Flow Development using OO Studio (OO220-202211)

ID OO220-202211 **Price** on request **Duration** 4 days

Who should attend

This course is intended for:

- Workflow developers
- System Administrators
- Automation Operators
- DevOps integrators
- Other personnel responsible for the implementation of OO

Prerequisites

To be successful in this course, you should have the following prerequisites or knowledge:

- Networking terms and concepts
- Web browsers and Telnet or SSH connection methods
- Different operating system environments

Course Objectives

Upon successful completion of this course, you should be able to:

- Run and manage automated workflows using Operations Orchestration (OO)
- Perform a wide range of system administration, monitoring, and management tasks using OO Central
- Author, maintain, document, and package new automated workflows using the OO Studio application
- Test and debug the flows locally and remotely
- Work with Looping and Iteration operations
- Apply parallel processing methods to your flows in OO
- Use responses, rules, and transitions to control flow run
- Use XML operations and XML filters for processing XML content in OO
- Work with JavaScript Object Notation (JSON) operations
- Describe how OO executes workflows in terms of component execution order
- Execute scriptlet methods in OO to manage flow data and flow execution
- Summarize the conceptsrelated to semaphores and how to use them in OO
- Describe the use of the Source Control Management (SCM) tool and perform advanced tasks
- Describe and use Representational State Transfer(REST) calls
- Write flows for OBM Integration
- Run and manage automated workflows using Designer

Course Content

Module 1: Course Overview

Module 2: Introduction to Operations Orchestration

- Describe OO and its key benefits
- Explain the system and functional architecture of OO
- Identify role-based privileges in OO
- Discuss the key capabilities of OO
- Describe collaborative development in OO
- Define content packs, operations, and projects
- Explain the improvements in OO

Module 3: Introduction to Flow Authoring

- Describe the OO Studio flow authoring environment
- Explain the components of the OO Studio application
- Explain a flow and describe the main components of a flow
- Explain the differences between:
  - A flow and an operation in OO
  - An operation and a step in OO
- Author a simple flow
- Test the flow in the OO Studio Debugger
- Modify a flow and test the modified flow
- Explain the purpose of OO Studio Debugger
- Explore the panes in the Debugger window

Module 4: Flow Management with OO Central

- Explain the role of OO Central in deploying automated workflows
- Describe the OO Central UI
- Deploy projects and dependencies
- Run flows, monitor progress, and evaluate results
- Set flow permissions
- View the dashboard and reports
- Visualize a deployed workflow
- Enable authentication and add local users
- Set the security banner

Module 5: Inputs

- Explain inputs and flow variables
- Explain local and global variables
- Define inputs in the Inspector window
- Use input data flow options
- Add, remove, replace, and disable inputs
- Create and assign system properties to inputs
- Use login credentials with a stored system account
- Create and use a selection list as an input
- Validate an input using a created system evaluator
- Work with flow inputs

Module 6: Results and Filters

- Explain how to use results to create flow variables that contain operation outputs
- Use the Step Inspector window's Results tab to add results to steps
- Use the Filter Inspector window to filter a result so only the data required by the flow is assigned to a result flow variable
- Use assignment actions to specify which action is taken for assigning the final result

Module 7: Operations, Responses, Transitions, and Subflows

- Explain how operations and subflows are used as steps in a flow
- Create new operations
- Modify operation properties
- Define responses and response rules
- Explain transition properties
- Use subflows in a parent flow
- Explain best practices for working with subflows
- Assign step results in a subflow to output fields for use in the parent flow
- Work with the Properties editor of a subflow

Module 8: Looping and Iteration Operations

- Explain how OO handles iterations and related tasks, such as list compilation
- Perform looping, iteration, and related tasks for the content in the OO library
- Author a flow that uses iteration and list compilation
- Create a flow that uses the counter operation

Module 9: Parallel Processing

- Explain the implementation of the following multiprocessing methods in your flows:
- Multi-instance step
- Non-blocking step
- Parallel-splitstep
- Describe how to handle flow data in multi-processing operations
- Create flows that use a multi-instance step
- Create flows that use a parallel-split step

Module 10: Using XML and JSON Operations

- List and describe the operations and filters available in OO for working with XML
- Explain how to use iterative operations to compile data extracted from XML documents
- Build a flow that validates and parses an XML document
- Use XML filters to extract data from an XML document
- Build a flow that validates, and parses XML data returned from a web service Simple Object Access Protocol (SOAP) inquiry
- Use XSL Transform to represent XML as HTML
- Describe the concepts of JavaScript Object Notation (JSON)
- Work with JSON in OO

Module 11: Using Integration Content

- Describe the integration of content pack structures
- Explain about OO-OBM Integration
- Write flowsfor OBM
- Monitor the Operations Agent

