Wonderware HMI and Supervisory Solutions

What's New in 2014 R2

With smart new engineering tools and rich content, Wonderware InTouch 2014 R2 and Wonderware System Platform 2014 R2 do more than ever to simplify design, increase efficiency, improve usability, increase operator awareness and effectiveness, and maximize the management and efficient storage and utilization of historical alarm and event data. 2014 R2 also includes improved diagnostics and improved support for continued operation of redundant environments during upgrades, plus so much more...

Wonderware®

by Schneider Electric

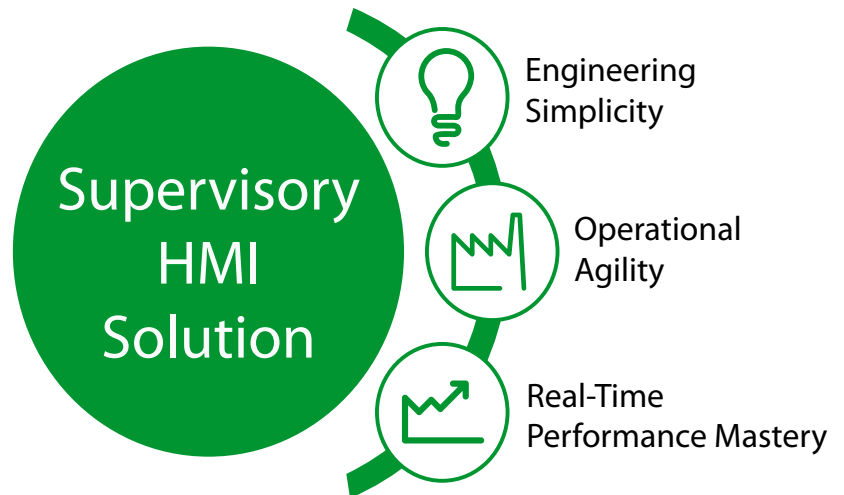# Wonderware HMI and Supervisory Solutions Features

RELEASE AT A GLANCE

- Improves Best Practices in HMI Design
- Advances Situational Awareness even further
- Improves Engineering Usability
- Extends Connectivity and Integration

Why upgrade to System Platform and InTouch 2014 R2?

1. Simple to follow Best Practices in HMI Design and new out-of-the-box content
2. Extensive Design Tools to deliver Situational Awareness
3. Simplified Installation Workflow
4. Simplified Design Workflow and Graphic Library
5. Localized InTouch Graphic Editor
6. Improved Alarm management
7. Improved Engineering Workflows for connectivity
8. Superior upgrade experience of redundant environments
9. Exceptional Engineering Re-use
10. Improved diagnostics and management capabilities
11. Continuation of unrivaled uninterrupted migration path from legacy applications

Supervisory HMI Solution

- Engineering Simplicity
- Operational Agility
- Real-Time Performance Mastery

Wonderware HMI and Supervisory Solutions Features (continued)

Overview - What's New in 2014 R2?

Wonderware System Platform

Wonderware Application Server

Wonderware InTouch

Promote Best Practices in HMI Design

Simple to follow Best Practices in HMI Design and new easy-to-use conversion tools reduce engineering costs and time and ensure consistency of HMI designs. These shorten design time and the learning curve for novice engineers. Design efficiency is maximized so engineers attain the greatest gains with less effort and continue to take advantage of engineering re-use. Upgrading existing applications is quick and convenient — easily convert older applications to advanced graphics using the latest technology.

Increase Operator Awareness

Extensive improvements in Situational Awareness and alarm management capabilities extend real-time visibility into your processes and minimize nuisance alarms. These improvements greatly enhance the ability for both experienced and entry-level operators to focus on what is most important and helps them identify, understand, react to and resolve, abnormal situations more easily. The Situational Awareness Symbol Library has been expanded to enable faster HMI design, greater standardization, and superior operator proficiency. Anything you can imagine for HMI can be created quickly and easily with a few clicks. Millions of preconfigured and pretested combinations and orientations of Symbols are available making this the largest Situational Awareness object library on the planet.

Superior Engineering Usability

New and extensive design tools, simplified design workflows and an enhanced graphical library enable engineers to deliver consistent goal-oriented HMI designs. Designs like these maximize operator focus, improve business value and increase the safety of the entire industrial system.

