



Proficy* Historian

Best-in-class, plant-wide data historian

Production information – it's the lifeblood of your entire operation. As the complexity of production operations increases, it becomes more and more difficult to effectively manage the vast amount of process data and convert this data into useful information.

Finding a fast, easy, and cost-effective way to collect, normalize and store massive amounts of process data has always been a daunting task. And with today's new requirements to make real-time decisions based on this information, the task hasn't become any easier. Proficy Historian (formerly iHistorian) can address these most pressing data management challenges to maximize your operational performance.

Whether you're a small municipal facility, a global pharmaceutical company, or a mission-critical space agency, Proficy Historian can make you more profitable and productive. Proficy Historian is the foundation for improved production management.

Proficy Historian excels under the most demanding data management situations. Extraordinarily easy-to-use and maintain, unmatched in speed and performance, highly reliable for even the most mission-critical applications, and exceptionally scalable – it is truly revolutionary in how it manages production data.

And with a wide range of performance and execution applications that leverage the Historian's data management capabilities, we can help you solve any of your specific production needs. From machine downtime reporting and OEE to quality and scrap management to product traceability, Proficy solutions offer a cost-effective way to optimize your operations.



Proficy Historian Technical Benefits

Performance and Execution Clients and Applications

Proficy Historian is the data management foundation for a wide range of clients and applications.

- *Historian Excel Add-In client* – provides analysis and reporting in the most widely used analysis tool, with pre-configured reports including alarm & event analytics.
- *Proficy HMI/SCADA – iFIX and CIMPLICITY HMI*. For real-time decisions, the Historian can be accessed by our iFIX and CIMPLICITY HMI applications.
- *Proficy Plant Applications* – For more advanced performance and execution applications such as Quality, Efficiency and Production Management.
- *Proficy Real-Time Information Portal* – a web-based, configurable trending and analysis solution that aggregates data from all production data sources into a single user interface.

Highly Reliable System Architecture

Historian provides the most highly reliable process data management system.

- *24/7/365 Data Availability* – provides uninterrupted access and collection of plant data regardless of network, software or hardware problems with support for Microsoft Cluster Server, redundant data collectors and certification on Stratus® fault-tolerant PCs.
- *Automatic “Store & Forward”* – utilizes automatic store and- forward so that information is never lost if the server should become unavailable for any reason.

Easy Configuration and Administration

Designed to be easier than ANY database to configure and maintain.

- *Quick and simple configuration and installation* – As opposed to the usual days or weeks typically required to install a plant historian, many users fully configure Proficy Historian in less than an hour without any specialized database expertise.
- *True thin client administration* – featuring a full featured web-based administration interface that makes it easy to configure and manage your application using only a web browser.

Unparalleled Performance

Historian provides unparalleled performance in the collection, storage and retrieval of all types of production data types.

- *High speed collection and retrieval* – offering sustained storage and retrieval rates of more than 20,000 events per second for high-performance applications.
- *Ultra-efficient data compression* – filtering the collected data to minimize data storage based on compression algorithms. This results in the storage of data in a format that occupies as few as three bytes per value.
- *Precise time stamp resolution* – providing time stamps automatically synchronized with the server clock, giving you the same reference across PCs and locations. This makes it quick and easy to perform “Sequence of Events” type reporting and analysis.

Enterprise-Level Data Management

- *Designed for 21 CFR Part 11* – includes electronic signatures and non-modifiable audit trails for electronic record keeping.
- *Superior Calculation Engine* – users can create and store advanced calculations and performance metrics. Includes a full spectrum of pre-configured calculations plus extensibility to create custom calculations.
- *Data Distribution Capabilities* – the Server-to-Server Collector gives you the power to easily distribute data and KPIs between servers and locations.
- *Multiple time zone support* – Proficy Historian enables users to deploy clients and analyze data across multiple time zones without having to manually compensate for local time differences or daylight savings time changes.

Extensive Standards-based Connectivity

Based on open standards, Historian has the ability to connect to all your plant data sources and be accessed by applications via standard interfaces.

- *Collection from Most Plant Data Sources* – including OPC, OPC Alarm and Events, CSV/XML, SCADA and other historians.
- *Open access for ERP applications* – accessed via a diverse array of clients or custom-designed applications using either the OLE DB provider or the software development kit (SDK).

Support for all Data Types in an Integrated Application

- *All Data Types* – including integer and float numbers, fixed length and unlimited length strings and large binary objects (such as documents, images and other files). All data points are indexed by product code or other data value to greatly simplify comparisons across production runs and phases.
- *Single Application* – provides collection and storage of process data and alarms and events in a single, secure data repository. This provides an easy to administer data repository for critical “root-cause” and “sequence-of-event” type analyses.

Proficy Historian Business Benefits

The value of any software product is its ability to improve business performance.

Proficy Historian greatly surpasses most other products in its ability to immediately add value to your operations – providing the best-in-class performance you expect with the low cost of ownership that you require. Proficy Historian is the key to unlocking your manufacturing potential and improving your operational productivity, quality and profitability.

