



## PRODUCT DATASHEET

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### HISTORIAN CLIENT SERVER



# Endüstriyel Bilgi Yönetimi

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## Historian

BAUTEK Endüstriyel Bilgi Yönetimi oluşturulan verileri kullanarak verimlilik, kalite, uyum ve karlılığı arttırmanıza yardımcı olur.

Wonderware Historian, endüstriyel veritabanı ve arşivleme çözüm platformudur.



AV VA

## HISTORIAN

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Capture and store  
high-fidelity industrial data.

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Historian is a high-performance process historian capable of storing huge volumes of data generated from today's industrial facilities. Historian easily retrieves and securely delivers information to desktop or mobile devices, enabling organizations to analyze processes anywhere at any time.



## Summary

Historian is the first, large volume plant data historian to unite a high-speed data acquisition and storage system with a traditional relational database management system, facilitating access to plant data using open database standards.

### Business Value

- y A complete and accurate operational history provides a foundation for faster troubleshooting and easier discovery of high value process improvement opportunities.
- y Flexible, scalable implementation options reduce IT costs and accelerate system ROI. High availability and disaster recovery options help ensure business continuity.
- y Comprehensive reporting and data analysis options enable more team members to gain value from your process history and having access to data enhances collaboration.

Historian combines advanced data storage and compression techniques with an industry-standard query interface to ensure open access to all of your process, alarm and event data, enabling faster, more informed decisions while keeping your team fully informed on operational performance.

Historian is the perfect companion to the world's leading HMI, Wonderware InTouch®, allowing you to easily store data coming from your HMI SCADA application. Historian is offered in a number of configurations to meet the needs of any industrial facility, from a single site to a multifacility global enterprise.

Data stored in Historian is easily accessible using a comprehensive set of integrated reporting and data analysis tools. From your desktop, laptop, tablet or smart phone, Historian data is available 24/7 helping you better manage and improve your process.

### Highly Scalable and Flexible

Historian offers greater scalability and more deployment options than ever before. Historian can collect and store all of your vital process, alarm and event data up to 2 million tags.

Historian can be deployed to monitor a single process or an entire facility. It can expand as a tiered Historian, capable of storing data locally and aggregating data at the corporate level to simplify the most demanding data reporting and analysis requirements.

### Data Integrity

In many industries like Upstream Oil & Gas or Water & Wastewater, remote facilities are connected via low bandwidth data communications systems. Network efficiency is a key consideration. Historian has increased network efficiency by up to 92% so all of your high resolution data is captured accurately every time.

Data can also be intermittent, late, or come in bursts, straining the ability of a historian to keep up. The high performance Historian data storage engine can handle data bursts of late data without adversely affecting system loading. Historian can even handle data coming in from systems with mismatched system clocks, preserving the correct data sequence automatically.

Regardless of your industry, Historian delivers the high levels of data integrity required by today's most demanding companies.





## Business Continuity

Business continuity is a growing concern among leading industrial companies. How do you ensure that your plant historian keeps functioning if a computer system fails or if you experience a natural or man-made disaster?

With Historian, it is simple to create distributed configurations that address your business continuity concerns. A 'Tier 2' system can serve as a data repository for backup of critical information, or multiple Tier 2 systems can enable replication of all of your historical data. Multiple Tier 1 systems can feed either their complete data stream or just aggregate summary data to one or more Tier 2 systems. Tiered architectures guard against possible data loss and provide valuable summary data for system performance analysis.

Data access and visualization is also ensured by our tiered historian approach. Connected instances of the Historian Client, a data analysis and reporting application, automatically switch to a designated backup historian if the primary historian goes down. When the primary historian comes back online, all connected Historian Client instances automatically switch back to the primary server.

