PAC Machine Edition

Version 9.70





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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 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.

ACAUTION

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.

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Technical Support

If you experience technical problems that cannot be resolved with the information in this manual, please contact us by telephone, email, or on the web at www.qeautomation.com/support.

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PAC Product Information

Product	Version
PAC Machine Edition Logic Developer PLC QP+ (View / PC)	9.70
PAC Change Management Server Client Scheduler Engine	9.70

PAC Productivity Suite¹

3.60

Note ¹ PAC Productivity Suite is made up of several chained installs that will install the required components and is only available from the PPS Disk.

Product	Version	Engineering Workstation	Operator Console	Application Server	System Server
PME (LD PLC)	9.50	$\sqrt{}$			
HMI (CIMPLICITY)	10.00	$\sqrt{}$	\checkmark		
HMI (iFix)	5.9	$\sqrt{}$	\checkmark		
EGD Driver	7.40k		\checkmark	\checkmark	
EGD Tools	6.01		\checkmark	$\sqrt{}$	\checkmark

Release Notes

When upgrading from Versions of PAC Machine Edition older than 9.0 your PME window settings and system options may be reset.

Fixed Issues

A subset of fixed issues specific to the release is available within in the "fixed issues" document on the installation disk and installed to the help directory

A detailed history can be found on the support page:

https://digitalsupport.ge.com/communities/en US/Article/PAC-Fixed-Issues

New Features

General

Project Version

Added a version property to projects to allow saving in the format used for previous versions. Supported versions include 9.00, 9.50, and current.

Project Properties

Added properties to show the name of the user logged into the workstation and the timestamp of when the project was last modified.

Toolchest Sorting

Added support for sorting entries in the Toolchest by either name or version. When sorting by version, the version string shown for the item's preview is used. If no version string is available, it defaults to the legacy sorting method. The sorting method can be set through the Options tab of the Navigator, or by right-clicking in the Toolchest.

Note: This was also shipped in PME 9.50 SIM 10.

User Options Import and Export

Added support for importing and exporting user options in PME. Two menu options were added to the "Options" tab's right-click menu to export and import. User options can also be imported from windows command prompt.

Note: This was also shipped in PME 9.50 SIM 13.

Hot Key IDE Navigation

Added support for navigating to the next and previous visible tool windows using CTRL + F6 and CTRL + SHIFT + F6 and to navigate between the tabs/panes within a tool window using CTRL + TAB and CTRL + SHIFT + TAB.

Note: This was also shipped in PME 9.50 SIM 13.

User Interface Improvements

The following improvements have been made to the user interface:

- Added new "Photoshop" theme
- Improved support for 4K displays

Logic Developer PLC

GSDML Updates

The following installed GSDML's are updated from the ones shipped with PME 9.50

GSDML-V2.3-GEIP-RX3iPNS-20170109

RSTi EP Standalone Controller

Added support for the CPE100 and CPE115 PACSystems RSTI EP Standalone Controllers.

Note: Support for the CPE100 was also shipped in PME 9.50 SIM 1, and support for the CPE115 was also shipped in PME 9.50 SIM 8.

Default HWC Compression Level set to High

The default HWC compression level is now set at high for new PACSystems Targets.

Note: This was also shipped in PME 9.50 SIM 1.

PROFINET GSDML Schema Support

Added the ability to import PROFINET GSDML's created with schema v2.32 & v2.33

Note: This was also shipped in PME 9.50 SIM 1.

Embedded SNTP Client

The CPU's (CPE305, CPE310, CPE330, CPE400) Embedded Ethernet interface may be configured as a Simple Network Time Protocol (SNTP) client which allows synchronization of the high-resolution Time of Day Clock to an SNTP network time server. This capability provides a consistent time across multiple systems so that all produced EGD exchanges use the CPU's Time of Day Clock for the time stamp.

Note: This was also shipped in PME 9.00 SIM 10 & PME 9.50 SIM 2.

