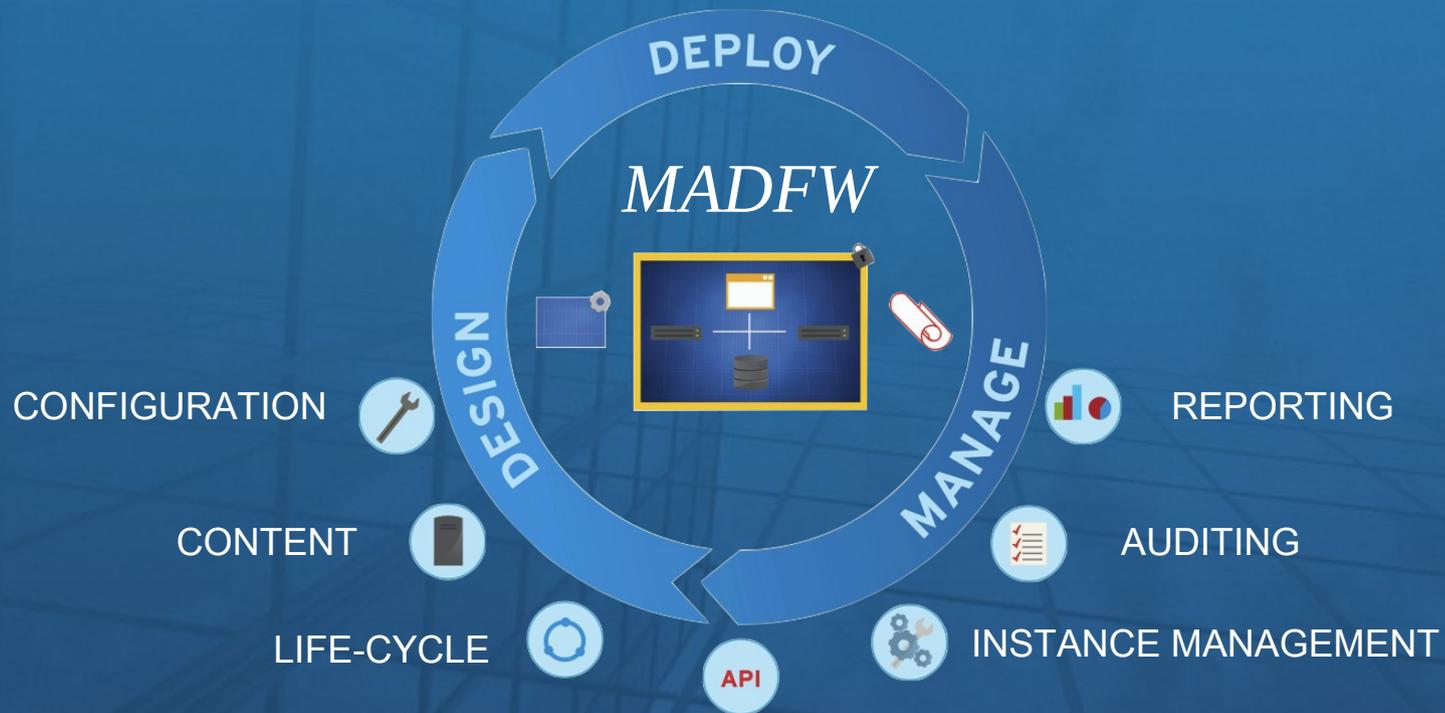


MADFW Program Review



Briefing Overview

(1) System Purpose & Capabilities

Terry Seibel

(2) System Design Review

Shawn Wells

- Infrastructure Review
- MADFW Common Services

(3) Demos

Michele Newman

- Workflow Overview
- Environment Interface
 - Tenant Self-Service Portal
 - System Management



System Purpose & Capabilities



MADFW System Purpose & Capabilities

- Why the project began
- What provide to MSD
- Manage infrastructure, not OS
- Provide RHEL versions **free** for unlimited use within MADFW environment
 - Inherit premium 24/7 support SLA from Red Hat Support
 -



MADFW Security Review

- ICD 503 C&A Lifecycle
 - H/L/L
 - Currently IATT
 - Verified by FN&ISD
 - SECSCAN
- Host/Tenant Model
 - We provide base infra (hypervisor down)
 - You provide OS and up



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MADFW Architecture Review

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MADFW: Hosting Capabilities

- Built for future growth and scalability

	Current MADFW Environmental Limitations	Technology Limitations
Logical CPUs/Hypervisor	xxxx	160
Physical RAM	xxxx	2TB
vCPU per Guest	64 vCPUs	
vRAM per Guest	512GB	

- Support for multiple tenant Operating Systems
 - RHEL 3, 4, 5, 6, and future versions (unlimited RHEL use for MADFW tenant VMs)
 - Microsoft Server 2003, 2008, 2008 R2
 - Microsoft Windows XP, Windows 7
 - Microsoft SVVP and WHQL Certified

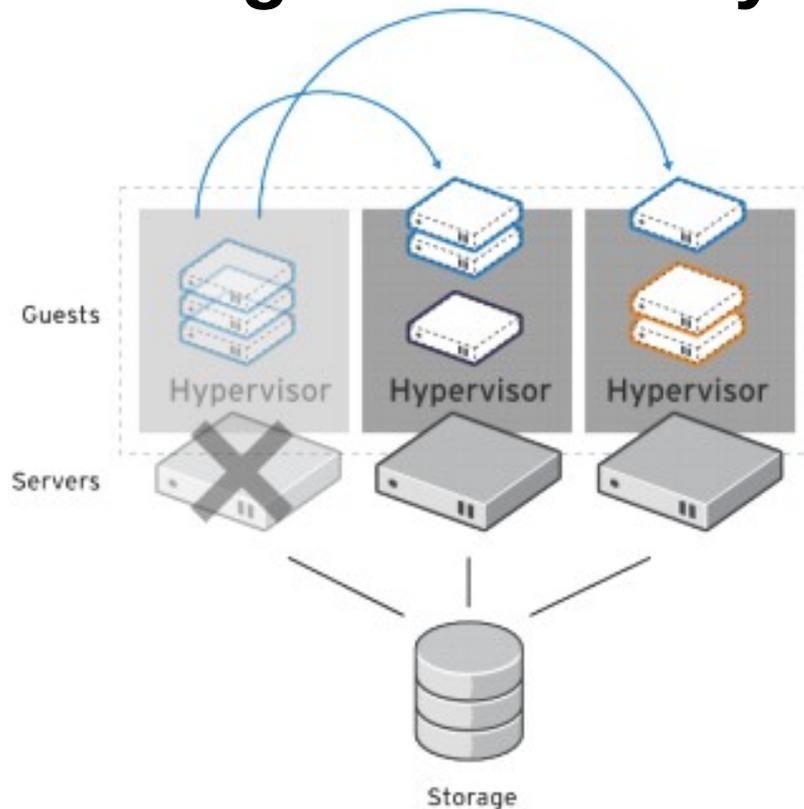


MADFW: Hosting Capabilities

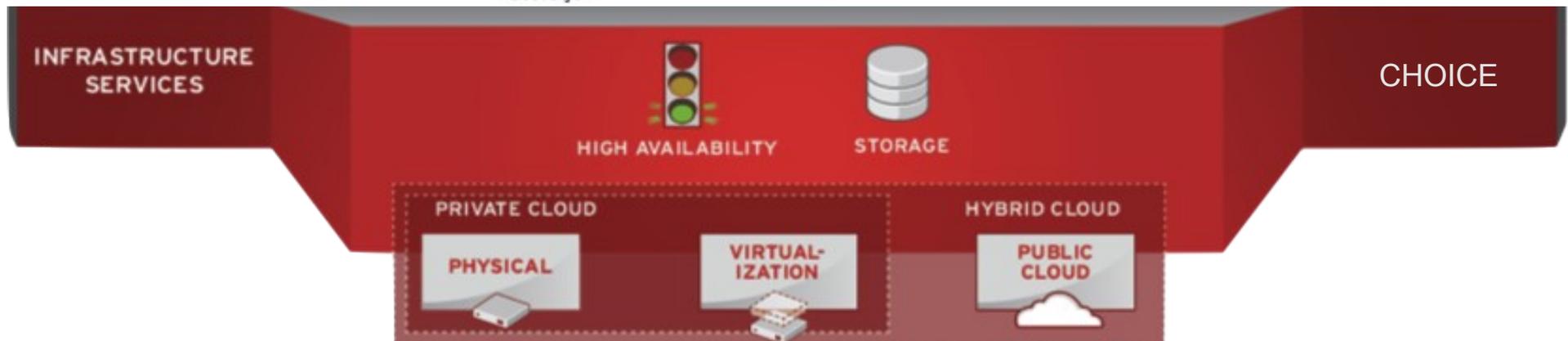
Feature	Description
High Availability	Restart guest VMs from failed hosts automatically on other hosts
Live Migration	Move running VM between hosts with zero downtime
System Scheduler	Continuously load balance VMs based on resource usage/policies
Maintenance Manager	No downtime for virtual machines during planned maintenance windows. Hypervisor patching
Image Management	Template based provisioning, thin provisioning and snapshots
Monitoring & Reporting	For all objects in system – VM guests, hosts, networking, storage etc.
OVF Import/Export	Import and export VMs and templates using OVF files
V2V	Convert VMs from VMware and RHEL/Xen to MADFW



