Comprehensive Training for
Wonderware InTouch Software
Course Outline

The InTouch Software - Comprehensive class is a 5-day instructor-led class that provides lectures and hands-on labs designed to teach a fundamental understanding of the basic principles of InTouch software.

The purpose of this course is to give you the knowledge necessary to develop a Human Machine Interface (HMI) system for your specific plant floor environment using basic elements of the Wonderware visualization module.

In addition, there will be in-depth discussions of ArchestrA graphics, security, and advanced I/O capabilities of the InTouch software.

Objective

Upon completion of this course, you will be able to:

- Create an IDE-managed InTouch application representing actual plant floor operations
- Establish communication with I/O aware programs; configure and troubleshoot DA Servers
- Historize and analyze plant floor data
- Retrieve data from external applications and a variety of PLCs
- Implement advanced tag strategies
- Configure I/O Failover
- Configure security
- Distribute alarms and history
- Work with ActiveX and .Net controls
- Create ArchestrA Graphics

Audience

Plant floor operators and managers, system administrators, system integrators, and other individuals who use InTouch HMI in manufacturing processes

Prerequisites

The prerequisites for this course are:

- Completion of the Introduction to InTouch Web tutorial at http://trainweb.wonderware.com/getstartit10/index.htm
- At least 8 hours of hands-on experience with InTouch software
- Manufacturing industry experience

Course Outline

Part 1:

Module 1 - Introduction

- Section 1 - Course Introduction
- Section 2 - System Requirements, Licensing, and Support

Module 2 - Applications

- Section 1 - InTouch HMI Overview
- Section 2 - The ArchestrA Galaxy and the IDE
- Lab 1 - Creating a New InTouch Application

Module 3 - Introduction to WindowMaker

- Section 1 - InTouch WindowMaker and Basic InTouch Graphics Overview
- Section 2 - Using WindowMaker
- Lab 2 - Create Graphics in a Managed InTouch Application

Module 4 - Tags and Data Sources

- Section 1 - Tag Types
- Lab 3 - Creating Memory Tags
- Section 2 - I/O Tags and Data Sources
- Section 3 - Wonderware I/O Servers
- Lab 4 - I/O Communications and Text-Based Visualization
- Lab 5 - Animate InTouch Graphics
- Lab 6 - Embed ArchestrA Graphics

Module 5 - ArchestrA Symbols

- Section 1 - ArchestrA Symbol Editor
- Lab 7 - Creating ArchestrA symbols
- Section 2 - Using Custom Properties
- Lab 8 - Defining Custom Properties
- Section 3 - Animating ArchestrA Symbols
- Lab 9 - Animation
- Lab 10 - Referencing a Symbol

Module 6 - Scripting

- Section 1 - InTouch Scripting
- Lab 11 - Using InTouch QuickScripts

- Section 2 - ArchestrA Symbol Scripting
- Lab 12 - ArchestrA Symbol Scripting

Module 7 - Alarming

- Section 1 - Alarms and Events
- Section 2 - The Distributed Alarm Object
- Lab 13 - Creating Alarms and Events

Module 8 - Real-Time and Historical Trending

- Section 1 - Real-Time Trends
- Lab 14 - Configuring Real-Time Trends
- Section 2 - Historical Trends
- Lab 15 - Configuring Historical Trends

Module 9 - Security and Application Navigation

- Section 1 - Security Models
- Lab 16 - Configuring Security and Navigation
- Section 2 - Customizing the Runtime Environment

Module 10 - Putting It All Together

- Section 1 - Review
- Lab 17 - Modeling a Process

Module 11 - Application Maintenance

- Section 1 - Tagname Dictionary Utilities
- Lab 18 - Deleting Tags
- Section 2 - Backing Up the Tagname Dictionary
- Section 3 - Publishing Your InTouch Application

Part 2:

Course Outline

Module 1 - Introduction

- Section 1 - Course Introduction
- Section 2 - InTouch HMI Overview
- Section 3 - System Requirements, Licensing, and Support

Module 2 - Plant Visualization

- Section 1 - Managing InTouch Applications Using the IDE
- Lab 1 - Importing Applications into the Galaxy
- Section 2 - Overview of I/O Connectivity
- Lab 2 - Connecting to the Data

Module 3 - Data Monitoring

- Section 1 - Value, Time, and Quality (VTQ)
- Lab 3 - Troubleshooting with VTQ
- Section 2 - Quality and Status Monitoring with ArchestrA Graphics
- Lab 4 - Implementing Quality and Status In ArchestrA Graphics
- Section 3 - I/O Failover
- Lab 5 - Monitoring I/O Communication

Module 4 - Techniques for ArchestrA Graphics

- Section 1 - Symbol Creation
- Lab 6 - Creating a Gel Button
- Section 2 - Modifying Existing Symbols
- Lab 7 - Modifying an Existing ArchestrA Symbol
- Section 3 - Scripting
- Lab 8 - Applying Scripts to ArchestrA Graphics
- Section 4 - Working with Assemblies
- Lab 9 - Creating a Mixer Assembly
- Section 5 - Referencing a Symbol
- Lab 10 - Referencing a Symbol

Module 5 - Advanced Tag Functionality

- Section 1 - Indirect Addressing
- Lab 11 - Using Indirect Addressing and Remote Data Access
- Section 2 - SuperTags

- Lab 12 - Creating SuperTags
- Section 3 - Dynamic Referencing
- Lab 13 - Dynamic Reference Addressing
- Section 4 - Remote Tag Referencing
- Lab 14 - Using Remote Tagname Referencing
- Section 5 - Redirecting Remote References

Module 6 - Security

- Section 1 - Application Security
- Section 2 - Security Models and Functionality
- Lab 15 - Implementing Security

Module 7 - ActiveX and .NET Controls

- Section 1 - ActiveX Controls
- Lab 16 - Using ActiveX with InTouch
- Section 2 - Using .NET Client Controls
- Lab 17 - Using Client Controls

Module 8 - Alarming

- Section 1 - Alarm Subsystem Overview
- Section 2 - Alarm Viewer Control
- Lab 18 - Working With the Alarm Viewer Control
- Section 3 - Alarm Suppression
- Lab 19 - Suppressing Alarms
- Section 4 - Alarm Tree View Control
- Lab 20 - Configuring an Alarm Tree View Control
- Section 5 - Alarm Hot Backup Manager
- Lab 21 - Configuring the Alarm Hot Backup Manager
- Section 6 - Alarm Printer
- Section 7 - Alarm Databasing Tools
- Lab 22 - Using the Alarm Database Logger & Alarm Database View Control
- Lab 23 - Configuring an Alarm Pareto Control

Module 9 - History

- Section 1 - Distributed History
- Lab 24 - Using InTouch as a History Provider
- Lab 25 - Using Wonderware Historian as a History Provider

Module 10 - Runtime Language Selection

- Section 1 - Runtime Languages
- Lab 26 - Runtime Language Selection for InTouch

Module 11 - Application Distribution

- Section 1 - Copying the Application
- Lab 27 - Publishing and Exporting the Application
- Section 2 - Network Application Development
- Lab 28 - Using Network Application Development
- Section 3 - Using InTouch on a Tablet PC
- Section 4 - Introduction to Terminal Services
- Section 5 - Introduction to Information Server

Module 12 - Implementation Considerations

- Section 1 - Implementation Considerations
- Section 2 - Services