PUZZLE ITC
changing IT for the better

Convergence between oVirt/RHEV and OpenStack

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Agenda

- Short intro into oVirt/RHEV
- Convergence oVirt/RHEV ↔ OpenStack Today
- Convergence oVirt/RHEV ↔ OpenStack Future

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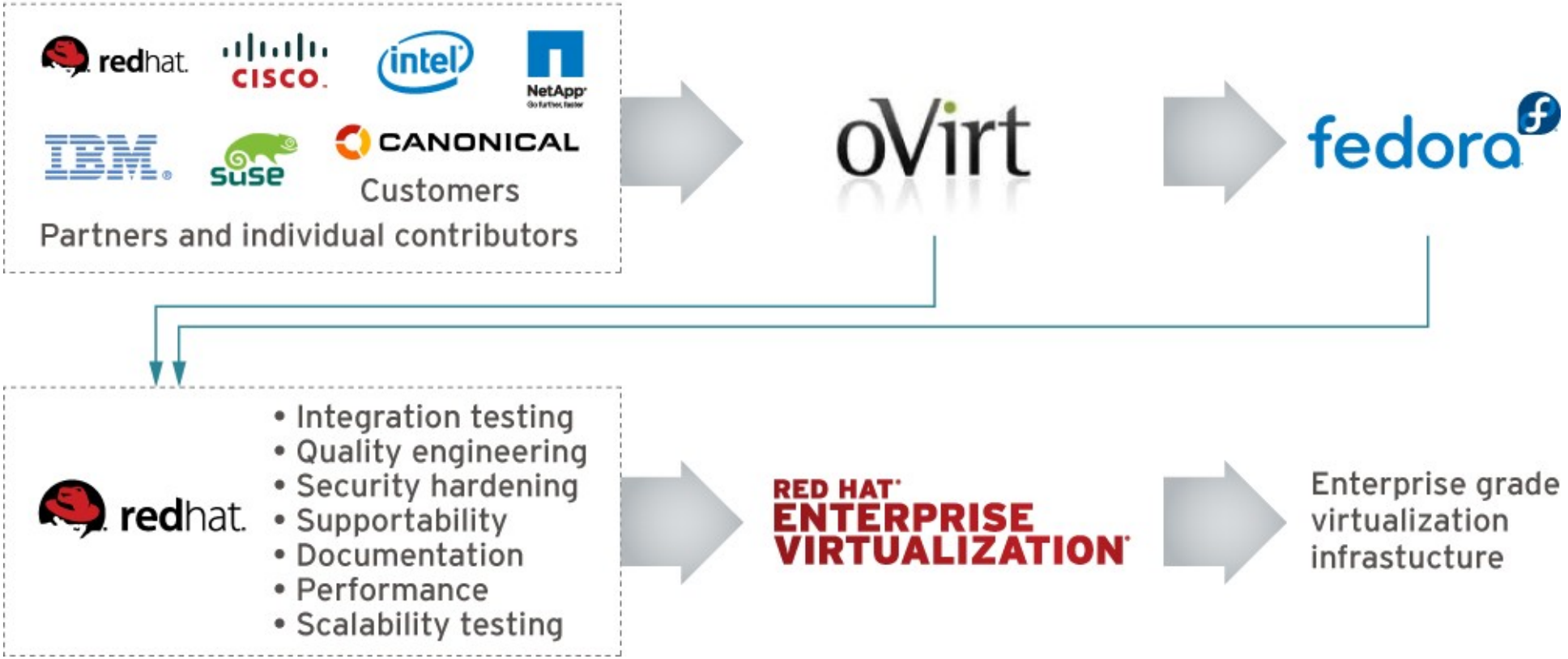
Overview