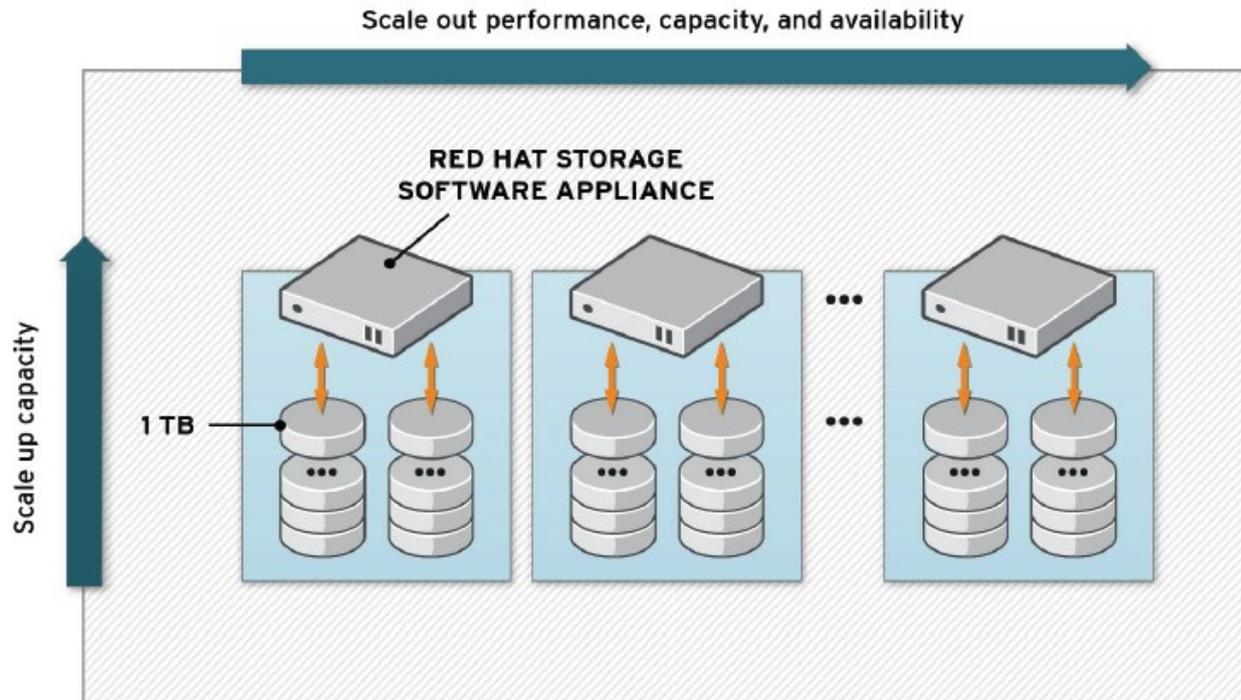
MADFW: High Availability



- Automatic restart on another hypervisor in event of failure
- Live migration to original host upon environmental restoration
- Resource specifications held constant through DR process (CPU, Memory, Storage, Network)



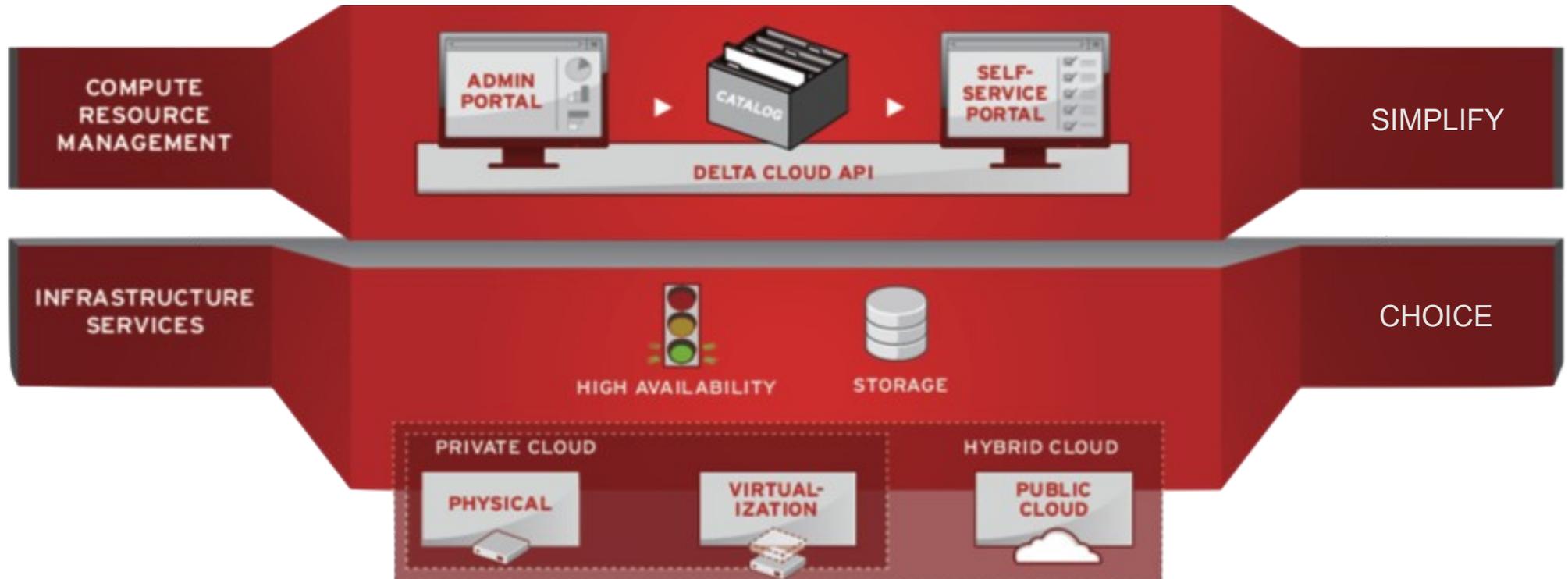
MADFW: Centralized Storage



- Storage pool managed by MADFW
- Hardware RAID
- Exposed as NAS



MADFW: Management Interfaces



MADFW: Admin Portal



MADFW: Self Service Portal

- Upon account creation, Tenants will be given a “pool” of resources
 - e.g. 50 vCPUs, 100GB RAM, 1TB disk
- Tenants have ability to utilize their resources as they see fit, managed through a WebGUI
 - Self-Service create and destroy VMs
 - Start/stop/modify
- Addition of resources (“pool growth”) will require a new ticket



MADFW: Self Service Portal

- Tenants can create Role-Based sub-accounts

New Edit Clone Remove

Show All Users Administrator Role User Role

	Name	Description
 	SuperUser	Roles management administrator
 	RHEVMUser	RHEVM user
 	RHEVMPowerUser	RHEVM power user
 	ClusterAdmin	Cluster administrator
 	DataCenterAdmin	Data Center administrator
 	StorageAdmin	Storage administrator
 	HostAdmin	Host administrator
 	NetworkAdmin	Network administrator
 	VmAdmin	Vm administrator
 	VmPoolAdmin	Vm-Pool administrator
 	TemplateAdmin	Template administrator
 	TemplateUser	Template User



MADFW: Self Service Portal



Red Hat Enterprise Virtualization

User: vdcadmin | [Sign out](#) | [Guide](#) | [About](#)

Basic

Extended

VM's

Templates

Resources

New Server | New Desktop | Edit | Remove | Run Once | Change CD

	FirstVM1 (First VM)					Spice
	LinuxPool					Spice
	RealLinux					Spice
	RealWindows7 (A Real One)					Spice
	SawiPool					Spice
	SecondVM					Spice
	danny-vm111					Spice

General | Virtual Disks | Permissions | Applications

Name:	LinuxPool	Defined Memory:	256 MB	Run On:	Any Host in Cluster
Description:		Physical Memory Guaranteed:	256 MB		
Template:	LinuxTemplate	Number of CPU Cores:	1 (1 Sockets, 1 Cores per Socket)		
Operating System:	Red Hat Enterprise Linux 5.x	Number of Monitors:	1		
Default Display Type:	Spice	USB Policy:	Disabled		



