Proficy Operations Hub 2022 from GE Digital



Modern, centralized environment for rapid, no/low code industrial applications for Web-based intelligence

Enable collaboration and continuous improvement with OT business intelligence, centralized visualization/configuration, and digitized processes Proficy Operations Hub allows both developers and non-developers to

Proficy Operations Hub from GE Digital is a centralized environment to rapidly build industrial applications (data connectivity, aggregation and visualization), enabling improved plant operations through comprehensive information that's easier to analyze and act upon independently of location.

With Proficy Operations Hub, teams across all levels in an organization can increase operational efficiency and make better decisions based on real-time and historical plant-wide application data, including historian, MES, analytics, and third party. Users can monitor, control, provide data entry, and perform analysis all through Proficy Operations Hub.

Proficy Operations Hub offers:

- 60% faster configuration with enhanced ease of use
- 40% enhanced data analysis capabilities including new widgets and enhanced Trend Analysis
- 100% improved performance including Query interface and Data Distributor enhancements
- 333% increased scale on a single server with up to 1,000 Concurrent Clients on a single server

Outcomes

- Improve collaboration and continuous improvement programs with a cross-business, easily accessible digital operations hub
- Rapid, low/no code development of Web-based displays for operations
- Faster response and better decision-making with centralized visualization, digitized processes, data analysis in context, and task lists
- Decreased costs and time-to-market for creating Web-based operations applications
- Lower maintenance costs with centralized Web applications
- Information anywhere, any time with responsive design

Accelerate development of rich Web applications with code-free configuration

quickly assemble displays through a comprehensive library of widgets and arrange them to provide responsive operator visualization. You can easily define data sources and entities for connected devices and create queries to access and transform data into actionable information for operations. Drag-and-drop design allows for simple placement and configuration of visualization components on the display, then dragging the guery or data source onto the component guickly enables the data connections.

Deliver actionable information with a crossbusiness digital operations hub

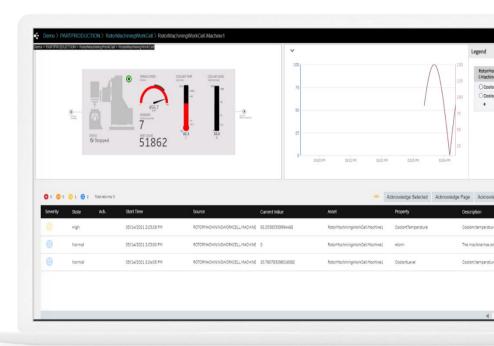
Proficy Operations Hub shares information across frontline workers, empowering them with knowledge of what is happening. The software enhances accessibility across roles and locations, providing critical information including trends for improved response and real-time task lists. The solution also makes it easy to collect data from operators, facilitating interaction and sending commands back to connected interfaces. Operators can monitor, control, analyze, and more.

Information at your fingertips

Responsive design allows you to build the application, so information is readily available on PC displays, tablets, and mobile phones, allowing access to information and insights into your operations from anywhere, any time.

Fast, automatic response based on IIoT data

Proficy Operations Hub allows you to trigger automatic actions based on human events or device or system data. You can configure actions to drive data gueries, send emails, or send commands to devices.



With Proficy Operations Hub, you can leverage powerful, code-free development tools to quickly assemble High Performance, Web-based applications, enabling collaboration and continuous improvement.

Save time with zero deployment clients, centralized management & standards

Leveraging Web technology and open standards such as OPC UA for interoperability, Proficy Operations Hub reduces deployment and maintenance time. The true native Web clients do not require any client installation. Deploying and maintaining have never been easier.

"Proficy Operations Hub accelerated time to value as we developed and delivered an expanded remote and local monitoring and control solution for ENGIE, a major energy company serving millions of customers. We leveraged this highly flexible software including RAD capabilities in conjunction with the Proficy portfolio to create reusable objects and High Performance HMI operator screens, GIS functionality, dashboards, and more."

