Summary

Wonderware Intelligence allows you to connect multiple plant /enterprise data sources to join, relate and maintain a history of your real time operations metrics in an open information model. User-friendly analytics and dashboard-based monitoring of metrics empower workers and decision makers to make informed assessments, enable collaboration and comparison of results across plants/locations

Business Value

Manufacturing Intelligence generates actionable insights, increases situational awareness, supports better decision making and drives improvements to increase bottom line results and sharpen your market competitiveness.

Wonderware Intelligence

USE MANUFACTURING INTELLIGENCE TO MAINTAIN YOUR COMPETIVENESS

To respond more effectively to demand, opportunities, or market-driven events, manufacturers need to shift to a new level of information management to allow agile decision making with confidence. The investment into automation and manufacturing IT systems over the last decade provides the "big data," but lacks the ability to efficiently create the business context across multiple systems.

Wonderware Intelligence is an Enterprise Manufacturing Intelligence (EMI) product that creates an information framework to simultaneously connect to industrial data sources and to automate the calculation, contextualization and storage of operational Key Performance Indicator (KPI) metrics.

Intelligence data is presented in an intuitive dashboard, providing real-time visibility and worker empowerment through drill down analytics, allowing decision-making on actual operations performance and in close alignment with business targets.

With Wonderware Intelligence, personalized operations intelligence information is always just a fingertip away, using a web browser or on your mobile device, anytime and anywhere.