MADFW: Reports Interface



Trends Dashboard of Data Center DC_23_iscsi

Data Center: DC_23_iscsi (Removed on 01/05/2011) |

Cluster: All |

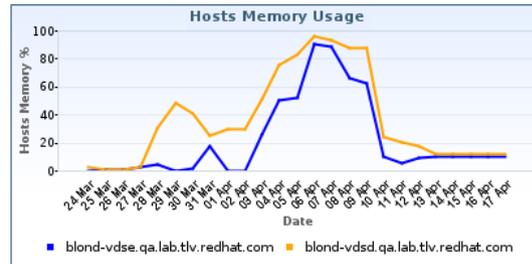
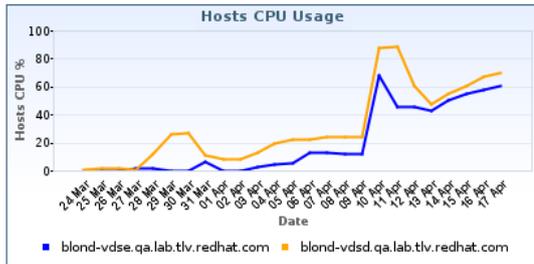
Host Type: All |

VM Type: All |

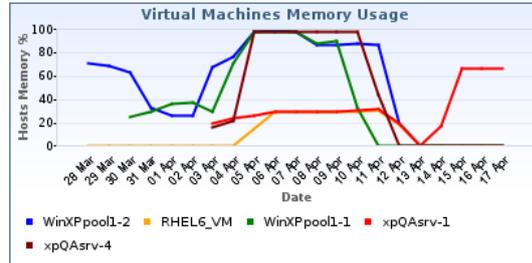
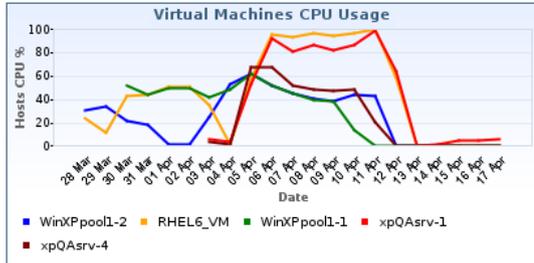
Period Range: Quarterly |

Dates: March 2011 |

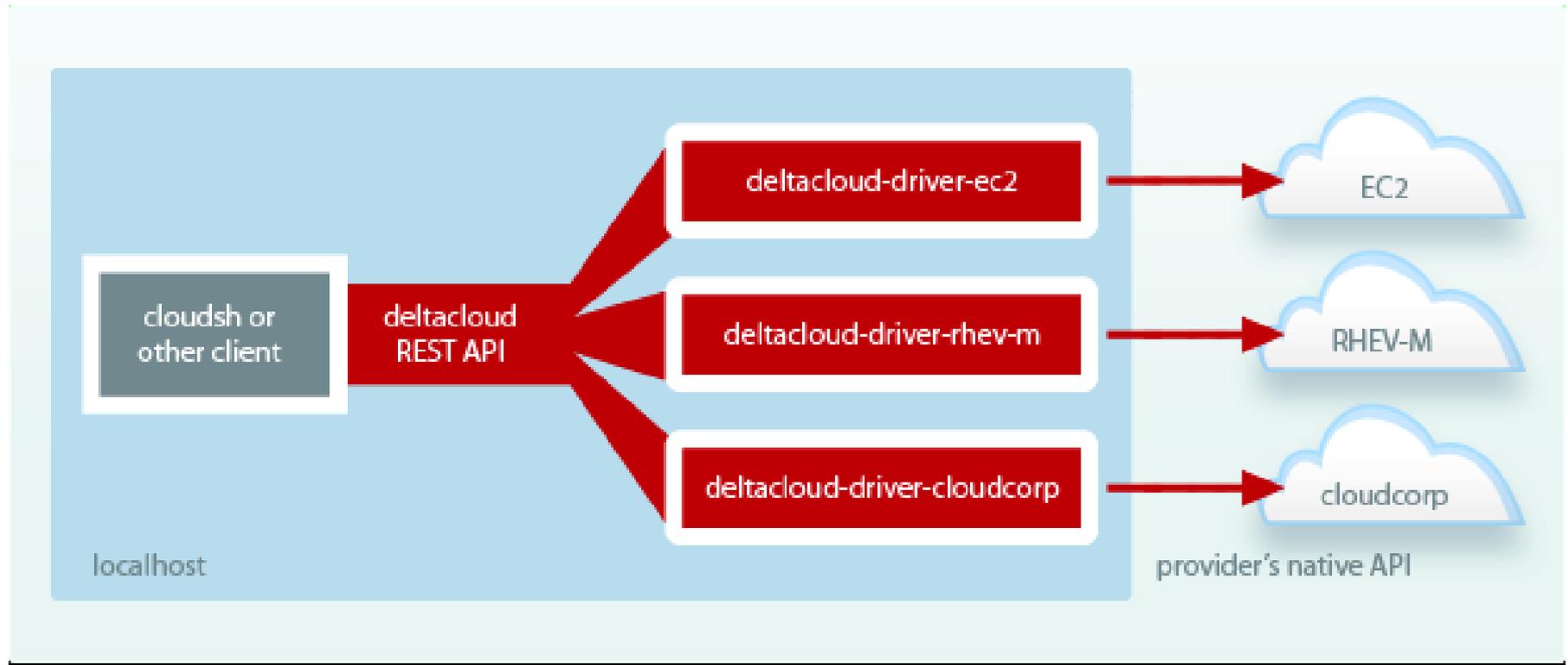
Five Most Utilized Hosts



Five Most Utilized Virtual Machines



MADFW: Management through APIs



A RESTful API for simple, any-platform access



MADFW: API Example

```
$ deltacloudd -l
```

Available drivers:

```
* condor
* vsphere
* opennebula
* eucalyptus
* rhevm
* sbc
* azure
* gogrid
* mock
* rackspace
* rimuhosting
* terremark
* ec2
```

```
require 'deltacloud'
```

```
api_url      = 'http://madfw.example.com:5000/api'
api_name     = 'TK2PJCAN9R1HKG2FK24Z'
api_password = 'aLe27rZIRhIBcVoQbL4JsVtaNga12vEL9d9kS5CA'
```

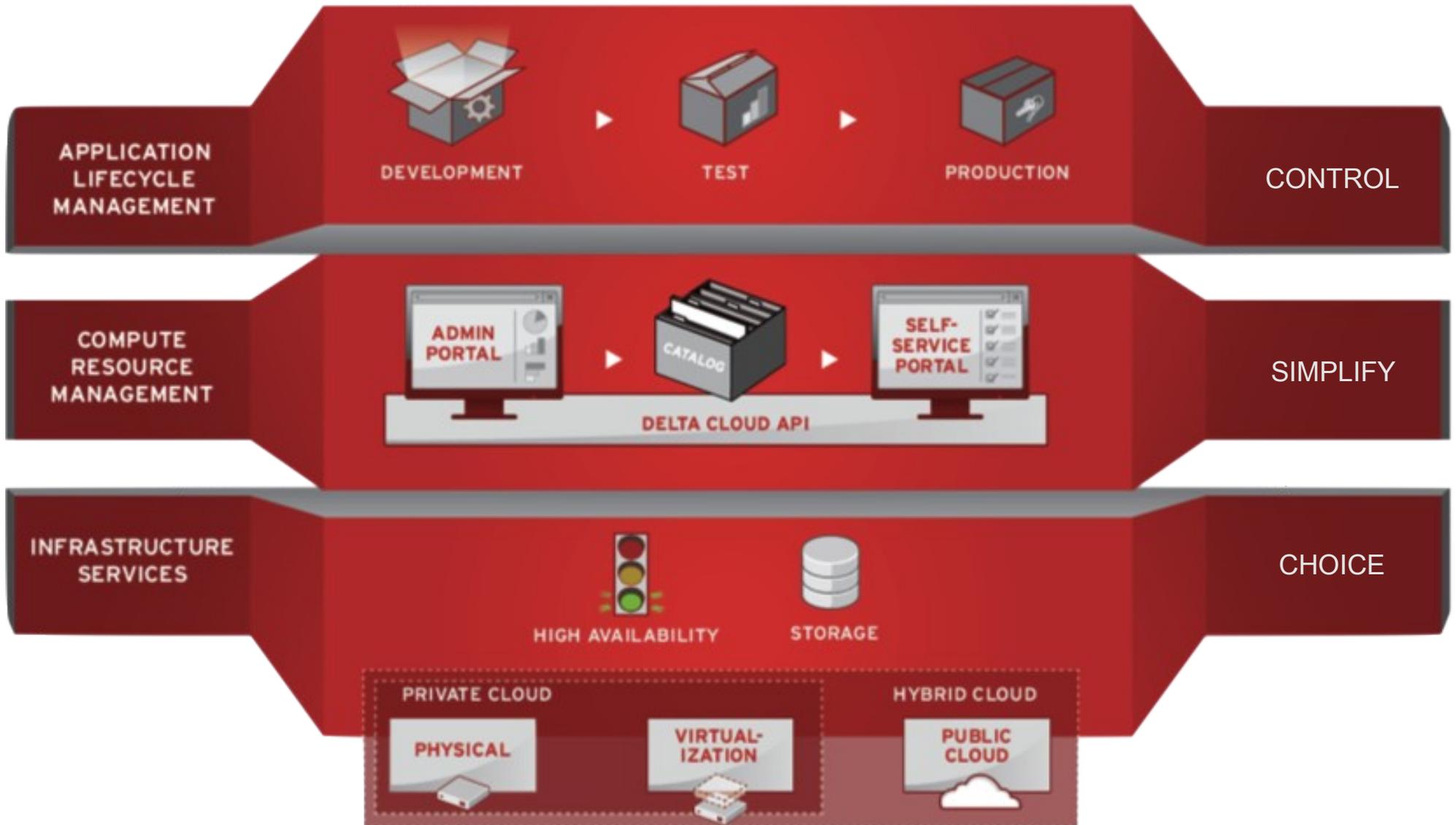
```
client = DeltaCloud.new( api_name, api_password,
api_url )
```

```
# get a list of currently running instances (virtual
machines)
```

```
client.instances.each do |instance|
  puts instance.name
end
```

```
$ deltacloudd -i rhevm -P 10000 -r madfw.example.com
```