Optimize your production operations through improved decision making

Proficy Historian collects, normalizes and stores your production data in a format that can be quickly and easily accessed by a wide range of performance and execution applications. This Historian foundation coupled with Proficy performance and execution applications allows your organization to make real-time decisions to support critical performance improvement efforts. Some examples of these applications are:

- *Downtime Reporting and Overall Equipment Effectiveness (OEE)* – Identify equipment downtime and perform root cause analysis into the source of “bottlenecks” and inefficiencies.
- *Quality and Scrap management* – Focus personnel and make faster decisions based on key performance metrics to increase and sustain plant-wide quality improvement efforts.
- *Product Traceability* – Track product bill of materials (BOMs) through production operations to quickly identify defective production lots for quality assurance and recall events.

Proficy Historian allows your managers to get one version of the truth in the context of production operations, thereby enabling them to make intelligent decisions on actual production data.

Reduce cost of regulatory compliance and accountability

With expanding regulatory initiatives and tighter enforcement policies, manufacturers are increasingly requiring companies to implement software to ensure and document regulatory compliance.

- Food, Beverage and Pharmaceutical companies must comply with FDA regulation 21 CFR Part 11 electronic record keeping requirements as well as tracking and tracing production.
- Machinery companies need to offer safety and improved asset utilization to comply with the Machine Directive from Europe.
- Automotive manufacturers and OEMs are required to comply with the Transportation Recall Enhancement Accountability and Documentation Act (TREAD) to report data more rapidly to the National Highway Transportation Safety Authority (NHTSA) to more quickly spot potential safety problems.

Proficy Historian is the only data historian on the market that makes it easy to comply with these regulations. Proficy Historian allows you to store ALL process information – data, alarms and events – in one single integrated product. This directly translates into improvements in total cost of ownership, system maintenance, security and analysis. Proficy Historian also has two key features that allow you to comply with the most stringent regulations. “Electronic Signature” capabilities force all users to sign in with their Windows user name and password before any change is made to the system configuration. And a Non-Modifiable Audit Trail keeps a record of all system configuration changes in a secure location that is non-modifiable by any user.

More easily integrate with ERP and Business Systems

Proficy Historian serves as a powerful, accurate, reliable data source for all your ERP and MES activities. Proficy Historian can collect and normalize all the production data in your global operations with multiple time zone support. With calculation and server-to-server capabilities, you can also turn production data into production information that is required by business systems. With standard interfaces, such as OLE DB, plus an SDK for more advanced interfacing, Proficy Historian can quickly be accessed by most business systems (and plant applications).

Reduces your system development and maintenance costs

Proficy Historian is the most cost-effective data historian in the market because it is the easiest to install and administer. Your administrator does not require any specialized training such as SQL or VBA knowledge to be able to configure your entire data management system. And the Historian can be installed in minutes instead of days or weeks, resulting in a drastically lower installation cost. The administration of Proficy Historian is even easier. With thin-client administration, 24/7/365 availability and advanced data management features, the Proficy Historian requires little on-going maintenance. There is no other production data management solution that compares to the Proficy Historian.

Proficy Intelligent Production Solutions

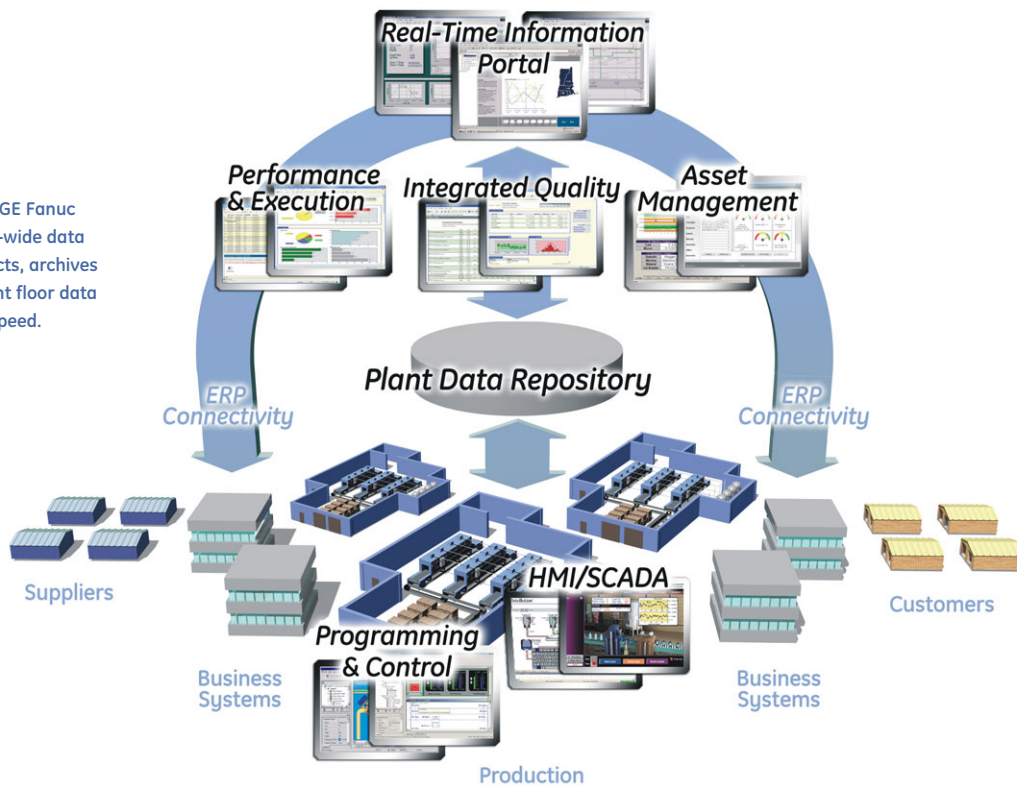
For years, manufacturers throughout the world have recognized the critical link between production efficiency and profitability. But as new competitive pressures emerge, even the most successful companies are being forced to continually streamline their operations.

