



Real Time College

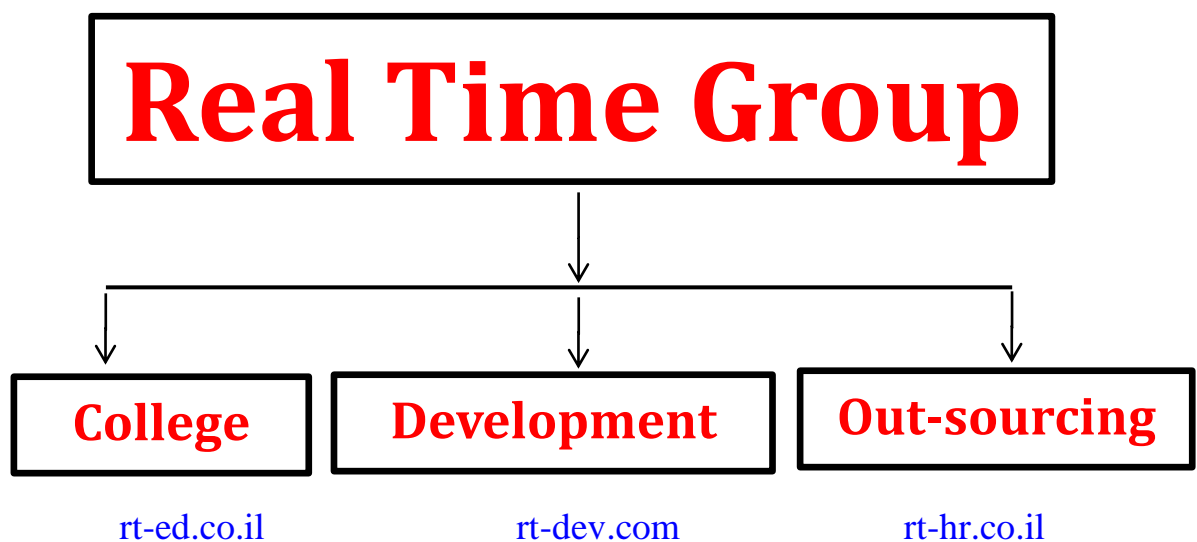
**Course: Configuration Monitoring -
Zabbix**

Duration: 20 Hours
Hands-On-Training: 50%

Real Time Group is a multi-disciplinary dynamic and innovative Real-Time O.S. and Embedded Software Solutions Center, established in 2007.

Providing Bare-Metal and Embedded Linux solutions, professional services and consulting, end-to-end flexible system infrastructure, outsourcing, integration and training services for Hardware, Software and RT-OS \ Embedded Systems.

The company is divided into the following three Divisions:



Training Division:

Professional Training Services for Hardware, Software, RT-OS and Embedded systems industries.

We provide the knowledge and experience needed to enable professional engineers to Develop, Integrate and QA Hardware, Software and Networking Projects.

In order to insure experience, all courses are practical – hands-on-training. The latest Development, QA and Automation equipment which are adopted by the industry are used.

All students are supplied with Development-Boards for home-work and course projects.

Course Overview:

More than ever, server configuration is important. Misconfiguration can not only have devastating effects on server performance, but they can also pose a security risk. This is why server configuration monitoring tools have become popular.

Business rely on servers for successful data communication. If a server isn't performing as it should, then the data that businesses rely on for mission-critical tasks won't reach its destination on time – or potentially, at all. Server monitoring tools are the best way for enterprises to ensure that their servers, both physical and virtual, are operational and functioning at a manageable level.

Zabbix is an open source monitoring tool suite that includes server monitoring functions, including both server performance and server health monitoring. For server performance, Zabbix measures CPU and memory utilization, network and server bandwidth usage, and packet loss and interface error rate. The solution also monitors availability parameters, including system and hardware status checks, disk space availability, and remote server monitoring.

This Course is full of practical tasks, where each trainee installs and configures Zabbix software on his own, sets up services for monitoring, solves complex monitoring issues. Training schedule includes enough time for Q&A sessions so participants may turn to their trainer with any practical issues and get expert advices.

Who should attend:

- This Course is intended for testers, programmers, DevOps or IT professionals who would like to learn and to understand what Zabbix is, how it works and how to monitor different servers using Zabbix.

Prerequisite:

- Understanding of Software Development Life Cycle.
- Knowledge about Linux is mandatory.
- Familiarity with Source control utilities.
- Basic Testing concepts are an advantage.



Zabbix Course Outline

1. **Introduction to Configuration Monitoring**
 - a. What is Configuration Monitoring?
 - b. What are Configuration Monitoring Tools?
 - c. Why to use Configuration Monitoring Tools?
 - d. Different Monitoring Tools Review
2. **Introduction to Zabbix**
 - a. What is Zabbix?
 - b. How Zabbix works?
 - c. Zabbix Features
 - d. What is Zabbix Server?
 - e. What is Zabbix Agent?
3. **Installing Zabbix - Preparing Your Environment**
 - a. Checking your machine requirements
 - b. Installing Apache Webserver
 - c. Installing and Configuring PHP Packages
 - d. Installing and Configuring MariaDB Server
 - e. Installing and Configuring Zabbix
 - f. Zabbix Frontend Post-Installation
4. **Getting Started with Zabbix**
 - a. Adding Users to Zabbix
 - b. Adding Permissions for new users
 - c. Adding Host
 - d. Adding New Item
 - e. Monitoring the latest data
 - f. Graphical representation of the data
 - g. Adding Trigger
 - h. Adding Template
 - i. Linking Template to Host
5. **Service Monitoring**
 - a. Service Monitoring Overview
 - b. Service Configuration

6. Adding and Monitoring new Hosts on Zabbix

- a. Installing Zabbix Agent
- b. Configuring Zabbix Agent
- c. Configuring the Firewall Rules for Zabbix Agent
- d. Using Template OS Linux by Zabbix Agent
- e. Troubleshooting by checking zabbix_agentd.log

