

Data Analysis Tools for IndustrialSQL™ Server



Real Business Value

Increase Asset Utilization

With an image of the data, true productivity can be assessed.

Empower Employees

Browse to information, not just raw data, in the proper context.

Improve Plant Profitability

Affect bottom line results because you'll know more information, sooner.



Visualize, Analyze, Optimize

PRODUCT HIGHLIGHTS

- Advanced Plant Data Reporting and Trending
- Powerful and Easy-to-Use Query Tool
- Out-of-the-Box Functionality
- Fully Integrated with IndustrialSQL Server™ Historian
- Improved Support for SuiteVoyager® Software **(NEW)**
- Works with Wonderware® Industrial Tablets **(NEW)**
- Supports FDA-Validated Applications
- Multilingual Operating System Support
- Powerful Library of ActiveX® Controls
- Compatible with Microsoft® Office® 2003
- Leverages Microsoft Office Products to Increase Ease of Use

The ActiveFactory™ 8.5 suite of advanced data analysis and reporting clients unlocks the wealth of information captured by Wonderware's IndustrialSQL Server historian. ActiveFactory 8.5 software provides desktop tools for data trending and queries as well as Microsoft Office add-ins to Excel and Word, allowing for advanced reporting. ActiveFactory software is completely integrated with Wonderware's SuiteVoyager industrial Web portal. As a result, valuable plant process data can be presented in the appropriate context, in an easily understandable format, to everyone in the

plant, in an exceptionally timely and cost-effective manner via the company intranet.

Visualize underlying plant process data with the Trend tool and use the Query tool to retrieve blocks of related information in a point-and-click environment – no SQL skills are required. ActiveFactory clients can help plant staff answer questions like:

- When the process disruption occurred on Line #1, what time did it start and did it affect total line output?
- How long has that machine been out of service?



Powering intelligent plant decisions in real time.

Analyze important plant processes by quickly adding real-time and historical process data to an Excel spreadsheet using Excel add-in tools. Data analysis and the creation of graphs and reports empower plant staff to quickly zero in on the root causes of costly process problems so they can answer questions like:

- What has the average temperature been over the last two hours?
- Does the reduced output from Line #1 justify keeping it online?

Optimize plant processes by sharing knowledge and act on information from straightforward Word and Excel reports. Acquire information such as:

- Could the potential windfall from Line #2 compensate for the reduced output from Line #1?
- At the end of the last shift, was the effluent temperature so close to regulatory limits that it requires around-the-clock surveillance?

Now, plant personnel can easily publish Trend images, Query results and Reports within the SuiteVoyager Web portal, on an intranet site or directly from the ActiveFactory software. Reports can be static (a snapshot of historical information) or dynamic. Dynamic reports can be generated on demand from within a browser or scheduled, eliminating the need for complicated reporting systems. With these trends and reports, plant personnel can answer questions such as:

- Is the machine running and, if so, how many units is it producing?
- How much output can be sold to customers?
- If this month's domestic output exceeds plan, should the offshore activities be rescheduled?
- Does the new equipment meet its specified performance targets?

The Challenge – How to Improve Operations

Manufacturers always strive to improve operations because they know that increased plant efficiency can significantly boost their profits. And the keys to improved operations often lie hidden within the plant's rich storehouse of plant data. Wonderware's IndustrialSQL Server historian has firmly

established itself as the number one plant database on the market since its introduction in 1997, capturing trillions of invaluable details about plant operations. But how can that data be transformed into valuable plant information?

The Solution – Get ActiveFactory Software

ActiveFactory analysis and reporting clients combined with the SuiteVoyager portal are a significant part of that process. The ActiveFactory 8.5 solution does not require specialized training or extensive engineering in order to generate, disseminate or gain access to detailed real-time and historical plant process information. Information in the form of simple or comprehensive scheduled reports can be made accessible to everyone in the enterprise via the SuiteVoyager Web portal.

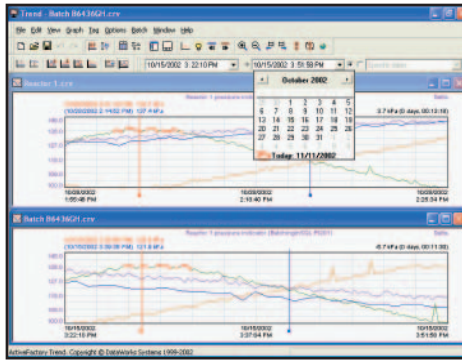
Production and engineering employees can easily use ActiveFactory desktop applications to harness real-time production data right out of the box. Empowered with data, anyone with knowledge of Excel and/or Word can easily and quickly create rich, detailed real-time data reports that have never before been available across an enterprise. With the proper permissions, these reports can be published in various views to the intranet – without Web authoring skills.

