

Sensu Check Output Metric Extraction with InfluxDB and Grafana

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Shameless self-promo

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thenikkiki



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github.com/nikkiki



Your monitoring stack shouldn't cost you stacks

Collect, record, & visualize your metrics with open source tools



Sensu

Collect

Monitoring event pipeline



InfluxDB

Record

Time-series database



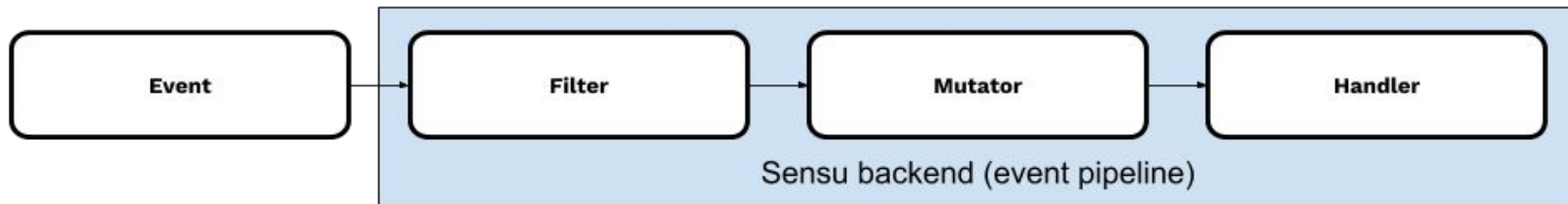
Grafana

Visualize

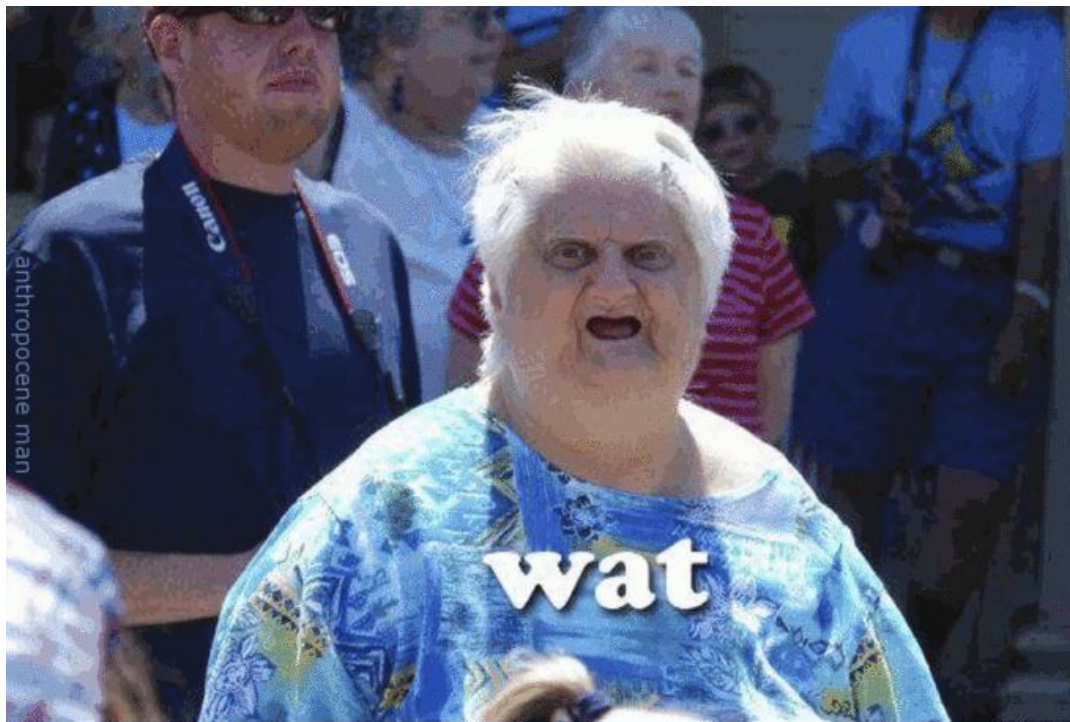
Data visualization

Wat is Sensus?

Sensus is a monitoring event pipeline.



wat



Why not both?

Application
Performance
Monitoring



STATSD

Metric Aggregation

Network
& Infrastructure
Monitoring

Nagios®

Service Checks

Why not both?



