

PAC Machine Edition

Version 10.7.222

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Warnings and Caution Notes as Used in this Publication

WARNING

Warning notices are used in this publication to emphasize that hazardous voltages, currents, temperatures, or other conditions that could cause personal injury to exist in this equipment or may be associated with its use.

In situations where inattention could cause either personal injury or damage to equipment, a Warning notice is used.

CAUTION

Caution notices are used where equipment might be damaged if care is not taken.

Note: Notes merely call attention to information that is especially significant to understanding and operating the equipment.

These instructions do not purport to cover all details or variations in equipment, nor to provide for every possible contingency to be met during installation, operation, and maintenance. The information is supplied for informational purposes only, and Emerson makes no warranty as to the accuracy of the information included herein. Changes, modifications, and/or improvements to equipment and specifications are made periodically and these changes may or may not be reflected herein. It is understood that Emerson may make changes, modifications, or improvements to the equipment referenced herein or to the document itself at any time. This document is intended for trained personnel familiar with the Emerson products referenced herein. Emerson may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not provide any license whatsoever to any of these patents. Emerson provides the following document, and the information included therein as is and without warranty of any kind, expressed or implied, including but not limited to any implied statutory warranty of merchantability or fitness for particular purpose.

PAC Product Information

Product	Version
PAC Machine Edition A. ProPlus Development Suite B. Professional Development Suite C. Lite Development Suite D. Quick Panel CE Development Suite	10.7
View and Control	10.7

Revision History

Version	Date	Description
Version 10.7.222	Mar 2026	<ul style="list-style-type: none"> • Windows 11 Support. Validated support for the following Windows 11 variants. For detail support information refer to the GFK-3245 – PAC Machine Edition, Change Management, and Productivity Suite System Requirements <ul style="list-style-type: none"> ○ Windows 11 Pro - Version: 25H2 ○ Windows 11 Enterprise - Version: 25H2 ○ Windows 11 Enterprise LTSC - Version: 2024 (24H2) ○ Windows 11 IoT Enterprise - Version: 25H2 ○ Windows 11 IoT Enterprise LTSC - Version: 2024 (24H2) • Removal of Folder Count Limit. The internal limit on the total number of folders in the Project Navigator has been removed. Previously, this limit applied only to the Project Navigator and did not affect other areas of the product (for example. Block Management limits folder nesting depth, not the number of folders). With this update, users can create folders without a predefined product limit . The only practical constraint available system memory. once the application exhausts system memory, no additional folders can be created. This behavior reflects a natural system resource limitation rather than a product imposed restriction.

Version	Date	Description
Version 10.7.221	Sept 2025	<ul style="list-style-type: none"> • Autosave • Performance Improvements in the area of project validation and online operations • Data Monitor updates: <ul style="list-style-type: none"> ○ Save Data Monitor configuration data within PME projects ○ Save plotted to .csv format ○ Added Data Replay utility which allows users to view, and replay, recorded data ○ Allow four binary axes to differentiate binary parameter data • 10.6 feature description has been updated to more properly reflect the change made to UDT element descriptions • Added new Advanced PID with Deadband block (ADV_PID_DB)
Version 10.6.219	Nov 2024	<ul style="list-style-type: none"> • Added support for PACSystems™ Simulator, which allows users to test and validate logic for a PACSystems™ CPU without using controller hardware. • Updated the Data Monitor with a feature-rich plotting tool • Added support for GSDML 2.44 and 2.45 • Added ability to configure UDT for Windows PC Target. • Added enhancements for UDT descriptions <p><i>Note: Descriptions on instances of structure elements on Logic Developer targets come from the structure definition and are read-only on the instance. Change the definition of the structure to change the description.</i></p>
Version 10.5	Sep 2024	<ul style="list-style-type: none"> • Added functionality to configure PACSystems™ VersaMax SafetyNet System. • Multiple bug fixes.
Version 10.4.13	Jun 2024	Includes bug fixes related to member parameter configuration in the Process Blocks
Version 10.4	May 2024	<ul style="list-style-type: none"> • Introduces the COMPUTE block, which allows users to execute multiple mathematical expressions in one instruction. COMPUTE BLOCK support is limited to LD. • Improved support for GSDML 2.43 • Updated EGD Management Tool (EMT) • Introduces feature to indicate whether users are in Admin mode

