Wazuh Setup Guide

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This document provides step-by-step instructions for setting up Wazuh, including installing the Wazuh server and dashboard, deploying Wazuh agents, and exploring the Wazuh dashboard. Each section includes a placeholder for manually inserting screenshots.

1. **Wazuh Installation**

Step-by-Step Guide: Installing Wazuh Using the Virtual Machine (OVA)

1. Download the Wazuh Virtual Appliance (OVA)

- Download the pre-built Wazuh OVA file for version 4.9.2 from Wazuh's official site.
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2. Check System Requirements

- Ensure your host system is 64-bit.
- Enable hardware virtualization in the firmware (BIOS/UEFI) of your host.
- Install a virtualization platform like VirtualBox or VMware or Hyper-V.

Default Hardware Configuration for Wazuh VM:

- CPU: 4 cores
- RAM: 8 GB
- Storage: 50 GB

Note: Modify the configuration based on your needs.

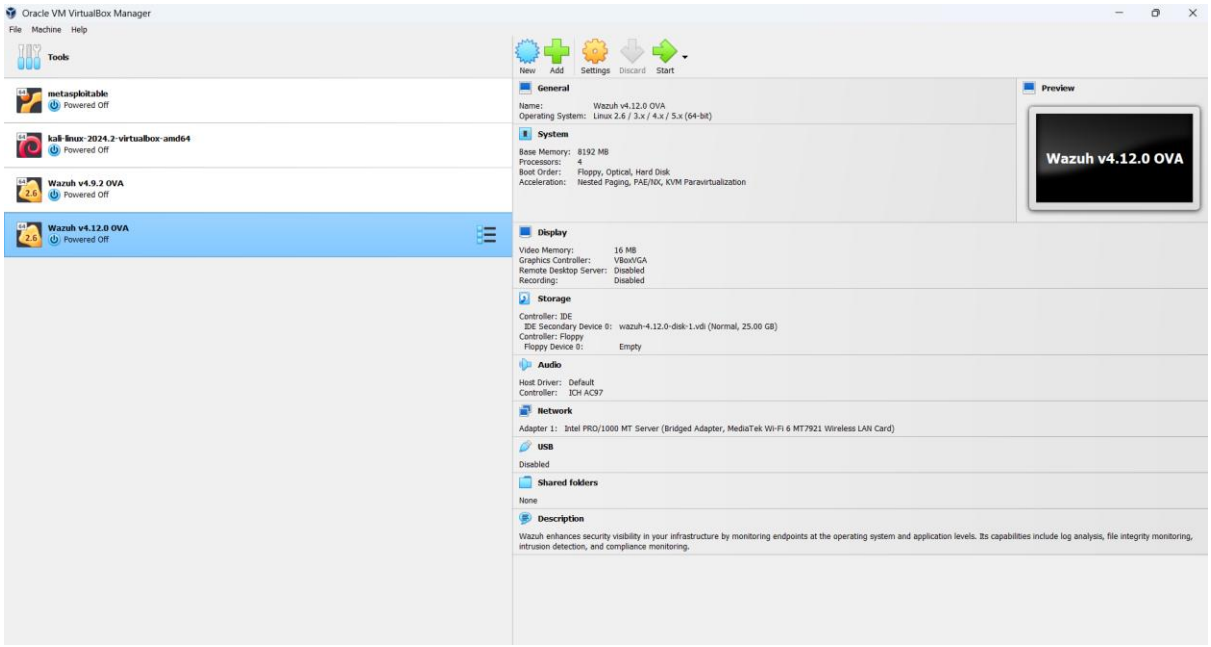
3. Import the OVA File

- Open your virtualization platform (e.g., VMware).
- Import the downloaded OVA file:
    - In VMware, go to File > Open...

- Select the Wazuh OVA file and click on Open

- In the new open windows, give a name to your VM (e,g : Wuzuh Server), choose the path where to store your VM configuraton files and then click on Import.

- Your VM has been successfully imported. You can now add more RAM (e,g: from 8Gb to 10Gb), Storage (From 50 Gb to 80Gb) and CPUs (4 to 8) if you want or have more resources. Also choose the correct network adapter (e.g, from bridge to NAT) for the sake of this demo.



