Proficy Historian 2022 from GE Digital

Powerful industrial time-series and A&E data collection for on-premise and cloud-based storage & analysis

Best-in-class Historian from edge to cloud with data analysis in context

Proficy Historian from GE Digital is a best-in-class historian software solution that collects your industrial time-series and Alarms & Events (A&E) data needed to analyze asset and process performance, so you can drive greater business value.

The emergence of cloud-based Industrial Internet of Things (IIoT) and big data solutions has spurred continued investment in our Historian. With decades of experience and thousands of successful customer installations around the world, Proficy Historian changes the way companies perform and compete by making data useful.

The new Proficy Historian 2022 enhances usability, performance, configurability and maintainability with significant improvements. Proficy Historian 2022 features a new HTML5-based administrator that enables system administrators with better information and tools. It also includes a new Asset Model Service that allows users to create context for their Proficy Historian tags. Other new features include performance increases for Collector, Calculation Collector, and OLEDB services; LDAP-based local security; Python-based Calculator Collector; and more.

Outcomes

- Achieve fast time to value with simple installation and easy-to-use web clients with integrated tag searching and drag-and drop features
- Secure-by-design data collection and storage
- Small, powerful footprint, scaling from small applications to hundreds of users and 100 million data points / tags
- Take advantage of data analysis in asset model context with the time-saving trend analysis card
- Support high availability with data redundancy
- Leverage continuous and highly scalable data read and write functionality
- Central management of remote data collectors to reduce maintenance costs and downtime

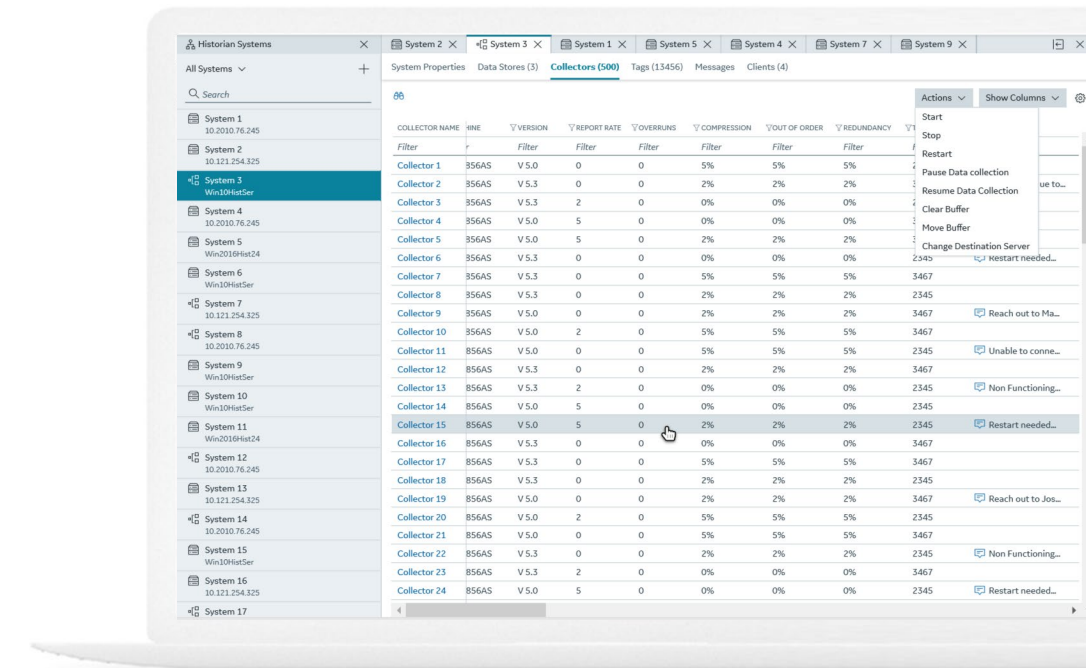### 01 Achieve data analysis in context for optimization & continuous improvement

With Proficy Historian, users can analyze data in context via Proficy Operations Hub and the Historian Analysis run-time application, which are available for license at no additional cost with Proficy Historian Standard and Enterprise versions. The combination of Proficy Historian and Proficy Operations Hub provides a powerful data management solution with asset model context and visualization. Users receive data aggregation across multiple sources or historians, ability to define an asset model including tag mapping, and advanced trend analysis. Proficy Historian also includes an Excel Add-In for Proficy Operations Hub, enabling users to query historical data based on the asset model.

