

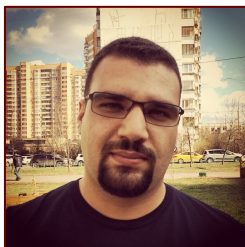
Magnum or Murano?

OpenStack options for container
environment creation and management





Madhuri Kumari, Intel Technology
Magnum Core Contributor



Serg Melikyan, Mirantis
Former Murano PTL

- Give a quick overview of Murano and Magnum
- Offer an apology // by Serg Melikyan :)
- Ask question of the century
- Show a demo
- Answer to the question of the century
- Q&A

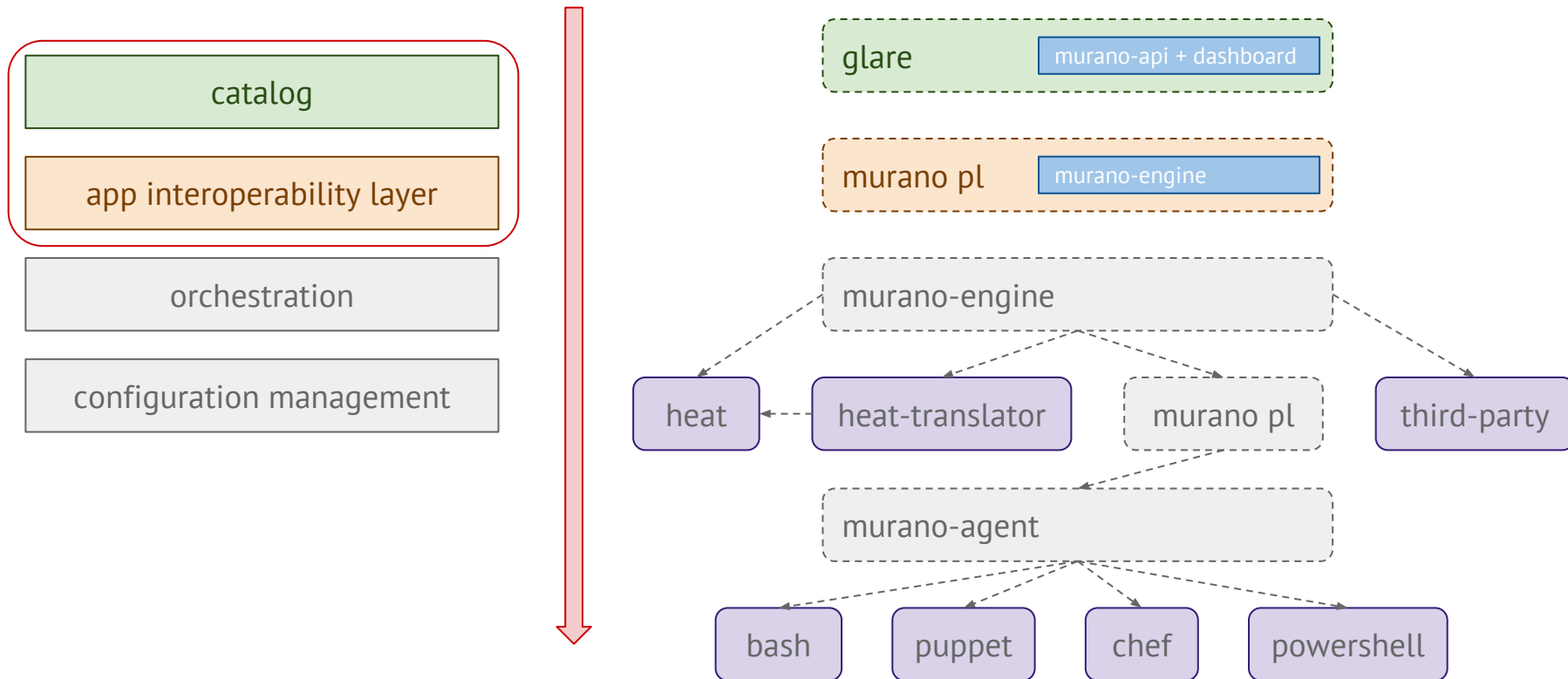
Application Catalog for OpenStack



Mission:

