PAC Productivity Suite 11

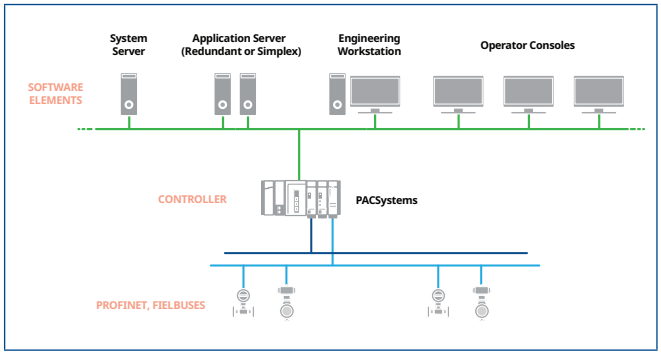
Integrated PLC and SCADA Software

Introduction

PAC Productivity Suite (PPS) streamlines the design, configuration, and deployment of industrial automation systems by unifying PACSystems Logic Developer and CIMPLICITY SCADA software into a single, integrated engineering environment. Instead of configuring multiple applications independently, engineers can define system information once and automatically propagate it across the entire control architecture through a common database.

Designed for both discrete and continuous process applications, PPS reduces engineering effort, minimizes configuration errors, and accelerates project execution by eliminating duplicate data entry and maintaining consistency across controllers, HMI, and SCADA systems. With a centralized point of configuration, teams can standardize development practices, simplify system maintenance, and improve collaboration throughout the project lifecycle.

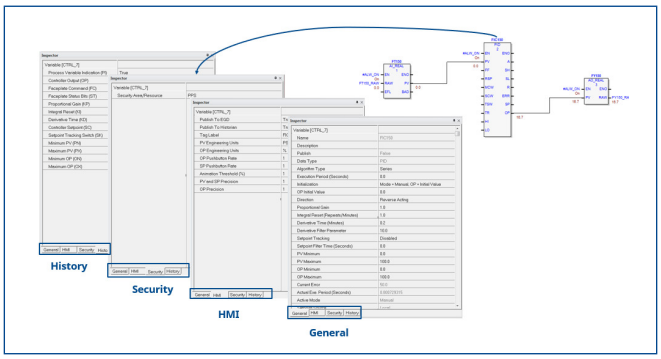
Whether building new automation systems or modernizing existing operations, PPS helps organizations increase engineering productivity, shorten commissioning time, and deliver more reliable, scalable automation solutions.



Benefits

Single Point of Configuration

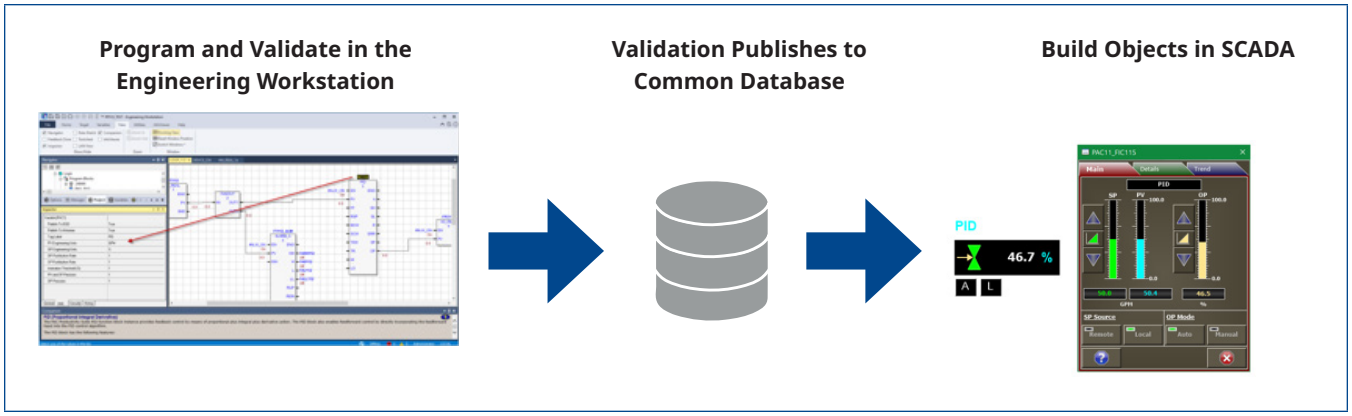
In PPS Logic Developer, all system-wide configuration is defined during control application development, providing a single, centralized point of entry for automation system configuration. As shown below, engineers can configure General, History, Security, and HMI settings directly within the development environment and publish them to a common database shared across the system.



