Proficy Operations Hub 1.5 from GE Digital

Modern, centralized environment for rapidly building industrial applications for Web-based intelligence

Enable collaboration and continuous improvement with centralized visualization/configuration, digitized processes, and business intelligence

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 independent 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 and third party. Users can monitor, control, provide data entry, and perform analysis all through Proficy Operations Hub.

The new Version 1.5 offers Advanced Historian Trend Analysis for data analysis in asset model context. Other new features include connectivity, security, model, and trend capability enhancements.

With Proficy Operations Hub, organizations gain a foundation for insights into operations and productivity, a critical step in the journey to digital transformation.

Outcomes

- Improve collaboration and continuous improvement programs with a cross-business, easily accessible digital operations hub
- Rapid development of Web-based displays for operations
- Faster response and better decision-making with centralized visualization and digitized processes
- 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

01 Accelerate development of rich Web applications with code-free configuration

Proficy Operations Hub allows both developers and non-developers to 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 query or data source onto the component quickly enables the data connections.

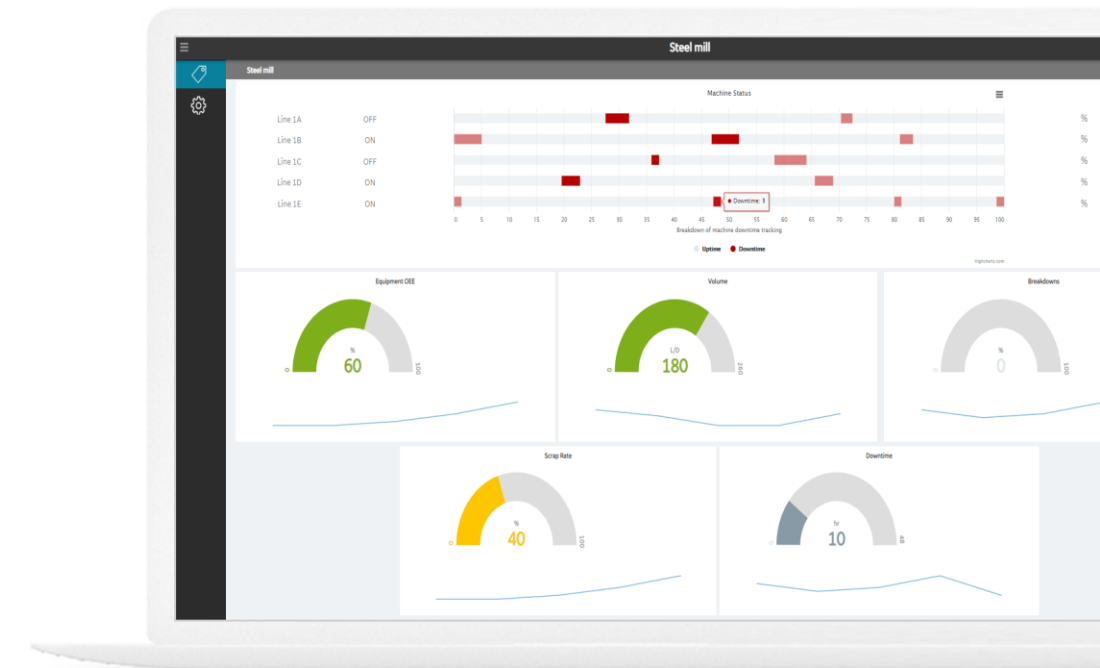## 02 Deliver actionable information with a cross-business digital operations hub

Making good use of IIoT data means sharing information with frontline workers, empowering them with knowledge of what is happening. Proficy Operations Hub enhances accessibility across roles and locations, providing critical information including trends for improved response. 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.

03 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.

04 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 queries, 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.

05 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.

"HMI/SCADA software is increasing its role as an integration and business intelligence hub, providing connectivity and visualization to business, engineering, supply chain, and CPM/MES software systems in addition to its traditional display and control role for plant equipment and automation systems located throughout factories and plants globally."

ARC

Proficy Operations Hub 1.5 from GE Digital

Modern, centralized environment for rapidly building industrial applications for Web-based intelligence displays

Features

- Develop, manage, and deliver applications that collect, display, and analyze data from equipment or servers – without needing programming skills
- Monitor, control, data entry, and analysis capabilities
- Democratized tool for cross-business access

New in Version 1.5

- Out-of-the-box Trend Analysis App to improve root cause detection and collaborative analysis by providing ad hoc trending & KPI dashboards from Historian data. Includes data analysis in model context with features such as query by model and flat tags, out-of-context model with pen support, favorites, annotations, multiple slider support, statistics (Min, Max, Avg, Std Dev and Total), print chart, and export to CSV.
- Connectivity: Historian, REST API (GET support), MQTT, URL
- Model and flat tag support
- Security enhancements: AD and shared UAA support

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

- Data Management: Modeling including Entities and Pivot Tables; Queries, events, and notifications
- User-friendly WYSIWYG App Builder with a rich development library including extensive widgets and drag-and-drop configuration. Responsive layouts per page (Web, mobile, tablet). Actions, Conditions, and Formulas. QR code navigation for mobile.
- Role-based permissions at the page level
- SDK for custom widgets and entities REST API
- OPC UA and MQTT: Discovery, configuration and data exchange
- ISA 18.2 and ISA 101 for improved operator performance and safety
- Web-based technologies, cloud, and Docker: Deployment, product updates, accessibility/mobility, improved collaboration, and lower IT costs

