

Course Description

This Operations Management Interface for System Platform 2017 course is a 4-day, instructor-led class designed to provide an overview of the features and functionalities released with Operations Management Interface for System Platform. It covers the components and capabilities of the software, as well as topics to help you build and deploy an Operations Management Interface for System Platform visualization application. It also introduces tools for creating graphics, visualizing alarms and events, visualizing trends, and implementing security in an Operations Management interface for System Platform application. Hands-on labs are provided to reinforce the knowledge necessary to use the software.

Objectives

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

- Describe Operations Management Interface for System Platform visualization components
- Create display layouts for visualization applications
- Create and run visualization applications
- Describe situational awareness concepts
- Create and use graphics
- Implement navigation for visualization applications
- Implement visualization application security
- Implement alarm visualization
- Implement trend visualization
- Implement historical playback visualization

Audience

Individuals who need to configure or modify Operations Management Interface for System Platform applications

Prerequisites

Knowledge of the following tools, features, and technologies is required:

Industrial automation software concepts

From the Application Server software product:

- ArchestrA IDE
- Automation objects
- Alarms of attributes
- Historization of attributes
- Security
- Deployment model
- Plant model
- QuickScript .NET scripting language

Course Outline

Module 1 – Introduction

Section 1 – Course Introduction

This section describes the objectives, prerequisites, intended audience, and agenda for the course.

Section 2 – System Platform Overview

This section describes the fundamental concepts about System Platform, including its clients, components, and services. It also introduces the ArcestrA technology.

Section 3 – ArcestrA Visualization

This section introduces ArcestrA visualization concepts, and describes Operations Management Interface for System Platform as one of the visualization clients of System Platform.

Section 4 – System Requirements and Licensing

This section describes system requirements for System Platform and introduces the licensing model.

Module 2 – Getting Started

Section 1 – Introduction

This section introduces features and components of Operations Management Interface for System Platform, including screen profiles, layouts, and panes.

Section 2 – Introduction to ArcestrA Symbols

This section introduces how to create and use ArcestrA symbols.

Section 3 – Screen Profiles

This section describes how to create and configure screen profiles and screens using the Screen Profile Editor.

Section 4 – Layouts and Panes

This section introduces how to create and configure layouts and panes using the Layout Editor.

Section 5 – ViewApps

This section explains the ViewApp object, including its editor, capabilities, and components. It also describes how to create and run an Operations Management Interface for System Platform view application (ViewApp).

Module 3 – ArcestrA Symbols

Section 1 – Symbol Editor

This section describes the ArcestrA Symbol Editor, including an overview of its interface and properties of embedded graphics.

Section 2 – ArcestrA Symbols with Objects

This section introduces using ArcestrA symbols with automation objects.

Section 3 – Tools and Animations

This section describes element tools and menus available in the Symbol Editor, symbol and graphic element properties, and visualization and interaction animations.

Section 4 – Custom Properties

This section provides an overview of custom properties for ArcestrA symbols.

Module 4 – Application Customizations

Section 1 – Content Types

This section describes content types and explains how to apply content types to symbols, panes, and layouts.

Section 2 – Custom Navigation

This section describes how to customize the built-in navigation in a ViewApp.

Section 3 – Content Presenter App

This section describes how to automatically generate graphic displays using the ContentPresenter ArcestrA App in a ViewApp.

Section 4 – Layout and Pane Customizations

This section describes how to customize layouts and panes for a ViewApp.

Section 5 – Galaxy Styles

This section explains how to work with the Galaxy Style Library.

Module 5 – Security

Section 1 – Security Overview

This section provides an overview of ArcestrA security, including authentication modes, permissions, roles, and users.

Section 2 – ViewApp Security

This section explains how to implement security in a ViewApp.

Section 3 – Signed Writes

This section explains security classifications for object attributes, including configuring Secured Writes and Verified Writes and using them at runtime.

Module 6 – Alarms and Events Visualization

Section 1 – ArcestrA Alarming Overview

This section provides an overview of ArcestrA alarming.

Section 2 – Live Alarm Visualization

This section describes how to use the AlarmApp ArcestrA App to display current and recent alarms and events. It also explains how to use AlarmApp to manage alarms at runtime.

Section 3 – Logged Alarms and Events Visualization

This section explains using the AlarmApp ArcestrA App for logged alarms and events.

Module 7 – Trends and Historical Playback

Section 1 – ArcestrA Historization Overview

This section provides an overview of ArcestrA historization.

Section 2 – Real-Time Trending

This section describes the Trend Pen element and explains trend symbols from the Situational Awareness Library.

Section 3 – Historical Trending

This section describes how to use the InSightApp ArcestrA App.

Section 4 – Historical Playback

This section describes how to configure and start the historical playback service, and how to implement historical playback in a ViewApp.

Module 8 – Scripting in ArcestrA Graphics

Section 1 – Introduction

This section describes symbol scripts and action scripts.

Section 2 – Show Graphics

This section explains the ShowGraphic() script function.