PAC Productivity Suite
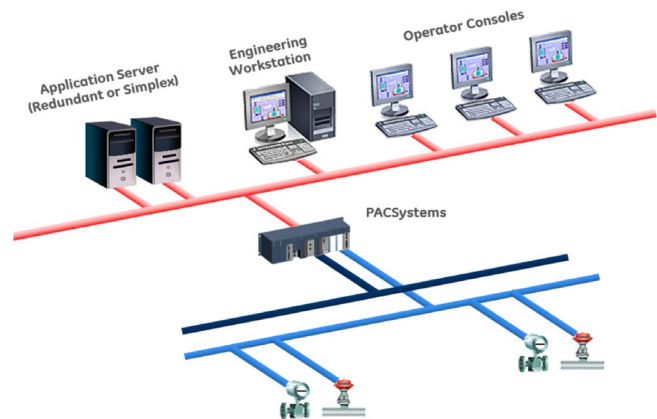## Integrated PLC and SCADA Solution

PAC Productivity Suite (PPS) provides a single point of configuration and a common database for your control system using symbolic variables for data and configuration properties. The result is a system that reduces errors and minimizes implementation time by having the logic developer and SCADA/HMI applications configured once in the Engineering Workstation. PPS gives you the freedom to develop control strategies as you see fit. Pull from our robust library of function blocks or create your own to leverage your in-house innovations.

Software Elements

PPS Software Elements are software components within PAC Productivity Suite that provide specific functionality and can be distributed onto PC hardware based on the requirements of the application. PPS software components include Engineering Workstation, Application Server, and Operator Console.

The **Engineering Workstation (EWS)** software element is used to develop and configure the system. It includes a SCADA development/runtime server, PPS Logic Developer, and EGD system tools. Included in the SCADA system are PPS mimic and faceplate objects that allow consistent and efficient development of HMI screens . The EGD system tools includes a configuration server that provides a common database between the Logic Developer and SCADA components of a PAC Productivity Suite application.
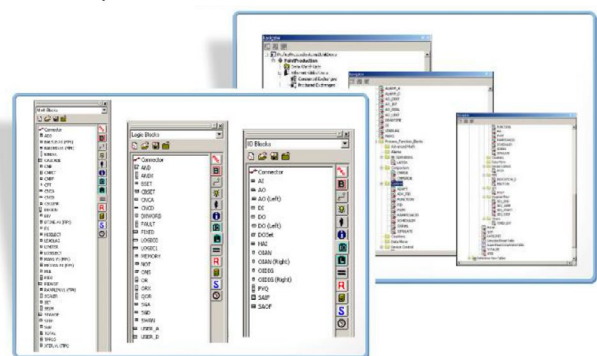
The **Application Server** software element supports CIMPLICITY client/server architecture. In this case, the Application Server serves as the CIMPLICITY Server and communicates to the PACSystems controller(s) during runtime. The Operator Consoles receive data from the Application Server (CIMPLICITY) and do not communicate directly with the controller(s). The Application Server also allows 3rd party device connectivity with PPS. The option to have redundant CIMPLICITY Application Servers is included in all offerings except the 100 I/O Point System.
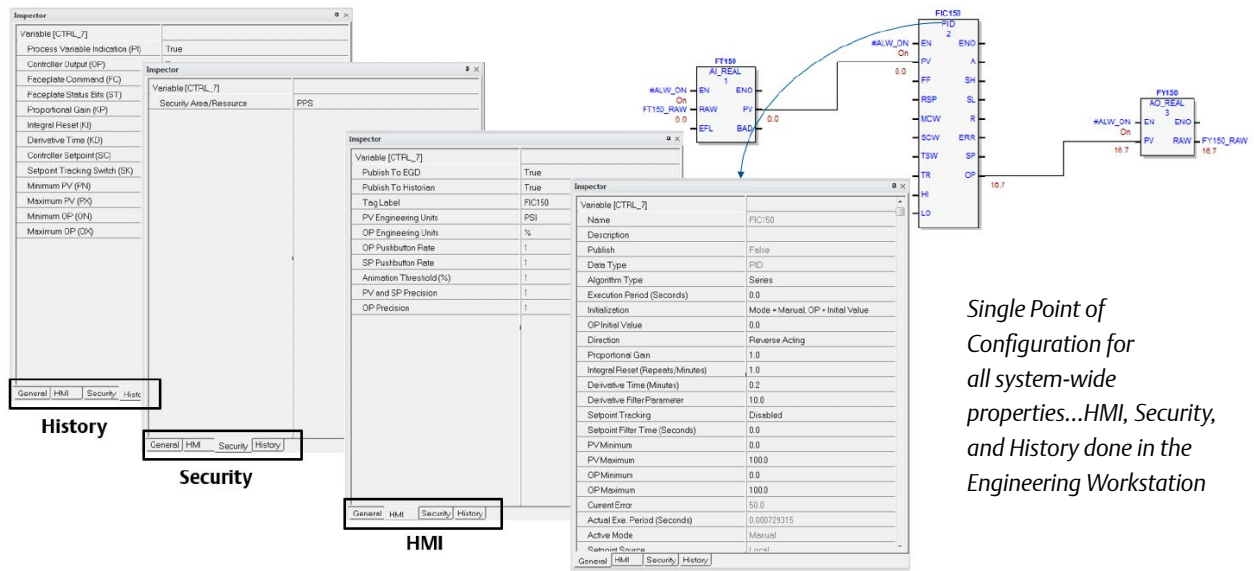
The **Operator Console (OC)** software element is used by the operator to monitor and control the process.

