For owners and operators of industrial equipment and processes, GE's Industrial Data Management (IDM) solution provides a more holistic view of industrial data to better support business decisions across the enterprise. The IDM solution, consisting of Proficy Historian and Proficy Historian Analysis, provides operational visibility in context through collection, storage, aggregation, analysis, and accessibility of key process data.

Unlike other process-data historians, the IDM solution provides a distributed architecture, central management and administration, lower storage costs, and a wide range of industry-standard interfaces in a fully integrated solution.

As the IDM’s visualization component, GE’s Proficy Historian Analysis (PHA) is an easy-to-use Web browser-based tool that provides immediate value from Proficy Historian process data. By viewing the data within trends and within context of a plant data model, you can quickly determine root causes and turn the data into actionable information.

Easy tag search, charting, and collaboration
PHA enables you to search Historian tags for analysis and display trends to show process behavior. You can utilize an ISA-95 model and common properties to group and find tags by characteristic (temperature, pressure, etc.) or by asset/process and visualize them in charts and tables. Simple but powerful editing tools allow you to customize each analysis session to unlock the meaning behind your data, which you can save as a Favorite for later recall or to be shared with your peers. Chart types include line charts, XY scatterplots, area charts, and box & whisker charts with exposed tag statistics.

Model-enabled run-time expressions
PHA provides an intuitive expression builder featuring IntelliSense to build expressions from one or more tags and to visualize the output in a chart or table. You can trend the delta between two tags, the sum of multiple tags, or create complex calculations that include functions like sin, cosine, logarithms, square roots, and more. A full library of math and other built-in Python functions are included with PHA, along with more than 150 unit-of-measure conversions, providing more control to your data analysis. For example, if you have captured your temperature data in Historian as Celsius, you can use the Celsius-to-Fahrenheit converter and trend your data as degree F. When you re-visit a session you’ve previously saved as a Favorite, or define a new time frame, your expressions will automatically re-calculate and your charts and tables will automatically update as required. When you include model tags in an expression, you can share the same expression and deploy it across all other assets that share similar properties.

Full integration with Proficy Historian
PHA offers best-in-class direct connection to Proficy Historian, allowing quick time-to-value and the opportunity to capitalize on the full potential of your historical data. This includes support of Historian sampling modes, data types, tag stats, and chart filtering, along with the fastest data retrieval possible. Simply put, PHA is the companion product to Proficy Historian for visualizing your process and asset data.

Features
- Completely updated Web client featuring HTML5 environment
- Run-time expression builder with IntelliSense
- Multiple chart types, including tag statistics
- Historian query modes and filters
- Extended personalization support
- Save and recall common Favorites
- Model enable Historian tags with PHA classes and properties
- Alarms & Events grid
- Configurable roles with specific privileges

Benefits
- Basic trending features easy to use
- Advanced features provide additional value to power users
- Easy collaboration across multiple shifts and locations
- Flexible security administration to support your global operations
Specifications

Software Requirements

- Operating System - Servers
  - Microsoft® Windows® Server 2012 R2 (64-bit)
  - Microsoft® Windows® Server 2008 R2 (64-bit)

- Additional Software - Servers
  - Microsoft® Internet Information Services (IIS) 7.5 or 8.0
  - Microsoft® SQL Server® 2008 R2 SP2 or 2012, Standard, or Enterprise Edition (64-bit)
  - Proficy Historian 5.5 SIM11 or greater, Standard or Enterprise Edition only
  - Proficy Historian AEDB 5.5 SIM1 or greater
  - Proficy Connect 2.5 (Included)

- Operating System - Clients
  - Windows® 8 Professional, Windows® 7 Professional (32-bit or 64-bit)

- Additional Software - Clients
  - Internet Browsers, these versions and above: Internet Explorer 11, Google Chrome 38, and Firefox 32

Hardware Requirements (Minimum)

- Servers
  - Quad-Core CPU capable of running 64-bit Windows Server 2008 R2 SP1 or 2012 R2
  - 32 GB RAM
  - 100 GB Free Disk Space

- Clients
  - 2 GHz Pentium 5-based computer with 8 GB RAM
  - 20 GB HD free disk space
  - Network interface software for network communications
  - TCP/IP network protocol is required
  - SVGA or better color monitor and a 100% IBM-compatible 24-bit graphics card capable of 1024x768 resolution and at least 65535 colors
  - Two-button mouse with scroll wheel or compatible

OPC Alarm & Event visualization and collaboration

A view is provided into the Historian Alarm & Event database. Users can view, search for, and filter alarms and events in a grid, analyze tags associated with the alarms, create manual alarms, and add and view Alarm Notes. All your work can be saved and retrieved to assist in creating a knowledge base of causes and desired outcomes.

Web-based accessibility

Providing convenience and ease-of-use, PHA installs as a Proficy Vision application, allowing you to easily add content to your Proficy Vision Web Server without the need to add new infrastructure in your data center. Your IT department will rest easy knowing that Proficy Vision and PHA are secured through the use of certificates, HTTPS, and user authentication. And starting with the release of PHA 6.0, all content is delivered in native HTML5, meaning no reliance on plugins for a truly thin client experience.

Ease of configuration

Have multiple sites and multiple Proficy Historians? PHA allows you to connect to any or all of the Proficy Historians installed on your network. PHA supports either a modeled or non-modeled Historian environment, so it works right out of the box when there is no model. Though not a required element, creating a model will open richer capability for searching and analyzing tags and creating expressions for tags that share common characteristics across similar asset types and process areas.