MADFW: Common Services

- System Management
- Identity Service
- Hardened RHEL Baselines

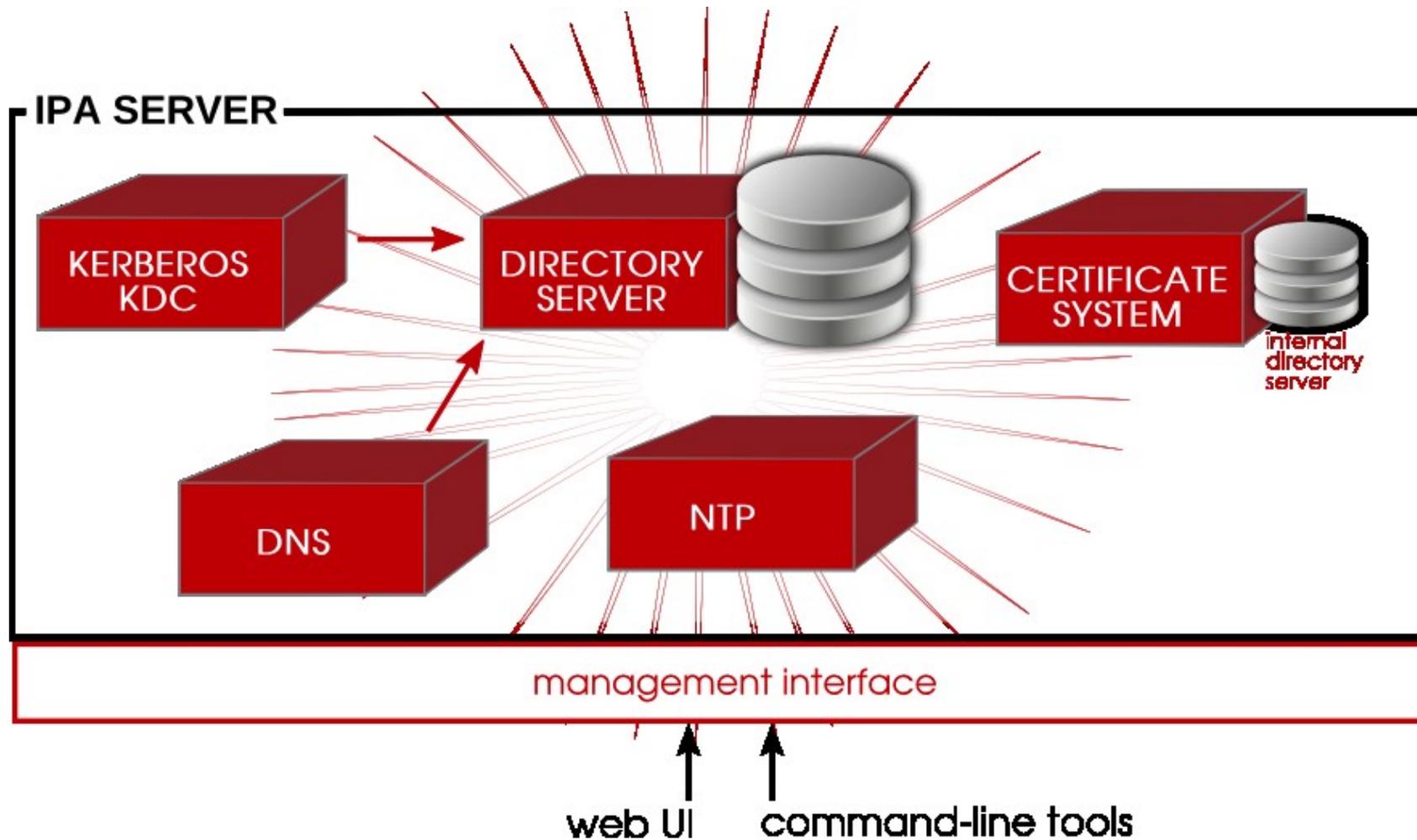


MADFW: System Management Service

- Software/Updates
 - Access to RHEL security updates, patches, new OS versions
 - Provides vehicle for IAVM/CVE patches
- Management
 - Manage groups of systems as one
 - Manage configuration files, not just binaries
 - Schedule updates to occur during maintenance windows
- Provisioning
 - Bare metal, Vms, or system cloning
 - Undo problematic changes with snapshots and rollback



MADFW: Identity Service



MADFW: Hardened RHEL Baselines

- Initial offering of hardened RHEL6 baselines
 - STIG, NIST 800-53
 - Common Criteria once announced (est. September)
- RHEL5 offered by mid-September
 - STIG, NIST 800-53, Common Criteria



MADFW: Limitations

- 10G network
- NAS storage (not block level through SAN)
- Limited Backup



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MADFW Demo

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MADFW Demo

- Demos
 - Workflow Overview
 - How to request MADFW access (TBD)
 - How to make a VM
 - Environment Interfaces
 - User Portal (start/stop/create)
 - System Management via RHN Satellite (Patching, Prov, Grouping, Custom Apps)



How to Make a Virtual Machine in RHEV Overview

- Login to RHEV User Portal (<https://userportal.example.com:8443>)
- Create a New Server
- Add Network and Disk to VM
- Begin installation

