

Lesson Description - Query Functions

Prometheus functions provide a wide range of built-in functionality that can greatly simplify the process of writing queries. In this lesson, we introduce Prometheus query functions. We will provide a few examples of functions and demonstrate their usage by executing some queries that include those functions.

Relevant Documentation

- [Functions](#)

Lesson Reference

Access the Prometheus expression browser for your Prometheus server in a web browser. Be sure to use the public IP address of your Prometheus server:

```
http://<PROMETHEUS_SERVER_PUBLIC_IP>:9090
```

Use the `clamp_max` function to clamp result values to a set maximum:

```
clamp_max(node_cpu_seconds_total{cpu="0"}, 1000)
```

Use the `rate` function to get the rate of increase in total CPU seconds:

```
rate(node_cpu_seconds_total[1h])
```