

# CIMPLICITY 2023 from GE Digital



Precisely monitor and control your operations with native HTML5 and centralized, remote & mobile innovation

## Enable centralized, remote and mobile operations to increase efficiency and uptime

As a proven automation platform, CIMPLICITY from GE Digital 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 Digital, 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 2023 featuring centralized project configuration and deployment, cloud compatibility, enhanced failover, MQTT, 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

- Speed problem detection and response across your entire enterprise with modern dashboards, KPIs, and sophisticated alarm management
- 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
- Reduce threat of cyber attacks with certificate-based communications and secure configuration guidance (Achilles Practices/IEC 62443)
- Minimize maintenance time and costs with zero deployment clients
- Take advantage of superior design flexibility for consumption of third-party HTML5 content, cloud architectures, and enterprise scalability
- Drive efficiencies in your development across the Proficy portfolio with a common model, installer, and security

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

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 and escalation capabilities can assist operators to see and act on the alarms that matter, improving efficiency and reducing risk.

## 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 including MQTT and cloud capabilities

CIMPLICITY delivers a standards-based open ecosystem for superior interoperability and the foundation for IoT including an MQTT5 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 Digital.

## 05 Improve connectivity, security & reliability across your entire 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, 7<sup>th</sup> busiest subway in the world  
1,500,000-point CIMPLICITY enterprise SCADA system  
[Read the story](#)

# CIMPLICITY 2023 from GE Digital

Precisely monitor and control your operations with native HTML5 and centralized, remote & mobile innovation



## Features

### New in Version 2023

- 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
- Native HTML5 graphics designer and lightweight scalable Runtime for a better, faster way to develop
- Easily combine CIMPLICITY, other OT systems plus IT systems with Proficy Operations Hub, adding information such as PDFs, videos, SQL tables, etc.
- 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. Payload can be JSON or Sparkplug B
- Alarm custom attributes + enhanced alarm filtering
- Digital screen and project signing
- Integrated installer plus Configuration Hub: start/stop projects and leverage OPC UA discovery
- Common model, common security (multi-domain) reduces configuration – SCADA, historian and visualization
- OPC UA Client/Server communications directly to CIMPLICITY clients (screens, point control panel, etc.)
- Enable project updates via failover with no downtime

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

#### Efficient Operations

- Sophisticated alarm management and escalation
- Native HTML 5 for High Performance HMI
- 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

- Design library & Integrator Toolkit
- Database model-based design (Classes/Objects)
- Extensibility: Python, .NET and VB scripting, rich APIs for customized and optimized advanced configuration and data acquisition and alarm toolkits

- Open standards (ISA, IEC, OPC)
- Never start with a blank sheet of paper, improve efficiency by starting with a model
- 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

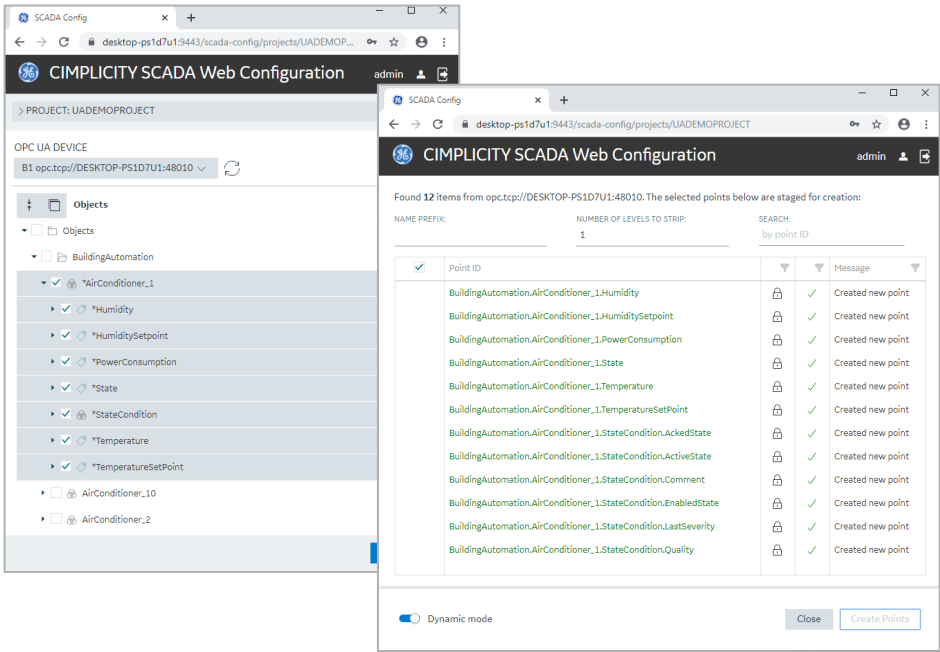
- Small systems to large (>500K) point count
- Enterprise server
- Reduced hardware costs through cloud infrastructure (Azure VM, AWS VM and hybrid cloud)
- Centralize operations and facilitate remote access using cloud infrastructure