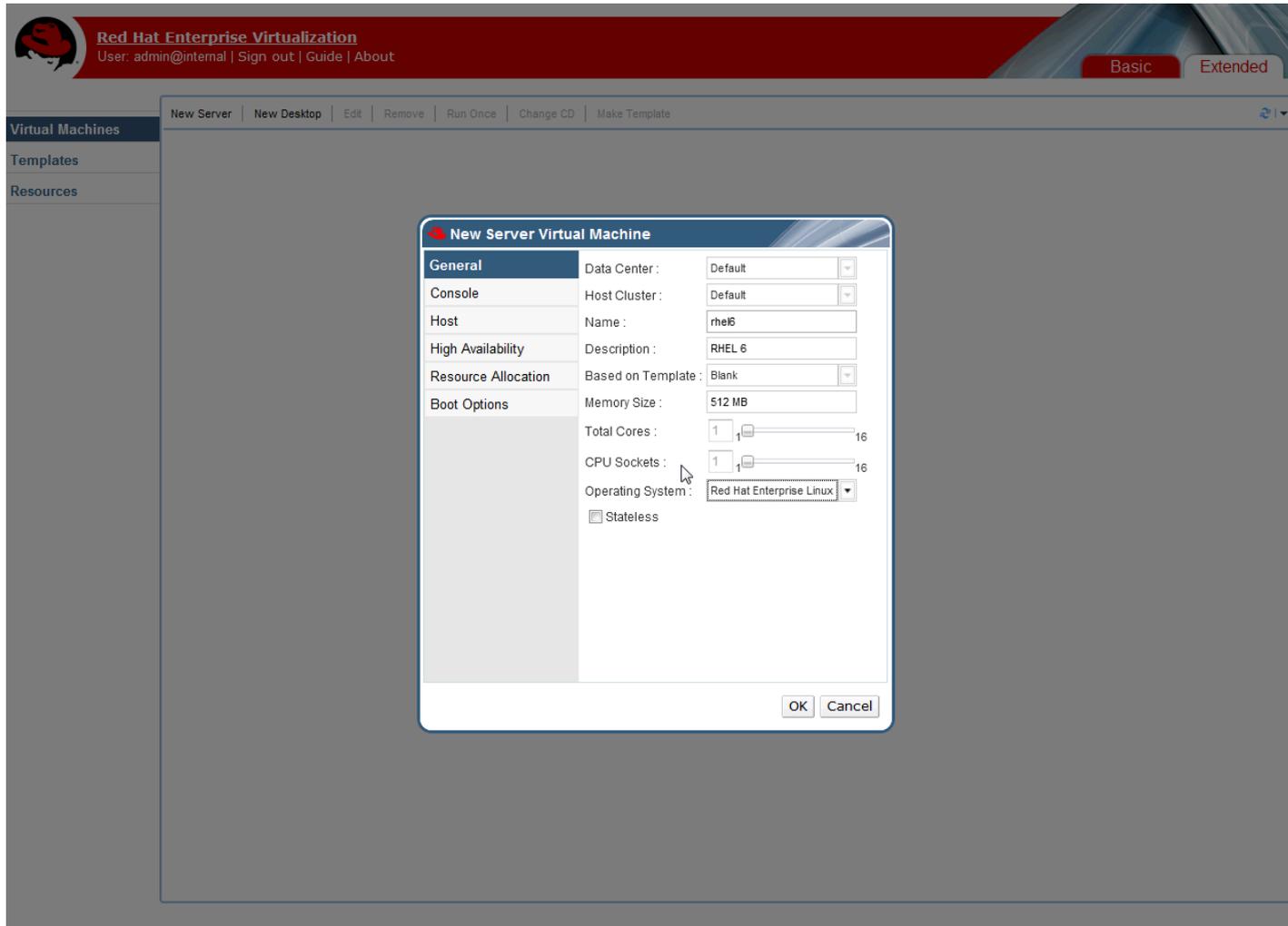


RHEV User Portal: Create a New Server

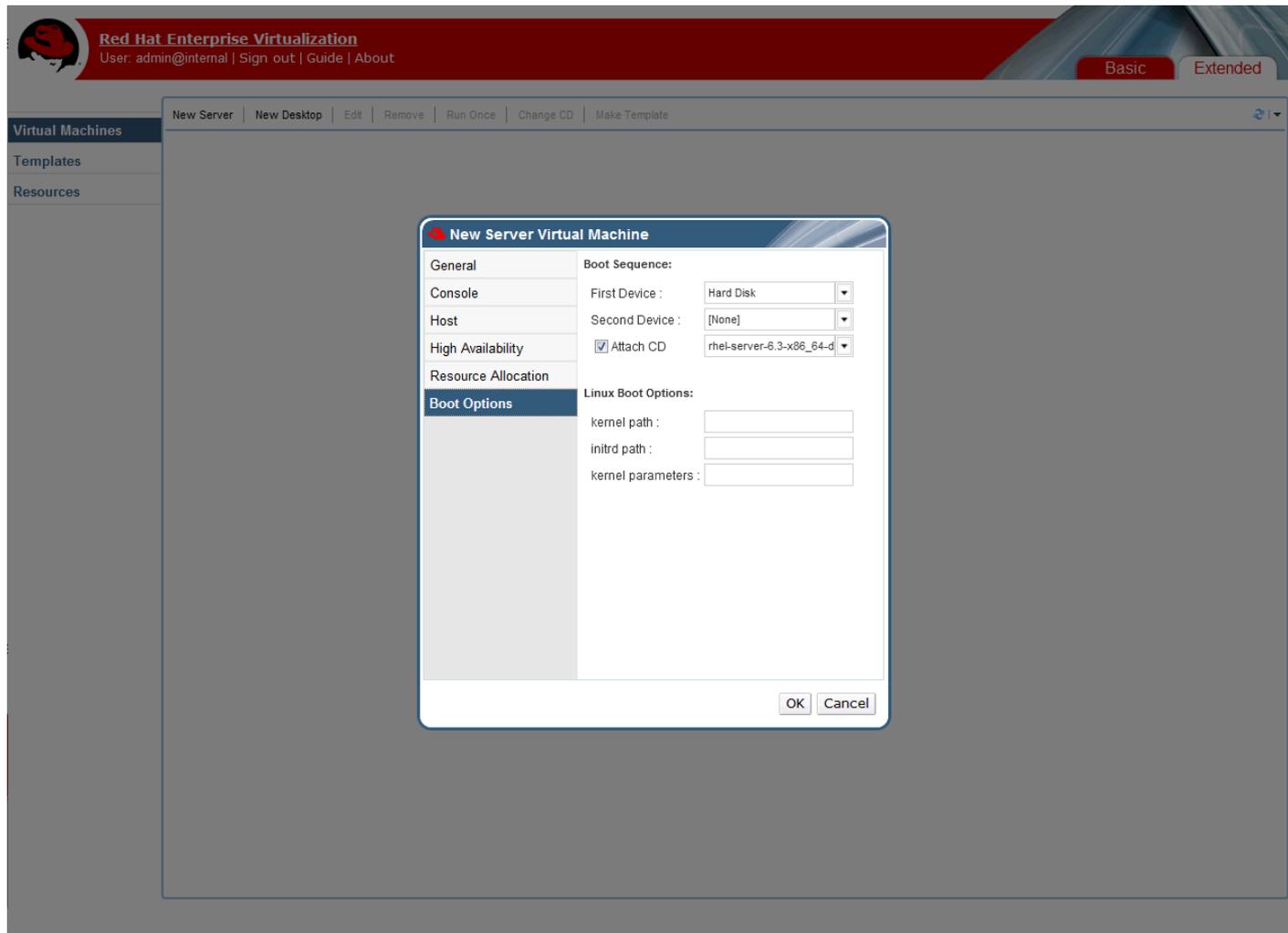
- Virtual Machines Menu, click “New Server”
- Fill out New Server Virtual Machine (if not stated below then use defaults)
- General
 - Name
 - Description
 - Template (If applicable)
 - Memory
 - CPU's
 - Operating System
- Boot Options
 - Second Device: CD-ROM
 - Select “Attach CD” and select version



New Server VM General Tab



New Server VM Boot Options Tab



Add Network and Storage to VM

- Attach Network Interface Card
 - Select new VM, go to “Network Interfaces” Tab, click on “New”
 - Defaults are acceptable, select “OK”
- Attach Storage
 - Select new VM, go to “Virtual Disks” Tab, click on “New”
 - Input size of O/S disk
 - Use Defaults
 - Select “OK”
- Wait for disk to be created/initialized



New VM NIC Configuration

Red Hat Enterprise Virtualization
User: admin@internal | Sign out | Guide | About

Basic Extended

New Server | New Desktop | Edit | Remove | Run Once | Change CD | Make Template

Virtual Machines
Templates
Resources

rhel6 (RHEL 6)

CONSOLE

New Network Interface

Name :

Network :

Type :

Specify custom MAC address

OK Cancel

General | Network Interfaces | Applications | Monitor

New | Edit | Remove

Name	Network Name	Type	MAC	Speed (Mbps)	Rx (Mbps)	Tx (Mbps)	Drops (Pkts)
No items to show.							



New VM Virtual Disk Configuration

The screenshot displays the Red Hat Enterprise Virtualization (RHEV) web interface. At the top, the header shows the Red Hat logo, the text "Red Hat Enterprise Virtualization", and the user information "User: admin@internal | Sign out | Guide | About". There are tabs for "Basic" and "Extended". The main content area shows a virtual machine named "rhe16 (RHEL 6)". A "New Virtual Disk" dialog box is open in the center, with the following settings:

- Size (GB): 10
- Storage Domain: Data
- Disk type: System
- Interface: VirtIO
- Format: Preallocated
- Wipe after delete
- Is bootable

At the bottom of the dialog are "OK" and "Cancel" buttons. Below the dialog, there are tabs for "General" and "Network Interfaces". A table with columns "Name", "Size", "Actual Size", "Type", "Format", "Allocation", and "Interface" is visible, but it contains no data, with the text "No items to show." below it.

