

Module Title : JB450-Red Hat JBoss Data Virtualization Development

Duration : 3 days

Overview

Red Hat® JBoss® Data Virtualization Development teaches database developers and administrators how to model data sources and virtual entities such as tables, views, and procedures. Through hands-on labs, students will learn how to deploy these virtual entities for JDBC and web service consumption. This course can also help certification candidates in their preparation for the Red Hat Certificate of Expertise in Data Virtualization Exam (EX450).

Course content summary

- Modeling data sources
- Modeling a virtual base layer
- Creating virtual databases (VDB)
- Modeling unions, joins, and virtual procedures
- Modeling and deploying web services
- Server administration
- Developing client applications

Audience

- Database administrators
- Database developers

Prerequisites

- Fluency in Relational Database Concepts and SQL
- Experience in programming with the JDBC API is helpful
- JBoss Developer Studio or Eclipse experience is helpful but not required

Course Outline

Introduction to Red Hat JBoss Data Virtualization

Install Red Hat JBoss Data Virtualization

Model data sources

Model connections to data sources and the Teiid server

Create a virtual base layer (VBL)

Model a VBL on top of data sources

Create virtual databases (VDB)

Create and deploy a VDB

Create view models with a union

Model combined projections

Create view models with joins

Model joins between tables (sources)

Create virtual procedures

Model virtual procedures

Produce XML results

Model for XML document results

Expose a model as a SOAP web service

Build and deploy a web service model using JAX-WS (SOAP)

Expose a model as a REST web service

Deploy a web service model using JAX-RS (REST)

Create a view from a web service data source

Use a web service as a data source

Server administration

Manage the data services server

Create materialized views

Utilize materialized views when appropriate

Restrict access to a virtual database

Implement access restrictions to the elements mapped in a virtual database

Access a virtual database in an application

Access virtual databases in a Java application

Course review

Recommended next exam or course

Red Hat Certificate of Expertise in Data Virtualization Exam (EX450)

Impact of this training

Impact on the organization

This course is intended to develop skills needed to consolidate data from disparate sources, thus allowing legacy and new systems to work in concert. JBoss Data Virtualization allows analysts with database query knowledge the ability to obtain consolidated information without importing or exporting data to a database.

Red Hat has created this course in a way intended to benefit our customers, but each company and infrastructure is unique, and actual results or benefits may vary.

Impact on the individual

As a result of attending this course, students should be able to connect to multiple data providers to integrate and provide a unified view of a company's data.

Students should be able to demonstrate the following skills:

- Create datasources to connect to each data provider
- Customize each dataset to be associated with a virtual database
- Implement SQL-like queries to obtain data
- Develop applications to pull data generated by Red Hat JBoss Data Virtualization