Zabbix Server Installation and Configuration on AlmaLinux

Overview

This guide walks through installing and configuring a Zabbix server using Docker on AlmaLinux, adding a Windows host, and setting up monitoring with graphical data representation.

Prerequisites

1. **System Setup:**
   - AlmaLinux 8+.
   - Docker and Docker Compose installed.
   - Internet access.
2. **Zabbix Components:**
   - Zabbix Server
   - Zabbix Web Interface
   - Zabbix Agent

Process Overview

1. Prepare the AlmaLinux System

- Update the system using `dnf update`.
- Install Docker and enable it.

2. Set Up the Zabbix Environment

- Create a directory for Zabbix.
- Use Docker Compose to configure Zabbix Server, Web Interface, and Database services.

3. Deploy the Containers

- Start the Zabbix setup using Docker Compose (`docker-compose up -d`).
- Verify containers are running with `docker ps`.

4. Access the Zabbix Dashboard

- Open the Zabbix web interface at `http://<server_ip>/`.
- Log in with default credentials and verify the server is working.

5. Add a Windows Host

- Install the Zabbix Agent on a Windows machine.
- Configure the host in Zabbix with appropriate templates.

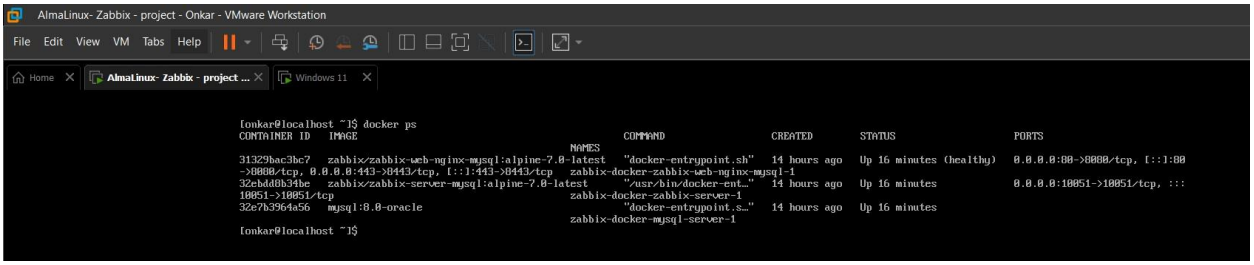
6. Monitor Data and View Graphs

- Use **Monitoring > Latest Data** to view metrics.
- Access **Monitoring > Graphs** for graphical representations of the collected data.

