

BMC Helix CMDB 20.x: Advanced Using REST API and Pentaho Spoon (ASP)

[Learning Path >](#)

Course Code: SPPT-ACA4-2002-ASP

Modality

Assisted Self-paced (ASP)

Duration

Equal to 3 Days

Applicable Versions

BMC Helix CMDB 9.0, 9.1,
9.1.04, 18.05, 18.08, 19.02,
19.08, 19.11, 20.02,
20.02.02 (On Premise) and
20.08 (SaaS)

Target Audience

- Administrators

Course Overview

BMC Helix CMDB provides a complete, accurate, and up-to-date view of the people, technologies, and services that make up your business and IT environments.

The BMC Helix CMDB 20.x: Advanced Using REST API and Pentaho Spoon (ASP) course teaches students about CMDB REST API, how to use the syntax and schemes for the CMDB REST API, how to write custom and complex Pentaho Spoon Jobs, and other functions such as importing and exporting Spoon jobs. This three-day course is focused on learning advanced concepts of BMC Helix CMDB.

This course will guide students through the advanced concepts of BMC Helix CMDB. Students will develop skills in working with REST API and Pentaho Spoon custom jobs.

This course offers additional multilingual subtitles/closed captioning (cc), generated using an Artificial Intelligence translation tool, in French, German, Italian, Portuguese, and Spanish.

Prerequisites

- BMC Helix CMDB 20.x: Fundamentals Administering – Part 2

Recommended Trainings

- None

Learning Objectives

- Learn about overview of REST API, general principles for using the REST API and benefits of using the REST API
- Learn about Swagger and Postman REST API
- Describe how to use BMC CMDB functions in an external application with the REST API
- Describe how to write custom and complex Spoon Jobs
- Describe how to import and export Pentaho Spoon Jobs
- Learn about the custom plug-ins

Course Activities

- Student and lab guide as ebook
- Product community for questions and answers
- Course recording via WBT
- Access to instructor for up to 1.5 hours by appointment (use within 90 days of registration)

Virtual Lab

- With this offering, you will receive student and lab guides as eBooks. You will have access to product and communities to answer your questions. All the course recordings will be available in the form of WBTs. You will have access to the instructors for up to 1.5 number of hours by appointment. Make sure to use this time up within **90 days** of registration.
- Lab Vouchers are issued at course registration time and must be redeemed within **90 days** of receipt. Once Lab Voucher is redeemed, **28 days** of lab access (portal access) are granted with **18 hours** of on-demand lab time to be used. Once the lab time is used, or the 28 days expires, the lab access ends.
- Click [here](#) for additional ASP virtual lab access information in a graphical format.

Course Modules

Module 1: Introduction to Spoon

- Overview of REST API
- Role of the Pentaho Spoon in CMDB
- Spoon steps that are supported by BMC Software
- Spoon installation
- View OOTB BMC jobs and transformations

Module 2: Creating Transformations in Spoon

- Creating a basic CSV import transformation in Spoon
- Adding data to the stream with constants
- Selecting the correct CMDB CI class to import into
- Reviewing CMDB classes and their underlying AR System forms
- Configuring a CMDBOutput step
- Importing data from an XML file and from an MS SQL Server Database table

Module 3: Exporting Data from CMDB

- Exporting data from CMDB to a CSV file in Spoon
- Adding CMDBInput and Text file output steps to a transformation
- Using CMDBLookup to find related CIs
- Exporting related CIs from different classes to a single CSV file

Module 4: Atrium Integrator Transformations

- BMC best practice to create jobs in Atrium Integrator (AI)
- Folder structure of AI-created jobs and transformations
- Logging in Spoon jobs and transformations
- Detailed look at Text file input and CMDBOutput steps
- Using CMDBLookup to create correct relationships in CMDB
- Investigating how the Delta update option works in a transformation

Module 5: Spoon and Foundation Data

- Spoon's role in loading ITSM Foundation data
- Structure of the spreadsheets used in DMT and On-Boarding Wizard
- Microsoft Excel input and Value Mapper steps
- Using AROutput to write to a Form instead of a CMDB Class
- Reviewing the OOTB LDAP transformation in Spoon

Module 6: Overview of the REST API

- Concept of the REST API
- General principles for using the REST API
- Supported resources/operations and status codes
- Various examples of using the REST API

Module 7: Basics of BMC Helix CMDB REST API

- Overview of the CMDB REST API
- Benefits of the CMDB REST API
- Scenario to SEARCH for CI using the CMDB REST API

Module 8: Syntax and Schemes for the CMDB REST API

- General principles for using the REST API
- Access and authentication for the REST API
- Versioning scheme for the REST API
- End Points in REST API
- Pagination schemes for REST API responses
- Troubleshooting steps for the REST API

Module 9: Using the CMDB Swagger UI

- Introduction to CMDB Swagger UI
- The process of authenticating and accessing the CMDB REST API
- The process of consume CMDB REST API

Module 10: Use Cases for CMDB REST API

- Various use cases for CMDB REST API
- Create, read, update, delete CI instances

Discount Options

Have multiple students? Contact us to discuss hosting a private class for your organization.

Contact us for additional information 