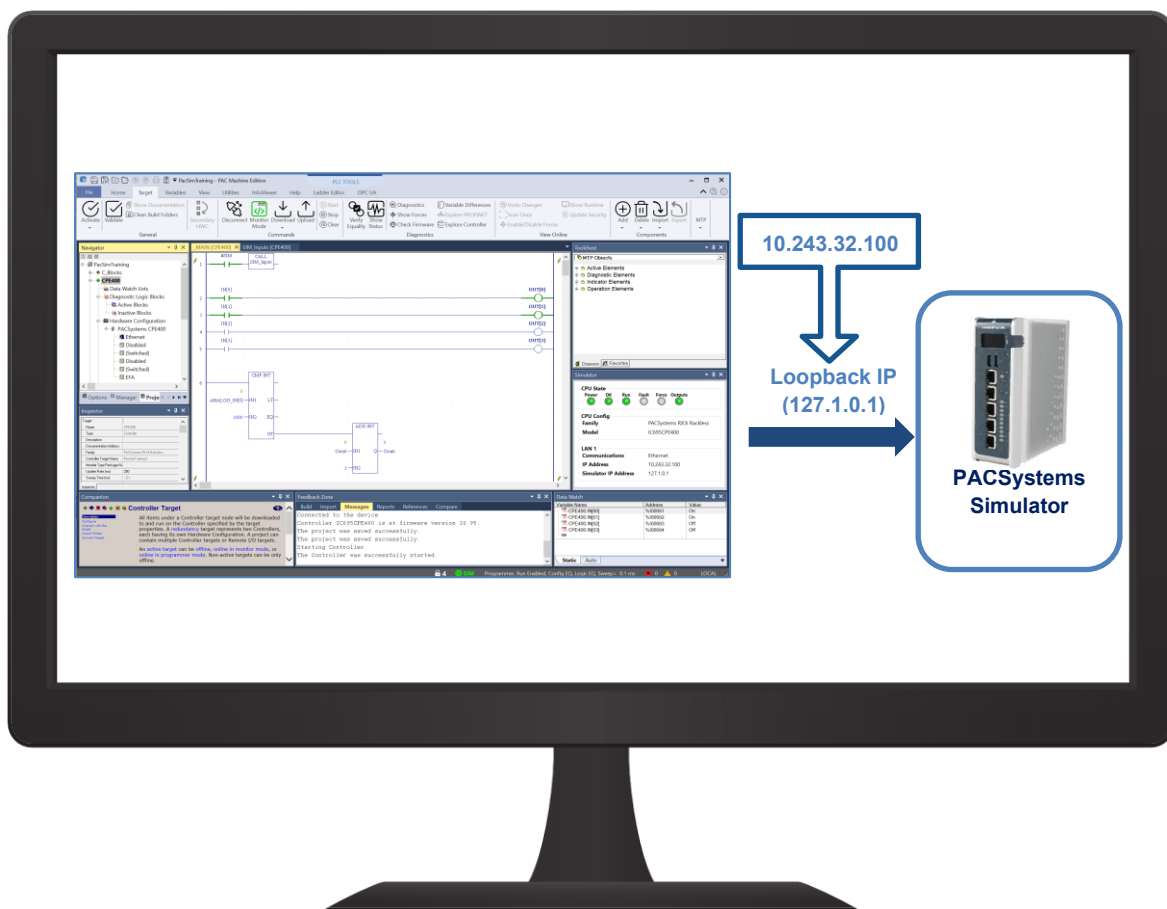


PACSystems™ Simulator

VERSION 1.1



Introduction

The PACSystems Simulator provides end users with the ability to modify, validate, and test logic for a PACSystems CPU without requiring controller hardware. The PACSystems Simulator Release 1.1 provides support for Timed Interrupt logic blocks, provides support for a new function block, and resolves the issues found in the **Problems Resolved by this Release** section.

The PACSystems Simulator is included with PAC Machine Edition 10.6 or later. A PAC Machine Edition Professional license is required to use the PACSystems Simulator.

Current Release Information

Component		Version Number	Date	Comments
PACSystems Simulator	Software	1.1	Apr 2026	Adds Timed Interrupt and Volt to Amp function block support.
PACSystems Simulator	Simulated Firmware	11.05		

Release History

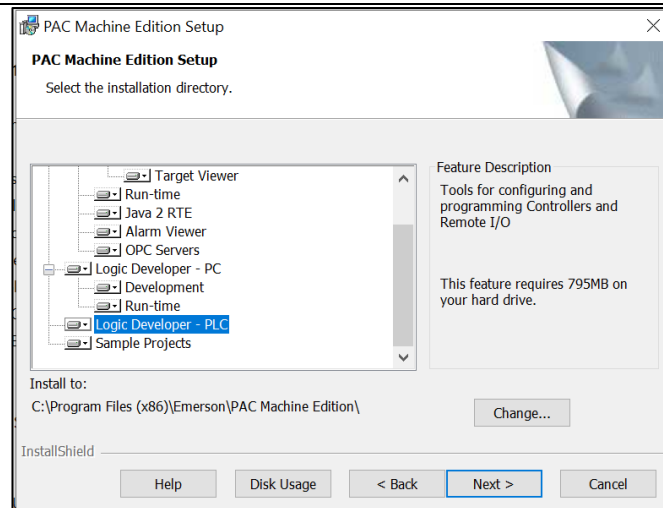
Product(s)	Date	Comments
PACSystems Simulator Version 1.1	April 2026	Release 1.1 adds support for Timed Interrupts and the Volt to Amp function block.
PACSystems Simulator Version 1.0	Nov 2024	Initial Release

Functional Compatibility

Subject	Description
Programmer Version Requirements	PACSystems Simulator Version 1.0 is supported on PAC Machine Edition Logic Developer PLC 10.6 or later. PACSystems Simulator Version 1.1 support requires PAC Machine Edition Logic Developer PLC 11.0 or later.
PC/VM Requirements	See GFK-3245 PAC Machine Edition, Change Management, and Productivity Suite System Requirements for more information.
C Toolkit Compatibility	PACSystems Simulator is supported by C Toolkit versions 10.0 or later.

