

# 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