



Course Syllabus - InTouch 10 for System Platform

Course Description

The InTouch 10.0 for System Platform Course is a three-day instructor-led course designed to teach the basic principles of how Wonderware Application Server 3.0 provides visualization of your plant galaxy data using ArchestrA Symbols within the InTouch 10.0 for System Platform software.

The focus of this course is to illustrate the use of visualization tools in the System Platform to provide a Human Machine Interface (HMI) utilizing connectivity to the galaxy, graphic symbols, animations and scripting features and functionality found in InTouch WindowMaker, ArchestrA Symbols, the ArchestrA Symbol Editor, and QuickScript.NET.

This course will also provide you with a fundamental understanding of how to utilize the alarm controls for alarm visualization, ActiveFactory™ controls for history visualization, and how to secure the application.

Course Objectives

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

- Create new InTouch Managed Applications
- Create new ArchestrA Symbols
- Work with the alarm controls for alarm visualization
- Apply the ActiveFactory controls for real-time and history trending
- Use ArchestrA security in an InTouch Managed Application

Audience

Engineers, application developers, system integrators, and other individuals whose jobs include creating and/or maintaining HMI applications for use with the Wonderware System Platform.

Prerequisites

The prerequisites for this course are:

- Attendance of the Wonderware System Platform - Part 1 course (knowledge of the Wonderware Application Server) and Part 2 course (knowledge of the ActiveFactory software) is recommended
- Manufacturing industry experience

- Some graphical design experience helpful

Wonderware System Platform 3.0 Part 1 course

In the prerequisite class, Wonderware System Platform 3.0 Part 1, you learned how to:

- Create new projects using ArcestrA Integrated Development Environment
- Model the plant floor using automation objects
- Work with the alarm and history configuration in the Galaxy
- Configure ArcestrA security in the Galaxy
- Troubleshoot Wonderware Application Server applications

Agenda

- Module 1 – Introduction -- This module
 - identifies the objectives and the agenda for the System Platform Course
 - describes the Wonderware System Platform and reviews the fundamental concepts and uses of the Wonderware System Platform.
 - introduces ArcestrA Graphics and creation of a managed InTouch application.
 - provides a detailed explanation of the system requirements necessary for System Platform, discusses Licensing details and covers Support services.
- Module 2 – InTouch -- In this module you will learn about:
 - the Development Environment -- WindowMaker, the Classic View and Project View panes, and the development environment, including defining toolbars and buttons in the WindowMaker interface.
 - ArcestrA Symbols – Such as how to embed ArcestrA Symbols found in the ArcestrA Symbol Library in an InTouch window.
 - the Runtime Environment -- This section discusses runtime customization, deployment of a managed InTouch Application, the InTouch Application Manager, and the InTouch runtime environment: WindowViewer.
- Module 3 – ArcestrA Symbols – In this module you learn about
 - the ArcestrA Symbol Editor -- This section covers the creation and manipulation of graphic objects, lines and outlines, text objects, images and bitmaps using the ArcestrA Symbol Editor.
 - Animation -- This section introduces animation concepts and applications.
 - How to edit Custom Properties -- This section describes configuration of Custom Properties.
 - The scripting language and how to generate Scripts --This section will explain the script types that can be associated with ArcestrA Symbols.
 - How to use some Advanced Features -- This section describes the Anchor, Dynamic Size Change, and Client Controls features of ArcestrA Graphics.
- Module 4 – ArcestrA Objects and Symbols
 - Proper use of ArcestrA Objects and Symbols -- This section describes how to include ArcestrA Symbols into ArcestrA Objects and how to properly use this feature when working on a containment relationship.

- Advanced Editing -- This section introduces advanced ArcestrA Symbol editing techniques.
- Quality and Status Display -- This section describes the Status element and its application in monitoring data status and quality in runtime.
- Module 5 – Alarm Visualization
 - ArcestrA Alarming Review -- This section provides a brief review of the concept of alarms and events and how ArcestrA handles them.
 - Alarm View Controls -- In this section you will learn about the Real-time and Historization alarm ActiveX controls available in InTouch.
- Module 6 – History Visualization
 - ArcestrA Historization Review -- This section reviews the concepts of historization covered in the Wonderware System Platform 3.0 Part 1 course.
 - ActiveFactory Controls -- This section introduces the ActiveFactory .NET controls available for use in ArcestrA Symbols.
- Module 7 – Security
 - ArcestrA Security Review -- This section provides a brief review of ArcestrA Security.
 - Bulletproofing the Application -- This section covers customization of the runtime environment to bulletproof the application.
- Module 8 – Runtime Language Switching
 - Runtime Language Switching