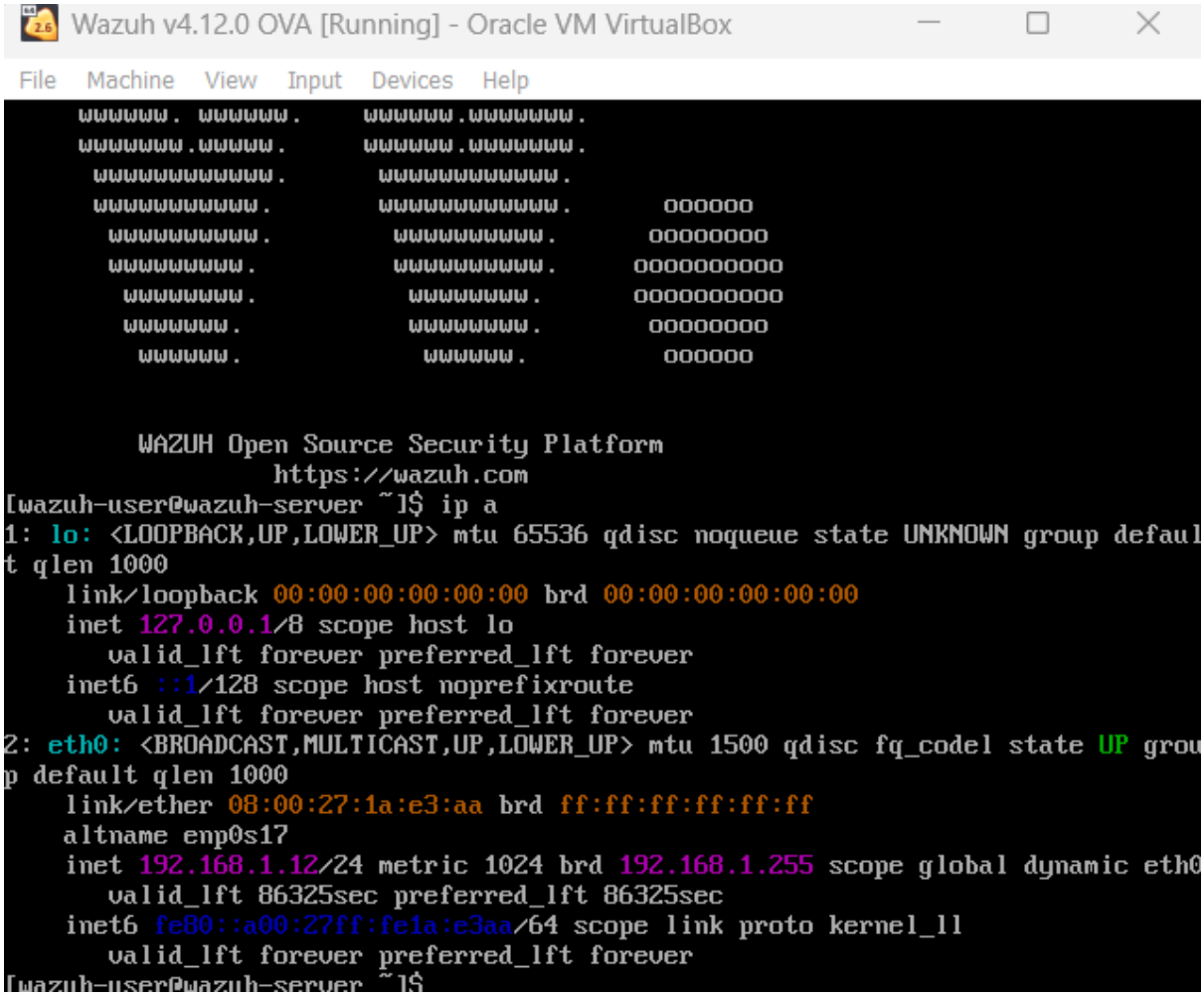
4. Start the Virtual Machine

- Start the VM from your virtualization platform by clicking on Power on this virtual machne.
- Login credentials for the VM:
    - Username: wazuh-user
    - Password: wazuh

