

Jakarta EE Overview

Audience Course Jakarta EE Overview

The course Jakarta EE Overview is intended for developers, designers, managers and architects who want to get an overview of the capabilities and operation of the Jakarta EE, Enterprise Edition, platform.

Prerequisites Course Jakarta EE Overview

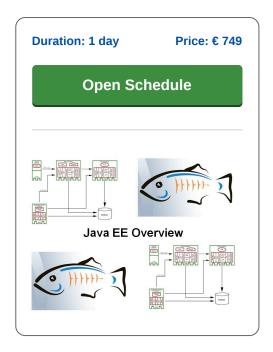
To participate in this course knowledge of modern software technologies such as C++, Java or. NET and Web applications is desirable.

Realization Training Jakarta EE Overview

The theory is discussed by means of presentation slides. The concepts are illustrated with demos and there is opportunity to practice. The course material is in English.

Certification Jakarta EE Overview

Participants receive an official certificate Jakarta EE Overview after successful completion of the course.



Content Jakarta EE Overview

The course Jakarta EE Overview discusses the main points of the Jakarta EE standard as it is implemented in application servers like GlassFish, WebSphere and JBoss. The demands of enterprise applications such as scalability, failover and distribution are discussed and how these demands are met by the Jakarta EE platform.

Jakarta EE Components

Attention is paid to the role of the various Jakarta EE Application Components as Java Servlets, Java Server Pages and Enterprise Java Beans. In this respect the JSF Framework for Java Web Applications is also discussed.

Jakarta EE Services

Key Jakarta EE services such as JNDI (Java Naming and Directory Interface) and JTA (Java Transaction API) are part of the subject matter.

Database Access

The various options for accessing databases are treated as well. Attention is paid both to the SQL-based Java Database Connectivity (JDBC) technology and to the new Persistence API for storing objects directly.

Web Services

Furthermore other Java technologies in the context of Jakarta EE, such as Web Services based on SOAP and REST are discussed as well.

Jakarta EE Application Servers

During the day several application servers and Enterprise Java Bean containers that rely on the Jakarta EE standard are addressed. If time permits, JMX, Java Management Extensions, as an optional module, is treated.



Modules Jakarta EE Overview

Module 1 : Jakarta EE Intro	Module 2 : Servlets, JSP and JSF	Module 3 : Enterprise Java Beans (EJB)
Java Editions	Servlets and JSP's	Types of Enterprise Beans
Enterprise Application Challenges	Translation and Request Time	Distributed Object Foundation
Jakarta EE Standard	Problems with Servlets and JSP	Architecture of an EJB
Jakarta EE Servers	Classic MVC Pattern	Enterprise Bean Class
Web Components	Model 2 Architecture	EJB Object at work
EJB Components	Using Java Beans	Remote Interface
Jakarta EE and Web Services	Scopes in Web Applications	Session Beans
Deployment Descriptors	ServletContext Scope	Statefull and Stateless
Annotations	Session Scope	Session Bean Pooling
Packaging in EAR Files	Java Web Applications	Message Driven Beans
Jakarta EE Deployment	Web Application Structure	JNDI Naming Context
Configurable Services	MVC Frameworks	Locate resources with JNDI
Jakarta EE API's	Java Server Faces	Context and Dependency Injection
Module 4 : Jakarta EE Persistence	Module 5 : Jakarta EE Web Services	Module 6 : Optional Module : JMX
Module 4 : Jakarta EE Persistence Jakarta EE Persistence	Module 5 : Jakarta EE Web Services What is a Web Service?	Module 6 : Optional Module : JMX What is JMX?
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Jakarta EE Persistence	What is a Web Service?	What is JMX?
Jakarta EE Persistence Direct File I/O	What is a Web Service? Web Service Standards	What is JMX? JMX Goal
Jakarta EE Persistence Direct File I/O Serialization	What is a Web Service? Web Service Standards Web Service Types	What is JMX? JMX Goal Where does JMX API fit?
Jakarta EE Persistence Direct File I/O Serialization Java Database Connectivity	What is a Web Service? Web Service Standards Web Service Types XML-Schema, SOAP and WSDL	What is JMX? JMX Goal Where does JMX API fit? Managed Beans
Jakarta EE Persistence Direct File I/O Serialization Java Database Connectivity JDBC Drivers and URL's	What is a Web Service? Web Service Standards Web Service Types XML-Schema, SOAP and WSDL JAX-WS Web Services	What is JMX? JMX Goal Where does JMX API fit? Managed Beans JMX Architecture
Jakarta EE Persistence Direct File I/O Serialization Java Database Connectivity JDBC Drivers and URL's Transparant Persistence	What is a Web Service? Web Service Standards Web Service Types XML-Schema, SOAP and WSDL JAX-WS Web Services Servlet Based Endpoint	What is JMX? JMX Goal Where does JMX API fit? Managed Beans JMX Architecture Management Consoles
Jakarta EE Persistence Direct File I/O Serialization Java Database Connectivity JDBC Drivers and URL's Transparant Persistence Object Relational Mapping	What is a Web Service? Web Service Standards Web Service Types XML-Schema, SOAP and WSDL JAX-WS Web Services Servlet Based Endpoint Stateless Session Bean Endpoint	What is JMX? JMX Goal Where does JMX API fit? Managed Beans JMX Architecture Management Consoles Protocol Adapters
Jakarta EE Persistence Direct File I/O Serialization Java Database Connectivity JDBC Drivers and URL's Transparant Persistence Object Relational Mapping Persistence API	What is a Web Service? Web Service Standards Web Service Types XML-Schema, SOAP and WSDL JAX-WS Web Services Servlet Based Endpoint Stateless Session Bean Endpoint JAX-WS Annotations	What is JMX? JMX Goal Where does JMX API fit? Managed Beans JMX Architecture Management Consoles Protocol Adapters Standard MBeans
Jakarta EE Persistence Direct File I/O Serialization Java Database Connectivity JDBC Drivers and URL's Transparant Persistence Object Relational Mapping Persistence API Entity Classes	What is a Web Service? Web Service Standards Web Service Types XML-Schema, SOAP and WSDL JAX-WS Web Services Servlet Based Endpoint Stateless Session Bean Endpoint JAX-WS Annotations REST Web Services	What is JMX? JMX Goal Where does JMX API fit? Managed Beans JMX Architecture Management Consoles Protocol Adapters Standard MBeans Implementing MBeans