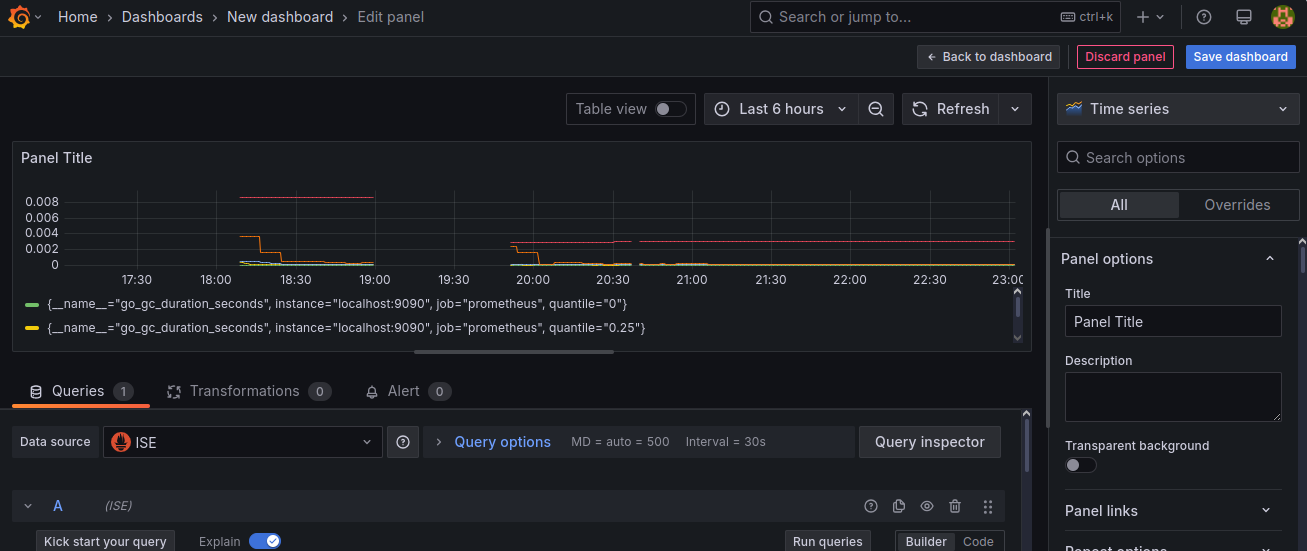
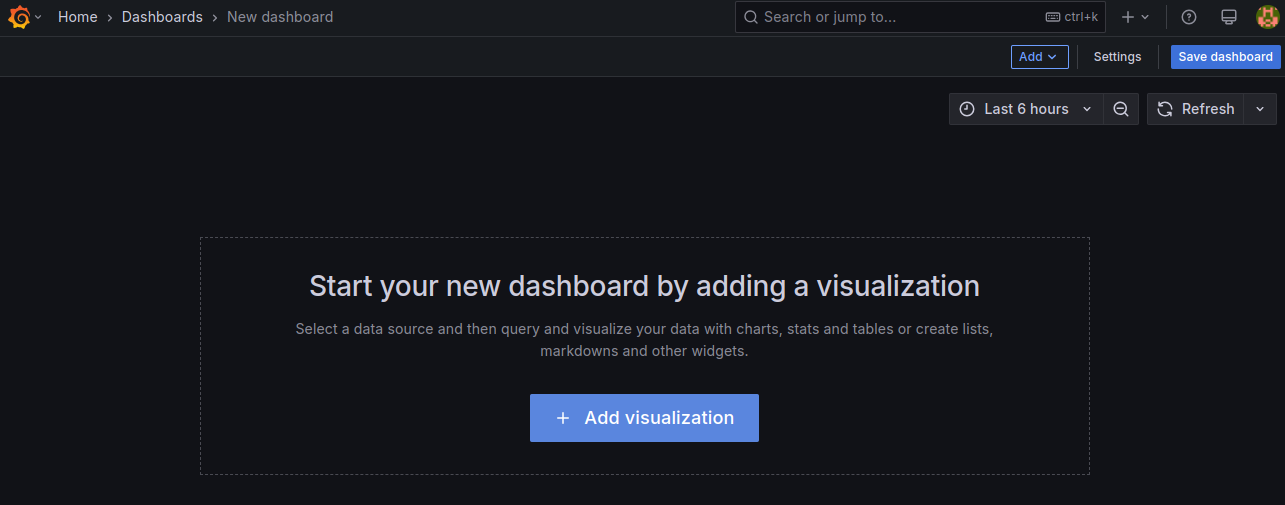
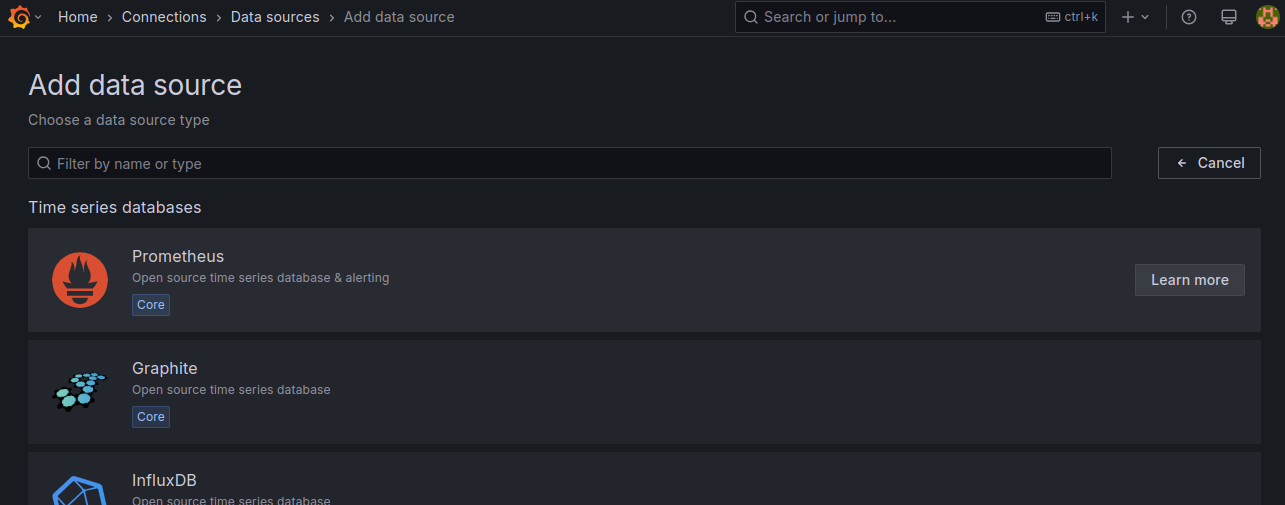
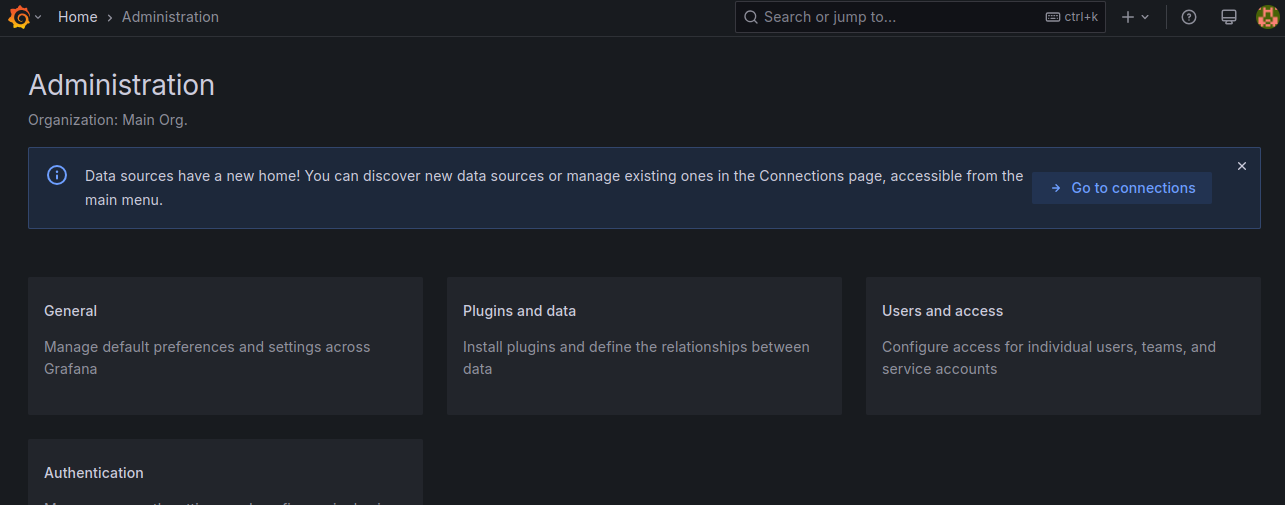
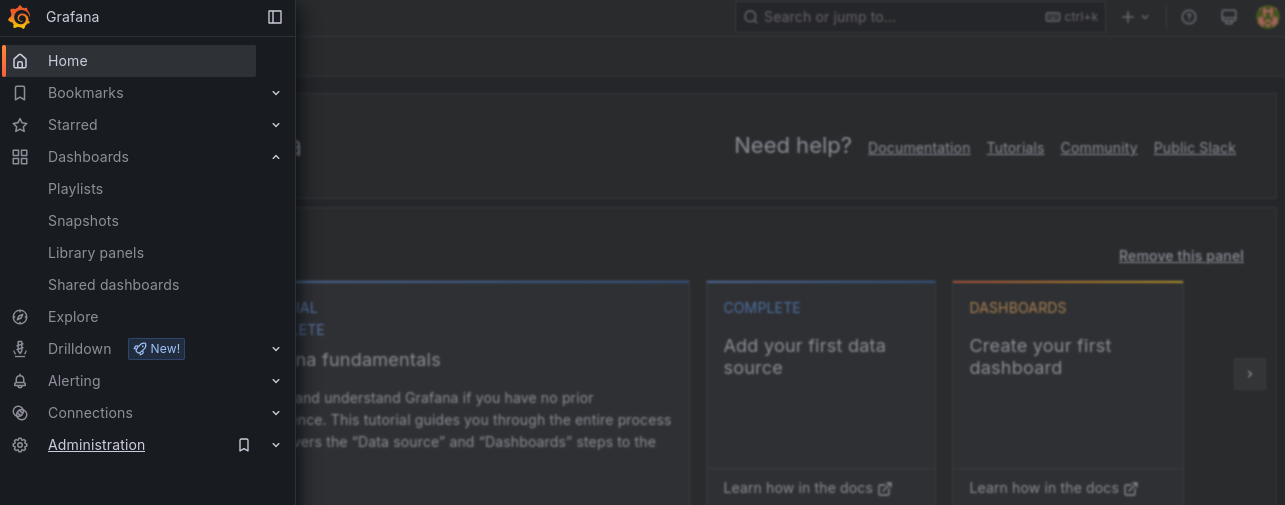
**INTEGRATION PROMETHEUS WITH GRAFANA:**



1. What are the advantages of using Grafana for monitoring systems?  
    Grafana offers real-time visualization of metrics, supports multiple data sources, allows interactive and customizable dashboards, and includes alerting features for proactive issue detection.
2. How do you integrate Prometheus with Grafana?

* Install both Prometheus and Grafana
* In Grafana, go to "Settings" > "Data Sources"
* Choose Prometheus as the type
* Enter the Prometheus server URL (e.g., http://localhost:9090)
* Click "Save & Test"

1. Describe the steps to create a panel in Grafana.

* Open a dashboard
* Click “Add Panel”
* Select the data source
* Enter a query (e.g., node\_cpu\_seconds\_total)
* Choose visualization type (e.g., graph, gauge, bar)
* Customize title, colors, and thresholds
* Save the panel

1. What types of visualizations are supported in Grafana?  
    Grafana supports graphs, bar charts, tables, heatmaps, gauges, stat panels, pie charts, and more.
2. Explain how Grafana handles alerting.  
    Grafana allows users to create alert rules for panels. When conditions are met (e.g., CPU > 80%), it triggers an alert and can send notifications via email, Slack, PagerDuty, or other channels.