6. Find the VM's IP Address

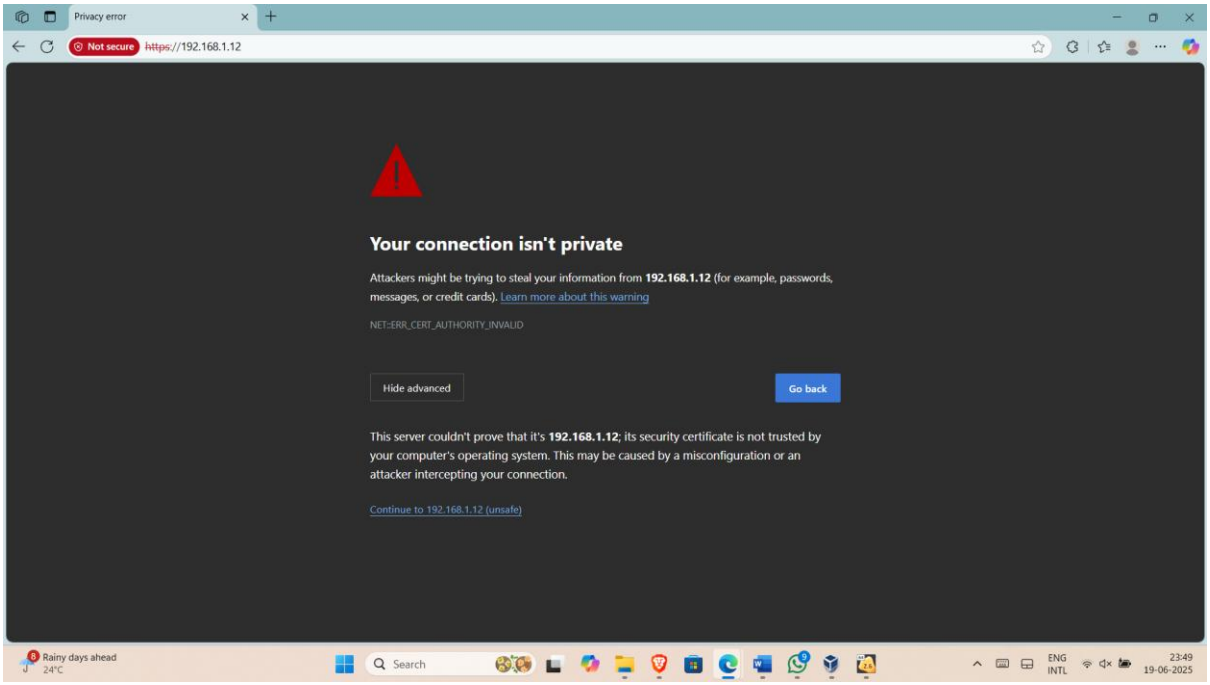
- Inside the VM, run the following command to get the IP address:

