



redhat.

Enabling Red Hat Virtualization for the Hybrid Cloud

RHV 4 integration with CloudForms and Ansible

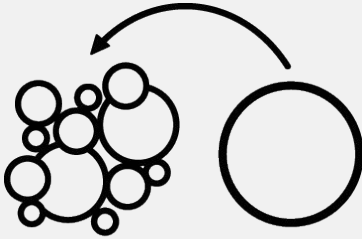
Scott Herold

Director, Product Management - Virtualization Business

Red Hat Forum Israel

November 2016

ENTERPRISE IT OBJECTIVES



INCREASE AGILITY

Faster time to market
Easier integration with
future technologies
(containers, SDN, SDS)



INCREASE EFFICIENCY

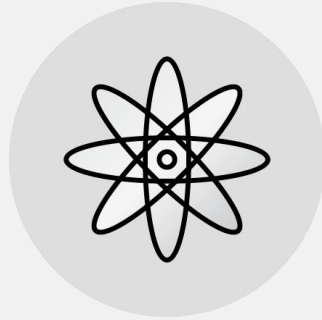
Do more with less
Increase performance
secure and compliant



LOWER COSTS

Avoid vendor lock-in
Unlock innovation

VIRTUALIZATION INDUSTRY TRENDS



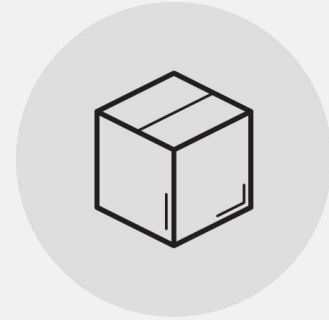
MARKET CONSOLIDATION

Significant M&A
activities of storage
and software
vendors



RISING COSTS

Hardware refresh
ELA Expiration
Move up the Stack



COMMODITY HYPERVISORS

Hypervisor features
Slowing of innovation
with proprietary
vendors

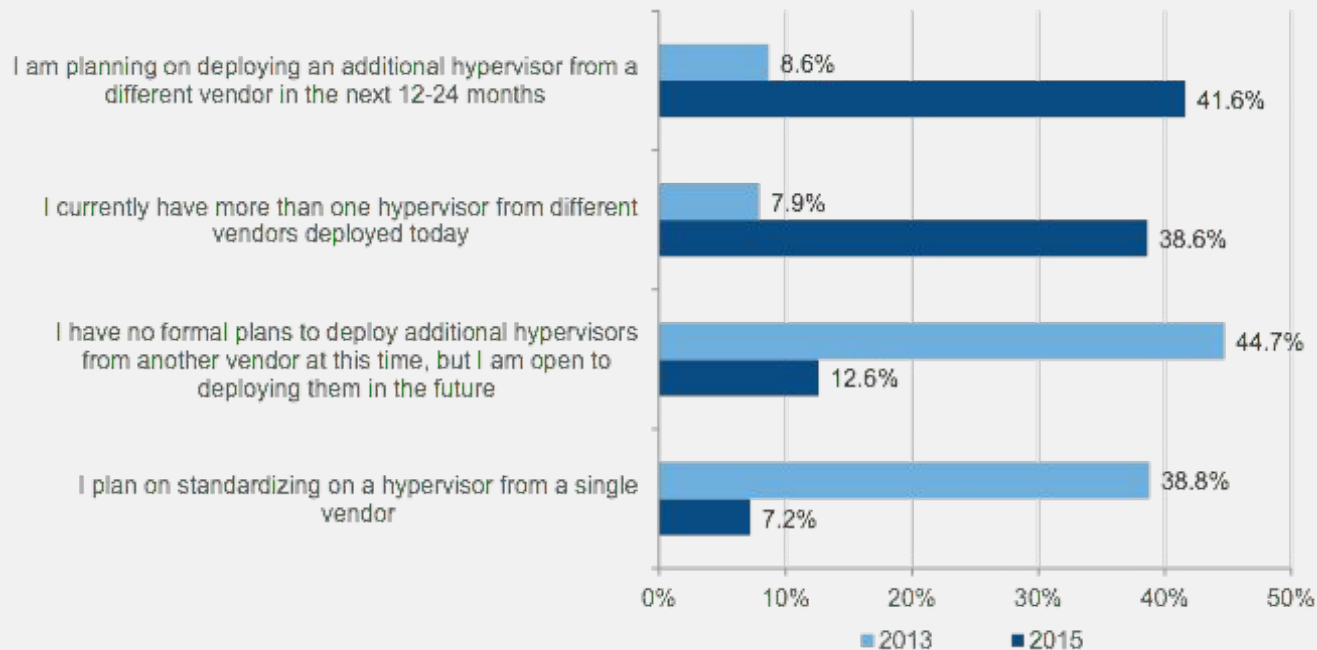
IDC SURVEY SPOTLIGHT

Ar



Gary Chen

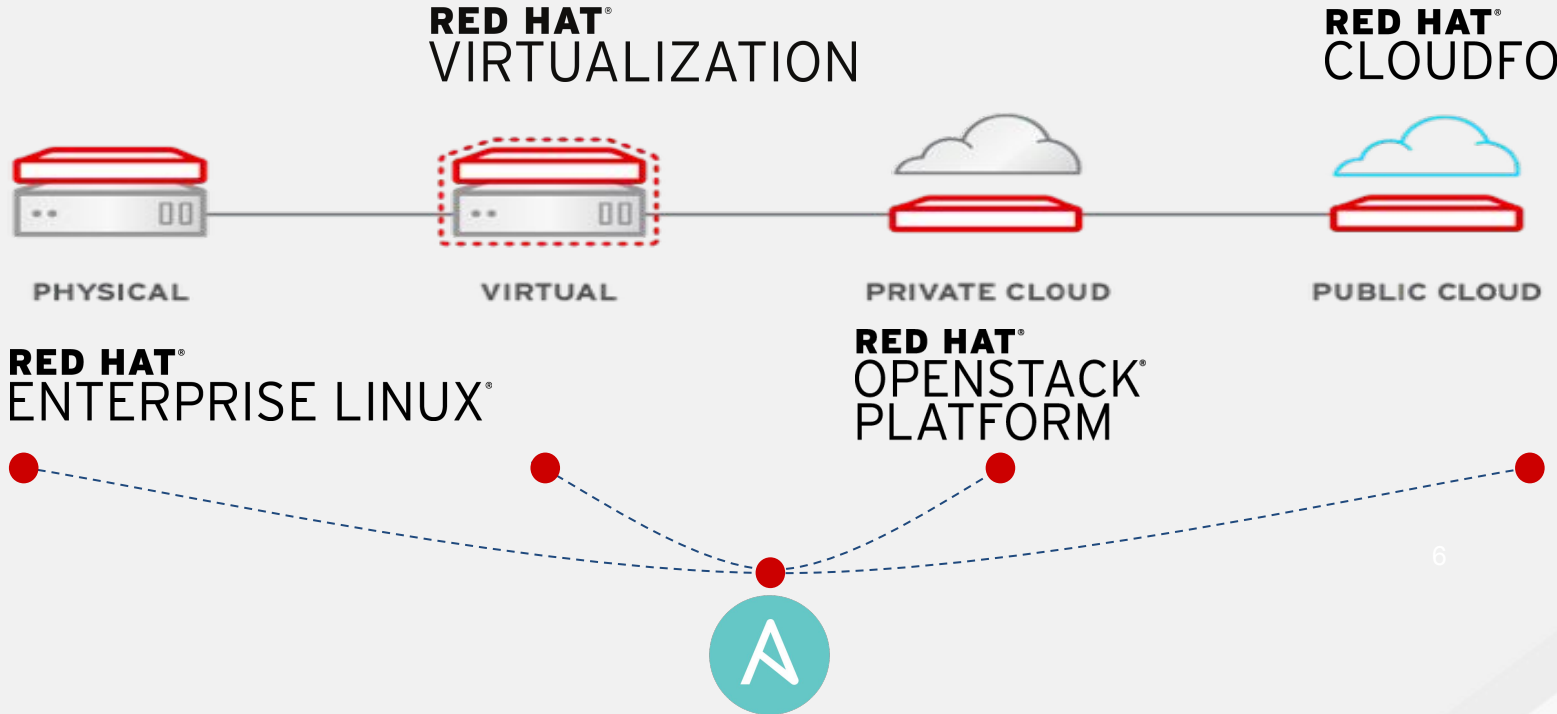
Which of the following best describes your plans for adoption of multiple hypervisors for your virtualized servers (excluding servers hosting virtualized desktops)?