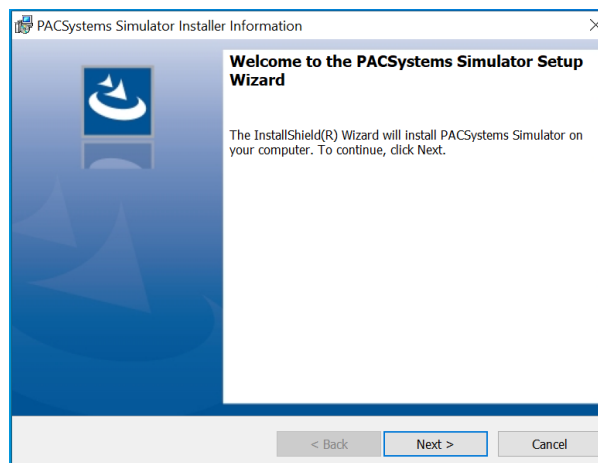
Getting Started

Subject	Description
Installing	PACSystems Simulator can be installed with PAC Machine Edition (PME) or with a separate installer. Installed with PME: 1. Run PACSetup.exe on PME Install ISO (as Admin). 2. Choose Install PAC Machine Edition 11.0 3. Go through the usual PME Installer screens a. Enable installation of Logic Developer – PLC 4. Click the Install button a) PACSystems Simulator will be installed (or upgraded) without additional prompts



Separate Installer:

1. Download the **PACSystems Simulator 1.1** installer from Salesforce
2. Run that installer (as Admin)
3. Agree to the EULA
4. Click the **Install** button
 - a. PACSystems Simulator will be installed (or upgraded)



Note: Both installation methods will upgrade PACSystems Simulator but **not** downgrade.

Problems Resolved by this Release

Subject	ID code	Description
CPE2xx C Blocks Calling strerror_r() Not Functional	DE11962	The strerror_r() C function does not work on the simulated CPE2xx series. Library parameters within the C toolkit cause the strerror_r() function to be a different version than is supported by the CPE2xx simulator. It has been verified that even though the function compiles, there is no operation.
Simulator Crash When Downloading C Blocks	DE12944	For any subsequent download after an initial download in PME, a simulator attempting to download a PME project with C blocks that size up to different sizes on the 64K boundary may result in a simulator crash. This occurs since the simulator can reuse and write to freed memory in the simulator C block heap that was previously marked as read-only for a specific section of a previously downloaded C block. This defect has been fixed by resetting all memory protections back to the default read/write state on the simulator C block heap during a free.
Files Stored in Aux_Data Not Updated During Run Mode Store	DE13643	This issue is written against the Simulator, but it also affects Controllers (CPE2xx series) that save data to /aux_data_ram/ and /aux_data_flash/ that can be updated as part of Run Mode Store. Data saved in /aux_data_ram/ and /aux_data_flash/ was not processed as part of a Run Mode Store. Thus, inactive files were never swapped to become active files. This has been resolved.

Operational Notes

Subject	Description
N/A	Not applicable for this Release of the PACSystems Simulator.

Restrictions and Open Issues

Subject	ID code	Description
Multiple Simulators		This release supports only one simulator at a time. Running multiple simulators simultaneously may lead to degraded performance and potential disconnections for all instances.
Supported HMIs		The PACSystems Simulator can be used by any HMI that supports using an SRTSP server on a loopback IP address. This has been verified using PME View and Movicon.NExT HMIs. HMIs that require Modbus TCP or OPC UA are not yet supported.
Simulator not logging Info Alarm for User Variable Data Excess	DE14244	The PACSystems Simulator allows the user to download user logic, hardware configurations, and user reference data configurations that may exceed the user memory limitations on a real controller. In some cases, the simulator may log faults in the Controller Fault Table, indicating that user logic, hardware configurations, or user reference data configurations have exceeded their normal limits. However, this is not always the case for every download scenario. Therefore, the user must monitor the memory usage for their project via the Memory tab in the Show Status window to ensure that their project will fit in a real controller's user memory.

Product Documentation

PAC Machine Edition Logic Developer – PLC Getting Started Guide	GFK-1918
PACSystems™ RX3i and RSTi-EP CPU Reference Manual	GFK-2222
PACSystems™ RX3i and RSTi-EP TCP/IP Ethernet Communications User Manual	GFK-2224
PACSystems™ TCP/IP Ethernet Communications Station Manager User Manual	GFK-2225
PACSystems™ C - Programmer's Toolkit User Manual	GFK-2259
PACSystems™ CPU Programmer's Reference Manual	GFK-2950
PAC Machine Edition, Change Management, and Productivity Suite System Requirements	GFK-3245

User manuals, product updates, and other information sources are available on the support site.

Contact Information and Support Guide

Questions? We are here to help.

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

If you have a question, try the following steps:

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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