



APPLICATION SERVER TRAINING

TRAINING DESCRIPTION

The **Application Server Training** 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 ArchedrA tools and services in the System Platform for plant modelling.

The class will demonstrate how to Application Server to utilize the ArchedrA 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 ArchedrA 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.

TRAINING OBJECTIVES

- Upon completion of this course, you will be able to:
- Create and deploy new applications using ArchedrA 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 & PREREQUISITES

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

TRAINING SCHEDULE

This training course has been developed based on the following daily schedule:

Daily Session	8 hours	Usually from 9:00 AM to 5:00 PM
Lunch	1 hour	12:00 PM to 1:00 PM
Breaks	2 x 20 minutes	10:00 AM and 3:00 PM



Based on the daily schedule above, the topics for this training course are estimated to break as follows:

Day 1	Ice-Breaking 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 for Data Simulation
Day 2	Module 4 – Application Objects Lab 6 – Modelling Meters Lab 7 – Configuring Change Control and Propagation Lab 8 – Modelling the Mixer Module 5 –Device Integration Lab 9 – Configuring the IO Server Lab 10 – Configuring the Device Integration Object Lab 11 – Connecting the Mixer to the Field Lab 12 – Configuring the Redundant Module 6 – History Lab 12 – Configuring and Retrieving History
Day 3	Module 7 – Alarms and Events Lab 14 – Configuring and Interacting with Alarms Module 8 – Object Management Lab 15 – Exporting and Importing Objects Lab 16 – Configuring Instances Using a .CSV File Module 9 – Security Lab 17 – Configuring Security Lab 18 – Implementing Object Security
Day 4	Module 10 – Application Redundancy Lab 19 – Configuring Application Redundancy Module 11 – Introduction to QuickScript.Net Lab 20 – Adding Auto Reconnect to the DDESuiteLinkClient Object Lab 21 – Switching Back to the Primary Redundant Engine Lab 22 – Scripting Valve Status Lab 23 – Scripting Custom Alarms Lab 24 – Creating an Averager Object Module 12 – Galaxy Backup and Restore