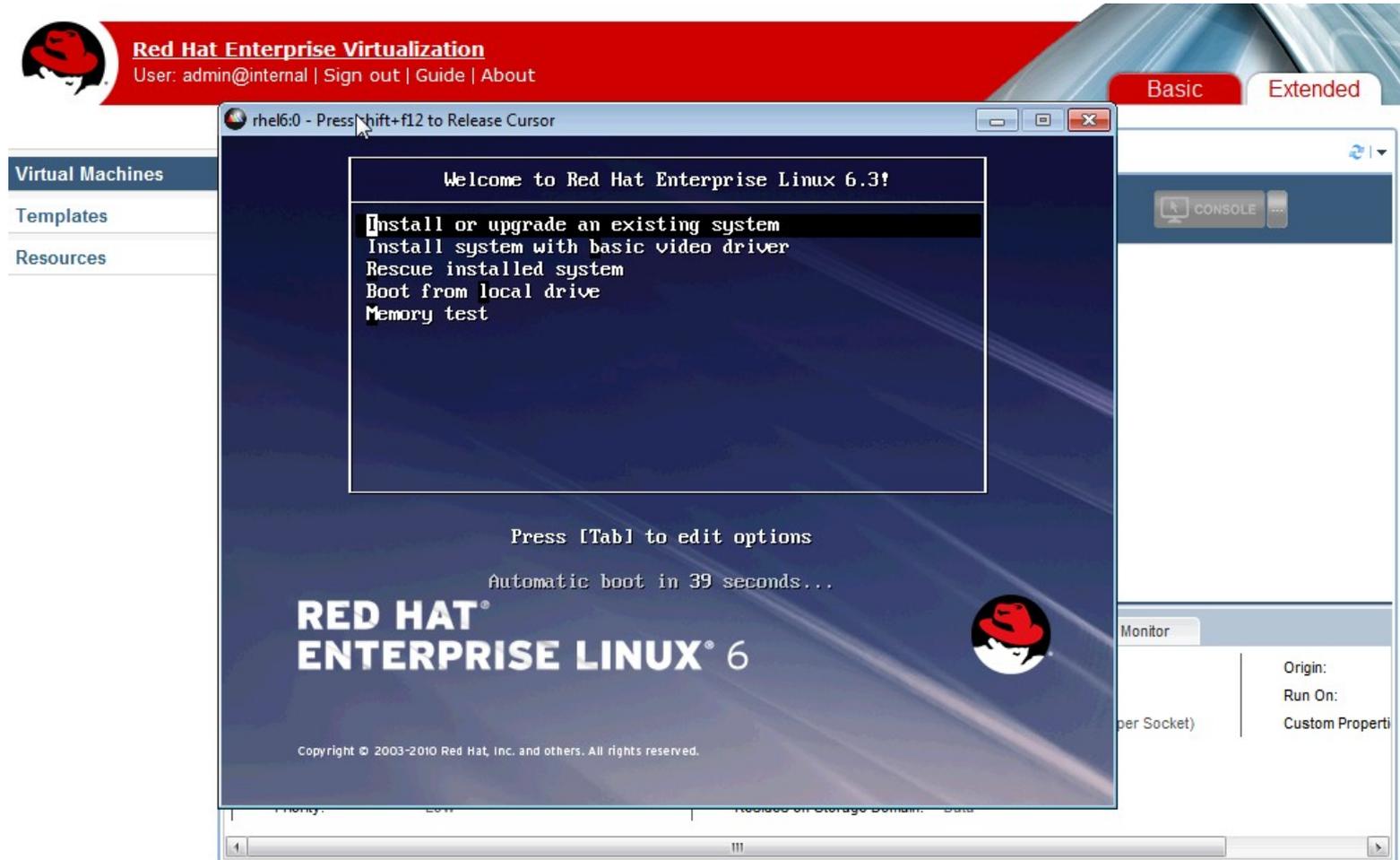


Open New VM

- Now that you have created a virtual machine in the power user portal, you can turn it on and connect to it.
 - Select rhel6 in the listing and click on “Play”, this will turn the VM on.
 - Click on the “Console” button to view the VM
 - A SPICE console window of the virtual machine displays. You can now use the virtual machine in the same way you would use a physical desktop.
 - You might have to install the SPICE app first
- The VM will boot to the CD ISO of RHEL 6 x86_64
- Begin normal installation



VM Installation via SPICE Console



VM Installation

The screenshot shows the Red Hat Enterprise Virtualization (RHEV) web interface. At the top, the header reads "Red Hat Enterprise Virtualization" with user information "User: admin@internal | Sign out | Guide | About". On the left, a sidebar contains "Virtual Machines", "Templates", and "Resources". The main area displays a terminal window for a VM named "rhel6:0". The terminal shows a "Package Installation" progress bar at 96%, with "Packages completed: 204 of 231". The current package being installed is "authconfig-6.1.12-10.el6.x86_64 (1 MB)", described as a "Command line tool for setting up authentication from network services". Below the terminal, a table lists VM configuration details.

Description:		Physical memory Subramana: 212.1 MB	
Template:	Blank	Number of CPU Cores:	1 (1 Socket(s), 1 Core(s) per Socket)
Operating System:	Red Hat Enterprise Linux 6.x x64	Highly Available:	false
Default Display Type:	Spice	USB Policy:	Enabled
Priority:	Low	Resides on Storage Domain:	Data

Navigation instructions: <Tab>/<Alt-Tab> between elements | <Space> selects | <F12> next screen

Origin: Run On: Custom Properti





Red Hat Enterprise Virtualization

User: admin@internal | Sign out | Guide | About

Basic

Extended

Virtual Machines

Templates

Resources

rhel6:0 - Press shift+f12 to Release Cursor

Welcome to Red Hat Enterprise Linux for x86_64

Complete

Congratulations, your Red Hat Enterprise Linux installation is complete.

Please reboot to use the installed system. Note that updates may be available to ensure the proper functioning of your system and installation of these updates is recommended after the reboot.

Reboot

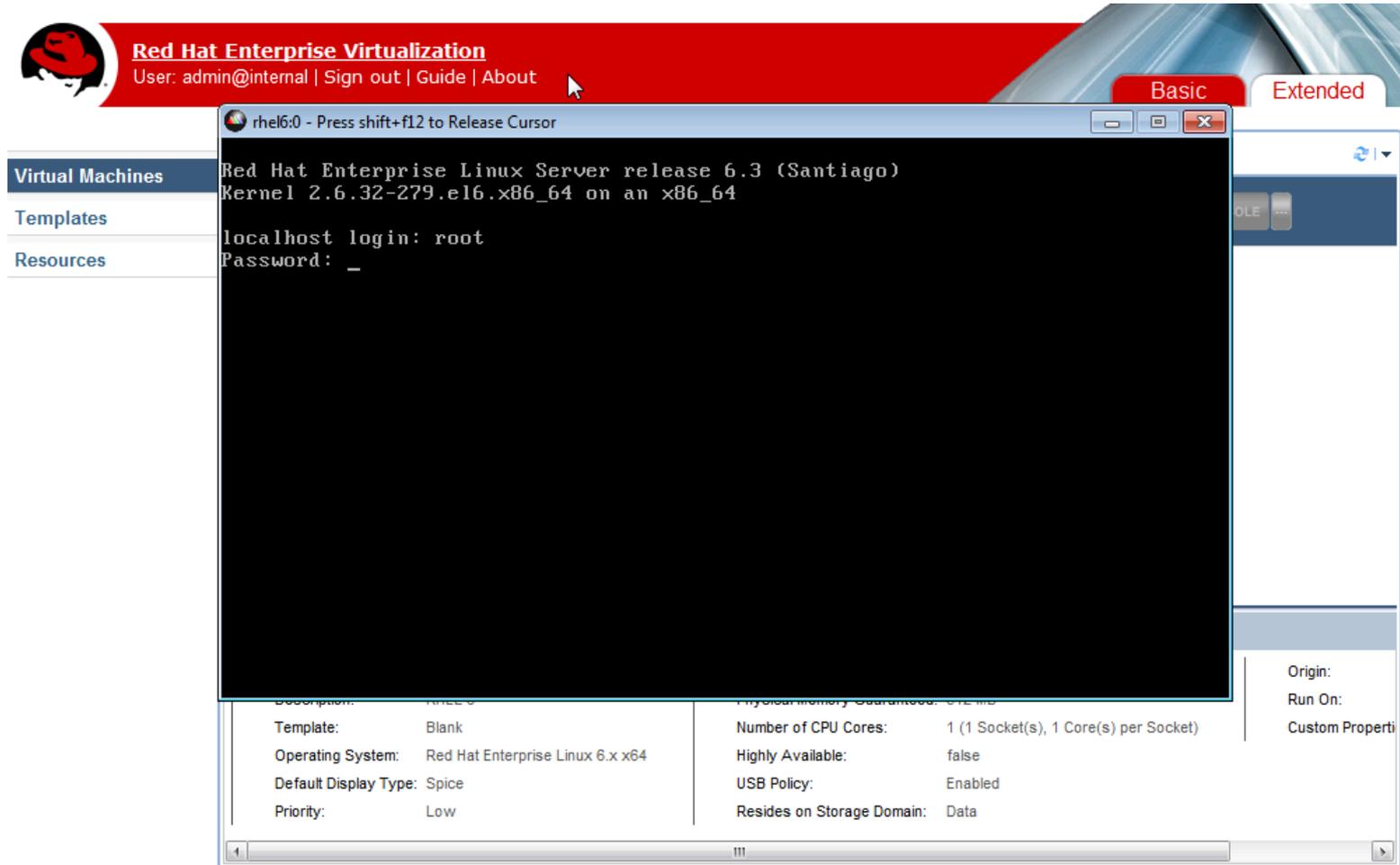
<Enter> to exit

Description:		Physical memory configuration:	
Template:	Blank	Number of CPU Cores:	1 (1 Socket(s), 1 Core(s) per Socket)
Operating System:	Red Hat Enterprise Linux 6.x x64	Highly Available:	false
Default Display Type:	Spice	USB Policy:	Enabled
Priority:	Low	Resides on Storage Domain:	Data