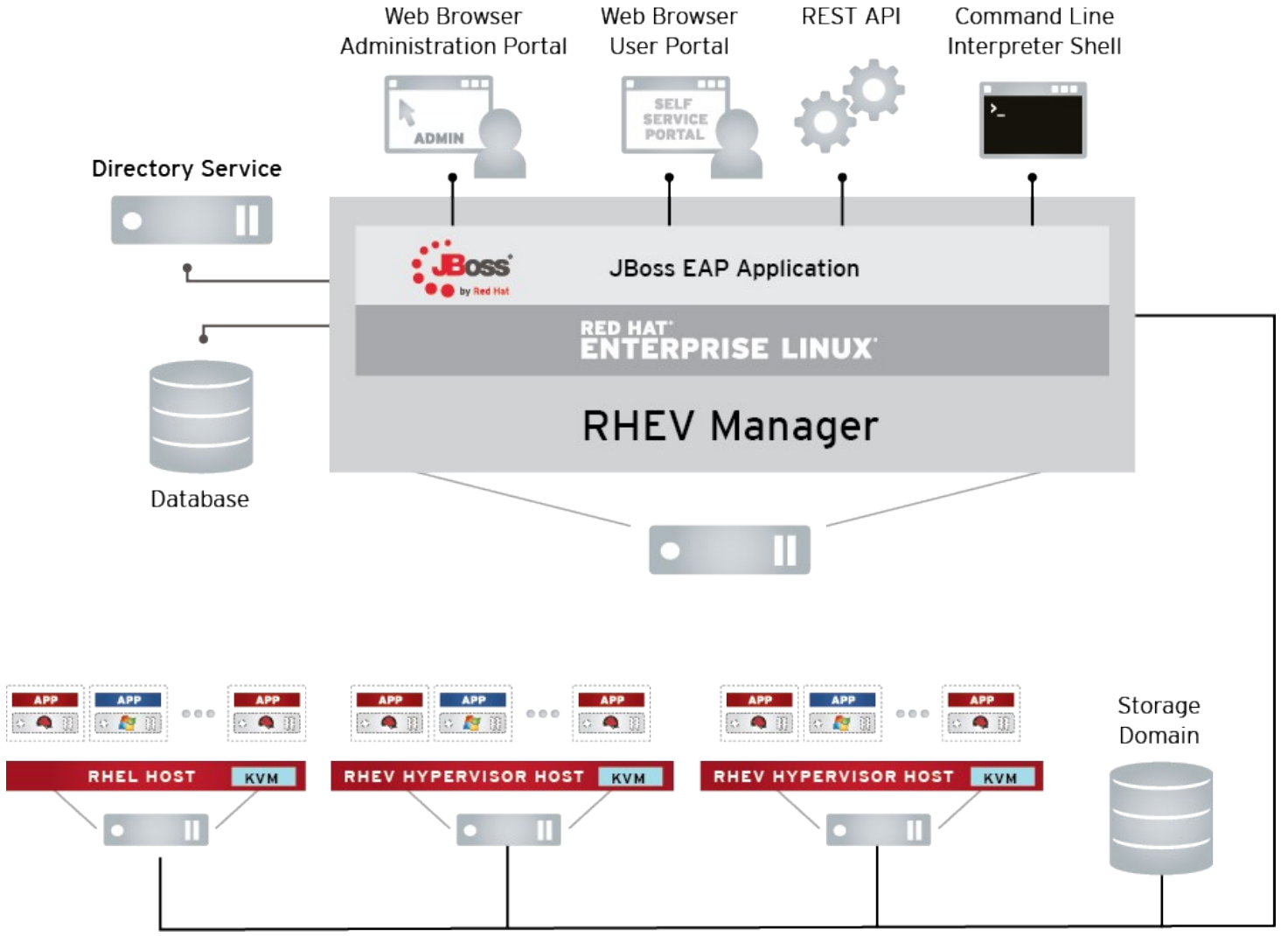
oVirt/RHEV Overview

- oVirt is a virtualization management application
- Manages hardware nodes, storage, network resources
- Free open source software, Apache License
- RHEV = Red Hat Enterprise Virtualization

