

oVirt

OVERVIEW

Agenda

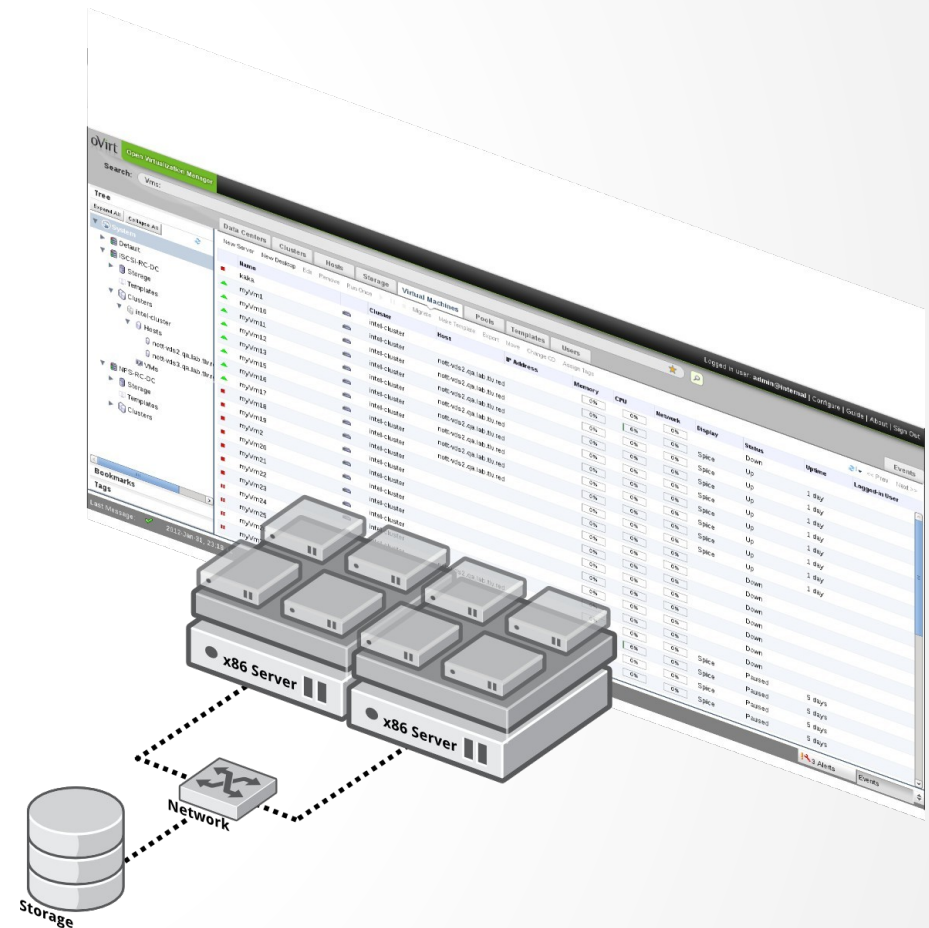
- About me
- What is oVirt?
- Why no (just) OpenStack
- Feature or Functionality
- Background
- Devprocess

About me

- 李建盛 (适兕)
- lijiangsheng1@gmail.com
- Worked at RedFlag Linux
- Open Source Preacher
- C/python/java
- Anaconda/peacemake/cloudstack

