

**HIMNISH PATEL (Date 11/13/2024)**

COURSE : UNIX -> SECT : 00002

## **1. Tool Exploration: Understanding Zabbix**

- **Overview:** Zabbix is an open-source monitoring tool that provides comprehensive solutions for monitoring networks, servers, applications, and cloud resources. It's well-suited for infrastructure monitoring and management.
- **Features:**
  - Real-time monitoring of thousands of metrics.
  - Alerts and notifications with customizable thresholds.
  - Visualization tools like graphs, network maps, and custom dashboards.
  - API for integration with other tools.
  - Flexible data collection methods (agent-based and agentless).
- **Use Cases:** Ideal for enterprises needing extensive infrastructure monitoring, with scalable support for high loads and complex environments. Kind of overkill for a small based project.

## **2. Installation and Configuration Analysis**

- **Installation:**
  - **Requirements:** Zabbix requires a web server (Apache, Nginx), a database (MySQL, PostgreSQL, SQLite, Oracle), and PHP.
  - **Installation Options:** Zabbix can be installed via packages (RPM/DEB) on Linux, or through Docker containers for easier deployment.
- **Configuration:**
  - **Initial Setup:** Configuring Zabbix involves setting up a database, configuring the Zabbix server, and installing a web frontend.
  - **Ease of Use:** Installation is straightforward with guides available, though it can require multiple components and initial configuration.
    - Helpful resources ;
    - <https://www.youtube.com/watch?v=CwgpE2ZBhbW>
    - <https://www.youtube.com/watch?v=h1999li-x78>
  - **Complexity:** Zabbix setup is moderately complex due to dependencies, but the availability of comprehensive documentation makes it manageable.

## **3. Comparative Analysis of Zabbix**

- **Interface Usability:**
  - Zabbix's interface is designed for detailed control and customization, though was complex and not so easily understandable.
  - Dashboards can be customized, but might require time to fully configure.
- **Feature Set:**

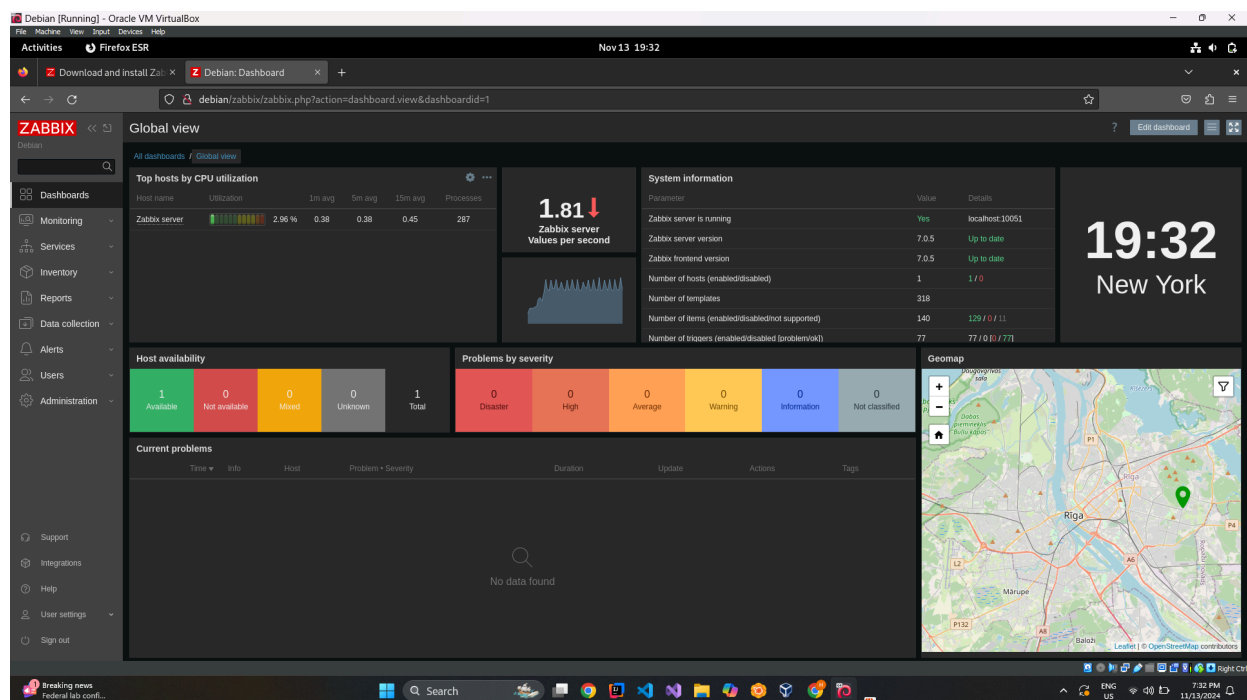
- Zabbix provides extensive out-of-the-box monitoring capabilities, including a wide range of metrics and options for alerts, automation, and historical data.
- Offers a high degree of customization, but this adds more complexity.