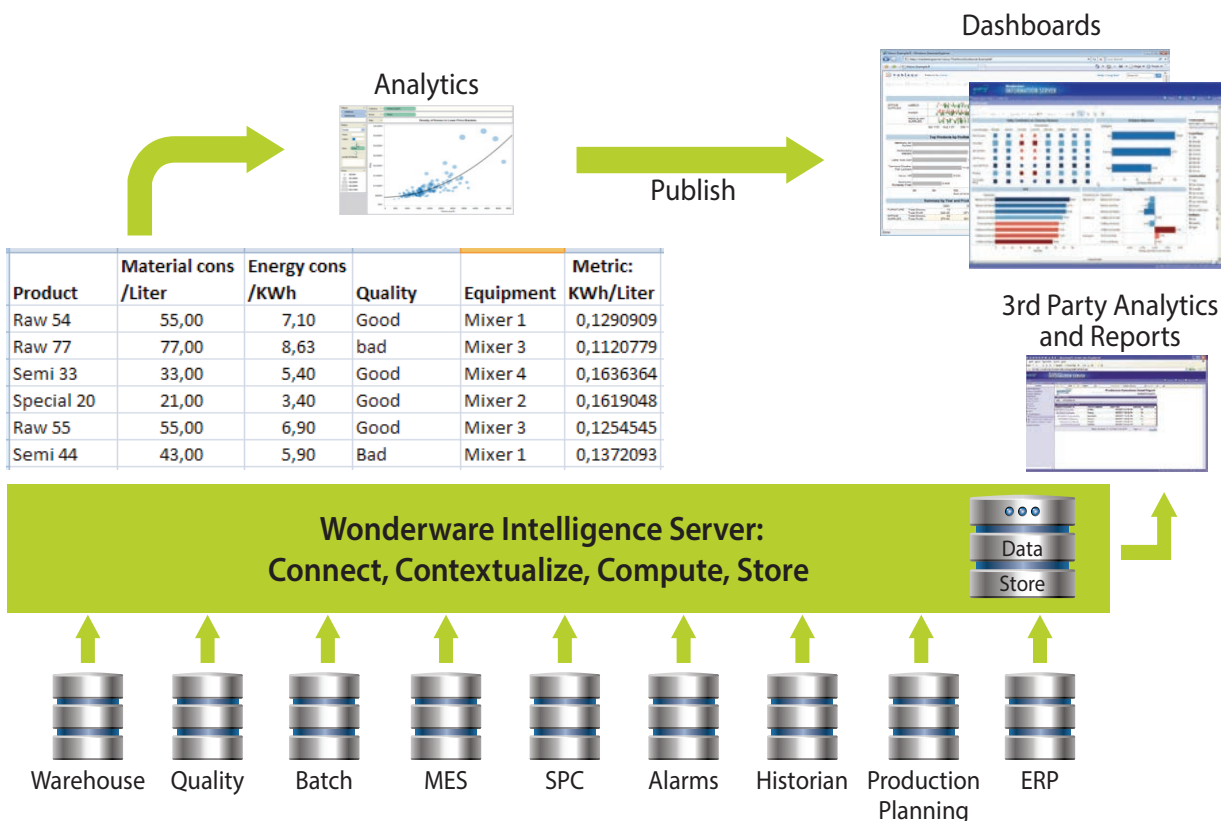## INCREASE THE ROI OF YOUR INDUSTRIAL IT INVESTMENT

Wonderware Intelligence leverages the existing investments you have in your plant floor and enterprise solutions, unlocking the business relevant context hidden in the distributed data of your existing applications. It does not replace—but supplements that data, as an overlay, adding the information and insight you need for more transparency to your operations to drive operational and financial improvements, understanding the true costs and profit contributions from your operations.

Wonderware Intelligence continuously computes the metrics that are important to you to determine plant, multi-plant or infrastructure performance.

Wonderware Intelligence can be used in any industry—whether you are in food & beverage, primary metals, chemicals, oil & gas, energy or infrastructure. It accesses the data feeding the KPI's that you need to manage your operations, whether that data comes from your Wonderware system, data historian, MES, ERP, LIMS, or other enterprise or custom legacy application.

Utilize existing Wonderware Reporting Products—Historian Clients, ArchestrA Reports, Wonderware Information Server or any other web-based content, by viewing this source data when drilling down into dashboards to determine cause and effect relationships.
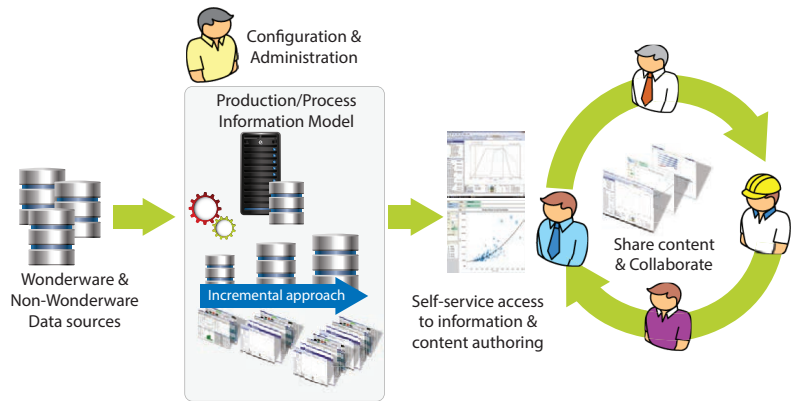
Wonderware Intelligence comes with predefined data models and dashboard content for Wonderware InBatch, System Platform Alarms, Wonderware MES/Performance, Wonderware Corporate Energy Management, Avantis.DSS Enterprise Asset Management, and the SimSci ROMeo Online Performance Suite. Pre-defined data models significantly shorten the time to reach an analytical view of your plant or business unit operations' performance and results.

Dashboards

Analytics

Publish

3rd Party Analytics and Reports

Product	Material cons /Liter	Energy cons /KWh	Quality	Equipment	Metric: KWh/Liter
Raw 54	55,00	7,10	Good	Mixer 1	0,1290909
Raw 77	77,00	8,63	bad	Mixer 3	0,1120779
Semi 33	33,00	5,40	Good	Mixer 4	0,1636364
Special 20	21,00	3,40	Good	Mixer 2	0,1619048
Raw 55	55,00	6,90	Good	Mixer 3	0,1254545
Semi 44	43,00	5,90	Bad	Mixer 1	0,1372093

Wonderware Intelligence Server:
Connect, Contextualize, Compute, Store

Data Store

| Warehouse | Quality | Batch | MES | SPC | Alarms | Historian | Production Planning | ERP |