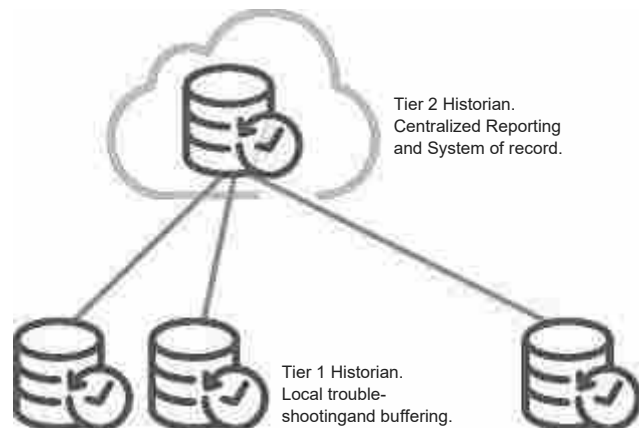
## High Performance Features

Store Plant Data with Amazing  
Speed and Remarkable Efficiency

Historian captures plant data hundreds of times faster than a standard database system and saves data in a fraction of the space using our history block technology.

**"The Historian storage engine provides 5x the storage performance over traditional relational databases."**

Because of the differences between time series information and conventional transactional data, conventional relational database technology is often not suited to the plant-floor environment. The Historian is designed to manage the continuum of values experienced in time-series data, along with alarm and event data, providing a single data repository for your operational records. Our storage engine also provides 5x the storage performance over traditional relational databases. This means Historian can capture very high resolution data on a large number of data tags ensuring you have the data you need to understand and solve the most difficult process and equipment problems.



Tiered architectures guard against possible data loss and provide valuable summary data for system performance analysis.

Historian combines front-end, high-speed data collection with time series extensions to an embedded Microsoft® SQL Server® relational database to optimize both storage and retrieval performance. Historian does not store data directly in Microsoft SQL Server tables, but instead utilizes highly optimized "history blocks" technology. This means that you don't have to purge your database as the size of your database grows – ever. You can move or transfer history blocks using Windows Explorer®. History block setup is improved so system management is easier than ever.



Additionally, our patented “swinging door” data storage algorithm greatly reduces data storage requirements while preserving important data features.

#### Capture Complete Data Records, Even from Slow or Intermittent Networks

Historian captures the complete data record (process, alarm, events) with its fault-tolerant data acquisition system. It is ideal for SCADA, geographically dispersed facilities or other applications that use slow or intermittent data networks. Historian can acquire and store data collected by remote terminal units (RTUs), providing more complete data records for SCADA operations.

#### Build Queries Faster and More Efficiently with Advanced Data Retrieval Modes

Historian has built-in advanced data retrieval modes that can make your data report queries easier to build, more efficient and more powerful. Historian offers the following advanced data retrieval modes:

1. Time-in-state
2. Slope
3. Interpolated
4. Best fit
5. Time-weighted average
6. Integral
7. Counter
8. Cyclic and delta
9. Full
10. Minimum, maximum, average
11. Value state
12. Round trip

#### History Replay

The history replay feature allows any process graphic hosted in the InTouch OMI industrial visualization platform to easily be redirected from real-time data to historical data for improved analysis of your process through the SCADA Playback feature.

#### Choices for Data Analysis and Reporting

Being able to use data is just as important as storing it. Wonderware provides many ways to access and visualize your process data. Historian Client provides a great desktop tool for viewing data trends and basic reports. Information Server displays Historian data in many ways via convenient web delivery. Historian InSight is a browser client for quick data query and trending. Wonderware Intelligence leverages Tableau® business analytics for powerful self service process analysis capabilities. Dream Report is a configurationbased reporting application that anyone can use out the box to create production or regulatory compliance reports. For mobile workers, Wonderware SmartGlance Mobile Reports delivers Historian and other plant data to smart phones or tablets.

Wonderware has all your data analysis and reporting needs covered.



## Data in the Cloud

Whether you are looking to move your industrial data storage to the cloud as a managed Software as a Service (SaaS), or to complement and extend existing on-premises investments, Insight is an affordable option.

For customers wishing to host their Historian architecture in the cloud, we also offer Wonderware Online — an industrial information management solution that makes data accessibility and analysis simple. Anywhere, anytime and on any device.