The demand for speed, agility and responsiveness in your production operations has never been greater – transforming not only how you manage production assets, but how you do business. As a result, real-time production management is now a cornerstone of any profitable company. And Proficy is the cornerstone of real-time production management.

Proficy is an open, powerful Intelligent Production Solution that provides the plant automation, analysis and execution capabilities that every manufacturer needs, along with the connectivity to the business environment that every company craves. And whether you implement an entire group of applications or simply install an individual module to meet a specific production need, Proficy enables you to incorporate the right solution for your business at any time – regardless of your current automation infrastructure.

Imagine a seamless, cohesive and entirely modular infrastructure that brings the worlds of business and manufacturing together as one – from GE, the company that has set the worldwide standard of excellence for both. The implications for your success are endless.

Proficy Historian is GE Fanuc Automation's plant-wide data historian that collects, archives and distributes plant floor data at extremely high speed.



Performance and Agility for the Real-Time Enterprise

GE understands that businesses today are under continuous pressure to increase productivity and improve profitability.

The Proficy solution integrates a full range of easy-to-use applications and services to continuously improve your level of productivity. It has been developed to build intelligence into your processes – gathering, analyzing, and transforming data into information and enabling you to act in real-time to optimize results.

Proficy connects the equipment on your floor, business systems and decision-makers. This closed-loop experience ensures that production runs smoothly, efficiently and with greater profitability.

With Proficy, you'll have the resources to meet your greatest manufacturing challenges, through a combined set of capabilities including:

- **Manufacturing Intelligence** – Making business sense out of plant data in real time
- **Asset Management** – Optimizing profitability by managing equipment and other plant assets
- **HMI/SCADA** – Improving production performance with plant floor visualization and control
- **Programming and Control** – Allowing you to develop Motion, PLC and PC Control and visualization applications in a single integrated environment
- **Software Services** – Maximizing your software investment through GE support, training, and professional services

Proficy Historian – The Data Management Foundation

Proficy Historian is the foundation for intelligent production management. As the leading plant-wide data historian in the market, Proficy Historian is the most versatile, reliable and scalable method for managing your production data.

Proficy Historian is designed to suit most production needs in a cost-effective manner. Seamlessly connecting to virtually any HMI/SCADA application, legacy plant databases or directly to plant floor devices, Proficy Historian can be easily integrated into your current production environment. And as your business grows, Historian can be scaled to keep pace – representing the most economical way to “future-proof” your operations.

Proficy Historian can be purchased in one of three versions – Standard, Enterprise and Enterprise Distributed Editions. All editions are based on the same architecture but differ in terms of the features. The Standard Edition provides all the features required to support standard data management requirements, while the Enterprise edition includes additional features for more advanced, enterprise-level data management. And, for users who standardize on Historian across their multiple facilities, the Enterprise Distributed License provides an easy way to manage and deploy servers with maximum flexibility.

All Historian clients and applications can be purchased regardless of the version installed.

Standard Edition

The Proficy Historian – Standard Edition includes the following key features and functions:

Versatile and Simple Administration

Proficy Historian provides both a Windows-based and web-based administrator for optimizing installation and maintenance. Both administrators have similar interfaces and operate in the same fashion, eliminating the need for additional training. The Windows-based administrator requires a dedicated install for each machine, while the web-based administrator requires only Microsoft Internet Explorer and can operate from any machine that can access the Proficy Historian server URL. As a result, users can access and configure Proficy Historian from virtually anywhere, including over the Internet.

Both types of administrator provide the following functions for managing a Proficy Historian system:

- Set up and configure large numbers of points manually or by browsing data sources directly from the collectors. Points correspond to data sources.
- Configure and delete tags and calculations individually or in bulk, and make changes to all with a single mouse click
- Create, Backup and manage archives (including the integrated alarms & events)
- View messages and alerts

Standard Data Collection

The heart of Proficy Historian's data acquisition capabilities is the collector, providing automatic data collection of configured points. Collectors feature store-forward capability and automatic reconnection to the server, ensuring that data is never lost during a server outage.

There are three basic types of collectors within Proficy Historian Standard Edition:

- HMI/SCADA Data Collectors – for any networked Proficy HMI/SCADA system
 - Proficy HMI/SCADA – iFIX
 - FIX
 - Proficy HMI/SCADA – CIMPLICITY
 - Proficy Machine Edition (both CE & PC based)
- OPC Collectors – Any OPC 1.0 or 2.0 data access server
- File Collectors – Load data and tag configurations from XML and CSV files

Archive Data Servers

Proficy Historian archive manager administers multiple archive files and is completely configurable to meet the specific needs of your application. It serves as the main data retention and information conduit, providing full archive management and messaging services.

