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Lesson 01 Demo 02

Configuring Prometheus to Scrape and Visualize the Metrics

Objective: To configure Prometheus to scrape and visualize metrics for monitoring system performance through its web interface for improved observability and real-time insights

Tools required: Linux operating system

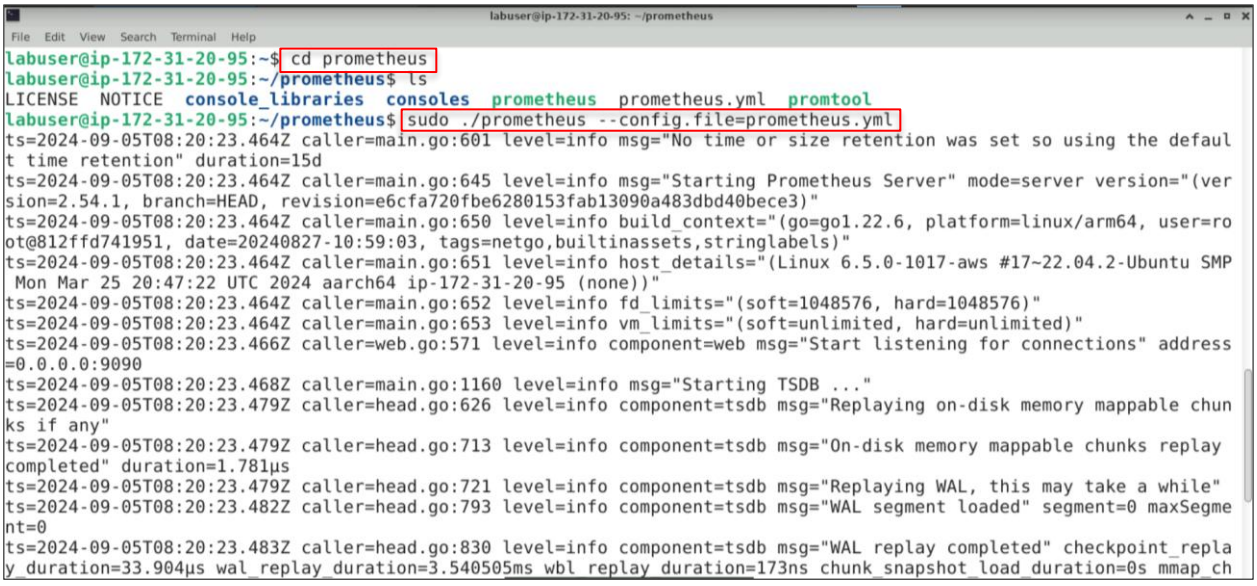
Prerequisites: Basic understanding of Web Applications

Steps to be followed:

1. Start Prometheus binary
2. Explore Prometheus UI

Step 1: Start Prometheus binary

1.1 Run the following commands to change the current directory to the Prometheus directory and start the Prometheus server:
cd prometheus
sudo ./prometheus --config.file=prometheus.yml