Simplest Field Device Connectivity

Wonderware software is built upon an unequalled open architecture that easily connects to any device. 2014 R2 makes device connectivity even simpler – improved engineering workflows for connectivity to all major brand controllers drastically reduces engineering time and pre-validation of connections improves connectivity accuracy and minimizes the need for troubleshooting.

Wonderware HMI and Supervisory Solutions
Features (continued)

Application Server - New Features and Benefits

More Effective Alarming

New Alarm Shelving and 'Plant State' based alarm suppression features minimize nuisance alarms, which improves operator attention to more critical events. An audit trail of the nuisance alarms is logged to Historian so nothing is lost. New Alarm Client Symbols take advantage of the these capabilities to present aggregated active and historical alarms. Alarms are grouped by severity and shelving status to further simplify the engineering effort and improve operator awareness and prioritization of alarms. All this functionality is built into each Symbol in the Situational Awareness Library for extremely easy alarm configuration.

Simplified Attribute Definition

An ergonomically redesigned Attribute Definition Editor for local and field I/O references simplifies the attribute definition workflow by consolidating several tabs into one. Everything you need is in one place to accelerate engineering, improve consistency, and reduce troubleshooting effort.

Simple Field Device Connectivity

Every PLC manufacturer has different naming conventions which means that manual configuration of each assignment can be tedious and error-prone. A new I/O Auto Assignment feature, matches attribute references to field devices based on manufacturer naming conventions to enable drag-and-drop association of objects to field references prior to deployment. This powerful new feature drastically reduces engineering time and frustration, enables live pre-validation of connectivity, and improves accuracy. All major brand controllers are supported.

Advanced Administration and Diagnostics

The System Management Console (SMC) has been upgraded with a number of new features that accelerate troubleshooting, reduce installation time, minimize maintenance effort, and improve system management and diagnostics especially during version upgrades and deployment. System health monitoring improvements give engineers greater insight into Engine state and association between Platforms and Engines as well as more sophisticated diagnostics. The Platform Remover tool has been improved and fully integrated. Platforms can now be sorted in various ways, for example in order of Platform name, computer name, or Platform ID, in an easy to understand Platform list. Actual States of Engines are displayed including OnScan, Stand-by (redundant), Off Scan, and Shutdown. Redundant Engines always show on the associated Platform with their respective states. Failover support for Engines has been added.
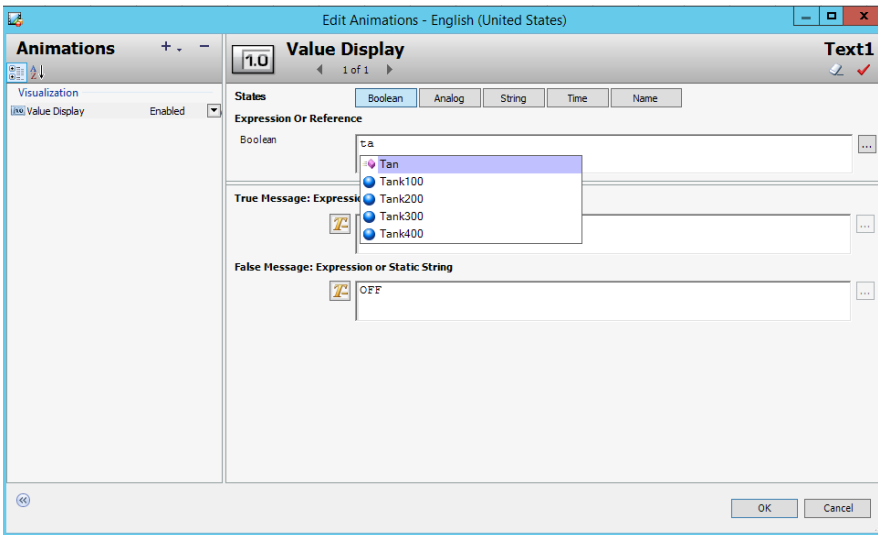
2014 R2 also includes an integrated Galaxy Scrubber which compresses and validates the entire Galaxy to ensure a complete migration process. The Galaxy Scrubber reduces database size by more than half and eliminates failures due to 'out of disk' issues during migration.