Supported metric formats: output_metric_format



InfluxDB
influxdb_line

```
kube-apiserver-node-01 cpu=16.4 1550625843
```



OpenTSDB
opentsdb_line

```
kube-apiserver-node-01.cpu 1550625843 16.4
```



Graphite
graphite_plaintext

```
kube-apiserver-node-01.cpu 16.4 1550625843
```



Nagios
nagios_perfdata

```
CPU ok - CPU = 16.4 | kube-apiserver-node-01.cpu=16.4
```


Sensu Check Configuration and Event Data

```
---
type: CheckConfig
api_version: core/v2
metadata:
  name: check-cpu-influxdb
  namespace: default
spec:
  command: check-cpu.sh
  interval: 10
  subscriptions:
  - metrics
  output_metric_format: influxdb_line
  output_metric_handlers:
  - influxdb
```



```
---
type: Event
api_version: core/v2
spec:
  check:
    metadata:
      name: check-cpu-influxdb
    output: kube-apiserver-node-01 cpu=16.4 1550625843
  metrics:
    handlers:
    - influxdb
  points:
  - name: kube-apiserver-node-01.cpu
    value: 16.4
    timestamp: 1550625843
```

check-cpu.sh

```
echo $(hostname) cpu=$(ps -A -o %cpu | awk '{s+=$1} END {print s}') $(date +%s)
```

Configuration isn't magic.. Or is it?



Insert time series-database here, seriously

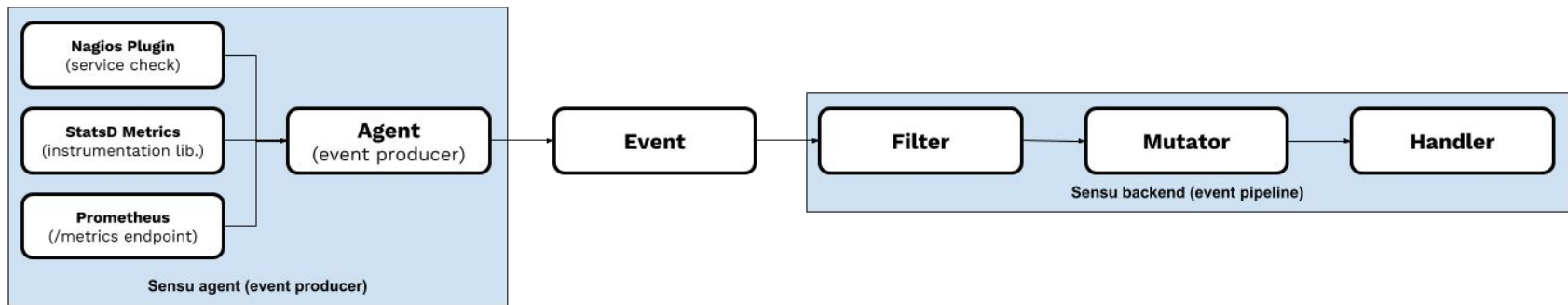
```
---
type: Event
api_version: core/v2
spec:
  check:
    metadata:
      name: check-cpu-influxdb
    output: kube-apiserver-node-01 cpu=16.4 1550625843
metrics:
  handlers:
    - influxdb
  points:
    - name: kube-apiserver-node-01.cpu
      value: 16.4
      timestamp: 1550625843
```



```
---
type: Handler
api_version: core/v2
metadata:
  namespace: default
  name: influxdb
spec:
  type: pipe
  command: sensu-influxdb-handler -d sensu
  env_vars:
    - INFLUXDB_ADDR=http://influxdb.default.local:8086
    - INFLUXDB_USER=sensu
    - INFLUXDB_PASS=password
  filters:
    - has_metrics
```

github.com/sensu/sensu-influxdb-handler

The Monitoring Event Pipeline



Raise the roof, cause your monitoring is all under one roof





Events



Entities



Checks



Silences



Filter events...



RESET



HIDE ▾

ENTITY ▾

CHECK ▾

STATUS ▾

SORT ▾

**staging-agent-0 › flapping-check**

Incident started just now and has continued for 2 consecutive executions.

**staging-agent-0 › execution-timeout**

Last executed seconds ago.

**staging-agent-1 › critical-check**

Last executed seconds ago.

**staging-agent-1 › failing-cron**

Last executed just now.

**staging-agent-1 › unknown-check**

Last executed seconds ago.

**qa-automation › handler-set-a-event**

Last executed just now.



Sensu
StatsD
Server

Sensu
Checks

Resources

- **sensu.io**
- **github.com/sensu/sensu-go**
- **github.com/sensu/sensu-influxdb-handler**
- **blog.sensu.io**
- **docs.sensu.io**
- **discourse.sensu.io**

Come chat at the Sensu booth!