Version	Date	Description
Version 10.2. 9762	Sep 2023	Updated to address installation issues from previous versions. Resolved further issues from v10.2.
Version 10.2	Jun 2023	Updated to reflect the changes in PME v10.2 and View and Control v10.2.
Version 10.1.9647	Apr 2023	Updated for the release of PME v10.1.9647 and View and Control 10.1.9647. Resolved further problems from v10.1.
Version 10.1	Feb 2023	Updated for the release of PME v10.1, PPS v10.1, PCM v10.1, and View and Control v10.1.
Version 10.0	May 2022	Update to documentation to clarify CPE3XX support.
Version 10.0	Apr 2022	Initial Release

Restrictions and Open Issues

Subject	ID Code	Description
HWC Smart Build	DE9761	The Smart Build option for hardware configuration (HWC Smart Build) is not functioning as expected under certain conditions. To ensure system stability and prevent unintended behavior, this feature has been temporarily disabled.
Avoid storing or mapping project files to any directory located within a OneDrive synchronized path.	N/A	Avoid storing or mapping project files to any directory located within a OneDrive synchronized path. OneDrive folders function as network-dependent storage, and connectivity interruptions or synchronization conflicts can lead to file inaccessibility or corruption, resulting in improper operation of the software.
Power Flow Error with COMPUTE block	N/A	When replacing a block with the COMPUTE block in “Test-Edit” mode, the surrounding rung logic may require manual adjustment to maintain proper power flow through the rung.
COMPUTE may cause stack overflow in firmware	DE13503 DE13935	For now, to avoid a potential issue within firmware, we do not recommend adding logic to execute on a rung after a COMPUTE execution.

PAC Machine Edition

Functional Compatibility

Subject	Description
CPE200 Series compatibility	CPE200 Series modules require PAC Machine Edition (PME) version 10.x and are not supported on PME 9.8 or earlier releases.
Module Type Package (MTP) Object support	MTP requires PAC Machine Edition (PME) version 10.x and is not supported on PME 9.8 or any earlier release.
Supported Operating Systems (For detail support information refer to the GFK-3245 – PAC Machine Edition, Change Management, and Productivity Suite System Requirements)	<ul style="list-style-type: none"> • Windows 11 Pro • Windows 11 Enterprise • Windows 11 Enterprise LTSC • Windows 11 IoT Enterprise • Windows 11 IoT Enterprise LTSC • Windows 10 Pro • Windows 10 Enterprise • Windows 10 Enterprise LTSC • Windows 10 IoT Enterprise • Windows 10 IoT Enterprise LTSC • Windows Server 2025 • Windows Server 2022 • Windows Server 2019 • Windows Server 2016
Supported Virtual Machines (For detail support information refer to the GFK-3245 – PAC Machine Edition, Change Management, and Productivity Suite System Requirements)	<ul style="list-style-type: none"> • VMWare Player and Workstation (type 2) • VMWare ESXi (type 1)
Supported Anti-Virus Systems (For detail support information refer to the GFK-3245 – PAC Machine Edition, Change Management, and Productivity Suite System Requirements)	<ul style="list-style-type: none"> • Norton Deluxe • McAfee Plus • Bitdefender Total Security • Trend Micro Maximum • CrowdStrike • Windows Defender

Problems Resolved by this Release

PAC Machine Edition 10.7.222 fixes the following defects:

