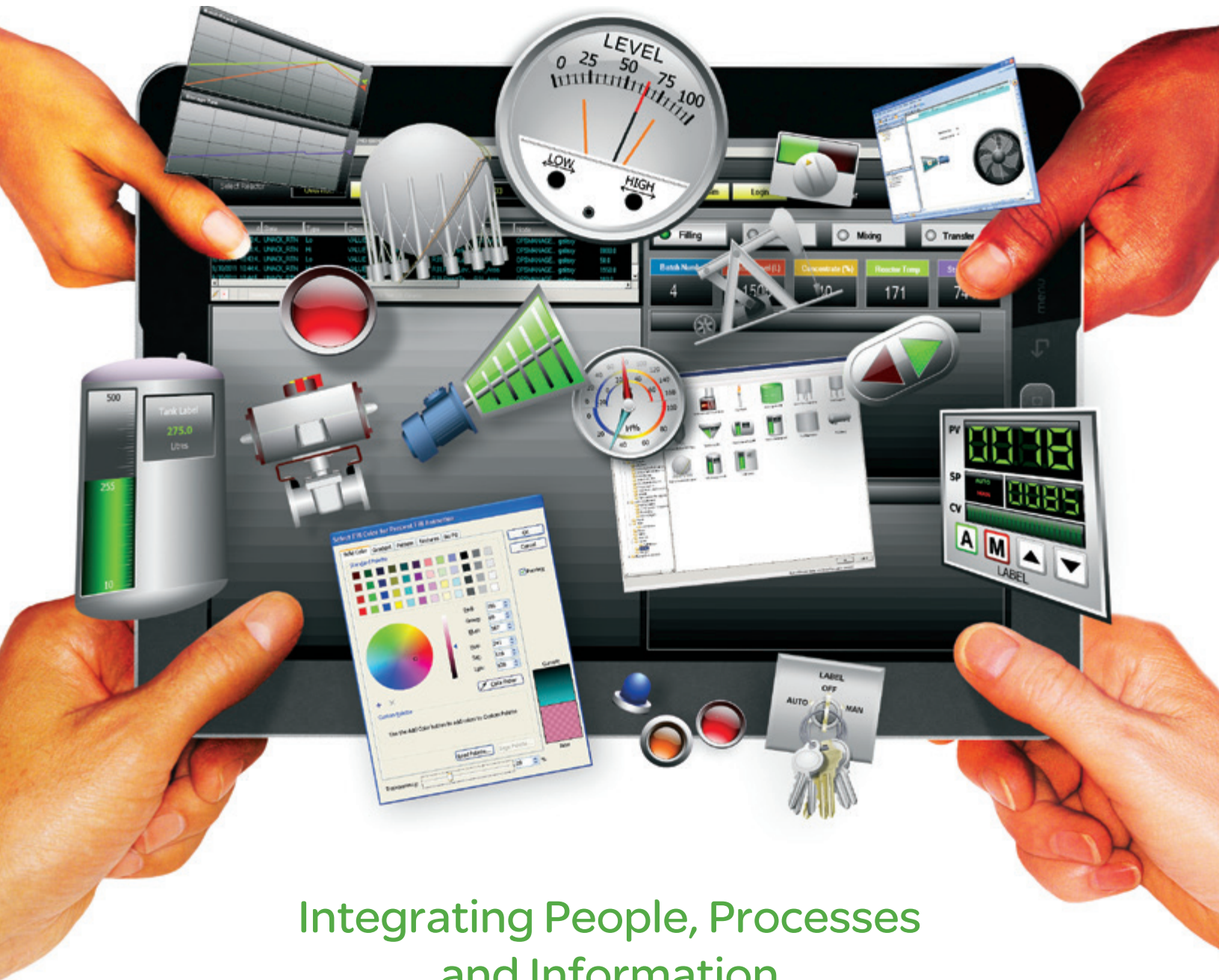# Wonderware System Platform

Integrating People, Processes and Information

Wonderware®

by **Schneider** Electric

Your Platform for Operational Success

Today, industrial companies need a more efficient and flexible way of developing, deploying and maintaining the software applications used to manage and improve operations.

Built like an operating system for industrial applications, Wonderware® System Platform provides configuration, deployment, communication, security, data connectivity and other services. Why struggle with multiple "point solutions" when you can build and deploy the same capabilities from a single, integrated software development environment or "platform"?

Wonderware System Platform interfaces to hundreds of field devices and plant systems, allows extensive re-use of engineering, eases maintenance burdens, provides broad scalability and extensibility while accommodating new computing technologies such as virtualization.

You can finally deliver a standardized set of industrial applications that encapsulate your best practices and proprietary knowledge to every one of your sites.

It is revolutionary; it is the next step and it is available today from Wonderware System Platform.

> **The Wonderware technology has measured up to and exceeded our expectations.**
>
> — Fandisco Alija
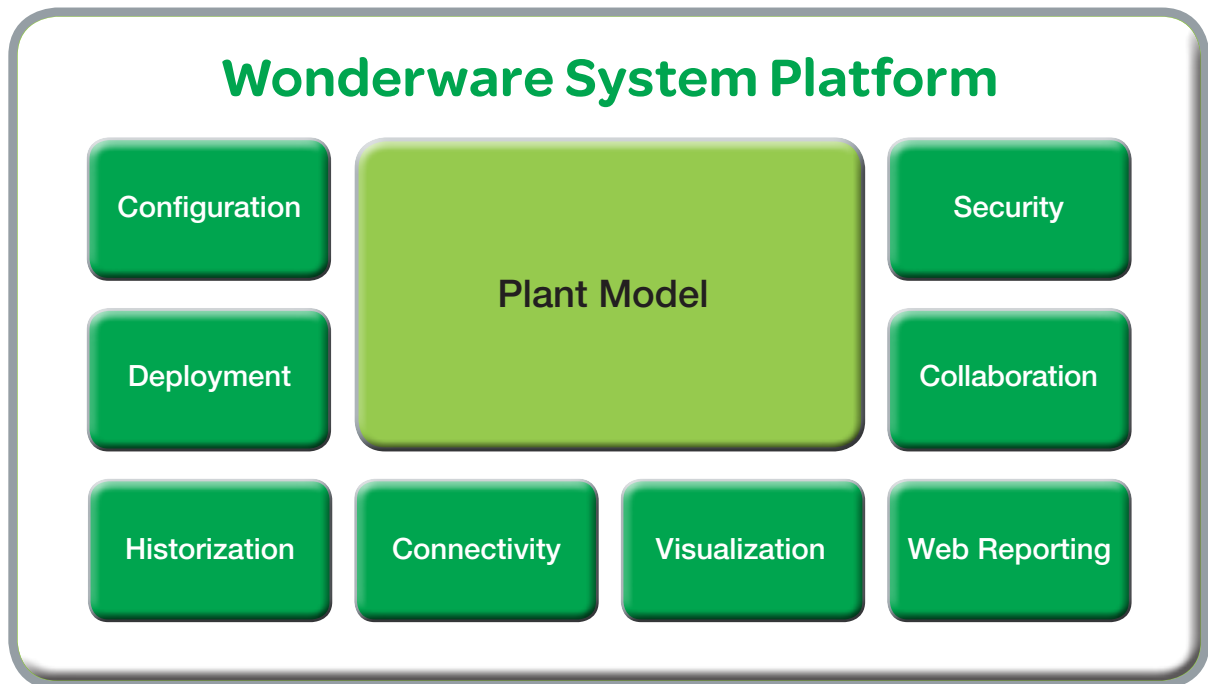>   Monitoring and Control Manager
>   9REN Group