For distributed installations, the Application Server installer can be separated from the main System Platform DVD to create a lighter standalone installation package for faster distribution over slow networks. This is especially helpful when installing to multiple nodes or over geographically distributed networks.

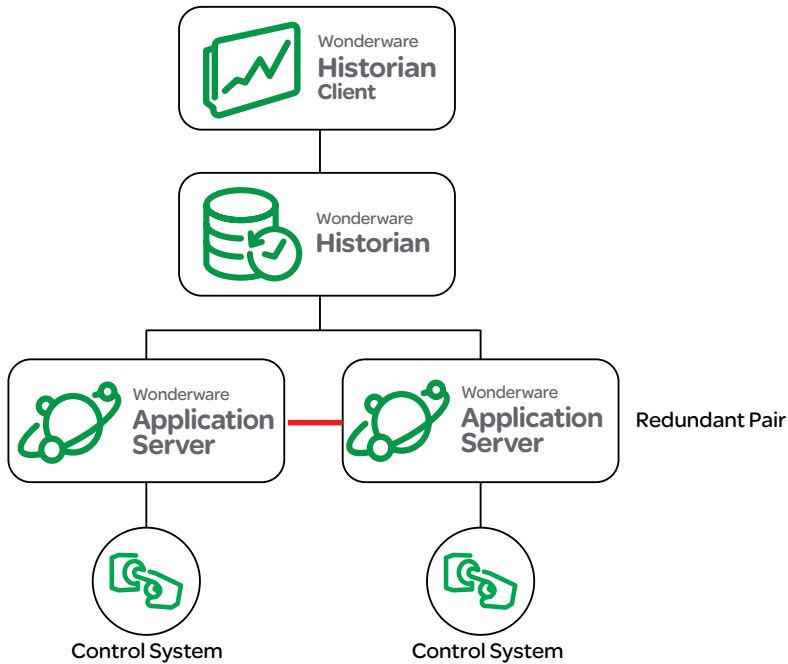# Wonderware HMI and Supervisory Solutions
Features (continued)

Faster More Accurate Scripting, Less Troubleshooting

The Auto-Complete capabilities in naming and scripting have been extended for absolute references.

Smooth Transition for Redundant Engine Pair Upgrades

Continued operation is vital for many types of systems and improvements in the upgrade procedure for Redundant Engine pairs enable engineers to maintain full production operations by upgrading each of the pair independently with no downtime or loss of data.

Wonderware HMI and Supervisory Solutions
Features (continued)

The Latest Technology

2014 R2 continues to evolve with support of new versions of Microsoft Windows and Microsoft SQL Server.

Automatic port management of ArchestrA Services improves cybersecurity and IT compliance by minimizing the requirement for ArchestrA Services to a single port.

Faster Installation Improved Performance

2014 R2 also brings you faster installation and improved integration and performance with Microsoft SQL Server. The optimal default settings for Microsoft SQL Server are set automatically when creating a new Galaxy which speeds up the overall install process and ensures system configuration performance as the Galaxy grows.

Propagation of engineering changes to InTouch View Applications has improved dramatically, now 10 to 50 times faster depending on the number of changes and number of nodes. As an example, propagation of changes to a large system that used to take as much as 10 minutes will now occur in less than 10 seconds.

The Wonderware Device Integration library has been updated with several new DAServer versions and a new OmronFINS DAServer. In addition, the new DASim DAServer simulates PID controller type behavior during development and testing with the ability to configure specific process variables such as setpoint, deadband range, and noise. This improves design simulation, testing and troubleshooting.

InTouch - New Features and Benefits

Wonderware
InTouch

The Most Advanced Graphics

2014 R2 introduces a new type of InTouch application called 'Modern App' that provides the versatility, power and benefits of ArchestrA Graphics with traditional InTouch ease of use. Modern Apps make using ArchestrA Graphics very easy because the application is fully designed within WindowMaker, no IDE required. The improved development workflow enables engineers familiar with InTouch WindowMaker and Tag based applications to continue utilizing their standard design practices yet with the more flexible and powerful ArchestrA Graphics. The Modern App design workflow also shortens the training cycle for new design engineers.

