Wonderware’s InTouch 9.5 visualization software combines the world’s leading HMI software with cutting-edge graphical advances to enable customers to obtain tremendous improvements in operational and engineering productivity. The InTouch 9.5 HMI continues to outshine its competition with advances that include easy-to-use, object-oriented programmable graphics and powerful communication connectivity. InTouch software is an open and extensible HMI that enables flexibility in custom application design with connectivity to the broadest set of automation devices in the industry.

PRODUCT HIGHLIGHTS

- Operational enhancements that streamline graphical windows while greatly expanding the amount of information available
- Leverages ArchestrA technology, decreasing the amount of time and cost of creating, modifying, deploying, maintaining and standardizing software applications
- Easy-to-use, open HMI solution that seamlessly integrates with legacy and new plant systems, enabling fast connectivity to real-time and historical information
- Preserves engineering efforts through re-use and standardization of graphical information
- Robust, intuitive script editor enables expert software engineers as well as non-programmers to quickly customize application functions
- Flexible and scalable architectures for small and large systems that can be easily expanded to meet future requirements

GAIN A COMPETITIVE ADVANTAGE WITH A UNIFIED APPLICATION ENVIRONMENT

InTouch 9.5 software is built on the groundbreaking ArchestrA architecture. ArchestrA technology enables users to have a unified environment that integrates information from multiple disparate sources and provides a common infrastructure and set of services. A significant competitive advantage is gained with the ability to design, build, deploy, maintain and standardize applications with the lowest total cost of ownership. Benefits include:

- Easy updates to existing applications
- Dramatically decreased costs to develop new automation projects
- Substantially reduced implementation time
This architectural approach facilitates the easy extension and expansion of existing systems to stay competitive and increase manufacturing agility. In addition, users can quickly create applications that conform to company standards yet are versatile enough to be strategically deployed throughout an organization via the best-suited devices for increasing productivity and efficiency.

CREATE AND DEPLOY EASY-TO-USE APPLICATIONS

InTouch software enables users to quickly create and deploy graphical representations of real-time industrial processes. The InTouch HMI is used throughout the world, in virtually every country and industry. Wonderware’s InTouch software is the proven world leader for HMI visualization and control of information.

Expansive Graphical User Interface (GUI) for Flexibility

The InTouch HMI empowers users to quickly and easily develop custom graphical views of their processes. Users can develop graphics with a variety of tools in Wonderware’s WindowMaker graphical editing program, which includes:

- Standard graphical components
- Bitmap images
- ActiveX controls
- A graphics library that contains thousands of pre-configured industrial images
- SmartSymbol technology

Plant employees also can leverage advanced development tools such as pan and zoom and rubber-banding to improve the speed and accuracy of application development.

Powerful Wizards and Templates

SmartSymbols for Increased Productivity

Wonderware’s InTouch HMI is SmartSymbol-enabled, which represents an enormous advancement in the creation, deployment and modification of graphical elements inside an application. SmartSymbols offer considerable savings by significantly reducing application engineering, testing and deployment time, and enabling the creation of reusable templates from graphics. These object-oriented graphics contain all the graphical, script and tag controls that an application object needs to be useful in a production environment.

Rapid Change Propagation

SmartSymbol graphics enable rapid propagation of changes throughout the application and even across multiple networked PC nodes. Users only modify the SmartSymbol template and the changes automatically propagate throughout the application. This makes changing, upgrading, and modifying -- as well as validating and revalidating applications after modification -- very fast and simple.

Productivity Improvements

Using SmartSymbols increases productivity when creating new applications and modifying existing applications. New applications can be quickly created using standard SmartSymbol libraries, facilitating easier compliance with standard operating procedures. Existing applications can easily be enhanced by modifying the SmartSymbol template. Customers benefit from improved flexibility and greater productivity.

More Information, Less Screen Clutter

New “tooltips” and “mouse-over” capabilities enable users to obtain more information about the real-time data and graphics being displayed in the window. This results in streamlined, uncluttered screens that can quickly display vital information. Additionally, these capabilities provide context to data, enable faster analysis, and facilitate better understanding of displayed information.
With the QuickScript Editor, an InTouch application can be extended and customized to address specific system requirements, making InTouch software one of the most flexible HMI products on the market. Scripts can be configured to execute based on numerous parameters, such as specific process conditions, data changes, application and windows events, keyboard strokes and ActiveX events. Users can also develop a library of scripts that can be re-used, simplifying the application and resulting in decreased initial engineering and application maintenance time as well as deployment.