Wonderware System Platform — Your Industrial Operating System

In today's challenging times, you need to drive more performance from your assets, collaborate better and generate more value from your existing automation systems.

Being the leader in Human Machine Interface (HMI) technology, Wonderware offers the next step in industrial software design and management — Wonderware System Platform.

Wonderware System Platform acts as your "Industrial Operating System" by providing common services such as; configuration, deployment, communication, security, data connectivity, people collaboration, and many others. These services allow you to build a single, unified "Plant Model" that logically represents your processes, physical equipment and industrial systems, even legacy systems, making the design and maintenance of these systems more efficient, more flexible and with less risk. The Plant Model also gives essential context to your data, greatly assisting with diagnostics and troubleshooting, as well as providing valuable system documentation throughout the system lifecycle. The Plant Model is unique to the Wonderware System Platform.

The object-based application development environment provided by Wonderware System Platform enables you to build, test, deploy and maintain a wide range of industrial applications using re-usable application objects. Our object approach, coupled with Wonderware application services, enables you to add functional capabilities, typically found in point solutions, directly to your Wonderware supervisory/HMI system. Everything is built and managed within the same software infrastructure — dramatically reducing development times and ongoing system maintenance costs.

Wonderware System Platform

Configuration	Plant Model	Security
Deployment		Collaboration

Historization	Connectivity	Visualization	Web Reporting

Wonderware System Platform Advantages

Acting as the industrial operating system to support your applications, Wonderware System Platform provides many advantages to improve operations over traditional "point solutions", including development, deployment, maintenance and security associated with multiple applications running at multiple sites; this significantly reduces the burden on your IT organization.

Development Advantages:

Traditional "point solutions" all require configuration and some degree of customization and scripting. What if you could configure all of your applications from a centralized development environment? Using only one development environment means your engineering teams are more productive and efficient.

Object-based development allows engineers to create specific application functions and save them as application templates. Once a template is developed and tested, it can be used by any engineer to add functionality to any of your applications throughout your entire site. Proprietary functions and calculations can be encapsulated into application templates and used at all of your sites. Errors are reduced and standardization is finally a realizable goal. Leading companies find they can save over 70% in engineering costs by using Wonderware System Platform.

Deployment Advantages:

Flying engineers to each of your sites to install application software can be a thing of the past if you use Wonderware System Platform. Centralized deployment allows your engineering team to deploy entire systems or just small changes any time without negative impact to your production or operations. And they can do these deployments from their offices.

You no longer have to wait to deploy system changes due to travel restrictions; this means that system improvements can be done anytime — allowing greater ROI to your company. You can change processes to take advantage of a market condition much faster with Wonderware System Platform. Your operational agility improves and you can operate your business with more flexibility.

Maintenance Advantages:

The more custom industrial applications you have, the more maintenance you need to perform. System updates, hot fixes and new versions all require valuable IT and engineering resources. Wonderware System Platform's object-based approach simplifies and reduces maintenance activities. If new functionality is to be implemented, it can be done from a central location. The exact version of each application object is available to system administrators so that they can be sure what is deployed to the field. Eliminating guesswork helps when a regulator performs an audit on one of your sites. No more drama, just confidence that everything is up-to-date and running smoothly.

Security Advantages:

Cyber security has never been more important than it is today. Wonderware System Platform is a highly secure development & deployment environment that can be configured to control system access and user rights, along with tracking system changes by user. Wonderware System Platform supports Microsoft Integrated Security, SmartCard & other security protocols and methods. Since applications are managed from a central location, you do not have to worry about security issues associated with multiple applications running at multiple sites; this significantly reduces the burden on your IT organization.
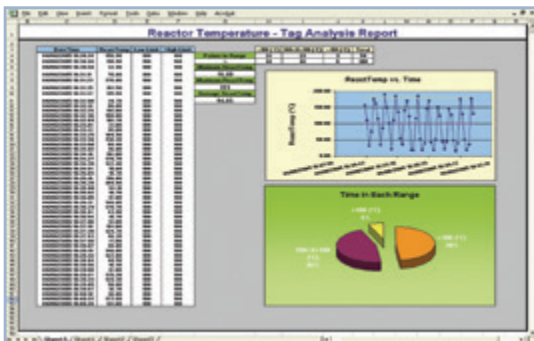
Possibilities are Endless

The New Way of Building Industrial Applications

Wonderware System Platform helps you build, integrate and scale all of your key industrial applications.