ArchestrA Graphics are one of the most significant enhancements in InTouch over the past several years. They provide numerous advantages over traditional symbols for both engineers and operators. They have become the standard graphics of choice due their ease of use, versatility, reusability, power and proven track record.
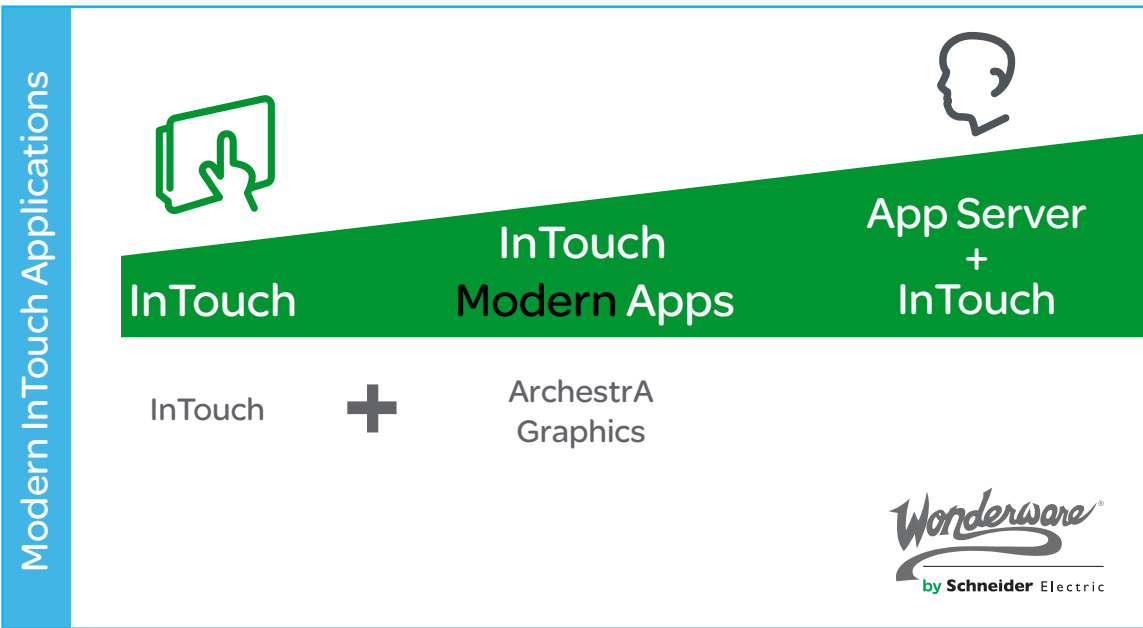
Wonderware HMI and Supervisory Solutions
Features (continued)

For Engineers: Higher Application Integrity, Faster Implementations, Lower Engineering Costs

- Design, distribute and enforce graphical component standards for greater application consistency and optimized application design and maintenance using Element Styles, Numeric Formatting, and graphic protection.

- Shorten initial and maintenance design phases using graphic template change propagation which enables engineers to make a change once and propagate it throughout the entire application

- Resolution independent graphics can be resized or stretched without losing original visual quality, they improve Window display performance, and can be designed in one resolution and reused without distortion in a different resolution

- Save time and effort in your multiple language projects by entering translations as you design the application using multi-language switching in-place translations capability

- Design highly configurable optimized templates without any code development using a richer set of intuitive animation and graphical design tools for flexible, reusable, and lean graphics

- Integrate the power of the latest feature-rich Microsoft technology .NET controls and third party designed controls to enhance application usability

- Expand the power of each graphic with unlimited use of Custom Properties and scripts

For Operators: More Efficient and Intuitive UIs, Improved Operator Awareness, Fewer Shutdowns

- Convey more information in less time using less window real estate and decrease multiple screen navigation

- More consistent standards based application design increases operator awareness and decreases training time for new operators

- The Situational Awareness Library of ArchestrA Graphics are a superior approach to presenting more information in less time to operators. This enables operators to focus on more useful informational displays, shortens the time to identify a problem, and minimizes distraction and fatigue. This results in greater visibility to the most important situations, prevention of excursions from "normal", reduction in disruptions and downtime, and greater focus on opportunities to improve performance, safety and reduction in costs of operations.

