

GE
Intelligent Platforms

proficy machine edition



imagination at work

Simplifying Your Development Efforts

Easy. Comprehensive. And Powerful. With Proficy Machine Edition, you get the ultimate integration between HMI, motion and multi-target control.

In today's competitive marketplace, the need to do more with less is more pertinent than ever before, as complex programs need to interface with many different aspects of the entire production system. Engineering resources have become increasingly constrained, and integrating different programming languages requires a significant investment in development, debugging and maintenance.

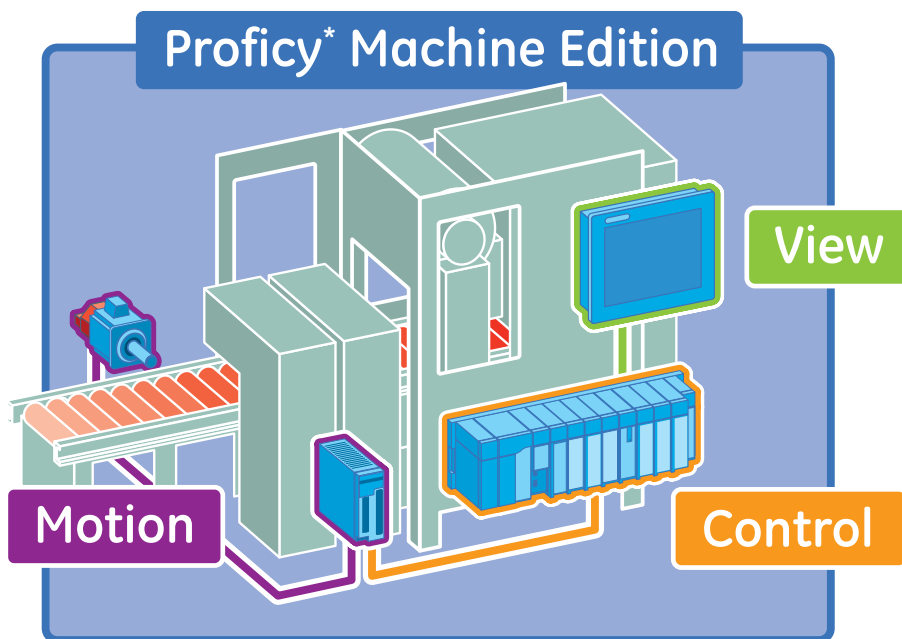
One Development Tool for All Controls, All Applications, All Users

With GE Intelligent Platforms' Proficy Machine Edition automation software, you can simplify your efforts and reduce costs by leveraging an integrated development environment that deploys all your HMI, motion and multi-target control applications. All components and applications within Proficy Machine Edition share a single workspace and tool set, including a standardized user interface and an efficient, user-friendly design.

Machine Edition combines the best of traditional programming and graphics applications with powerful open industry standard technologies such as COM/DCOM, ActiveX, OPC and XML—providing a smooth migration path to the latest development tools.

Key Benefits Include:

- Faster time to solution through increased efficiency
- Improved productivity to configure, develop, commission, and maintain applications
- Decreased development and maintenance costs
- Seamless migration path to the latest technologies
- Reduced training time with one software package for all controllers, operator interface, and motion



Tools for Every Stage

With Machine Edition, you have a rich set of automation software tools to support your applications throughout the entire project life cycle.



Improving Productivity from Configuring to Maintenance

Configure

- Intuitive tools make it easy to configure the system, and enhance and modify it as needed
- One software package supports the full line of GE Fanuc controllers

Develop

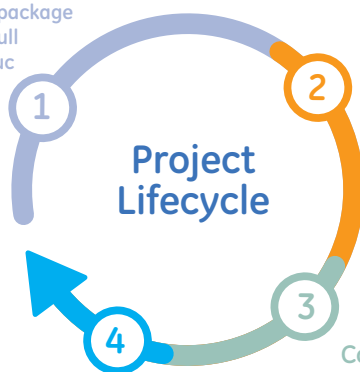
- A complete set of programming languages for you to develop your control applications
- User-defined function blocks enable you to develop and maintain code in one place but use it multiple times within and across your applications

Maintain

- Diagnostic tools for identifying problems that may have occurred within your system
- Central storage, version control and access control capabilities

Commission

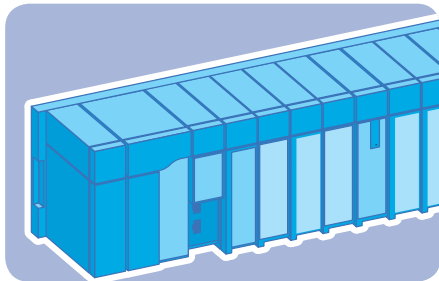
- A complete set of online development tools to help you debug issues and solve problems more quickly
- Data monitoring tools provide a window into your application execution



At the forefront of automation technology, GE Intelligent Platforms has a proven track record delivering best-of-breed solutions to help you increase operational performance while reducing costs and risk. Combining decades of technology expertise and in-depth domain experience, we can help you meet your mission-critical goals and gain a sustainable advantage for the long term.