IDC's TAKEAWAY

Multi-hypervisor adoption has grown tremendously in the past 2 years from 8% to 39% and could double in the next 12-24 months if customers follow through on future deployment plans

RED HAT'S VISION: OPEN HYBRID CLOUD



OPEN HYBRID CLOUD CHALLENGES

Vendor Lock-In

Dependence on a specific vendor

Cost of Change

Financial, Process, Personal

Solving the Puzzle

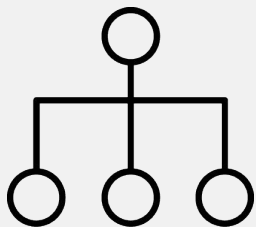
Determining how disparate components fit



RED HAT VIRTUALIZATION

Breaking the Vendor Lock-In

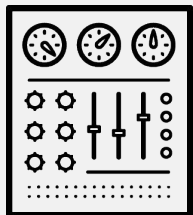
RED HAT VIRTUALIZATION



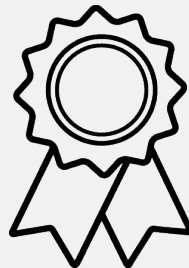
Centralized Management
of the KVM Hypervisor



Reduced
Infrastructure Cost



Automated Workload
Management, Scalability,
and Security

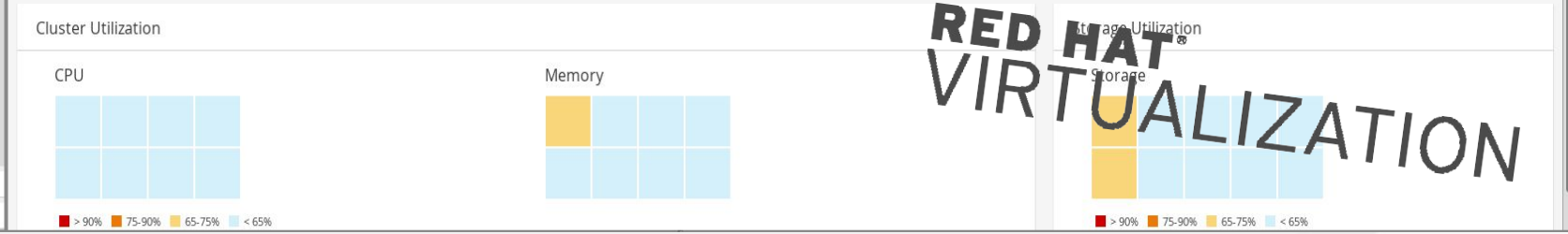
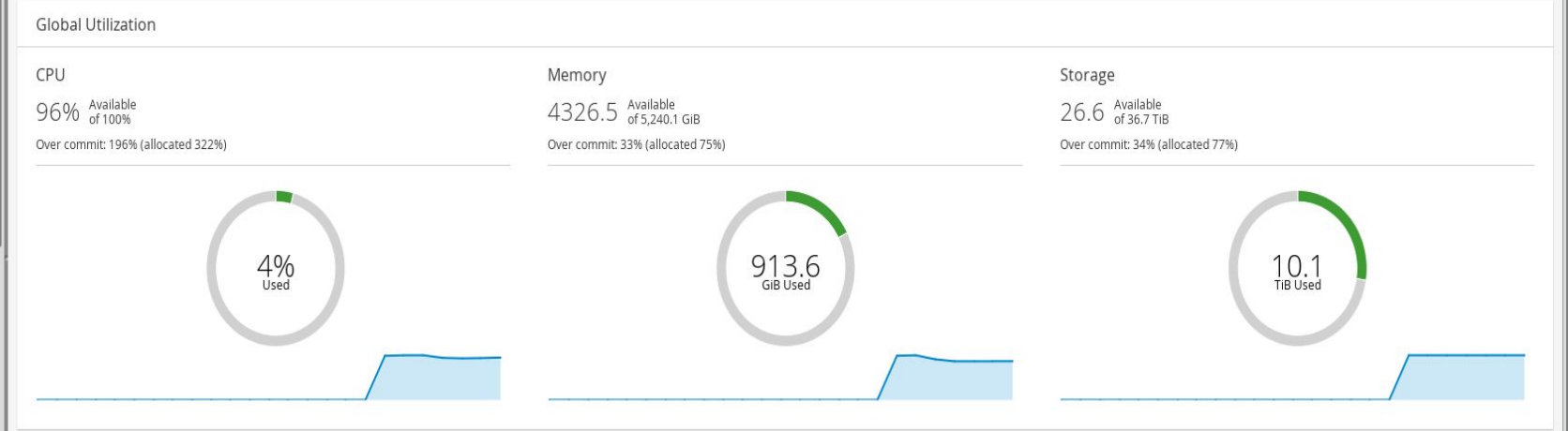