ip a

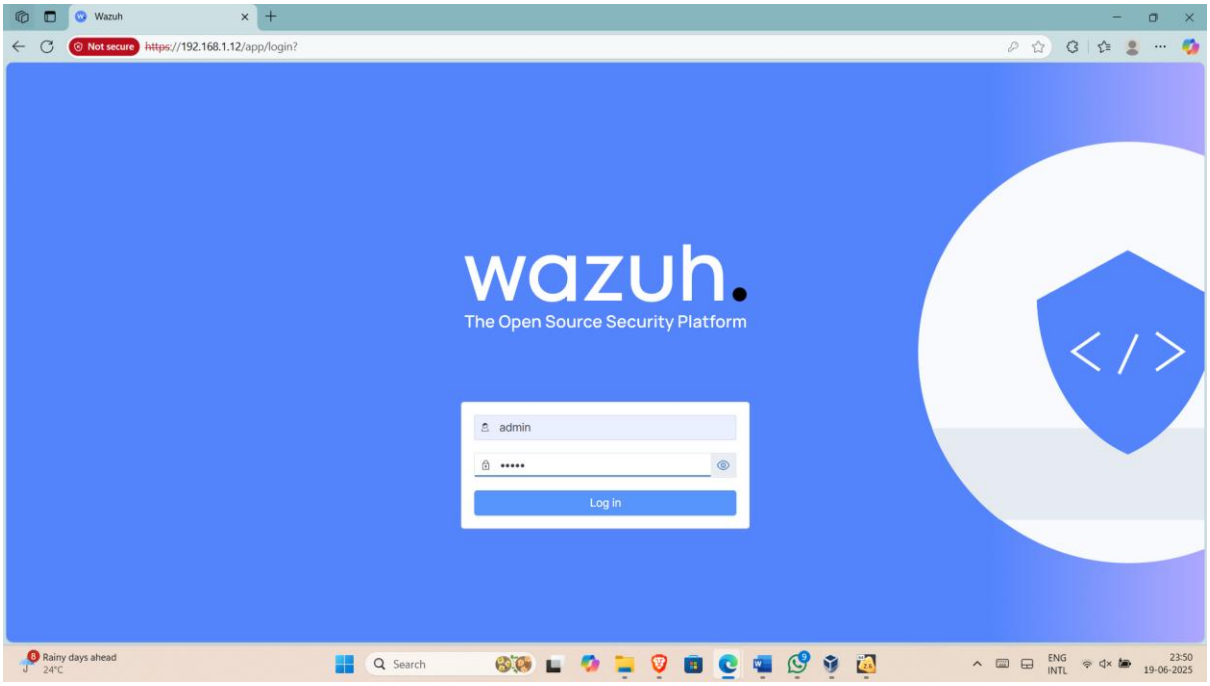


7. Access the Wazuh Dashboard

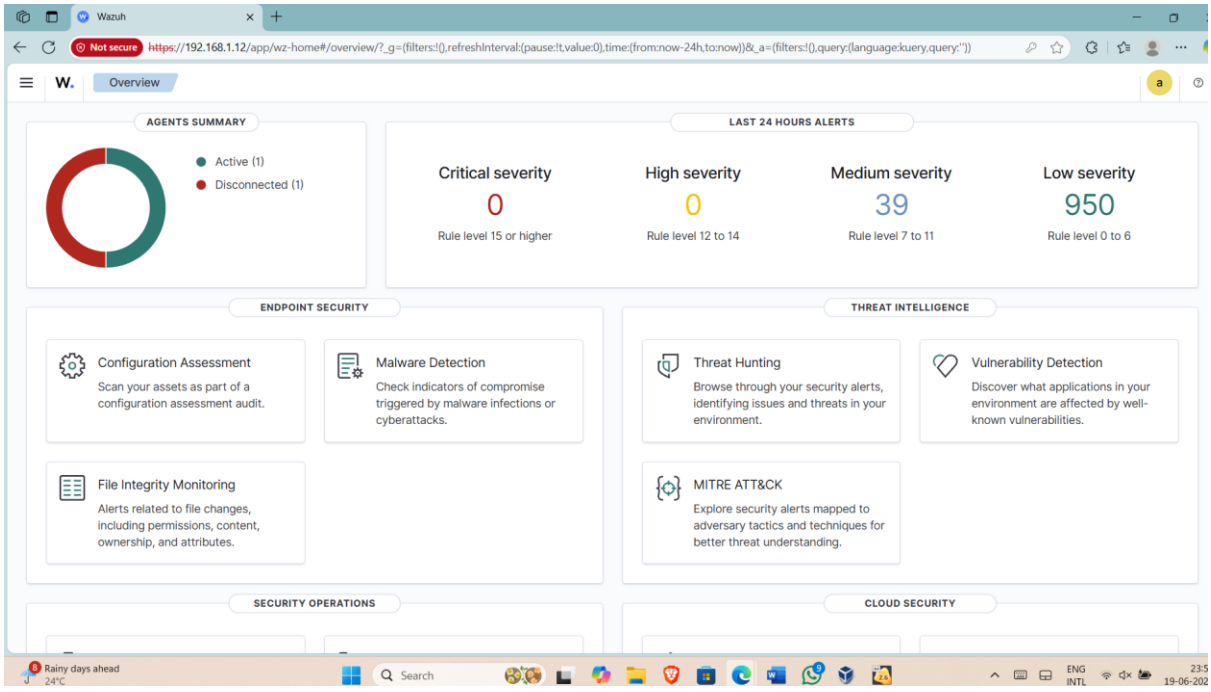
- Open a web browser from another oon the same network (e.g, Debian or Windows) and navigate to:
- https://<wazuh_server_ip>
- Replace <wazuh_server_ip> with the IP address obtained in the previous step.
- If pop-pup windows open, click on Advaanced and then click on Accept the Risk and Continue