Proficy Historian also ensures continued access to critical production data by enabling on-line system backups without the need to disconnect clients, as is often required by other data historians.

With Microsoft Cluster Server 2003 you can configure two historian servers in a primary-backup pair so that clients have uninterrupted access to critical production data. In the event of a system failure, the cluster server starts the backup server and forwards all data read & write operations to the backup machine automatically. This happens seamlessly in the background (most users won't even know) and, of course, with no data loss.

Interfaces

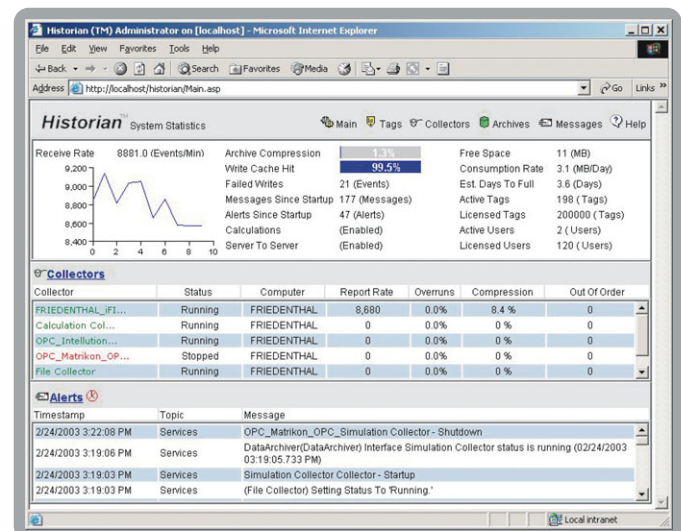
Historian provides two standard interfaces, namely the OLE DB Provider and a Software Developers Kit (SDK), plus many optional client tools and applications.

The Proficy Historian OLE DB provider makes it easy to integrate the Historian with OLE DB-aware applications such as Microsoft® SQL Server, Business Objects™ Crystal Reports, Excel XP, Proficy HMI/SCADA – iFIX's VisiconX™ and others. The OLE DB provider was designed to make it quick and easy to create powerful SQL queries. Using standard SQL commands, you can easily query the data, alarms & events and system and administrative information.

A fully functional and documented SDK is provided for users that want to develop custom programs using the Historian. In addition, a sample SDK application is now included in the installation program.

Optional Features

Users have the option to purchase any of the features bundled in the Enterprise Edition with their Standard Edition to enable you to develop the perfect solution for your production needs.



Proficy Historian Administrator

All configuration tasks can be performed using the Proficy Historian web-based administration tool. These include: browsing data servers, configuring points, performing on-line backups and viewing system messages and alerts.

Enterprise Edition

The Enterprise Edition is based on the same architecture as the Standard Edition, but includes additional features for more advanced enterprise-level data management. There are four additional capabilities bundled in the Enterprise Edition.

Alarm and Event Management

Proficy Historian provides an ability to collect and store alarm and events with process data in a single repository. This allows users to collect and store process data and alarms and events in a single, secure data repository – providing significant enhancements in cost of ownership, system maintenance, security and analysis. Users can conduct critical “root-cause” and “sequence-of-event” type analyses in a much easier and sophisticated way.

Alarms and Events can be collected from any OPC Alarm & Event server through a Historian OPC Alarm & Event Collector. Alarms and events are indexed with the process data tag in a bundled SQL database or MSDE that does not require any additional configuration. Administrator tools provide an ability to manage both the process data and alarm & event data simultaneously.

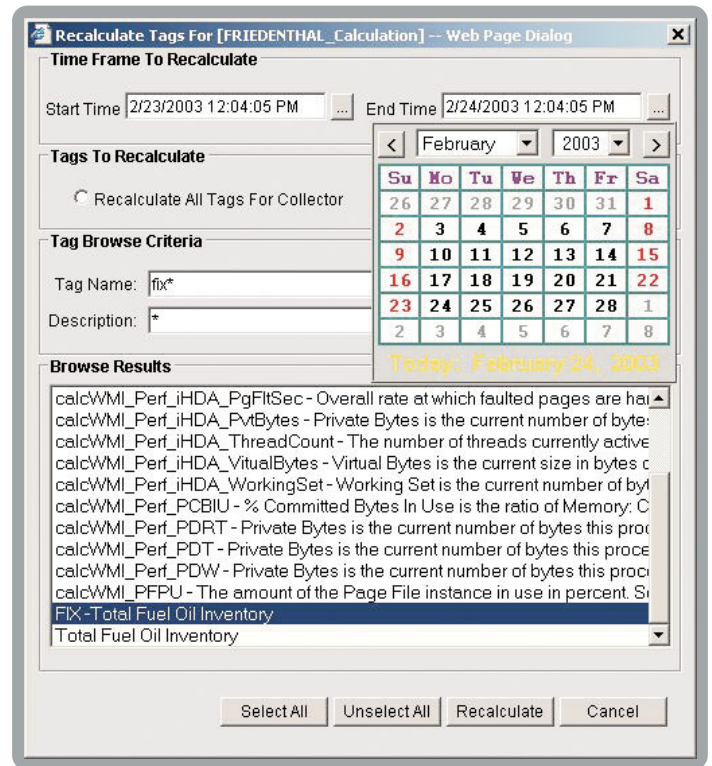
In addition, import and migration tools are available for importing alarm and event data into the Historian.