The QuickScript Editor is simple-to-use and extremely powerful, enabling complete customization of applications with common expressions and structures, such as “greater than,” “less than,” “for-next” and “if-then-else” as well as advanced functions including mathematical expressions and string conversions.

A built-in validation engine enables the user to check scripts before deploying them, preventing runtime errors. In addition, for more advanced users, scripts can be written and edited directly in the script editor, or cut and pasted from other applications, encouraging re-use and saving engineering time.

The QuickScript Editor gives users the flexibility to quickly and easily customize applications. From novice to expert programmer, everyone benefits from InTouch scripting.

PROTECT YOUR SYSTEM WITH INTEGRATED SECURITY

Different levels of security are required, depending on the application’s function, who needs access and the type of access required. InTouch 9.5 software provides many integrated options that enable users to choose security models and options that match their requirements. These include:

- **Access-Level Password Security** — limits user capabilities in the InTouch application based on areas of responsibility and authority
- **Microsoft Windows Authentication** — grants permissions to InTouch users authenticated on a domain controller or local computer, based on user identity and group affiliations
- **Data Level Security** — customers who have adopted Wonderware’s Industrial Application Server also enjoy secure integration between InTouch software and Industrial Application Server applications, all the way down to the data level
- **FDA 21 CFR Part 11 Functionality** — built-in authentication fields, security script functions and variables make it easier for users to comply with government regulations
- **Enhanced Password Encryption** — passwords entered through the application can be encrypted and masked to provide a greater level of security and protection against unwarranted access to the application
- **FactoryFocus Read Only Software** — a view-only runtime version of the InTouch application that increases system security because no data can be changed
- **No Security** — for non-critical applications and specific situations where security of the information is not needed
**BENEFIT FROM UNRIVALED CONNECTIVITY**

InTouch software can connect to virtually any industrial automation control device using hundreds of available I/O and OPC servers that are designed to connect to Wonderware products. In addition, the InTouch HMI can communicate via the SuiteLink protocol. Wonderware’s SuiteLink communication protocol is written specifically for the high demands and reliability needs of fast-paced automation.

The InTouch HMI is capable of serving as an OPC client or an OPC server, and Wonderware servers provide access to InTouch application data through:

- Microsoft DDE communications
- Wonderware’s SuiteLink protocol
- OPC technology

InTouch software offers connectivity to major hardware manufacturers including Rockwell, Siemens, Schneider and others. Third-party developers can also use the ArchestrA DAS (DA Server) Toolkit to create additional servers that incorporate one or all of the communication methods listed above.

**TROUBLESHOOT EFFECTIVELY WITH ADVANCED ALARM CAPABILITIES**

Knowledge of system alarms and the ability to acknowledge them in a timely manner can save hours of costly downtime and enable faster responses in critical situations. InTouch software includes several analysis tools and views into alarms, giving people the information they need to proactively correct situations before they worsen and to analyze events before, during and after an alarm situation.

Troubleshooting tools include:

- **Distributed Alarm Display** -- provides summary information of current alarms
- **Database View Control** -- displays historical alarms that have been logged in the InTouch alarm logger database
- **Alarm Viewer Control** -- an ActiveX control that provides both current summary and historical session alarm information

InTouch 9.5 software also contains several built-in and runtime configurable tools to enable users to quickly answer questions about specific alarm conditions. The tools assist plant employees in determining the nature of an alarm, its location and options for supporting fast analysis of alarm conditions coupled with immediate response capabilities.

**Alarm Analysis Tools**

- Built-In Pareto Charts
- Alarm Tree Navigation Windows
- Alarms Sortable at Runtime

Easy-to-use Wizards and dialog boxes make alarm configuration simple to implement. An InTouch user gains complete control over the current alarms in a system and retrieval of historical alarm information.

**Alarm Acknowledgement**

InTouch software offers three alarm acknowledgement models:

- Traditional, condition-oriented alarms
- Event alarms, which are compatible with the OPC alarm model and require an acknowledgment for the most recent transition to an alarmed state
- Expanded Summary alarms, which support acknowledgment of each transition into and out of an alarmed state.