Common Database

PPS Logic Developer publishes control objects to a common database that CIMPLICITY automatically leverages to generate corresponding SCADA and HMI objects, creating a unified, system-wide namespace. This object-oriented architecture enables engineers to define control and visualization elements once and seamlessly propagate them throughout the automation system.

By combining control logic and HMI aspects within reusable objects, PPS supports a modular engineering approach that simplifies the development of both simple and highly complex automation strategies.



Advanced Function Blocks

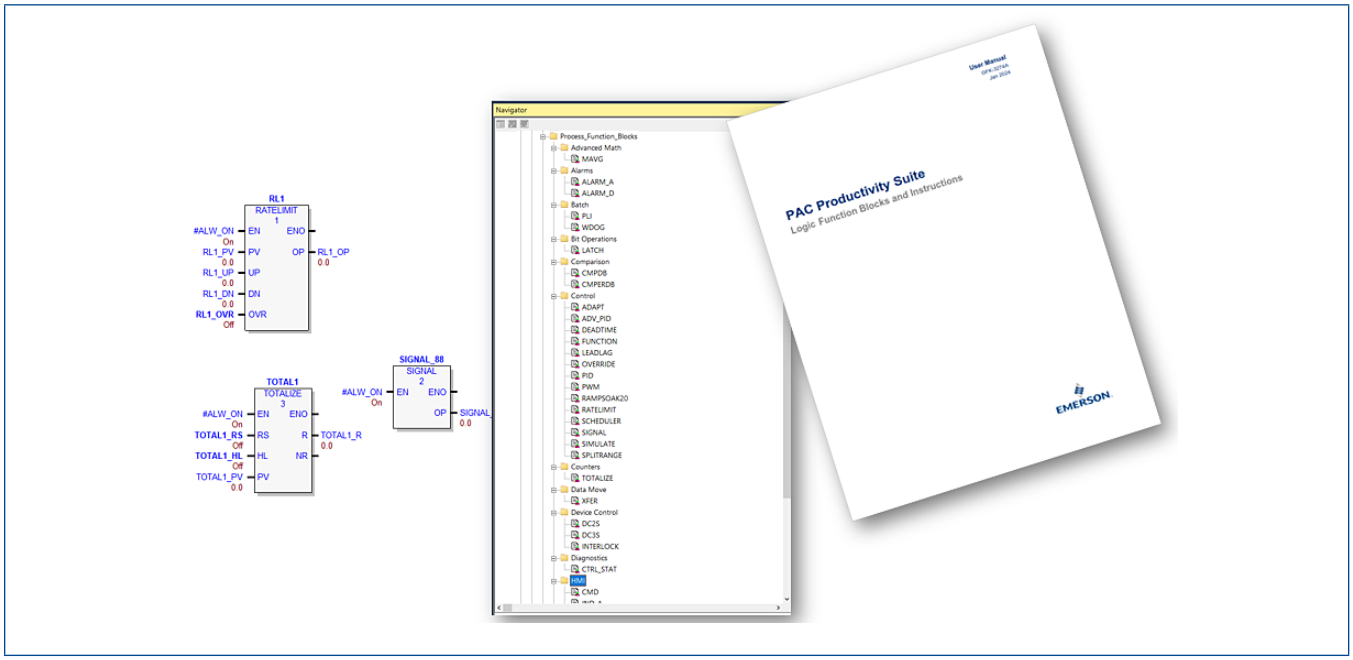
PPS includes a comprehensive library of pre-engineered function blocks that can be easily dragged, dropped, and configured to accelerate application development.

The library provides the advanced functionality required to efficiently design and implement sophisticated regulatory control strategies.

The library includes function blocks for implementing:

- **Ratio Control –** Maintain precise relationships between process variables.
- **Feedforward Control –** Proactively compensate for disturbances before they impact the process.
- **Split-Range Control –** Coordinate multiple final control elements from a single controller output.
- **Cascade Control –** Improve process stability and responsiveness through multi-loop control architectures.

