OSM-MR#9 Hackfest – Day 1
Part 2. OSM System Features

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OSM features beyond NS orchestration

- High Availability
- Identity Management
- System Quotas
- System Monitoring
OSM in High Availability

- High availability ➔ Increase uptime
  - Use of Kubernetes/Docker swarm
  - Use of redundancy
HA built into the upstream Charmed installer

$ ./install_osm.sh --charmed --ha
Benefits of Charmed Installation

- Production-ready
- Lifecycle management
- Integration
- Ecosystem

- HA, Backups, Upgrades...
- Configuration of OSM charms
- Operations
- Scaling
- Charms integrated via relations
- OSM Charms are part of a larger operator collection
Infrastructure

- Kubernetes Cluster
  - OSM Pods
- LXD Cluster
  - Proxy Charms deployment
- Juju Cluster
  - VCA in HA
Demo

```bash
$ ./install_osm.sh --charmed
   --ha
   --lxd
   --lxd-cred
   --vca
   --k8s
```
Identity Management

Gives appropriate access to resources to the right people
Identity Management

- Roles
  - Permissions
- Projects
  - Organizational units
- Users
  - Associated to different projects with different roles
$ osm project-create development
System Quotas
System Quotas

Solve a security risk

Limit the resources that can be allocated
$ osm project-create development
   --quotas vnfds=1,nsds=1
   --quotas ns_instances=1
Hands-on: OSM System Monitoring
How to install K8 System Monitoring

Available in the K8s installation

./install_osm.sh -c k8s --k8s_monitor

Access dashboard: http://<osm-host>:3000
What is installed

Resources monitored

- Kubernetes core
- "osm" namespace
- OSM pods
- Host

Monitoring components

- "monitoring" namespace
- Prometheus Operator & exporters
- Dashboards
Comprehensive OSM monitoring