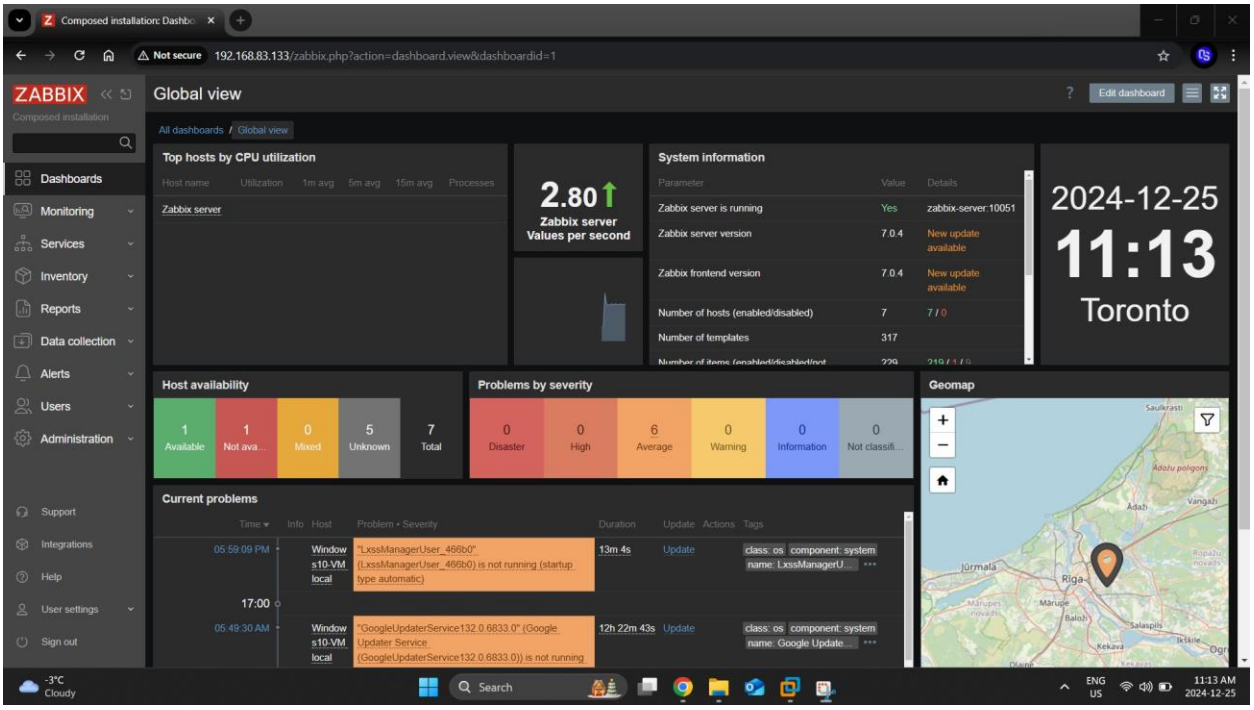
Skills Learned

1. **System Administration:**
    - Setting up Docker and Docker Compose on AlmaLinux.
    - Managing containerized services.
2. **Zabbix Configuration:**
    - Deploying Zabbix using Docker.
    - Configuring hosts and assigning monitoring templates.
3. **Monitoring and Troubleshooting:**
    - Analyzing metrics and creating graphical data views.
    - Troubleshooting agent connections and data collection issues.
4. **Networking:**
    - Managing network communication between Zabbix Server and Agents.
    - Setting up IP-based host configurations.
5. **Cross-Platform Monitoring:**
    - Integrating a Linux-based Zabbix server with a Windows-based host.

