

## **COURSE DESCRIPTION**

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

## **OBJECTIVES**

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

- Understand OMI visualization components
- Create display layouts for visualization applications
- Create and run visualization applications
- Understand situational awareness concepts
- Create and use graphics
- Create and use namespaces and attributes
- 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 and modify AVEVA OMI applications.

## **PREREQUISITES**

- Knowledge of industrial automation software concepts
- Prior Q-mation System Platform 1 course completion (or) equivalent working System Platform experience.
- Specifically, knowledge of the following from the AVEVA™ Application Server software product:
  - System Platform IDE
  - Automation objects
  - Alarms of attributes
  - Historization of attributes
  - Security
  - Deployment and Plant models
  - QuickScript .NET scripting language

## **COURSE OUTLINE**

### **OMI CLIENT FOR SYSTEM PLATFORM**

#### **MODULE 1 - INTRODUCTION**

- Section 1 – Course Introduction
- Section 2 – System Platform Overview
  - *Lab 1 – Creating and Deploying a Galaxy*
- Section 3 – Visualization Overview
- Section 4 – Encrypted Communication
- Section 5 – System Requirements and Licensing

#### **MODULE 2 - GETTING STARTED**

- Section 1 – Introduction
- Section 2 – Screen Profiles
- Section 3 – Layouts and Panes
  - *Lab 2 – Creating a Screen Profile and Layout*
- Section 4 – ViewApps
  - *Lab 3 – Creating and Running a ViewApp*

#### **MODULE 3 - INDUSTRIAL GRAPHICS**

- Section 1 – Introduction to Industrial Graphics
- Section 2 – Graphics Editor
  - *Lab 4 – Using Situational Awareness Dashboard Symbols*
- Section 3 – Industrial Graphics with Objects
  - *Lab 5 – Creating Symbols for Automation Objects*
- Section 4 – Tools and Animations
  - *Lab 6 – Creating Symbols for Containment Objects*
- Section 5 – Custom Properties
  - *Lab 7 – Creating a Custom Symbol*
- Section 6 – Galaxy Styles
  - *Lab 8 – Working with Galaxy Styles*

## **MODULE 4 - VIEWAPP APPLICATION CUSTOMIZATIONS**

- Section 1 – Link a Layout as Content in an Object
  - *Lab 9 – Linking a Layout as Content in an Object*
- Section 2 – Layout and Pane Customizations
  - *Lab 10 – Enhancing the ViewApp Layout*
- Section 3 – Custom Navigation
  - *Lab 11 – Rebuilding the Navigation Model*

## **MODULE 5 - EXTERNAL CONTENT**

- Section 1 – Introduction to External Content
  - *Lab 12 – Creating External Content for a ViewApp*

## **MODULE 6 - WIDGETS**

- Section 1 – Introduction
  - *Lab 13 – Adding a Home Carousel*

## **MODULE 7 - VIEWAPP NAMESPACES**

- Section 1 – Introduction
  - *Lab 14 – Using Built-in ViewApp Namespaces*
- Section 2 – Custom ViewApp Namespaces and Attributes
  - *Lab 15 – Creating and Using Custom ViewApp Namespaces and Attributes*

## **MODULE 8 - SECURITY**

- Section 1 – Security Overview
- Section 2 – ViewApp Security
  - *Lab 16 – Implementing Security in a ViewApp*
- Section 3 – Signed Writes
  - *Lab 17 – Signing Writes from a ViewApp*

## **MODULE 9 - ALARMS AND EVENTS VISUALIZATION**

- Section 1 – Alarming Overview
  - *Lab 18 – Adding Alarm Information to Graphics*
- Section 2 – Live Alarm Visualization
  - *Lab 19 – Creating a Live Alarm Display and Managing Alarms at Runtime*
- Section 3 – Logged Alarms and Events Visualization
  - *Lab 20 – Creating a Historical Alarm Display*

## **MODULE 10 – TRENDS**

- Section 1 – Historization Overview
- Section 2 – Realtime Trending
  - *Lab 21 – Adding Trending to Graphics*
- Section 3 – Historical Trending
  - *Lab 22 – Using the AVEVA Insight App for Historical Trending*

## **MODULE 11 – HISTORICAL PLAYBACK**

- Section 1 – Historical Playback
  - *Lab 23 – Implementing Historical Playback in a ViewApp*

## **MODULE 12 – .NET CONTROLS USAGE**

- Section 1 – Introduction
  - *Lab 24 – Working with .NET Controls*

## **MODULE 13 – SCRIPTING IN GRAPHICS**

- Section 1 – Introduction
- Section 2 – Symbol Scripts
  - *Lab 25 – Creating a Back Button for Navigation*
- Section 3 – Layout Scripts
- Section 4 – Graphic Client Functions
  - *Lab 26 – Using the ShowContent() Function*
  - *Lab 27 – Using the ShowGraphic() Function*