Origin:
Run On:
Custom Properti



VM Boot Screen



The screenshot displays the Red Hat Enterprise Virtualization (RHEV) management console. At the top, a red header bar contains the RHEV logo, the text "Red Hat Enterprise Virtualization", and user information: "User: admin@internal | Sign out | Guide | About". Below the header, a navigation sidebar on the left lists "Virtual Machines", "Templates", and "Resources". The main area shows a window titled "rhel6:0 - Press shift+f12 to Release Cursor". The window content is a terminal window with the following text:

```
Red Hat Enterprise Linux Server release 6.3 (Santiago)
Kernel 2.6.32-279.el6.x86_64 on an x86_64

localhost login: root
Password: _
```

Below the terminal window, a table of VM properties is visible:

Description:		Physical Memory Configuration:	
Template:	Blank	Number of CPU Cores:	1 (1 Socket(s), 1 Core(s) per Socket)
Operating System:	Red Hat Enterprise Linux 6.x x64	Highly Available:	false
Default Display Type:	Spice	USB Policy:	Enabled
Priority:	Low	Resides on Storage Domain:	Data

On the right side of the interface, there are tabs for "Basic" and "Extended", and a section for "Origin:", "Run On:", and "Custom Properti...".



Templates

- What is a template
 - Templates are model virtual machines that are used as a convenient and efficient way to create new virtual machines of the same type and content. Templates provide a shortcut that reduces the time required to build virtual machines.
- Sealing a Linux Template
 - Templates that have been created for Linux virtual machines must be generalized (sealed) before use. This ensures that machine-specific settings are not propagated through the template.
 - Login to the virtual machine to be used as a template and flag the system for re-configuration by running the following command as root:
 - `# touch /.unconfigured`
 - Remove ssh host keys. Run:
 - `# rm -rf /etc/ssh/ssh_host_*`
 - Shut down the virtual machine. Run:
 - `# poweroff`
 - The Linux virtual machine has now been sealed, and can be used as a template for Linux virtual machines.



Build a Template

- Build Template
 - Select VM to template
 - Turn off VM
 - Click “Make Template”
 - Fill out Name and Description
 - Use other defaults
 - Click “OK”
- View templates under “Templates” Menu



RHEL 6 Template Creation

The screenshot displays the Red Hat Enterprise Virtualization (RHEV) web interface. At the top, the header shows the Red Hat logo, the text "Red Hat Enterprise Virtualization", and the user information "User: admin@internal | Sign out | Guide | About". There are two tabs, "Basic" and "Extended", with "Basic" selected. The main content area shows a virtual machine named "rhel6 (RHEL 6)". A "New Template" dialog box is open in the center, with the following fields and options:

- Name: rhel6-template
- Description: RHEL 6 Template
- Host Cluster: Default
- Storage Domain: Data
- Make Public

At the bottom of the dialog are "OK" and "Cancel" buttons. Below the dialog, the "General" tab is selected, showing a table with the following data:

Date	Description	Disks
Current	<rhel6>	Disk 1

There are also buttons for "New", "Preview", "Commit", "Undo", and "Remove" above the table. To the right of the table is an "Installed Applications" section.



Create New VM from Template

- Same steps as creating a VM but select the template to use
- General > Based on Template: rhel6-template



Create New VM from Template

The screenshot displays the Red Hat Enterprise Virtualization (RHEV) management console. At the top, the header reads "Red Hat Enterprise Virtualization" with the user "admin@internal" and links for "Sign out", "Guide", and "About". The interface includes tabs for "Basic" and "Extended" views. A central dialog box titled "New Server Virtual Machine" is open, showing configuration options for a new VM. The dialog is organized into sections: General, Console, Host, High Availability, Resource Allocation, and Boot Options. The "General" section is currently active, showing the following settings: Data Center: Default; Host Cluster: Default; Name: rhel6-1; Description: RHEL 6 Server; Based on Template: rhel6-templat; Memory Size: 512 MB; Total Cores: 1 (with a slider from 1 to 16); CPU Sockets: 1 (with a slider from 1 to 16); Operating System: Red Hat Enterprise Linux; and a checkbox for "Stateless" which is currently unchecked. "OK" and "Cancel" buttons are located at the bottom right of the dialog. In the background, the console shows a list of virtual machines and a "New Server" button. A "CONSOLE" button is also visible on the right side of the interface.

Red Hat Enterprise Virtualization
User: admin@internal | Sign out | Guide | About

Basic Extended

Virtual Machines
Templates
Resources

New Server Virtual Machine

General
Console
Host
High Availability
Resource Allocation
Boot Options

Data Center : Default
Host Cluster : Default
Name : rhel6-1
Description : RHEL 6 Server
Based on Template : rhel6-templat
Memory Size : 512 MB
Total Cores : 1
CPU Sockets : 1
Operating System : Red Hat Enterprise Linux
 Stateless

OK Cancel



RHEV User Portal

- The User Portal Graphical Interface enables you to view and use all the virtual machines that are available to you.
- Two main views: Basic and Extended
- The screen consists of three areas: the title bar, a virtual machines area, and a details pane.
- Access to RHEV User Portal: <https://server.example.com:8443/UserPortal>



User Portal: Basic View



Red Hat Enterprise Virtualization

User: admin@internal | [Sign out](#) | [Guide](#) | [About](#)

Basic

Extended

rhel6

RED HAT ENTERPRISE LINUX 6
64 bit

Please Wait..

rhel6
RHEL 6

Operating System :

Defined Memory :

Number of Cores : 1 (1 Socket(s), 1 C

Drives :

Disk 1: 10GB

Console : Spice ([Edit](#))



User Portal: Extended View

The screenshot shows the Red Hat Enterprise Virtualization User Portal in the 'Extended' view. The top navigation bar includes the Red Hat logo, the text 'Red Hat Enterprise Virtualization', the user 'admin@internal', and links for 'Sign out', 'Guide', and 'About'. A 'Basic' view toggle is active, and the 'Extended' view is selected. The main content area displays a virtual machine named 'rhel6 (RHEL 6)' with a toolbar containing icons for 'New Server', 'New Desktop', 'Edit', 'Remove', 'Run Once', 'Change CD', and 'Make Template'. A 'CONSOLE' button is also visible. The left sidebar contains 'Virtual Machines', 'Templates', and 'Resources'. The bottom section shows the 'General' tab of the virtual machine's configuration, with the following details:

General	Network Interfaces	Virtual Disks	Snapshots	Permissions	Events	Applications	Monitor
Name:	rhel6	Defined Memory:	512 MB	Origin:			
Description:	RHEL 6	Physical Memory Guaranteed:	512 MB	Run On:			
Template:	Blank	Number of CPU Cores:	1 (1 Socket(s), 1 Core(s) per Socket)	Custom Properti			
Operating System:	Red Hat Enterprise Linux 6.x x64	Highly Available:	false				
Default Display Type:	Spice	USB Policy:	Enabled				
Priority:	Low	Resides on Storage Domain:	Data				



User Portal: Resources



Red Hat Enterprise Virtualization

User: admin@internal | Sign out | Guide | About

Basic

Extended

Virtual Machines

Templates

Resources

 **Virtual Machines:**
0%
Defined VMs: 1
Running VMs: 0

 **Virtual CPUs:**
0%
Defined vCPUs: 1
Used vCPUs: 0

 **Memory:**
0%
Defined Memory: 512MB
Memory Usage: 0MB

 **Storage:**
Total Size: 10GB
Number of Snapshots: 1
Total Size of Snapshots: 10GB

Virtual Machine	Disks	Virtual Size	Actual Size	Snapshots
 rhel6	1	10GB	10GB	1



RHN Satellite

- RHN Satellite provides a solution to organizations requiring absolute control over and privacy of the maintenance and package deployment of their servers.
- It allows Red Hat Network customers the greatest flexibility and power in keeping servers secure and updated.



RHN Satellite Homepage

English (change) Knowledgebase | Documentation USER: home_admin | ORGANIZATION: Home | Preferences | Sign Out

 Systems Search

Overview Systems Errata Channels Configuration Schedule Users Help

NO SYSTEMS SELECTED

Overview

- Your Account
- Your Preferences
- Locale Preferences
- Subscription Management
- Organization Trusts

Overview 

Tasks

- Manage Entitlements & Subscriptions
- Register Systems
- Manage Activation Keys
- Manage Kickstarts
- Manage Configuration Files

Inactive Systems

No inactive systems.