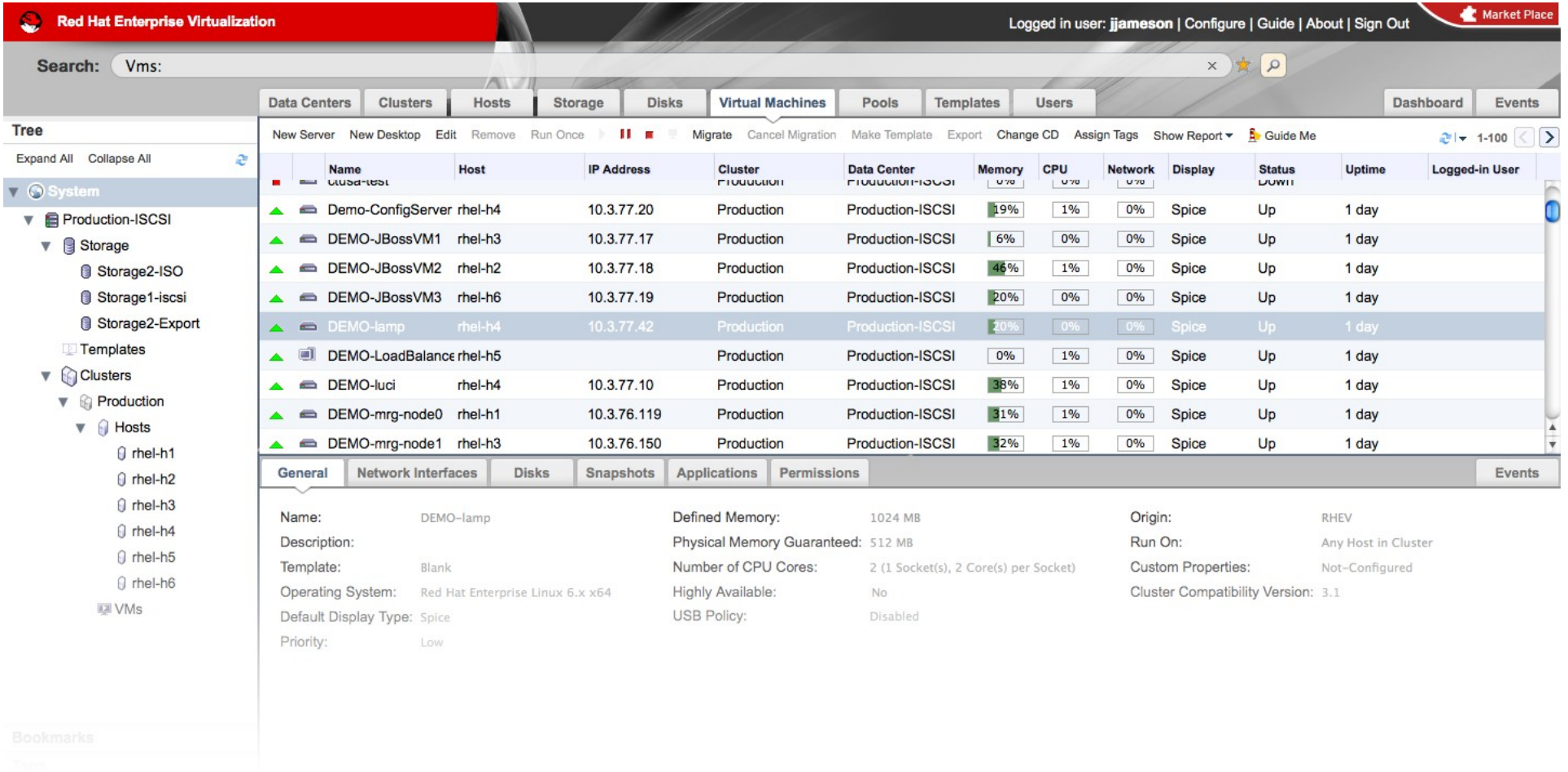
oVirt → RHEV


redhat
cisco
intel
NetApp
IBM
SuSE
CANONICAL
Customers
Partners and individual contributors
oVirt
fedora
redhat
• Integration testing
• Quality engineering
• Security hardening
• Supportability
• Documentation
• Performance
• Scalability testing
RED HAT
ENTERPRISE
VIRTUALIZATION
Enterprise grade
virtualization
infrastucture

oVirt/RHEV Architecture



Management Interface



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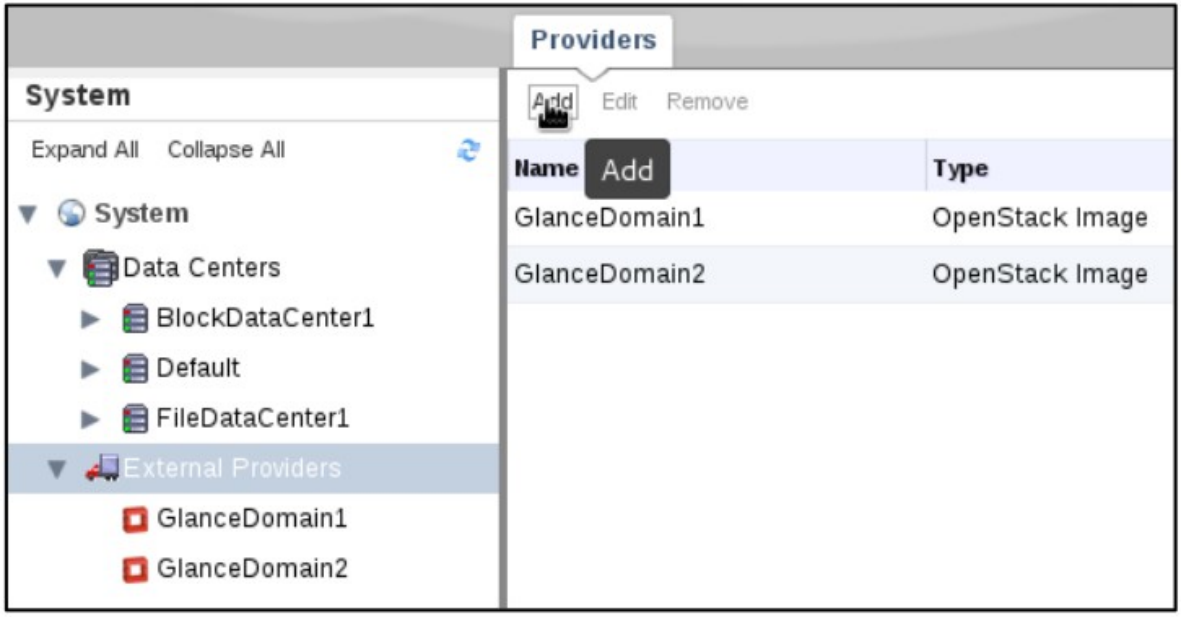
Today