EMPOWERMENT AND COLLABORATION

Information visibility at the right time empowers workers and operations decision makers to change the way they plan, schedule or act. Wonderware Intelligence relates data for a holistic view across different core functions, domains and operations, regardless of where the data resides.
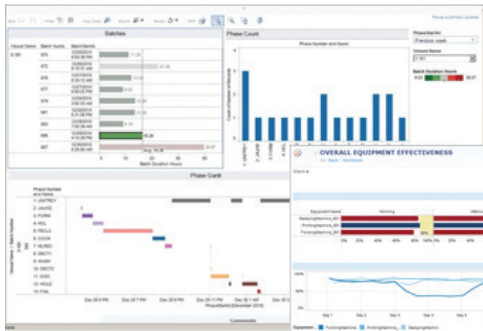
The ability to analyze metrics in context creates insights to optimize margins (e.g. for business unit operations), to minimize costs with optimized use of energy and raw materials, or to improve operational efficiencies with improved throughput, quality, and asset utilization.

Configuration & Administration

Production/Process Information Model

Wonderware & Non-Wonderware Data sources

Incremental approach

Self-service access to information & content authoring

Share content & Collaborate

OPERATIONS METRICS THAT MAKE BUSINESS SENSE

Intelligence allows you to adhere to operating goals with near real-time resolution. It will help you understand the impact of planning, execution, staff and equipment behavior on quality, performance, material and energy consumption, and the effects on overall business performance.
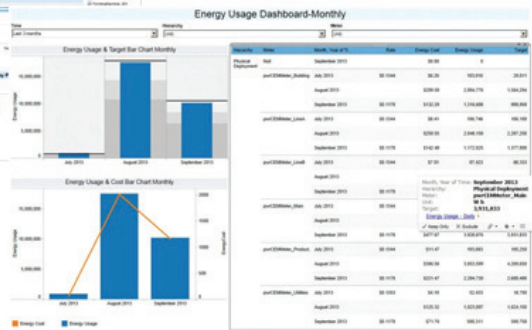

Batch Execution Dashboard

OEE Dashboard

Energy Dashboard

LOOK TO WONDERWARE TO MAKE EMI AS EASY AS HMI

Wonderware Intelligence helps you gain more out of your existing assets and resources by unlocking the value of your existing data, making Enterprise Manufacturing Intelligence easy, scalable, and with fast time to benefits.

Wonderware Intelligence's information model is simple to create and maintain using the Wonderware System Platform integrated development environment (IDE). You use the IDE to configure calculations, metrics and the relationships between historical and transactional data sources at the desired resolution.

SELF-SERVICE PRODUCT

Wonderware Intelligence comes integrated with the Tableau Software dashboard, positioned by industry analyst Gartner as a Leader in 2013 BI (Business Intelligence) Magic Quadrant. Tableau Software is a user-friendly intelligence analytics and visualization tool, allowing end users from the plant floor to corporate level to immediately explore and analyze Intelligence data and KPI's. This self reliance approach eliminates the need for IT services to create reports and dashboards as the users can create the desired artifacts on their own.
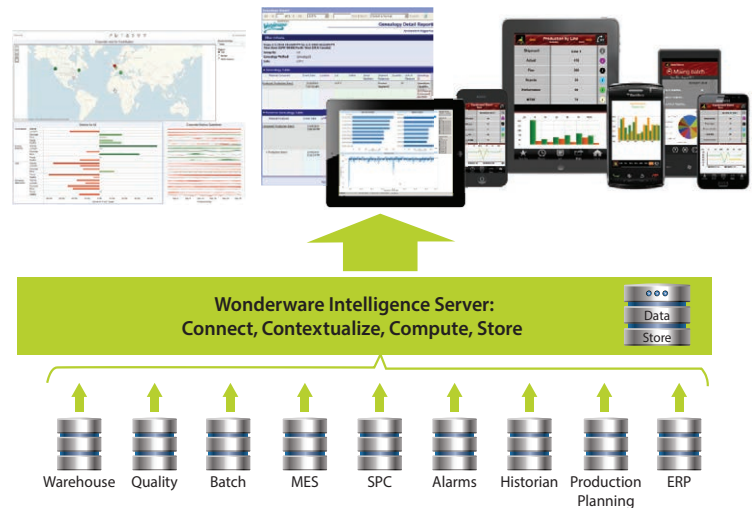
Wonderware Intelligence dashboards then provide self-service access to information and enable users to analyze, monitor and compare important metrics such as quality by shift or batch, yields by line, energy consumption by product run or batch, or other information context that is key to your operational performance.