RX3i Redundancy CPU support for Hot Standby Redundancy (CPE400)

The CPE400 may be used as a RX3i Redundancy CPU for Hot Standby Redundancy with PROFINET IO.

Note: CPE400 Firmware version 9.30 or higher is required for redundancy support.

Note: This was also shipped in PME 9.50 SIM 5.

Support for Single-RMX Redundancy

Removed validation requiring 2 RMX modules for a redundant pair of CPE330s with FW version 9.75 or higher.

Note: This was also shipped in PME 9.50 SIM 14.

Support for new hardware

- Power usage of the new IC695PNC001-Bxxx PROFINET controller may now be tracked using the new configuration option.
- Added support for CPL410.
- Added support for IC695ETM001-Kxxx module.

Text Block Support Within FBD Multi-Select

The FBD Editor now supports Text Box's when selecting multiple items

Note: This was also shipped in PME 9.50 SIM 3.

Variable Element Filter Configurations

An "Include Variable Elements" option was added to the filter configuration dialog. The "include Variable Elements" option allows the filtering to evaluate tag elements instead of just the parent.

Figure 1: Variable Element Filter Configuration Dialog



Support for \$# Tags in FBD and ST

Added support to FBD & ST for tags starting with \$# (i.e. \$1234A)

Toolchest Drag-N-Drop of Profinet Devices to Embedded Profinet Ports

Added support to drag devices from the toolchest to embedded Profinet Ports.

Added System Variable for %SA5 on PAC Systems

Added the system variable #PS_FLT for %SA0005 to PAC Systems Projects

System Option – Catalog Update

Added a system option to allow a user to "Always Update, Never Update, Always Prompt" for PAC Systems Catalog Updates.

Support for String literals in the ST Editor

Added support for assigning a string literal to a string variable or parameter. String literals can also be used in the VAR CONSTANT section of an ST block. A string literal is text surrounded by double quotes, such as:

stringVariable := "Message text";

Note: This was also shipped in PME 9.50 SIM 10.

Increased Communication Timeouts

The Connect and Request timeouts under Additional Configuration for a target has been increased from 60,000 ms to 120,000 ms.

Increased Block Count

The limit on the block count has increased from 512 to 768 on the CPE330, CPE400, and CPL410 starting with firmware revision 9.70.

Note: This was also shipped in PME 9.50 SIM 13.

Support for Control Modules

Control Modules are now available without requiring a PPS license.

Structured Text Editor

The structured text editor has been rewritten to boost performance, add support for line numbers, code snippets, better searching, better tooltips, and many other features.

VersaSafe Logic Blocks and Template Update

Updated VersaSafe logic blocks and template.

Note: This was also shipped in PME 9.50 SIM 16.

DNP3 Outstation Protocol

Added the ability to configure DNP3 communication protocol for the PACSystems Rx3i Rackless modules.

OPC UA Security Configuration

Added support for OPC UA Security Configuration in PME.

Note: Firmware version 9.80 or higher is required for OPC UA Security Configuration for CPE302, CPE305, CPE310, CPE330, CPE400, or CPL410.

Note: This was also shipped in PME 9.50 SIM 16.

Utilities

PACSystems Analyzer

Added support for getting forces, an option to not ping a controller before getting data from it, and redesigned the user interface to be easier to use.

Note: This was also shipped in PME 9.50 SIM 9.

View/LDPC

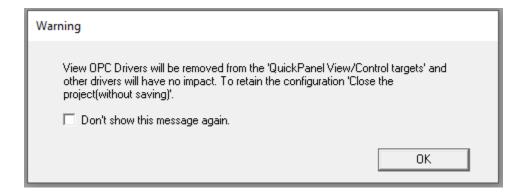
Proficy View Integrated OPC Server Version 5.21

View OPC UA drivers 5.21 are not supported by QuickPanel (QP+) View/Control models.