Unmatched
Performance

- System
 - Expand All Collapse All
 - System
 - Data Centers
 - BRNO
 - Storage
 - Networks
 - Templates
 - Clusters
 - BRNO-PPC
 - Storage
 - Networks
 - Templates
 - Clusters
 - NESTED-DC
 - Storage
 - Networks
 - Templates
 - Clusters
 - PRODUCTION
 - Storage
 - Networks
 - Templates
 - Clusters
 - RDU
 - Storage
 - Networks
- Bookmarks
- Tags

Last Updated 11/6/2016 8:50:06 PM

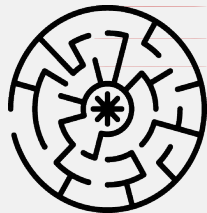
| | | | | | |
|----------------------------------|-------------------------------|-------------------------------|---------------------------------------|--|------------------------------------|
| <p>9 Data Centers</p> <p>1 8</p> | <p>12 Clusters</p> <p>N/A</p> | <p>37 Hosts</p> <p>1 1 35</p> | <p>12 Storage Domains</p> <p>2 10</p> | <p>725 Virtual Machines</p> <p>373 352</p> | <p>148 Events</p> <p>26 12 110</p> |
|----------------------------------|-------------------------------|-------------------------------|---------------------------------------|--|------------------------------------|



RED HAT VIRTUALIZATION

RED HAT VIRTUALIZATION KEY USE CASES

MISSION CRITICAL VIRTUALIZATION



Unmatched scale and performance for enterprise workloads, including SAP and Oracle, on x86 and Power

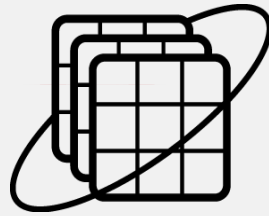
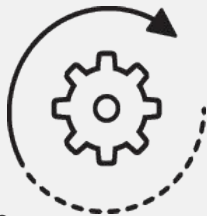


CLOUD TRANSITION

Co-engineered with Red Hat OpenStack for a smooth transition into Private and Public clouds

DEV/TEST

Simple, inexpensive self-serve infrastructure for enterprise development



TECHNICAL WORKSTATIONS

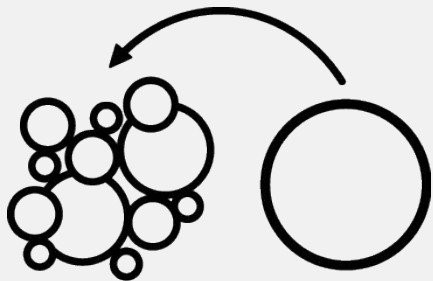
Gain performance and reduce cost of resource intensive Linux workstations (e.g. CAD/CAM)



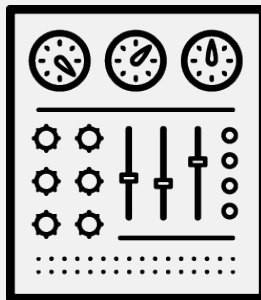
RED HAT CLOUDFORMS

Decreasing the cost of change

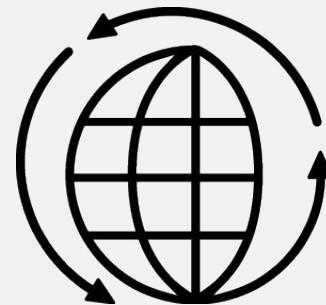
RED HAT CLOUDFORMS



Accelerate service delivery and reduce operational costs



Improve operational visibility and control



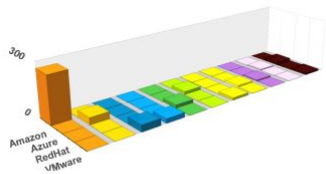
Ensure compliance and governance

- Cloud Intel >
- Red Hat Insights >
- Services >
- Compute >
- Configuration >
- Networks >
- Control >
- Automate >
- Optimize >
- Settings >