INTELLIGENCE COMPONENTS

INTELLIGENCE SERVER

The Intelligence Server provides core Intelligence functionality: data acquisition, aggregation and contextualization from multiple data sources into a single Information Model. The Intelligence Server is scalable, from a single site/single server to multiple servers for hosting data from multiple sites. You can establish a hierarchical data structure for aggregating multiple databases into one data store. Intelligence data is persisted in a Microsoft SQL Server database which can either be displayed in the Tableau-based Intelligence Clients, Wonderware Smart Glance mobile reporting or by any of your preferred analysis, business intelligence (BI), reporting, or client tools.

**Wonderware Intelligence Server:
Connect, Contextualize, Compute, Store**

Data Store

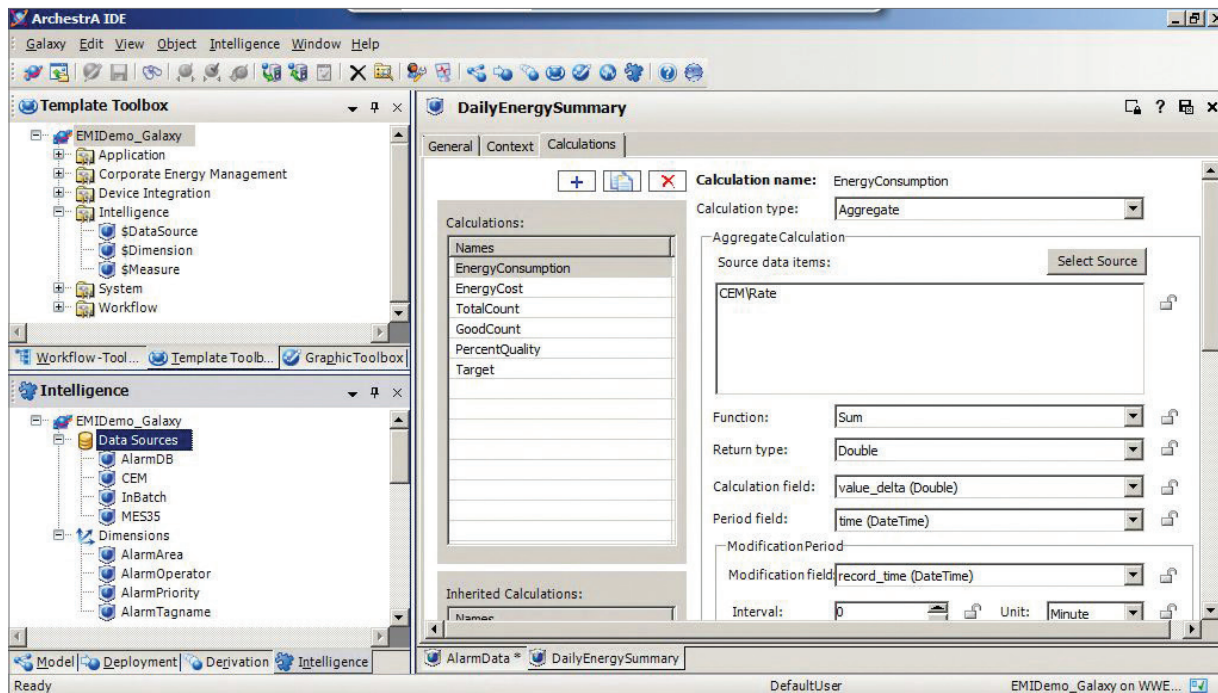Warehouse Quality Batch MES SPC Alarms Historian Production Planning ERP