Resolved Problem	Defect Code	Resolution
Variable list column set parameter (Current Value) not available	DE12243	Updated the display logic to ensure the "Current Column" value appears correctly in the list. Modified the internal file access to eliminate the requirement for write permissions, improving compatibility in read-only environments.
PME v10 CRC Issue - New Project Auto Detect Pulls Old Catalog Version	DE12294	The system now automatically detects when an "Auto Detect IP" template is in use and upgrades the associated catalog without user prompts. This streamlines the process and removes unnecessary interruptions.
Issue importing UDFB. Getting error that an input element of the UDFB is an invalid variable or expression.	DE12419	Improved the import process to prevent incorrect "invalid variable or expression" errors. When a variable is defined as a parameter reference, the system now correctly handles it without applying local-scope rules that previously caused issues.
Byte variable display on Move Bool instruction	DE12637	For variable type "Byte" PME now automatically adjusts the memory offset for proper memory alignment and correctly displays the "BYTE" variable values in the Data Watch window and Ladder Editor.
Byte Variable Value is not properly displayed in DataWatch or Ladder Editor	DE13782	
Byte data type animation/data manipulation issue.	DE13899	
Error 9563: Invalid dangling vertical expression	DE12681	Improved how branch points are processed to ensure all short-circuit conditions at the same location are handled correctly. In certain rare topologies, a short-circuit entry could be recorded in a format not recognized by the system. An additional validation step has been implemented to route these cases through the appropriate handling path for stacked short-circuit scenarios.

Resolved Problem	Defect Code	Resolution
Hardware configuration becomes unequal for no reason when doing a runtime store	DE12701	Updated the logic so that subtags are no longer added when they are not required. This change eliminates incorrect change detection and prevent unintended rebuild cycles. Additionally, improved handling of project descriptions during save, validate, and build operations to ensure consistent processing.
PME 10.2.9762 hangs whilst making a word for word change on a real constant	DE12705	Added protection to ensure system stability during tag-reference updates. The update process now includes an internal safety check that guarantees the lock is always released, even if an unexpected error occurs.
Unable to initialize the following Machine Edition Service: 'Tag Database'	DE12733	Updated the software to prevent issues caused by projects storing variable data in the newer lean format without appropriate project designation. This enhancement ensure compatibility by preventing legacy loading logic from misinterpreting the file structure.
ST comments are ignored	DE12853	Fixed an issue where Structured Text comments that use a single quote (')—the type created by the “Comment Section” button—were incorrectly treated as comments in the editor but still executed on the controller. The ST viewer now correctly reflects how these lines are handled during execution
PME 10.6 crash in WinServer	DE13158	Fixed an application crash on Windows Server by improving internal validation checks and enhancing thread-safety handling.
PLC stability appears more unstable in PME 10.6 than they did in 10.1	DE13192	Fixed several issues that could cause the software to crash in specific scenarios. Stability has been improved across multiple areas of the application.
"PME project contains absolute paths to files" message	DE13286	Resolved an issue where the “Folders” stream was not being created when adding a new target. The system now correctly generates the required “Folders” stream during target creation.
Issue with cross reference in a structure text	DE13389	We’ve updated the function so that tag references in the ST block are now handled correctly. We also refined the feedback message to make it more helpful, it now clearly shows the line number involved and the specific tag being referenced