Another feature enabled by Insight is the ability to send key data to a mobile device. This allows users to access KPIs on the go and create personalized alerts. Do you want to know when the line has stopped for more than five minutes? What about a critical asset that is in a high temperature state? Simply ask the question and get the answer.

## Customer Support and Services

The Customer FIRST Services Program makes it easy to receive the latest Wonderware software and associated applications. To learn more about this valuable program, which maintains and often increases the value of your industrial software applications, please contact your local Wonderware sales representative.

Discover how industrial information solutions such as Historian and Insight can benefit your business. Contact your Wonderware distributor today, or visit

<https://sw.aveva.com/monitor-and-control/industrial-information-management/historian>





PRODUCT DATASHEET

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# AVEVA<sup>TM</sup> Historian Client

AVEVA Historian Client empowers workers with real-time operational data, allowing operators, engineers and operations managers to quickly troubleshoot issues, identify cost-saving opportunities and improve production efficiency.

A perfect complement to AVEVA<sup>TM</sup> Historian, AVEVA Historian Client provides data trending and reporting capabilities, integrated with Microsoft Office, allowing easy sharing of reports on the company intranet site.



# Overview

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## Summary

AVEVA Historian Client data analysis and reporting software places real-time and historical process data into the hands of the people most responsible for plant performance: operators, engineers and operations managers.

## Business value

AVEVA Historian Client software delivers near real-time historical process data from the AVEVA Historian to industrial workers at all levels.

- y Near real-time process data critical for process troubleshooting activities
- y Access to self-service production and performance reports that can be shared via email or the web

## Gain better visibility into your processes

AVEVA Historian Client is tightly integrated with AVEVA Historian, enabling you to easily navigate through your operational data. It generates real-time and historical data charts and reports allowing operators, engineers and decision makers to quickly visualize what is happening during a production run, a batch or any industrial process.

AVEVA Historian Client reports and data trends can be viewed, analyzed and consumed through our desktop application or using your preferred web browser with AVEVA Historian Client Web. You can also use external applications such as Microsoft® Office®, AVEVA™ InTouch HMI or even custom software clients.

AVEVA Historian Client also supports AVEVA Insight, our managed cloud solution, Microsoft SQL Server, when integrated with AVEVA Historian, and Open Data Protocol (OData) data access interface, delivering on our commitment of using the latest software technologies.

## Rich data analysis and reporting

AVEVA Historian Client's rich data analysis and reporting experience gives you powerful ad hoc query capabilities, as well as preconfigured trending tools needed to drill down into data details to evaluate trends, find root causes, and determine the best solutions to critical process issues.

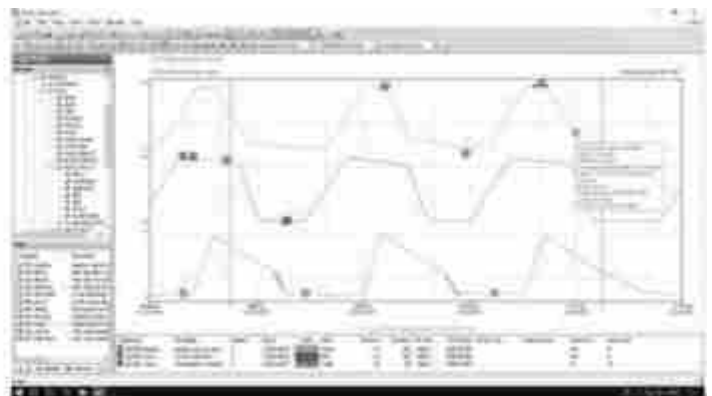
Plant IT personnel tasked with creating and maintaining production reports and regulatory reports can also use AVEVA Historian Client to pull important information out of the huge volume of plant process data stored in AVEVA Historian.