Wonderware HMI and Supervisory Solutions
Features (continued)

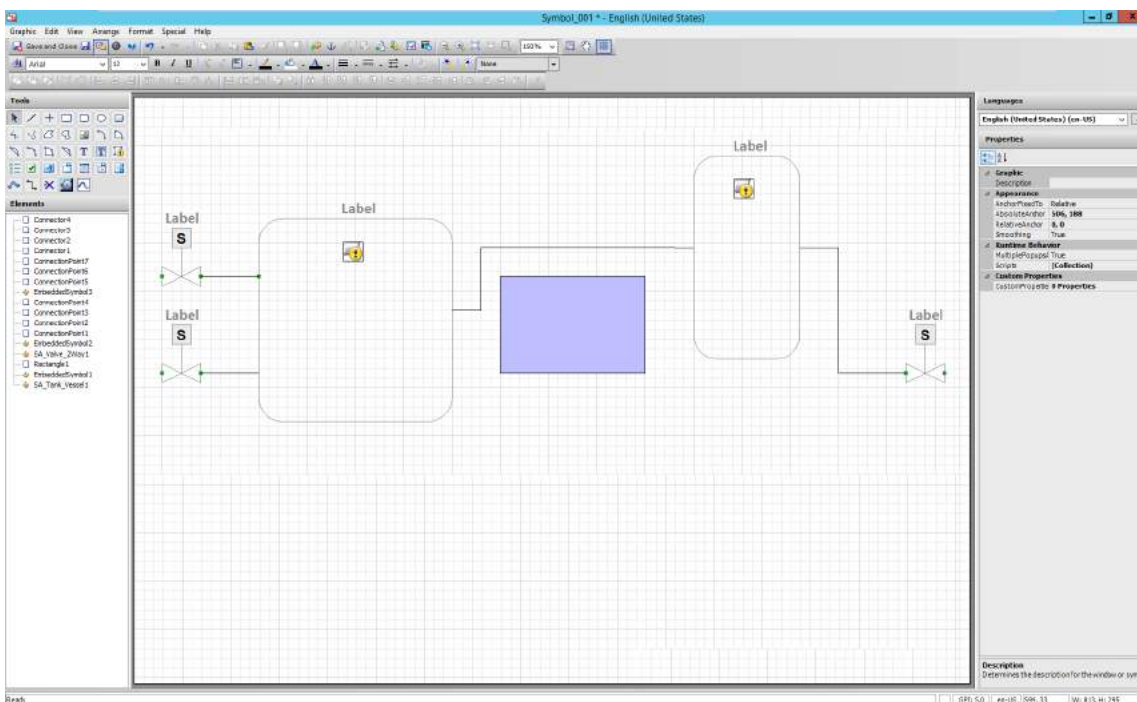## Capitalize on Your Existing Investment in Engineering

Continuing the Wonderware reputation of unrivaled uninterrupted migration path and preserving previous engineering investment, two new features take the work, worry, and guesswork out of transitioning your legacy existing InTouch application to the most current technology.

When migrating a legacy standalone InTouch application to the new 2014 R2 version, you are given the option to migrate into a 'Modern' type application which allows you to use ArchestrA Graphics and leverage the latest technology and years of advancement in visualization, such as the Situational Awareness Library, or to keep it as a classic InTouch application with legacy graphics.

Convert InTouch Windows to ArchestrA Graphics with one click. A Window backup is automatically created, elements are converted to ArchestrA Graphics and replaced in the Window, ActiveX controls remain in place, and a detailed conversion report is generated. Your old Window has now been updated to the most current technology.

