



# RED HAT ENTERPRISE VIRTUALIZATION (RHEV)

## RHEV 3.1 Overview and Roadmap

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29-Nov-2012  
Last updated 24th April 2012



# RED HAT ENTERPRISE VIRTUALIZATION MOVING BEYOND 3.0

- oVirt Project officially launched November 2011
- All new development happening 'upstream' at [ovirt.org](http://ovirt.org)
- Broken out into 13 separate projects
  - Engine core
  - Web Admin
  - User Portal
  - API
  - CLI
  - Node
  - VDSM
  - etc ...



# RED HAT ENTERPRISE VIRTUALIZATION

## RHEV 3.1

### Platform Infrastructure

#### JBoss EAP 6

- Reduced in-memory footprint
- Reduced startup time
- Improved performance and scalability

#### OpenJDK

- Run on 100% open source infrastructure
- No requirement for proprietary Oracle JRE

#### RHEL 6.3

- Improved performance & Scalability
- New KVM features  
e.g., New CPUs, live snapshots, storage migration
- Scaling to 2TB / 160 vCPU per VM\*

#### Jasper 4

- Move to latest Jaspersoft Reporting engine

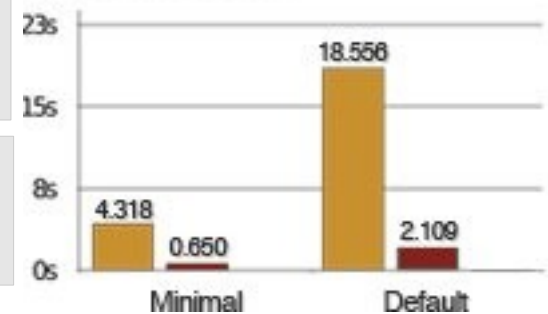
#### RHDS

- Red Hat Directory Server Support

#### Quotas

- Support quotas for storage, memory and CPU

#### Boot Time Results



# RED HAT ENTERPRISE VIRTUALIZATION

## RHEV 3.1

### Integration & API

#### Linux CLI

- New CLI based on upstream command line tool
- Allows all RHEV operations to be run from command line

#### JSON

- Support for JavaScript Object Notation in addition to XML

#### Python SDK

- Python SDK for developers

#### API Session

- Session support for API connections



# RED HAT ENTERPRISE VIRTUALIZATION

## RHEV 3.1

### User Interface

#### Web Admin

- Full support for Web Admin
- Remove Windows Admin Portal

#### Reports Integration

- Integrate Reports / Dashboard into web admin portal
- Single Signon between Admin portal and Jasper Reports

#### Task Manager

- Interface to view and manage on-going tasks

#### Internationalization

- Internationalization / Localization for UI



# RED HAT ENTERPRISE VIRTUALIZATION

## RHEV 3.1

### Storage

#### Hotplug Disk

- Hot plug/unplug virtual machine disk image

#### Direct LUN

- UI support for configuring direct LUN access for virtual machine

#### Shared Disk

- Allow VM disk to be shared e.g., Shared disk for database

#### Multiple Storage Domains

- Allow VM to use disks from multiple storage domains

#### Live Snapshots

- Live snapshots of Virtual Machine – including guest agent

#### 'Floating' Disks

- Create and manage disks that are not associated to a VM

#### 'Pluggable' Filesystems

- Infrastructure to support other shared file systems e.g., Gluster, GPFS, etc

#### Storage Migration

- Storage Live Migration

Tech Preview



# RED HAT ENTERPRISE VIRTUALIZATION

## RHEV 3.1

### Networking

#### Network UI

- New Network management UI
- Support for more advanced configuration options
  - e.g., Set MTU for network interfaces (jumbo frames)
  - e.g., Define SPAN/Monitor port for network security monitoring

#### Hot plug/unplug

- Hot plug/unplug virtual machine's network interface



# RED HAT ENTERPRISE VIRTUALIZATION

## RHEV 3.1

### Virtual Desktop Infrastructure

#### Autostart VM Pools

- Extend VM pools to autostart virtual machines

### SPICE

#### Native USB

- Native USB 2.0 support in Spice (remove 3<sup>rd</sup> party USB solution)
- Support for USB remoting for Linux guests

#### WAN Optimizations

- Optimizations for low bandwidth / high latency networks





# RED HAT ENTERPRISE VIRTUALIZATION BEYOND 3.1 – KEY FEATURES

Still in planning – based on upstream development

## RHEV 3.2 – Target H1-2013

RHEL 6.4

- Based on RHEL 6.4 Hypervisor

SLA Support

- SLA / QoS for CPU, memory, network and storage

## RHEV 4.0 – Target H2 - 2013

RHEL 7.0

- Based on RHEL7 Hypervisor

New Storage  
Infrastructure

- Remove need for SPM  
- Mixed storage types in same pool – iSCSI, FC, NFS

Networking

- Support for Open vSwitch





**THANK YOU**

