

# **PAC Machine Edition**

**Version 10.4**

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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.

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### **CAUTION**

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

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**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.

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# PAC Product Information

Product	Version
PAC Machine Edition	<b>10.4</b>
A. ProPlus Development Suite	
B. Professional Development Suite	
C. Lite Development Suite	
D. Quick Panel CE Development Suite	
View and Control	<b>10.4</b>

## Revision History

Version	Date	Description
Version 10.4	May 2024	<ul style="list-style-type: none"> <li>Introduces the COMPUTE block, which allows users to execute multiple mathematical expressions in one instruction. COMPUTE BLOCK support is limited to LD.</li> <li>Improved support for GSDML 2.43</li> <li>Updated EGD Management Tool (EMT)</li> <li>Introduces feature to indicate whether users are in Admin mode</li> </ul>
Version 10.2. 9762	Sept 2023	Updated to address installation issues from previous versions. Resolved further issues from v10.2.
Version 10.2	June 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

## Release Notes

This IPI includes changes from PME 10.4. Logic that includes the use of the COMPUTE block cannot be saved nor uploaded to previous versions of PME.

# PAC Machine Edition

## Functional Compatibility

Subject	Description
CPE200 Series compatibility	CPE200 Series modules require PME 10.x. They cannot be used with PME 9.8 and lower.
Module Type Package (MTP) Object support	MTP requires PME 10.x. It cannot be used with PME 9.8 and lower.
Non-Supported Operating Systems	<ul style="list-style-type: none"> <li>• Microsoft® Windows® XP</li> <li>• Microsoft® Windows® Server 2003</li> <li>• Microsoft® Windows® Server 2008</li> <li>• Microsoft® Windows® 7</li> <li>• Microsoft® Windows® 8</li> </ul>
Supported Operating Systems	<ul style="list-style-type: none"> <li>• Microsoft® Windows® 10 (22H2)</li> <li>• Microsoft® Windows® 10 IoT Enterprise (21H2)</li> <li>• Microsoft® Windows® 11 (22H2)</li> <li>• Microsoft® Windows® Server 2016 (1607)</li> <li>• Microsoft® Windows® Server 2019 (1809)</li> <li>• Microsoft® Windows® Server 2022 (21H2)</li> </ul>
Supported Virtual Machines	<ul style="list-style-type: none"> <li>• VMWare Workstation (type 2)</li> <li>• VMWare ESXi (type 1)</li> </ul>
Supported Anti-Virus Systems	<ul style="list-style-type: none"> <li>• Norton Deluxe</li> <li>• McAfee Plus</li> <li>• Bitdefender Total Security</li> <li>• Trend Micro Maximum</li> <li>• CrowdStrike</li> <li>• Windows Defender</li> </ul>

## Problems Resolved by this Release

PAC Machine Edition 10.4 fixes the following defects:

Resolved Problem	Defect Code	Resolution
Waiting For Data Message Prevents Variable Updates in Watch Window	DE5900	The variable watch window updates as normal even when using large string UDTs.
PME Performance Slow when connected to a PCM server with multiple instances open	DE6854	Quick access toolbar retains positioning that is set by user, even after PME is closed.
RX3i CPE305 – Error Messages on Download	DE7219	Upgrading the catalog version of the CPE305 (or doing a replace module) resolves the “Unknown Error” on download
Help Index Display Issue	DE8670	PME will warn the user if the scaling of text is not set to 100%, so the user can set the scaling properly before entering help.
RSTi-EP EP-5261 outdated in Toolchest	DE8944	The RSTi-EP EP-5261 GSDML has been updated in the Toolchest installed with PME.
EPXCPE Access Control Tab Number Column begins with 63	DE8991	The “Number” column in the Access Control tab in the EPXCPE240 begins with 1.
PME Cross-Reference Issue	DE9037	Variables with children will now populate the references to the child variables as well as the parent variable.
Error 12300 and Environment not saved error	DE9107	PME’s environment file is now being saved properly during loading, closing, and saving a project as well as running a validate on the active target.
Updating safety for versasafe	DE9295	Updated the install links for CToolkit to the correct links.