## AVEVA Historian Client components

AVEVA Historian Client includes multiple applications designed to maximize the value of data stored in AVEVA Historian. These applications give you access to plant and process data through easy-to-use interfaces. With AVEVA Historian Client plant workers can quickly troubleshoot problems, study potential operational inefficiencies and eliminate the time-consuming process of locating data.

## Trend application

The trend application is a powerful desktop data graphing tool. Providing a range of charting and formatting capabilities, it is designed to allow users to create highly informative data analysis charts for real-time and historical data trend analysis, faster troubleshooting and process improvement. Multiple types of analysis displays and reports are available as standard, such as Trend charts, X-Y Scatter plots, and Batch trend charts, including 'Golden Batch' comparison.



## Excel add-in

This Microsoft Excel add-in is designed to simplify the creation of rich data reports using AVEVA Historian data.

## Query application

Eliminate the need for SQL expertise with this easy-to-use tool for creating database queries. Our query tool can be used in tandem with trend, workbook or report applications. It can also be used as a standalone querying tool for the AVEVA Historian or any SQL-compliant database.

## Powerful web-based solution

AVEVA Historian content can be consumed with AVEVA Historian Client Web, or through external applications such as Microsoft Office, AVEVA InTouch HMI or even custom software clients.

Trends, reports and workbooks can be published on the intranet, aggregating plant and business data into a powerful web-based production and performance management solution.

## High availability and business continuity

AVEVA Historian Client takes full advantage of the AVEVA Historian redundancy capabilities. If the primary historian server goes off-line AVEVA Historian Client automatically switches to the secondary historian server. Once the primary server is back online, AVEVA Historian Client automatically switches back to the primary with no interruptions to the user.

## Choices for data analysis and reporting

With AVEVA Historian, you have plenty of choices on how you want to analyze and report on your data:

- y AVEVA Historian Client Web is a browser client for quick data query and trending.
- y Intelligence is a BI application that leverages Tableau® business analytics for powerful self service process analysis capabilities.
- y AVEVA Insight makes information accessible through the cloud for any modern browser or mobile device, allowing you to monitor your critical information, KPIs, and alerts on-the-go.

- y Dream Report is a configuration-based reporting application that anyone can use out the box to create production or regulatory compliance reports

## Data accessibility

AVEVA reporting applications can be web-enabled using AVEVA Insight, ensuring the proper information can be made available to the right individuals wherever they are located. Using client components within AVEVA Insight delivers a rich and flexible portal experience.

Sample reporting solutions that can reside in AVEVA Insight include:

**AVEVA MES/ Performance** - OEE and equipment downtime reports and KPI dashboards

**AVEVA MES/Operations** - multiple reporting options including:

- y Production events and formula reporting (usage and set points)
- y Material consumption including comparisons of "plan vs. actual"
- y Consumption and genealogy of materials, equipment, personnel and production events related to a lot, batch or serial number
- y Complete traceability and genealogy reporting to help you comply with government regulations



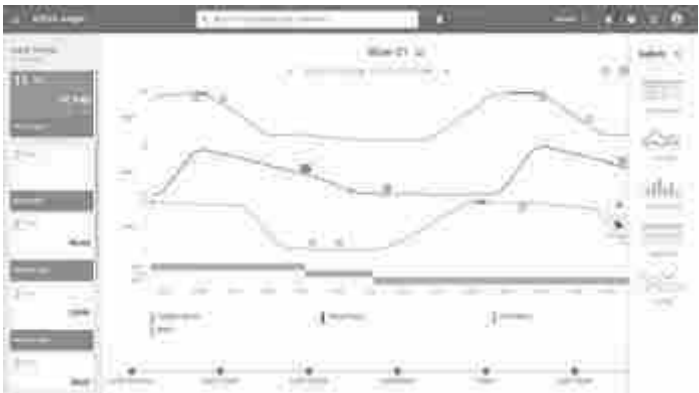


**Mobility and cloud capabilities**

AVEVA Insight is a cloud-based, “managed” solution that makes information accessible through any modern browser or mobile device. Democratize industrial data access, monitor critical information, KPIs, and alerts on-the-go through AVEVA Insight, without the need to install and manage these solutions on-premise.