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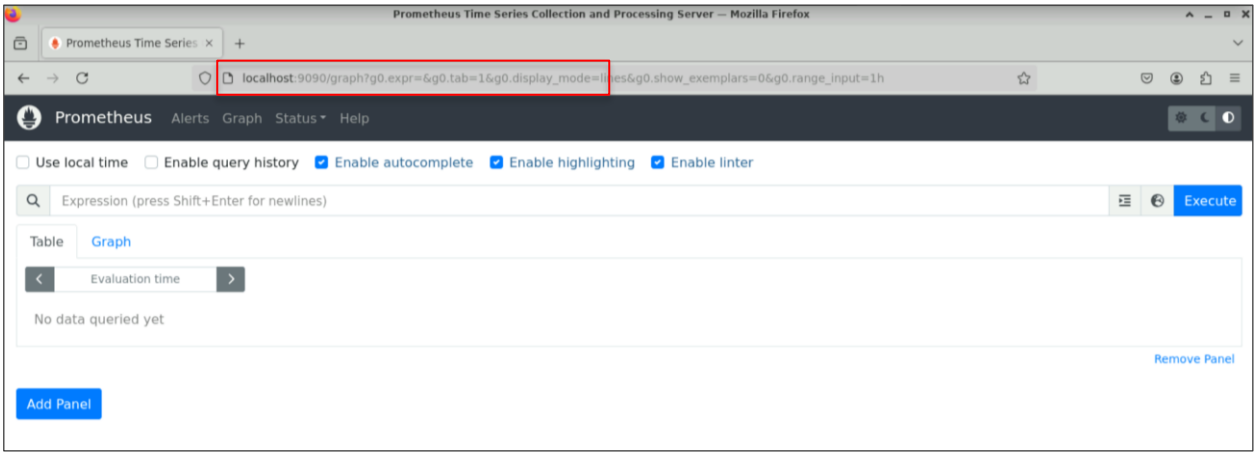
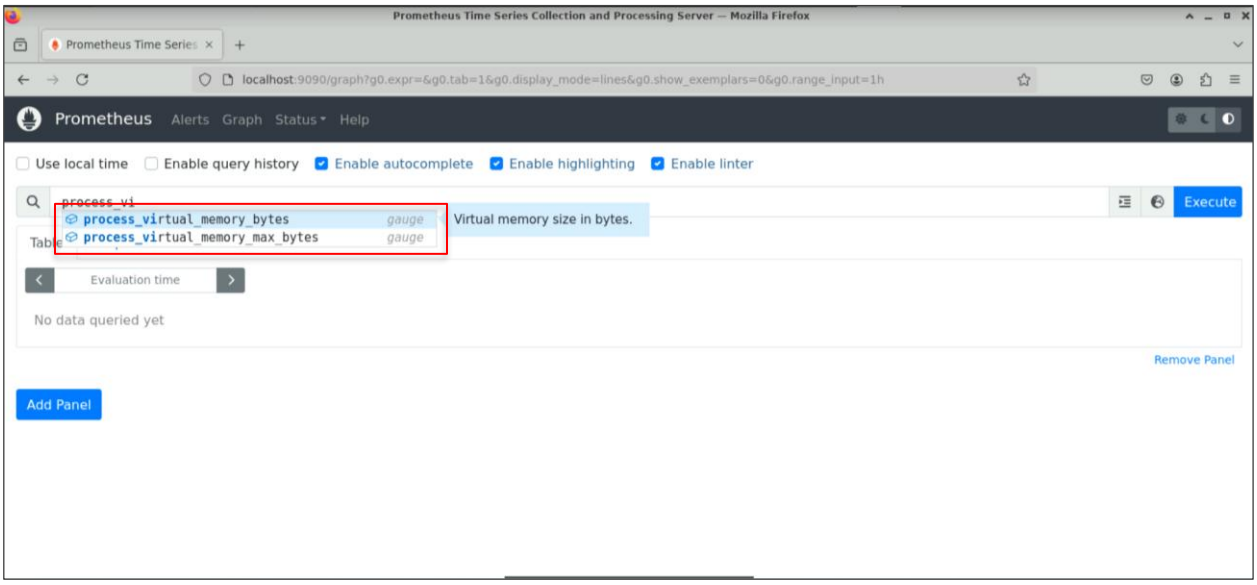
Step 2: Explore Prometheus UI

2.1 Navigate to the browser and enter the URL **http://localhost:9090/** or **http://<public-ip>:9090/** to access the Prometheus console



Note: The Prometheus server must run in the terminal to access the Prometheus UI.