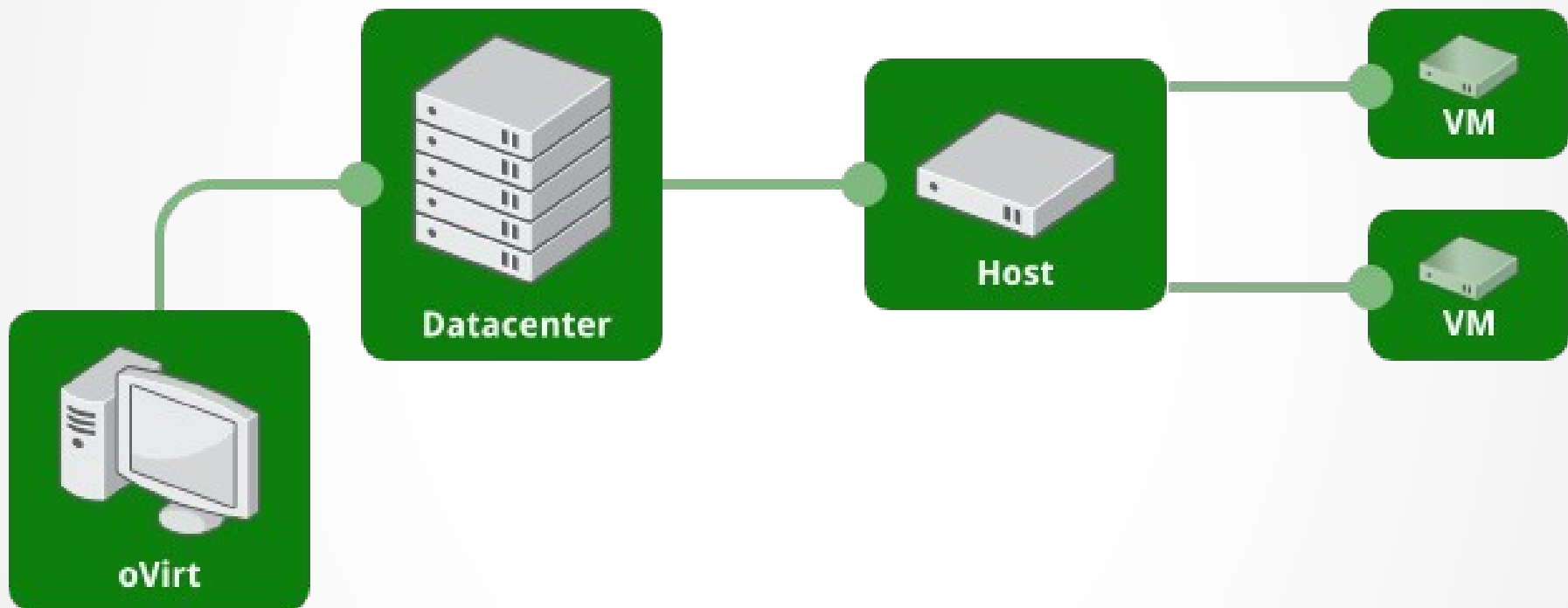
What is oVirt?

- Large scale, centralized management for server and desktop virtualization
- Based on leading performance, scalability and security infrastructure technologies
- Focus on KVM for best integration/performance
- Provides an open source alternative to vCenter/vSphere
- RHEV upstream



