# **Apache Camel**

By Dr. Vishwanath Rao

Module 1: Introduction to Camel

Camel's message model Camel's architecture

Module 2: Managing routing with Camel

Create Java routes Using message filter Using multicasting

Module 3: Data transformation in Camel

Introduction to data transformation
Transforming data with EIPs and Java
XML Transformation
Data format provided with Camel
Using Camel's CSV and JSON data format
Transforming with templates
Using Camel type converters

Module 4: Beans and Camel

Beans invocation from Java
The Service Activator pattern
Using bean's registries
Camel's method-selection algorithm
Bean parameter binding

Module 5: Error Handling

Understanding error handling Error handlers in Camel

Module 6: Using Camel's components

Overview of Camel components
File and FTP components
JMS component
CXF component for web services
MINA component for networking
JDBC and JPA components
Timer component

### Module 7: Using the Enterprise Integration Patterns

Aggregator
Splitter
Routing Slip
Dynamic Router
Load Balancer

#### Module 8: Transactions in Camel

Transaction basics
The Transaction Client EIP
Configuring and using transactions

# Module 9: Concurrency and scalability

Using concurrency
Camel thread pool profiles
Using concurrency with EIPs
Synchronicity and threading
The concurrency client API
Using the asynchronous routing engine

## Module 10: Monitoring Camel

Checking health at the network level Checking health at the JVM level Using JMX with Camel Verifying application activity Managing Camel applications