2.2 Navigate to the **Expression Browser**, type **process_vi**, and then select the **process_virtual_memory_bytes** metric as shown



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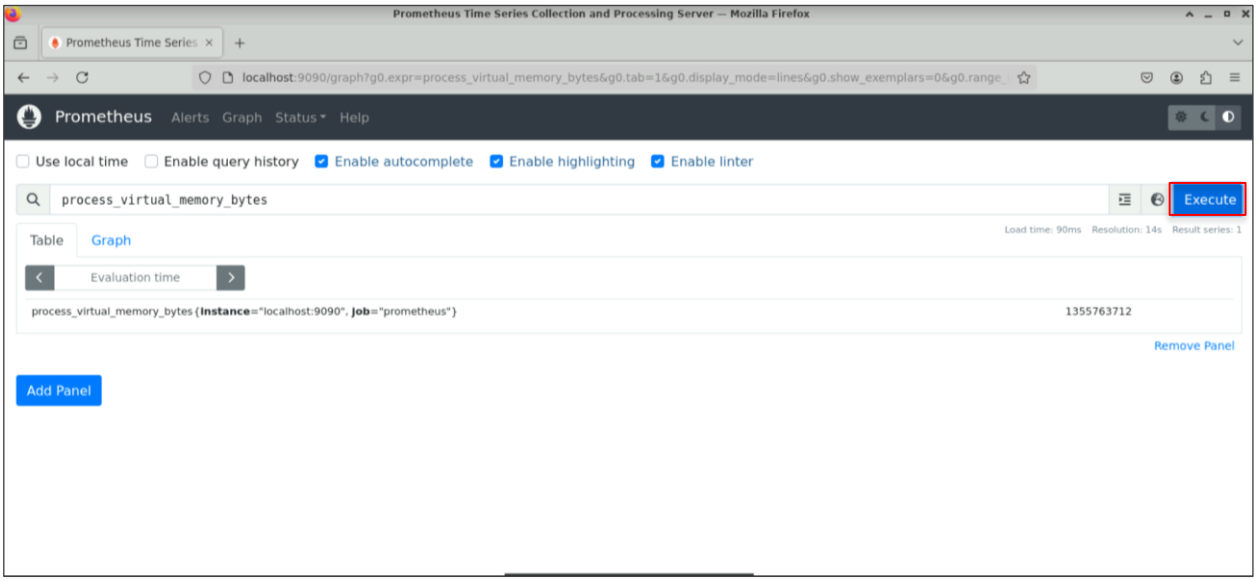
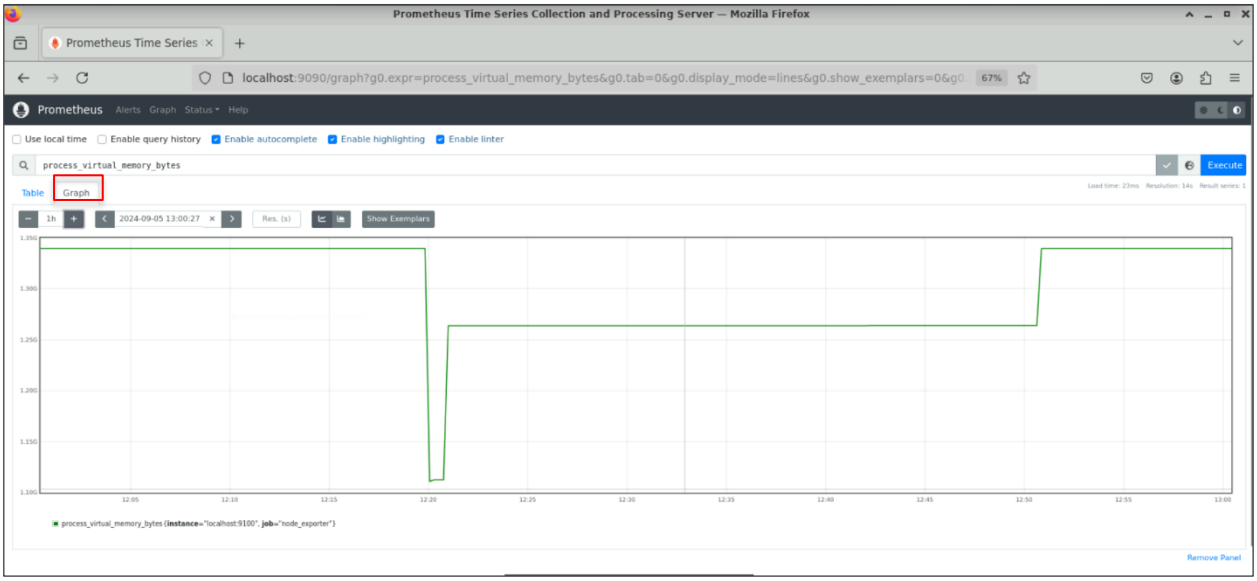
2.3 Click on **Execute**