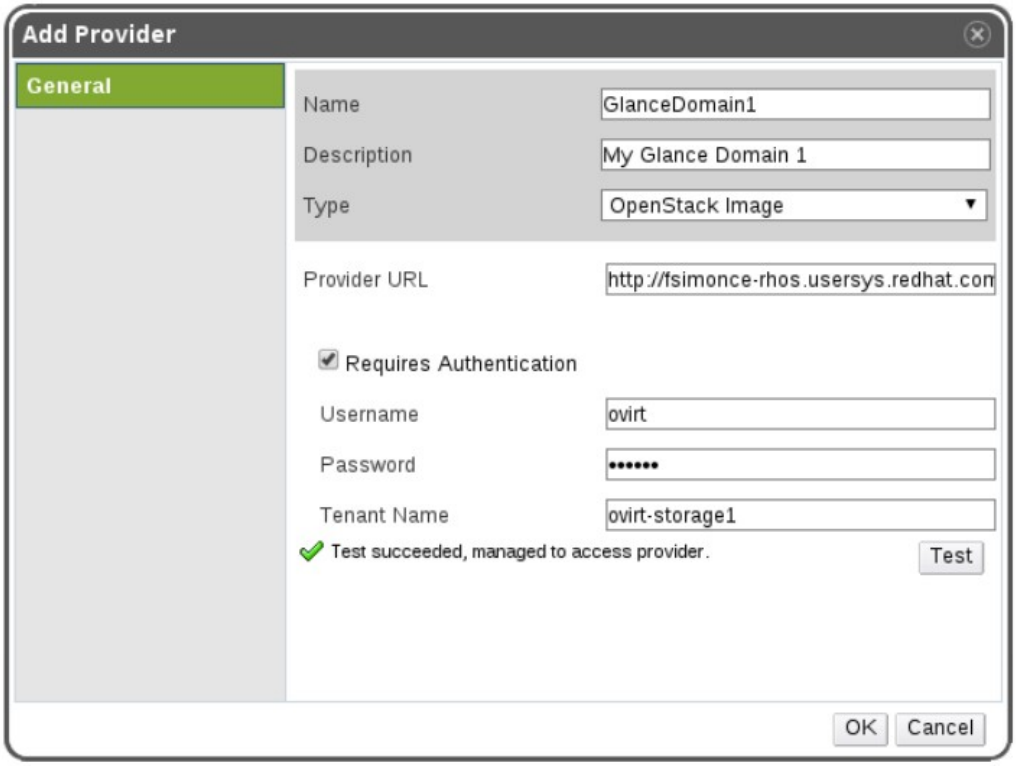
External Providers

- External Providers add support for additional services



