

Monitoring Key Systems with Prometheus Exporters

GETTING STARTED WITH PROMETHEUS EXPORTERS



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Overview



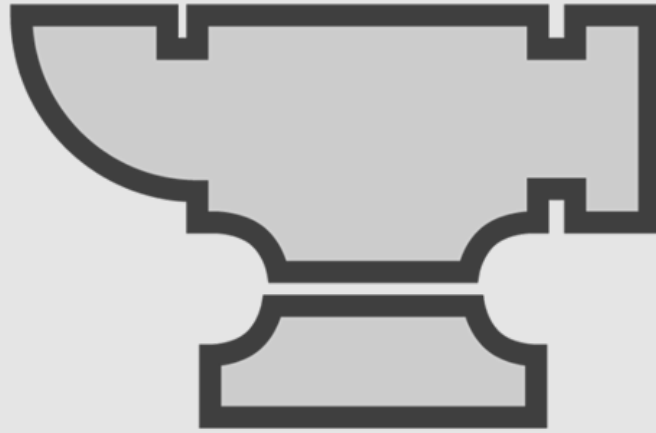
What are exporters?

What do they do?

Available exporters

Node exporter





Undifferentiated Heavy Lifting

Lots of work that doesn't add unique value.



Adding Value



Email Client

Just pick one and use it;
no differentiating value

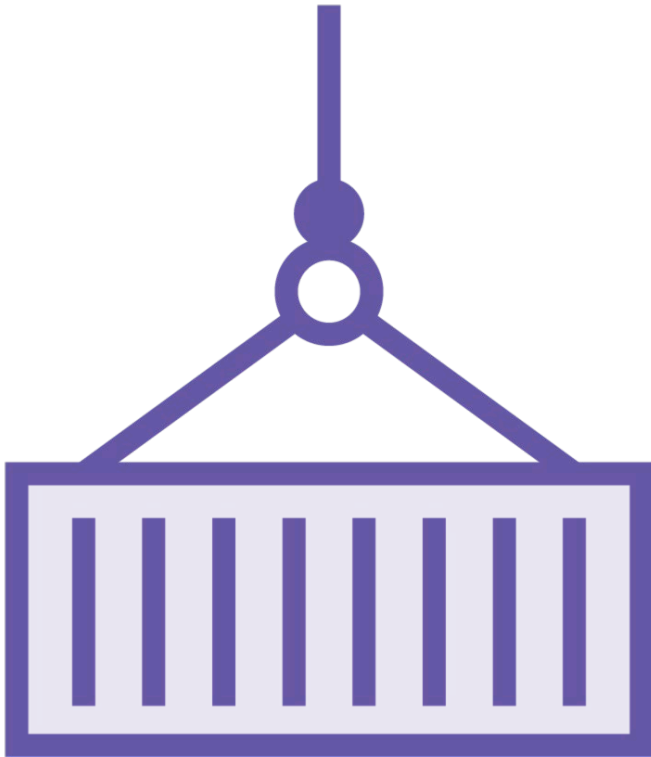


Monitoring

Don't build from scratch unless
there is unique value-add



Prometheus Exporters



Translate metrics to Prometheus format

Existing systems

- Linux
- MySQL

Some are built-in

<https://prometheus.io/docs/instrumenting/exporters/>

Using Exporters



Identify and install desired exporter on target system



Create Prometheus job to pull data from exporter



Prometheus will gather metrics and report on job status



You can set up multiple targets and multiple exporters



Prometheus Exporters



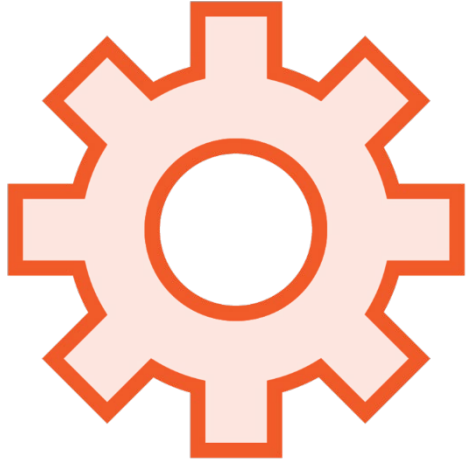
You can write your own exporter

Prometheus provides guidelines

https://prometheus.io/docs/instrumenting/writing_exporters/



Node Exporter



System Metrics

Linux based systems
CPU, memory, disk, network



Download

[https://prometheus.io/download/
#node_exporter](https://prometheus.io/download/#node_exporter)




```
wget https://github.com/  
prometheus/node_exporter/releases/  
download/v*/node_exporter-  
*.linux-amd64.tar.gz
```

```
tar xvfz node_exporter-*.linux-  
amd64.tar.gz
```

```
cd node_exporter-*.linux-amd64
```

```
./node_exporter > node.out 2>&1
```

```
curl http://localhost:9100/metrics
```

◀ Get the exporter tar

◀ Unpack the tar

◀ Move into folder

◀ Start the exporter

◀ Check that metrics are publishing



Exporter Setup

Port 9100

Prometheus must be able to reach the target machine to pull metrics

Change default port

```
--web.listen-address=":9200"
```

List of parameters and defaults

```
node_exporter --help
```



```
prometheus/prometheus.yml
```

```
scrape_configs:
```

```
- job_name: 'node_exporter'
```

```
  static_configs:
```

```
    - targets: ['172.31.27.103:9100']
```

Prometheus Configuration for Exporter

Create a job to pull metrics from exporter

IP will depend on your network setup (internal vs. external IP)

Restart Prometheus to pick up the change



Demo



Node Exporter

- Install and configure on Linux machine

View results in Prometheus



Summary



Prometheus exporters available

What they do

- Convert metrics for Prometheus use

Node exporter install and config

- Wide variety of metrics available

Up Next: Monitoring Databases

