



AVEVA™ EDGE R2 TRAINING

TRAINING DESCRIPTION

The AVEVA™ Edge R2 course is a 4-day, instructor-led class designed to provide a fundamental understanding of the features and functionality of the AVEVA Edge software. The software enables users and machine builders to quickly create intuitive, secure, and highly maintainable HMI applications for intelligent machines on a variety of platforms, including Windows, Windows IoT, and Linux, as well as on low-level devices. The course provides lectures and hands-on labs to supply and reinforce the knowledge needed to use the software to develop an HMI for a plant floor environment, using basic software elements. The HMI application will be developed using AVEVA Edge software features, such as tags, classes, indirect addressing, animation, symbols, scripting, alarms, real time and historical trending, reports, and recipes. The HMI application also will have connections to databases, including SQL Server, Oracle, and MySQL; AVEVA™ Historian; PLC drivers; and OPC UA. It will provide remote troubleshooting, remote client project security, and application backup.

TRAINING OBJECTIVES

- Create a complete HMI application
- Configure tags
- Implement basic navigation
- Create symbols and animation.
- Configure alarms and events
- Create trends and recipes
- Describe and use scripting
- Configure a driver to communicate with a PLC
- Configure security
- Connect to a database

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 – Course Introduction Lab 2 – AVEVA Edge Overview Module 2 – Installation and Licensing Lab 3 – Installation Lab 4 – Licensing Module 3 – Getting Started Lab 5 – Studio: Creating the Training Project Lab 6 – Creating Project Tags Lab 7 – Distributing an Edge application Module 4 – Communicating with External Devices Lab 8 – Communication drivers Lab 9 – POC UA Lab 10 – Tag Integration Lab 11 – Monitoring and Troubleshooting
Day 2	Module 5 – Native Screens and Native Graphics Lab 12 – Native Screens and Screen Groups Lab 13 – Shapes, Formatting and Active Objects Lab 14 – Animations and the Symbols Library Lab 15 – Project Localization Module 6 – Overview of Scripting Lab 16 – Client-Side Scripts Lab 17 – background Tasks Module 7 – Alarms and Events Lab 18 – Working with Alarms Lab 19 – Working with Events Module 8 – Data Logging and Display Lab 20 – Trends Lab 21 – Grid Control
Day 3	Module 9 – Recipes and Reports Lab 22 – Using Recipes Lab 23 – Using Reports Module 10 – Project Security Lab 24 – Security Overview Lab 25 – Protecting Your Intellectual Property Module 11 – Remote Clients Lab 26 – Configuring and Using Mobile Access Module 12 – Using Databases Lab 27 – The Projects Database Lab 28 – Database/ ERP Task



Day 4



Module 13 – Integrating with Other AVEVA Software Products

Lab 29 – AVEVA Historian

Lab 30 – System Platform

Module 14– Industrial Graphics

Lab 31 – Industrial Graphics and Situational Awareness Visualization

Lab 32 – Using the Industrial Graphics editor

Lab 33 – Custom Properties and Animations in Symbols

Lab 34 – QuickScript.Net for Industrial Graphics