

# Monitoring System for Jenkins

The Jenkins CI environment can be monitored with the below mentioned open source tools.

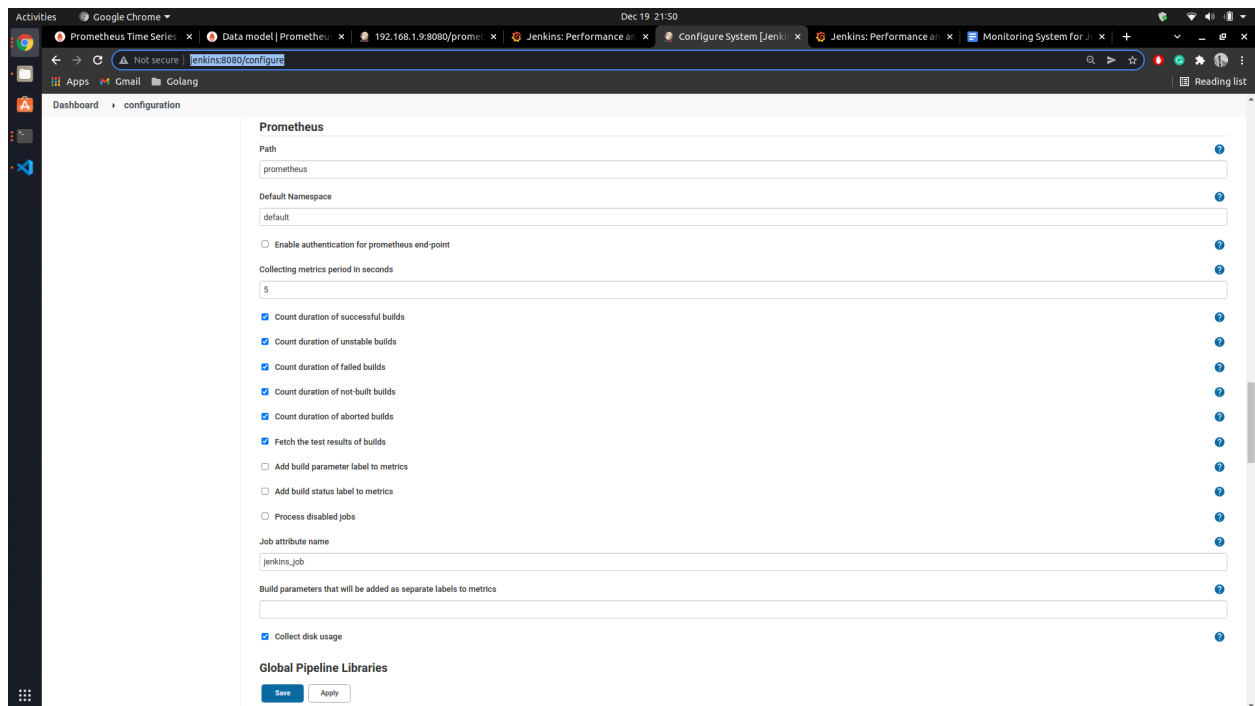
1. Prometheus (Data Storage)
2. Grafana (Data Visualization)
3. Prometheus Plugin in jenkins to export metrics.

I have attached configuration files for Prometheus and Grafana. Also, docker-compose file for both the tools to be hosted in a server.

## Data Source:

In Jenkins, the Prometheus plugin needs to be installed in order to export metrics. The screenshot for prometheus config in jenkins is given below.

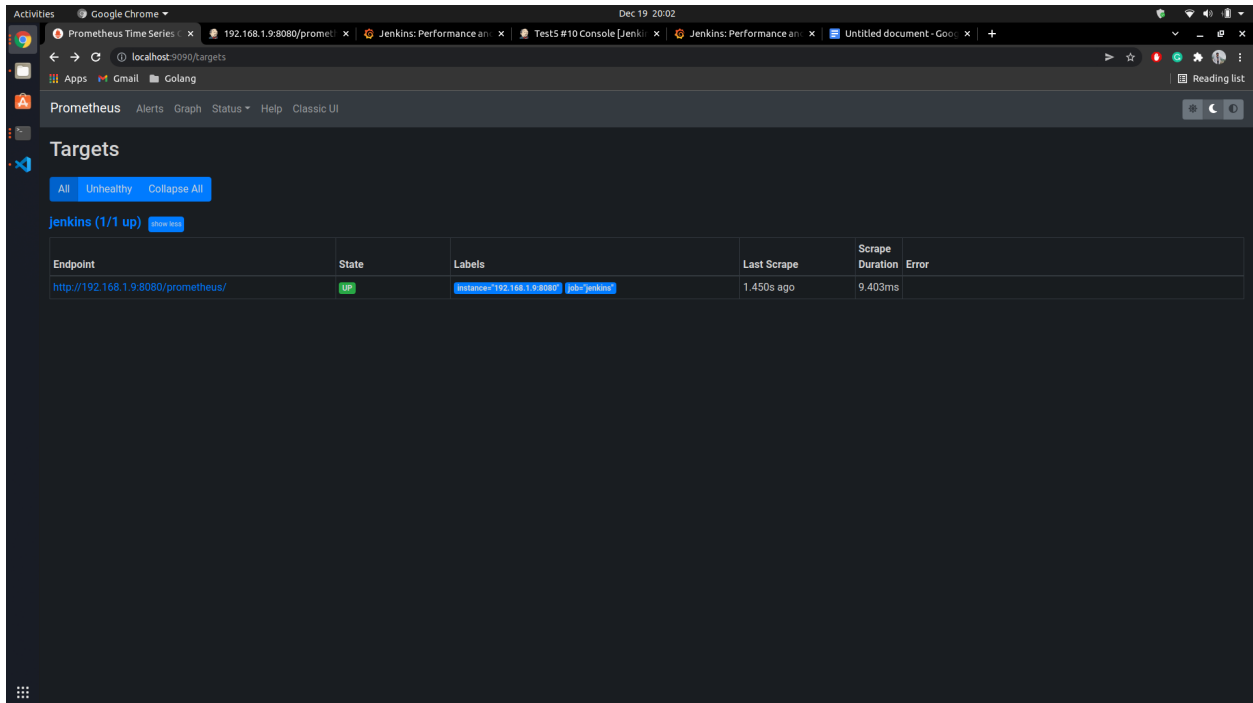
Plugin name: [Prometheus metrics plugin](#)