Sven Simons, Manager, Industrial IT Business Unit **Control & Protection Automation nv**

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Features

New in Version 2022

Increasing Rapid Application Development

- Use cloud infrastructure (Azure and AWS VM)
- Expanded widget library for data display and analysis
- Third-party systems integration OPC UA write Enhancing OT Business Intelligence (BI)
- Visualization widgets for supervisory dashboards
- Pivot grid for ad hoc multi-dimensional data analysis

 Enhancing MES and HMI/SCADA
- Dataflow editor for creating runtime logic to transform data for visualization
- Multi-timeline widget for displaying event-based data such as downtime, machine/equipment utilization and more
- Improved operator experience for Life Sciences customers with new customizable Proficy Batch Execution app for operators

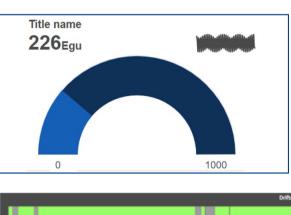
Proficy Operations Hub: Rapid development in a code-free environment

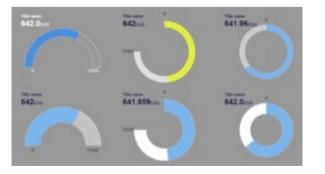
- Develop, manage, and deliver applications that collect, display, and analyze data from equipment or servers without needing programming skills
- Monitor, control, data entry, analysis, and task management capabilities
- Democratized tool for cross-business access
- Proficy family integration: iFIX, CIMPLICITY, Proficy Historian, Proficy Plant Applications, Proficy Webspace, Proficy CSense, Proficy Batch Execution, Proficy Workflow
- Connectivity: OPC UA, relational databases (SQL), time series, Historian, REST, MQTT, URL
- Data Management: Modeling including Entities and Pivot Tables; Queries, events, and notifications
- Model and flat tag support
- Trigger automatic action based on events and data

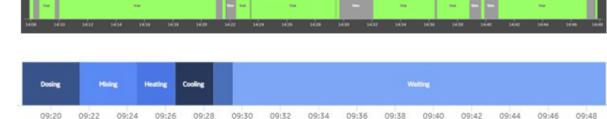
- User-friendly WYSIWYG App Builder with a rich development library including extensive widgets and drag-and-drop configuration
- Native HMI builder integration HMI widgets: Mimic, Alarm, Proficy Webspace
- Stock widgets: Gauge, Timeline Chart, Indicator, Grid, Pareto Chart, Spider Chart, Sparkline, Bullet Graph, iFrame, and many more
- Trend Analysis App (widgets) to improve root cause detection and collaborative analysis by providing ad hoc trending & KPI dashboards from Historian data... Feature-rich app for data analysis in model context
- Task Lists (widget) on an asset with context. View and act on tasks in real time with Proficy Workflow integration
- SDK for custom widgets and entities REST API
- ISA 18.2 and ISA 101 for improved operator performance

- Responsive layouts per page (Web, mobile, tablet)
- Actions, Conditions, and Formulas
- Access using PC displays or mobile devices
- HTML5 and CSS3 for platform independence
- Role-based permissions at the page level
- Security: AD and shared UAA support
- QR code navigation for mobile
- Easy installation
- Up to 1,000 Concurrent Clients on a single server
- Web-based technologies, cloud, and Docker: Deployment, product updates, accessibility/mobility, improved collaboration, and lower IT costs
- Excel Add-In for detailed queries by model, asset, type, and flat tag
- Languages: English, Japanese, Chinese, Korean, Spanish, German, Russian, Czech, Italian, French, Portuguese, Turkish

Proficy
Operations Hub
provides new
widgets to
enhance
visualization and
speed response.







Please consult the online $\underline{\text{product documentation }f}\text{or hardware}$ and software requirements.

Proficy Operations Hub supports rapid application development and rich displays for faster operational response and better decision making.

LEARN MORE

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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.

<u>Implementation Services</u> 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.

<u>Security Services</u> Our solutions provide industrial-grade security for a wide range of OT network and application topologies.

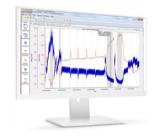
Related Products for Your Digital Transformation Journey

GE Digital's 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.



iFIX

Gain visibility into your operations and secure agility for smarter decision making that drives results.



Proficy CSense

Turn raw data into real-time value with a digital Process Twin and proven industrial analytics software



CIMPLICITY

Drive real-time visibility for smart operators with true client-server based visualization and control.



Proficy Plant Applications

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



Proficy Historian

Contact

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



Proficy Workflow

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

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.

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