ODBC driver, SquareD, is not supported on Windows PC targets. Yokogawa Suite is not supported on Windows PC targets or QP+ targets with drivers version 5.21.

If the user has a saved project with QP View/Control targets in a version previous to PME 9.70, the user will get a popup message stating View OPC Driver will be removed from the 'QuickPanel View/Control targets' and other View Native drivers will have no impact. To retain the configuration, Close the project (without saving) ".

Figure 2: View OPC Driver Prompt



This popup will appear for every QuickPanel View/Control target. If the project has more number of QuickPanel View/Control targets, you can ignore the message by checking the option 'Don't show this

message again'. Usually this message will be popped up while adding a new target (old QP View/Control) in a project but once check the check box, this message won't popup while adding a new target. But if you save and open again the same project it pops up the dialog message again. If you don't check the above check box, the pop up will be shown for every old QP View/Control target.

Note: This was also shipped in PME 9.50 SIM 11.

Support for User-defined Data Types (UDTs)

Added ability to configure UDT for QuickPanel+ . A UDT is a User-defined Data Type. After defining a UDT, you can create variables of that data type and use them in HMI application. UDT is not supported for PC and old QuickPanel Targets.

Note: This was also shipped in PME 9.50 SIM 13.

View Runtime Splash Screen Download Details

The View Runtime splash screen dialog will now show the windows user and machine that last downloaded the project to QP+.

Figure 3: About Runtime



Note: This was also shipped in PME 9.50 SIM 14.

Change Management

Parameters View of Function Blocks

Enabled the ability to view the parameters of a PACSystems function block when the project is not checked out.

Note: This was also shipped in PME 9.50 SIM 1.

Windows Server 2016, 2012 Standard, and R2 Support

Windows Server 2012 Standard and Windows Server 2012 R2 have been added to the list of supported operating systems for PAC Change Management.

Note: This was also shipped in PME 9.50 SIM 3.

Internet Explorer v10.0 and v11.0 Support

Internet Explorer v10.0 and v11.0 have been added to the list of supported Internet Explorer versions for PAC Change Management.

Note: Windows Server 2012 support was also shipped in PME 9.50 SIM 3.

Unity Pro XL Support

The Unity Pro XL module has been added to support Unity Pro XL projects (version 11.0 or greater) on PCM Thick Client.

Notes:

- Some operations of this type of projects may also require installation of Unity Pro XL (version 11.0 or greater) and Unity DIF (version 8.0 or greater) on PCM Thick Client.
- This was also shipped in PME 9.50 SIM 3.

Enhancement to the Server Configuration Utility

Added the ability to create and configure Subversion repository and service in the Server Configuration Utility.

Note: This was also shipped in PME 9.50 SIM 7.

Enhancement of Destroy Confirmation

The Destroy dialog has been updated to require the user to type "yes" in the edit box to confirm for destroying the selected project(s) or folder of projects from the PCM server or local computer.

Note: This was also shipped in PME 9.50 SIM 9.

Enhancement of Access Control Permissions

Added 3 new Change Management permissions, i.e. 'Destroy Non-Server Projects', 'Add Server Projects', and 'Destroy Server Projects'.

Note: This was also shipped in PME 9.50 SIM 10.

User Account Control Changes

The PAC Change Management client no longer requires elevated access to run properly on Windows 7 or Windows 10.

Known Issues

Indirect Reference incorrectly reporting as used addresses (00422649/DE3864)

An indirect reference when used in logic with a length treats the register address used as if it were using the direct reference. For example, "H_WIRE; MOVE_INT 6 999 @index,G,%R00001;" displays the address used as %R1 to %R6.

PPS Based CIMPLICITY Alarms Can Not be Acknowledged

There has been a fix to CIMPLICITY to address an alarm acknowledgement issue, download and install CIMPLCITY 9.50 SIM 4 or Greater.

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