All of your systems are actively checking into RHN Satellite at this time. You can view a list of all of your systems at [Systems > All](#).

Overview Legend

-  OK
-  Critical
-  Warning
-  Unknown
-  Locked
-  Kickstarting
-  Pending Actions
-  Failed Actions
-  Completed Actions
-  Security

Most Critical Systems

System Name	All Updates	Security Errata	Bugfix Errata	Enhancement Errata
No critical systems.				
None of your systems are in a critical state.				

0 - 0 of 0 most critical systems displayed [View All Critical Systems](#)

Recently Scheduled Actions

No recently scheduled actions.

You have scheduled no actions within the past thirty days. You may view a list of past completed actions at [Schedule >](#)



RHN Satellite: Kickstart Creation

English (change) Knowledgebase | Documentation USER: home_admin | ORGANIZATION: Home | Preferences | Sign Out

 Systems Search

Overview **Systems** Errata Channels Configuration Schedule Users Help

NO SYSTEMS SELECTED

- Overview
- Systems
- System Groups
- System Set Manager
- Advanced Search
- Activation Keys
- Stored Profiles
- Custom System Info
- Kickstart**
 - Profiles
 - Bare Metal
 - GPG and SSL Keys
 - Distributions
 - File Preservation
 - Kickstart Snippets

Step 1: Create Kickstart Profile

A kickstart file is a simple text file containing a list of items, each identified by a keyword, that answers the questions an installer needs in order to successfully install Red Hat Enterprise Linux. A kickstart profile includes a kickstart file, as well as other saved options such as the version of Red Hat Enterprise Linux to be installed and the location of the installation files.

Label*:	<input type="text" value="rhel6-x86_64"/>
Base Channel*:	<input type="text" value="Red Hat Enterprise Linux Server (v. 6 for 64-bit x86_64)"/>
Kickstartable Tree*:	<input type="text" value="ks-rhel-x86_64-server-6-6.3"/>
Virtualization Type:	<input type="text" value="None"/>

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RHN Satellite release 5.4.1



RHN Satellite: Systems

English (change) Knowledgebase | Documentation USER: home_admin | ORGANIZATION: Home | Preferences | Sign Out

 **RED HAT NETWORK SATELLITE** Systems Search

Overview **Systems** Errata Channels Configuration Schedule Users Help

No SYSTEMS SELECTED

Overview

- Systems
- System Groups
- System Set Manager
- Advanced Search
- Activation Keys
- Stored Profiles
- Custom System Info
- Kickstart

System Overview

Systems ([View System Groups](#))

0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Filter by System Name: Display items per page 1 - 1 of 1 (0 selected)

<input type="checkbox"/>	System <input type="text"/>	Updates	Errata	Packages	Configs	Base Channel	Entitlement
<input type="checkbox"/>	 new-host-2	 17	24	0		Red Hat Enterprise Linux Server (v. 6 for 64-bit x86_64)	Management, Provisioning

1 - 1 of 1 (0 selected)

System Legend

- OK
-  Critical
-  Warning
-  Unknown
-  Locked
-  Kickstarting
-  Pending Actions
-  Unentitled
-  Monitoring Status



RHN Satellite: System Details

English (change) Knowledgebase | Documentation USER: home_admin | ORGANIZATION: Home | Preferences | Sign Out

RED HAT NETWORK SATELLITE Systems [] Search

Overview **Systems** Errata Channels Configuration Schedule Users Help

No SYSTEMS SELECTED MANAGE CLEAR

Overview
Systems
All
Virtual Systems
Out of Date
Unentitled
Ungrouped
Inactive
Recently Registered
Proxy
Duplicate Systems
System Currency
System Groups
System Set Manager
Advanced Search
Activation Keys
Stored Profiles
Custom System Info
Kickstart

new-host-2 add to ssm | delete system

Details Software Configuration Provisioning Groups Events

Overview Properties Remote Command Reactivation Hardware Migrate Notes Custom

System Status

Software Updates Available **Critical: 6** **Non-Critical: 11** Packages: 24

System Info

Hostname:	new-host-2
IP Address:	192.168.1.56
Virtualization:	KVM/QEMU
UUID:	79ef7995ea344850b7a3c27e70923957
Kernel:	2.6.32-279.el6.x86_64
RHN Satellite System ID:	1000010041
Lock Status:	System is unlocked (Lock system)

System Events

Checked In:	8/6/12 9:10:17 PM EDT
Registered:	8/6/12 9:09:30 PM EDT
Last Booted:	8/6/12 9:02:19 PM EDT (Schedule System Reboot)
OSA Status:	unknown

System Properties (Edit These Properties)

Entitlements:	[Management] [Provisioning]
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RHN Satellite: System Software Details

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  RED HAT NETWORK SATELLITE

Systems Search

Overview **Systems** Errata Channels Configuration Schedule Users Help

NO SYSTEMS SELECTED

Overview
Systems
All
Virtual Systems
Out of Date
Untitled
Ungrouped
Inactive
Recently Registered
Proxy
Duplicate Systems
System Currency
System Groups
System Set Manager
Advanced Search
Activation Keys
Stored Profiles
Custom System Info
Kickstart

 new-host-2 

Details **Software** Configuration Provisioning Groups Events

Errata **Packages** Software Channels

List / Remove Upgrade Install Verify Profiles

 Packages

- List / Remove Installed Packages
- Verify Files and Packages
- Upgrade Packages
- Install New Packages
- Compare Package Profiles / Manage Package Profiles

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 Systems Search

Overview Systems **Errata** Channels Configuration Schedule Users Help

No SYSTEMS SELECTED

Errata
Relevant
All
Advanced Search
Manage Errata
Clone Errata

Errata Overview 
[All Errata](#) [Bugfix Errata](#) [Enhancement Errata](#) [Security Errata](#)

The following errata apply to at least one system to which you have administrative access.

Relevant Errata

Filter by Synopsis: Display items per page 1 - 17 of 17

Type	Advisory	Synopsis	Systems	Updated
	RHSA-2012:1141	Moderate: dhcp security update	1	8/3/12
	RHSA-2012:1131	Important: krb5 security update	1	7/31/12
	RHEA-2012:1101	tzdata enhancement update	1	7/19/12
	RHBA-2012:1104	kernel bug fix update	1	7/19/12
	RHSA-2012:1098	Moderate: glibc security and bug fix update	1	7/18/12
	RHSA-2012:1091	Moderate: nss, nspr, and nss-util security, bug fix, and enhancement update	1	7/17/12
	RHSA-2012:1081	Moderate: sudo security update	1	7/16/12
	RHBA-2012:1078	dracut bug fix update	1	7/16/12
	RHBA-2012:1073	subscription-manager bug fix update	1	7/13/12
	RHSA-2012:1064	Important: kernel security and bug fix update	1	7/10/12



RHN Satellite: Software Channels

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Overview Systems Errata **Channels** Configuration Schedule Users Help

No SYSTEMS SELECTED

Software Channels

- All Channels
- Red Hat Channels
- Popular Channels
- My Channels
- Shared Channels
- Retired Channels
- Package Search
- Manage Software Channels

Full Software Channel List [?]

All Channels Red Hat Channels Popular Channels My Channels Shared Channels Retired Channels

The software channels listed below are all of the channels that your organization has access to.

Filter by Channel Name:

[Show All Child Channels](#) | [Hide All Child Channels](#)

Channel Name	Provider	Packages	Systems
<input type="checkbox"/> Red Hat Enterprise Linux (v. 5 for 64-bit x86_64)	Red Hat, Inc.	13920	0
└─ <input type="checkbox"/> Red Hat Network Tools for RHEL Server (v.5 64-bit x86_64)	Red Hat, Inc.	502	0
<input type="checkbox"/> Red Hat Enterprise Linux Server (v. 6 for 64-bit x86_64)	Red Hat, Inc.	8367	1
└─ <input type="checkbox"/> Custom Software	Home	0	0
└─ <input type="checkbox"/> RHEL Server Supplementary (v. 6 64-bit x86_64)	Red Hat, Inc.	249	0
└─ <input type="checkbox"/> RHN Tools for RHEL (v. 6 for 64-bit x86_64)	Red Hat, Inc.	64	1

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References

- RHEV Power User Portal Guide
 - http://docs.redhat.com/docs/en-US/Red_Hat_Enterprise_Virtualization/3.0/html/Power_User_Portal_Guide/index.html
- RHEV User Portal Guide
 - http://docs.redhat.com/docs/en-US/Red_Hat_Enterprise_Virtualization/3.0/html/User_Portal_Guide/index.html
- RHEL Installation Guide
 - http://docs.redhat.com/docs/en-US/Red_Hat_Enterprise_Linux/6/html/Installation_Guide/index.html
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