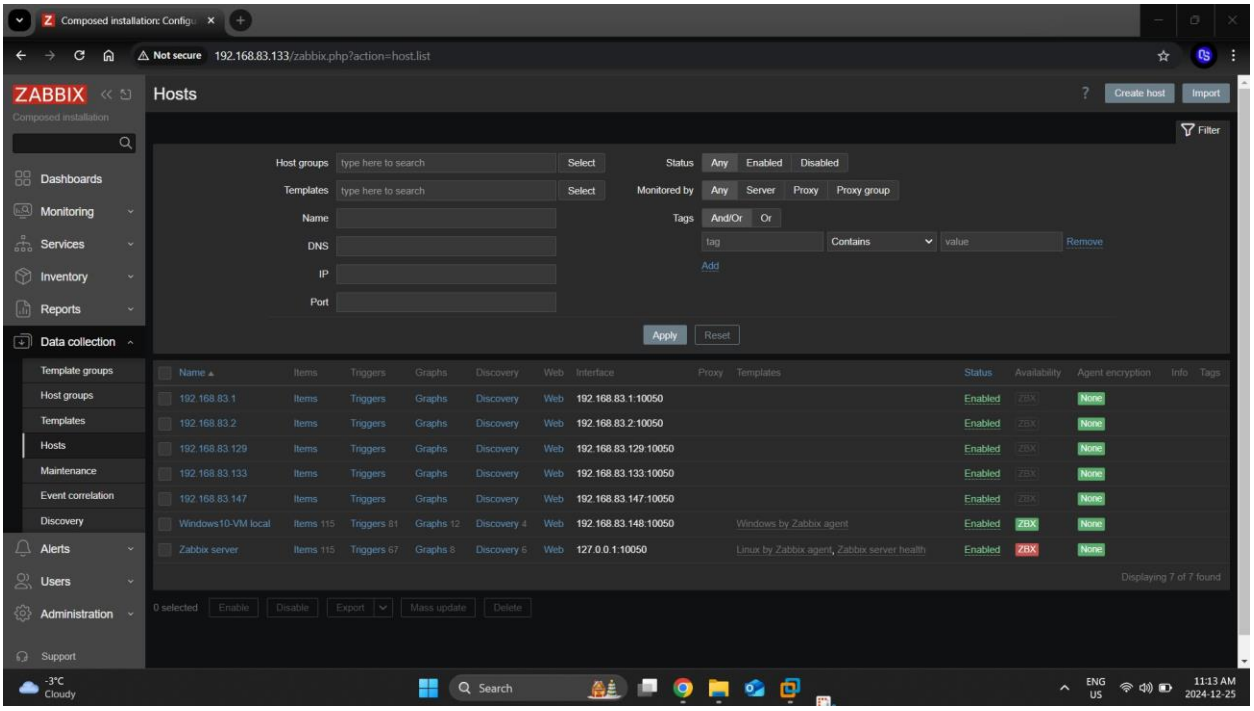
Docker containers running Zabbix server



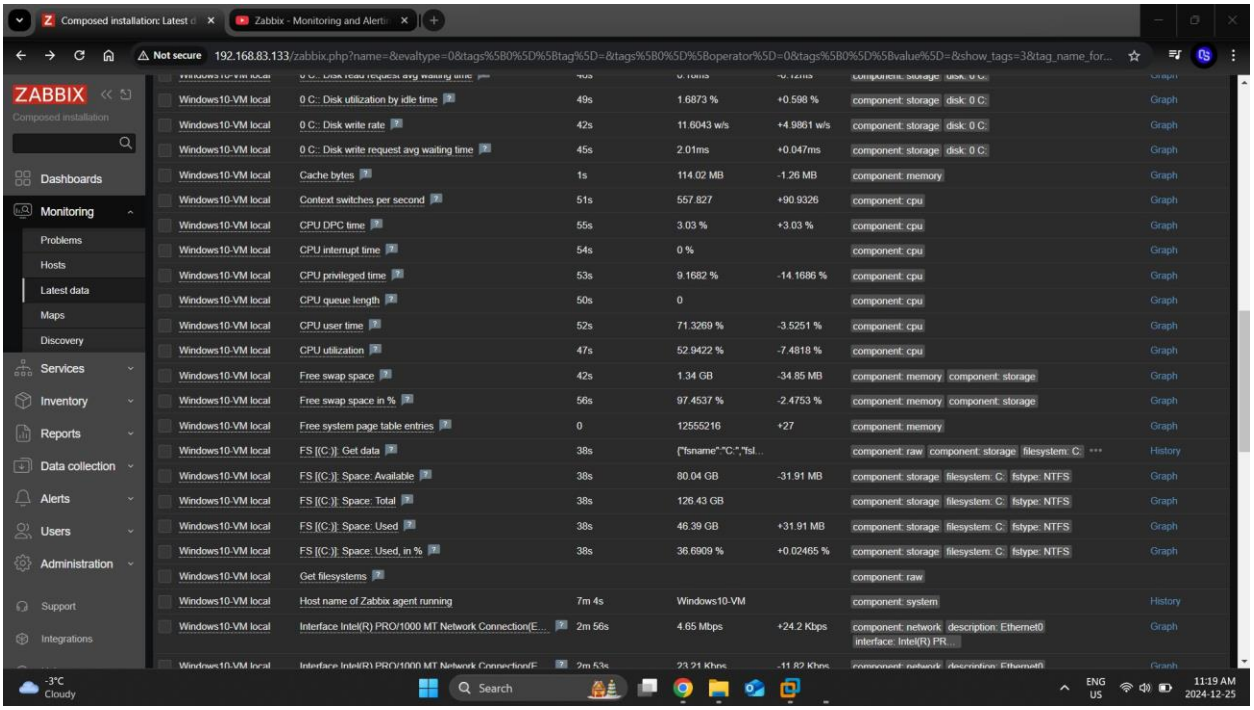
Zabbix Dashboard



Available hosts



Data collected from Windows host by Zabbix agent



Graphical representation of collected data (CPU utilization)