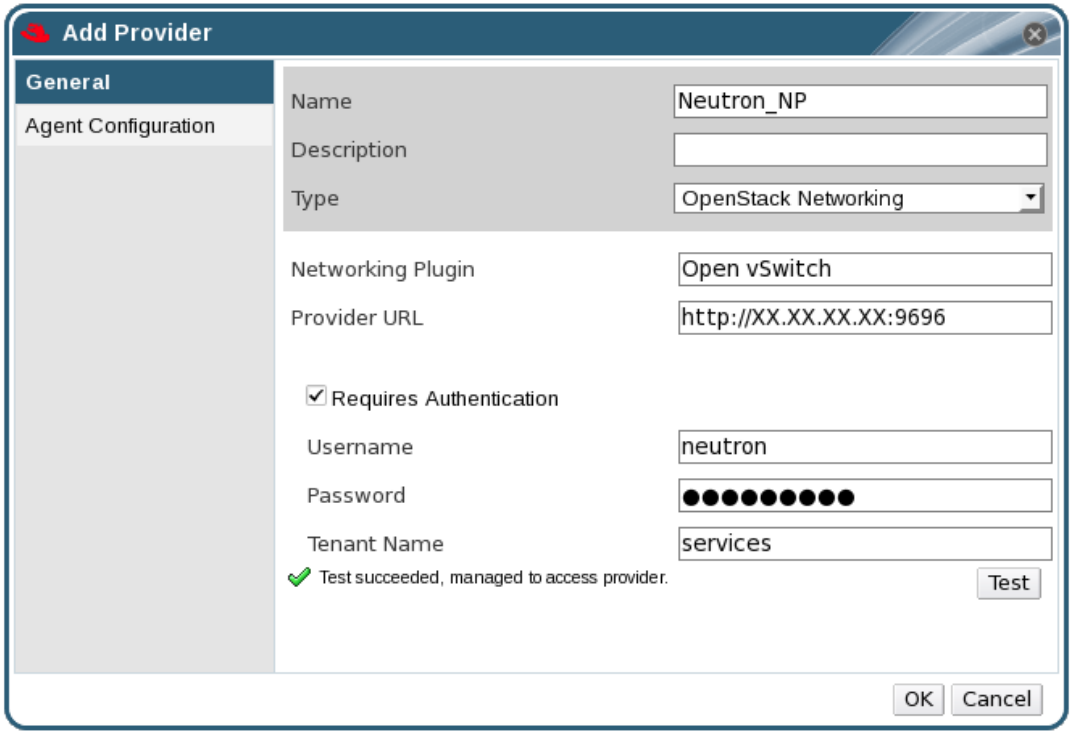
Glance

- Glance is the « OpenStack Image » External Provider

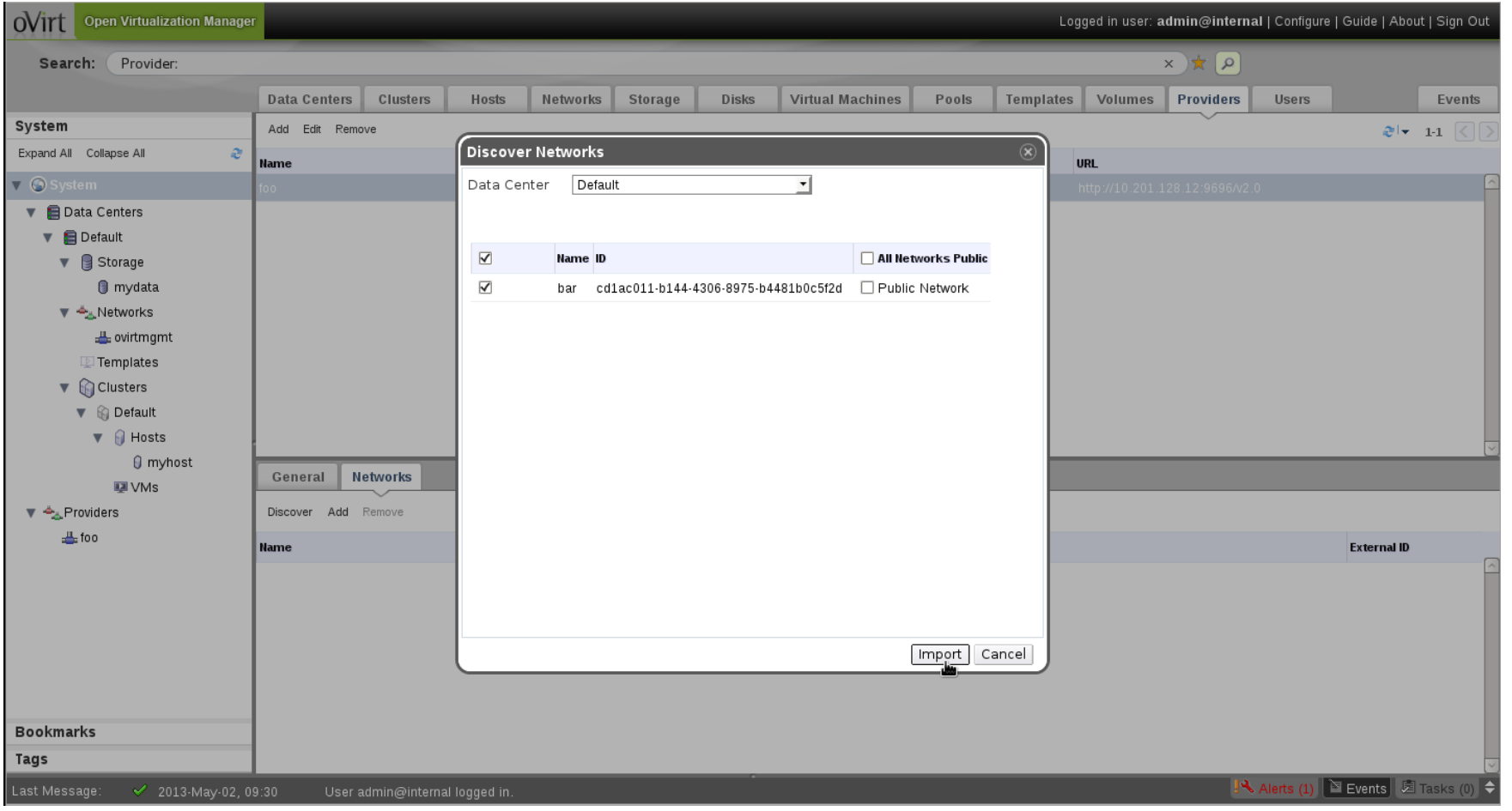