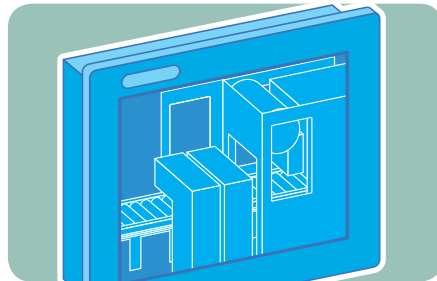
Save Time With Tight Integration

In addition to common development tools, all Machine Edition components share a common database and common objects across applications, including logic, scripts and animation.



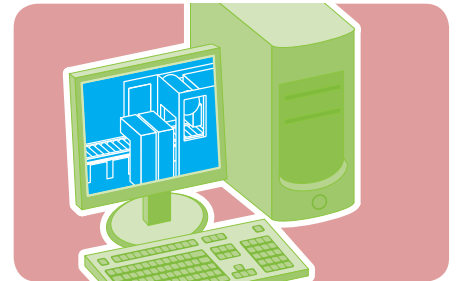
Logic Developer-PLC

Logic Developer-PLC is an all-encompassing system that helps you program and configure all GE's PLCs and Programmable Automation Controllers (PACs), including VersaMax[®] Professional, Standard, and Nano/Micro versions, Series 90[®]-30, Series 90-70 and PACSystems RX7i and RX3i.



Proficy View

Proficy View is the graphical interface component, an HMI specifically designed to address your machine-level operator interface and HMI requirements. It includes a wide range of PLC/device drivers and OPC client/server support, and provides remote connectivity and thin client support for diagnostic and data monitoring. It also supports GE's full line of operator interfaces, including QuickPanel[®], QuickPanel View (Windows CE-based), and Windows NT/2000/XP.

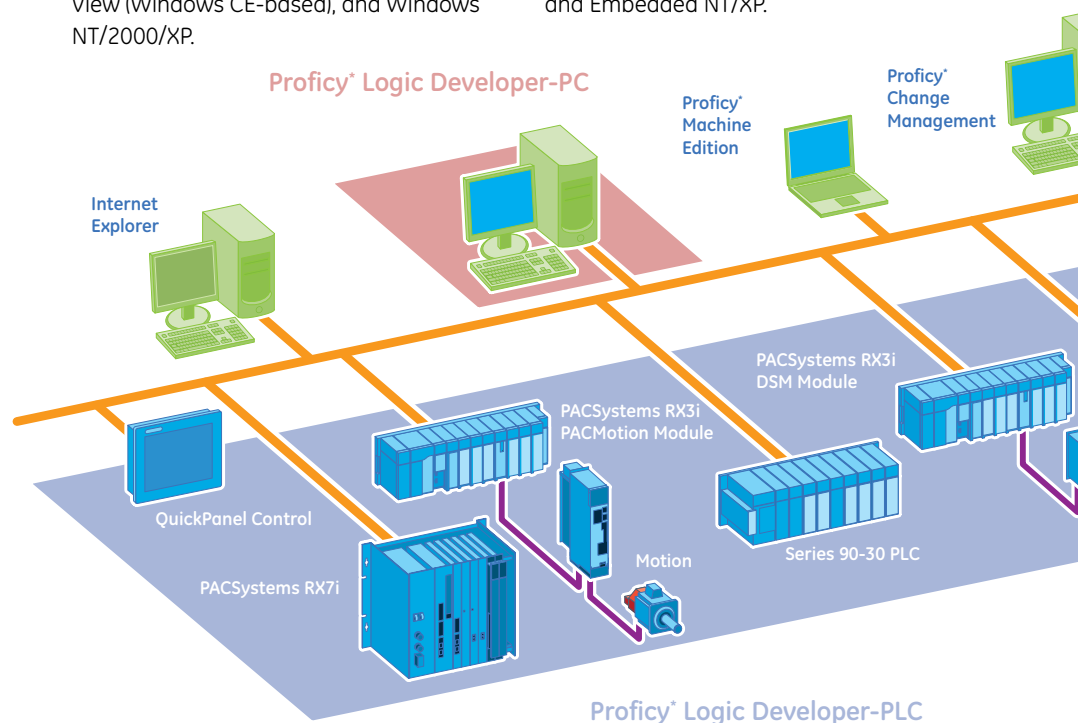


Logic Developer-PC

Logic Developer-PC is a proven PC-based development and runtime system. It provides you with flexibility in programming in all five IEC 1131 languages (Ladder Diagram, Structured Text, Instruction List, Function Block Diagram and Sequential Function Charts), web publishing of logic, and connectivity to a wide choice of PLC and open I/O devices. It includes support for QuickPanel Control (Windows CE-based), Windows NT/2000/XP, and Embedded NT/XP.