Resolved Problem	Defect Code	Resolution
PAC ME Installation Issue	DE9297	Users with Windows 10 Enterprise 2016 LTSC were unable to install PME's Logic Developer due to the component option not appearing. This has since been resolved.
PME 10 install issues on Type 2 VM	DE9390	Users with a type 2 virtual machine were unable to install PME's Logic Developer due to the component option not appearing. This has since been resolved.
Reload license feature not working with ELM 1.4 and PME 10.0	DE9483	When running the Reload License function, PME cleans up any existing licenses before attempting to load a new license.
Modbus EP-5261 Serial Documentation	DE9635	Updated GFK-2992 to include missing information (ex: descriptions for "jumper" or "termination" for RS485 wiring)
Modbus Serial Communication	DE9685	Toolchest update to fix a Modbus serial communication issue
Error when updating CPE100	DE9720	The "UTC Offset" parameter in the OPCUA tab would be set to an incorrect value previously. Now, when doing a module replace or a catalog upgrade, the correct options populate allowing the user to modify the HWC to get a successful validate.
PME 10.1 PN Catalog is not updating correctly with imported GSDML	DE9806	The user can add a IC086GLM064 PROFINET device to a target's hardware configuration.
RX3i CPE305 Enhanced Security Upload/Download	DE9829	An update was made to the companion help of Enhanced Security explaining why the user cannot upload/download logic and config separately with Enhanced Security enabled.
Incomplete Cross References of Block Calls	DE9832	PME would only show last 500 results compared to search results tab, added an error message and prevented deletion of the >500 results.
Multiple Error Messages and PROFINET drop after second validate	DE9921	Fixed bug with HWC Smart Build that did not properly generate IO Segments after the initial build (unless the PNC was made "dirty" before the subsequent validates)
PME Help "Coil Addressing"	DE10132	Updated PME help to fix errors regarding output coil addressing in ladder logic.
PME 10.1 UI Issues- ST Editor Search Issue	DE10213	When an ST Block is locked, the find function would not allow the user to copy text into the find text search bar. This issue has been resolved.
PPS instance templates are broken	DE10247	Updated the path to the template XML files to the correct directory.
PME 10.2 Error 0x8013150c	DE10252	Fixed install issue where the IODescription.dll file was not being versioned properly.
PME Help "Variable List"	DE10272	Updated some minor issues regarding variable list.
GSDML Upgrade incorrect error	DE10281	Added a check to verify that the reference hasn't changed, to stop the error from displaying.
10.0 Project Logic Does Not Download to Newer Versions of PME	DE10299	Fixed an issue in which saving a version 10.0 project in PME 10.2 or later would not download 10.0 logic.
ST editor on-line value crash PME	DE10301/ DE10385	Made a change to prevent PME from refreshing online values faster than every 250ms, as it was doing it faster than PME could retrieve the data
Memory Leak in File Read in PACSAnalyzer	DE10307	Resolved memory leak when PACSAnalyzer reads a file.
Word for Word Change	DE10312	Fixed PME's processing of symbolic variable addressing during word for word changes.
Unable to edit Structured text in STEditor	DE10327	Fixed intermittent crash when pressing enter in the ST Editor.
OPC UA Config is missing redundant IP addresses	DE10347	Changed the way the CPE400/CPL410 gets redundant IP addresses.

Resolved Problem	Defect Code	Resolution
Need to replace serial communication module drawer file	DE10415	Updated the RSTi-EP EP-5261 Serial Comm FB to the current version.
OPC-UA Product URI	DE10568	Product URI URL is no longer visible on the OPCUA tab.
Crash on GetLicensingSession call	DE10631	Fixed crash when closing PME where PME would attempt a license check.
Machine Edition crashes when adding Profibus slave device	DE10760	A null pointer was being passed, added a check to prevent this.
Licensing Crash on PME Close	DE10765	PME no longer crashes when closing due to a licensing check.
When PME is idle and updating editor window it will crash	DE10780	Additional null checks were added to prevent the crash when calls to update the UI were made.
PME crash because of failure to synchronize export variable map	DE10788	Synchronized usage of the export variable map to prevent race condition
Hardware configuration becomes unequal when doing a runtime store	DE10840	PME now does an additional check in the validate call to determine equality
PME crash when opening project	DE10850	Added a null check in the PLC module.
All program blocks deleted while Uploading	DE10864	Added missing export and import's of block properties when reloading the controller.
01918649: - Cannot select the top rows in the variable list	DE10983	Issue was occurring when the user had the scaling in Windows was set to anything other than 100%. If the user sets the scaling to 100%, the top row of the variable list is selectable.
PME crash when try to tune PID	DE10998	Crash was coming when PME would try to call the RTU but it was empty. Added a check to prevent that.
PACSAAnalyzer fault descriptions broken	DE11006	PME was using a hardcoded path to the fault table descriptor file. Made this check dynamic based on the install directory.
IC694ALG223 Jumping Around When Status bits configured for %W	DE11014	Fixed using %W for module status with the following Analog Input Devices in a PROFINET RACK: IC693ALG222, IC694ALG222, IC693ALG223, IC694ALG223, IC693ALG392, IC694ALG392, IC693ALG442, IC694ALG442.
GSDML File Issue	DE11024/ DE11151	Users are now able to upload GSDML files with the "+" character in the file's name
PME crash during tool window container handling	DE11045	Added a check to the object pointer to prevent crash when removing a container.
Controller Connect/Timeout changed	DE11069	Templates included in PME are updated to reflect the increased default connection timeout parameter for the target.
PPS 10.3 Integrated PACS Analyzer Tool crashing	DE11071	Configured PACAnalyzer to properly recognize serial vs Ethernet connection.
PAC Analyzer crash on "Get Data" with serial connection	DE11121	PACSAAnalyser no longer crashes when using the Get Data function.
PacsAnalyzer redundancy state field missing	DE11164	Retrieving redundancy information for all PACSystems Models works when PACSAAnalyzer is connected through Ethernet. If the connection is through serial, at the moment we will not provide Redundancy information.
Unexpected Behavior from Refresh Variable References	DE11176	Refresh Variables will no longer set symbolic variables to their initial value before returning them to their current value when the target is online.
ST editor strips scope of variables locally scoped to other blocks	DE11207	Auto-case corrector no longer strips the scope off the name
FAT/SAT UI not visible on the PAC Machine Edition. The editor opens up blank page.	DE11279/DE11301	The FAT/SAT editor in PPS projects no longer appears blank when selected
PPS v10.1 and 10.2 'Save as' version function	DE11349	PPS "Save As" field includes PPS 3.6 now.