With these built-in control strategies, engineers can rapidly develop scalable, high-performance automation applications while applying industry-proven control methodologies.



HMI Graphics and Alarms

PPS has built-in CIMPLICITY graphics, scripts, and alarm manager that allow engineers to build operator screens and interface with ease.

Product Description

PPS is made up of four software elements: Engineering Workstation, Application Server, System Server and Operator Console. Each software element is a functional entity that can be combined to run on one computer or distributed onto multiple computers depending on the requirements and size of the application. The definition for each software element is given below.

Engineering Workstation: Utilized to develop and configure the system, including control logic and HMI/SCADA, through an integrated configuration database and a global namespace, streamlining design and ensuring seamless interoperability across components.

System Server: Serves as the centralized configuration repository for the system. It includes the EGD Configuration Server and EGD Management Tool, providing a unified platform for managing system configuration data. A RESTful interface enables the publishing, retrieval, and integration of configuration information across the system.

Application Server: Designed to deliver real-time HMI/SCADA information to clients, ensuring efficient and reliable access to critical system data during runtime.

Operator Console: Used to visualize the operational aspects of the process, enabling operators to maintain situational awareness and respond to events with precision and timeliness.

The PPS product can be ordered as a base bundle package or as individual software elements or a combination of both.

Base Bundle Product Offering

Licensing for the PPS Base Bundle is determined by the total number of I/O points supported by the system. An I/O point is defined as a physical wired signal terminated on a local or remote I/O rack, or as a fieldbus-connected device. Available licensing tiers include 100, 250, 500, 1,000, 2,000, 3,000, 5,000, and 5,000+ I/O points. For each tier the PPS Base Bundle can include activations for:

- 1 × Engineering Workstation (EWS)
- 1 × Operator Console (OC)
- 1 × Application Server (APP)

Optionally, a base bundle can be ordered to include Application Server Redundancy which entitles the user to another activation.

- 1 × Redundant Application Server

The Base Bundle may be licensed to support a total of 1, 5, 10, or 25 Terminal Services connections.

Please note that the System Server does not require a license. It may be installed on system hardware to provide the Engineering Workstation and Application Server with access to the common database for publishing and retrieving data.

Individual Software Element Product Offerings

Engineering Workstation may be licensed to support a total of 1, 5, 10, or 25 Terminal Services connections.

Application Server may be licensed to support a total of 1, 5, 10, or 25 Terminal Services connections. The Application Server has options for Server Redundancy and Change Approval.

Operator Console may be licensed to support a total of 1, 5, 10, or 25 Terminal Services connections.

Logic Developer

PAC Productivity Suite Engineering Workstation comes with Logic Developer with the following features:

- PACSystems RX3i and RX7i
- PACSystems RSTi-EP
- Process Block Library
- RIO VersaMax & 90-30
- VersaMax PLCs
- QuickPanel+ / QuickPanel+2
- View Development and Runtime
- PC Control Development and Runtime
- 8000 View / PC Control Points
- PACSystems Simulator

CIMPLICITY

PAC Productivity Suite Application Server and Engineering Workstation come with CIMPLICITY Pro-Server feature set which includes:

- CIMPLICITY Development Server
- Action Calendar
- Recipe
- System Sentry (1 client)
- SPC
- Digital Graphical Replay
- Server Redundancy

PAC Productivity Suite Operator Console includes a CIMPLICITY Development Viewer.

License Types

When ordering PAC Productivity Suite 11, one of the following license types must be selected: Leased Key or Computer Locked Key. Each option is designed to support different deployment and license management requirements. Please note that M7 hardware keys are not supported by PAC Productivity Suite 11.

Leased Key

A Leased Key is activated and managed through a license server. The server maintains a pool of available licenses that can be leased by PAC Machine Edition clients.

The license server can be installed on either a physical or virtual machine. Similarly, PAC Machine Edition clients may run on physical or virtual machines and obtain a license from the server.

This licensing model simplifies administration, improves license utilization, and enables efficient sharing of licenses across multiple users, workstations, and virtual environments.

Computer Locked Key

A Computer Locked Key is permanently tied to a specific physical computer. Once activated, the license can only be used by PAC Machine Edition running on that designated system.

