

Szkolenie: Micro Focus CMS350 - Configuration Management System Advanced



Cel szkolenia:

This five day course enables students to understand advanced concepts and acquire Universal CMDB (UCMDB) development skills. Advanced topics are discussed and implementation methods and techniques are demonstrated using hands-on exercises. Jython, Java, and Web Services are introduced in the context of UCMDB.

The hands-on lab environment uses UCMDB version 10.2

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

- Use multiple tenants using the Multitenancy feature
- Integrate multiple Configuration Management Databases (CMDBs) and explain the integration components and process
- Use advanced modelling techniques and change the composite CI for the Universal CMDB (UCMDB) browser and Configuration Manager
- Explain the reconciliation process and use identification rules
- Develop new adapters: discovery and integration
- Use UCMDB data in your adapters
- Develop your own Jython scripts for your adapter
- Develop your own Generic database adapter and federate data into UCMDB or populate UCMDB with data
- Develop your own Java integration adapter
- Use the UCMDB API for Java adapters
- Develop your own XML push adapters
- Explain the Web Services push adapter
- Develop Java code using the UCMDB API
- Use the UCMDB Java API for querying and populating the UCMDB
- Develop your own Web Services client

Audience/Job Roles

This course is recommended for:

- Business Technology Optimization (BTO) architects leveraging the power of the integrated CMDB across the BTO/BSM portfolio. –

- Those in charge of Configuration Management and the documentation and storage of business services and their related assets and relationships.
- Project managers, application modellers, discovery engineers, and UCMDB implementation consultants.
- Integration specialists implementing data federation across the different business silos and software product families

Plan szkolenia:

- Course Overview
 - Contents of the course
 - Goals of the course
 - Recognizing fellow participants
 - The class agenda
 - Prerequisites
- CMS End-to-end Scenario
 - Define CMDB and Configuration Management System (CMS)
 - Describe the relationships between Service Asset and Configuration Management (SACM), Information
 - Technology Asset Management (ITAM), and CMS
 - List CMS use cases • Explain different integration methods
 - Explain the different ways to consume data
- Multi Tenancy
 - Describe multitenancy
 - List multitenancy use cases
 - Describe multitenancy architecture
 - Explain the differences between a tenant and a customer
 - Use multitenancy management tools
- Integrating Multiple CMDBs
 - Describe multiple CMDB synchronization
 - Explain the need for multiple CMDB synchronization
 - List multiple UCMDB components
 - Describe the CMDB adapter
 - Explain what the Global ID is
 - Describe what a push back ID is
 - Name the uses of Push and Federation in CMD synchronization
 - Describe the CLIP solution

- Name the UCMDB synchronization limitations
- Advanced Modeling
 - Describe the class model
 - Build complex relationships
 - Explain the principle of modeling for change management
 - Explain the principle of modeling for availability management
 - Explain modeling for UCMDB browser/CM
 - Explain URM functions
- Reconciliation
 - Describe the Reconciliation Engine in UCMDB 10
 - List reconciliation processes
 - Explain the history of reconciliation
 - Name reconciliation types
 - Use identification rules
- Adapter Development and Writing
 - Explain the need for development writing
 - Describe the Adapter development lifecycle
 - List the Adapter components
 - List the ways to access the CMDB data
 - Explain the differences between adapter types
 - Name the best practice in Adapter development
 - Describe remote process execution
- Developing Jython Adapters
 - Explain Python and Jython
 - Describe Python basics
 - Explain the Jython adapter structure
 - Explain the ObjectStateHolder
 - Describe a framework instance
 - Name OOTB UCMDB libraries
- Developing Generic DB Adapters
 - Describe the Generic Database Adapter (GDBA)
 - Describe Java Hibernate
 - Name the preparation for adapter steps
 - Recognize the mapping tags
 - List the differences between Federation and Population
 - List GDBA limitations

- Developing Java Adapters
 - Describe Java adapters
 - Describe the Federation Framework
 - List the federation framework capabilities
 - Use Java adapter resources
 - Recognize Java adapter structure
 - Use Java adapter coding
 - Use logging and debugging
- Developing Generic Push Adapters
 - Describe the Generic push Adapter
 - Differentiate between XML and the Web Services push adapter
 - Prepare the push adapter
 - Use push adapter Jython Script writing
 - Use the differential synchronization technique
 - List Generic push adapter best practices
- Using Data Flow Management API
 - List Data Flow Management (DFM) API use cases
 - Describe the DFM API
 - Use the DFM API documentation and access the Web Services Description Language (WSDL) file
 - Describe the DFM code general structure
 - Use DFM code examples
- Using Data Flow Management API
 - Name UCMDB API use cases
 - Describe the UCMDB API
 - Describe the UCMDB API flow
 - Use the UCMDB API general structure
 - Use UCMDB API code samples
- Using the CMDB Web API
 - Name uses for the Web Services API
 - Describe the UCMDB Web Services API
 - Access the Web Services API
 - Use the UCMDB API general structure
 - Explain UCMDB update using Web Services
 - Use code samples
- Hardening CMS
 - Describe UCMDB security threats

- Define basic security measurements
- Explain the role of reverse proxy and demilitarized zone (DMZ)
- Describe MSSQL recommended practice
- Explain the Confidential Manager system role
- Describe saving sensitive data in the memory
- Explain HA and hardening
- Performance Tuning and Sizing
 - Recognize UCMDB needs
 - Explore organization examples
 - Learn about use cases
 - Define server and probe specifications
 - Maintain a high performing UCMDB
- Appendix A: High Availability Deployment
 - Describe the purpose of High Availability (HA)
 - Explain typical HA architecture
 - Explain the principles of data flow
 - List the supported products
 - Describe HA configuration steps

Wymagania:

- Successful completion of UCMDB120 UCMDB 10.x Essentials and UD120 Universal Discovery 10.x Essentials
- At least 6 months experience with UCMDB & Universal Discovery.
- Prior experience with scripting language such as Python, Perl, etc.

Poziom trudności



Certyfikaty:

The participants will obtain certificates signed by Micro Focus (course completion).

Prowadzący:

Authorized Micro Focus Trainer