Advanced Calculations

Proficy Historian includes a collector and powerful rules engine for transforming raw data into useful business information. The Calculation Collector has pre-configured but extendable business rules and calculations that allow users to manipulate the collected data, including alarm and event data, and store the calculated values in the Historian.

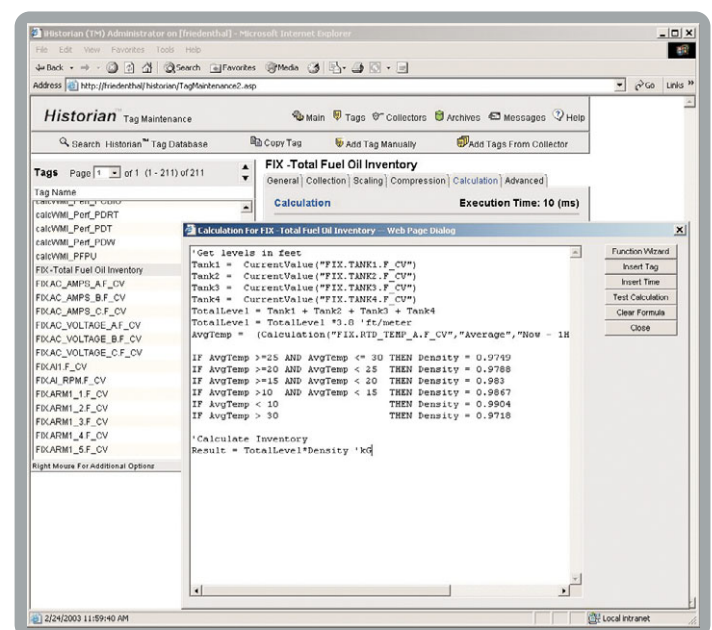
The Calculation Collector has many features that, when combined, offer users a truly unique and powerful capability:

- *Function Wizard & Library* – provides quick and easy access to a large array of pre-built calculations and functions as well as the means to configure and store user defined functions in a function library.
- *Visual Basic Scripting* – the calculation engine contains a full-featured VBS shell, so a “calculation” can be as extensible as you need it to be.
- *Time and Event-Based Triggers* – calculations can be configured to execute on time – as fast as every 100 milliseconds – or whenever an assigned trigger tag receives a new tag value. Unlike other historians, there is no practical limit to the number of trigger tags that can be assigned to a calculation.
- *Automatic Recovery Logic* – If the data for any trigger tag changes, or comes in “late” (e.g., the data collector was buffering data) the recovery logic will automatically detect the new or changed value and re-execute the calculation. Users are assured that calculated results are the best available input data.
- *Recalculation Expert* – a recalculation engine enables users to re-run a calculation from any configurable start and end time against the history of values and update the stored results.
- *Stand Alone Installation* – can be installed on any PC that has network access to the Proficy Historian server. Users can install as many Calculation Collectors as needed, so distributing the CPU load across multiple computers is simple.



Proficy Historian Re-calculation Expert

The Re-calculation Expert makes it easy to run calculations or update stored results against legacy data.



Proficy Historian Calculation and Server-to-Server Collectors

The Calculation and Server-to-Server Collectors enable you to create custom calculations quickly and easily – and store the results in the Proficy Historian.

Distributed Data Management

The Server-to-Server Collector is used to distribute data from one Proficy Historian to another, enabling robust data distribution. With the Server-to-Server Collector, you can centralize administration for all remote tags and standardize on performance metrics and reporting standards across multiple locations, thereby streamlining your processes and reducing variances.

The Server-to-Server Collector shares all of the features of the Calculation Collector, such as a function wizard, VBS, time and event triggers, recovery logic and the recalculation expert.

- **Alarm, Event & Audit Message Forwarding** – The Server-to-Server can also forward all alarms & events as well as the Historian audit trail to the destination Proficy Historian. This is a particularly critical feature for businesses operating within regulated industries, such as those under the guidance of the Food and Drug Administration.
- **Remote Tag Configuration** – The Server-to-Server collector offers the same tag browse and remote configuration features of any Proficy Historian collectors. However, this is particularly useful with the Server-to-Server collector, since regardless of the number of servers, all configuration data can be rapidly accomplished from a single location.

Enhanced High Availability

In addition to Microsoft Cluster Server support, the Historian Enterprise version includes redundant data collectors. This combination provides uninterrupted access and collection of plant data regardless of network, software or hardware problems. A powerful solution for ensuring mission-critical applications are always available – 24/7/365.