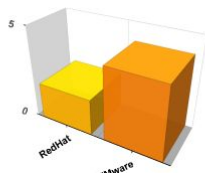
Default Dashboard

Vendor and Guest OS Chart



Updated 06/26/16 18:00 | Next 06/27/16 18:00

Virtual Infrastructure Platforms



Top CPU Consumers (weekly)

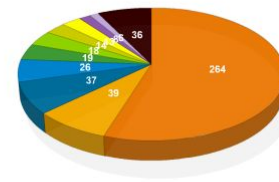
| Asset Name | Cluster Name | CPU - Usage Rate (%) (Avg) |
|-------------------|--------------|----------------------------|
| ose32master1 | Raleigh | 65.3% |
| ose32etcd | Raleigh | 56.8% |
| ose32master2 | Raleigh | 38.4% |
| cf41_vmware1 | Production | 19.5% |
| cf41_openshift1 | Production | 19.1% |
| cf41_openshift | Production | 19.0% |
| 40DemoMaster | Production | 17.2% |
| CFME 5.6.0.6 | QA | 15.7% |
| cf4.1b5_openshift | Production | 12.5% |
| cf41_openshift2 | QA | 12.5% |

Updated 06/26/16 13:38 | Next 06/27/16 18:00

Top Memory Consumers (weekly)

| Asset Name | Cluster Name | Memory - Used for Collected Intervals (MB) (Avg) |
|----------------|--------------|--|
| cf4.1b5_cloud1 | Raleigh | 7.3 GB |
| cf41b6_rhev | Raleigh | 7.3 GB |
| cf4.1b5_master | Raleigh | 6.1 GB |
| 40DemoMaster | Production | 6.1 GB |
| CFME 5.6.0.6 | QA | 5.1 GB |
| cf4.1b5_vmware | Production | 4.7 GB |
| cf4.1b5_cloud2 | Production | 4.7 GB |

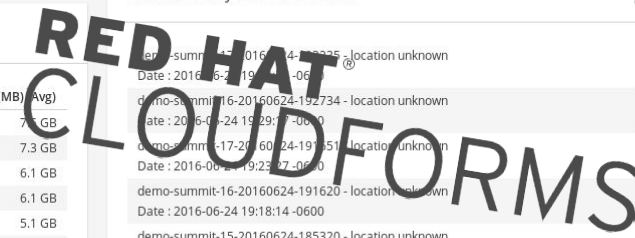
Guest OS Information



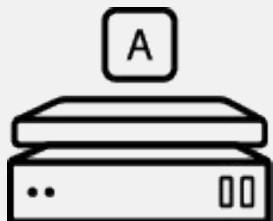
Updated 06/26/16 18:00 | Next 06/27/16 18:00

EVM: Recently Discovered VMs

- demo-summit-16-20160624-185320 - location unknown
Date: 2016-06-24 19:23:27-0600
- demo-summit-16-20160624-192734 - location unknown
Date: 2016-06-24 19:29:07-0600
- demo-summit-17-20160624-191620 - location unknown
Date: 2016-06-24 19:23:27-0600
- demo-summit-16-20160624-191620 - location unknown
Date: 2016-06-24 19:18:14 -0600
- demo-summit-15-20160624-185320 - location unknown
Date: 2016-06-24 18:54:59 -0600

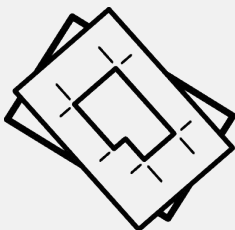


RED HAT CLOUDFORMS KEY USE CASES



Provisioning

Initial deployment of infrastructure and workloads across multiple technologies



Configuration

Optimal configuration for infrastructure and running workloads



Compliance

Maintain ongoing patch and configuration compliance throughout workload lifecycle



RED HAT ANSIBLE

Putting the puzzle together

ANSIBLE BY RED HAT



Ansible is a simple automation language that can perfectly describe an IT application infrastructure in Ansible Playbooks.