ACTIVEFACTORY COMPONENTS

ActiveFactory Trend

ActiveFactory Trend is for analyzing a plant's process data. Trend delivers real-time and historical traces of IndustrialSQL Server data in easy-to-understand charts that include analog, discrete, string or event data. Trend meets the demands of engineers who troubleshoot or analyze processes with rich features such as:

- **Time Bar:** Enter specific times or relative time periods using the Time Bar, which easily selects time periods via mouse or keyboard. Select automatic or real-time updates.
- **Limits:** Easily spot alarm conditions using Limits that employ different line formats for values outside the normal range.

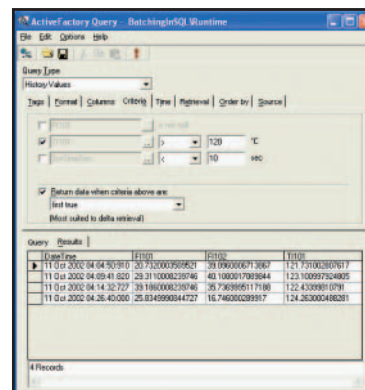


ActiveFactory Trend helps compare data from different time periods

- **Tag Browser:** Navigate public and private tags and tag groups using the Tag Browser, which uses a familiar tree control. The integrated tag browser makes including new chart data very simple. Users less familiar with tag names can find tags based on a description or I/O source by using drag & drop operations to populate a Trend plot with process data.
- **Chart Size:** Expertly control the screen area and balance charts with their supporting controls. Easily hide the tag browser, tag list and toolbars to expand the chart area, or expose them for more complete information.
- **Stack:** Automatically scale tag data to eliminate overlapping trend lines and easily distinguish data from different tags.
- **Scaling:** Because value ranges vary greatly between tags and over time, you can quickly adjust the scaling for individual tags or the entire chart in 15 different ways.
- **Annotations:** Gain additional insight into process data. The system automatically captures the user name of the person recording the comment and the time of entry.
- **Time & Value Cursors:** Using two vertical time axis cursors, easily view and compare precise values at different points in time. Trend displays the value and time at both cursors and automatically calculates the time and value differences between cursor positions. Horizontal value axis cursors make it easy to compare values across the trend interval.
- **Zoom:** To uncover more detailed information, Trend can Zoom into a portion of the chart area by selecting a region of the chart or by decreasing the amount of time shown on the trend. Trend can also Zoom Out and Undo Zoom to broaden the time period.
- **Statistics:** Easily access summary information about all displayed tags, including minimum and maximum values, the times associated with

those values, average values, ranges, etc. Statistics can be calculated for the entire trend interval, or only the period between time cursors.

- **Documents:** View personalized and public chart configurations based on chart settings stored in Trend's local, shared or Web-based files.
- **Workspaces:** Save your analysis desktop as a workspace that includes the list of open trend documents, their window sizes and placement. Quickly recall complete configurations for easy comparisons across multiple charts. Like individual trend documents, workspaces can be stored on a local hard disk, network, Web server or Web portal.

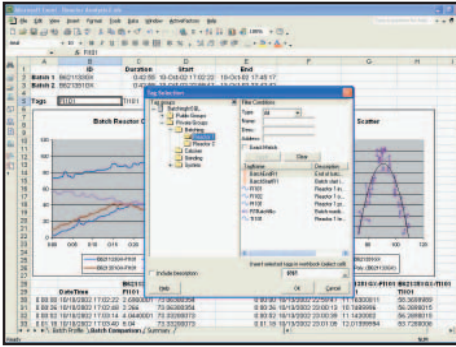


ActiveFactory Query gives novices access to the power of SQL & helps them learn SQL

- **Export:** Export displayed tag data to a comma-separated value (CSV) file for use by other applications. ActiveFactory users who require flexible trending capabilities (but not the comprehensive analysis and troubleshooting tools that the Trend desktop application offers) can use an embedded version of Trend called iTrend. iTrend resides within a Web page, an InTouch® application or custom solutions. Web and application developers can completely control how much flexibility end-users have over the embedded trend. In addition, iTrend supports full application control via scripting for an even more tailored trending solution.

ActiveFactory Query

ActiveFactory Query offers an easy way to browse and mine the data stored in your IndustrialSQL Server historian. Query dynamically generates and executes SQL queries based on the criteria provided by the user in an easy-to-use, point-and-click interface. It includes a tag browser that finds and selects individual tags or entire public or private tag groups.