HMI Supervisory

Common graphics, along with the object-based engineering approach and Integrated Development Environment, make it easier and faster than ever to create standardized HMI applications and deploy them across your industrial sites. All aspects of your equipment and processes can be captured in re-usable application templates — saving up to 70% in development time. Move away from one-off HMI applications that are hard to maintain and extend. Also, Wonderware is the only automation vendor that can take a first generation InTouch application and run it on the latest version to give you unsurpassed investment protection.
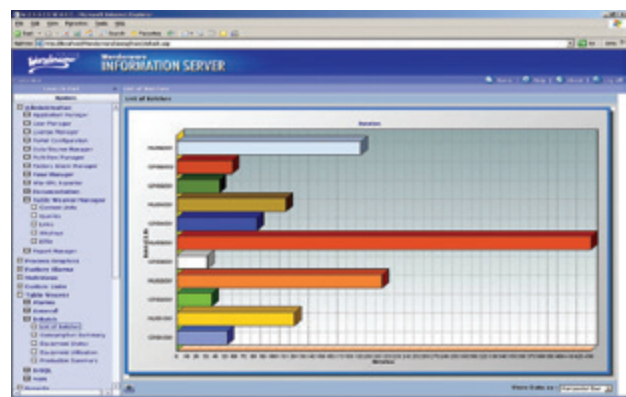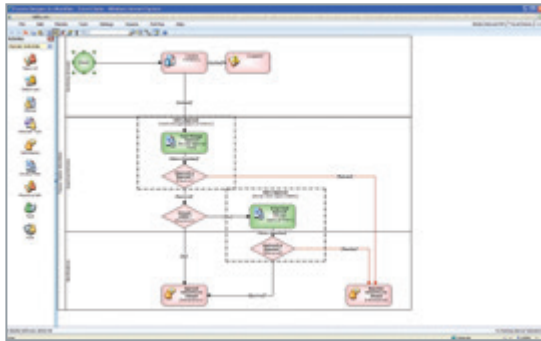

Process Data Historian

"Historize" your data at industrial speeds! Combine the power and flexibility of a relational database with the speed and compression of a true automation process historian. This simple, automated step, integrates the office with the factory floor or any industrial operation. Store or "historize" any type of process data by simply clicking a check box within the associated application object. This data can then be used in a number of reporting and web applications to help you gain better insight into the performance of your facility.

Multi-tiering of historian servers enables you to easily configure process history. The Process Data Historian can be configured to create small, efficient segments and these smaller historians can be combined into one or more larger historians. Tiering of historians in this way allows you to balance the level of detail against network bandwidth requirements and improve availability of historical data throughout your many sites.

Reporting and Analysis

Data captured by your Wonderware System Platform applications can be used to create a wide range of interactive reports and data analysis charts available on your desktop and via the web. The right information in the right context at the right time enables users to make timely and accurate decisions. These tools and more are included as part of the Wonderware System Platform.
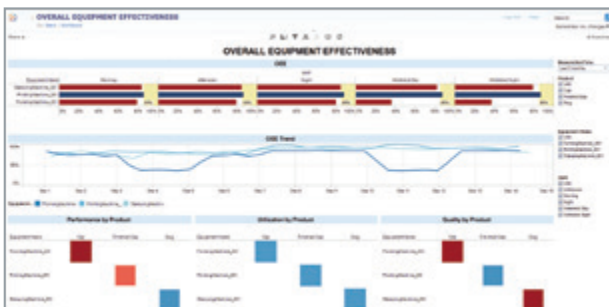
Workflow

Business process management, "workflow," is integrated into the Wonderware System Platform base templates. This enables companies to model, execute, analyze and improve work processes to drive higher levels of collaboration, productivity, and innovation. Wonderware System Platform allows you to embed specific workflow activities into your process and then keep detailed records of the actual work performed, which become available for later review. This allows you to better monitor vital workflows and take action when work is not completed on time or executed according to specification.

Mobile Solutions

IntelaTrac, the Wonderware mobile solution, is integrated with Wonderware System Platform, enabling you to push standardized operating procedures and data collection tasks to your mobile workers more easily than ever before. Your operators will be better informed and able to react faster and more consistently to process upsets or machinery failures.
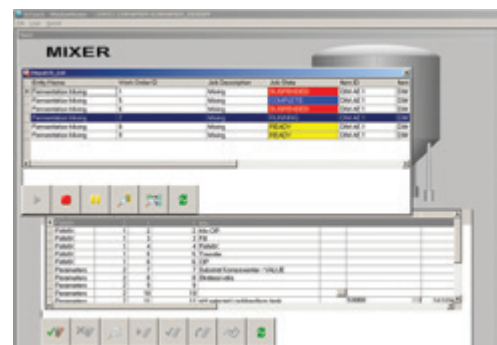
Downtime Tracking

Keeping equipment downtime to an absolute minimum has never been more important. Wonderware System Platform allows you to add downtime tracking to your system so that configuration effort is minimized and key equipment downtime data is collected and available to you through powerful reporting tools.