This option is well suited for dedicated engineering workstations where license mobility is not required and centralized license management is unnecessary.

System Requirements

For detailed system requirements see GFK-3245M.

Operating System

- Windows 11 Pro, Enterprise, and IoT
- Windows 10 Pro, Enterprise, and IoT
- Windows Server 2022, 2019 and 2016*

*PACSystems Simulator is not supported on Windows Server 2016.

Recommended Physical Machine Specifications

Software Element	CPU Processor	Cores	RAM	Storage
Engineering Workstation	2-4 GHz	2-8	32 GB	64 GB
Operator Console	2-4 GHz	2-4	16 GB	64 GB
Application Server	2-4 GHz	2-4	32 GB	64 GB

Supported Virtual Machines

Platform: VMware Workstation (Type 2) or VMware ESXi (Type 1)

Primary Support

Primary Support is a service designed to optimize the reliability and performance of PAC Software. It provides customers with access to the Emerson Customer Center website, the latest software releases, and access to experts to troubleshoot and address issues with Productivity Suite.

Ordering Information

To order PAC Productivity Suite, both a product part number and a key type must be specified. The table below lists the available Productivity Suite product offerings and their corresponding part numbers. For each part number, customers must select one of the following key types: Leased Key or Computer Locked Key.

Part Number Base Bundles	Description
PS110PS00100C1Ty	PAC Productivity Suite v11 Base Bundle 100 Points with 1 Activation and 'y' Terminal Services
PS100PS00250CxTy	PAC Productivity Suite v11 Base Bundle 250 Points with 'x' Activations and 'y' Terminal Services
PS100PS00250CxRTy	PAC Productivity Suite v11 Base Bundle 250 Points with Server Redundancy, x' Activations, and 'y' Terminal Services
PS110PS00500CxTy	PAC Productivity Suite v11 Base Bundle 500 Points with 'x' Activations and 'y' Terminal Services
PS110PS00500CxRTy	PAC Productivity Suite v11 Base Bundle 500 Points with Server Redundancy, 'x' Activations, and 'y' Terminal Services
PS110PS01000CxTy	PAC Productivity Suite v11 Base Bundle 1000 Points with 'x' Activations and 'y' Terminal Services
PS110PS01000CxRTy	PAC Productivity Suite v11 Base Bundle 1000 Points with Server Redundancy, 'x' Activations, and 'y' Terminal Services
PS110PS02000CxTy	PAC Productivity Suite v11 Base Bundle 2000 Points with 'x' Activations and 'y' Terminal Services
PS110PS02000CxRTy	PAC Productivity Suite v11 Base Bundle 2000 Points with Server Redundancy, 'x' Activations, and 'y' Terminal Services
PS110PS03000CxTy	PAC Productivity Suite v11 Base Bundle 3000 Points with 'x' Activations and 'y' Terminal Services

Part Number Base Bundles	**Description**
PS110PS03000CxRTy	PAC Productivity Suite v11 Base Bundle 3000 Points with Server Redundancy, 'x' Activations, and 'y' Terminal Services
PS110PS05000CxTy	PAC Productivity Suite v11 Base Bundle 5000 Points with 'x' Activations and 'y' Terminal Services
PS110PS05000CxRTy	PAC Productivity Suite v11 Base Bundle 5000 Points with Server Redundancy, 'x' Activations, and 'y' Terminal Services
PS110PS5000ICxTy	PAC Productivity Suite v11 Base Bundle 5000+ Points with 'x' Activations and 'y' Terminal Services
PS110PS5000ICxRTy	PAC Productivity Suite v11 Base Bundle 5000+ Points with Server Redundancy, 'x' Activations, and 'y' Terminal Services

Part Number Individual Software Elements	**Description**
PS110ECTy	PAC Productivity Suite v11 Engineering Workstation with 'y' Terminal Services
PS110ACTy	PAC Productivity Suite v11 Application Server with 'y' Terminal Services
PS110ACTy-E	PAC Productivity Suite v11 Application Server with 'y' Terminal Services and Change Approval
PS110OCTy	PAC Productivity Suite v11 Operator Console with 'y' Terminal Services

Number of Activation 'x' can be either 1, 2, 3, or 4
Number of Terminal Services 'y' can be either 1, 5, 10, or 25

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