ActiveFactory Workbook gives Microsoft Excel “point-and-click” access to IndustrialSQL Server data for reports and analysis

The menu of 12 types of queries — ranging from simple queries that return historical data to more specialized queries about I/O server status, annotations, limit violations and events — makes it easy to specify the desired information. Users need no knowledge of SQL or the IndustrialSQL Server database to run these queries. Users can also designate Favorites query types for easy access to commonly used or specialized queries.

Users can quickly change tag selections, time periods, columns, etc., in either a results list or the generated SQL. This immediate feedback makes Query an ideal tool for learning the proper syntax to develop standard and advanced SQL queries. Query also integrates with Workbook and Report to deliver straightforward reporting solutions. Users can also copy queries to other database client applications, such as Microsoft Query Analyzer and Microsoft Query applications.

ActiveFactory Workbook

ActiveFactory Workbook combines flexible reporting and powerful calculation and analysis capabilities. It extends Microsoft’s Excel software by providing easy access to the data in Wonderware’s IndustrialSQL Server historian via Wizards and custom Excel functions. Workbook is ideal for common operational reports that contain specific information.

Reports created in Workbook are formatted with standard Excel features, minimizing training costs. Reports can also be saved as templates, which helps users easily create standard reports. The ActiveFactory software can automatically update reports on a regular schedule, on demand, based on an event detected by the IndustrialSQL Server event system, or under the control of external programs.

Furthermore, Workbook Reports can be published to Wonderware’s SuiteVoyager Web portal using the new ActiveFactory for SuiteVoyager application, which delivers tailored information throughout the facility. ActiveFactory Reports can be refreshed automatically when opened, or periodically based on a schedule.

Web-based reporting offers easy access to up-to-the-minute information and fast distribution of that information, without eliminating paper reports, which can be printed at any time. Because Workbook allows users to create hard copy reports using Word and Excel and then publish those reports to the Internet, users can save a significant amount of time.

ActiveFactory Report

Just as ActiveFactory Workbook extends Microsoft’s Excel application, the ActiveFactory Report feature extends Microsoft Word and offers easy access to data stored in the IndustrialSQL Server historian. The perfect complement to ActiveFactory Workbook, ActiveFactory Report can generate reports of varying lengths. Creating reports — such as a list of all operator notes from the last shift, the peak temperature for each batch, etc. — is simple for novices as well as experts because ActiveFactory Report uses ActiveFactory Query to select the desired data.



ActiveFactory Report is ideal for creating variable-length reports directly in Microsoft Word

Users can create IndustrialSQL Server reports using familiar Word features to such as Format to indicate a desired Style, Pagination, Headers and Footers, etc. Moreover, ActiveFactory Report automatically retrieves data from the IndustrialSQL Server historian and applies the desired table formatting. Like Workbook, Report uses the same report definition for both Web-based and hardcopy reports. Reports can be published to the SuiteVoyager portal via the ActiveFactory for

SuiteVoyager application. In addition, new custom filters can be defined to capture important process information, such as batch number, and then provide tightly focused process reports.

ActiveFactory 8.5 software supports the latest versions of Microsoft Word and Excel – which offer statistical analysis, reporting, scripting and other tools – and delivers the resulting information throughout the plant.

Web-Based Reporting

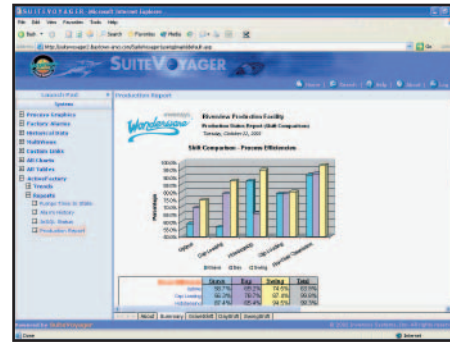
Wonderware's ActiveFactory software includes a sophisticated website for publishing plant data from the IndustrialSQL Server historian. This website offers out-of-the-box access to a wide range of data. Additional website content can be easily created using ActiveFactory desktop applications such as Trend, Workbook, Query and Report without specialized authoring tools. The reporting website can run as a stand-alone solution, or it can be integrated with Wonderware's SuiteVoyager product to deliver rich and dynamic content to everyone in the enterprise.

INTEGRATION

SuiteVoyager Support

The new ActiveFactory for SuiteVoyager application provides valuable and highly configurable ActiveFactory content within the SuiteVoyager industrial Web portal. The combination of SuiteVoyager and ActiveFactory software offers a variety of benefits.