"With its extensive capabilities and integrated platform, GE's Machine Edition software is a better solution for us and our customers. The ability to develop HMI and PLC programming in a single package using common editing tools, database, and objects has greatly simplified the process and decreased programming time."

Dale Cormier
Instrument Control Systems



Unique Features That Give You an Edge

You can easily add functionality and simplify complexity to reduce the learning curve for engineers, achieve higher operating efficiency and lower development costs.

Object Oriented Programming (Toolchest)

Manages libraries of built-in and user created logic, graphical objects, script sequences and more. It saves you time by eliminating the need to manually update each occurrence of an object when the master or library version is changed.

User Defined Function Blocks

Allows you to specify and reuse specific function blocks. It saves you time by using function block capabilities exactly where you want them.

Symbolic Names and Automated Address Management

Allows you to create your programs with symbolic variables or can automatically map locations for referenced-based variables.

Cross Reference Tab

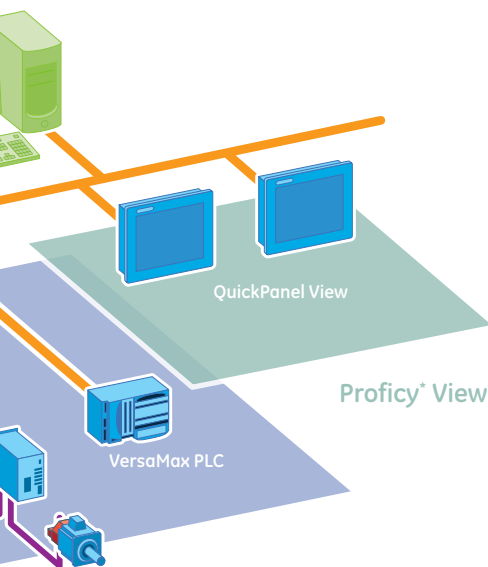
Allows you to click on a variable to get a list of everywhere that variable is used in the project, including PLC logic, graphic panels, HMI scripts, etc.

Single Tag Database

Eliminates integration issues when using an OI/MMI with a motion or control system. Once you create a variable, it can easily be used in all other domains of the application.

User Defined Data Types

Allows you to create custom data structures that represent real world equipment and objects. It significantly reduces application development time and increases productivity.



Proficy Machine Edition works with many different parts of your manufacturing system to maximize productivity.

Technical Advantages:

- Wide range of PLC/device drivers and OPC client/server support, remote connectivity and thin client support for diagnostic and data monitoring
- Web client/server
- Optimized view for systems with up to 2500 I/O points
- Expansive networking features
- Multi-language support
- Advanced scripting—uses standard VBScript with over 70 script functions to manipulate and format data
- Web publishing—provides remote monitoring and diagnostics and remote client-based reporting from a wide variety of web clients

Learn more about how Proficy Machine Edition can help you achieve greater efficiency and increased productivity. Contact your GE Sales Representative today.

The Proficy Machine Edition Environment

The Proficy Machine Edition user interface contains a powerful set of tools and editors that are useful in application development.

Navigator

The Navigator organizes and displays your project information, showing the list of projects that you may use.

Inspector

The Inspector displays the detailed properties of a selected object such as a block of logic.

Companion

The Companion is a dynamic, context-sensitive help window that provides a summary of the information about the current selected item. It has been described as "always having the user manual open to the right page."

The screenshot displays the Proficy Machine Edition Engineering Workstation interface. The main window is titled "PPS_Controller1_200_with_xfer - Engineering Workstation - [Kam_PID]". The interface includes a menu bar (File, Edit, Search, Project, Target, Variables, Tools, Window, Help), a toolbar, and a Navigator pane on the left. The Navigator pane shows a tree view of the project structure, including "Data Watch Lists", "Ethernet Global Data", "Hardware Configuration [Primary]", "Hardware Configuration [Secondary]", and "Logic". The main workspace shows a logic diagram with a block labeled "AL_REAL" and various input/output connections. A text box above the diagram provides instructions for using the advanced PID UDFB. At the bottom, the Inspector pane shows properties for the selected object, and the Companion pane displays the "Data Watch Tool" help text.