**Customer support and services**

The Customer FIRST for AVEVA Services Program makes it easy to receive the help you need when you need it and to receive the latest version of the AVEVA Historian Client and associated AVEVA products.



# AVEVA™ Insight

## Cloud platform for industrial operations

Make better and faster decisions with complete visibility of your operations at your fingertips. AVEVA Insight delivers actionable information and Artificial Intelligence capabilities to help your teams improve asset reliability and operational performance.

Lower your IT costs, get started quickly and uncover opportunities in a matter of minutes. It is the fastest and simplest way to increase your operational agility and resilience, while driving sustainable growth.



# Making industrial analytics and actionable intelligence easy

AVEVA Insight simplifies the complex. It combines AVEVA's leading operations management and asset performance technology into one easy-to-use cloud-based solution, enabling your teams to collaboratively manage your operations and assets from anywhere, at any time.



## Unlock critical data

Access contextualized data from multiple sources in a single cloud environment to gain operational insights anywhere, any time.



## Increase collaboration

Empower the connected worker and break down silos with a single source of truth and customized alerts for better, faster decisions.



## Improve asset reliability

Gain asset performance insights and respond to anomalies earlier with artificial intelligence and powerful analytics.



## Drive operational performance

Fully understand your operations with a digital twin that combines corporate and operational KPIs to discover efficiency gains.

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The other benefit of digital transformation is our people – the software has had a positive impact on workplace culture. With data transparency, our teams have more trust in the data, and this leads to more trust between the individual workers. We've seen that when digital tools empower people, great breakthroughs are possible.

– Anthony Loy,

Smart Supply Chain Program Director, Schneider Electric

[Read the Success Story](#)



## Key features

### Unlock actionable information

AVEVA Insight is both vendor and system agnostic. Containing built-in publishers to more than 30 AVEVA and Wonderware products, and native connectivity to over 300 industry standard drivers, AVEVA Insight allows you to consolidate all your asset, operational and production data in one convenient location.

With context applied in an easy-to-use, secure cloud environment, AVEVA Insight is not just for data collection and storage. It also provides a powerful system for immediate access to asset information, KPIs and sophisticated analysis capabilities for users of all levels and experience.

### Anywhere, any time access

Enable the connected worker to get out from the behind the desk with the right information at your fingertips, when and where you need it – desktop, tablet or mobile.

### Without the IT burden

With AVEVA Insight you enjoy seamless, automatic updates and scalability for your business needs. Its cost-effective subscription model eliminates the need for additional investment in hardware servers and software. Leaving the IT burden of managing your system to us, so that you save time, money and manpower.

## Simple to start, simple to use, out-of-the-box

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AVEVA Insight is a cloud platform for Industry 4.0 and strategic growth initiatives. This simple to use system accelerates adoption and helps kick-start your digital transformation out-of-the-box with capabilities including:

- y Secure access from any location, any device
- y Search based navigation
- y Time series analysis
- y Process graphics
- y Geolocation / mapping
- y Customizable dashboards
- y Condition management, alerts and notifications
- y Automated analytics using supervised machine learning
- y Asset efficiency analysis
- y Connectivity to 300+ industry standard drivers
- y Built in publishers for 30+ AVEVA and Wonderware products
- y Restful API for data access and integration
- y Plus, a growing range of fully integrated add-ons so you can easily tailor AVEVA Insight to your needs.

“ AVEVA Insight is being rapidly adopted across our organization. The speed at which we can implement a real-time manufacturing solution has drastically been minimized, going from weeks to only hours.

–  
**Automation Manager**  
**Leggett & Platt**

AVEVA Insight is fast to get started and simple to manage so the time to value is dramatically reduced.



## Fully integrated add-ons for AVEVA Insight

### Guided Analytics

Guide the user to create anomaly alerts with higher fidelity with just a few mouse clicks. Making it easy to explicitly identify a group of tags for predictive analytics monitoring.