**Alarm Flexibility**

Users have a lot of flexibility when configuring and viewing alarms, including:

- Alarm Inhibitor Tags that facilitate the enabling or disabling of alarms directly or indirectly
- Alarm suppression, which prohibits the display of alarm information on a specific view node and can be applied to single alarm classes, tags or groups
- System-wide disablement, which can block alarm activity at the source

**Powerful Distributed Alarm Subsystems**
**Alarm Toolkit**
The Alarm Toolkit enables third parties, system integrators (SIs) and end-users to enhance InTouch systems by writing custom Alarm Providers and Alarm Consumers that work with their devices. Alarm Providers determine alarm conditions and publish the alarms to the InTouch Distributed Alarm Subsystem. Alarm Consumers are clients that receive information from the InTouch Distributed Alarm Subsystem. By using the toolkit, a hardware device interface can be constructed and integrated into an InTouch environment, allowing the hardware device to publish and manage alarms using the Distributed Alarm Subsystem.

**SuiteLink Time-Stamping**
InTouch 9.5 software offers alarming up to the millisecond -- when the alarm is generated, not when the consumer receives the alarm.

**Alarm Database**
The InTouch Distributed Alarm Subsystem supports logging alarms and events to a Microsoft SQL Server 7.0, 2000 or MDSE database. This function gives users the power of a relational database regardless of the application size or project budget.
Support for AlarmSuite users is still available. However, to enable maximum flexibility, the InTouch 9.5 HMI also provides migration tools from existing AlarmSuite databases to the Wonderware Alarm Database.

**Easy-to-Configure Hot Backup and Resynchronization**
The Distributed Alarm System facilitates the configuration of a secondary backup Alarm Provider. Furthermore, if a primary Alarm Provider fails, the Distributed Alarm Subsystem is designed to seamlessly acquire alarm information from the backup system. Upon reconnection to the primary Alarm Provider, the Distributed Alarm Subsystem synchronizes the information before the primary system becomes live again.

**LEVERAGE THE COMBINED POWER OF INTOUCH SOFTWARE AND THE INDUSTRIAL APPLICATION SERVER TO GAIN SIGNIFICANT COMPETITIVE ADVANTAGES**
InTouch 9.5 software and the Industrial Application Server are both built upon the ArchestrA architecture, which enables reusable, distributed application development with centralized deployment and maintenance -- resulting in best-of-breed applications with the lowest lifecycle costs. Used together, the InTouch HMI and Industrial Application Server provide an information and automation application environment that supports the following activities:
- Development of advanced HMI templates that can be easily created, replicated and modified;
- A single tag namespace that enables the addition of client and server computers that seamlessly connect to and integrate with the application without requiring any additional engineering effort;
- Remote, centralized software deployment, change management and monitoring that eliminates the need to physically go to HMI computers to make changes; and
- An active (real-time), deterministic, plant-wide visualization system that can read and write values to a large number of PLCs and control devices.

The above features can give you, our valued InTouch customers, a significant competitive advantage!

**SUPPORT VIRTUALLY ANY APPLICATION WITH EXTREMELY FLEXIBLE AND SCALABLE ARCHITECTURAL OPTIONS**
InTouch software is used throughout the world to fulfill the requirements of many different environments. System solutions range from singlenode visualization stations to multi-plant, multicountry applications and SCADA solutions that require visualization for remote, unmanned locations. The InTouch HMI offers a variety of deployment methods to meet customer needs today while enabling a path for future growth – at all times preserving engineering effort and time.

**Self-Contained, Standalone Visualization Stations**
In a standalone architecture, the InTouch software is installed on a single computer node.
Each node is completely self-contained and not dependent on any other computer for operation. These systems can also be networked together.

**Reliable and Effective Client/Server Architectures**
The most popular system configuration for automation applications is a client/server architecture. In this scenario, the InTouch software is installed on the server and accessed by client computers. This method saves time and money on software maintenance and administration and provides additional security and redundancy functionality. The InTouch HMI can be deployed in the following client/server architectures:

**Tag Server Configuration** – A user designates one or multiple computers as tag servers that can:
- Store the tagname dictionary
- Perform historical event-logging
- Run QuickScripts
- Act as an alarm facility
- Connect to I/O data

InTouch applications running on client nodes or operator stations connect to the tag servers to display the information.