2.4 Click on the **Graph** tab to visualize **process_virtual_memory_bytes**



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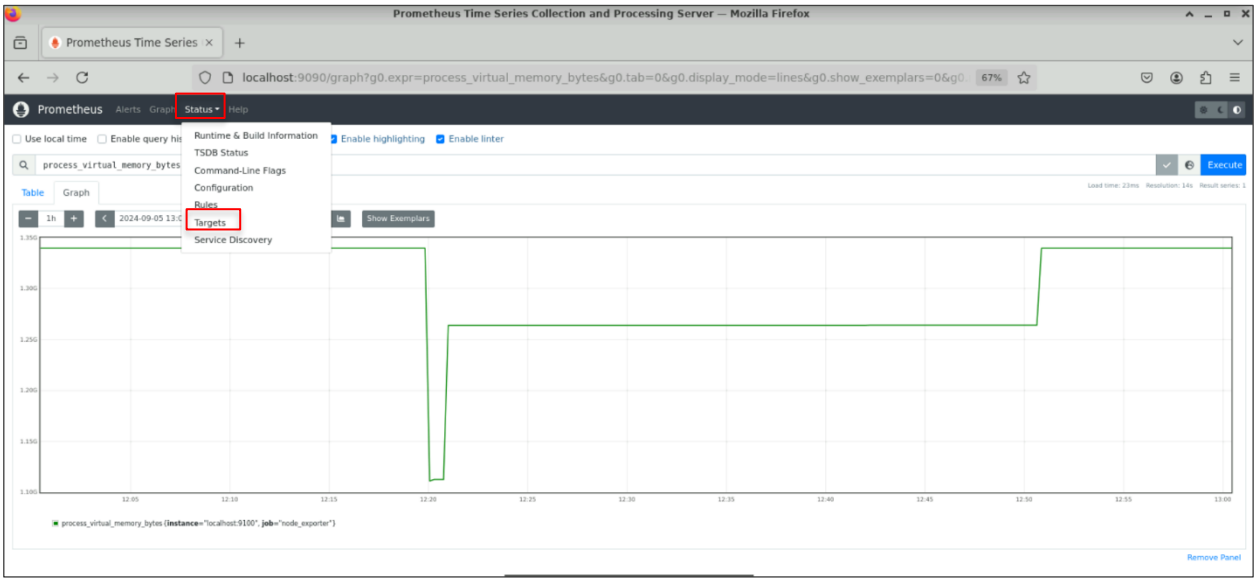
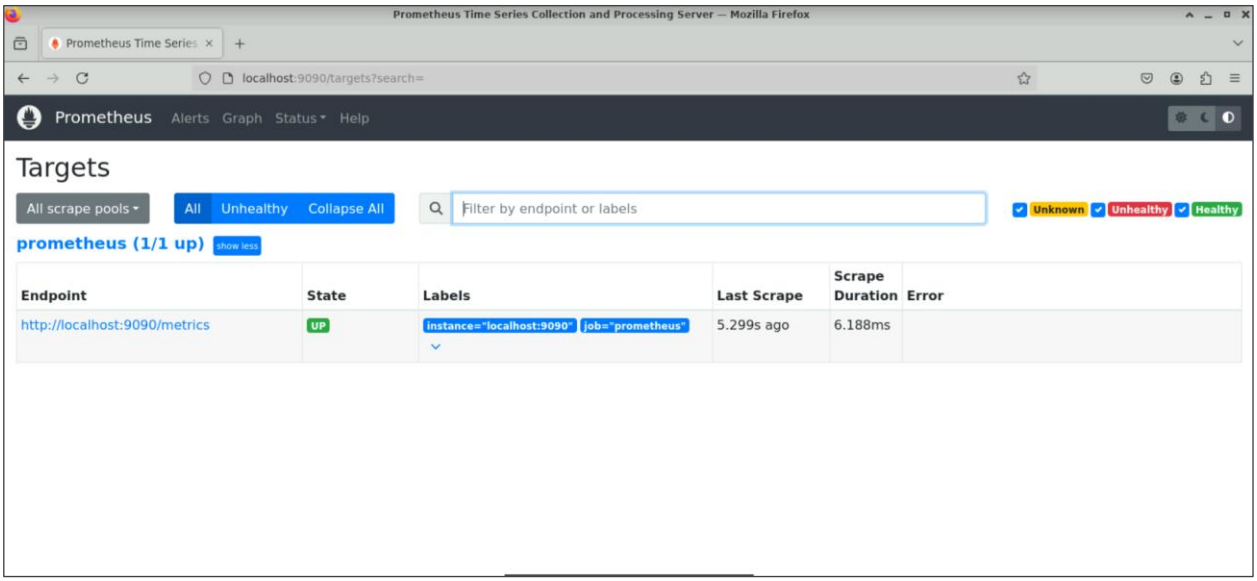
2.5 Click on the **Status** section and select **Targets**