### Advanced Analytics

Enable creation of rigorous multi-variable predictive analytics models for the most critical assets with user-friendly cleansing, model training, fault analysis and diagnostics, and prescriptive actions.

### BI Gateway

Automate the extraction, transformation and storage of operational KPIs and related contextual information with this enterprise manufacturing intelligence (EMI) solution.

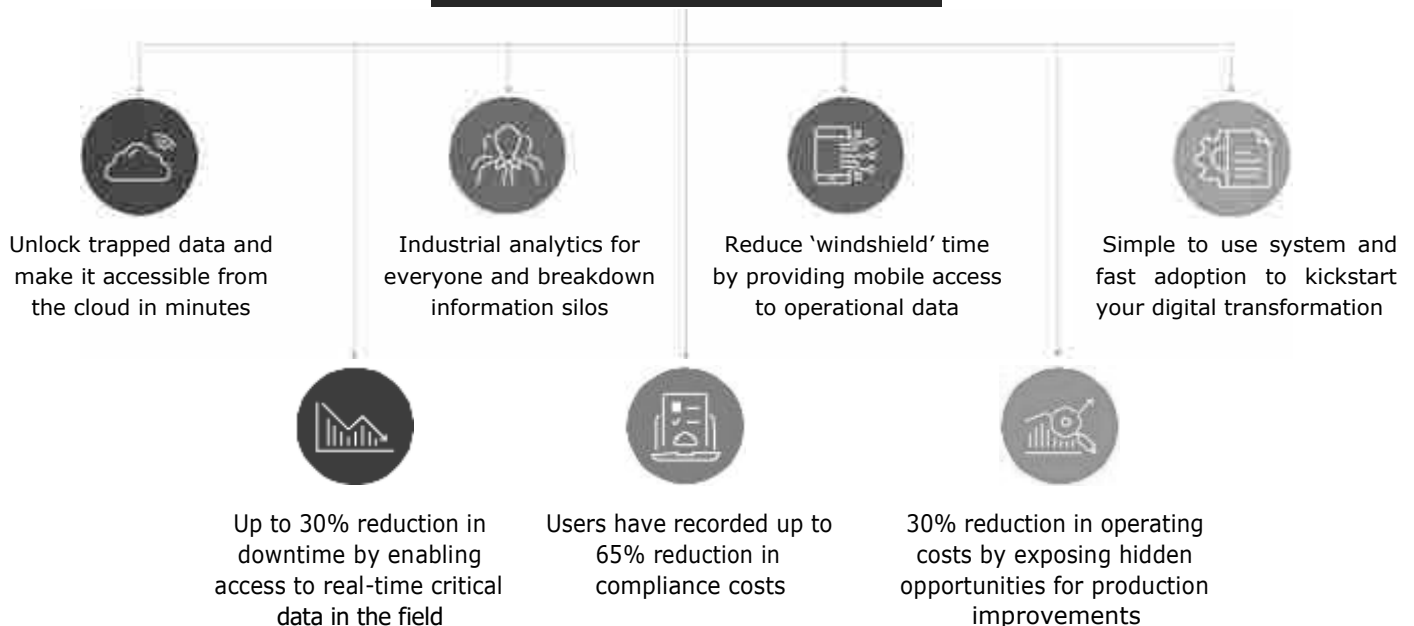
### Asset Library

Accelerate time to value and share best practices across the organization with pre-packaged libraries that help free up resources, optimize asset performance and address inconsistent or missing data.

### Operational Performance

Increase plant asset and production line utilization and efficiency, and easily identify areas for continuous improvement with root cause analysis. Standardize and compare OEE KPIs, share best practices and elevate performance of your sites.

## The benefits of Insight





# Try AVEVA Insight today

Explore the demo and sign up for your free 45-day trial today.



Try it yourself, visit us at: [sw.aveva.com/campaigns/aveva-insight-demo](https://sw.aveva.com/campaigns/aveva-insight-demo)



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