The redundant data collectors can be installed in redundant “chains” to automatically switch to a backup collector in the event of a system failure. Features include:

- **n-level redundancy** – you can configure as many collectors in a redundant chain as your application requires. From two collectors in a primary-backup configuration to several backup collectors, configuration is a snap and takes seconds to set up.
- **Configurable fail-over criteria** – collector fail-over is completely code & script free. Simply select the “trigger tag” and whether the collector should switch to the backup on a change in value, quality or heartbeat. And with the Calculation Collector, users can completely customize the trigger logic for any backup collector enabling an unlimited flexibility.
- **No data loss** – Most importantly, the system is designed to ensure that regardless of the system failure there is no data loss.
- **Automatic “Store & Forward”** – utilizes automatic store and- forward so that information is never lost if the server should become unavailable for any reason.

Optional Features

With Standard Edition, users have the option to purchase many of the features bundled in the Enterprise Edition (Calculation Collector, Server-to-Server Collector, etc), plus some other optional features such as Electronic Signatures and an OSI PI connector.

Below is a chart that highlights the Historian licensing.

	Standard	Enterprise	Enterprise Corporate
Proficy Historian Server	X	X	X
Standard Collectors (OPC, iFIX, FIX, CIMPLICITY HMI, ME)	X	X	X
Standard Interfaces (OLE DB, SDK)	X	X	X
High Availability (MSFT Cluster Server & Stratus® fault-tolerant PCs)	X	X	X
Advanced Collectors (Calculation Collector, Server-to-Server, Collector Redundancy)	Optional	X	X
OPC Alarm and Event Management	Optional	X	X
Distributed Tags and Clients	N/A	N/A	X
Electronic Signatures	Optional	Optional	Optional
OSI PI Connectors	Optional	Optional	Optional

Historian Interactive SQL (HISA) -

File Edit View Window Help

SET StartTime="February 14, 2002 00:00:00", EndTime=Today, CalculationMode=Average
SELECT TagName as 'Batch Tag', TimeStamp, Value, Quality FROM IhRawData WHERE tagname like %
ReactorLevel% and value between 50 and 60

	Batch Tag	timestamp	value	quality
1	FX:IFX1_BATCH_REACTORLEVEL_F_CV	14 Feb 2002 01:00:00.000	51.83	100.00
2	FX:IFX1_BATCH_REACTORLEVEL_F_CV	14 Feb 2002 02:00:00.000	51.83	100.00
3	FX:IFX1_BATCH_REACTORLEVEL_F_CV	14 Feb 2002 03:00:00.000	51.83	100.00
4	FX:IFX1_BATCH_REACTORLEVEL_F_CV	14 Feb 2002 04:00:00.000	51.83	100.00
5	FX:IFX1_BATCH_REACTORLEVEL_F_CV	14 Feb 2002 05:00:00.000	51.83	100.00
6	FX:IFX1_BATCH_REACTORLEVEL_F_CV	14 Feb 2002 06:00:00.000	51.83	100.00
7	FX:IFX1_BATCH_REACTORLEVEL_F_CV	14 Feb 2002 07:00:00.000	51.03	100.00
8	FX:IFX1_BATCH_REACTORLEVEL_F_CV	14 Feb 2002 08:00:00.000	51.03	100.00
9	FX:IFX1_BATCH_REACTORLEVEL_F_CV	14 Feb 2002 09:00:00.000	50.01	99.97
10	FX:IFX1_BATCH_REACTORLEVEL_F_CV	14 Feb 2002 10:00:00.000	50.17	51.94
11	FX:IFX1_BATCH_REACTORLEVEL_F_CV	15 Feb 2002 03:00:00.000	50.01	100.00
12	FX:IFX1_BATCH_REACTORLEVEL_F_CV	15 Feb 2002 10:00:00.000	50.06	100.00
13	FX:IFX1_BATCH_REACTORLEVEL_F_CV	15 Feb 2002 12:00:00.000	50.33	100.00
14	FX:IFX1_BATCH_REACTORLEVEL_F_CV	27 Feb 2002 22:00:00.000	50.00	100.00
15	FX:IFX1_BATCH_REACTORLEVEL_F_CV	20 Feb 2002 00:00:00.000	50.01	100.00
16	FX:IFX1_BATCH_REACTORLEVEL_F_CV	20 Feb 2002 01:00:00.000	50.76	100.00
17	FX:IFX1_BATCH_REACTORLEVEL_F_CV	20 Feb 2002 20:00:00.000	50.34	14.42
18	FX:IFX1_BATCH_REACTORLEVEL_F_CV	01 Mar 2002 02:00:00.000	50.01	100.00
19	FX:IFX1_BATCH_REACTORLEVEL_F_CV	01 Mar 2002 05:00:00.000	50.35	100.00
20	FX:IFX1_BATCH_REACTORLEVEL_F_CV	06 Mar 2002 18:00:00.000	50.14	34.72
21	FX:IFX1_BATCH_REACTORLEVEL_F_CV	06 Mar 2002 19:00:00.000	50.01	100.00
22	FX:IFX1_BATCH_REACTORLEVEL_F_CV	07 Mar 2002 03:00:00.000	50.00	100.00
23	FX:IFX1_BATCH_REACTORLEVEL_F_CV	07 Mar 2002 04:00:00.000	50.05	100.00

Library Complete

3/11/2002 5:25 PM

Interactive SQL Tool

The OLE DB provider comes with the easy to use and powerful “Interactive SQL Tool” to let you quickly create, test and export queries to Excel.