- Dashboard login credentials:
    - Username: admin
    - Password: admin



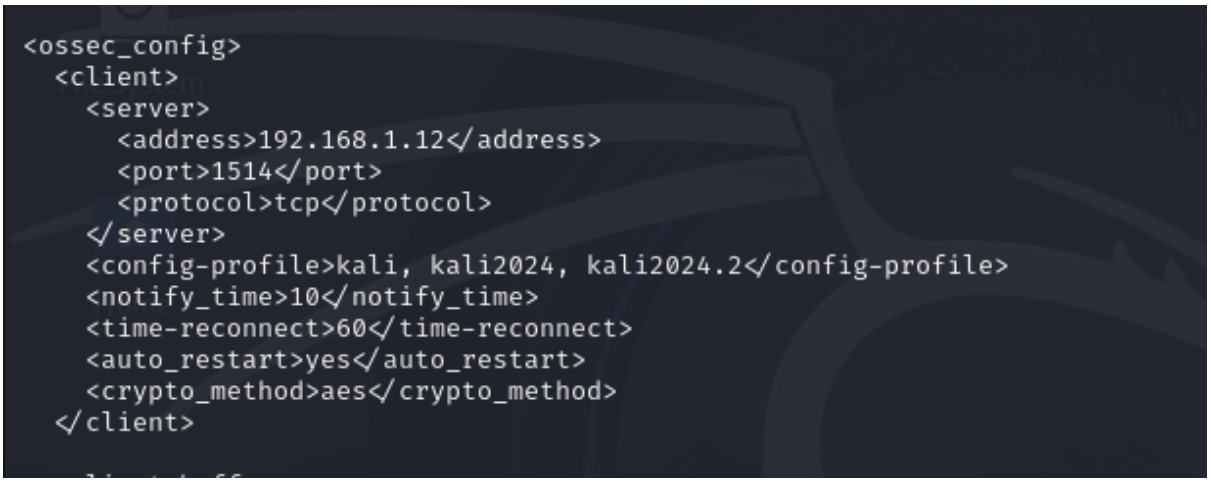
- You have successfully install the wauh server using the OVA file.