TOWER

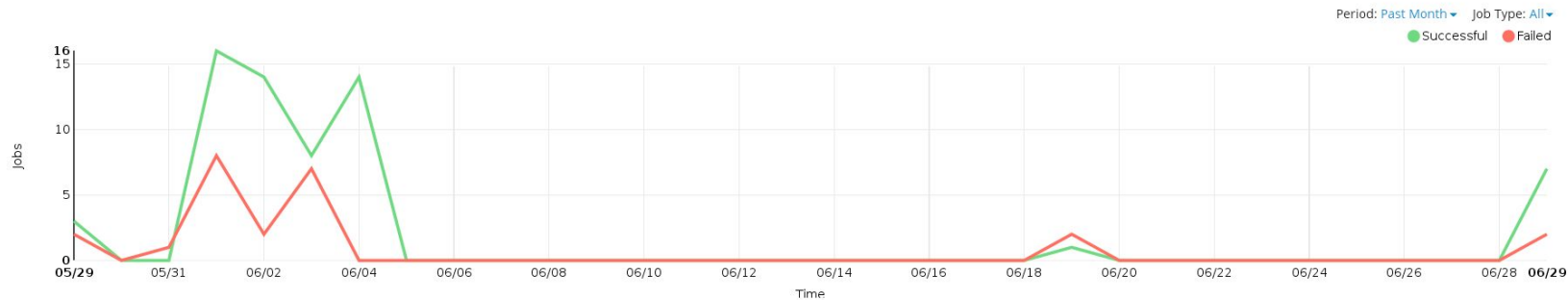
Ansible Tower is an enterprise framework for controlling, securing and managing your Ansible automation with a UI and RESTful API



87 Hosts 0 Failed Hosts 2 Inventories 0 Inventory Sync Failures 3 Projects 0 Projects Sync Failures

Job Status

Host Status



Recently Used Job Templates

- Update systems
- deploy cloud software
- Fix shellshock
- Boot the cloud
- basic scan

See all job templates

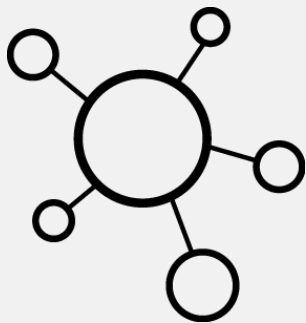
Recent Job Runs

- Update systems
- Update systems
- deploy cloud software
- Fix shellshock
- Boot the cloud

See all job runs

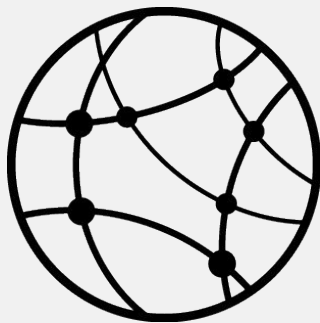


ANSIBLE BY RED HAT KEY USE CASES



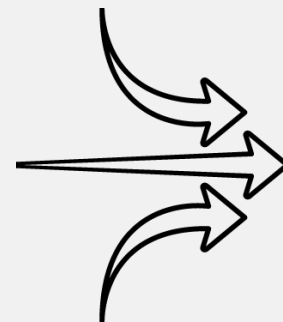
Enable

Seamlessly create,
deploy and manage VMs
on top of RHV



Empower

Leverage existing
Ansible eco-system



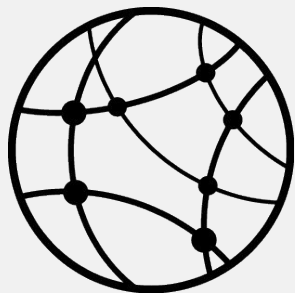
Deliver

Automate scale up/down
processes



WHY RED HAT?

RED DELIVERY HAT STRATEGY



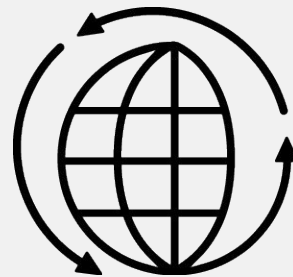
Community

Invest development and thought leadership into latest technologies



Product

Deliver enterprise ready open platforms



Solutions

Together with ISVs, Partners, and other Red Hat products

RED HAT® VIRTUALIZATION

"Through a combination of Red Hat Virtualization and Red Hat's management portfolio solutions, we received extensive support for the design and implementation of our new private cloud."

- THOMAS WENNINGER,
COO I.T.-SERVICES DEPARTMENT & HEAD OF I.T. INFRASTRUCTURE,
UNIVERSITÄT SALZBURG