## Summary

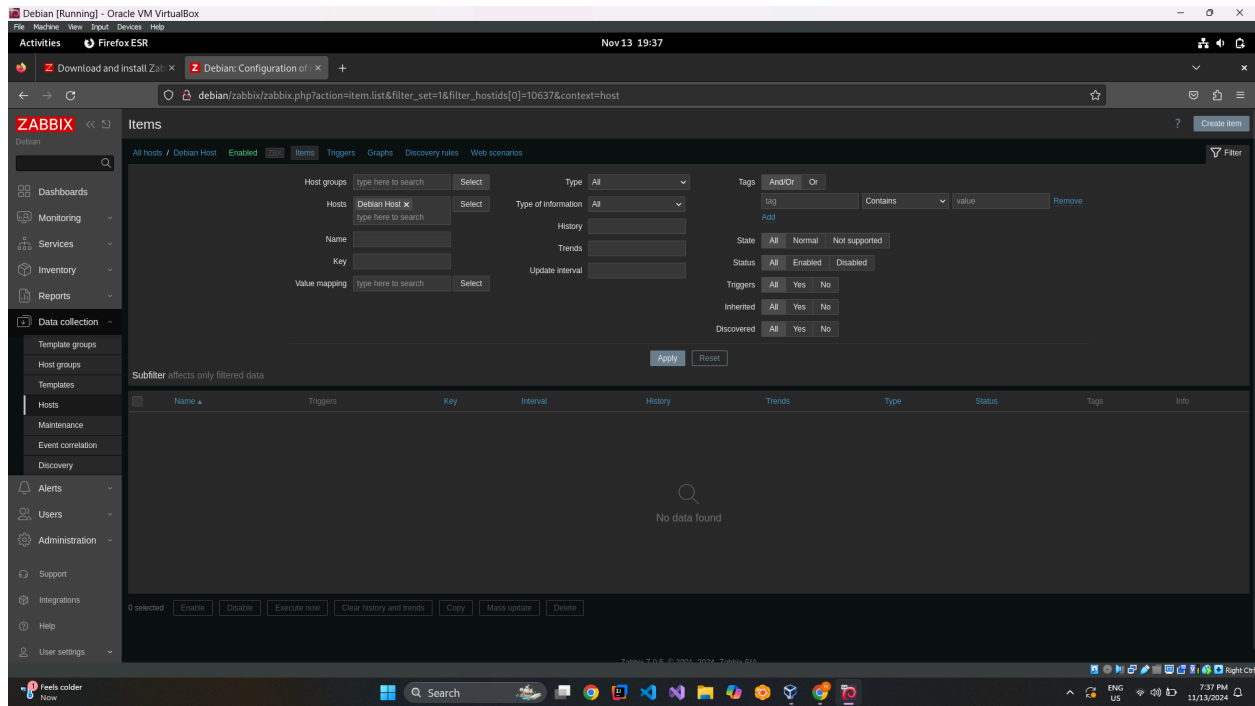
Zabbix is powerful for infrastructure and network monitoring, with strong alerting and data collection options. However, its setup is complex, and the interface feels overwhelming for smaller teams or projects focused mainly on high-level application metrics rather than infrastructure-level insights. In comparison to Prometheus with Grafana and CheckMK, Zabbix is particularly suited to large-scale, multi-server environments where detailed infrastructure monitoring is essential.

## Some Pictures

### 1-Home Screen



### 2- Setting Up Host



### 3-CPU Load graph