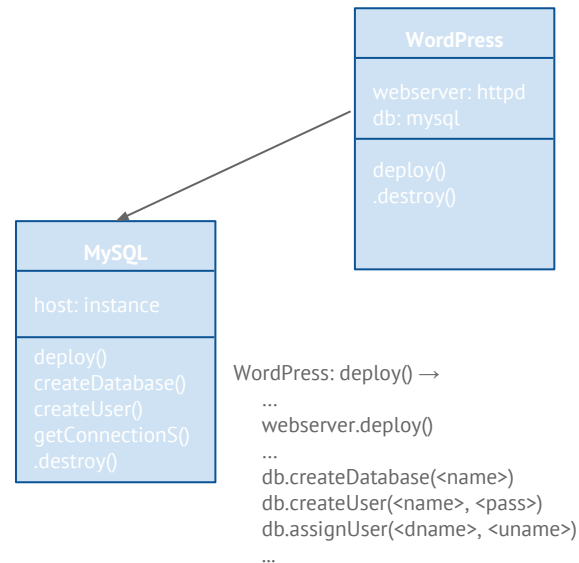
Introduce an application catalog to OpenStack, enabling application developers and cloud administrators to publish various cloud-ready applications in a browsable categorized catalog.

Layers



- Murano PL: imperative OOP DSL
 - Sandboxed, built on top of Python
- Everything is an object
- Dependencies on interface
- Decoupling

Apps form an ecosystem where complex environments can be constructed from independent building blocks

