



Wonderware Training Course Descriptions

InTouch 10 HMI –Advanced Application Development

P/N WW-IT-ADV

InTouch® 10.0 HMI Advanced Application Development Course is a 4-day instructor led class designed to teach advanced functionality of the Wonderware® visualization module. The focus of this course is on distributed applications. Students will gain the InTouch knowledge necessary to develop networked HMI systems for their specific plant floor environment using the following features/functionality: ArchedrA Graphics, Network Application Development (NAD), Indirect Tags, Dynamic Reference Addressing, Remote Tagname Referencing, SuperTags, I/O Failover, InTouch and Operating System Security, Distributed Alarms, Distributed History, SuiteLink, OPC, VTQ, .NET, ActiveX, Services and Internet functionality. Students will also be introduced to InTouch for Terminal Services, and on a Tablet PC, as well as a demonstration of how to view their InTouch applications over their intranet or the internet using the Wonderware® Information Server web portal.

Objective

Upon completion of this course, students should be able to:

- Create client/server InTouch applications and distribute them over networks
- Use InTouch as part of the Wonderware® System Platform
- Implement advanced tag strategies
- Configure I/O Failover
- Configure security
- Distribute alarms and history
- Secure InTouch Applications
- Work with ActiveX controls
- Develop communication solutions
- Create ArchedrA Graphics

Audience

System integrators, plant floor operators and managers, system administrators, and other individuals who need to use the advanced features of InTouch HMI in a distributed environment.

Prerequisites

The prerequisites for this course are:

- Completion of the InTouch™ HMI 10.0 Fundamentals of Application Development Course
- Familiarity with networking
- Extensive knowledge of Microsoft Windows
- InTouch scripting experience
- Manufacturing industry experience
- Exposure to Wonderware® Application Server helpful

Course Outline

Module 1 Introduction

Section 1 - Course Introduction

Section 2 - InTouch HMI and ArchedrA Integration

Lab 1 - Creating and Importing Applications Into the Galaxy

Module 2 Fundamentals of Application Development

Section 1 - Review of Basics

Lab 2 - Standard Tag Addressing

Section 2 - Using SmartSymbols

Module 3 ArchestrA Graphics

Section 1 - Managing Symbols

Section 2 - Using ArchestrA Symbols in WindowMaker

Lab 3 - Symbol Creation

Section 3 - Using Custom Properties

Section 4 - Animating Graphic Elements

Lab 4 - Custom Properties and Animation

Section 5 - Associating Scripts with Symbols

Lab 5 - Using InTouch

Lab 6 - Scripting

Module 4 Advanced Tag Functionality

Section 1 - Indirect Addressing

Lab 7 - Indirect Addressing and Remote Data Access

Section 2 - SuperTags

Lab 8 - Creating SuperTags

Section 3 - Dynamic Referencing

Lab 9 - Dynamic Reference Addressing (DRA)

Section 4 - Remote Tag Referencing

Lab 10 - Remote Tagname Referencing

Section 5 - Redirecting Remote References

Lab 11 - Dynamic Reference Addressing (DRA)

Section 6 - I/O Properties at Runtime

Module 5 Data Monitoring

Section 1 - I/O Failover

Lab 12 - Monitoring I/O Communication

Section 2 - Value, Time and Quality (VTQ)

Lab 13 - Troubleshooting With VTQ and Status Points

Section 3 - Quality and Status in ArchestrA

Lab 14 - Using Quality With ArchestrA Graphics

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 - .Net Controls and ArchestrA Graphics

Lab 17 - Using .Net Controls and ArchestrA Graphics

Module 8 Alarm Distribution

Section 1 - Alarm Subsystem Overview

Section 2 - Alarm Viewer Control

Lab 18 - Working With the Alarm Viewer Control

Section 3 - Alarm Suppression

Lab 19 - Alarm Suppression

Section 4 - Alarm Tree View Control

Lab 20 - Configure an Alarm Tree View Control
Section 5 - Alarm Hot Backup Manager
Lab 21 - Configure the Alarm Hot Backup Manager
Section 6 - Alarm Printer
Section 7 - Alarm Databasing Tools
Lab 22 - Alarm Database Logger and Alarm Database View Control
Lab 23 - Configure an Alarm Pareto Control

Module 9 History Distribution

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

Module 10 Runtime Language Switching

Section 1 - Runtime Languages
Lab 26 - Configuring Languages for Runtime

Module 11 Application Distribution

Section 1 - Network Application Development and the IDE11
Lab 27 - Deploying Applications
Section 2 - Publishing an Application from the IDE
Lab 28 - Publishing the Application
Section 3 - Standalone Applications and NAD
Lab 29 - Using Network Application Development
Section 4 - Using InTouch on a Tablet PC
Section 5 - Introduction to Terminal Services
Section 6 - Introduction to Information Server

Module 12 Implementation Considerations

Section 1 - Implementation Considerations
Section 2 - Services