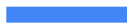


# Why we love Prometheus (and you should too)



A few stories to prove a point

# The Visibility team@Outbrain

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We listen here

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## So Outbrain

Outbrain is the world's largest content discovery platform, bringing personalized, relevant online, mobile and video content to audiences Outbrain serves

**557 MILLION** Monthly unique visitors.

**250 BILLION** personalized content recommendations every month.

**63%** OF US ONLINE Population use Outbrain

## Few notes on how Outbrain does alerting

Everything gets an owner - not as easy as you might think.

Everything is available via self serve tools - Instrumenting code, Alerting, Graphing.

Each team has its own on call rotation and is responsible for monitoring his services.

Automate everything new servers, services... .

## Where we started - Yes Nagios

Collectd is used for 3rd party services and OS level metrics.

Outbrain code sends metrics directly to Graphite.

4 data centers thousands of servers god knows how many checks.

4 Nagios agents one master.

Using home-grown automation, custom check Graphite script and Grafana.

2 x Graphite clusters being hit with 18M metrics / minute each. (this is a whole other story)

# A Prometheus definition

## Prometheus is:

A monitoring and alerting system for distributed systems and infrastructure.

## Prometheus is not:

A long-term archival system, a business intelligence reporting system, data-mining backend.

Benjamin Staffin @ Fitbit Site Operations

# Prometheus features we like

Operational simplicity, no external dependency, single binary(Go).

Powerful query language.