Reduce Graphics Design Time in Half

Every HMI design includes graphic elements and connectors between elements, such as a pipe, wire, or line. Much of the design time goes into connecting graphic elements to one another. For most HMIs, this connecting can be a tedious effort and can prove especially frustrating when graphics are repositioned in the design phase or even if the graphic is required to move at runtime as a result of animation. In 2014 R2 there is a new combination of Connection Points and Connectors which provide resilient connections between graphics with simple point, click, drag and drop operations. With these new features, whenever graphics are repositioned, either in design or runtime, the Connectors adjust and move with the graphics to maintain the connections. This eliminates tedious connector redrawing and refinements.
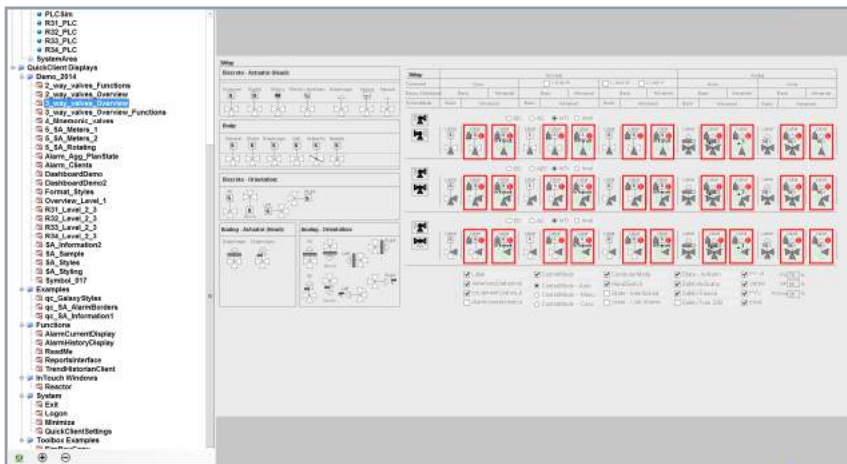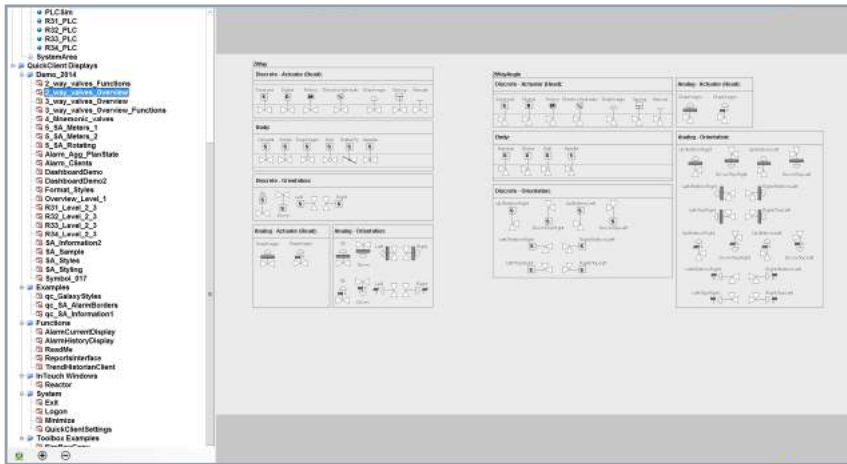
Wonderware HMI and Supervisory Solutions
Features (continued)