Neutron

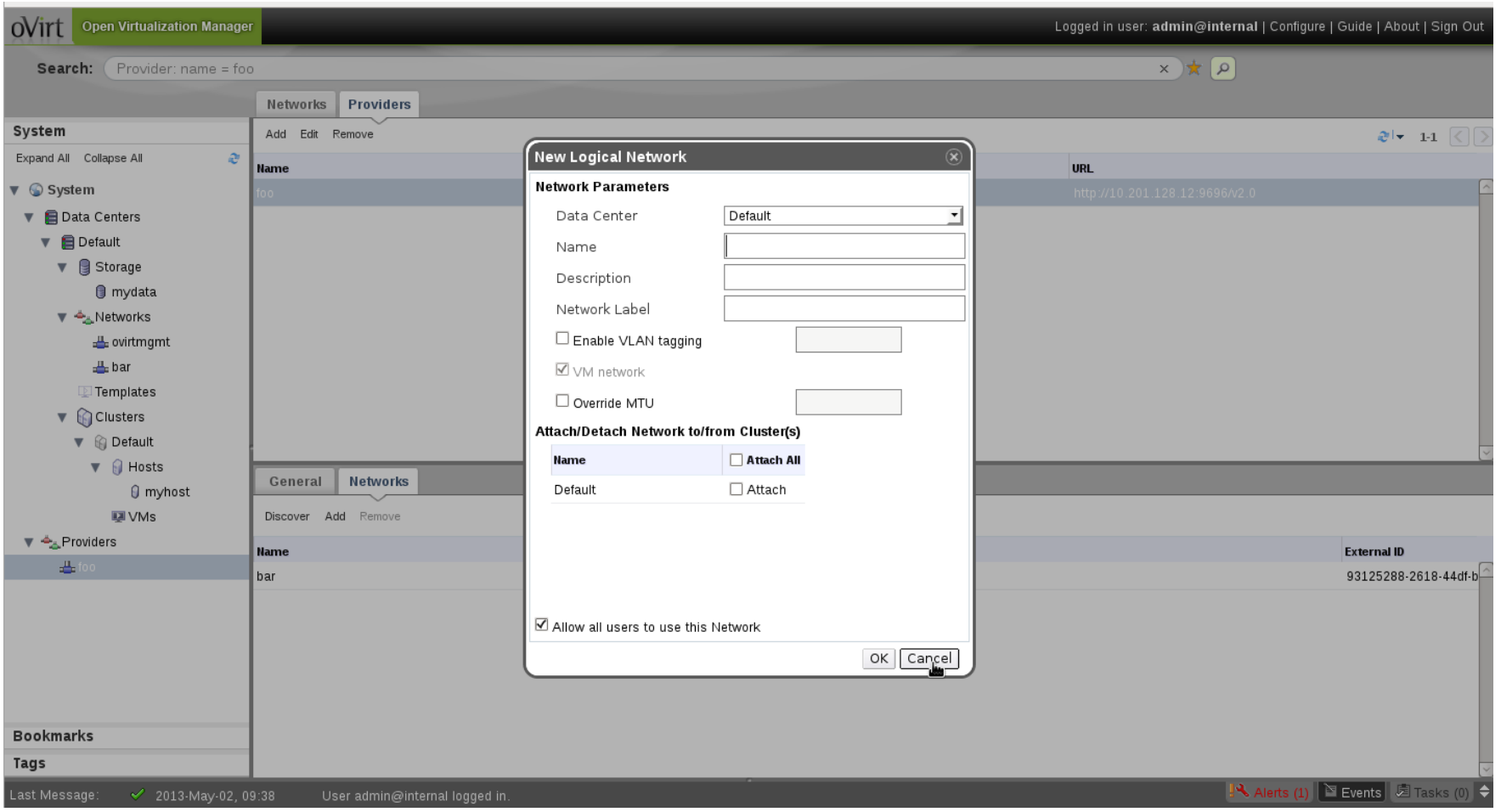
- Neutron is the « OpenStack Network» External Provider