Many native service discovery integrations.- we use Consul

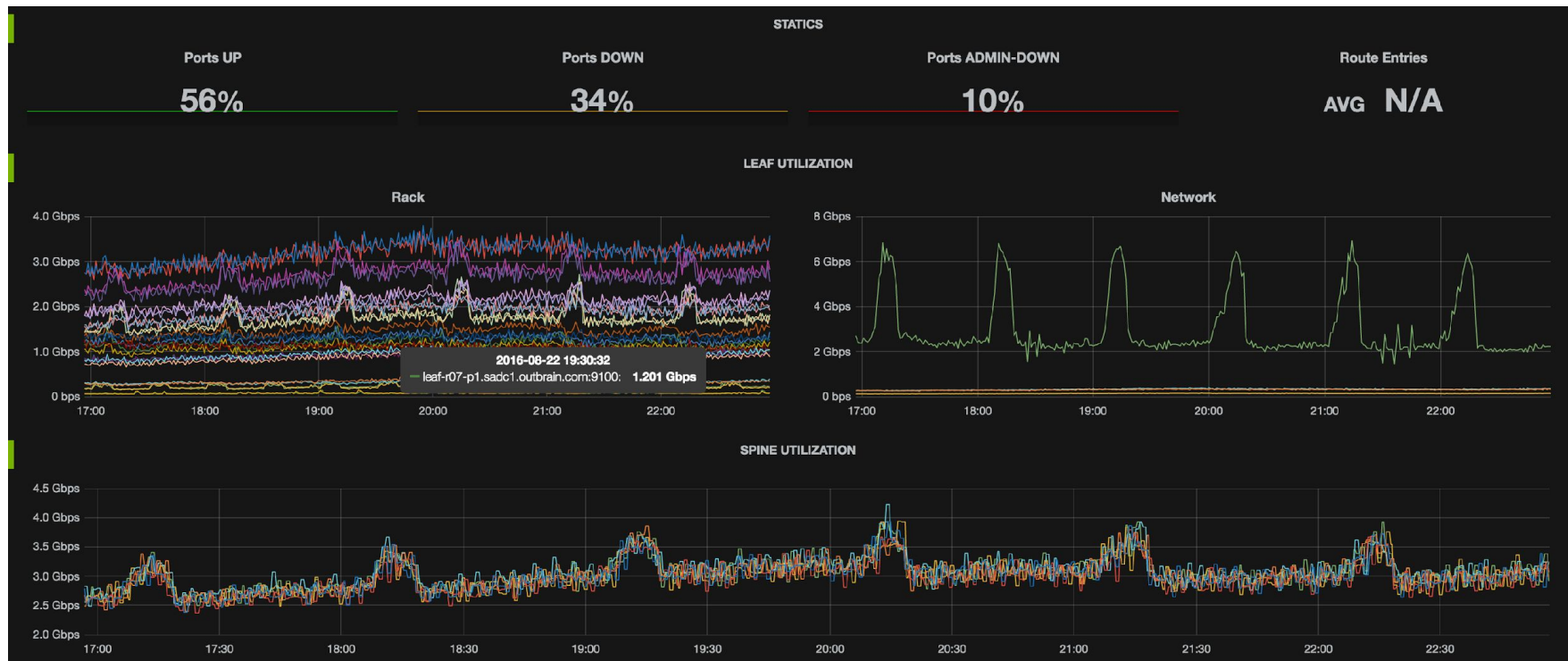
And

Keeps us warm because you know “The Night is Dark and full of Terrors.”