Common Database

PPS Logic Developer publishes control objects to the common database that CIMPLICITY utilizes to build corresponding SCADA/HMI objects. This object-oriented database allows modular programming of simple to complex controls strategies using objects that possess both control and HMI aspects.

PPS has many built-in objects that can be dragged and dropped into your application and configured to create a control application quickly.
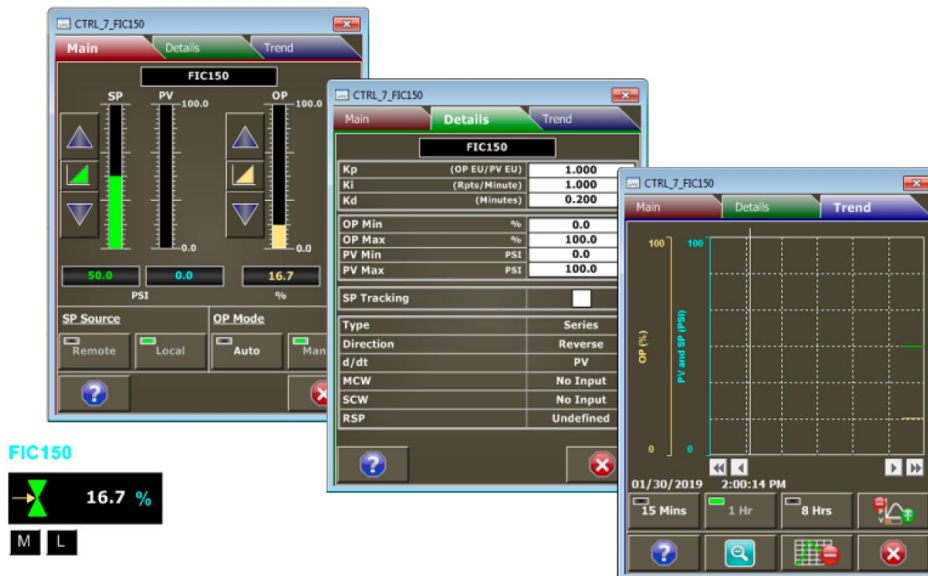
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Single Point of Configuration for all system-wide properties...HMI, Security, and History done in the Engineering Workstation

Single Point of Configuration

n the PPS Logic Developer, all system wide configuration can be entered at the time of control development. As shown above, you configure General, History, Security, and HMI properties from a single point of entry that gets published to the common database. This eliminates multiple entry points of configuration that can lead to errors and inconsistencies. Each aspect of the object is configured under a tab dedicated to that aspect. The resulting configuration is published to a common database. Applications automatically consume the configuration to create the aspects to realize control strategies for mining, water & wastewater and metro tunnel applications.

