

1. Record Nr.	UNINA9910816475803321
Titolo	Patterns : SOA with an Enterprise service bus in WebSphere application server V6 // Martin Keen ... [et al.]
Pubbl/distr/stampa	[Research Triangle Park, N.C., : IBM Corp., International Technical Support Organization], c2005
Edizione	[1st ed.]
Descrizione fisica	xvii, 386 p. : ill
Collana	Redbooks
Soggetti	Electronic commerce - Computer programs Software patterns Enterprise application integration (Computer systems) Business enterprises - Data processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"This edition applies to Version 6 of WebSphere Application Server and Rational Application Developer."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front cover -- Contents -- Notices -- Trademarks -- Preface -- How to read this redbook -- The team that wrote this redbook -- Become a published author -- Comments welcome -- Part 1 Patterns for e-business and SOA -- Chapter 1. Introduction to Patterns for e-business -- 1.1 The Patterns for e-business layered asset model -- 1.2 How to use the Patterns for e-business -- 1.2.1 Selecting a Business, Integration, or Composite pattern, or a Custom design -- 1.2.2 Selecting Application patterns -- 1.2.3 Review Runtime patterns -- 1.2.4 Reviewing Product mappings -- 1.2.5 Reviewing guidelines and related links -- 1.3 Summary -- Chapter 2. SOA and the Enterprise Service Bus -- 2.1 Overview of SOA -- 2.1.1 Definition of a service -- 2.1.2 Web services and SOA -- 2.1.3 The advantages of SOA -- 2.1.4 SOA summary -- 2.2 Overview of Enterprise Service Bus -- 2.2.1 SOA infrastructure requirements -- 2.2.2 Definition of an ESB -- 2.2.3 Enterprise requirements for an ESB -- 2.2.4 Minimum ESB capabilities -- 2.2.5 ESB and Web services technologies -- 2.2.6 Extended ESB capabilities -- 2.2.7 The ESB and other SOA components -- Chapter 3. Application Integration and Extended Enterprise patterns -- 3.1 Application Integration pattern -- 3.1.1 Direct Connection -- 3.1.2

Direct Connection=Message Connection variation -- 3.1.3 Direct Connection=Call Connection variation -- 3.1.4 Broker -- 3.1.5 Broker=Router variation -- 3.1.6 Serial Process -- 3.1.7 Serial Process=Workflow variation -- 3.1.8 Parallel Process -- 3.1.9 Parallel Process=Workflow variation -- 3.2 Extended Enterprise pattern -- 3.2.1 Exposed Direct Connection -- 3.2.2 Exposed Direct Connection=Message Connection variation -- 3.2.3 Exposed Direct Connection=Call Connection variation -- 3.2.4 Exposed Broker -- 3.2.5 Exposed Broker=Router variation -- 3.2.6 Exposed Serial Process. 3.2.7 Exposed Serial Process=Workflow variation -- Chapter 4. Product descriptions and ESB capabilities -- 4.1 Runtime product descriptions -- 4.1.1 IBM WebSphere Application Server V6 -- 4.1.2 IBM DB2 Universal Database Enterprise Server Edition V8.2 -- 4.1.3 IBM Cloudscape -- 4.1.4 IBM WebSphere MQ V5.3 -- 4.1.5 IBM WebSphere Business Integration Message Broker V5 -- 4.1.6 IBM WebSphere Business Integration Server Foundation V5.1 -- 4.2 Development product descriptions -- 4.2.1 IBM Rational Application Developer V6 -- 4.3 Product capabilities for the Enterprise Service Bus -- 4.3.1 Assessment of ESB capabilities by product -- 4.3.2 IBM WebSphere Application Server V6 -- 4.3.3 IBM WebSphere Business Integration Message Broker V5 -- 4.3.4 Conclusion -- Chapter 5. SOA runtime patterns and Product mappings -- 5.1 Runtime patterns -- 5.1.1 Direct Connection using a service bus -- 5.1.2 ESB runtime pattern -- 5.1.3 ESB Gateway runtime pattern -- 5.1.4 BSC runtime pattern -- 5.1.5 ESB, BSC composite pattern -- 5.1.6 Exposed ESB Gateway runtime pattern -- 5.1.7 Exposed ESB Gateway, BSC composite pattern -- 5.2 Product mappings -- 5.2.1 ESB runtime pattern::Product mappings -- 5.2.2 ESB Gateway runtime pattern::Product mapping -- 5.2.3 BSC runtime pattern::Product mapping -- 5.2.4 Exposed ESB Gateway Product mapping -- Part 2 Business scenario and guidelines -- Chapter 6. The business scenario that this book uses -- 6.1 WS-I sample application -- 6.2 Stages of the business scenario -- 6.2.1 Stage 1: Internal supply chain management on demand -- 6.2.2 Stage 2: Additional warehouses -- 6.2.3 Stage 3: Divested inter-enterprise manufacturers -- Chapter 7. Technology options -- 7.1 Web services -- 7.1.1 Web services interoperability -- 7.1.2 Advanced and future Web services standards -- 7.2 Java Message Service -- 7.2.1 Understanding messaging. 7.2.2 JMS messages -- 7.2.3 Advantages of JMS -- 7.2.4 Disadvantages of JMS -- 7.3 J2EE Connector Architecture -- 7.3.1 Advantages of the J2EE Connector Architecture -- 7.3.2 Disadvantages of the J2EE Connector Architecture -- 7.4 Service integration bus in WebSphere Application Server -- 7.4.1 Concepts and architecture -- 7.4.2 Further information -- Part 3 Scenario implementation -- Chapter 8. SOA Direct Connection pattern -- 8.1 Design guidelines -- 8.1.1 Business scenario -- 8.1.2 Selecting an SOA pattern -- 8.1.3 Products -- 8.2 Development guidelines -- 8.2.1 Scenario implementation: Direct Connection interaction -- 8.3 Runtime guidelines -- 8.3.1 Using the service integration bus for messaging -- 8.3.2 Creating a bus -- 8.3.3 Adding a bus member -- 8.3.4 Creating the destinations -- 8.3.5 Creating a JMS connection factory -- 8.3.6 Creating the JMS queues -- 8.3.7 Creating the JMS activation specifications -- 8.3.8 Hosting the WSDL files -- 8.3.9 Installing the applications -- 8.3.10 Running and using the sample application -- Chapter 9. Enterprise Service Bus pattern: router scenario -- 9.1 Design guidelines -- 9.1.1 Business scenario -- 9.1.2 Selecting an SOA pattern -- 9.1.3 Router interaction design -- 9.1.4 Products -- 9.2 Development guidelines -- 9.2.1 Scenario implementation: ESB router interaction -- 9.2.2 Creating a SOAP over JMS Web service -- 9.2.3 Updating Web service clients to use

