



Course Description: Equipment Operations Module

The *Equipment Operations Module* course is a 2-day, instructor-led class that provides you with a fundamental understanding of the Wonderware® Equipment Operations Module. The Equipment Operations Module works in conjunction with the Wonderware System Platform to provide formula management capabilities and real-time production events collection to an ArcestrA® application.

The Equipment Operations Module includes the Production Events Module and the new Formula Management Module. The Formula Management Module adds fixed procedure formula management to a Wonderware Application Server application. It allows you to create, load, edit, and download formulas within the ArcestrA environment to other objects or external devices. The Production Events Module captures and records information about production events in the context of the logical plant model. It allows you to monitor, report, and analyze production data related to genealogy of materials (lots, batches, or serial numbers), equipment usage, personnel associated with production activities, and other relevant production events.

OBJECTIVES

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

- Install the Equipment Operations Module components
- Create formula templates and formulas
- Configure and use, both, the Formula Management and Production Events objects in an existing Wonderware Application Server application
- Access production data reports from within Wonderware Information Server (formerly known as SuiteVoyager™)

AUDIENCE

Engineers, application developers, system integrators, and other individuals whose jobs include using Wonderware Application Server for managing formulas and collecting production information.

PREREQUISITES

The prerequisites for this course are:

- Wonderware System Platform – Part 1 course (formerly known as Industrial Application Server course)
- Wonderware Information Server (SuiteVoyager™) knowledge
- Manufacturing industry experience

COURSE OUTLINE

Module 1 – Introduction

- Section 1 – Course Introduction
- Section 2 – Equipment Operations Module Introduction
- Section 3 – Installation and Licensing
 - Lab 1 – Setting Up the Galaxy
- Section 4 – Production Modeling

Module 2 – Formula Management

- Section 1 – Formula Management Introduction
- Section 2 – Formulas
 - Lab 2 – Creating and Importing a Formula Template File
- Section 3 – Formula Manager Object
 - Lab 3 – Adding a FormulaManager Object

Module 3 – Production Events

- Section 1 – Production Events Introduction
- Section 2 – Production Events Objects for Material Events
 - Lab 4 – Adding a MaterialConsumedActual Object
 - Lab 5 – Adding a MaterialProducedActual Object
 - Lab 6 – Adding a MaterialMovedActual Object
- Section 3 – Production Events Objects for Status Events
 - Lab 7 – Adding an EquipmentActual Object
- Section 4 – Validation
 - Lab 8 – Adding Validation to the Objects

Module 4 – Genealogy

- Section 1 – Overview of Genealogy
- Section 2 – Internal Genealogy
 - Lab 9 – Configuring Genealogy Within the Same Segment
 - Lab 10 – Configuring Genealogy Between the Segments
- Section 3 – Lot-Based and Serial Number-Based Genealogy
 - Lab 11 – Configuring Lot-Based Genealogy

Module 5 – Troubleshooting and Maintenance

- Section 1 – Production Database Maintenance Utility
- Section 2 – Production Database Setup
- Section 3 – ArchestrA Logger

Module 6 – Production Database Views

- Section 1 – Overview of Production Database Views
- Section 2 – Description of Formula Management Views
- Section 3 – Description of Production Events Views