**Terminal Services Architecture** – In this architecture, the InTouch software is installed on a terminal server. Clients access InTouch application sessions running on the terminal server.
Terminal Services capabilities add:
- Centralized software deployment, maintenance and management
- Re-use of existing, older hardware
High levels of security and redundancy
Client support for multiple operating systems for standard InTouch applications
Support for thin-client terminals, PDAs, Tablet PCs and browser visualization

Client operating system support includes:
- Microsoft Windows 2000, XP, 2003, CE, NT 3.51 and 4.0, and Embedded Windows NT (NTE) operating systems
- Microsoft Windows for Workgroups 3.11, 95 and 98 operating systems
- Linux operating systems
- UNIX operating systems.

Dynamic Network Application Development (NAD)
Dynamic NAD facilitates centralized maintenance of an InTouch application master copy using one network server. It offers:
- Strong redundancy – each client maintains a local copy of the master application
- Unparalleled reliability – the client continues working, even if master server is unavailable
- Seamless reconnections – from client to server after disruptions

NAD also facilitates changes to the master application through:
- Online modification changes – no need to shut down the running application
- Dynamic operator alerting – allows the operator to accept or delay configuration changes
- Fast downloads – only changes are downloaded

Using NAD enables the operator to have the most current application while allowing the running application to be updated at any time, without incurring downtime or loss of process visualization.

Industrial Application Server-Based Systems
The Industrial Application Server provides additional reduction of time for the deployment, maintenance and diagnostics of applications through the following features:
- **Online Maintenance and Expansion** – Upgrades can be done on portions of the application without restarting the entire system, enabling companies to lower maintenance costs and respond quickly to changes or problems.
- **Remote Deployment** – Upgrades can be done on portions of the application without restarting the entire system, enabling companies to lower maintenance costs and respond quickly to changes or problems. In addition, new plant equipment or workstations can be easily added without disrupting the rest of the line or plant.
- **Remote System-Wide Diagnostics** – Engineers save valuable engineering and troubleshooting time by centrally managing system-wide diagnostics. Any workstation on the network, local or remote, can be configured to view the entire status of the system.

Using the Industrial Application Server and NAD enables users to change every aspect of their application remotely.

**UTILIZE EFFECTIVE DESIGN AND CONTROL FEATURES FOR DISTRIBUTED SYSTEMS**
InTouch software offers several additional features to enable better application design and control for distributed environments. These include:
- **Remote Tag Referencing** – Developers can create an InTouch application without using any local tagnames. At runtime, client nodes connect to the tag server or the Industrial Application Server to retrieve information.

InTouch software running in a Terminal Services environment empowers industrial employees to reduce the time and effort they spend on software administration and management. At the same time, they can use the most up-to-date versions of the application software with a high degree of reliability and security.

**Industrial Application Server Architecture**
– Wonderware’s Industrial Application Server uses the InTouch View graphics engine for process visualization. The InTouch View graphics engine, combined with the Industrial Application Server, contains all of the functionality and features of the InTouch HMI, plus the productivity and cost savings of the Industrial Application Server. The Industrial Application Server greatly reduces the engineering effort and time required to maintain and deploy systems within one plant or across multiple plants.

**REDUCTIONS IN SOFTWARE ADMINISTRATION AND MANAGEMENT**
InTouch software includes several options for significantly reducing the time and effort required to administer and manage software applications.
Remote Tag Referencing enables companies to reduce costs and save time because users can create one template and re-use it several times throughout the application.

**Distributed History**  -- Personnel can dynamically specify a different historical file or data source for each pen of a trend chart. This allows an operator to view both native InTouch history and IndustrialSQL Server history in the same trend. Distributed history trending enables swift analysis of historical information on one screen, saving time and improving the analysis of multiple variables.

**Dynamic Resolution Conversion (DRC)**  -- Develop an application in one screen resolution and run the application in another, without affecting the original application. Applications can also run at a user-defined resolution, instead of the display resolution, and take advantage of multiple monitors within an application without worrying about where the windows will appear. Dynamic Resolution Conversion enables users to save time by deploying applications anywhere, on displays of any size, without redesigning, copying or modifying the original application.

**Distributed Time Zones**  -- This feature provides services to both the distributed history and alarm systems, permitting value viewing in the local time. This is important because it eliminates confusion over what time events actually occurred.