## New Features

PAC Machine Edition 10.4 makes various improvements on the following:

New Features	Description
COMPUTE Block	Logic COMPUTE block allows users to execute multiple mathematical expressions in one ladder logic instruction. COMPUTE BLOCK support is limited to LD.
UI Enhancement	PME now indicates in the top right corner is running as Admin.
GSDML Enhancement	Improved support for GSDML 2.43
EGD Managmnet Tool Enhancement	Updated EGD Management Tool (EMT)

## View and Control

### Functional Compatibility

Subject	Description
Non-Supported Operating Systems	<ul style="list-style-type: none"> <li>• Microsoft® Windows® XP</li> <li>• Microsoft® Windows® Server 2003</li> <li>• Microsoft® Windows® Server 2008</li> <li>• Microsoft® Windows® 7</li> <li>• Microsoft® Windows® 8</li> </ul>
Supported Operating Systems	<ul style="list-style-type: none"> <li>• Microsoft® Windows® 10 (22H2)</li> <li>• Microsoft® Windows® 10 IoT Enterprise (21H2)</li> <li>• Microsoft® Windows® 11 (22H2)</li> <li>• Microsoft® Windows® Server 2016 (1607)</li> <li>• Microsoft® Windows® Server 2019 (1809)</li> <li>• Microsoft® Windows® Server 2022 (21H2)</li> </ul>
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  \fxView\WebTemplates\JavaPlugin and install “<b>jre-6u30-windows-i586-s.exe</b>” 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 Internet 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 10.4 fixed the following defects:

Resolved Problem	Defect Code	Resolution
Machine Edition 10.2.9762 View Script FileCopy error on QP+, PME 10.2 QP+ Scripts with 'Filecopy' don't work	DE10841	Adjust the destination file path in accordance with the source file path length if the length of the destination file path is insufficient for the length of the source file path.
Logic Developer PC v10 cannot browse Historian	DE10654	As the historian browsing tag length is incorrect, tag name length is derived from the tag prefix length.
PME 10.2.9762 download issue	DE11015	WinPC project download issues have been resolved.
QP application using indirect getting stuck on pop up window	DE10727	Runtime script execution is handled to close the panel when the mouse pointer crosses outside of the button zone.
Legacy view project will not convert	DE10842	Fixed the WinCE target(s) to QP View/Control by properly handling the WinCE conversion process.
Quickpanel+ - view script issue, QuickPanel+ frozen after showing too many error windows	DE10355, DE11157	The script event execution time issue has been fixed since the current time is not being properly reset.
Browser ActiveX control	DE11244	The ActiveX object known as "Microsoft Web Browser" is no longer supported by Microsoft. This is now displayed in the modified pop-up message.

## New Features

PAC View and Control 10.4 makes various improvements on the following:

New Features	Description
N/A	N/A

## Dropped Features

PAC View and Control 10.4 dropped the following:

Dropped Features	Description
N/A	N/A

## Related Documents

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

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

## 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.

# General Contact Information

Home link: <http://www.emerson.com/industrial-automation-controls>

Knowledge Base: <https://www.emerson.com/iac-support>

## Technical Support

### Americas

Phone: 1-888-565-4155  
1-434-214-8532 (If toll-free option is unavailable)

Customer Care (Quotes/Orders>Returns): [customercare.mas@emerson.com](mailto:customercare.mas@emerson.com)  
Technical Support: [support.mas@emerson.com](mailto:support.mas@emerson.com)

### Europe

Phone: +800-4444-8001  
+420-225-379-328 (If toll-free option is unavailable)

Customer Care (Quotes/Orders>Returns): [customercare.emea.mas@emerson.com](mailto:customercare.emea.mas@emerson.com)  
Technical Support: [support.mas.emea@emerson.com](mailto:support.mas.emea@emerson.com)

### Asia

Phone: +86-400-842-8599  
+65-3157-9591 (All other Countries)

Customer Care (Quotes/Orders>Returns): [customercare.cn.mas@emerson.com](mailto:customercare.cn.mas@emerson.com)  
Technical Support: [support.mas.apac@emerson.com](mailto:support.mas.apac@emerson.com)

Any escalation request should be sent to: [mas.sfdcescalation@emerson.com](mailto:mas.sfdcescalation@emerson.com)

**Note:** If the product is purchased through an Authorized Channel Partner, please contact the seller directly for any support.

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