Resolved Problem	Defect Code	Resolution
Options Folder > Engineering Workstation - Preferences > Project File Location is not updated when importing the original setting.	DE13459	Removed the special-case comparison for 'securWORX' project paths so those keys are now included correctly during import. This ensures the 'Project File Location' setting is properly updated when importing configuration settings.
Status length changes automatically to value "0" when CPE210 is replaced by CPE220	DE13553	Resolved an issue that occurred when replacing a module where one parameter was being reset incorrectly based on the maximum value defined in the configuration XML. The logic has been updated so the system now checks the parameter's maximum value and applies it correctly during module replacement.
Several Button in the Utilities tool bar are not working	DE13675	Removed the dynamic URL from the message display and applied several cosmetic improvements across all utility tools. Because the URL changes each time, the system now presents a consistent, user-appropriate message instead of showing the varying link. These updates ensure a cleaner and more reliable user experience across all tools.
ADV_PID_DB Block Not Visible in Toolchest After Upgrading PME from 10.6 to 10.7	DE13689	Resolved an issue where the ADV_PID_DB block did not appear in the Toolchest after upgrading PME from version 10.6 to 10.7. The block is now correctly detected and displayed following the upgrade.
Descriptions of UDT item tags can't be edited	DE13701	Updated UDT descriptions to support international characters. Previously, only UDFB descriptions allowed localized text, while UDT descriptions were restricted. UDTs now follow the same rules as UDFBs, ensuring consistent support for international and localized descriptions across both types.
PME v10.7 %s error on opening project	DE13718	Added logic to detect when an exchange was saved using the newer format rather than the older format the system expected. This ensures the software can correctly recognize and load exchanges regardless of which format was used.

Resolved Problem	Defect Code	Resolution
Build performance, takes 2+ mins	DE13719	Optimized the pre-validation process to improve performance and stability. Previously, the system was suspending and rebuilding the address database hundreds of times while mirroring primary data to secondary, even though this only needed to happen once. The logic has been updated to properly handle nested suspend calls and to pause address-database updates for the entire duration of the mirror operation, resulting in a much more efficient process.
PME 10.7 crashes when a User Defined Function block has been using an incorrect block type instance	DE13720	Added a safeguard to prevent the system from attempting to read a NULL object. The process now checks for a valid object before continuing, ensuring smoother and more reliable operation.
PME 10.7 Reference List not populating correctly	DE13753	Fixed an issue where an optimization meant to hide references on subtags prevented them from appearing when the subtag itself became the active item in the editor. The logic now correctly recognizes when a subtag is the current selection, ensuring its references are displayed as expected.
PME cross-reference issue	DE14060	
In PME 10.5 the References in the Feedback Zone are sometimes blank when attempting to locate where tags are used.	DE13779	
PME crash when expanding the nested UDT	DE13791	Fixed an issue where an uninitialized structure was being passed into a method, leading to undefined behavior and potential crashes. The update ensures the structure is properly initialized before use.
PME crashes when changing a variable's index while connected and observing data changes	DE13804	Fixed an issue where an uninitialized structure was being passed into a method, leading to undefined behavior and potential crashes. The update ensures the structure is properly initialized before use.

Resolved Problem	Defect Code	Resolution
"Unable to import layout for..." logs across multiple PAC Analyzer files.	DE13809	Resolved two related issues when loading BLK files from a BLZ retrieved from the controller. First, the system was not correctly appending the .blk extension and was relying on a specific file order inside the ZIP, which caused extraction failures. Second, nested FB types were not being imported correctly. Both problems have been fixed to ensure reliable BLK extraction and proper handling of nested function block types.
PME v10.7 release build crashes for investigation.	DE13824	Fixed several issues that could cause the software to crash in specific scenarios. Stability has been improved across multiple areas of the application.
PME v10.7 - Controller LD Editor pop-up - Unable to open storage for block data (Code 0x80030005)	DE13825	Fixed a bug where PME waited for the system's double-click interval after a single click, causing the button-down event to be processed before the double click event when a double-click occurred. The click-handling logic now behaves correctly and prevents unintended actions.
All v10.7 - All products in the v10.7 release are not compatible with a currently supported version of windows 11	DE13832	<p>PME, PPS, PM, ELM and PLSA Software added support for the following Windows 11 OS versions:</p> <ul style="list-style-type: none"> ○ Windows 11 Pro - Version: 25H2 ○ Windows 11 Enterprise - Version: 25H2 ○ Windows 11 Enterprise LTSC - Version: 2024 (24H2) ○ Windows 11 IoT Enterprise - Version: 25H2 ○ Windows 11 IoT Enterprise LTSC - Version: 2024 (24H2) <p>GFK-3245 – PAC Machine Edition, Change Management, and Productivity Suite System Requirements was updated as well.</p>
Issues on UDT Descriptions	DE13834	Fixed an issue in method where a UDT child element with its own description caused a description string to be deleted. This left the pointer invalid during subsequent exports, preventing the description from being written onto the file. The condition that checked the validity of the description string has been removed to ensure descriptions are exported correctly.
UDT/UDFB export error - no descriptions for members	DE13863	
ME 10.7 can't find implicit addresses in LD blocks	DE13835	Fixed an issue where variables that are implicitly referenced in the LD editor are not found by PME's "Find in Target" function.