Proficy Historian Performance and Execution Clients and Applications

Proficy Historian offers a wide range of clients and applications to deliver many ways to make business sense out of plant data – in real-time.

Current Proficy Historian Clients and Applications include:

Historian Excel Add-In

Using the Historian Excel Add-In, you can retrieve and display data in Microsoft Excel, the most widely accessible spreadsheet application available.

The Excel Add-In makes it fast and easy to analyze the historian data and develop dynamic and interactive reports. Users do not need to learn any special code or languages like “SQL” to extract data. Simply select the information you want to see and how it should be filtered and a “live” report is created so that users can easily change any of the input parameters and immediately see the results. Easy-to-use dialog boxes and several standard Excel report templates are fully integrated within Excel, enabling the quick and easy creation of data queries and views.

The Excel Add-In also makes it easy to import new data, import or update tags – even create calculations for the calculation collector. And with special “alarm & event” functions, it is simple to perform an advanced “sequence-of-events” or “root-cause” analysis on the integrated alarm and process data.

Proficy Real-Time Information Portal

Designed specifically for use with Proficy Historian, Proficy Real-Time Information Portal is GE Fanuc’s powerful web-based data analysis and visualization tool. Using the simple and widely available Microsoft Internet Explorer web browser, Proficy Real-Time Information Portal allows you to gain insight into your overall production process from anywhere in the world.

Powerful, secure and fully customizable, Proficy Real-Time Information Portal puts critical production data just a mouse-click away – including KPIs, trends, X-Y plots, batch and event data and more.

Proficy Plant Applications

(Efficiency, Quality and Production Management)

Proficy Plant Applications offer premier performance and execution applications including Efficiency, Quality and Production Management. Proficy Historian is the foundation for the data served to these robust applications that offer compelling solutions such as:

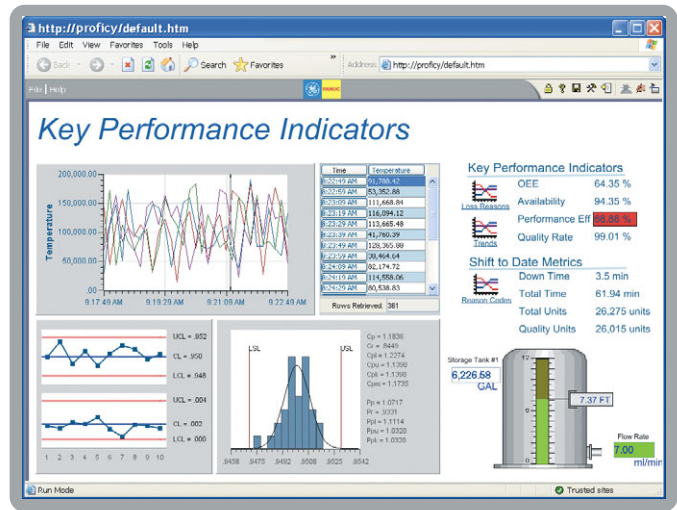
- Downtime tracking and reporting
- Overall Equipment Effectiveness
- Quality and SPC management
- Product recipe management
- Product tracking and genealogy

Proficy HMI/SCADA – iFIX v2.6, CIMPLICITY v6.1 – Current

Through the standard Proficy HMI/SCADA – iFIX and CIMPLICITY chart objects, you can display historical information from multiple Proficy Historian servers, as well as mix different data ranges, times, time zones and real-time data on the same chart. Plant operators also enjoy one of the fastest chart update rates on the market – with typical charts displaying several pens spanning months of data taking only a few seconds to update – as opposed to the several minutes they may be used to with other historians.

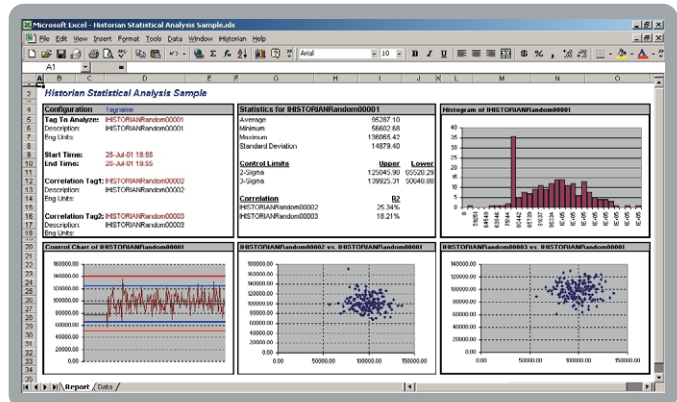
Proficy Machine Edition (PC & CE based)

Proficy Machine Edition boasts automatic configuration so that all of your data is automatically stored in the Proficy Historian without the need to use any of the Historian’s administration tools. Simply select a tag to be stored within Machine Edition and the Historian will store a new value whenever it changes.



