "OUTPUT FAULT". (case 8893)
- ▶ Ladder logic download change: corrected issue with ladder logic files that are within 36 bytes over 64K in size. (Case 9158).
- ▶ [Launch Bar](#) change: A button has been added to allow the user to switch between [block diagram](#) and [table](#) I/O views. (Case 6804)

Version 7.1.255.743 (February 3, 2011)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.1.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.30

Prototype release (expected production release version 7.1.2.7xx).

Changes from V7.1.1.734:

- ▶ New Features:
 - ▶ Support for [frequency input](#) duty cycle added. (Case 6802)
- ▶ Minimum EMD version changed: increased to 2.30. (Case 7083, 6802)
- ▶ Output over current value (OCV) changes:
 - ▶ Added error check on opening a ladder logic file to ensure that OCV values are correct. (Case 7180)
 - ▶ Corrected an error introduced in version 7.0.0.700 where on saving a pre version 7 ladder logic file as a version 7 the settings for the last VMM are assigned to the outputs for all of the VMMs, instead of just that VMM. (Case 7357)
 - ▶ Corrected an issue that resulted in an OCV value of 0 being shown for VMM1210 output 9, and 10 in the IO view. (Case 7357)
- ▶ VMM1210 h-bridge output change: corrected issue that allowed a soft start setting to be entered for output 9 and 10. (Case 7287)
- ▶ VMM1615 sensor supply voltage change: removed sensor supply disabled option. Only 5 or 8V allowed, with 5V default. (Case 7083)
- ▶ VMM Software changes:
 - ▶ Tolerate the use of comma decimal place holders, in addition to period. (Case 7388)
 - ▶ Corrected issue that resulted in invalid message "No response to erase Lx-254 request.". (case 7517)

Version 7.1.1.734 (October 28, 2010)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.1.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.27

Production release.

Changes from V7.1.0.727:

- ▶ Minimum EMD version changed: increased to 2.27. (Case 6507, 6644)
- ▶ New feature: bus bar voltage monitoring. See [VMM 1615](#) topic for complete details. (Case 6507)
- ▶ Query screen change: supports reporting three digit hardware version numbers using the format x.y.z. (Case 5964)
- ▶ New feature: [output](#) load type specification for models that require it (i.e. VMM1615). (Case 6644)

Version 7.1.0.727 (July 15, 2010)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.1.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.22
- ▶ [VMM 1210/2820 application \(736603\) version](#) on July 15, 2010: V7.1 build 130, VMM System Version 7.0.
- ▶ [VMM 0604/2404 application \(836602\) version](#) on July 15, 2010: V3.0 build 66, VMM System Version 7.1.
- ▶ [VMM 3120 application \(916607\) version](#) on July 15, 2010: V1.1 build 46, VMM System Version 7.1.
- ▶ [VMM 1615 application \(935602\) version](#) on July 15, 2010: V1.0 build 19, VMM System Version 7.1.

Production release.

Changes from V7.1.255.725:

- ▶ Version information change: Changed version to 7.1.0.727, and set release date to July 15, 2010. (Case 5536)

Version 7.1.255.726 (June 11, 2010)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.1.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.22

Prototype release (expected production release version 7.1.0.7xx).

Changes from V7.1.255.725:

- ▶ [Ladder Logic File - Module security](#) change: corrected issue with change to provide default module security options when creating a new ladder logic file. Issue resulted in default module security options being added to existing ladder logic files that did not have module security previously enabled. (Ticket #250)
- ▶ [VMM1615 D2V40S1DA](#) change: high side output bus bar mapping corrected. Now, odd high side outputs (1, 3, ...) map to bus bar 1, even high side outputs (2, 4, ...) to bus bar 2. This change was made to version 2.22 of the external model database. (Ticket #248)

Version 7.1.255.725 (May 10, 2010)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.1.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.21

Prototype release (obsoleted by version 7.1.255.726).

Changes from V7.0.3.723:

- ▶ New features:
 - ▶ Added [Export to VSE](#). (Ticket #161)
 - ▶ Support for optional VMMs added. It is because of this feature that the VMM System Version increased to 7.1. (Ticket #164)
- ▶ [Ladder Logic File - Module security](#) change: all module security options except query and download, enabled by default when creating a new ladder logic file. (Ticket #184)
- ▶ [I/O view](#) changes:
 - ▶ I/O view shows all available [CAN message](#) parameter information. (Ticket #71)
 - ▶ When selecting print while in IO view table view, the printer dialog box is now shown prior to sending content to the selected printer. (Ticket #200)
 - ▶ For VMM1615, frequency inputs no longer provide a quadrature option. (Ticket #206)
- ▶ [Product key](#) change: a valid product key is required to use the VMM software. (Ticket #195)
- ▶ [Logic Explorer](#) change: Goto Rung feature in diagnostics will key off of another symbol, if terminator can not

be selected. (Ticket #207)