## Data Storage:

The Prometheus configs files are updated with the default configs and same is configured in the docker-compose file attached.

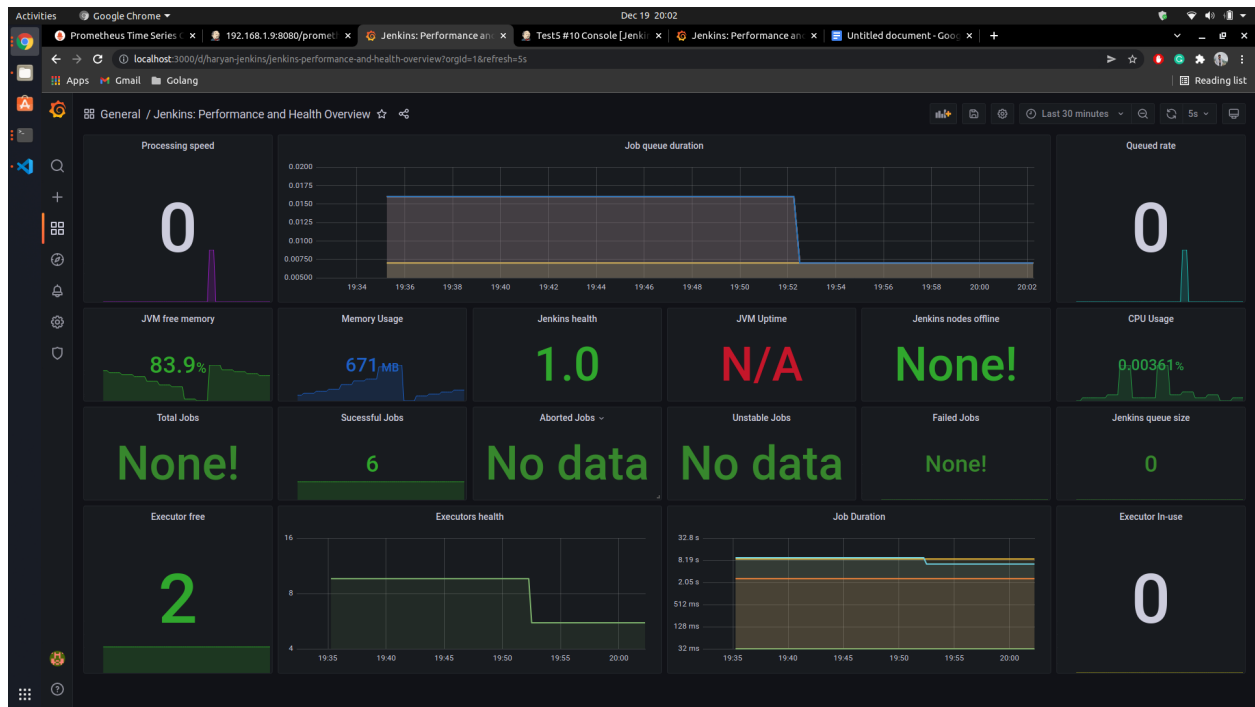
Find the screenshot for the application which is already configured to collect jenkins metrics.



The metrics are stored in a time series database. The data source is set to be refreshed for every 5 seconds and the same interval is assigned for the data visualization(Grafana).

## Data Visualization:

The config files for Grafana, configuring the data source, are attached. Find the screenshot for the Grafana tool.



I have configured some of the metrics to be viewed like, number of successful builds, number of executors etc,.

## **Flowchart:**