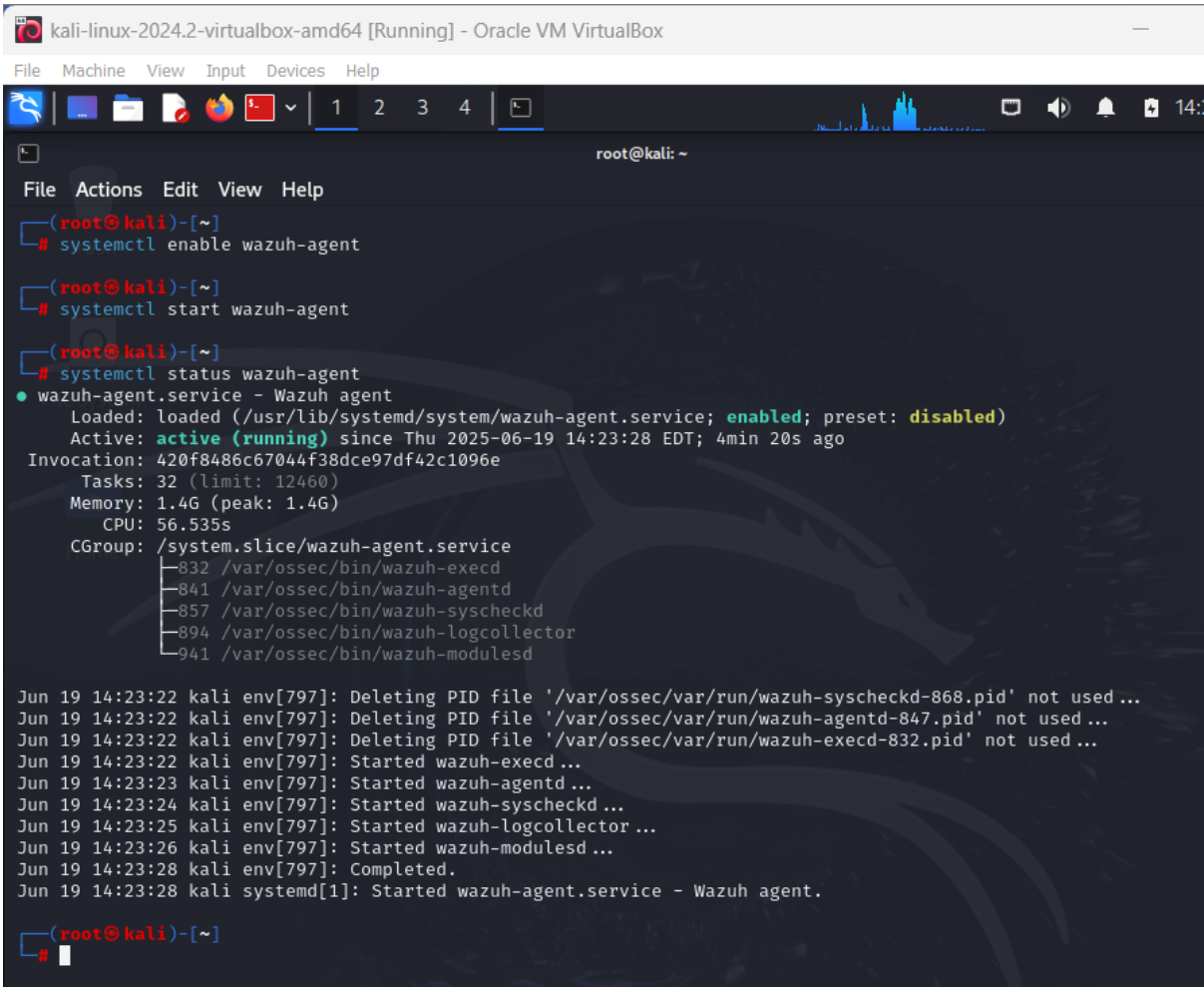
2. Deploy Wazuh Agent

Step 1: Install Wazuh Agent on Linux

1. **Add Wazuh Repository**:
    - For Debian/Ubuntu, add the Wazuh repository:
    - echo "deb https://packages.wazuh.com/4.x/apt/ stable main" | sudo tee /etc/apt/sources.list.d/wazuh.list
    - wget -qO - https://packages.wazuh.com/key/GPG-KEY-WAZUH | sudo apt-key add -
    - sudo apt-get update
2. **Install Wazuh Agent**:
    - Install the agent:
    - sudo apt-get install wazuh-agent
3. **Configure Agent**:
    - Edit the configuration file /var/ossec/etc/ossec.conf to point to the Wazuh manager:
    - <client>
    - <server>
    - <address><your-wazuh-manager-ip></address>
    - </server>
    - </client>



4. **Start Agent**:
    - Enable and start the Wazuh agent:
    - sudo systemctl enable wazuh-agent
    - sudo systemctl start wazuh-agent

