CentOS Opstools SIG - Update

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Agenda

- Intro
- What is included
- A closer look at performance monitoring
- Taking the next step
Opstools - tools for operators

- Intended to support operators in second day tasks
- A piece in the puzzle for RHOSP
Community and products
Relationship with community and OSP repos

- OpenStack
  - RDO
  - Cloud SIG
  - OSP
  - OSP opstools

- collectd
  - CentOS opstools

- QPID
  - CentOS Messaging
  - EPEL
  - Red Hat AMQ

- oVirt
  - RHV
CENTRALIZED LOGGING
Centralized logging

- fluentd
- fluentd
- fluentd
- elasticsearch
AVAILABILITY MONITORING
Availability monitoring - Sensu
PERFORMANCE MONITORING
Performance monitoring (past)

- collectd
- Graphite/CarbonDB
- Grafana
- Gnocchi
collectd

- collectd 5.8.0, released Nov 17, 2017
- release 5.8.1 in preparation
- small resource usage
- around since 2005
- about 80 plugins, reporting mostly low level system information
  - bindings for Python, Java, exec, Perl
- generates both metrics and events
Performance monitoring (past) - HA

- collectd
- collectd
- graphite
- Grafana

Monitoring node
Kubernetes is a portable, extensible open-source platform for managing containerized workloads and services, that facilitates both declarative configuration and automation.
Prometheus

Service discovery
- kubernetes
- file_sd

Prometheus server
- Retrieval
- TSDB
- HTTP server

Prometheus targets

Pushgateway
- push metrics
- discover targets

Alertmanager
- push alerts
- notify

PromQL

Jobs/exporters
- pull metrics

Node
- HDD/SSD

Data visualization and export
- Grafana
- API clients

Prometheus alerting
- pagerduty
- Email
- etc
Prometheus operator

- Decouple Prometheus instances from configuration
Apache QPID

- QPID proton
- dispatch router
- qpid cpp broker
Service assurance framework
Grafana
Alarming rules defined in prometheus
alarm actions executed by alertmanager
- name: openstack-api slow
  rules:
  - alert: openstack-api
    expr: avg_over_time(collectd_curl_response_time[30s]) > 0.2
    for: 3m
    labels:
      severity: pager
    annotations:
      summary: openstack api slow
OUTLOOK
Outlook

- integration of “self healing” parts?
- adding tools like vitrage, or doctor?
- deprecating sensu in favor of alertmanager
Questions?

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