Manufacturing

In any manufacturing process there are a large number of steps needed to complete an operation. These manufacturing steps and associated data collection activities can be added to application objects with minimal configuration effort. Essential data is collected to monitor and report on the performance of critical manufacturing processes.
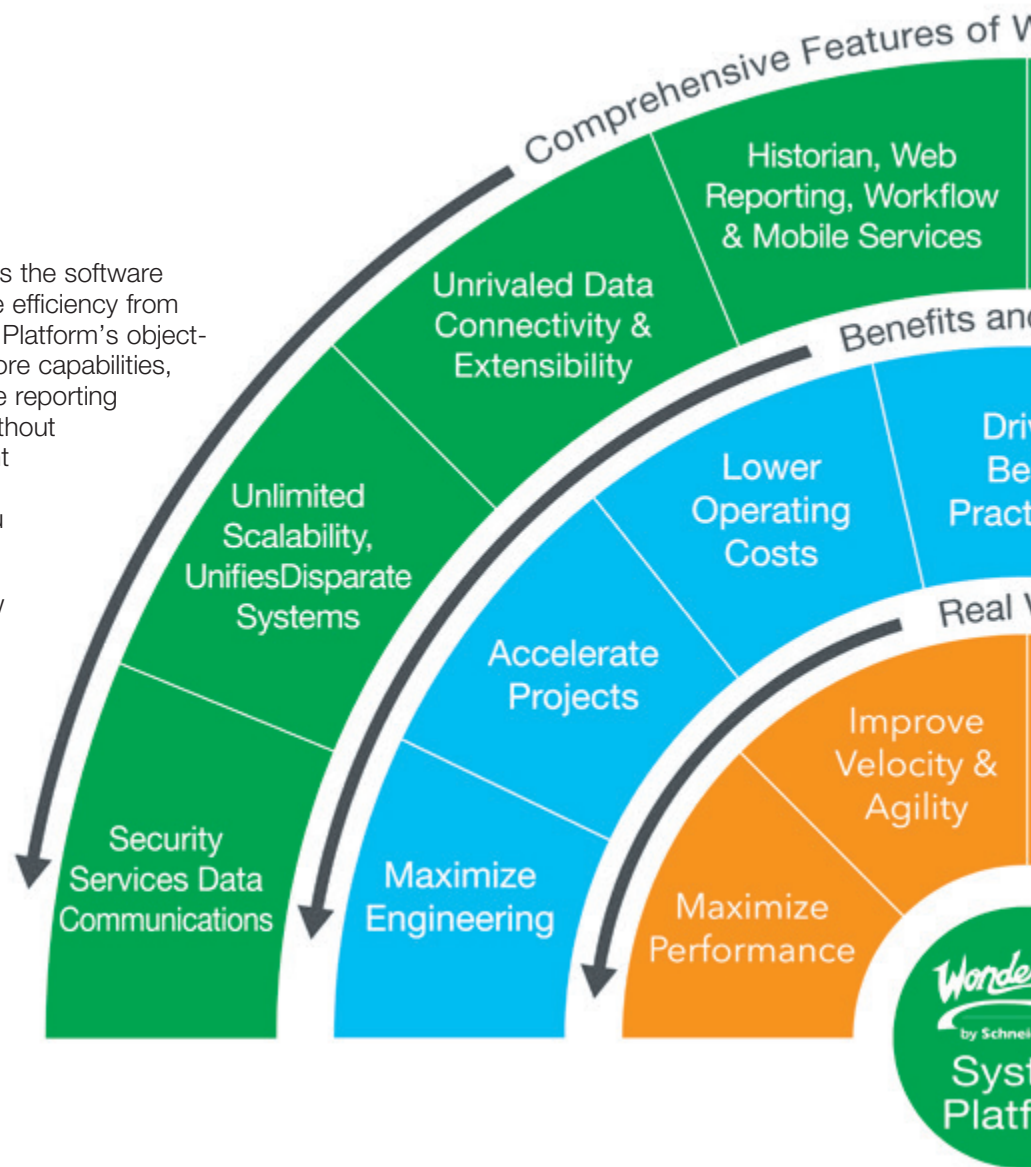
Whatever you do, Wonderware System Platform helps you...

...do it BETTER

Wonderware System Platform provides the software infrastructure you need to obtain more efficiency from your processes. Wonderware System Platform's object-based approach allows you to add more capabilities, connect to new data sources, improve reporting and improve system maintainability without having to "rip and replace". If you want to improve your automation systems and standardize on best practices you need Wonderware System Platform.
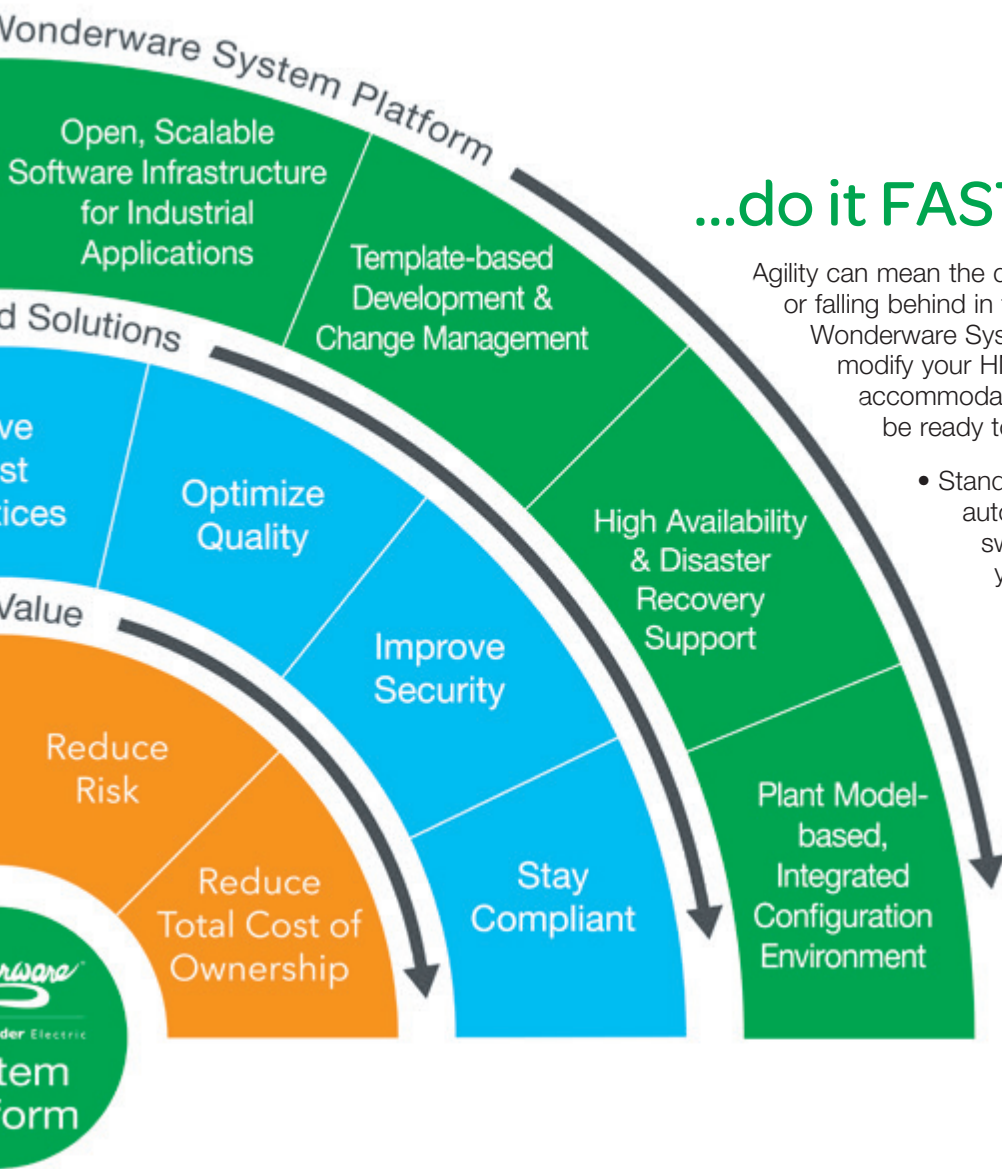
- Powerful object templates allow new system functionality to be added to any system quickly and efficiently.
- Object technology makes it easy to develop and deploy best practices across your organization.
- Best practice workflows, mobile procedures, manufacturing steps and production metrics can all be easily added with object technology.

