

Hands on Training for DataPower SOA Appliances

Customizable instructor lead course with hands on exercises

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Topics includes Web Service and XML application security and monitoring features provided by XI50 IBM WebSphere Data Power SOA Appliance.

Top Reasons for Attending our Training Engagement

Content

This instructor-led course covers the Web service and XML application security and monitoring features provided by IBM DataPower SOA Appliances. Learn how to configure an XML firewall to protect against a new class of XML – based threats. Create a Web services proxy to virtualize Web service application. Configure SSL to and from that Datapower appliance. Enforce service level policies to manage traffic entering to and from this appliance. Students will learn how to troubleshoot their services using logs and probes. Lastly, examine best practices and architectural scenarios for effective using DataPower appliances in you SOA architecture.

Structure

Our innovative and flexible learning approach consists of instructor-led learning methods, supplemented with hands-on exercises, mentoring and access to our online library of knowledge (OASIS) including our World-class training material. You have the choice to customize your training plan by choosing from 50 different topics or use our full training engagement.

Location

We offer flexibility of location. Training can be provided at our SOA Education Centre, or at your company site.

Budget

We offer a great value for your money. If the training takes place at your own premises, you will eliminate travel costs and avoid time away from the office (Any installation work is done at your company site will be charged at \$150/Hr). Our training engagement is priced at \$6000.00 + Expenses (Unlimited attendee's if training engagement is hosted at your company site)

Course Duration /Scheduling

A full-length engagement spans over 5 business days (1 Week). Course outline and duration can also be customized based on your time and need.

Our Premium Services

We deliver premium services to help customers by improving the performance, security and management of business processes built of reusable, open-standards based software components, which operate independently from the applications and computing platforms on which they run.

We help customers to improve security and speed the processing of computer transactions through our vast experience.

Course Objectives

- Describe the security features and key capabilities of the XI50 IBM Data Power SOA appliance.
- Explain the role and values of an IBM Data Power SOA appliance in IBM middleware solution architecture in terms of performance, security and integration.
- Configure key security on an IBM DataPower SOA appliances elaborating on the configuration objects for each service.
- Integrate WebSphere Data Power SOA Appliances with desecrate Systems.
- Develop/Integrate any-to-any transformation using WebSphere Transformation Extender
- Configure Open Database Connectivity (ODBC) support for database connectivity.
- Manage/Monitor access controls using ITCAM

Audience

This Course is intended for integration developers responsible for configuring service policies on the IBM WebSphere Data Power SOA

Pre-Requisites

Security-based concepts and protocols, XML related technologies such as XML schemas, XPath and XSLT, Web Service fundamentals and Web Service security specification.

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Skills taught / Course Outline

Typical Course Outline

Introduction to IBM Web Sphere Data Power SOA appliances

- Introduction to IBM Web Sphere Data Power SOA appliances
- Introduction to Web Services, XML and XSL, XML firewall
- Introduction to Data Power SOA appliances Administration
- Data Power SOA appliance installation and configuration
- Configuration to create Web service Proxy, XML Firewall
- Content-based routing using XML firewalls

Introduction XML and Web Service security

- Introduction to XS40/XI50 security features
- Introduction to Data Power Crypto tools
- Configure Data Power appliance to communicate using SSL.
- Associate SSL proxy profile with keys and certificate
- SSL handshake/Digital Signatures
- Advance XML firewall configuration
- Implementing service policy
- Content based routing using XML firewalls

Introduction to XML threat protection

- Addressing the security concerns
- Types of XML Attacks
- Message Tampering
- Recursive entity attack threat protection
- Excessive attribute count protection
- SQL injection attack and other potential attack prevention

Introduction to Web Service encryption and decryption

- Create cryptographic objects
- Create XML firewall to encrypt messages
- Create an XML firewall to sign message
- Field level encryption and decryption

Introduction to Authentication, Authorization and Auditing

- Obtain connectivity to any LDAP
- Create AAA policy using LDAP
- Defining access control policies
- Internal access control policies
- AAA XML file
- Access control using SAML

Common use patterns for connecting Data Power Service to different Systems

- FTP
- HTTP/HTTPS
- IMS
- MQ/JMS/ TIBCO
- Database
- NFS Clients
- WTX (WebSphere Transformation Extender)
- ITCAM WSRR/UDDI

Introduction to Multi protocol gateway service for any-any communication and transformation

- Create an multi-protocol gateway for any-any transformation
- Configuration of Data Power for use with WebSphere Transformation Extender.
- Create an multi-protocol gateway for any-any communication
 - MQ-to-HTTP gateway
 - HTTP-to-MQ gateway
 - MQ-to-MQ gateway
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Introduction to troubleshooting /problem determination

- Create traffic patterns, message types, message filters, message monitors.
- Configure a service level monitoring policy
- Associate message monitors with XML firewall service
- Data Power architecture scenarios