CIMPLICITY® 2024 – PROFICY® HMI/SCADA SOFTWARE

GE VERNOVA

Precisely monitor & control plant & enterprise operations with native HTML5 & centralized, remote & mobile innovation

Enable centralized, remote & mobile operations to increase efficiency & uptime

As a proven automation platform, CIMPLICITY from GE Vernova provides true client/server visualization and control – from single machines to plant locations spanning the world – helping you manage your operations and improve decision-making.

Based on decades of research and development and part of the Proficy family from GE Vernova, CIMPLICITY is the HMI/SCADA of choice for the world's largest manufacturers and utilities. For applications of all sizes, CIMPLICITY can help deliver easier development, faster response, reduced costs, and increased profitability.

Explore our new generation CIMPLICITY 2024 featuring centralized configuration and licensing, integrated advisory analytics, enhanced native HTML5 with Proficy Operations Hub, and more.

With capabilities beyond your traditional HMI, native HTML5 means less installation and maintenance effort, easier mobility, responsive design, added value with modern web functionality, secure by design, and rich information where and when you need it – on the device of your choice, in the control room or out in the field.

OUTCOMES BY DESIGN

- Speed problem detection and response across your entire enterprise with modern dashboards, KPIs, and sophisticated alarm management including integrated advisory analytics
- Reduce time-to-value with Rapid Application Development tools including native HTML5, Configuration Hub, cloud, and object-oriented design
- Improve decision-making with richer information in context, supported by modeled data, web-based visualization, and OT systems consolidation
- Minimize maintenance time and costs with zero deployment clients
- Take advantage of superior design flexibility for consumption of third-party HMTL5 content, cloud architectures, and enterprise scalability
- Drive efficiencies in your development across the Proficy portfolio with a common model, installer, security, and unified configuration

01 Increase efficiency with dashboards, mobility, sophisticated alarming & analytics

CIMPLICITY changes the HMI experience to enable decision support for the user. The overall HMI layout is designed to provide users with the most informed, personalized view of the problem or task at hand – for faster response and fewer errors. Additionally, sophisticated alarm management including advisory analytics and escalation capabilities can assist operators to see and act on alarms that matter, improving efficiency and reducing risk. CIMPLICITY 2024 users can receive the free SCADA Analytics Starter Runtime Edition of Proficy CSense featuring alarm pattern recognition, sensor health, and AI/ML templates – jumpstarting your analytics to optimize operations.

02 Drive faster time-to-value with native HTML5, cloud & centralized configuration

Deploy solutions faster with powerful tools including common installer, model, and security as well as our Configuration Hub – across SCADA, historian, and visualization. Leverage our native HTML5 graphics designer, high availability for 24/7 uptime, and enterprise capabilities including cloud architectures. Also, easily combine CIMPLICITY with other OT and IT systems. Use CIMPLICITY's object-oriented design for easy repeatability and faster time-to-value through modeled context. You can use classes and objects to build a structured database quickly. Modeling capabilities in CIMPLICITY allow you to create templated applications for repeatable assets, further speeding configuration.

03 Achieve enterprise-wide visualization – including remote operators & supervisors

CIMPLICITY screens through Proficy Operations Hub and Webspace are full HTML5 compliant and support responsive design. The displays support multi-touch and scale to various form factors and orientations to support remote and on-site operators and supervisors.

04 Leverage standards for IoT interoperability such as MQTT & cloud capabilities

CIMPLICITY delivers a standards-based open ecosystem for superior interoperability and the foundation for IoT including an MQTT client. CIMPLICITY supports MQTT, OPC UA, cloud, ISA 18.2, ISA 101, and more.

With thousands of installations, CIMPLICITY offers trusted performance, reliability, one of the richest HMI/SCADA feature sets, and edge-to-cloud innovation from GE Vernova.

05 Improve connectivity, security & reliability across your entire enterprise operations

With OPC UA server support for modeled data, CIMPLICITY helps you aggregate systems for a single connection to your SCADA and consolidated views. Additionally, CIMPLICITY's Global Discovery Server reduces threats from cyber attacks with overall certificate-based communication. Robust coding practices and secure deployment guidance (ISO 27001) make CIMPLICITY the SCADA of choice to help meet the most demanding security requirements.

"Playback is the 100% bonus. Event diagnostics and response time decreased by at least 80%."

Calvin Forde, General Superintendent of Signals New York City Transit Authority, 7th busiest subway in the world 1,500,00-point CIMPLICITY enterprise SCADA system
Read the story

CIMPLICITY® 2024 – PROFICY® HMI/SCADA SOFTWARE

Powerful enterprise SCADA to reduce costs, maintenance, & risk while improving collaboration & uptime

GE VERNOVA

New in Version 2024

Advisory Analytics

- Alarm pattern recognition and troubleshooting, PID control loop health monitoring, AI/ML templates

Enhanced visualization & scale

- Proficy Operations Hub HTML5 HMI – enhanced trending, new click zones, additional animations for enabling improved operator visual experience
- Improved alarm viewer performance for large systems
- Support for multiple event managers enables higher scalability by allowing multiple event services to run on server
- Reduced process startup time
- Right-to-left support (text and string objects) and new procedures for common tasks that would require scripting

Security and uptime

- Enable remote project start and stop using digitally signed interface
- Redundancy Configuration Update leveraging CIMPLICITY redundancy, perform build changes on a running project without downtime

Central management

- Central licensing – manage license allocation to servers and clients plus tag allocations to servers
- Configuration Hub registration to facilitate shared portfolio integration
- Global Class Script Library enables consistency and maintainability across CIMPLICITY applications leveraging classes/objects

Secure-by-design data collection from anywhere to monitor, control and analyze your processes

