

Apache Tomcat Server

Duration: 3 Days (8Hours per day)

Module 1 – Introduction to Tomcat and Installation

Overview of Tomcat
Installation and Configuration of Tomcat
Lab: Installing Apache Tomcat
Lab: Login with Manager App

Module 2 – Tomcat Security and SSL configuration

Security Overview
Enable SSL – Generating Certificate
Enabling SSL
Lab: SSL configuration

Module 3 – Virtual Hosts

Introduction to Virtual Host
Configuring Virtual Host
Lab: Configuring Virtual Host

Module 4 – HA Clustering

Scaling Traffic and High Availability using Clustering
Cluster Setup
Lab: HA Clustering setup

Module 5 – Load Balancing

Load Balancing Tomcat using NGINX
Lab: Load Balancing Tomcat using NGINX
Setting up Apache and Mod_Jk Connector
Lab: Setting up Apache and Mod_Jk
Distributing Traffic with Apache Load Balancer
Lab: Distributing Traffic with Apache Load Balancer

Module 6 – Session Management and Connection Pooling

Stickey Sessions Introduction
Configuring Stickey Sessions on NGINX and Apahce LB
Lab: Configuring Stickey Sessions on NGINX and Apahce LB
Session Replication Introduction
Configuring Session Replication
Lab: Configuring Session Replication

Module 7 – Custom Error Page and Tomcat Logging

Configuring Custom Error Page
Lab: Configuring Custom Error Page
Configuring Tomcat Logging
Lab: Configuring Tomcat Logging

Module 8 – Performance Tuning and Optimization

Performance Tuning Overview

Setting Up Monitoring

Lab: Setting Up Monitoring

Connectors and Executor Thread Optimization

Lab: Connectors and Executor Thread Optimization

Memory Optimization – Heap and Metaspace

Lab: increase the JVM heap size in tomcat server

Enable HTTP Response Compression

Lab: Enable HTTP Response Compression