

Course code: **TOMCAT/ADM**

Course title: **Tomcat server administration**

Days: 2

Description:

Course intended for:

The training has been developed for IT system administrators and Java programmers, wanting to find out how to launch Web applications compatible with Java EE on a Tomcat server and how to configure the components.

Course objective:

The training objective is to get familiar with the Apache Tomcat server configuration and the rules of distribution and launching of Web applications compatible with Java EE.

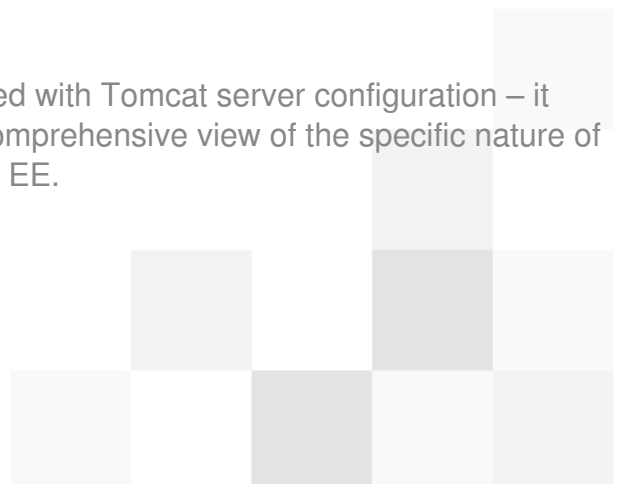
In particular, the participants are to:

- Get familiar with the structure of Web applications compatible with Java EE and the specific characteristics of launching of these applications,
- Find out how to configure access to external resources (e.g. databases)
- Learn to configure the software load balancer mod_jk and connect several Tomcat servers into a cluster, increasing resistance of the application to failures,
- Find out how to monitor the server operation parameters and how to configure a log,
- Learn to secure the application by introduction of safe communication channels (https) and user authentication mechanisms.

Course strengths:

The training encompasses not only issues associated with Tomcat server configuration – it has been enriched with information allowing for a comprehensive view of the specific nature of launching of Web applications compatible with Java EE.

Requirements:



The training participants are required to have the basic knowledge of functioning of Web applications and the basic protocols used by them (tcp/ip, http, https). Familiarity with Java platform is not required; however, some basic knowledge of it will allow the participants for better understanding of the training material.

Course parameters:

2*8 hours (net 2*7 hours) of lectures and workshops (with a visible emphasis on workshops).

During the workshops, apart from simple exercises, a simple complex application is designed and implemented.

Group size: no more than 8-10 participants.

Course curriculum:

1. Basic information

- Web application structure
- Application distribution modes
- Server launching

2. Application launching

- Deployer service
- The context.xml file
- The Manager service

3. The JNDI service

- Basic information
- Configuration of resources
- Configuration of JDBC data sources

4. Security configuration

- Realms



- Access control
- Access monitoring
- SSL configuration
- Security Manager

5. Monitoring and management

- JMX technology
- ANT and tasks

6. Cluster environment configuration

- Software load balancer configuration
- Web session replication configuration
- Cluster monitoring

7. Production environment configuration

- Jvm configuration
- Server configuration
- Enhancing performance of the application