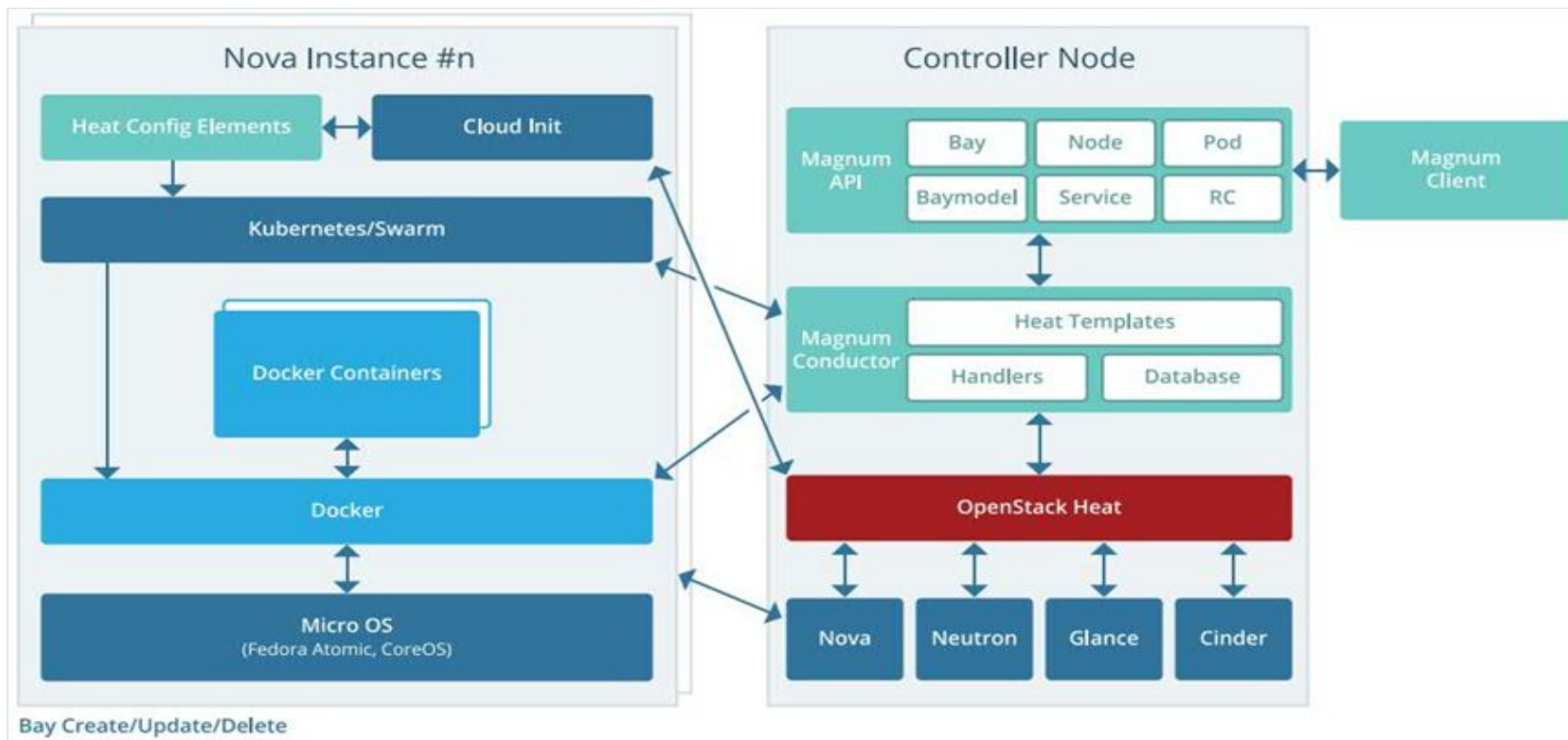


Containers Service for Openstack

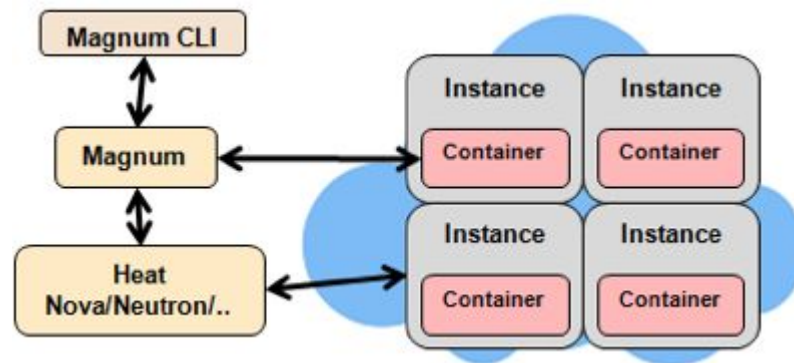
Mission:

Provide a set of services for management of application containers in a multitenant cloud environment.

Magnum Architecture



- Provisioning
 - Kubernetes*
 - Docker* Swarm
 - Mesos*
- Scaling
 - Add instances
 - Remove instances
- Manage
 - Pod
 - Service
 - Replication controller
 - Container



Implemented Features



Cluster Types

- Kubernetes
- Docker Swarm
- Apache Mesos

Cluster OS

- Atomic
- CoreOS

Secure API Endpoints

- Authentication
- Encryption
- Certificates Mgmt

Cinder

- Docker Volume
- Volume driver

High Availability

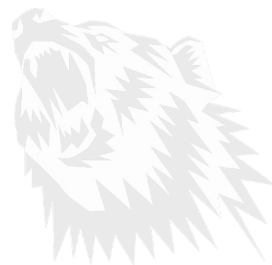
- Multi-Master Configuration

Neutron load balancer

- Connect K8S
- Balance API servers

Magnum or Murano?

- What should I use to deploy K8s: Magnum or Murano?
- Why Murano duplicates Magnum effort by deploying K8s?
- Which way is better to deploy K8s?
- Do you guys know about Magnum?
- ...