Advanced HMI Mimic & Faceplate

Many PPS control objects have mimic and faceplates graphics that can be used to create HMI screens quickly. For example, you can create a single-input / single-output PID loop in the Engineering Workstation in minutes. Instantiate a PID function block and then CIMPLICITY will build the HMI aspect for the PID function block. The object includes a mimic object, such as a valve for flow control, that can be drag and dropped onto an overview screen and you are done! Once the screen is put into run-mode and the valve mimic is clicked upon the advanced faceplate will pop-up for the operator to interact with the PID loop.

Advanced Regulatory Control Made Easy

The Logic Developer Process Edition function block library has the necessary functionality to easily construct advanced regulatory control algorithms.

The library provides blocks to create:

- Ratio Control
- Feedforward Control
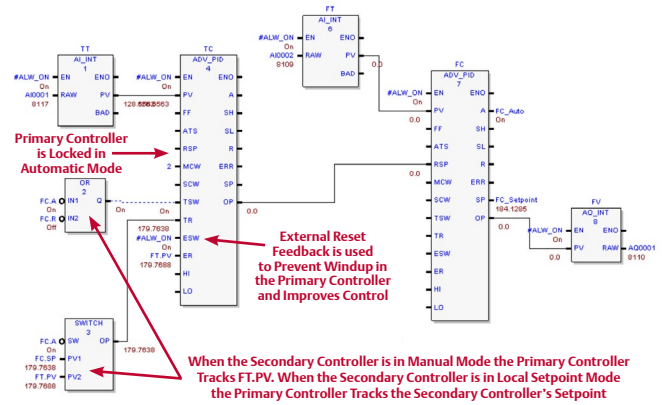- Split Range Control
- Cascade Control

Integration Equals Productivity

Based on proven technologies that have been built as a fully integrated system, PAC Productivity Suite adds up to even more than the sum of its parts.

At the heart of the system is our multi-disciplined PACSystems controllers groundbreaking technology that allows you to jump seamlessly between process, discrete and motion control for unprecedented design flexibility.

CIMPLCITY HMI/SCADA allows you to effectively manage alarms and visualize the process under control.

Integration with Historian allows you to archive data and replay anomalous events with CIMPLICITY's historical data replay giving you the means to learn and gain insights into situational awareness.