Efficient Operations

- Sophisticated alarm management and escalation
- Native HTML5 HMI provides a single experience for processing and interacting with Operations, driving transparency of information and better decision-making, efficient actions, and faster on-job training
- Trending
- Action Calendar
- SPC, eSignature / Change Approval, recipes
- Graphical incident playback (DGR) to enable remote operations & analysis
- Device connectivity plus 70 +basic drivers with our Industrial Gateway Server (IGS) option
- Reporting: KPIs, operations dashboards and compliance data at your fingertips

Powerful Development Tools

- Native HTML5 graphics designer and lightweight scalable Runtime for a better way to develop
- Common model, common security (multi-domain) reduces configuration – SCADA, historian and visualization
- Never start with a blank sheet of paper, improve efficiency by starting with a model
- Integrated installer plus Configuration Hub: start/stop projects, leverage OPC UA discovery
- Database model-based design (Classes/Objects)
- Design library & Integrator Toolkit

- Extensibility: Python, .NET and VB scripting, rich APIs for customized/optimized advanced config and data acquisition and alarm toolkits
- Open standards (ISA, IEC, OPC, MQTT)
- MQTT5 client: MQTT to OPC UA translator normalizes OT data connectivity; brings data from smart IoT sensors/devices into SCADA and subscribes to MQTT message bus data
- Native Web HMI structured asset model mapped to CIMPLICITY's objects and classes
- OPC UA for structured data and secure-by-design interoperability, including the OPC UA server for consolidated data in context to the model with certificate management

Highly Scalable for Enterprise SCADA

- Small systems to large (>500K) point count
- Consolidate SCADA systems across enterprise to reduce costs, maintenance, risk, and training
- Easily combine CIMPLICITY, other OT systems plus IT systems with Proficy Operations Hub, adding information such as PDFs, videos, SQL tables, etc.
- Enterprise server
- Reduced hardware costs via cloud infrastructure (Azure VM, AWS VM and hybrid cloud)
- Centralize operations and facilitate remote access using cloud infrastructure

Other Features

- Historization to SQL and Proficy Historian
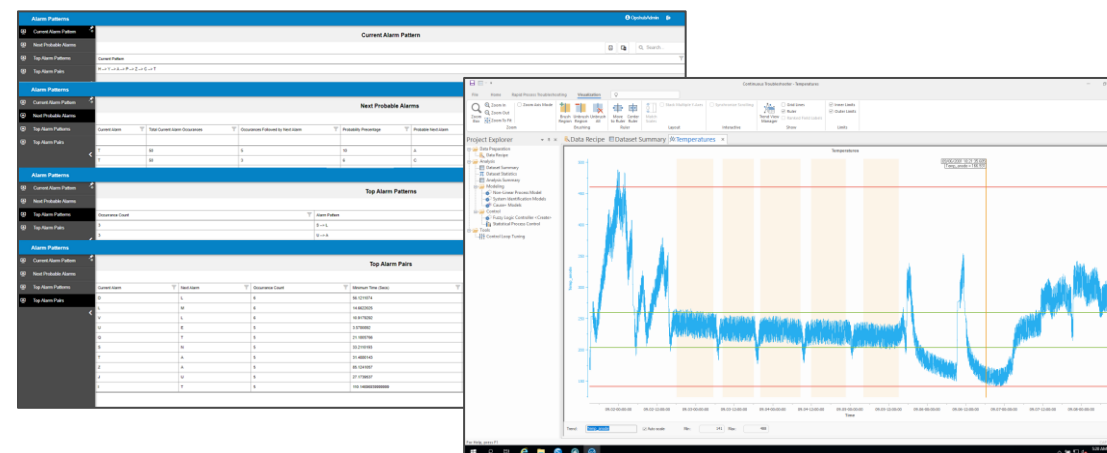- Local, remote over LAN, WAN, or Internet connections including VPN

- High availability for 24/7 uptime: Host redundancy, Windows cluster support, dynamic configuration and dynamic change support, support for high availability hardware, system health parameters, System Sentry
- Secure by design: Secure Deployment Guide, ISO 27001, IEC 62443, Global Discovery Server, certificate management, and more
- In addition to integrated analytics with Proficy CSense, also enable analytics through SCADA data and Python libraries (e.g. Pandas)
- Tracker, HMI for CNC, iPower, Building Management / Energy Management, Batch Execution
- Flexible clients: scalable screens, viewer, advanced viewer, Proficy Operations Hub, Proficy Webspace, terminal services, broadcast option, QuickPanel XP
- Marquee and Marquee Manager
- Best-in-class and fully integrated options
  - Proficy Operations Hub
  - Proficy Historian Essentials, permanent storage of time-series data generated by your SCADA system
  - Proficy Webspace, native CIMPLICITY HMI operator experience in a Web browser
  - Proficy CSense, advanced analytics including free SCADA Analytics Starter Edition

Consult product documentation for hardware/software requirements. Confirm standard vs optional features with GE Vernova representative. Specifications are subject to change without notice. Results and functionality vary, depending on existing hardware/software, applications, implementation, and other factors.

FREE SCADA ANALYTICS STARTER EDITION OF PROFICY CSENSE

Jumpstart advisory analytics with integrated templates.

- **Alarm Pattern Recognition** – Understand how alarms occur together to assist with understanding root causes and rationalize alarm configuration. Easily identify daily top occurring alarm pairs.
- **PID Control Loop Performance Monitoring** – Monitor PID control loop performance and help detect process and equipment issues before impact on operations.
- **AI/Machine Learning Templates** – Predict numeric outputs (such as Quality) and non-numeric outputs (such as Faults).

LEARN MORE ABOUT CIMPLICITY

GET FREE TRIAL

WATCH CIMPLICITY 2024 VIDEO