BCIT, COMP 4912 - LAB #5

Winter 2025

1. Objectives

At the end of this lab, you will get hands-on experience on launching a Zabbix server and Zabbix agents (installed via Ansible) on AWS EC2 instances.

2. Tasks

2.1. Create three VMs (with your OS choice) using Terraform in AWS**.**

2.2. Launch a Zabbix Server using Docker image based on the instructions shared in last week slide (slide #14) on your host VM.

2.3. Use your host VM as an Ansible control node and install the latest Zabbix agent on three AWS EC2 instances. Also, ensure to put the IP address of the Zabbix server into the configuration of Zabbix agent installed on your AWS instances. The IP address of your Zabbix server will be the Public IP address of your computer, when you connect to the Internet.

2.4. When the Zabbix agents are installed on three AWS VMs, open port TCP/10050 on the Security Group of each AWS instance.

2.5. Now, you should be able to add these three hosts into your Zabbix server via its web-interface. Call these VMs, **Node-1**, **Node-2,** and **Node-3**. Use Zabbix Linux-template to monitor these VMs and collect their metrics.

2.6. Wait for 30-minutes and check the generated graphs for each host. Please ensure to include screenshots from the generated graphs in your report.

3. Expected Outcome

3.1. **Individual Report Requirement**

Each student must submit an individual report for every lab. Collaboration on reports is not allowed, but you can discuss concepts with classmates.

3.2. **Report Content**

- **Screenshots**: Include screenshots of each step, including the commands you used and the corresponding output.
- **Challenges and Solutions**: If you encounter challenges while following the instructions on your computer, describe it in your report along with the solutions you applied to resolve them.

3.3. Organization and Quality

- Divide your report into sections corresponding to each task in the lab.
- At the end of your report, write a summary highlighting the tasks completed and your observations.
- Ensure your report is clear, well-written, and well-organized.

3.4. Deadline

Submit your report before the deadline. Late submissions may not be accepted unless prior arrangements are made.

3.5. Troubleshooting Guidance

- If you face an issue, start by researching solutions using Google, community forums, or tools like ChatGPT.
- Take time to investigate and understand the problem thoroughly.
- If you cannot resolve the issue, share your question along with a detailed explanation of what you've already tried with your classmates and me.
- Remember, It is very important to attempt some independent research before asking for help with any project-related questions.