QUICK START

Wonderware Intelligence software includes predefined content for Wonderware MES (Performance), Wonderware InBatch, Wonderware Alarms, Wonderware Corporate Energy Management, Avantis. DSS, and SimSci ROMeo Online Performance Suite. Predefined content is delivered as Intelligence Model templates (aaPkg files) and Analytics Client

DEVELOPMENT

Wonderware Intelligence uses the Integrated Development Environment (IDE) of Wonderware System Platform to configure the Intelligence Server. Workbooks (twb files).
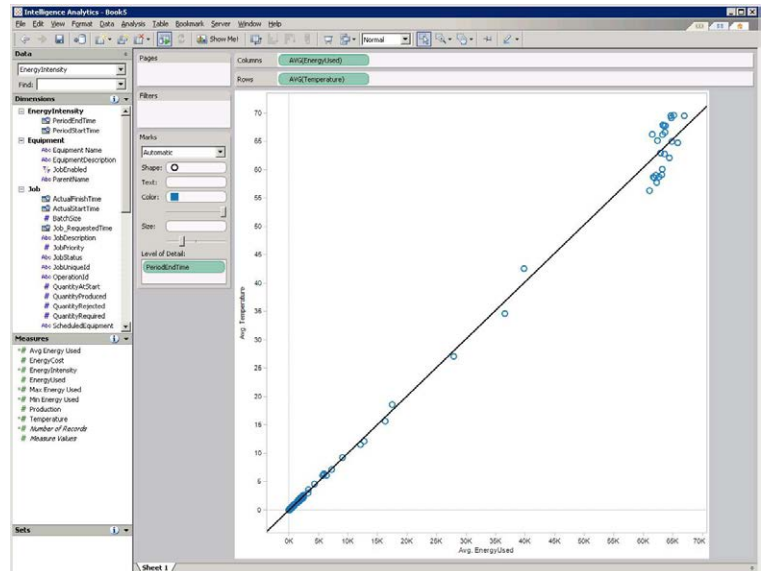
INTELLIGENCE CLIENTS

Wonderware Intelligence clients provide the ease of use analytics and innovative visualization capabilities of Tableau Software, integrated with the Intelligence Server. The unmatched self-reliance approach perfectly complements Wonderware Intelligence, securing acceptance and people empowerment to leverage the knowhow of your industrial and operations employees without the requirement to turn them into IT experts.
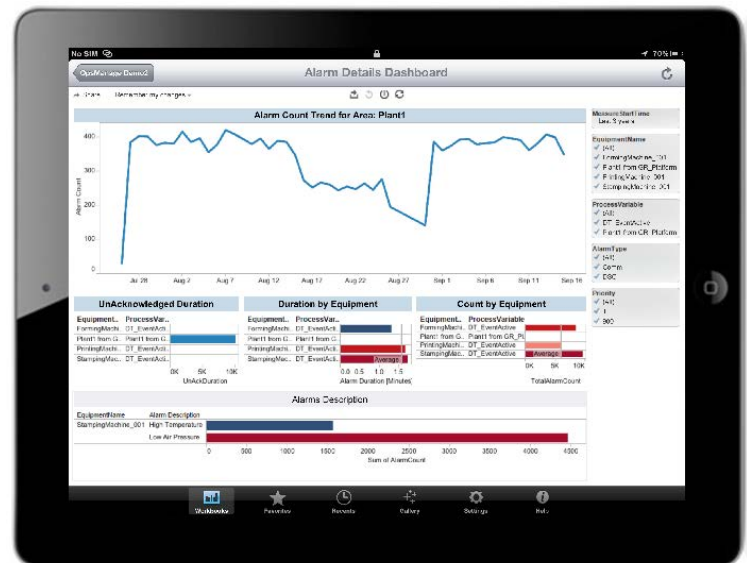
WONDERWARE INTELLIGENCE ANALYTICS CLIENT

Intelligence Analytics Clients (Tableau Desktop for Wonderware Intelligence) enable users to quickly visualize and analyze Intelligence data with simple drag and drop capabilities, allowing the creation of rich visualizations and dashboards in minutes. With a few clicks, users can publish interactive Dashboards that feature drill-down capabilities for root-cause analysis.