- **Personalized Navigation:** Manage your own lists of published reports from the Reporting Website using the SuiteVoyager software's navigation panel. ActiveFactory for SuiteVoyager provides total control over which ActiveFactory content is available to each user.
- **Embedded Trends:** Export Trends embedded within InTouch applications and include them in SuiteVoyager views. ActiveFactory for SuiteVoyager allows complete control over which Trend plot functions users can see – from cursors and scaling tools to control over which tag data can be shown.
- **MultiViews:** Create dashboards of ActiveFactory reports and trends within a SuiteVoyager MultiView window, which can display Web parts such as .asp and .html files.



ActiveFactory's iTrend control adds valuable content to your SuiteVoyager industrial web portal

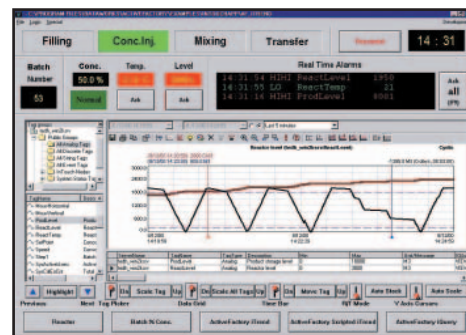
- **Across Firewalls:** ActiveFactory software can delivery vital plant information across firewalls from the plant floor to the enterprise, without compromising the security of either system. Within a local network, where direct connections to the IndustrialSQL Server historian are generally supported, iTrend's full analysis capabilities can be available. In more restrictive environments, static trends are displayed.

Mobile Solutions

ActiveFactory 8.5 software supports the Microsoft Windows XP Tablet Edition operating system and Wonderware's new Industrial Tablets and Touch Panel Computers. Now, mobile workers can access vital real-time and historical plant data anywhere in the plant—streamlining process troubleshooting and saving valuable time.

ActiveFactory Control Objects

ActiveFactory software contains a powerful library of component-based ActiveX controls for software developers and systems integrators. These controls integrate with FactorySuite® container applications, such as InTouch HMI software, as well as third-party container applications, such as Microsoft's Internet Explorer and Visual Basic® development system. ActiveFactory control objects can significantly increase functionality within custom industrial applications and markedly decrease development time.



ActiveFactory controls extend other software, such as InTouch applications

Other Data Sources

Although ActiveFactory software is designed to tightly integrate with the IndustrialSQL Server historian, it supports access to other data sources, as well. As with Microsoft Query or other SQL query tools, a user can manually build and execute queries against other online SQL databases and take advantage of ActiveFactory formatting features. Users can view data from the IndustrialSQL Server historian alongside data from other sources.

SECURITY AND FDA 21 CFR PART 11

ActiveFactory software uses integrated Windows or SQL Server security to access IndustrialSQL Server data. Users do not have to remember additional account information and ActiveFactory security features can automatically give users a single Windows login to ActiveFactory and IndustrialSQL Server applications. ActiveFactory software fully supports FDA-validated applications, making use of the IndustrialSQL Server historian's access controls, secure manual updates and audit trails.

NON-ENGLISH LANGUAGES

Wonderware's ActiveFactory software is fully internationalized. It supports non-English language operating systems and automatically switches to the appropriate language based on regional settings. Users can benefit from regionally specific date, time and number formatting. Languages supported include English, German, Spanish, Russian, Czech, Slovak, Italian, French, Danish, Swedish, Portuguese, Polish, Japanese and Simplified Chinese.

COMPREHENSIVE SUPPORT

Wonderware's Comprehensive Support Program makes it easy to receive up-to-date Wonderware software and associated applications. To learn more about this valuable program, which maintains and often increases the value of industrial software applications, please contact your local sales representative.

SPECIFICATIONS

CPU: Pentium – minimum of 100 MHz

Free hard disk space: 80 MB

RAM: 64 MB (128 MB for Microsoft Office add-Ins)

Operating system: Microsoft Windows XP Professional, XP Tablet Edition, 2000, 2000 Terminal Services, NT® 4.0 operating system (Service Pack 3 or higher) are supported.

Microsoft Office: Office add-ins require Microsoft Office 2003, 2000 or Office XP.

IndustrialSQL Server: ActiveFactory 8.5 software supports versions 7.1 (Patch 5 or higher) and 8.0 of the IndustrialSQL Server software.

Browser: Microsoft's Internet Explorer, Version 3.02 or higher.

Contact Wonderware or your local Distributor for information about software products for industrial automation.
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