



Accelerate, Secure and Integrate with IBM DataPower V6
Information

Length:	5.0 Days
Ref:	WE601G-X
Delivery method:	ClassroomInstructor Led Online
Price:	AUD

Overview

An updated version of this course is available. For more information, click*Accelerate, Secure, and Integrate with IBM DataPower V7* (WE701G).

This course is also available as self-paced virtual (e-learning) course*Accelerate, Secure and Integrate with IBM DataPower V6.0* (ZE601G). This option does not require any travel.

In this course, you learn the fundamental skills that are required to implement IBM WebSphere DataPower SOA Appliances with firmware version 6.0.0.

The IBM WebSphere DataPower SOA Appliances allow an enterprise to simplify, accelerate, and enhance the security capabilities of its Extensible Markup Language (XML) and web services deployments, and extend the capabilities of its service-oriented architecture (SOA) infrastructure. The appliances also extend these capabilities into the REST and JSON application areas.

Through a combination of instructor-led lectures and hands-on lab exercises, you learn how to implement the key use cases for the DataPower appliances. These include web service virtualization, web services security, integrating with IBM WebSphere MQ and WebSphere Java Message Service (JMS), mobile and REST support, integrating with OAuth 2.0, and authentication, authorization, and auditing (AAA). You also learn how to use various problem determination tools such as logs, monitors, and probes, and also techniques for testing DataPower services and handling errors.

Hands-on exercises give you experience working directly with an IBM WebSphere DataPower SOA Appliance. The exercises focus on skills such as creating multi-protocol gateways and web service proxies, working with encryption and cryptographic objects, configuring service level monitoring, troubleshooting services, and handling errors.

The lab environment for this course uses the Linux platform.

For information about other related courses, visit the IBM Training website:
<http://www.ibm.com/training>

Public

This course is designed for integration developers who configure service policies on IBM WebSphere DataPower SOA Appliances.

Prerequisites

You should successfully complete course *Technical Introduction to WebSphere DataPower V6*(VW600G).

You should also be familiar with:

- Security-based concepts and protocols
- XML-related technologies such as XML schema, XPath, **and** XSLT
- Web service fundamentals **and** the web services security specifications
- REST-based services

Objective

- Describe how WebSphere DataPower SOA Appliances are configured
- Create a web service proxy to virtualize web service applications
- Implement web services security
- Create and configure cryptographic objects
- Configure Secure Sockets Layer (SSL) to and from WebSphere DataPower SOA Appliances
- Configure a multi-protocol gateway (MPGW) to handle multiple protocols for a single service
- Configure a service level monitoring (SLM) policy to control message traffic
- Configure support for IBM WebSphere MQ and WebSphere Java Message Service (JMS)
- Use logs and probes to troubleshoot services
- Configure the DataPower resources that are needed to support OAuth 2.0
- Use patterns to define and deploy new services
- Use DataPower resources and options to support REST and JSON-based services
- Handle errors in service policies

Topics

- Course introduction
- DataPower administration overview
- Exercise: Exercise setup
- DataPower services overview
- Structure of a service
- Exercise: Creating a simple XML firewall
- Multi-protocol gateway service
- Problem determination tools
- Exercise: Creating an advanced multi-protocol gateway

- Handling errors in a service policy
- Exercise: Adding error handling to a service policy
- DataPower cryptographic tools and SSL setup
- Exercise: Creating cryptographic objects and configuring SSL
- Web service proxy service
- Exercise: Configuring a web service proxy
- Service level monitoring
- Exercise: Implementing an SLM monitor in a web service proxy
- XML and web services security overview
- Exercise: Web service encryption and digital signatures
- Authentication, authorization, and auditing (AAA)
- Exercise: Web service authentication and authorization
- OAuth overview and DataPower implementation
- Exercise: Defining a three-legged OAuth scenario that uses DataPower services
- Patterns for service configuration
- Exercise: Using a DataPower pattern
- Integration with WebSphere MQ
- DataPower and WebSphere JMS
- Exercise: Configuring a multi-protocol gateway service with WebSphere MQ
- REST and JSON support for Web 2.0 and Mobile applications
- Exercise: Using DataPower to implement REST services
- Course summary