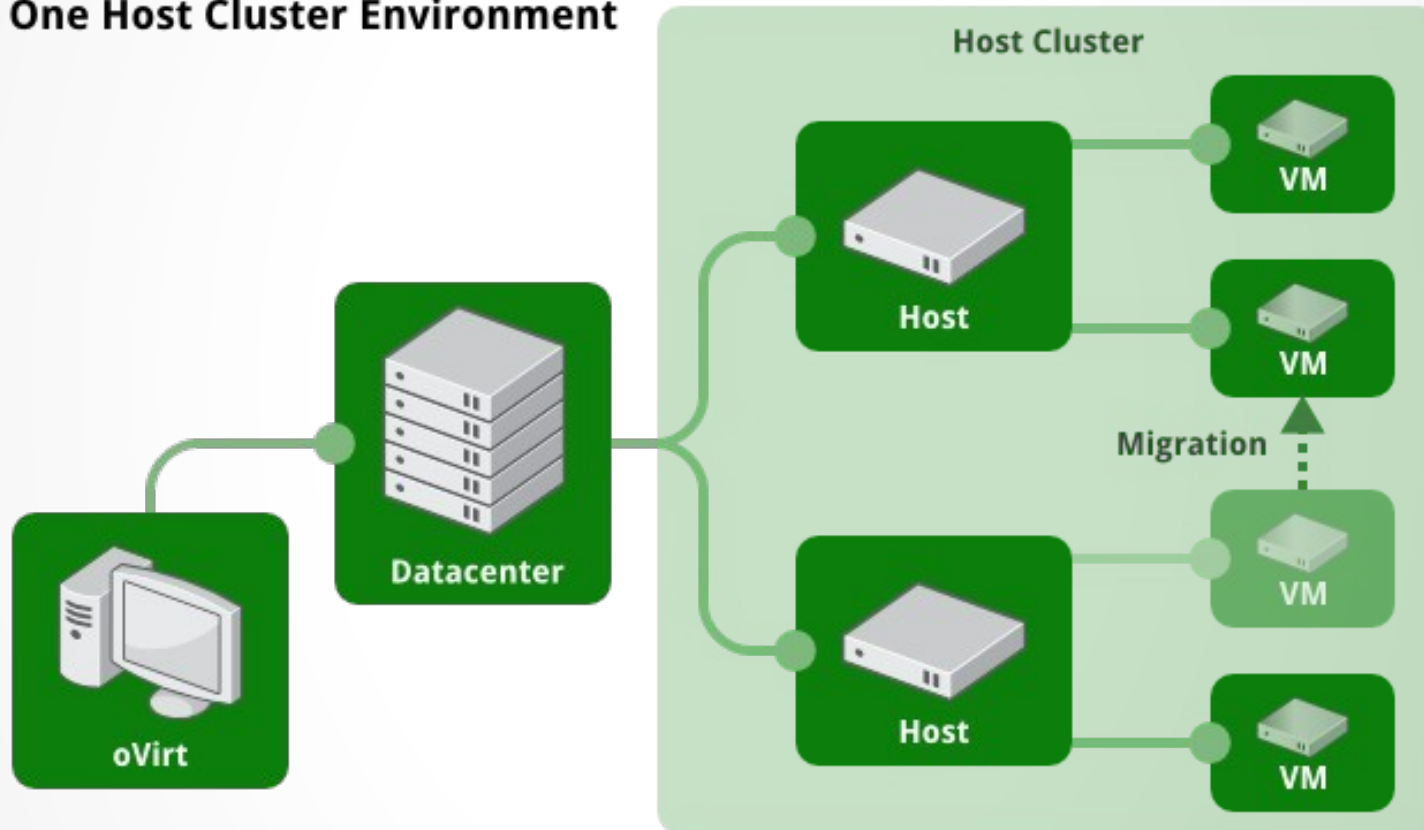
Single host environment

Basic One Host Environment

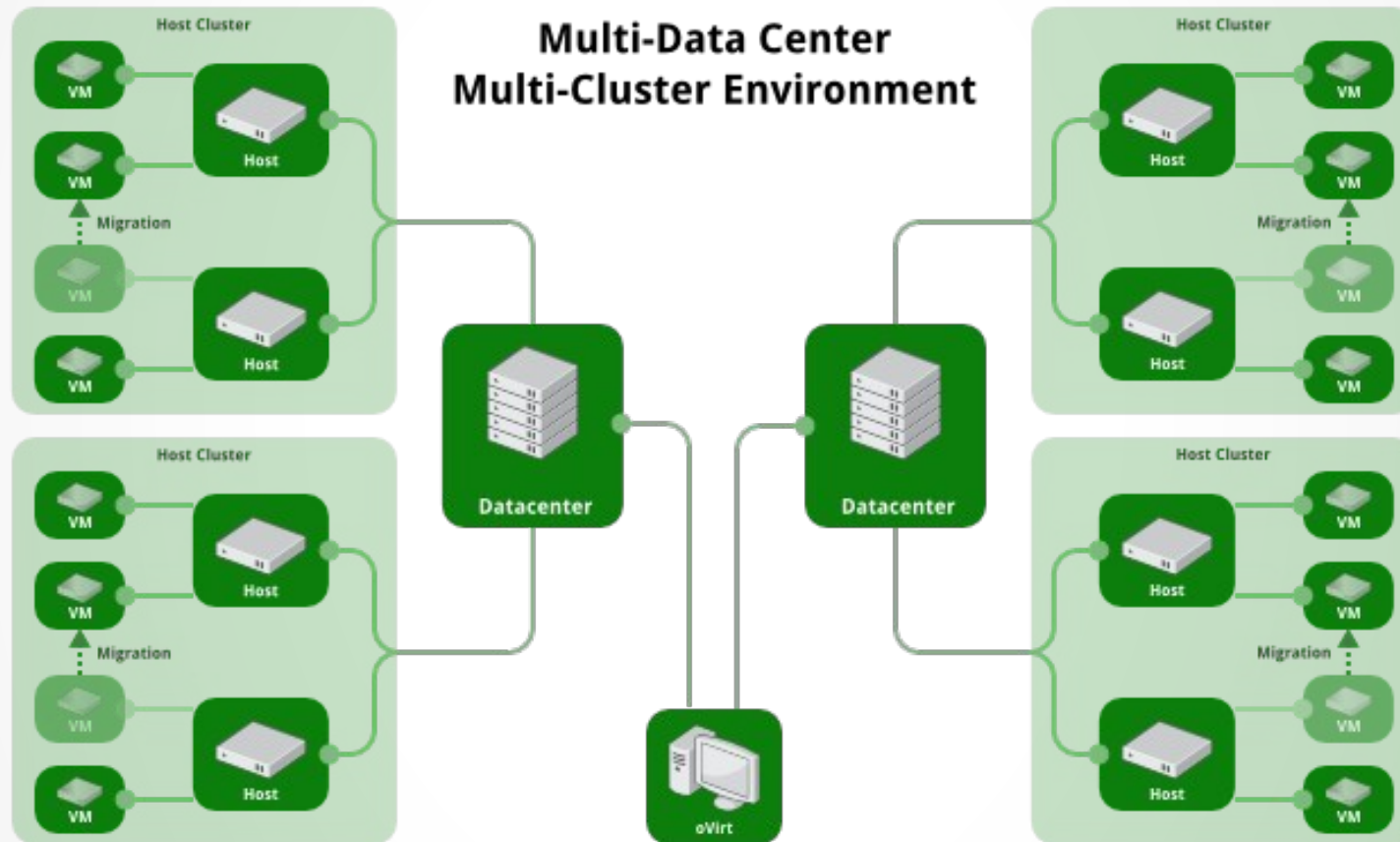


Single cluster environment

One Host Cluster Environment



Multiple datacenter environment



Why not OpenStack?

- Statefull VMs: application is king
- Application SLA = VM SLA
- SLA Request VM must High Available
- VM scale up: add vCPU,vRAM etc.
- on line time per years.
- suit for tradition application
- Stateless VMs: Distributed Applications
- app's SLA no depend VM
- create and delet as needed
- application scale out: add more VMs
- on line per hours/days/months
- Change tradition app for cloud

Why not OpenStack(2)