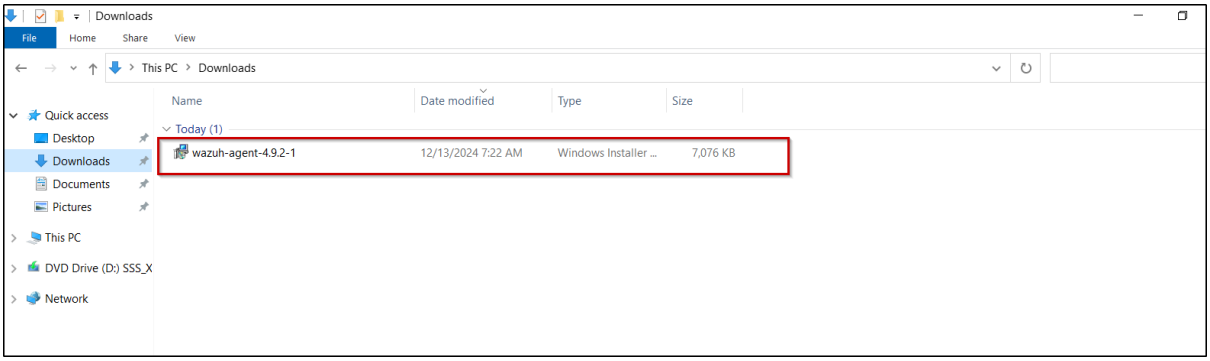


Step 2: Install Wazuh Agent on Windows

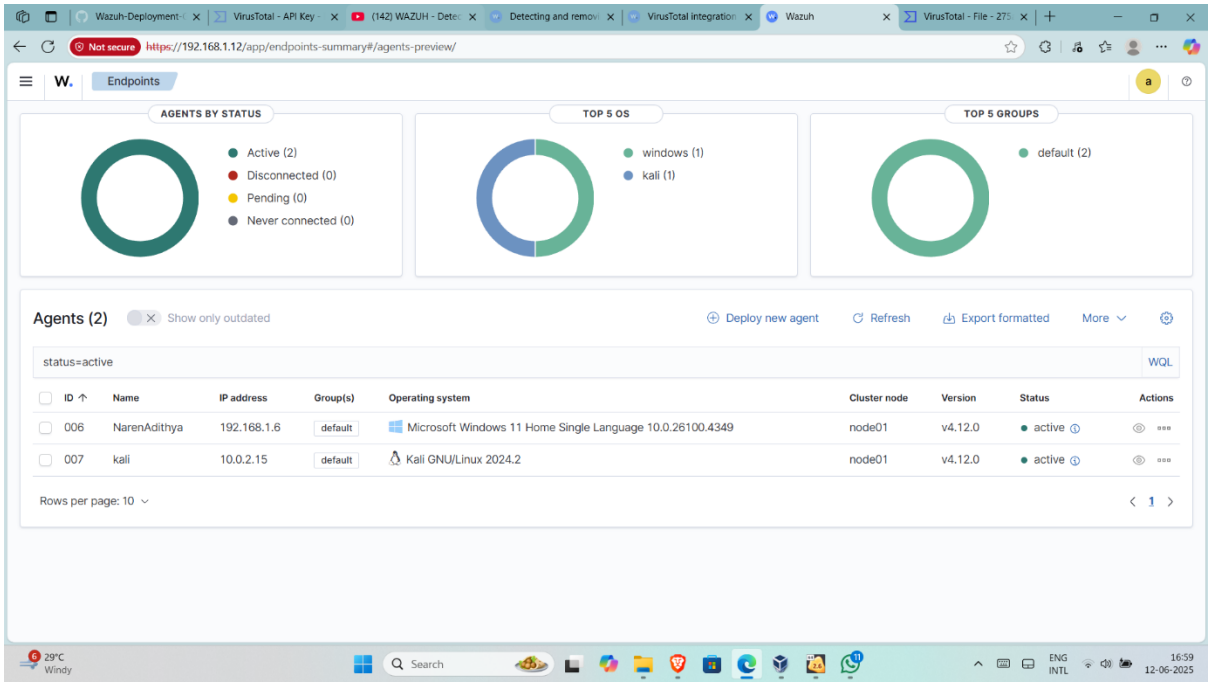
1. **Download Agent Installer**:
    - Download the Windows agent installer from https://packages.wazuh.com/4.x/windows/wazuh-agent-<version>.exe.
2. **Run Installer**:
    - Execute the installer and follow the wizard.
    - Enter the Wazuh manager IP when prompted.
3. **Verify Agent Status**:
    - Open a command prompt and check the agent status:
    - net start WazuhSvc

Step 3: Connect Agent to Wazuh Manager

1. **Register Agent**:
    - On the Wazuh manager, register the agent:
    - sudo /var/ossec/bin/manage_agents -i <agent-id>