the ESB -- 9.3 Runtime guidelines -- 9.3.1 Using the service integration bus to route Web service requests -- 9.3.2 Removing the existing enterprise applications -- 9.3.3 Installing the SDO repository -- 9.3.4 Installing the Web services support -- 9.3.5 Creating the endpoint listeners -- 9.3.6 Creating the JMS resources for the Retailer Web service -- 9.3.7 Creating the outbound services -- 9.3.8 Creating the inbound services.

9.3.9 Exporting the service integration bus WSDL for development -- 9.3.10 Importing the schemas into the SDO repository -- 9.3.11 Installing and testing the new enterprise applications -- 9.3.12 Runtime alternatives -- Chapter 10. Enterprise Service Bus pattern: broker scenario -- 10.1 Design guidelines -- 10.1.1 Business scenario -- 10.1.2 Selecting an SOA pattern -- 10.1.3 Broker interaction design -- 10.1.4 Products -- 10.2 Development guidelines -- 10.2.1 Scenario implementation: ESB broker interaction -- 10.2.2 Mediations -- 10.2.3 Creating a mediation handler class -- 10.2.4 Working with messages in mediations -- 10.2.5 Coding the mediations -- 10.2.6 Assigning and exporting the mediation handlers -- 10.3 Runtime guidelines -- 10.3.1 Externalizing service lookup -- 10.3.2 Configuration of additional resources -- 10.3.3 Mediation configuration -- 10.3.4 Installing the additional Warehouses -- 10.3.5 Testing the sample application -- Chapter 11. Exposed ESB Gateway pattern -- 11.1 Design guidelines -- 11.1.1 Business scenario -- 11.1.2 Selecting an SOA pattern -- 11.1.3 Exposed ESB Gateway design -- 11.1.4 Products -- 11.2 Development guidelines -- 11.3 Runtime guidelines -- 11.3.1 Removing Web services from the ESB -- 11.3.2 Migrating the SDO repository to use Network Cloudscape -- 11.3.3 Setting up the Exposed Gateway -- 11.3.4 Configuring the service integration bus link -- 11.3.5 Routing Web service requests between buses -- 11.3.6 Testing the sample application -- Part 4 Appendixes -- Appendix A. Additional material -- Locating the Web material -- Using the Web material -- System requirements for downloading the Web material -- How to use the Web material -- Appendix B. Configuring the scenario environment -- Working with the WS-I sample scenario enterprise applications -- Configuring the Direct Connection scenario. Configuring the ESB router scenario -- Abbreviations and acronyms -- Related publications -- IBM Redbooks -- Other publications -- Online resources -- How to get IBM Redbooks -- Help from IBM -- Index -- Back cover.

---