Proficy Real-Time Information Portal and Proficy Historian

One of the most robust tools for accessing, analyzing, and visualizing Proficy Historian data, Proficy Real-Time Information Portal enables users to view trends, KPI and other critical production metrics from anywhere in the world via the Internet.



Proficy Historian Microsoft Excel Add-In

Proficy Historian features a Microsoft Excel Add-In, which provides an easy-to-use interface for performing detailed analysis and reporting of Proficy Historian data.

Proficy Historian 3.0 System Requirements

Proficy Historian can be deployed either as an option of an Proficy HMI/SCADA system or as a stand-alone, plant-wide server.

Hardware Requirements

Proficy Historian as a SCADA Node:

Pentium 4 2.0 GHz or better computer with 512 MB RAM

Proficy Historian as a plant-wide server:

Pentium 4 2.0 GHz or better computer with 1 GB RAM

Note: Users should determine the size of a Proficy Historian Server by the number of points of data collected, and the maximum number of concurrent client connections that are anticipated. If the number of concurrent users is significantly different from the suggested guidelines, then adjust your server memory size accordingly. See chart below:

Points	Users	RAM (MB)	CPU
5000	10	1000	Single
10,000	30	1000	Single
20,000	50	1000	Dual
50,000	100	1000	Dual
100,000	200	1000	Quad
150,000	200	2000	Quad
200,000	200	2000	Quad
250,000	200	3000	Quad

Software Requirements

Server:

- Windows 2003 Server
- Windows XP Pro
- Windows NT Workstation v4, SP 6 and IIS 4
- Windows 2000, SP2 and IIS 5
- Networking (if applicable)

Note: Microsoft Internet Information Server (IIS) is required for the web-based administrator only. For additional performance and usability, GE Fanuc recommends using Windows 2000 with IIS.

Clients:

- Windows 2003 Server
- Windows XP Pro
- Windows NT Workstation v4, SP 6
- Windows 2000
- Windows 95 OSR 2
- Windows 98
- Networking (if applicable)

Excel Add-In:

- Microsoft Office 2000 or higher

Administrator Clients:

- Internet Explorer v5.5 or higher (for Web based administration)

Collectors:

- Proficy HMI/SCADA – iFIX v2.6 or greater (iFIX collector only)
- Proficy HMI/SCADA – CIMPLICITY v5.5 or greater
- Proficy Machine Edition v5.00 SP2 or greater
- OPC DA Server v1.0 or v2.0 (OPC collector only)
- OPC Alarms & Events v1.0 or greater
- FIX Collector (Version 7.0)
- File Collector (CSV and XML files)
- Calculation Collector
- Server-to-Server Collector
- OSI PI Collector

Proficy Historian 3.0 Capabilities

Easy Configuration and Administration

- Simple configuration
- True thin-client administration

Unparalleled Performance

- Sub-second data collection
- Ultra-efficient data compression
- Collect up to 250,000 data points per server
- Store and retrieve over 20,000 events per second
- Precise time stamp resolution

All Types of Data

- Wide range of collectors including OPC Alarms & Events

Standard Interfaces for Data Access

- Open access for ERP & MES applications
- Full Featured SDK

Highly Reliable System Architecture

- Fault tolerant architecture
- Support for Microsoft Cluster Server
- Redundant data collectors
- Supports multiple time zones and Daylight Savings Time

Advanced Data Management

- Designed for FDA's 21 CFR Part 11
- Calculation Collector
- Server-to-Server Collector

Wide Range of Performance and Execution Applications

- Historian Excel Add-In
- Proficy Real-Time Information Portal
- Proficy HMI/SCADA
- Proficy Plant Applications

Proficy Software Modules:

Real-Time Information Portal
Proficy Real-Time Information Portal

Plant Performance and Execution
Proficy Efficiency
Proficy Production
Proficy Tracker
Proficy Machine Tool Efficiency

Integrated Quality
Proficy Quality
Proficy Non Conformance Reporting
Proficy Shop Floor SPC

Process Solutions
Proficy Process Systems^{*}
Proficy Batch Execution
Proficy Batch Analysis

GE Fanuc Support & Services:

GE Fanuc Automation Information Centers

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1 800 GE FANUC or 434 978 5100

Asia Pacific:
86 21 3222 4555

Europe, Middle East and Africa:
800 1 GE FANUC or 800 1 4332682
or 1 780 401 7717

Europe, Middle East and Africa (CNC):
352 727979 1

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Plant Data Repository
Proficy Historian

Asset Management
Proficy Enterprise Asset Management
Proficy Remote Monitoring & Diagnostic
Proficy Change Management

HMI / SCADA
Proficy HMI/SCADA – iFIX^{*}
Proficy HMI/SCADA – CIMPLICITY^{*}
Proficy View – Machine Edition

Programming & Control
Proficy Logic Developer
Proficy Motion Developer – Machine Edition

Proficy GlobalCare Support
Proficy Professional Services
Proficy Training

Additional Resources

For more information, please visit the GE Fanuc web site at:

www.gefanuc.com