This is the advanced PID UDFB for PPS performance testing. It consists of a PID block, and an analog output block; it uses a global RAW_In as input and an analog output block. To use this block, just instantiate this UDFB as many times as you need and use Remote Setpoint. This block should be used together with Remote Setpoint running at this block. To run this, simply change the value of the Kam_PID_Setpt.

Extra Local Words	128
Diagram Settings	
Zoom	100%
Page	Letter
Page Width	11
Page Height	8.5
Orientation	Landscape
Margins	
Custom Order	Auto: Leftmost Diagram

Data Watch Tool

The Data Watch tool is a debugging tool that lets you monitor the values of variables.

The **Static** tab contains all variables that you add to the Data Watch tool yourself. The only limit to the number of variables you can add is the amount of memory on your computer.

The **Auto** tab displays variables associated with the currently selected item. It is automatically updated when you click on an item.

Done

Environment

Editors

The Editors are the main windows where you create and edit your logic and HMI applications.

Toolchest

The Toolchest contains preconfigured and user-defined objects that can be used to quickly develop your Machine Edition projects.

InfoViewer

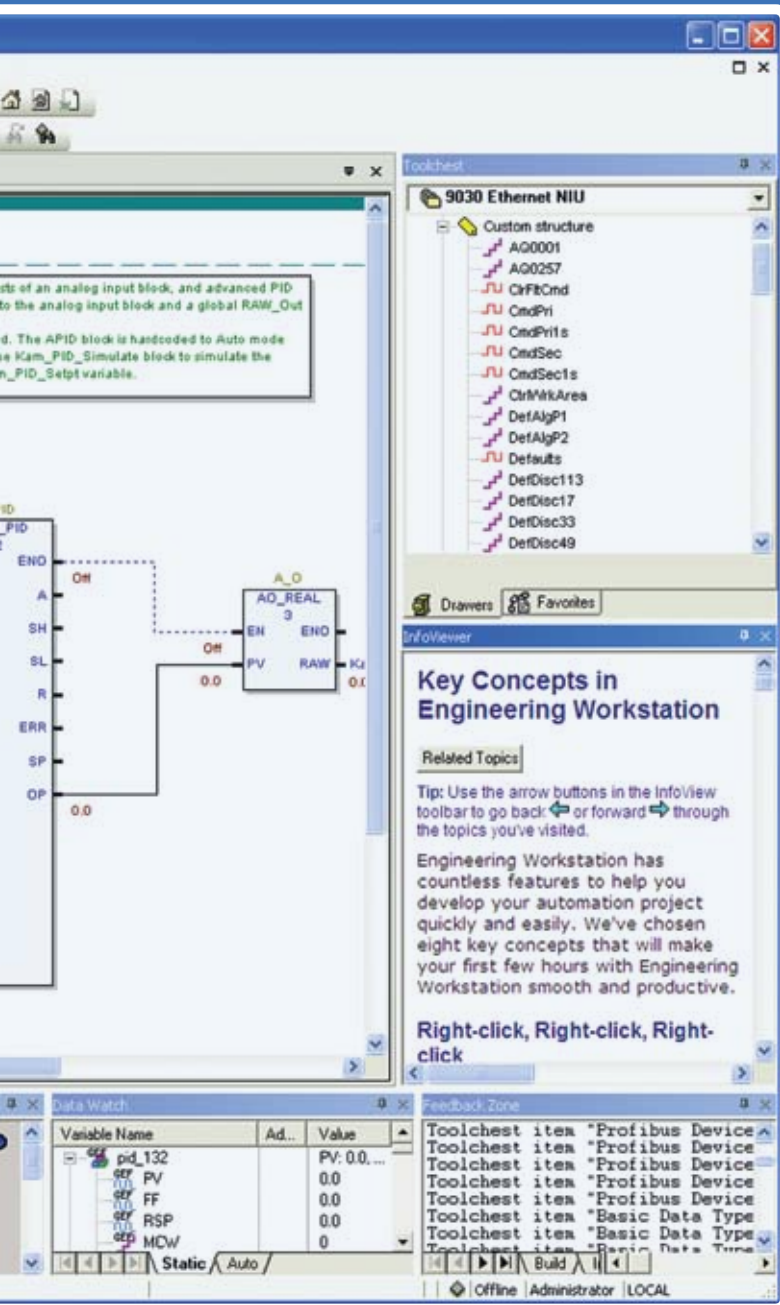
The InfoViewer doubles as a web browser that displays reports and comprehensive help.

Feedback Zone

The Feedback Zone displays output information generated by Machine Edition components. For example, it shows the results of a project validation, listing any errors and warnings that are encountered.

Data Watch

The Data Watch is a debugging tool that enables you to keep watch on the values and forces of variables while working online with a target.





GE Intelligent Platforms Contact Information

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Global regional phone numbers are listed by location on our web site at **www.ge-ip.com/contact**

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