CIMPLICITY Features Included

Feature Name	PPS Base Bundle	Engineering Workstation	Operator Console	Application Server
CNC Connections	0	0	0	0
Sentry Nodes	1	1	0	1
Webview Connections	1	1	0	1
Terminal Server Connections	Configurable	1	0	1
ThinView Connections	0	0	0	0
GlobalView Connections	0	0	0	0
Marquee Devices	0	0	0	0
System Type-Development/Runtime Server	Enabled	Enabled	-	Enabled
SystemType-Development Viewer	-	-	Enabled	-
Options-ActionCalendar	Enabled	Enabled	-	Enabled
Options-DynamicGraphReplay	Enabled	Enabled	-	Enabled
Options-OPC Server	Enabled	Enabled	-	Enabled
Options-HostRedundancy	Enabled	Enabled	-	Enabled
Options-Recipes	Enabled	Enabled	-	Enabled
Options-SPC	Enabled	Enabled	-	Enabled
Options-SystemSentry	Enabled	Enabled	-	Enabled
OptionsTerminalServices	Enabled	Enabled	-	Enabled
Options-Tracker Display	Enabled	Enabled	Enabled	Enabled
Options-OrderExDisplay	Enabled	Enabled	Enabled	Enabled
Options-WebView	Enabled	Enabled	-	Enabled
ABCOMM	Enabled	Enabled	-	Enabled
ABDF1	Enabled	Enabled	-	Enabled
ABDHP	Enabled	Enabled	-	Enabled
ABRF	Enabled	Enabled	-	Enabled
APPLICOM	Enabled	Enabled	-	Enabled
FLOPRO	Enabled	Enabled	-	Enabled
HONYWELL	Enabled	Enabled	-	Enabled
MARQUEE	Enabled	Enabled	-	Enabled
MBRTU	Enabled	Enabled	-	Enabled
MBTCPIP	Enabled	Enabled	-	Enabled
MITSUBISHISERIAL	Enabled	Enabled	-	Enabled
MITSUBISHITCPIP	Enabled	Enabled	-	Enabled
JOHNSON	Enabled	Enabled	-	Enabled
OMRONHOSTLINK	Enabled	Enabled	-	Enabled
OMRONTCPIP	Enabled	Enabled	-	Enabled
SHARPTCPIP	Enabled	Enabled	-	Enabled
SIEMENST1	Enabled	Enabled	-	Enabled
SMARTEYE	Enabled	Enabled	-	Enabled
SYMAX	Enabled	Enabled	-	Enabled
TOYOPUC	Enabled	Enabled	-	Enabled

Logic Programmer Features Included

Feature Name	PPS Base Bundle	Engineering Workstation	Operator Console	Application Server
I/O Points	Configurable	Same as Base	Same as Base	Same as Base
PACSystems RX3i & RX7i	Enabled	Enabled	-	-
PACSystems RSTi-EP	Enabled	Enabled	-	-
Series 9030 & Series 9070	Enabled	Enabled	-	-
Process Block Library	Enabled	Enabled	-	-
RIO VersaMax & 90-30	Enabled	Enabled	-	-
VersaMax	Enabled	Enabled	-	-
QuickPanel & QuickPanel+	Enabled	Enabled	-	-
View Development	Enabled	Enabled	-	-
View Runtime	Enabled	Enabled	-	-
PC Control Development	Enabled	Enabled	-	-
PC Control Runtime	Enabled	Enabled	-	-
View and PC Control Points	8000	8000	-	-

Ordering Information

Part Number *PPS Based Bundles*	Description
PS38PS00100C1	PPS v3.8 PPS Standard 00100 Points CIMPLICITY 1 Activation
PS38PS00250C3R	PPS v3.8 PPS Standard 00250 Points CIMPLICITY 3 Activations
PS38PS00500C3R	PPS v3.8 PPS Standard 00500 Points CIMPLICITY 3 Activations
PS38PS01000C3R	PPS v3.8 PPS Standard 01000 Points CIMPLICITY 3 Activations
PS38PS02000C3R	PPS v3.8 PPS Standard 02000 Points CIMPLICITY 3 Activations
PS38PS03000C3R	PPS v3.8 PPS Standard 03000 Points CIMPLICITY 3 Activations
PS38PS05000C3R	PPS v3.8 PPS Standard 05000 Points CIMPLICITY 3 Activations
PS38PS05001C3R	PPS v3.8 PPS Standard 05000+ Points CIMPLICITY 3 Activations
Add-On Part Numbers (Extend Base Bundle as Needed)	
PS38EC	Enabled
PS38AC**	Enabled
PS38OC***	Enabled

* PPS CIMPLICITY can have Redundant Application Servers, excluding the 100 I/O system, as part of the base system by appending the part number with an "R."
**PPS CIMPLICITY Application Server has a host redundancy option included.
***PPS CIMPLICITY Operator Console is a development viewer.

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