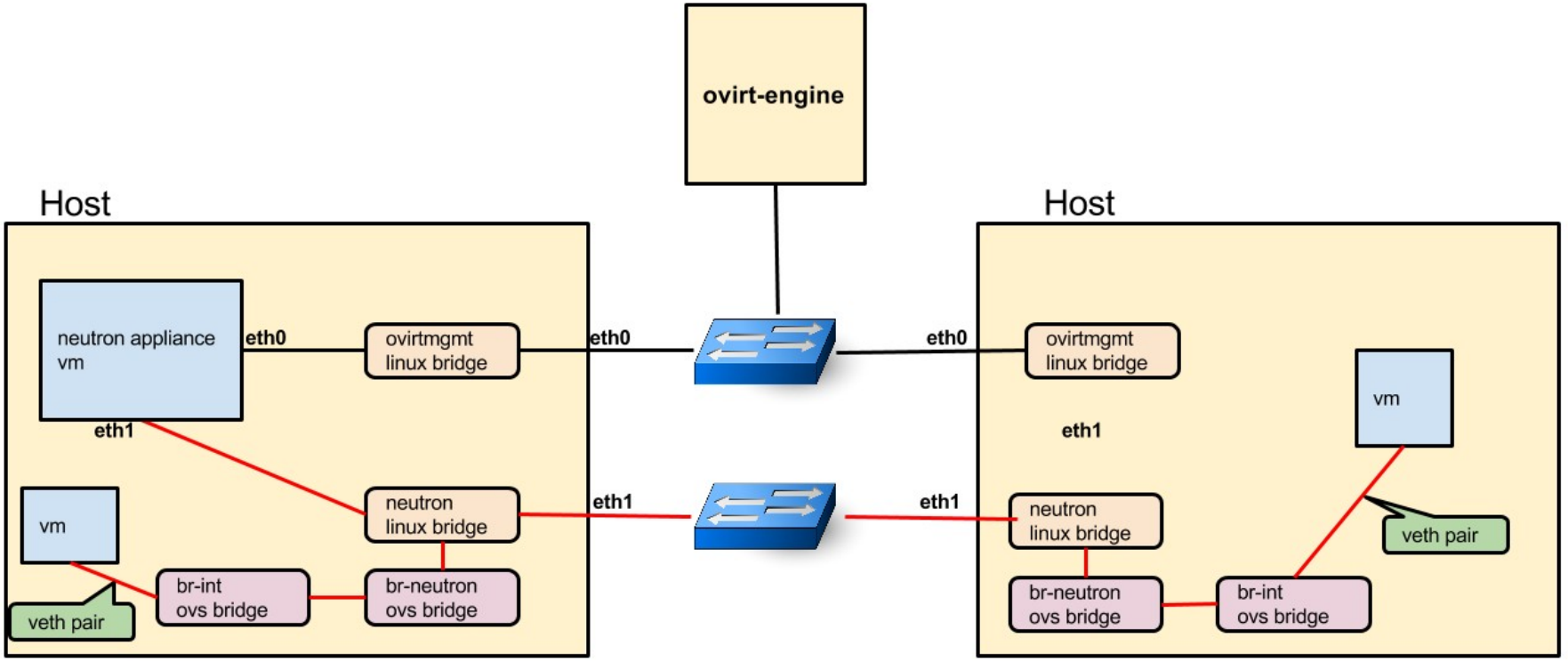
Discover Networks



Add Network

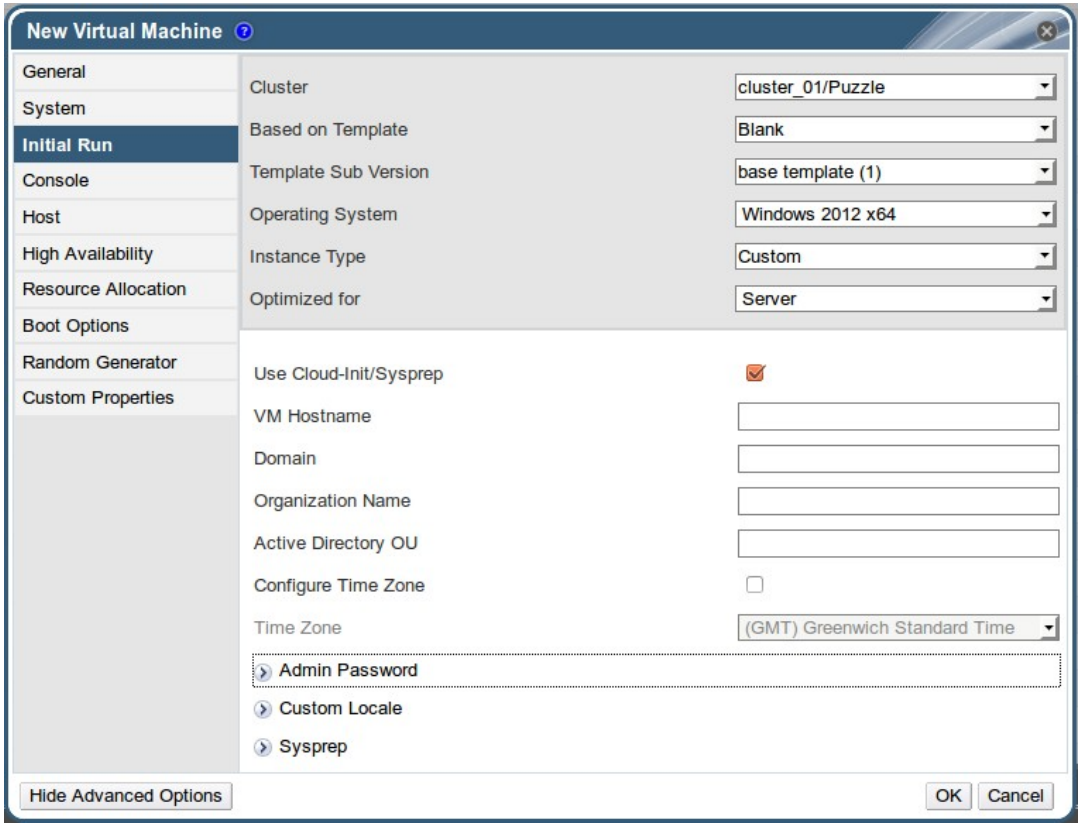

oVirt
Open Virtualization Manager
Logged in user: admin@internal | Configure | Guide | About | Sign Out
Search:
Provider: name = foo
Networks
Providers
System
Expand All
Collapse All
Data Centers
Default
Storage
mydata
Networks
ovirtmgmt
bar
Templates
Clusters
Default
Hosts
myhost
VMs
Providers
foo
Add
Edit
Remove
Name
URL
foo
http://10.201.128.12:9696/v2.0
1-1
New Logical Network
Network Parameters
Data Center
Default
Name
Description
Network Label
Enable VLAN tagging
VM network
Override MTU
Attach/Detach Network to/from Cluster(s)
Name
Attach All
Default
Attach
Allow all users to use this Network
OK
Cancel
General
Networks
Discover
Add
Remove
Name
External ID
bar
93125288-2618-44df-b
Bookmarks
Tags
Last Message:
2013-May-02, 09:38
User admin@internal logged in.
Alerts (1)
Events
Tasks (0)