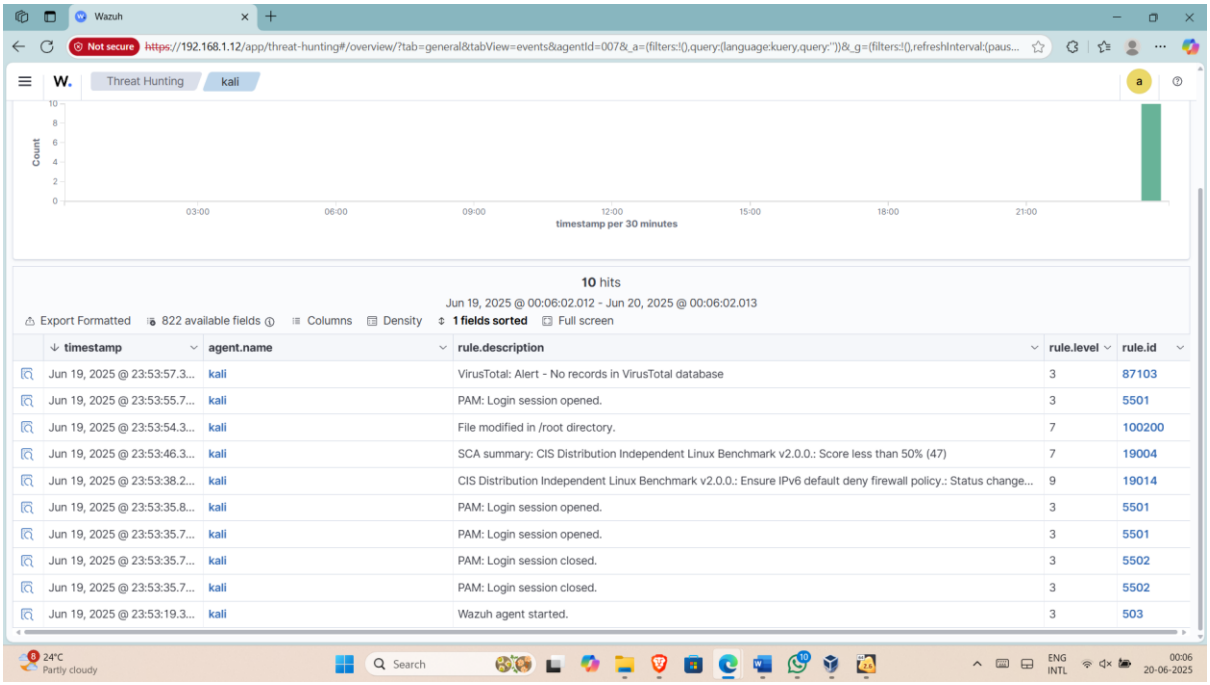
2. **Restart Wazuh Manager**:
    - Restart the manager to apply changes:
    - sudo systemctl restart wazuh-manager
3. **Verify Connection**:
    - Check the agent status in the Wazuh dashboard under the "Agents" tab.



3. Explore Wazuh Dashboard

Step 1: Navigate Through Modules

1. **Access Dashboard**:
    - Log in to the Wazuh dashboard at https://<your-server-ip>:5601.
2. **Security Events**:
    - Navigate to the "Security Events" module to view alerts and logs.
3. **Agents**:
    - Go to the "Agents" tab to see connected agents and their status.
4. **File Integrity Monitoring (FIM)**:
    - Explore the FIM module to monitor file changes on endpoints.
5. **Syscheck**:
    - Check the Syscheck module for system integrity alerts.



Step 2: Identify Top Alerts and Their Sources

1. **View Top Alerts**:
    - In the "Security Events" module, sort alerts by severity or frequency.
2. **Analyze Sources**:
    - Click on an alert to view details, including the source IP, agent, and rule.
3. **Create Custom Filters**:
    - Use the dashboard filters to focus on specific agents or alert types.

Vulnerability Detection

2 Critical

11 High

10 Medium

6 Low

Top 5 Packages

Package	Count ↓
Oracle VM VirtualBox 7.0.18	9
Steam	8
Node.js	7
Java(TM) SE Development Kit 21.0.2 (64-bit)	4
Maltego	1