Uyuni on kubernetes
From monolith to containers

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Agenda

• Short Uyuni presentation
• The path towards containers
• Benefits to expect
“Salar de Uyuni” is the world's largest salt flat*

Uyuni

\[\text{juju:'ni/}\]


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Uyuni: upstream project for SUSE® Manager

- Community-supported
- Monthly meeting: Uyuni Community Hours (last Friday of the month, 4pm CET)
- Runs on openSUSE Leap
- Monthly releases
- Rolling-release
- Product import using CLI tool (vs wizard in SUSE Manager)
- All translations enabled by default (even community ones)

Join Us at uyuni-project.org
Architecture
10,000ft view

- apache
- cobbler
- Salt master
- WSGI scripts
- tomcat
- taskomatic
- postgresql
The path towards containers
How we do it
Rough steps
k8s differences

- SSL
  - Certificates generated by cert-manager
  - Terminated at Ingress

- Ingress routes

- No fixed hostname

- Init containers to populate the volumes
Migration from existing server

- Job
  - Same image
  - Volumes mounted
  - SSH key mounted
  - SSH agent socket mounted
  - Rsync

- Point DNS to the new machine

- Start the container
Making it easier

- uyuniadm
  - Setup
  - Migration

- uyunictl: daily tasks
  - Exec into the container
  - Copy files
  - ...

- Work in progress
Benefits to expect

Can I scale my server?
OS independence

- Can run on any Linux
- Easier dependencies management
Resilience

• Deployment, one replica

• Requires
  – Multi node cluster
  – Shared storage across node
Scalability

- Not without refactoring
- To be started with selected containers
Decoupling components

- Sets the foundation
- One at a time
  - Easiest
  - Most critical
- Requires code refactoring
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