- High Performance HMI Runtime
- Trigger automatic action based on events and data
- Excel Add-In for detailed queries by model, asset, type, and flat tag
- Access using PC displays or mobile devices
- HTML5 and CSS3 for platform independence
- **Future Connectors include:** Time Series, Proficy Plant Applications, iFIX, CIMPLICITY, Proficy Workflow, Proficy Batch Execution, OPC UA, Relational Databases
- **Future Visualization Content includes**: Alarm Analysis, HMI Widgets, Workflow Widget, Plant Applications Widgets, Charting Types (Pareto, Histogram, Event Trend, Heatmap, Radar, Spiderweb)

Software Requirements

Supported Operating Systems

Servers: (Only English Operating Systems are supported with Version 1.5)

- Microsoft Windows Server 2019
- Microsoft Windows Server 2016

Client Operating Systems:

- Microsoft Windows Server 2019
- Microsoft Windows Server 2016
- Microsoft Windows Server 2012
- Microsoft Windows 10 Pro
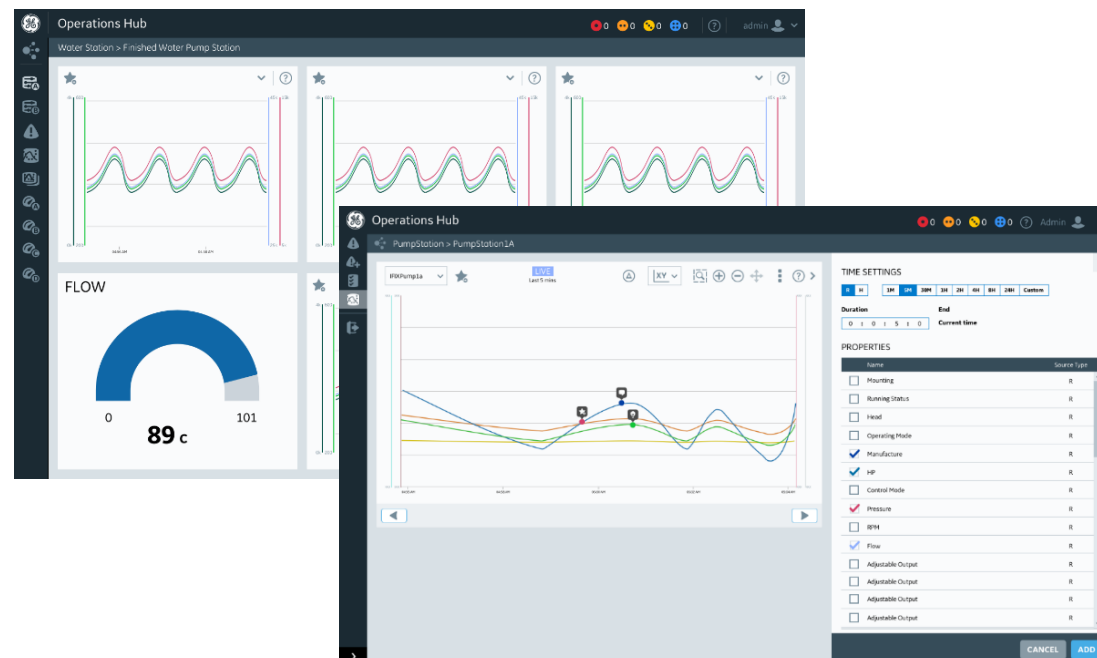- Microsoft Windows 8.1 Pro

Hardware Requirements

The following hardware requirements are not comprehensive. Please refer to the Getting Started Guide or GE Digital for complete requirements information related to your application.

Minimum Server Requirements:

- 4-core CPU
- 16GB RAM

Hardware and software requirements are representative and may vary by customer deployment. Please consult the product documentation for more details.

Proficy Operations Hub's Asset Model mapping and new Trend Analysis App in Version 1.5 provides data analysis in context.

Take advantage of a centralized environment for aggregating and visualizing contextual and situational information for industrial applications – without needing IT or coding resources. Proficy Operations Hub supports rapid application development and rich displays for faster operational response and better decision making.

LEARN MORE

Proficy Operations Hub 1.5 from GE Digital

Modern, centralized environment for rapidly building industrial applications for Web-based intelligence displays

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.

Related Products

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.

iFIX

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

CIMPLICITY

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

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.

Continue your Digital Transformation journey

Transforming your business requires foundational innovations that lay the groundwork for future success. It requires connecting assets and processes securely to drive operational efficiencies, reduce unplanned downtime and improve performance.
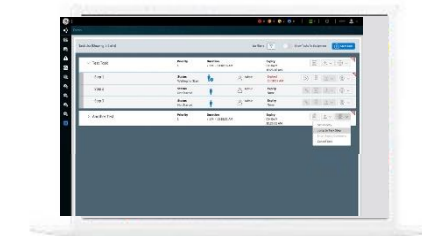
Predix

Innovate and transform your business with the cloud-based operating system for the Industrial Internet, purpose-built for industry.

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.

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.

Contact

gedigital@ge.com

www.gedigital/digital