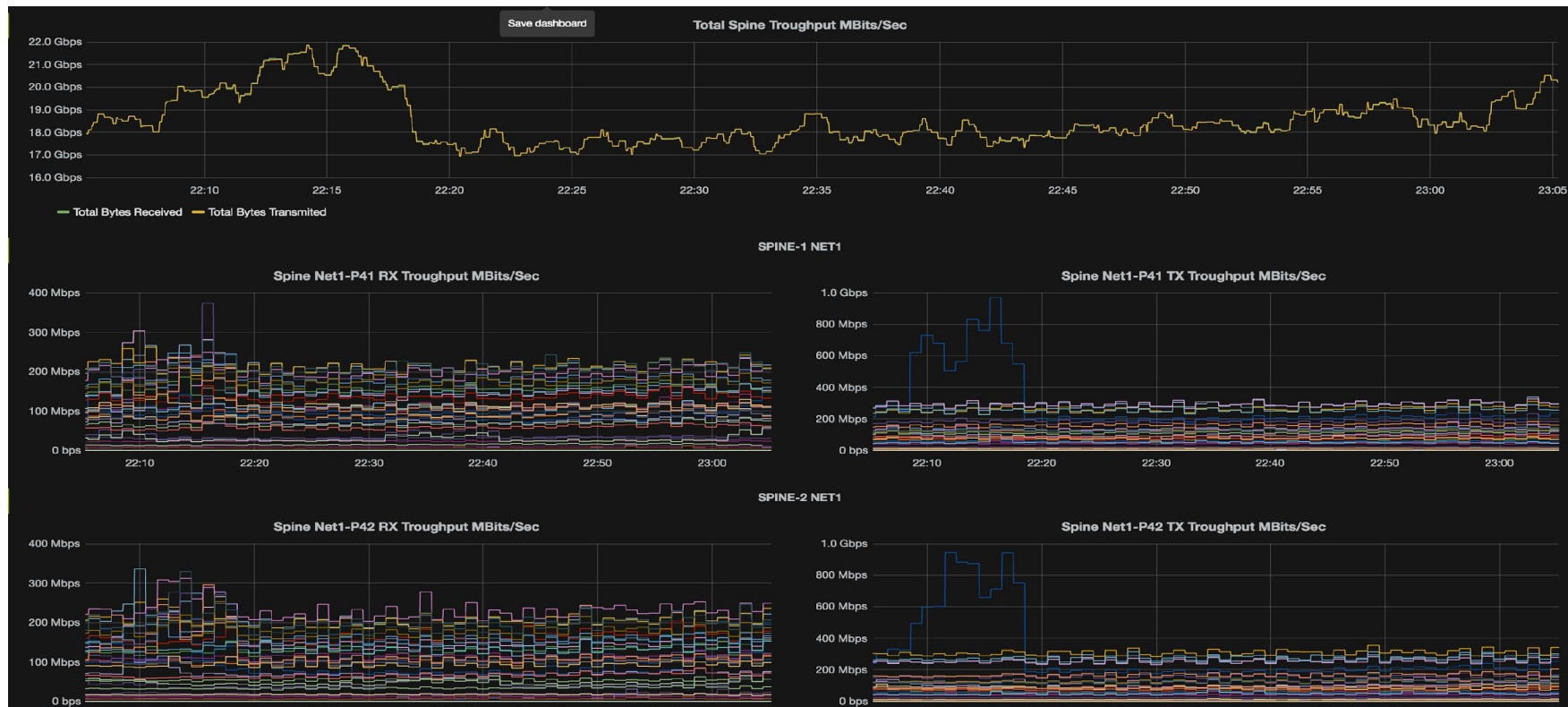
## Three stories as an example



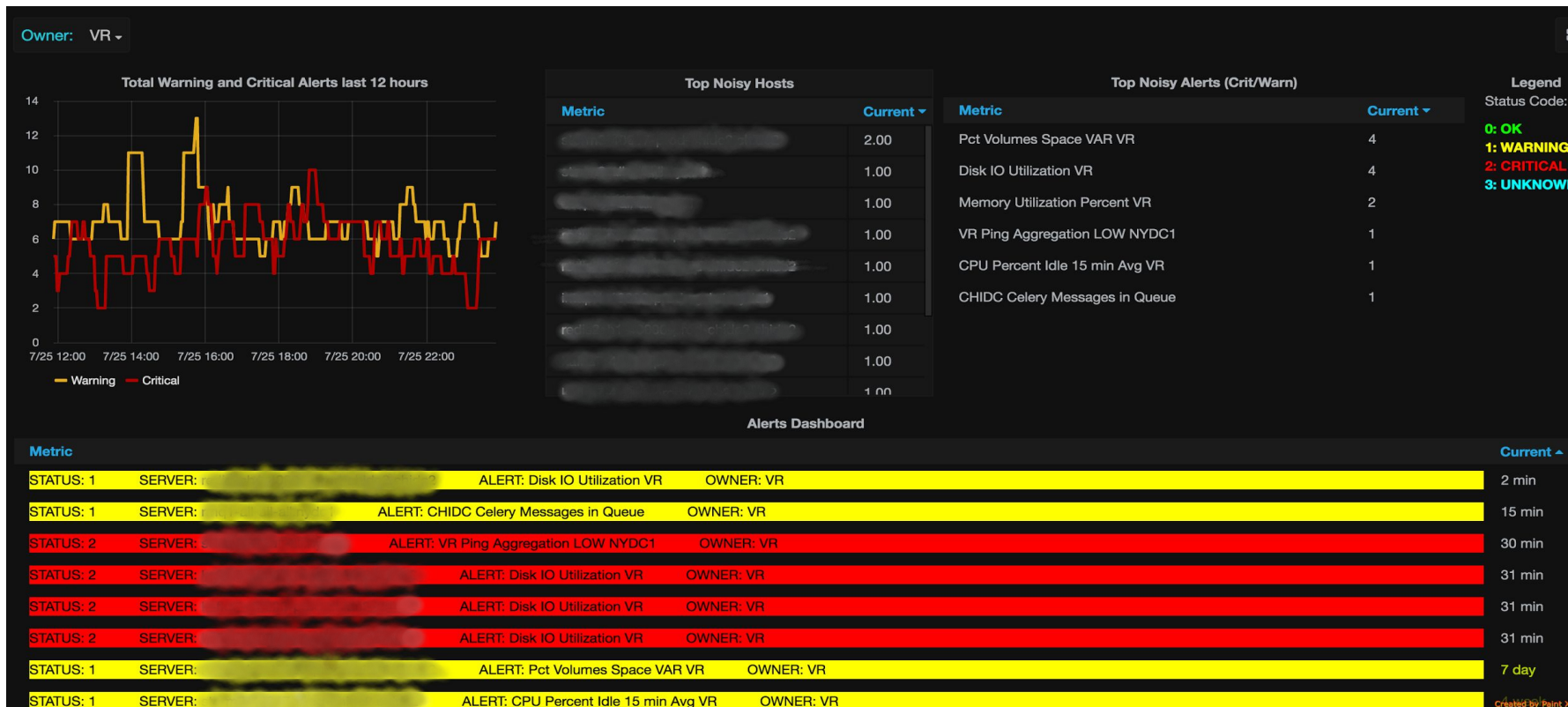
# The story of Cumulus switches monitoring