Version 7.0.3.723 (March 30, 2010)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.0.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.19
- ▶ [VMM 1210/2820 application \(736603\) version](#) on March 30, 2010, V7.1 build 130, VMM System Version 7.0.
- ▶ [VMM 0604/2404 application \(836602\) version](#) on March 30, 2010, V2.0 build 62, VMM System Version 7.0.
- ▶ [VMM 1615 application \(935602\) version](#) on March 30, 2010: V1.0 build 39, VMM System Version 7.0.

Changes from V7.0.2.717:

- ▶ Re-enable [Export / Import Utility](#).
- ▶ Version number and release date is shown in the caption of the [launch bar](#).
- ▶ VMM model type can be changed for a defined VMM in the [I/O view](#) provided the change is within the same hardware platform (VMM3120 x to VMM3120 y, VMM1615 x to VMM1615 y).
- ▶ CAN port parameter support added to [CAN message](#) definition in [I/O view](#).
- ▶ Added output fault present error to list of power LED fault causes reported in [query](#) screen.

Version 7.0.2.717 (July 30, 2009)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.0.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.9
- ▶ [VMM 1210/2820 application \(736603\) version](#) on July 27, 2009: V7.1, build 130, VMM System Version 7.0.
- ▶ [VMM 0604/2404 application \(836602\) version](#) on July 27, 2009: V2.0, build 62, VMM System Version 7.0.

Changes from V7.0.1.711:

- ▶ VMM diagnostic request delay observed in version 7.0.1.711 has been eliminated.
- ▶ Disabled access to CM2216.
- ▶ For VMMs that have a configurable sensor supply (e.g. VMM 1615), the sensor supply configuration is shown in the I/O table view.
- ▶ [Ladder logic view](#) supports scrolling using the mouse wheel.

Version 7.0.1.711 (July 16, 2009)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.0.
- ▶ Minimum [External Model Database \(EMD\)](#) version: 2.9
- ▶ [VMM 1210/2820 application \(736603\) version](#) on July 16, 2009: V7.1, build 130, VMM System Version 7.0.
- ▶ [VMM 0604/2404 application \(836602\) version](#) on July 16, 2009: V2.0, build 62, VMM System Version 7.0.

Changes from V7.0.0.700:

- ▶ [Group manager](#) improvements:
 - ▶ Group manager access is only allowed when ladder logic is compiled.
 - ▶ Corrected an issue that could result in rungs being deleted from a group if ladder logic is saved and closed prior to compiling.
- ▶ Supports 1 bit SPN and CAN parameter diagnostics. A parameter value of 1 is interpreted as a 1, and not data not available.
- ▶ Corrected a diagnostics issue that would not initialize memory flags on startup to 0 but instead show a null string until the VMM reports something other than 0.

- ▶ Supports [J1939 table](#) size greater than 8KB.
- ▶ Supports up to 254 module [count / duration / generic logs](#).
- ▶ Supports default value configuration for [count/duration/generic logs](#).

Version 7.0.0.700 (February 9, 2009)

- ▶ Version 7 software supporting VMM 2820, VMM 1210, VMM 0604, VMM 2404, VMM 3120, and VMM 1615 hardware.
- ▶ VMM System Version 7.0.
- ▶ [VMM 1210/2820 application \(736603\) version](#) on February 9, 2009: V7.0, build 121, VMM System Version 7.0.

Changes from V6.0.0.600:

- ▶ Enhanced symbol line patterns used in [ladder logic](#) diagnostics mode so that the pattern in addition to the color can be used to determine a symbol's state:
 - ▶ active = green horizontal lines
 - ▶ inactive = red diagonal lines
 - ▶ unknown = grey crossed lines
- ▶ [VMM 1615](#) added.
- ▶ Force present [flag](#), Fx-248 added.
- ▶ Supports output auto reset (OAR) and over current value (OCV) configuration on an [output](#) by output basis.
 - ▶ When converting ladder logic created in version 6 (or earlier) to version 7, for each VMM supporting OCV and OAR on an output by output basis, the obsolete VMM OAR and OCV settings are used as the initial output OAR and OCV settings.
- ▶ Supports short fault threshold (SFT) adjustment between 1 and 10 on an output by [output](#) basis.
- ▶ Added support for setting [master power](#) on a [VMM](#) by VMM basis, in addition to being able to set it for the entire system.
- ▶ VMM [master power](#) setting is now shown in the [IO view](#).