

SCS & dNation: What we have accomplished together in last 2 years

presentation for



Big Thanks to



Bundesministerium
für Wirtschaft
und Klimaschutz

dNation won following SCS tenders:

- [SCS-VP06c](#) Container Registry
- [SCS-VP12](#) Health Monitoring
- [SCS-VP04](#) Networking (involves SONiC)
- [SCS-VP10](#) SCS certification (with [Cloud&Heat GmbH](#))
- Involved in KaaS (Kubernetes as a Service)

About Martin

- I started to use Linux around 1996
- Mandrake, ..., Debian
- Compiling kernel
- Solving problems like
 - › Angry girlfriend
 - › Diacritic (Ž, Č, ä)
 - › HW support (video/audio cards, printers)
 - › Floppy drives



Big Thanks for Ubuntu



dNation: d = Development | DevOps

- d = Development: Custom Software Development
- We are software developers
- Go, Python, Java, C++ and others
- d = DevOps: Cloud Services
- We are DevOps/Cloud engineers



dNation: Open Source Involvement

SCS: SCS Service Partner

OSBA: SCS Forum

ALASCA: Association for Operational,
Open Cloud Infrastructures e.V.



dNation is one of the ALASCA founding members

- [Yaook](#) - Lifecycle Management Tool for OpenStack



How can I monitor my hybrid infrastructure using Open Source solution without any vendor lock-in?



Public



On-premise





dNation Monitoring: Our contribution to OSS



- **Intuitive:** Green, orange and red colors signaling whether your action is needed
- **Relevant information only:** Provides only metrics relevant for area of interest
- **Hierarchical (drill-down):** Details needed? Just click on it.
- **Built-in monitoring for SCS** and ALASCA (in progress)

20+ Built-in Dashboards



dNation Monitoring and Canonical Observability Stack

Similarities

- Both are built on same open-source technical stack: Prometheus, Grafana, Loki

Differences

- dN uses Thanos - solves HA, long-term metrics, work in progress in COS
- dN uses highly modular dashboards/alerts written in Jsonnet
- dN supports multi-cluster monitoring

Possible synergies

- COS could easily use 20+ dN dashboards, including OpenStack, Kubernetes, CEPH, Redis, JVM applications, etc.

Red Hat Advanced Partner

- Red Hat Certified Specialist in OpenShift Administration
- 3 additional (non-technical) certifications

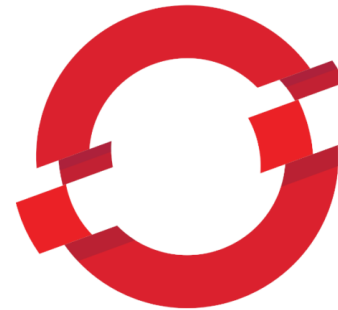


Advanced

Business Partner

Solution provider

Container platform specialist



OPENSIFT

SCS VP04 Challenge

OpenStack doesn't use Encryption Everywhere



- OpenStack uses encryption when talking to outside world
- But OpenStack internal components do not use encryption
- It is an issue for security sensitive application

Solution: E2E Encryption between OpenStack Internal Components



- 20+ Kolla Ansible and Kolla projects contributions
- Simple settings
 - } `kolla_enable_tls_internal`
 - } `kolla_enable_tls_external`
 - } `kolla_enable_tls_backend`

=> Whole control plane will use encrypted communication via TLS

28 upstream OpenStack contributions

Service/Peer	Backend	Caching	Database	Messaging	Intra-service	Inter-service
Keystone						
Horizon						
Glance						
Cinder						
Placement						
Nova						
Neutron						
Heat						
Octavia						
CloudKitty						
Barbican						
Designate						
Ceilometer						
Gnocchi						
Ironic						
Skyline						
Manila						
Masakari						
OpenvSwitch						
Redis						
libvirt						
Memcached						
MariaDB						
RabbitMQ						
	Existing support		New contributions		Not relevant	



In [Kolla](#) and [Kolla Ansible](#) repositories



Software for Open Networking in the Cloud

References

Telecom Industry



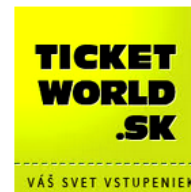
Pharmacy Industry



Bank Industry



Ticket Sale Industry



Thank you for your attention



Questions? Comments?

Do not hesitate to contact me!

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