# The story of Cumulus switches monitoring



# The story of Nagios monitoring



# The story of Reeve, living@ AWS

```
- job_name: 'elasticsearch'
  ec2_sd_configs:
    - region: us-west-2
      access_key: 
      secret_key: <hidden>
      refresh_interval: 10m
      port: 9108
  relabel_configs:
    - source_labels: [__meta_ec2_tag_elasticsearch_expo
      regex: '[0-9].*'
      action: keep
    - source_labels: [__meta_ec2_instance_id]
      regex: '(.*)'
      target_label: instance_id
      replacement: '$1'
    - source_labels: [__meta_ec2_tag_Name]
      regex: '(.*)'
      target_label: instance
      replacement: '$1'
    - source_labels: [__meta_ec2_tag_service]
      regex: '(.*)'
      target_label: service
      replacement: '$1'
#####
- job_name: 'mesos_master'
  ec2_sd_configs:
    - region: us-west-2
      access_key: 
      secret_key: <hidden>
      refresh_interval: 10m
      port: 9108
  relabel_configs:
    - source_labels: [__meta_ec2_tag_mesos_exporter]
      regex: '[0-9].*'
      action: keep
    - source_labels: [__meta_ec2_instance_id]
      regex: '(.*)'
      target_label: instance_id
      replacement: '$1'
    - source_labels: [__meta_ec2_tag_Name]
      regex: '(.*)'
      target_label: instance
      replacement: '$1'
    - source_labels: [__meta_ec2_tag_service]
      regex: '(.*)'
      target_label: service
      replacement: '$1'
```

Created by Paint X

## Targets

### elasticsearch

Endpoint	State	Base Labels
<a href="http://172.31.33.115:9108/metrics">http://172.31.33.115:9108/metrics</a>	UNHEALTHY	Instance_id="i-57078bf8" service="elastic-search"
<a href="http://172.31.8.65:9108/metrics">http://172.31.8.65:9108/metrics</a>	HEALTHY	Instance_id="i-4f2d9a92" service="elastic-search"
<a href="http://172.31.8.66:9108/metrics">http://172.31.8.66:9108/metrics</a>	HEALTHY	Instance_id="i-4e2d9a93" service="elastic-search"
<a href="http://172.31.33.205:9108/metrics">http://172.31.33.205:9108/metrics</a>	HEALTHY	Instance_id="i-181db0b7" service="elastic-search"
<a href="http://172.31.45.214:9108/metrics">http://172.31.45.214:9108/metrics</a>	HEALTHY	Instance_id="i-1030ebb" service="elastic-search"
<a href="http://172.31.32.234:9108/metrics">http://172.31.32.234:9108/metrics</a>	HEALTHY	Instance_id="i-4df4ae89" service="elastic-search"
<a href="http://172.31.1.29:9108/metrics">http://172.31.1.29:9108/metrics</a>	HEALTHY	Instance_id="i-ebab6a36" service="elastic-search"
<a href="http://172.31.28.25:9108/metrics">http://172.31.28.25:9108/metrics</a>	HEALTHY	Instance_id="i-f92c6a20" service="elastic-search"
<a href="http://172.31.10.138:9108/metrics">http://172.31.10.138:9108/metrics</a>	HEALTHY	Instance_id="i-da14cf00" service="elastic-search"

# Famous last words before you go

- Don't start without automation.
- Make sure you have enough bandwidth for education, it is not an easy switch.
- Run things in parallel , old and new.
- Join relevant forums the majority of questions were asked (beside your version).

Want to join the team – [jobs@outbrain.com](mailto:jobs@outbrain.com)

Want to ask a question or just chat ? Catch me after this is done.