02 Improve data security & enable enterprise-wide industrial data management

With data security as our highest priority, Proficy Historian offers common and shared User Account Authentication (UAA). Integrated with LDAP, this feature eases security, allowing users to choose the common UAA deployed by other products in their application. Additionally, for enterprise-wide deployments, Proficy Historian features a model for cross-enterprise data access, cloud-like elastic computing on prem, and scalability to 100 million tags.

03 Simplification, ease of use, reduced costs

Proficy Historian installs in minutes and offers a small footprint yet scales to support hundreds of users across an enterprise. This new version significantly simplifies Historian management with an HTML5-based administrator. Version 2022 also offers new encryption over the wire with support for IPSEC tunneling to reduce the cost of distributed applications, eliminating the requirement for VPNs. Lastly, Proficy Historian has the easiest Remote Collector Management on the market with industry-leading centralized administration.

Proficy Historian offers simple configuration with proven industrial data management capabilities to reduce costs and speed deployment.

04 Faster configuration and easy connectivity for IoT applications

Connect to your machine data with an existing collector or build your own using our SDK. Proficy Historian now supports MQTT end points and enhanced hybrid on-prem/cloud data models with the ability to select data, frequency, and rate of change, all while leveraging GE Digital's rich data aggregation and collection capabilities. Collectors can send data to your local Historian or to cloud-based AWS, Google, Azure, and Predix applications. Furthermore, Proficy Historian includes an optionally installed OPC UA server, password and certificate-based security, and more.

"Proficy Historian is the heart of the [system]. This solution allows more accurate data to be implemented in real time for each machine and product."

Hervé Husson, Automation and Industrial IT (A2i) Manager, Terreal

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Features

- Collects industrial data at very high speed, normalizes data and stores it securely, distributes, and allows for fast retrieval and analysis
- 24/7 availability: avoid downtime and information gaps; stability and reliability for continuous improvement data analysis as well as mission-critical applications

New in Version 2022

- New HTML5 based (Config Hub) Administrator: Enables system administrators with better information and tools to manage their Historian systems. All Historian servers may be administered from a single application
- Asset Model Service: Allows users to create context for their Historian tags. Configured through the new Config Hub based Administrator. Data may be queried in context via REST or OPC-UA
- Performance Improvements: Collector, Calculation Collector, and OLEDB services all have significant performance increases
- LDAP-based Historian Local Security: Historian Local Security may be linked to UAA for applications where connection to AD is not possible
- New Python based Calculation Collector: Enables users to select their own Python run times and libraries to interact with Historian data

- Encryption over the wire: Support for IPSEC tunneling to reduce the cost of distributed applications, eliminating the requirement for VPNs
- Delta Query Mode: Allows tags to be configured with meta data describing meter/counter behavior (min value, max value, max rate of change), so simple queries can return the change period over period