Neutron Virtual Appliance



Others

- Keystone for authentication
- Cloud-init for VM metadata
- (Foreman Compute Resource)



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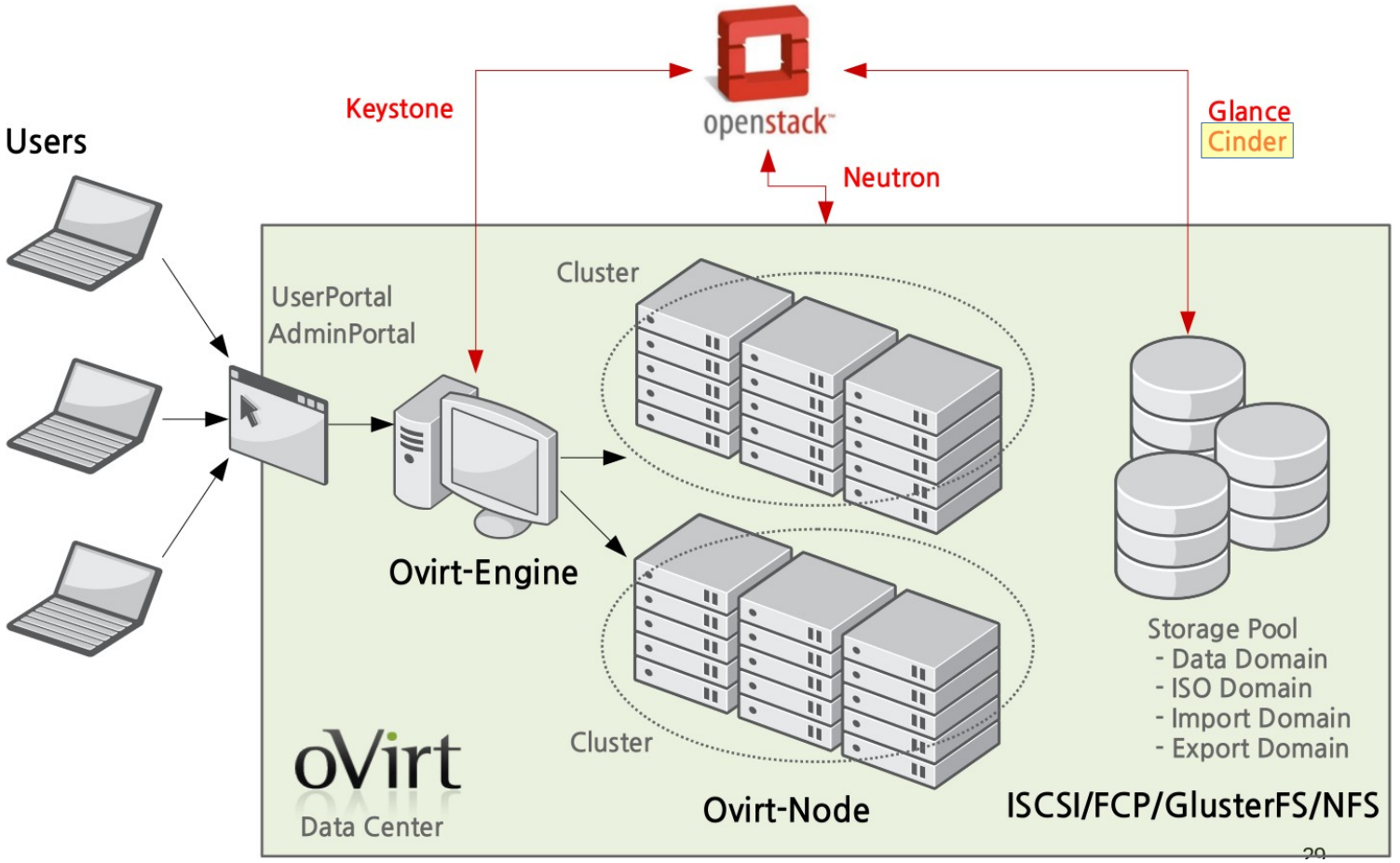
Future

oVirt Architecture (near future)



Cinder

- Use ceph, DRBD, etc. in oVirt
- Import/Export Images from and to Cinder
- Share Cinder Volumes
- Leverage the Cinder Volume drivers for the supported storage appliances (IBM, NetApp, Dell, EMC)
- Gain storage offloading capabilities (Cinder Volumes)
- Unify snapshots and backup strategies in your data centers

Pets and cows

- oVirt/RHEV → Pet style VMs
- OpenStack → Elastic Cloud ready applications
- Share storage, network between legacy and cloud apps

Links

http://www.ovirt.org

http://www.redhat.com/en/technologies/virtualization

http://www.ovirt.org/Features/NeutronVirtualAppliance

http://www.ovirt.org/Features/Cinder_Integration

http://de.slideshare.net/nearyd/o-virt-andopenstack

http://de.slideshare.net/rogan/20140208-ovirtkorea-01

Thank you!

...for not having slept during the presentation