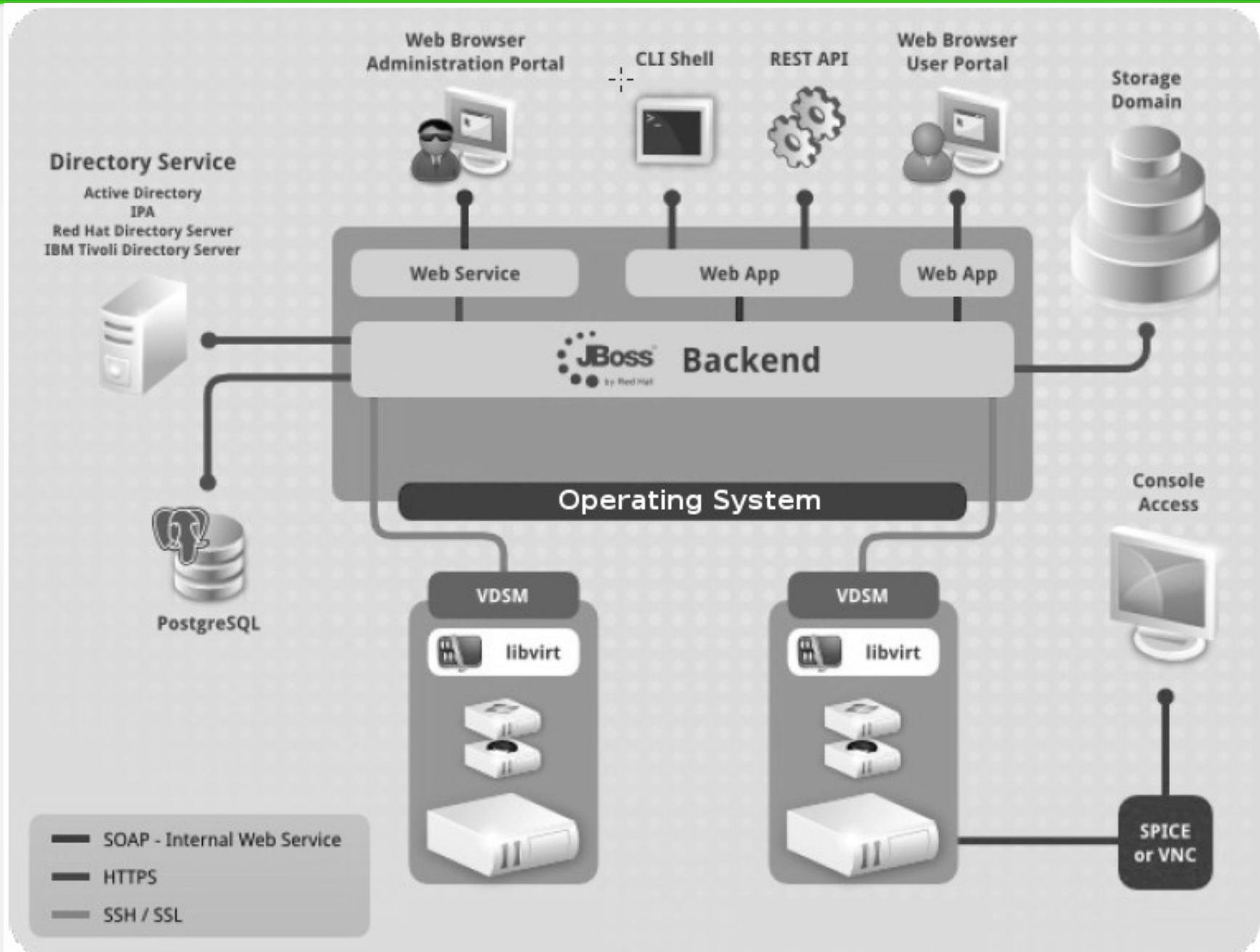


- pet
- not happy only one.
- application



- cattle
- all not happy
- resource and service

Architecture



Administration Portal

Tree

Expand All Collapse All

- System
 - RDU-SALAB-DataCenter
 - Storage
 - Templates
 - Clusters
 - RDU-SALAB-Production
 - Hosts
 - VMs
 - RHIC-DataCenter

Data Centers | Clusters | Hosts | Storage | Disks | **Virtual Machines** | Pools | Templates | Users | Dashboard | Events

New Server | New Desktop | Edit | Remove | Run Once | Migrate | Cancel Migration | Make Template | Export | Change CD | Assign Tags | Show Report | Guide Me