#### Other Features

- [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
- Historization to SQL and Proficy Historian

- Secure by design: Secure Deployment Guide, ISO 27001, IEC 62443, Global Discovery Server, certificate management, and more
- Enable analytics through SCADA data and Python libraries (e.g. Pandas)
- Local, remote over LAN, WAN, or Internet connections including VPN
- Tracker, HMI for CNC, iPower, Building Management / Energy Management, Batch Execution
- Flexible clients: scalable screens, viewer, advanced viewer, Proficy Operations Hub, Proficy Webspaces, terminal services, broadcast option, QuickPanel XP
- Marquee and Marquee Manager
- Best-in-class and fully integrated optional solutions
  - [Proficy Operations Hub](#) integration: publish model and mimics from CIMPLICITY, build new Web-based mimics by browsing data
  - [Proficy Historian Essentials](#), permanent storage of time-series data generated by your SCADA system
  - [Proficy Webspaces](#), providing your native CIMPLICITY HMI operator experience in a Web browser

With CIMPLICITY, you can significantly reduce development time on database creation from OPC UA data sources.



Please consult the [product documentation](#) for Hardware and Software Requirements.

Optimize operator and development efficiency with High Performance HMI, reducing risk with proven visualization and SCADA that spans your enterprise.

GET FREE TRIAL

LEARN MORE

# CIMPLICITY 2023 from GE Digital



Precisely monitor and control your operations with native HTML5 and centralized, remote & mobile innovation

## Services

In the world of Industrial Internet of Things (IIoT), organizations are able to optimize productivity, reduce costs, and achieve Operational Excellence. While this is an exciting time for opportunity and growth, it can also bring on new challenges, questions, and uncertainty. No matter where you are on your IIoT journey, GE Digital has the right services offering for you.

[Advisory Services](#) We can help you plan and start your IIoT journey in a way that aligns to your specific business outcomes.

[Managed Services](#) We can help you maintain your critical machines from one of our remote locations around the world using model-based predictive analytic technology.

[Implementation Services](#) Our experienced global Automation partners can implement a collaborative, multi-generational program that marries your existing investments to the right enhancements and technology.

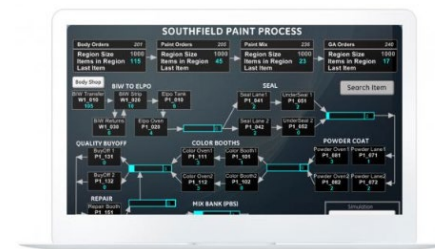
[Education Services](#) We specialize in education services to ensure that you're leveraging our solutions to the fullest extent with our training and certificate programs.

[Acceleration Plans](#) Let us help by ensuring that your business continues to operate at its highest efficiency, all while mitigating risks to your investments.

[Security Services](#) Our solutions provide industrial-grade security for a wide range of OT network and application topologies.

## Unified and Integrated Proficy Products for Your Digital Transformation Journey

GE Digital's unified and integrated Proficy suite helps you precisely monitor, control, and visualize every aspect of your operations, enabling operators to make the best decisions faster. Transforming your business requires foundational innovations that lay the groundwork for future success.



### Tracker

Accelerate time-to-market and improve just-in-sequence performance at global scale.



### Proficy Operations Hub

A centralized environment for aggregating and visualizing contextual and situational information, supporting rapid application development and rich displays for faster response.



### Proficy Historian

Optimize asset and plant performance through time-series and A/E industrial data collection and aggregation. Improve decision-making with advanced trend analysis.



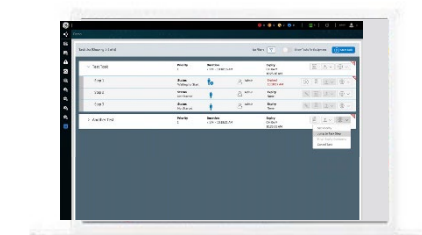
### Dream Report

Powerful reporting to help you improve performance and meet operational goals.



### Proficy Plant Applications

Maximize overall equipment effectiveness (OEE), improve production scheduling, and ensure product quality by leveraging real time production data.



### Proficy Workflow

Guide operators with dynamic, interactive electronic work instructions and eSOPs for more consistent operations and optimized processes.



### iPower

Achieve safer operations and efficient network management. iPower is electric utility SCADA made easy!

## About GE

GE (NYSE: GE) is the world's Digital Industrial Company, transforming industry with software-defined machines and solutions that are connected, responsive and predictive. GE is organized around a global exchange of knowledge, the "GE Store," through which each business shares and accesses the same technology, markets, structure and intellect. Each invention further fuels innovation and application across our industrial sectors. With people, services, technology and scale, GE delivers better outcomes for customers by speaking the language of industry.

©2023 General Electric. All rights reserved. \*Trademark of General Electric. All other brands or names are property of their respective holders. Specifications are subject to change without notice. 07 2023

## Contact

[www.ge.com/digital](http://www.ge.com/digital)