Comprehensive Features of W

Historian, Web Reporting, Workflow & Mobile Services

Unrivaled Data Connectivity & Extensibility

Benefits an

Unlimited Scalability, UnifiesDisparate Systems

Lower Operating Costs

Dri Be Pract

Accelerate Projects

Real

Improve Velocity & Agility

Security Services Data Communications

Maximize Engineering

Maximize Performance

Wonder
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...do it SAFER

Wonderware System Platform allows you to build and test application objects before deploying them into production applications — lowering your risk and reducing the potential for errors. By making a change to a template, all of the deployed instances are automatically updated. Change management is easier, faster, more accurate, controlled and precise.

- Wonderware System Platform supports Microsoft integrated operating system security, Active Directory and Smart Card technology.
- You can easily trace when and by whom system changes were made, so that when it is time to report to regulators, you will be prepared — without all the drama.
- Wonderware System Platform also supports demanding high availability requirements with its industry leading support for the latest virtualization technologies from Microsoft and VMware.

Wonderware System Platform

Open, Scalable Software Infrastructure for Industrial Applications

Template-based Development & Change Management

...d Solutions

Optimize Quality

High Availability & Disaster Recovery Support

...ve ...st ...ices

...Value

Improve Security

Reduce Risk

Reduce Total Cost of Ownership

Stay Compliant

Plant Model-based, Integrated Configuration Environment

...do it FASTER

Agility can mean the difference between staying ahead or falling behind in today's competitive environment. Wonderware System Platform allows you to quickly modify your HMI or automation system to accommodate changes to your process and be ready to seize any market opportunity.

- Standardized, pre-tested Wonderware automation objects with automatic I/O switching and common graphics allow you to build complete equipment or process templates — saving you from the burden of creating custom HMI graphics and I/O connections for each asset.

- Wonderware System Platform's centralized deployment capability eliminates the need for someone to go to each facility to update applications.

- Historization of data becomes a single click operation and built-in web-based reporting reduces your web development costs and accelerates your time to value.

...do it CHEAPER

Wonderware System Platform saves you significant development and system maintenance costs through its industry-leading Wonderware object based architecture. The "Code Reuse" or "build once — use many times" approach preserves your investments in engineering and helps you to build standardized applications that cost effectively support best practices throughout your operations.

- Wonderware templates allow changes to automatically propagate across your applications, saving you the effort of manually changing each and every application that contains a similar component.

- Centralized development environment means you can save on travel and labor costs.

- Wonderware support for the latest virtualization standards and technologies helps you consolidate systems, optimize and unify hardware and architectures and reduce costs.

Wonderware System Platform is Driving Success Worldwide

Leading companies across the globe are already using Wonderware System Platform to drive down costs, improve performance and increase their business agility. Here are a few examples of Wonderware System Platform in action around the world.

Pepsi Bottling Ventures of Idaho

Application: Pepsi Bottling Ventures (PBV) is the third largest manufacturer and distributor of Pepsi-Cola products in North America. PBV runs a state-of-the-art manufacturing and distribution plant in Nampa, Idaho. The Nampa facility recognized the need for a better way to track and control downtime and in particular changeovers. PBV selected a Wonderware solution comprising Wonderware System Platform, Wonderware Performance software, Wonderware InTouch and Wonderware Historian Clients.

Wonderware System Platform's object-based programming enables more work to be done by fewer engineers, speeding up the development process. When a new asset or line is added, existing processes can be quickly and easily replicated thanks to the standardization provided by Wonderware. As a result, PBV was able to reduce changeover times by 50%, improve their filler efficiency by 10% and enjoy a project payback of less than one year!

> **With more detailed data available from the PLCs in real-time, we are able to cost-justify upgrade projects specifically for certain machine centers. We're able to prove the need for more capital investment."**
>
> — Chris Bacon, Project Manager

Chevron Oronite

Application: Chevron Oronite is a subsidiary of the Chevron Corporation, one of the largest oil companies in the world. The company specializes in the production of additives for fuels and lubricants. The project involved the creation of a new SCADA system with integration to their existing ERP system using Wonderware System Platform, InTouch Terminal Services and the Equipment Operations Module.

> **For the supervision of our new reactor, we decided to go in a new direction and use the latest in computer technology. More than anything, we wanted a software program that was compatible with ISA-95 because it guaranteed the simplification of exchanges between the control system and the ERP application. We were also looking for a solution that accepts the connection for thin client workstations. And finally, and this was a very important aspect, we wanted a software program that enabled us to design objects.,,**
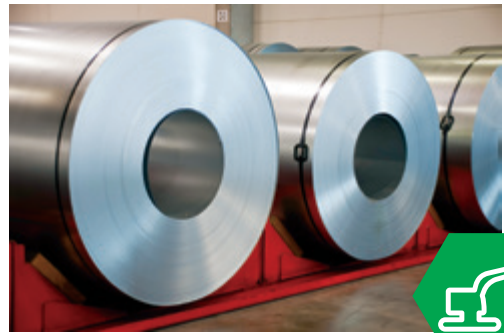>
> — Serge Talleux, Industrial IT Director

Nucor Steel

Application: Each year the Nucor Steel mill in Berkeley, South Carolina, produces more than 2,500,000 tons of rolled sheet steel and 1,000,000 tons of steel beams and girders in twenty different grades, to meet specific customer requirements. They needed a solution to improve the power and flexibility of their automation system. In an environment such as the melting area of a steel mill, where equipment has a short life-cycle, system agility is critically important.

Nucor Berkeley mill uses the application object capabilities of Wonderware System Platform to speed up the process of adding and removing mill equipment. With Wonderware, new equipment can now be added and removed more quickly and easily than ever before.

