

Active MQ (4 days)

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Day 1

- **Introduction to Messaging**
 - What is messaging
 - What problems does Messaging solve
 - What types of Messaging systems exist
- **Getting Started with ActiveMQ**
 - What is ActiveMQ
 - How is ActiveMQ used in the enterprise
 - Downloading and Installing ActiveMQ
 - Standard administration: start / test / monitor / stop
 - Basic configuration concepts
- **Understanding ActiveMQ**
 - Architecture
 - Relation to Java and other technologies
 - Key concepts
 - Brokers, Transports, and Topologies
- **Configuration**
 - Required libraries
 - Optional libraries
 - Configuring Brokers
 - Configuring Transports
 - Working with an embedded broker
- **ActiveMQ Features**
 - Clustering support
 - JMX

- JMS to JMS Bridge
- Persistence support
- Security

Day 2

Administration

- The Web console
- Logging
- log4j configuration
- Dead letter queue
- How you stay up-to-date with advisory topics

- **Integration with other Technologies**

- Java / Python
- Ajax and Web Services
- Frameworks, like Spring

- **Developing a Basic Solution**

- Choosing a Topic or a Queue
- Creating a consumer
- Creating a producer
- Running the solution

Day 3

Clustering

- High availability, reliability and response time behavior
- Loadbalancing
- Network of brokers
- Store and forward

Master and Slave

- Pure, shared filesystem and shared JDBC master slave
- Recovery
- Configuration

Monitoring

- Monitoring of ActiveMQ with JMX
- Monitoring ActiveMQ with Nagios
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Day 4

- **Performance Tuning**
 - Performance Tuning concepts
 - JVM Performance Tuning
 - Async publishing
 - Defining pre-fetch sizes
 - Other tunings