Resolved Problem	Defect Code	Resolution
PME 10.7 Simulator reliability	DE13837	Improved thread synchronization when download/upload occurs, resolving the problem where PME would occasionally reach a "hung" state and crash when using the simulator on a CPI with only 2 cores.
PME 10.7 - some projects consistently crash on "Word for word" or "Test Mode Edit" change	DE13859	When making online changes, the symbolic memory table now safely handles variables stored when making online changes, preventing crashes during "Word for Word" or "Test Edit"
Windows 11 Pro 10.0.22631 - PPS v10.7 crashes on starting project validation every time.	DE13861	Improved verification that a file exists and is complete before the system attempts to open or process it, confirm that every write operation succeeds and that all expected data is fully written. We added stronger safeguards around third-party components to ensure the system handles unexpected errors gracefully.
Catalog Update prompt showing when "Auto detect controller IP" is selected as template	DE13872	For variable type byte the system now automatically adjusts the memory offset for proper memory alignment and correct display of byte variable values in Data Watch window and Ladder editor.
PME 10.7 - PME crash while saving the workspace during project closure	DE13907	Fixed several issues that could cause the software to crash in specific scenarios. Stability has been improved across multiple areas of the application.
200 Folders Limit in PME	DE13912	We have removed an internal limit that previously restricted the total number of folders that could be created. This limit was unique to the project navigator and did not exist in other areas of the product, such as block management, which only restricts the depth of folder nesting, not the number of folders. With this update, users can now create as many folders as their system resources allow. The only remaining practical limit is available memory: once the application exhausts system memory, no additional folders can be created. This is a natural system constraint rather than a product imposed restriction.

Resolved Problem	Defect Code	Resolution
PME 10.7 - PME crash when using Check-in operation from PCM	DE13913	Fixed several issues that could cause the software to crash in specific scenarios. Stability has been improved across multiple areas of the application.
ME 10.7 crashes while searching for an implicit address	DE13946	Fixed several issues that could cause the software to crash in specific scenarios. Stability has been improved across multiple areas of the application.
PME 10.7.221 is crashing when searching for Implicit addresses	DE14127	
PME 10.7 - PME crash while showing ST block reference during project closure	DE14001	Fixed several issues that could cause the software to crash in specific scenarios. Stability has been improved across multiple areas of the application.
PME 10.7.222 - Upgrade scenario failure due to upgrade PAC EGD	DE14168	When upgrading PME to the latest 10.7.222 patch, PME now fully upgrades the supporting tools including PAC EGD.
PPS 10.7.221 - Install as prompted but final installed version shows PPS v10.7.5362 which is confusing.	DE14184	The build number found in the 'Control Panel' now matches the build number shown on the installer splash screen and the PME .iso file.