Name	Host	IP Address	Cluster	Data Center	Memory	CPU	Network	Display	Status	Uptime	Logged-in User
bc-demo	rhel-h5.rdu.salab.rec		RDU-SALAB-Produr	RDU-SALAB-DataC	0%	0%	0%	Spice	Up	62 days	
ChicaoTest-VM			RDU-SALAB-Produr	RDU-SALAB-DataC	0%	0%	0%		Down		
commvault-win1	rhel-h2.rdu.salab.rec	10.11.164.236	RDU-SALAB-Produr	RDU-SALAB-DataC	0%	25%	0%	Spice	Up	89 days	
commvault-win2			RDU-SALAB-Produr	RDU-SALAB-DataC	0%	0%	0%		Down		
demo	rhel-h6.rdu.salab.rec	10.11.164.173	RDU-SALAB-Produr	RDU-SALAB-DataC	39%	0%	0%	Spice	Up	70 days	
demo2.lscala	rhel-h5.rdu.salab.rec		RDU-SALAB-Produr	RDU-SALAB-DataC	0%	0%	0%	Spice	Up	37 days	
demo3.lscala			RDU-SALAB-Produr	RDU-SALAB-DataC	0%	0%	0%		Down		
demo4.lscala			RDU-SALAB-Produr	RDU-SALAB-DataC	0%	0%	0%		Down		
demo5.lscala			RDU-SALAB-Produr	RDU-SALAB-DataC	0%	0%	0%		Down		
demo-bhinson			RDU-SALAB-Produr	RDU-SALAB-DataC	0%	0%	0%		Down		
DEMO-idm3			RDU-SALAB-Produr	RDU-SALAB-DataC	0%	0%	0%		Down		
demo.lscala.host1	rhel-h4.rdu.salab.rec		RDU-SALAB-Produr	RDU-SALAB-DataC	0%	0%	0%	Spice	Up	32 days	
DEMO-luci	rhel-h1.rdu.salab.rec	10.11.165.10	RDU-SALAB-Produr	RDU-SALAB-DataC	41%	1%	0%	Spice	Up	19 days	
DEMO-MRG-Grid-H			RDU-SALAB-Produr	RDU-SALAB-DataC	0%	0%	0%		Down		

General | Network Interfaces | Disks | Snapshots | Applications | Permissions | Events

Name:	commvault-win1	Defined Memory:	6144 MB	Origin:	RHEV
Description:		Physical Memory Guaranteed:	4096 MB	Run On:	Any Host in Cluster
Template:	Blank	Number of CPU Cores:	4 (4 Socket(s), 1 Core(s) per Socket)	Custom Properties:	Not-Configured
Operating System:	Windows 2008 R2	Highly Available:	No	Cluster Compatibility Version:	3.1
Default Display Type:	Spice	USB Policy:	Disabled	Directory Domain:	
Priority:	Low				

Bookmarks

Tags

Functionality

- ● Centralized Management
- ● High Availability
- ● Live Migration
- ● Storage Live migration
- ● Load Balancing
- ● Power Management
- ● Templates, thin provisioning, snapshots
- ● V2V & P2V Migration tools
- ● Self Service User Portal
- ● Reporting Engine
- ● [More](#)

Background

- Feb 2007: Qumranet's KVM becomes part of mainline Linux kernel
- Sept 2007: Qumranet's KVM-based Windows VDI product, Solid ICE, ships
- Oct 2007: First commit in old oVirt repo (git.et.redhat.com)
- Feb 2008: oVirt project emerges publicly (for the 1st time)
- Sept 2008: Red Hat acquires Qumranet, Inc.
- Nov 2009: RHEV 2.1 ships w/ .NET-based management server
- Nov 2011: oVirt Project re-launches w/ Java-based management server
- Jan 2012: RHEV 3.0 ships w/ new engine in tech preview
- Feb 2012: oVirt 3.0 release (first community release)
- Aug 2012: oVirt 3.1 release
- Feb 2013: oVirt 3.2 release
- Aug 2013: oVirt 3.3 release
- May 2014 : oVirt 3.4 release
- May 2014: oVirt 3.5 preview

Devprocess

- <http://gerrit.ovirt.org>
- ssh config
- `git clone gerrit.ovirt.org:subproject`
- Hacking
- `git add /git commit -s`
- `git push origin HEAD:refs`

Come to join us

- Get started with oVirt

<http://www.ovirt.org/Download>

- Help us make it better

<http://www.ovirt.org/Develop>

- Chinese User Group

<http://ovirt-china.org>(come soon)

Thanks for your listening.

Any Questions?

Reference

- <http://www.socallinuxexpo.org/sites/default/files/presentations/ovirt-overview-scale-brooks.pdf>
- http://www.ovirt.org/File:Open_Source_Cloud.pdf
- [litke-lfcs-oVirt-Update-20140328.pdf](#)
- <http://www.ovirt.org/File:OVirt>