New Situational Awareness Symbols

The Situational Awareness Library continues to be expanded with the addition of new Symbol Wizards for Valves and Trends.
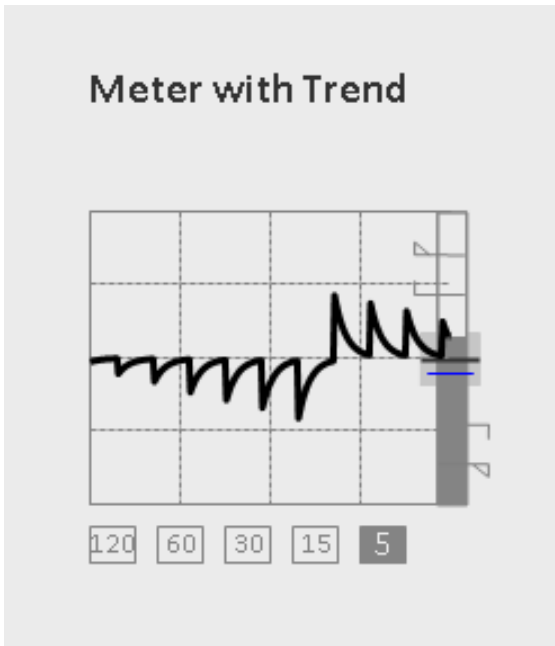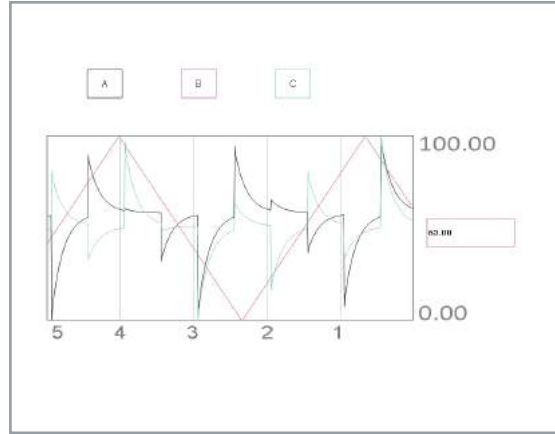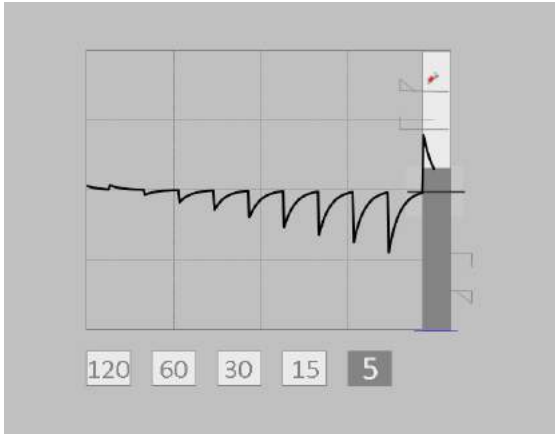
Valve Situational Awareness Symbols – The new set of Symbol Wizards for Valves greatly expand the possibilities to over one million combinations and orientations.

Wonderware HMI and Supervisory Solutions
Features (continued)

Situational Awareness Trend Symbols – Easy to configure, Single Pen and Multi Pen Trend Symbols provide instant visualization of recent historical data for enhanced operator situational awareness.

Meter with Trend

Wonderware HMI and Supervisory Solutions Features (continued)

Localized ArchestrA Graphics Editor

The ArchestrA Graphic Editor, which is now integrated into WindowMaker for an intuitive design workflow with InTouch Modern applications, has been localized into the five languages of InTouch: English, French, German, Japanese, and Simplified Chinese.

New and Enhanced Script Functions Accelerate Design

Script functions reduce design effort and enable completely new design options for engineers. The ShowGraphic and HideGraphic script functions are enhanced to allow opening and closing InTouch Windows from ArchestrA Graphics. The new GetCPQuality and GetCPTimeStamp script functions expand the versatility of Custom Properties by accessing quality and time stamp data for use in scripts and visualization.