> **The steel industry is a very harsh environment. Everything is temporary. We see equipment destroyed and replaced on a daily basis. I would recommend it to anybody who is looking for a way to improve their process, speed up programming changes and increase profits."**
>
> — Dennis Boyd, Melting Area Electrical Systems Supervisor

Yellow River Conservancy Commission

Application: Regulating China's Yellow River is the task of the Yellow River Conservancy Commission — an agency of the Ministry of Water Resources of the People's Republic of China. The Commission implemented an HMI/SCADA system from Wonderware. This system features the Wonderware System Platform, Wonderware InTouch and Wonderware Information Server.

The Wonderware System Platform is the ideal solution for the water regulation center because it provides the ability to create a logical model in the control system based on the actual physical location of plant equipment; object-based development; integrated and centralized security down to the data level; flexible data connectivity; application run-time management; centralized diagnostic utilities; and tight integration with other Wonderware products and third-party products.

> **The advanced functionalities of the Wonderware System Platform, such as reusable objects, modularized technology and remote deployment … made it possible for us to complete the first phase of this system in 3 months, which includes 43 sluice stations and the other four management levels."**
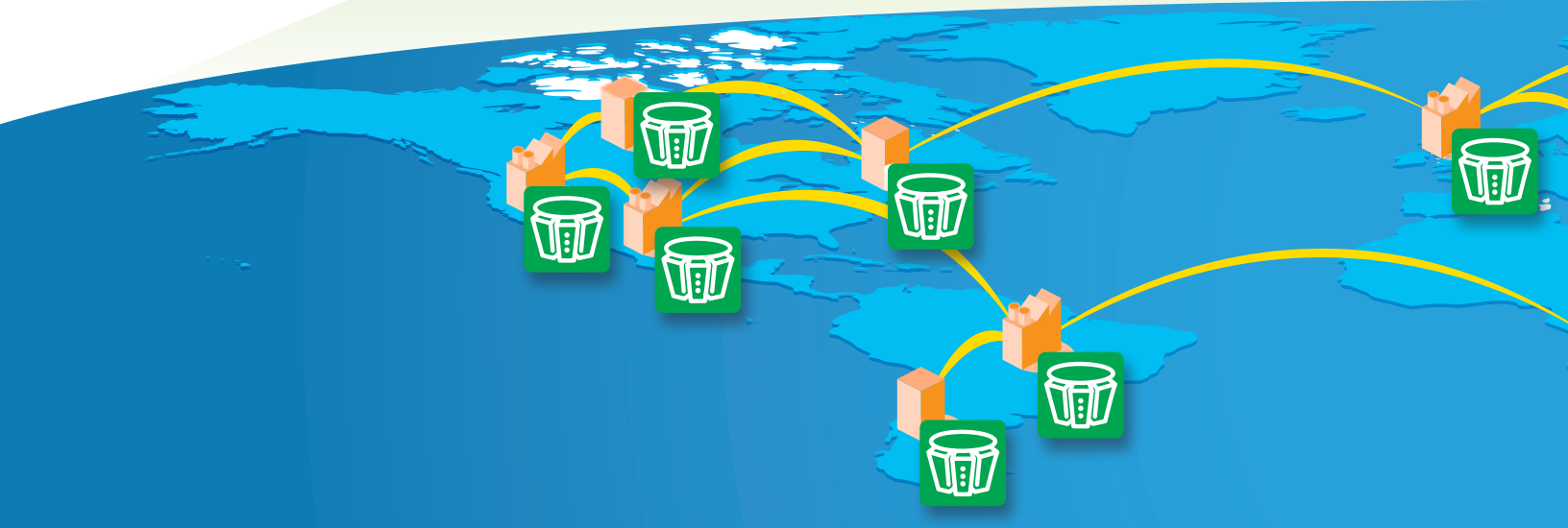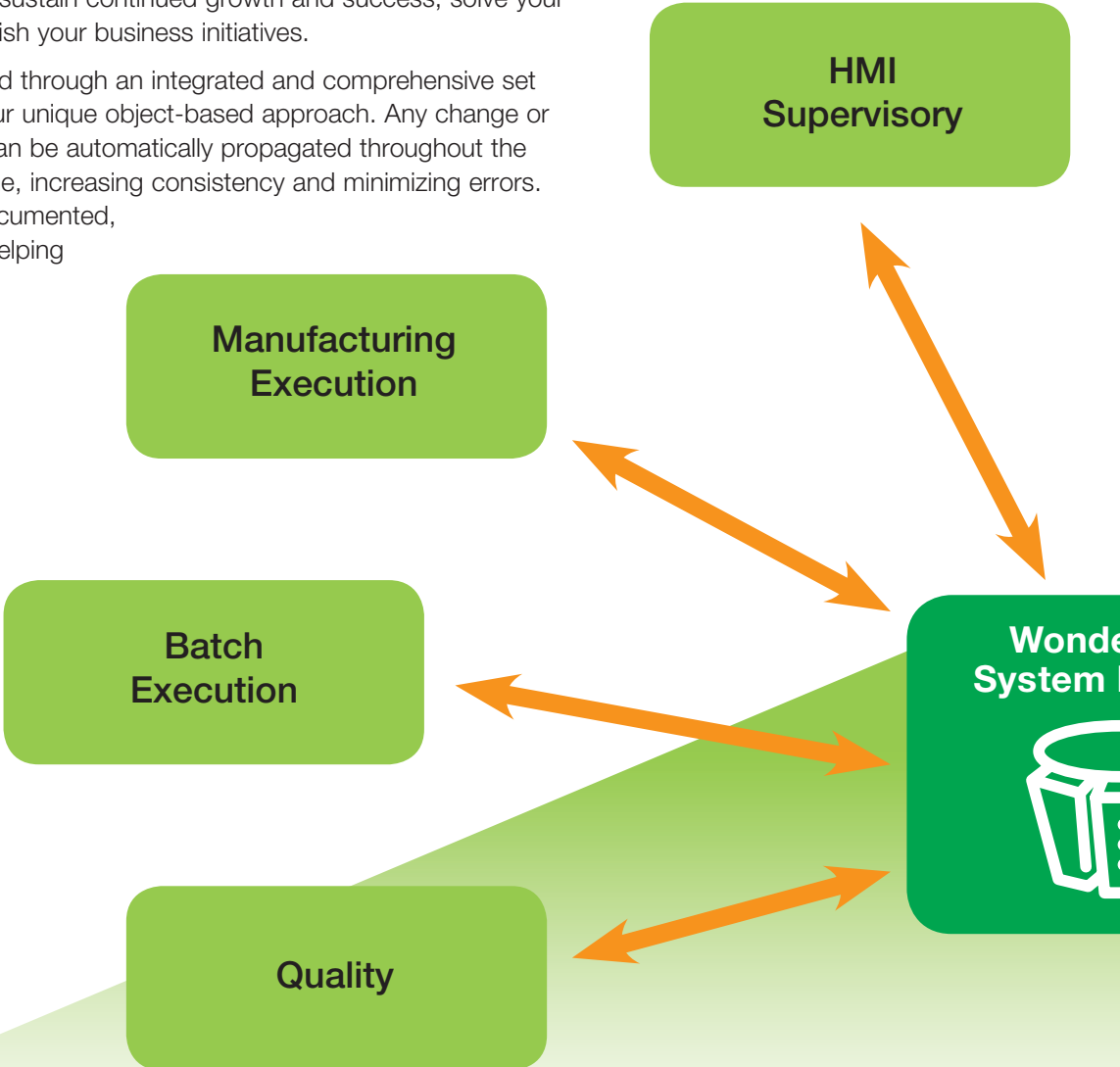>
> — Zhu Chenhua, IT Director
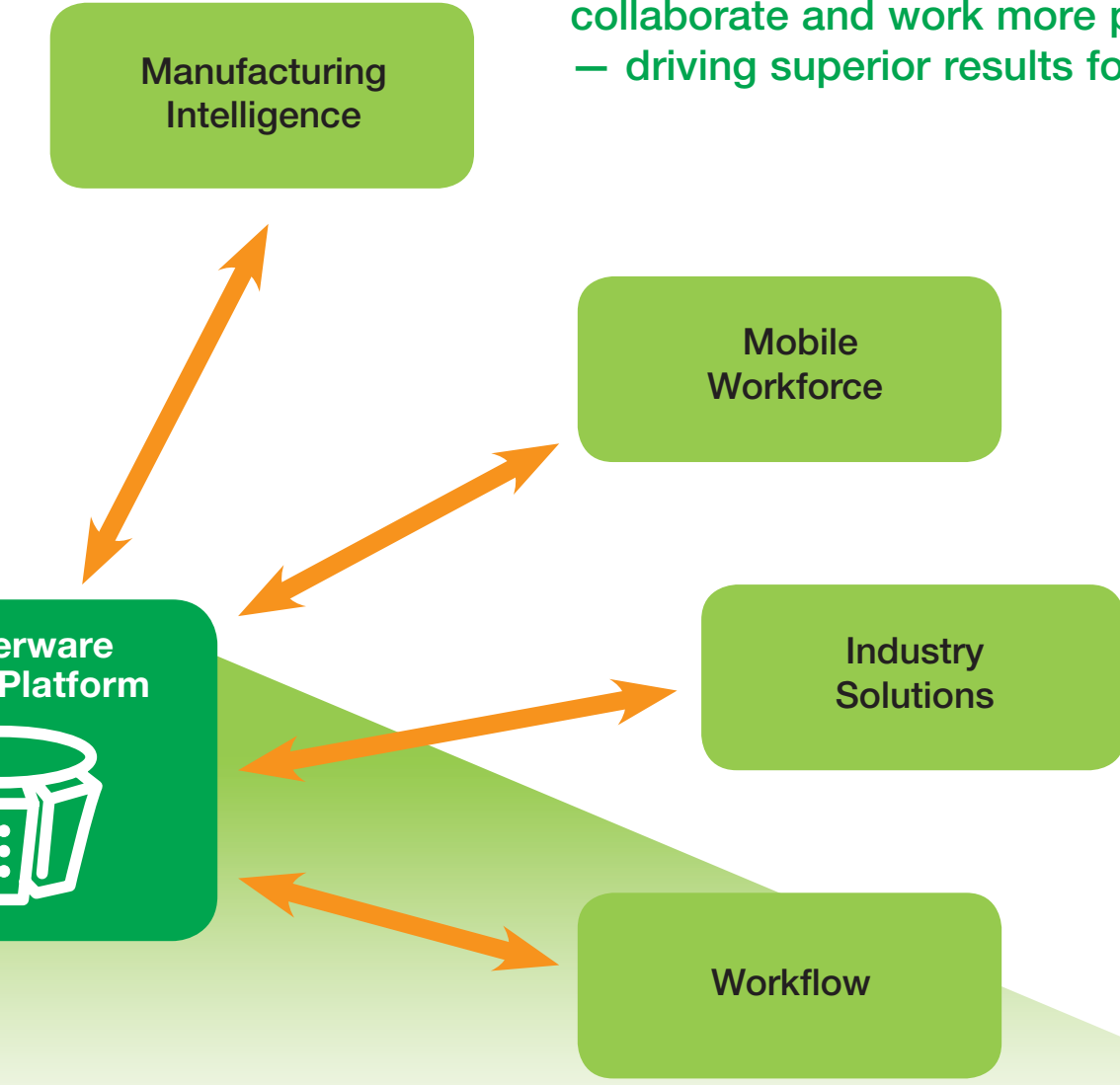
Centralized Empowerment