Several data visualization objects are available: grids, charts (line, bar, pie, bullet), maps (geographical, heat, tree) and more, all helping you to understand the information at a glance. Intelligence Analytics Clients can configure reports and dashboards that encompass existing reporting content from Wonderware Information Server, Historian Clients, or ArchestrA Reports.

WONDERWARE INTELLIGENCE STANDARD CLIENTS GO MOBILE

Intelligence Standard Clients provide viewing access to published Dashboards, using Tableau Server for Wonderware Intelligence. They allow the user to browse and navigate the Intelligence data as personalized content, featuring the same visualization capabilities and drill down analysis capabilities as the Analytics Client. High performance data management secures fast response times, even when you are dealing with industrial Big Data. Support for several Web Browsers and mobile tablet devices allows you to view Intelligence dashboards anytime, wherever you are.

TECHNICAL SPECIFICATIONS

INTELLIGENCE SERVER

Wonderware Intelligence software includes the following data adapters:

• OSIsoft PI Server Native adapter (requires OSI PI Data Access option - SDK)
• OSIsoft PI Server OLEDB adapter (requires OSI PI Data Access with PI OLEDB provider)
• Wonderware Historian adapter
• Microsoft SQL Server adapter
• Oracle data adapter
• Text File adapter (CSV format)

Wonderware Intelligence Server supports the following OS languages:

English, French, German, Japanese and Simplified Chinese

Wonderware Intelligence Server supports the following OS's:

Windows XP, SP3 (single node, 32-bit); Windows 2003 (32-bit only); Vista SP1 Ultimate (both 32- and 64-bit, single node); Vista SP1 Business (both 32- and 64-bit, single node); Windows 7 Professional (both 32- and 64-bit, single node); Windows 7 Enterprise (both 32- and 64-bit, single node); Windows Server 2008 Business and Enterprise (both 32- and 64-bit) and Windows Server 2008 R2 Standard and Enterprise Edition.

Wonderware Intelligence Server supports Microsoft SQL Server (Standard and Enterprise Editions): 2008 SP1 or SP2 (32-bit), 2008 R2 (32- and 64-bit), or 2012 (32- and 64-bit).

Wonderware Intelligence supports the following virtualization platforms:

• Microsoft® Hyper-V™
• VMware vSphere 5.x

TECHNICAL SPECIFICATIONS, CONTINUED

INTELLIGENCE CLIENTS

(Tableau Software for Wonderware Intelligence)
Tableau Software is localized in the following languages: English, French, German, Spanish, Brazilian Portuguese, Japanese, Korean, and Simplified Chinese.

ANALYTICS CLIENT

The Wonderware Intelligence Analytics Client supports Windows XP, SP3 (32-bit); Windows 2003 (SP2, and R2, SP2, 32-bit); Vista (SP1, Ultimate and Business, both 32- and 64-bit); Windows 7 (Professional and Enterprise, both 32- and 64-bit), Windows 8 (Professional and Enterprise, both 32- and 64-bit) Windows Server 2008, Business and Enterprise, both 32- and 64-bit), Windows Server 2008 R2 Standard and Enterprise Edition and Windows Server 2012 Standard and Enterprise Edition.

STANDARD CLIENT (DASHBOARD ACCESS)

Tableau Server Dashboards for Wonderware Intelligence support the following web browsers: Android Browser (Android 3.2 or later), Apple Safari 3.x or later, including Safari on the iPad (iOS 4.3.3 or later), Microsoft® Internet Explorer 7 or later, Mozilla Firefox 3.x or later, and Google Chrome.

MOBILE DEVICES

Wonderware Intelligence dashboards and interactive reports can be viewed on Tablet Devices using the Tableau iPad and Android Apps, the Safari web browser on the iPad (iOS 4.3.3 or later) and the Android Browser (Android 3.2 or later).

For more information on Wonderware Intelligence, please contact your local Wonderware distributor, or visit www.wonderware.com.