Module 12: Working with OO Wizards

- Explain the benefits and requirements of the PowerShell wizard
- Configure the PowerShell wizard and import flows
- Verify and debug the generated flows
- Explain how OO uses RESTfulservices
- Use the REST wizard to convert a Web Application Description Language (WADL) file into OO operations
- Explain how the imported content works
- Describe useful operationsto treat and manipulate the content imported using REST wizards

Module 13: Scriptlets

- Describe scriptlets and their use in OO
- Execute OO scriptlet methodsto manage flow data and flow execution
- Analyze sample flowsthat use scriptlets
- Execute scriptlets in flows

Module 14: Execution Order

- Describe how OO executes workflows in terms of the component execution order

- Describe how OO assigns execution priority to the various component types

Module 15: Using Semaphores

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

Module 16: Remote Debugging

- Explain the need for and benefits of remote debugging
- Configure remote debugging:
  - Explain the prerequisites for remote debugging
  - Explain the remote debugging lifecycle
  - Explain the permissions for remote debugging
  - Add or edit OO Central server connections
- Configure the proxy settings for debugging on a remote OO Central environment
- Rerun a flow

Module 17: Using Source Control Management (SCM)

- Use the Source Control Management (SCM) tool
- Perform advanced tasksthat you might encounter when projects and items are shared among multiple authors.

Module 18: Using OO Workflow Designer

- Explore the OO Workflow Designer
- Create and debug a flow using OO Workflow Designer

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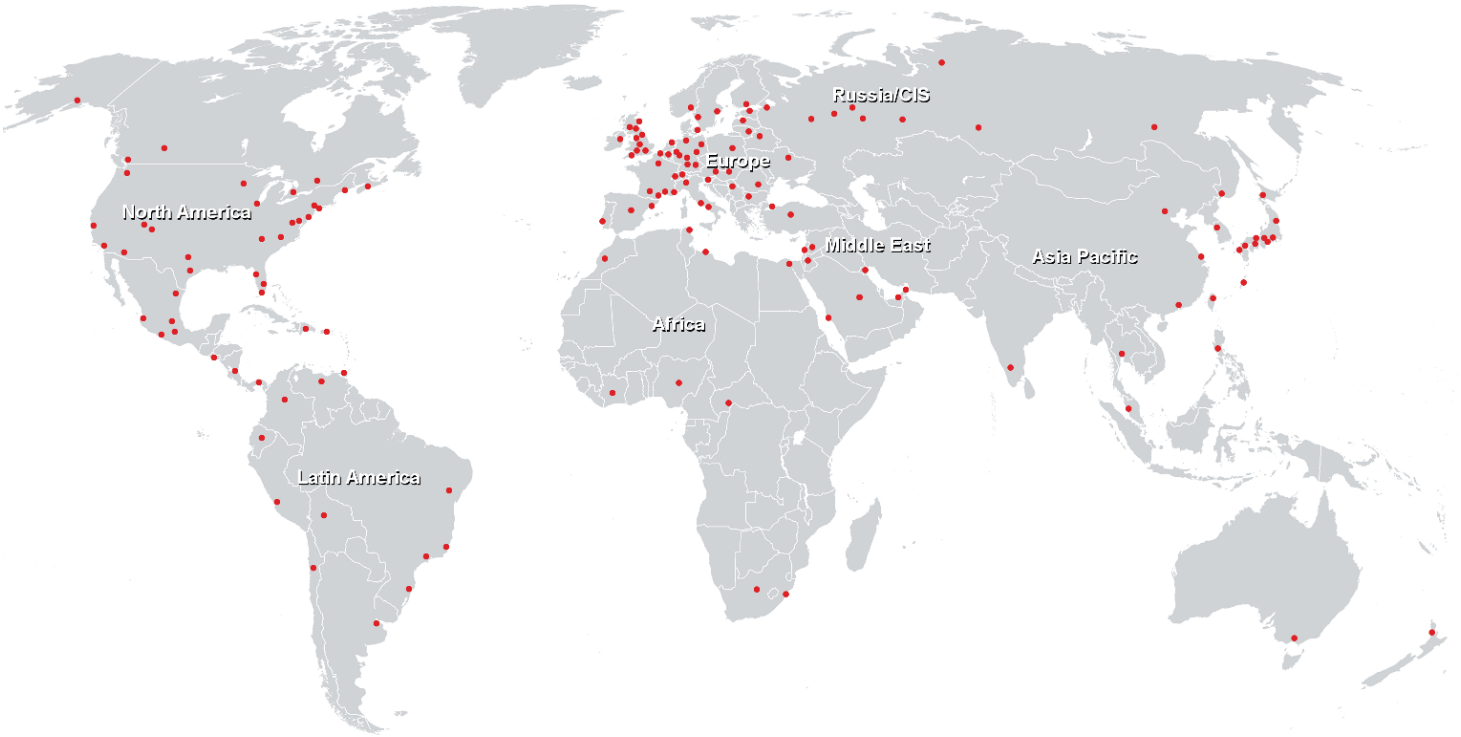

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