InTouch with System Platform - New Features and Benefits

Wonderware
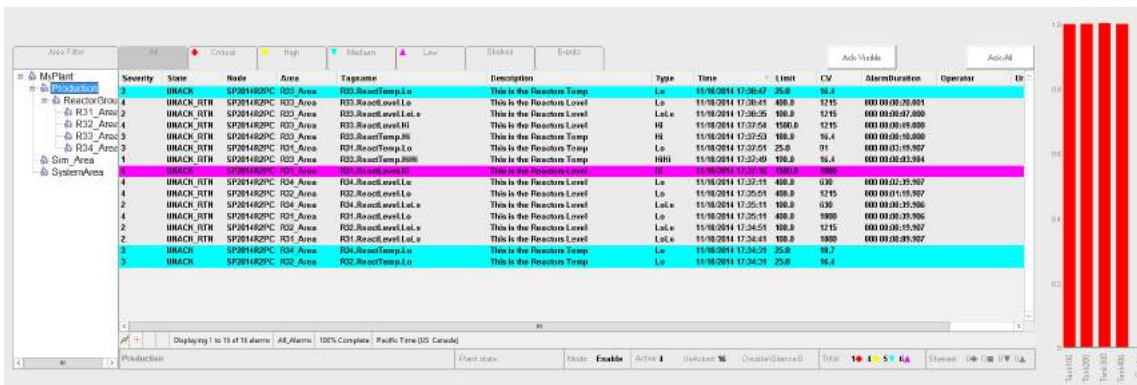**InTouch**

Wonderware
System Platform

Easily Visualize Summarized Historical Data

Much of the information operators utilize is data which has been aggregated or summarized over a period of time such as average, minimum, maximum, standard deviation, and duration in a particular state. Wonderware Historian automatically calculates this summary data and now, with the new History Summary data type, this aggregated information can be easily accessed and displayed in InTouch. This not only saves considerable engineering effort, but can be used to provide aggregated data in graphical form to operators enhancing their situational awareness for more efficient operations.
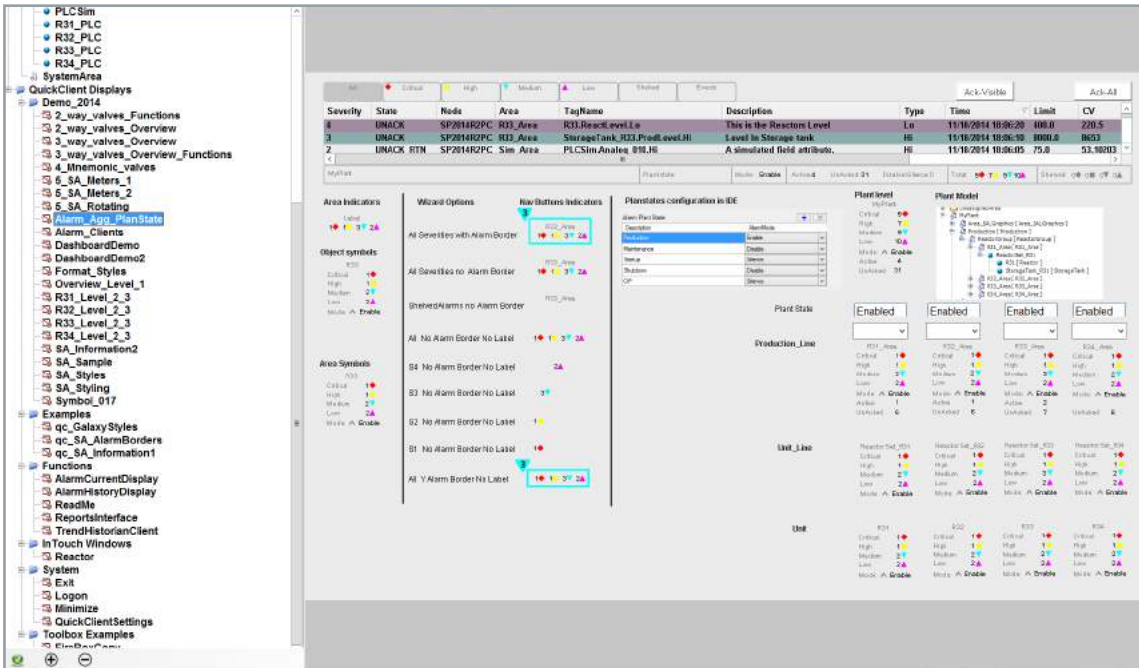
New Situational Awareness Symbols

Another addition to the Situational Awareness Library is a new set of Alarm Symbols including three new pre-built Alarm Dashboards and an Alarm Severity Panel. These new alarming capabilities are built into System Platform 2014 R2 for much simpler alarm design and operator alarm visualization and management.

Wonderware HMI and Supervisory Solutions
Features (continued)

Severity Panel

Fully Compatible and Easily Upgradable

The 2014 R2 release is the leading Supervisory HMI on the market specializing in open system compatibility and easy upgradeability so our users always get the most from their investment.

Wonderware products enable you to create well designed, standards-driven, industrial solutions that reduce development time and effort, shorten implementation schedules, maximize productivity, increase quality, optimize user effectiveness, and lower maintenance and operational costs, helping to maximize your profitability and flexibility to accommodate change. In short, whatever you do, you can do it better, faster, safer and cheaper with Wonderware software.

Learn more about Wonderware System Platform and InTouch 2014 R2. Contact your Wonderware distributor today! And check out our YouTube Channel: Wonderware HMI SCADA.

PN WW-4227   Rev. 01/15