Easily Integrate, Unify, Manage and Scale

Wonderware System Platform is a superior infrastructure and technology that helps customers centrally manage growth, integrate disparate systems, unify workers, and drive best practices throughout the entire enterprise. Wonderware System Platform helps you drive, implement, and sustain continued growth and success, solve your business problems and accomplish your business initiatives.

World-class scalability is delivered through an integrated and comprehensive set of application services and via our unique object-based approach. Any change or improvement to an application can be automatically propagated throughout the enterprise saving engineering time, increasing consistency and minimizing errors. All changes are automatically documented, simplifying revision control and helping you respond more quickly and accurately to regulator audits.

HMI Supervisory

Manufacturing Execution

Batch Execution

Quality

Wonde
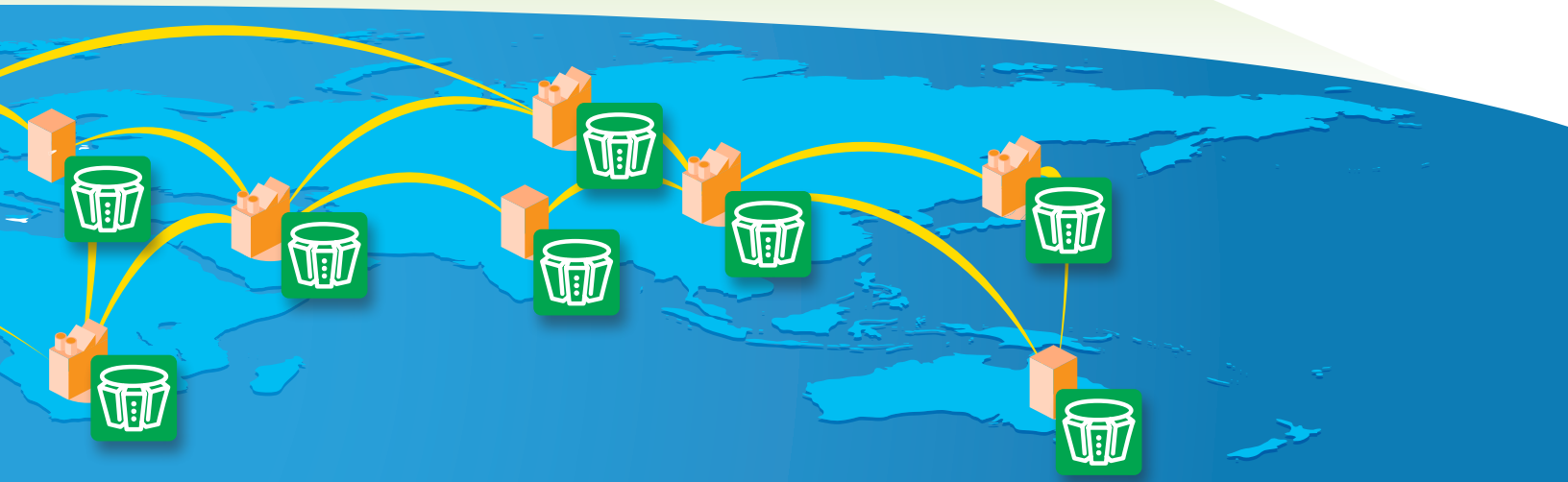System

Manufacturing Intelligence

Wonderware System Platform enables all the roles in a plant or facility to seamlessly collaborate and work more productively together — driving superior results for your enterprise.

Mobile Workforce

Industry Solutions

Workflow

erware
Platform

Wonderware Delivers So Much More

Wonderware products are a comprehensive set of industrial software solutions that assist you on your path to greater business success. All Wonderware software solutions are tightly integrated to help improve your business today, and expand your operations in the future; so you can start small and grow your business at your own pace with peace of mind that Wonderware solutions will grow with you.

Wonderware System Platform

Wonderware System Platform provides a highly efficient and centralized industrial software infrastructure that helps drive standards and helps you to develop, manage and maintain your industrial applications with exceptional scalability and openness. It provides a central development environment, an application server, historian, web-based information server and data connectivity.

Wonderware InTouch

Wonderware InTouch enables users to quickly and easily create, and centrally manage, standardized, reusable, industrial applications; maximizing return on engineering, shortening project times, reducing risk and significantly reducing total cost of ownership.

Wonderware Intelligence

Wonderware Intelligence enables you to access, aggregate, contextualize (provide relationships) and visualize your critical operational metrics so you can more effectively monitor, collaborate, and compare results across the facilities within your enterprise.

Wonderware IntelaTrac

Wonderware IntelaTrac is the industry- leading mobile workforce and decision support system. IntelaTrac includes configurable software and ruggedized mobile hardware solutions that enable workflow, data collection and general task management for plant operations, maintenance management, production tracking and compliance applications.

Wonderware MES

Wonderware Manufacturing Execution Systems (MES) feature a complete set of functional capabilities for consistent and effective execution of operational activities, from product track and trace through work in progress tracking and enterprise integration.

Wonderware InBatch

Wonderware InBatch is a comprehensive batch execution solution that manages and tracks equipment history, material genealogy, stringent security, web-based reporting and facilitates the design and implementation of systems that are compliant with the ISA S88 batch standard and FDA 21 CFR Part 11 regulations.

Wonderware QI Analyst

Wonderware QI Analyst software is a complete statistical process control (SPC) software solution that provides powerful statistical techniques that empower every member of your team—from operators to quality professionals to decision makers.

Wonderware Workflow

Wonderware Workflow is an advanced workflow application that enables you to capture and formalize work processes within your operational environment, helping you to ensure that standardized work activities are performed by the right people, at the right time, using the right processes. Wonderware Workflow enables companies to model, execute, analyze and improve work processes to drive higher levels of collaboration, productivity and innovation .

Wonderware ®
by **Schneider** Electric

What's Behind Wonderware System Platform?

Customer FIRST Program and World-class Customer Support

Our commitment to you doesn't stop at our products. By enrolling in our Customer FIRST program you gain access to a host of support services including our global award winning support organization, the Wonderware Developer Network online support website which contains thousands of support related documents, online help, and 'how to' Tech Notes and Videos, Best Practices, FAQs, and of course our Security Central website with the most current Microsoft security patches and bulletins to enable you to maximize your system security.

Year after year we win awards for our customer service. You can rely on us to help keep your Wonderware products running smoothly and productively.

Saving money is always important, and Customer FIRST helps you save money over the long-term with innovative discounts and flexible funding options.

The Industry's Leading Ecosystem

Our worldwide Partner Ecosystem represents thousands of partners all with the goal of helping you succeed. They can help you with System Platform as well as the full breadth of our Enterprise Control offering.

Authorized Distributors – Our distributors combine their knowledge of our products with a clear understanding of your needs to assist you in the selection and purchase of the Wonderware products and related technologies.

System Integrator Partners – Our system integrator partners can deliver cost effective solutions using our products, no matter what the industry

Industry Solution Partners – We work closely with application software providers, OEMs and VARs to offer industry-specific solutions which extend and enhance the value of your Wonderware System Platform solution.

Partner Products – These complementary products add value to solutions and expand the value of your system.

Learning Services