New Features

PAC Machine Edition 10.7.222 adds the following new features:

New Features	Description
N/A	N/A

View and Control

Functional Compatibility

Subject	Description
Supported Operating Systems (For detail support information refer to the GFK-3245 – PAC Machine Edition, Change Management, and Productivity Suite System Requirements)	<ul style="list-style-type: none"> • Windows 11 Pro • Windows 11 Enterprise • Windows 11 Enterprise LTSC • Windows 11 IoT Enterprise • Windows 11 IoT Enterprise LTSC • Windows 10 Pro • Windows 10 Enterprise • Windows 10 Enterprise LTSC • Windows 10 IoT Enterprise • Windows 10 IoT Enterprise LTSC • Windows Server 2025 • Windows Server 2022 • Windows Server 2019 • Windows Server 2016
Java installation for WebView	<p>The default installation of Java has been removed from PME. To use WebView, users need to manually install Java from the below path.</p> <p>Go to PME installation location, go to the path <code>\fxView\WebTemplates\JavaPlugin</code> and install “jre-6u30-windows-i586-s.exe” or download this specific version from internet and install.</p>
WebView support on View and Control	<p>WebView will continue to be supported until IE 10.0. To make it work on Microsoft Edge, you can change the browser settings to open in Explorer mode, as there are restrictions in the Java version that supports Webview in PME.</p>

Problems Resolved by this Release

PAC View and Control 10.7.222 fixed the following defects:

Resolved Problem	Defect Code	Resolution
PME View v10.7 performance - UDT editing is slow	DE13702	A conditional validation mechanism was implemented to suppress redundant object notifications, resulting in optimized system performance and reduced processing overhead.
PME View - download to local media error	DE13747	The View Runtime ‘Shutting Down’ message is now correctly handled within the application workflow, preventing recurrence of the issue and ensuring stable runtime behavior.

Resolved Problem	Defect Code	Resolution
Getting an error running View Runtime in PME 10.6.219	DE14078	Required read/write permissions were provisioned, enabling the application to successfully create and modify the necessary retentive database files.
View project crashes PME on open	DE13781	The resource leak occurring during I/O address validation was resolved, preventing PME crashes during variable export and ensuring stable system operation.
PME 10.7 Quick Start Guide document error	DE13984	The QSG has been updated with the required licensing information to ensure consistency and alignment with the User Manual (GFK-1918AD).

New Features

PAC View and Control 10.7.222 make various improvements in the following:

New Features	Description
N/A	N/A

Dropped Features

PAC View and Control 10.7.222 dropped the following:

Dropped Features	Description
ASCII Driver (Control I/O Drivers)	The ASCII driver is officially deprecated as of PME v10.6 and will be completely unsupported beginning with PME v10.7.

Related Documents

For additional information about PAC Machine Edition and PAC Products, refer to the following publications:

Title	Document Number
PAC Change Management for Machine Edition – Getting Started	GFK-1779
PAC Machine Edition – View and PC Control – Getting Started Guide	GFK-1868
PAC Machine Edition - Logic Developer – PLC – Getting Started Guide	GFK-1918
Entitlement and License Manager User Manual	GFK-3104
Emerson Legacy Licensing Guide	GFK-3107
PAC Productivity Suite Configuration Guide	GFK-3134
PAC Productivity Suite Installation, Operation, and Maintenance Manual	GFK-3136
PAC Productivity Suite Application Setup and Configuration Guide	GFK-3137
PAC Change Management IPI	GFK-3258
PAC Machine Edition, Change Management, and Productivity Suite System Requirements	GFK-3245
PAC License Server Administrator User Manual	GFK-3247
PAC Productivity Suite IPI	GFK-3259
PACSystems Simulator IPI	GFK-3300

Additional Support

For support and information, visit Emerson’s support link located at the end of this document. The files for this manual and other related documentation are available there. Additional region- and language-specific websites and telephone numbers are found there as well.

Contact Information and Support

Questions? We are here to help.

Before starting a case or making a call, try searching our Knowledge Base website – it might have the answer you need right away.

If you have a question, try the following:

Search our Knowledge Base	Open a Support Ticket	Register for a Customer Account
 pacsystems.co/knowledge	 pacsystems.co/support	 pacsystems.co/signup

Other Helpful Links

Customer Center Home Page	Commercial Website	Contact Information
 pacsystems.co/customercenter	 pacsystems.co/commercial	 pacsystems.co/contactus

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