

# APPLICATION SERVER

**Duration: 3 days, Instructor-led**

## Course Description

The Application Server course is a 4-day, instructor-led class designed to provide a fundamental understanding of the features and functionality of Application Server. This course provides lectures and hands-on labs to supply and reinforce the knowledge necessary to use the ArchestrA tools and services in the System Platform for plant modeling. The class will demonstrate how to Application Server to utilize the ArchestrA technology to connect to field devices, process data, run scripts, handle alarms, and historize alarms and events. This is achieved using features and functionality such as Automation Objects, templates, instances, the ArchestrA Integrated Development Environment (IDE), and the QuickScript .NET scripting engine.

This course also provides a fundamental understanding of Galaxy maintenance, real-time alarm recording and security settings, and how to setup redundancy.

## Objectives

- Upon completion of this course, you will be able to:
- Create and deploy new applications using ArchestrA IDE
- Model the plant floor using automation objects
- Acquire data from field devices
- Work with alarm and history configuration in a Galaxy
- Define the security model for a Galaxy
- Configure application-level and device integration redundancy

## Audience

- Application developers
- Engineers
- System integrators
- Other individuals who use Application Server in their manufacturing processes

## Prerequisites

- Manufacturing industry experience

## Course Contents

### Module 1 : Introduction

- Lab 1 – Creating the Galaxy
- Lab 2 – Creating Global Derived Templates

### Module 2 : Application Planning

### Module 3 : Application Infrastructure

- Lab 3 – Creating the Plant and Deployment Models
- Lab 4 – Using Object Viewer
- Lab 5 – Configuring a DA Server
- Lab 6 – Configuring the Device Integration Object

### Module 4 : Application Objects

- Lab 7 – Modelling the Heat Exchanger
- Lab 8 – Configuring Change Control and Propagation
- Lab 9 – Modelling the Mixer

### Module 5 : Alarms and History

- Lab 10 – Configuring Alarms
- Lab 11 – Configuring History

### Module 6 : Galaxy Maintenance

- Lab 12 – Exporting and Importing Objects
- Lab 13 – Configuring Instances Through a .CSV File

### Module 7 : Security

- Lab 14 – Configuring Security
- Lab 15 – Using Security

### Module 8 : Redundancy

- Lab 16 – Configuring Application Redundancy
- Lab 17 – Configuring the Redundant

### Module 9 : Introduction to QuickScript.NET.

- Lab 18 – Adding Auto Reconnect to the DDESuiteLinkClient Object
- Lab 19 – Switching Back to the Primary Redundant Node
- Lab 20 – Scripting Valve Status
- Lab 21 – Scripting Custom Alarms