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## Developing Applications for IBM WebSphere Enterprise Service Bus V7

**CODE:**      **DURÉE:**      **PRIX H.T.:**

ZB713G      40 Hours      €1,500.00

### Description

This course is also available as classroom course *Developing Applications for IBM WebSphere Enterprise Service Bus V7* (WB713G).

An updated version of this course is available. For more information, click *Developing Applications for IBM WebSphere Enterprise Service Bus V7.5* (ZB753G).

This course teaches students how to build and deploy mediation integration solutions using WebSphere Enterprise Service Bus and WebSphere Integration Developer.

WebSphere Enterprise Service Bus enables a service-oriented architecture (SOA) by providing a platform for business applications requiring a complex integration that will use different technologies. WebSphere Enterprise Service Bus supports a variety of integration bindings, including Service Component Architecture (SCA), Java Message Service (JMS), HTTP, and Web services. In addition, the WebSphere Integration Developer tool set can be used to create integration solutions by utilizing simplified integration mechanisms.

In this course, students learn the concepts, architecture, components, processes, and procedures involved in implementing an integration solution. In addition, this course enables students to design, develop, and test the mediation integration for many of the supported types of integration bindings. Students create integration solutions with WebSphere Enterprise Service Bus and the WebSphere Integration Developer tool set, and learn about mediation modules, mediation flow components, mediation primitives, unified common data structures such as the service message object (SMO), mediation module deployment, and the development-to-deployment life cycle for mediations. Students also learn how WebSphere Enterprise Service Bus supports an SOA by working with a variety of messaging protocols, using a broad range of interaction models, leveraging advanced Web services support, and supporting Web 2.0 applications.

In hands-on laboratory exercises, students create several mediation solutions by employing various technologies, such as JMS transport, HTTP binding, the JCA flat file adapters, mediation primitives, mediation flow components, and standard WebSphere MQ messages. The exercises also enable students to create a Common Event Infrastructure (CEI) event using the event emitter primitive, as well as business object maps and Extensible Stylesheet Language transformations to develop message relationships.

Students also learn how to create various stand-alone utilities for testing and accessing the data on queues.

In additional exercises, students add plug-ins and create a mediation module that uses dynamic endpoints, and learn how to use Enterprise JavaBeans (EJB) bindings and the JCA Java Database Connectivity (JDBC) adapter, as well as Web services gateways with Web services bindings.

For information about other related courses, visit the IBM Training website:

<http://www.ibm.com/training>

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**Paced Virtual Classes and Web-Based Training Classes** on our Terms and Conditions page, as well as the system requirements, to ensure that your system meets the minimum requirements for this course.

<http://www.ibm.com/training/terms>

### Objectifs

- Describe the role of the enterprise service bus (ESB) in the IBM SOA reference architecture
- Explain the Service Component Architecture (SCA) programming model for IBM WebSphere Enterprise Service Bus
- Explain the message models and data models used in IBM WebSphere Enterprise Service Bus
- Describe data binding, mapping, and relationship capabilities
- Describe key concepts for development and deployment of mediations: mediation modules, mediation flows, and mediation primitives
- Use IBM WebSphere Enterprise Service Bus for Web services and JMS-based integration
- Develop, test, and debug mediation flows with IBM WebSphere Integration Developer
- Use the IBM WebSphere Integration Developer tooling to specify the events to be monitored within mediations
- Deploy mediation modules to the IBM WebSphere Enterprise Service Bus runtime
- Develop and test mediations that use WebSphere adapters to integrate with enterprise information systems (EIS)
- Implement application integration using the IBM WebSphere Enterprise Service Bus product

- Integrate WebSphere MQ with WebSphere Enterprise Service Bus

## Audience

This course is designed for integration developers, system administrators, support engineers, and technical sales and marketing professionals.

## Prérequis

Before taking this course, students should be familiar with the following:

- The fundamentals of service-oriented architecture (SOA)
- The role Web services play within an SOA
- Web service standards such as Web Services Description Language (WSDL), SOAP, **and** Web services for Java 2 Platform, Enterprise Edition (J2EE)
- J2EE 1.4, specifically the Java API for Extensible Markup Language (XML), JMS, Java Connector Architecture (JCA), **and** Web services
- IBM WebSphere Application Server
- The basic features of IBM WebSphere MQ

## Programme

- Course introduction
- SOA and ESB concepts
- WebSphere Integration Developer overview
- Exercise: WebSphere Integration Developer tooling overview
- Service Component Architecture (SCA) programming model
- SCA bindings
- Exercise: Service Component Architecture basics and Web services
- Mediation primitive principles
- Service message objects
- Exercise: Creating business objects
- Message transformation and enrichment
- Exercise: Implementing a mediation and using WebSphere MQ binding
- Invoking services and aggregating messages
- Exercise: Using service invoke and message aggregation
- Flow control in mediations
- Exercise: Writing a generic error handler
- Tracing and error handling
- Dynamic message routing
- Exercise: Dynamic message routing
- Using WebSphere Adapters in WebSphere Enterprise Service Bus
- Exercise: Using the WebSphere JDBC and flat file adapters
- Mediation problem determination
- Exercise: Mediation problem determination
- Administration and event monitoring
- Exercise: Generating and reviewing Common Event Infrastructure events
- Course summary

## Dates de session

Sur demande. [Merci de nous contacter](#)

## Informations Complémentaires

[Cette formation est également disponible sous forme de formation sur site. Veuillez nous contacter pour en savoir plus.](#)