Focus on fact of Kubernetes deployment
VS
Focus on Murano capabilities



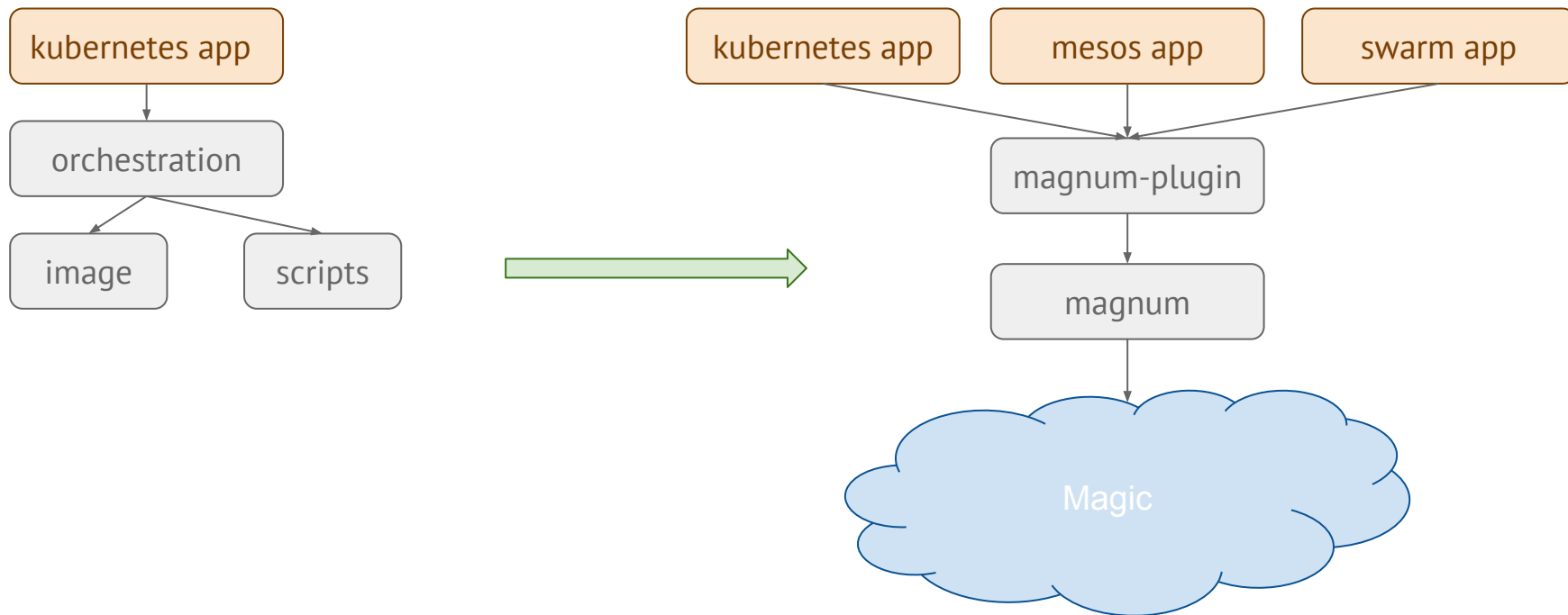
Intel, Rackspace & Mirantis gathered in Tokyo in order to decide how to clear up this confusion...



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- Integrate Magnum and Murano
- Create set of Magnum-based apps for Murano
 - Deploy Kubernetes, Mesos and Docker Swarm
- Make them compatible with regular K8s app for Murano
- Prepare this talk for you
- Smile and be happy :)

Difference



<http://j.mp/murano-magnum-app>



Demo

Magnum & Murano

- Provisioning & Operations
 - Automation API
 - Developer-oriented experience
 - Choice of technologies:
Container Orchestration Engines (COEs), Virt-driver, OS, etc..
 - Advanced configuration options:
network, storage, HA, Load balancer, etc..
- UI & API for self-service provisioning
 - Application interoperability layer



Thank you

for your time