New in Version 9.1/9.0

- Multi-domain support for Proficy Historian local security
- Dramatic simplification of collector installation and management: completely simplified collector installation process, new collector configuration UX, centralized admin of remote collectors, remote configuration & management of cloud collectors
- Enterprise-scale deployments enhancements: new model for cross enterprise data access, cloud-like elastic computing on-prem, scalable from 100 tags to 100 Million tags
- Hybrid on premise / third-party cloud data model: select data, frequency, rate of change; support for MQTT end points
- OPC UA server that supports HDA, DA, installation on a server node or separate machine, and password and certificate-based security
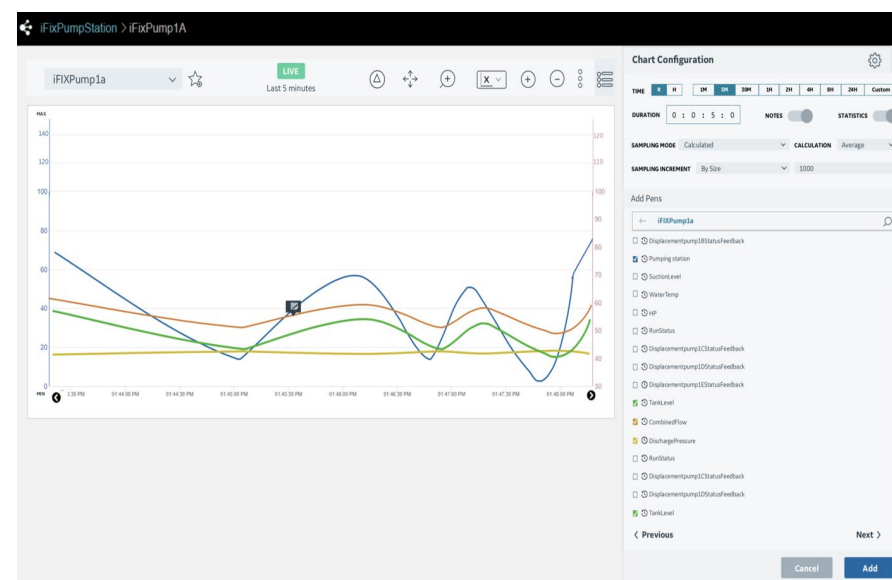
Proficy Historian: Best-in-class industrial data management that scales to 100 million tags

- Easily deployable mirrored architecture based on GE's U.S.-patented highly efficient and secure storage format
- Alarms & Events database, allowing retrieval of A&E in correlation to time-series data
- Browser-based central administrative console and trend client
- Multi-threaded for high performance
- Scales from small to 100 million tags – including model for cross-enterprise data access
- Ability to perform complex, multi-site industrial information management
- Hybrid on-premises / third-party cloud data model: AWS, Azure, Google, and Predix cloud connectivity
- Data in context: Proficy Operations Hub Server and HTML5 Historian Analysis run-time application available for license at no additional cost with Proficy Historian Standard or Enterprise versions
- Native collectors including MQTT collector
- Store and forward capability
- Historian ETL – Extract, Transfer, Load
- Remote Collector Management with centralized admin

- High availability for superior reliability
- Highly efficient data compression: collector compression at the source (deadband) and archive compression at the server
- Flat or traditional hierarchical architecture; horizontal scalability with distributed server architecture
- Secure-by-design storage
- Flexible model structure
- Condition-based collection
- Server-to-server aggregation
- OPC UA server
- UAA/OAuth2 Java Web Token security model
- Server-to-Azure IoT Hub Distributor
- Cloudera certified method to move and query data in HDFS / Hadoop to Parquet
- APIs to track version information of collectors, Query Results API, Write Tag API, Rename API
- Public REST API and Java API
- One-click configuration with CIMPLICITY and iFIX
- Excel Add In
- Little to no DB admin required
- Support for storage of Future Data

Please consult product documentation for hardware/software requirements.

Proficy Historian includes use of Proficy Operations Hub's Asset Model mapping and Trend Analysis App for centralized data analysis in context.

Both your IT department and end users will love the ease of deployment, scalability, simplicity, and speed of getting the data and value out of Proficy Historian.

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.

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.
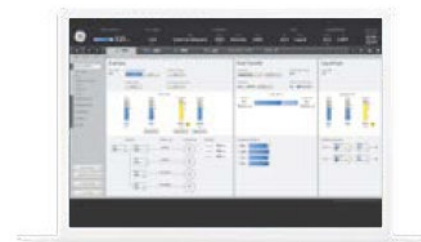
Related Products for Your Digital Transformation Journey

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.

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

Proficy Operations Hub
A centralized environment for aggregating and visualizing contextual and situational information for industrial applications – supporting rapid application development and rich displays for faster operational response and better decision making.

Proficy CSense
Optimize with 5-in-1 industrial analytics capabilities, allowing process engineers to analyze, monitor, predict, simulate, and optimize and control setpoints in real time.

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

Dream Report
Make better operational decisions with this real-time report and dashboard generator including an easy, configurable user interface. Direct connectivity to GE Digital's software

Contact

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