

## Operations Orchestration 10.x Advanced Authoring

**Duration: 3 Days    Course Code: OO320    Version: 10.x**

### Overview:

This three-day course introduces students to advanced concepts of flow development and usage of the Operations Orchestration (OO) software along with some integration. OO is part of Cloud Automation solutions. This course introduces best practices related to content authoring, structuring, and promotion. The execution order internal to OO is explained in detail. This course further focuses on advanced topics including using scriptlets, using Representational State Transfer (REST) to interact with OO Central, using Simple Object Access Protocol (SOAP) to interact with web services and using semaphores. A number of topics dive deeper into the use of OO to automate tasks, such as creating PDFs and interfacing with Subversion (SVN) from within OO flows. A separate, full day topic discusses the use of CloudSlang, an open source, textual authoring tool that integrates with OO. The course consists of focused, task-oriented lectures, text, and a series of detailed hands-on labs to teach the course material to the student. The hands-on labs for this course starts with version 10.70 of the OO software and ends with version 10.80.

### Target Audience:

This course is intended for Workflow developers, System Administrators, Automation Operators, DevOps integrators, Other personnel responsible for the implementation of OO

### Objectives:

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| <ul style="list-style-type: none"><li>■ <b>After you complete this course you will be able to:</b></li><li>■ Describe how to align flow authors to a common way to develop, document, package, and deliver OO 10.x content. ?</li><li>■ Describe how OO executes workflows in terms of component execution order. ?</li><li>■ Execute scriptlet methods in OO to manage flow data and flow execution ?</li><li>■ Summarize the concepts related to semaphores and how to use them in OO ?</li><li>■ Describe the use of the Source Control Management (SCM) tool and perform advanced tasks ?</li></ul> | <ul style="list-style-type: none"><li>■ Extend OO through the use of external libraries ?</li><li>■ Use the Web Services wizard and create flows using the newly generated operations ?</li><li>■ Describe and use REST calls ?</li><li>■ Write flows for Cloud Service Automation (CSA) lifecycle actions ?</li><li>■ Describe integration content ?</li><li>■ Create workflows using CloudSlang and execute them on OO Central</li></ul> |
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### Prerequisites:

**Attendees should meet the following prerequisites: ?**

- OO220 – Operations Orchestration 10.x Flow Development ?
- Networking terms and concepts ?
- Web browsers and telnet or Secure Shell (SSH) connection methods ?
- Different operating system environments

### Testing and Certification

**Recommended preparation for exam(s):**

- OO10.x ASE

## Content:

### Module 1: Course Overview

- Introductions ?
- Class schedule and class logistics ?
- Related courses ?
- Documentation ?
- Lab environment details

### Module 2: Best Practices for Content Authoring, Structuring, and Promotion ?

- Align flow authors to a common way to develop, document, package, and deliver OO 10.x content

### Module 3: Understanding Execution Order ?

- Describe how OO executes workflows in terms of component execution order ?
- Describe how OO assigns execution priority to the various component types

### Module 4: Scriptlets ?

- Describe scriptlets and their use in OO ?
- Execute OO scriptlet methods to manage flow data and flow execution ?
- Analyze sample flows that use scriptlets ?
- Execute scriptlets in flows

### Module 5: Using Semaphores ?

- Summarize the concept of semaphores and how to use semaphores in OO ?
- Describe sample flows

### Module 6: SCM Management ?

- Use the Source Control Management (SCM) tool and perform advanced tasks that you might encounter when projects and items are shared among multiple authors

### Module 7: Generate PDFs ?

- Extend OO with PDF creation functionality and use it

### Module 8: Web Services ?

- Explain how OO uses web services ?
- Use the Web Services wizard to convert a Web Service Description Language (WSDL) file into OO operations ?
- Explain how the imported web service content works ?
- Create a flow that interoperates with an external web service provider ?
- Use filters to extract data elements from a web service (SOAP) response ?
- Use other operations to interoperate (HTTP RAW Post and Invoke Method 2) with web service providers

### Module 9: REST Calls ?

- Explain how OO uses RESTful services ?
- Use the REST wizard to convert a Web Application Description Language (WADL) file into OO operations ?
- Explain how the imported content works ?
- Describe useful operations to treat and manipulate the content using REST wizards
- Module 10: Writing Flows for CSA ?
- Explain how OO and CSA communicate back and forth ?
- List the required flow inputs ?
- Use the Get Artifact Properties flow to request info from CSA ?
- Use the Update Service Component operation to report back to CSA

### Module 11: Integration Content (Server Automation and Service Manager) ?

- Explain how OO integrates and ISV software, such as Server Automation (SA) and Service Manager (SM) ?
- Describe the integration of content pack structures ?
- List the OO content that interacts with SA and SM

### Module 12: CloudSlang ?

- Describe Git ?
- Describe CloudSlang ?
- Use CloudSlang standalone and within OO

## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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