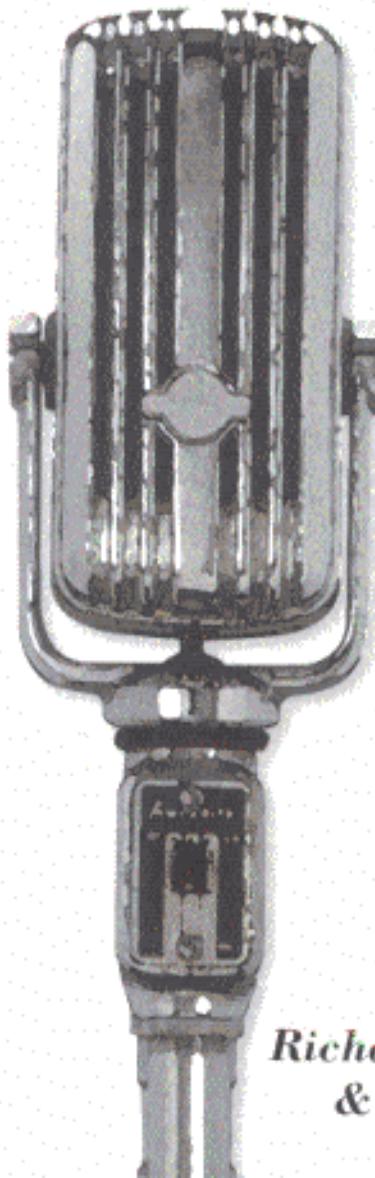


JAVA

Message Service



O'REILLY®

*Richard Monson-Haefel
& David A. Chappell*

Table of Contents

<i>Preface</i>	xi
1. Understanding the Messaging Paradigm	1
Enterprise Messaging	2
The Java Message Service (JMS)	6
Application Scenarios	8
RPC Versus Asynchronous Messaging	12
2. Developing a Simple Example	17
The Chat Application	17
3. Anatomy of a JMS Message	34
Headers	35
Properties	40
Message Selectors	43
Message Types	45
4. Publish-and-Subscribe Messaging	58
Getting Started with the B2B Application	58
Temporary Topics	67
Durable Subscriptions	69
Publishing the Message Persistently	71
JMSCorrelationID	72
Request and Reply	73
Unsubscribing	76

5. Point-to-Point Messaging	78
Point-to-Point and Publish-and-Subscribe	79
The QWholesaler and QRetailer	81
Creating a Queue Dynamically	91
Load Balancing Using Multiple QueueSessions	92
Examining a Queue	93
6. Guaranteed Messaging, Transactions, Acknowledgments, and Failures	97
Guaranteed Messaging	97
Message Acknowledgments	99
Message Groups and Acknowledgment	106
Transacted Messages	111
Lost Connections	122
Dead Message Queues	125
7. Deployment Considerations	126
Performance, Scalability, and Reliability	126
To Multicast or Not to Multicast	131
Security	136
Connecting to the Outside World	139
Bridging to Other Messaging Systems	141
8. J2EE, EJB, and JMS	142
J2EE Overview	142
J2EE: A United Platform	145
The JMS Resource in J2EE	147
The New Message-Driven Bean in EJB 2.0	150
9. JMS Providers	155
IBM: MQSeries	156
Progress: SonicMQ	157
Fiorano: FioranoMQ	158
Softwired: iBus	159
Sun Microsystems: Java Message Queue	161

BEA: WebLogic Server	162
ExoLab: OpenJMS	163
A. <i>The Java Message Service API</i>	165
B. <i>Message Headers</i>	183
C. <i>Message Properties</i>	196
D. <i>Message Selectors</i>	204
<i>Index</i>	211