**BENEFIT FROM A CONSISTENT INTERFACE THROUGHOUT THE PLANT WITH ROBUST HARDWARE PRE-INTEGRATED WITH INTOUCH SOFTWARE**

**Wonderware Tablets and Touch Panel Computers**

Wonderware’s Industrial Tablets and Touch Panel Computers are pre-installed with fully functioning InTouch software. These are ideal for:

- Existing applications which can be re-used without modifications
- Increasing the mobility and versatility of new applications
- Replacing older hardware systems; and
- Serving as smart terminals for visualization and control in many automation scenarios previously serviced only by closed, proprietary (a.k.a., ‘dumb’) terminals

Wonderware Industrial Tablets and Touch Panel Computers work out-of-the-box, without additional configuration, and include access to Wonderware’s extensive library of device integration tools, providing connectivity to a wide range of systems.

**CREATE WORLDWIDE APPLICATIONS**

**Language Support**

InTouch software is supported in English, German, French, Japanese and Simplified Chinese. Additional languages are also available around the world and supported by local distributors.

**Runtime Language Switching**

The languages displayed through the application can be dynamically changed at runtime based upon the requirements of the user. This capability enables global companies to provide information to the user in a preferred language, eliminating communication barriers and improving production and performance throughout the organization.

**Time and Date Functions**

Users can access UTC time, the current local time, the current time offset from the GMT zone, and Daylight Savings Time status for their applications, simplifying worldwide application management.

**MAKE FULL USE OF THESE PRODUCTIVITY FEATURES**

**One Click, Real-Time Information Access Failover**

Point-and-click failover to a separate computer node is highly valuable in cases of failure. In these situations, the InTouch software facilitates a switch from a primary to secondary communication computer, which is also connected to plant devices.

**Fast Visualization from Multiple Devices**

InTouch users can run a script function to modify the data source for ArchestrA Objects or InTouch tag references at runtime. This enables users to view information from different devices, objects, areas and plants based on particular conditions or directly via user interaction. Updating the real-time information in the window is very fast because only one line of script needs to execute.

**Tablet PC Support**

Wonderware’s InTouch software has been enhanced to leverage Microsoft Tablet PC features such as Inking and Annotation.

Inking enables customers to write values into data links in their own handwriting. The InTouch application recognizes numbers and/or text in multiple languages and inputs them into the data field.

Annotation enables users to mark up a graphical display with pens and highlighters. After capturing and annotating a graphical screen, the user can instantly e-mail, print or save the screen capture to facilitate troubleshooting and explanations of the production process.

**Deployment**

The InTouch Fast Switch function enables application developers to switch back and forth between runtime and development environments at the click of a button. Developers can quickly determine how their applications will look and behave before deploying them into a production environment. In addition, the InTouch HMI can be started as a service, enabling automatic application start up and
continuous operation through multiple log-on and log-off cycles.

Local Variables
InTouch 9.5 software supports the use of local variables in scripts to store temporary results and create complex calculations with intermediate scripting values.

“Designed for Windows XP” Certification
InTouch software is the first HMI to qualify for Microsoft’s prestigious “Designed for Windows XP” certification. This means that InTouch applications will install and run on the Windows XP platform.

INTEGRATE INTOUCH SOFTWARE WITH OTHER WONDERWARE COMPONENTS
InTouch 9.5 software can function as a universal client. It can be used as a front end for the Industrial Application Server, InTrack resource tracking software, InBatch production management software, the IndustrialSQL Server historian, InControl real-time control software and DT Analyst asset monitoring software. InTouch graphical windows can be viewed over a PDA, Tablet PC, thin-client terminals, standard computer displays and over a browser. In addition, client tools such as ActiveFactory analysis tools, SuiteVoyager Web analysis portal QI Analyst SPC/SQC software and SCADAlarm event-notification software collaborate with the InTouch HMI to provide additional information about the industrial process.

SYSTEM REQUIREMENTS
To run InTouch 9.5 software, we recommend the following hardware and software configurations:

HARDWARE
Minimum
- 1.2 GHz Pentium III or greater
- 512 MB of RAM, plus 5MB of additional RAM per 5K tags
- 2 GB Free Hard Disk Space

OPERATING SYSTEMS*
- Microsoft Windows 2003 Server, Standard and Enterprise Editions
- Microsoft Windows 2000 Professional, Server, and Advanced Server
- Microsoft Windows XP
- Microsoft Windows XP Tablet Edition

*with the latest service packs applied

Agile Applications

ENJOY DEDICATED CUSTOMER SUPPORT
The Wonderware Customer Support Services Program makes it easy to maintain up-to-date Wonderware software and associated applications. To learn more about this valuable program, which often increases the value of industrial software applications, please contact your local Wonderware sales representative.