You will see the following interface:



Only a single Prometheus server is in the **UP** state on this page, indicating that the last scrape was successful. If there had been an issue with the previous scrape, an error message would appear in the **Error** field.

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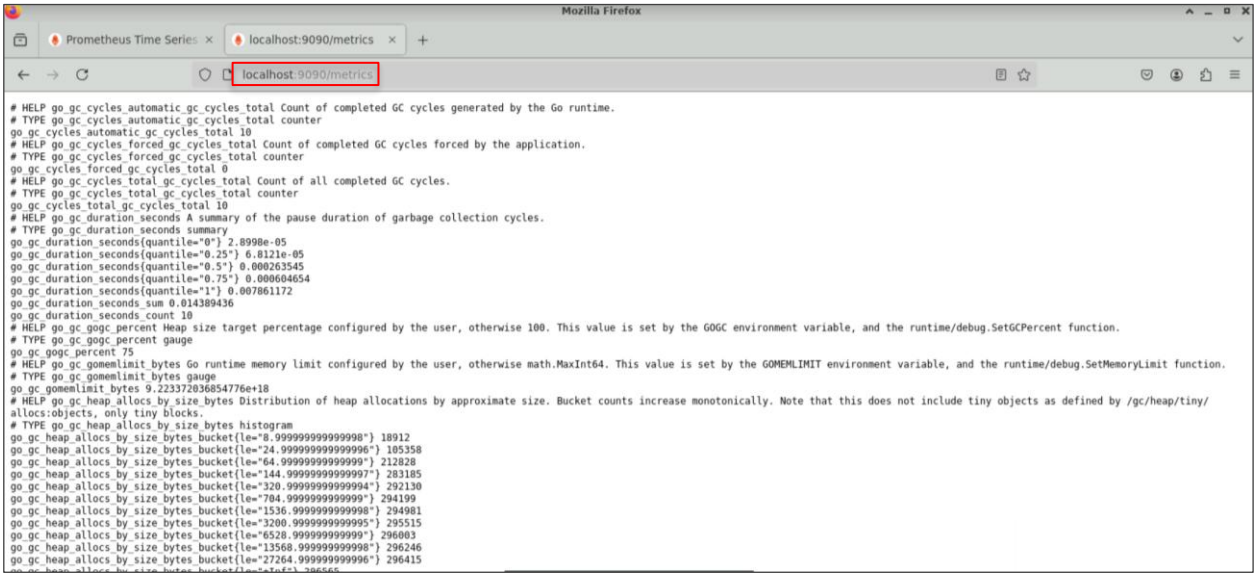
2.6 Copy the link **http://localhost:9090/metrics** from the **Targets** page and paste it into a new browser tab as shown:



This will display metrics for monitoring the application.

By following these steps, you have successfully configured Prometheus to scrape and visualize metrics for monitoring system performance through its web interface.