ON THE ROAD TO OPEN HYBRID CLOUD

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BUSINESS DEMANDS DRIVE I.T TRANSFORMATION

- Business wants agility, lower cost, new capabilities
- IT struggling with existing legacy infrastructure architecture and cost model
- Cloud providers are using next-generation IT built on open source technologies
- IT needs to adopt cloud architectures and technologies to close innovation gap
THE ROLE OF I.T. IS CHANGING
From service provider to strategic partner

TRADITIONAL I.T.
- Provides services on traditional infrastructure

HYBRID I.T.
- Provides services on traditional infrastructure
- Provides services on private cloud
- Brokers services from public clouds
- Consumes services from public clouds
MANY ORGANIZATIONS TARGETING HYBRID CLOUDS

PUBLIC CLOUD
- Pay as you go
- Capacity on demand
- Hyperscale
- Provider managed

HYBRID CLOUD
- Choice of environment per project
- IT managed

PRIVATE CLOUD
- Control
- IT managed
- On-premise
- SLAs
OPEN HYBRID CLOUD VS. CLOSED CLOUD

OPEN HYBRID CLOUD
- Select your own technologies and partners.
- Build a uniform cloud across your entire IT.

CLOSED CLOUD
- Let your vendor control your access to solutions.
- Use only a subset of your infrastructure.
- Increase complexity and add cloud silos.
- Limit your flexibility to build apps.

FLEXIBILITY
- Choose a physical platform, virtualization, or private and public clouds.

EFFICIENCY
- Build apps with your choice of languages.

CHOICE
- Increase complexity and add cloud silos.

PORTABILITY
- Limit your flexibility to build apps.

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BENEFITS OF OPEN HYBRID CLOUD

UNIFIED SYSTEMS
Create efficiency

PORTABLE WORKLOADS
Create flexibility

OPEN STANDARDS
Ensure your organization is future-proof
RED HAT AND LINUX ARE LEADING THE WAY TO CLOUD COMPUTING

80% of top public clouds run on Linux

Linux is twice as popular as Windows on Amazon Web Services

Companies contributing to OpenStack Grizzly


SOURCE: http://blog.bitergia.com/2013/04/04/companies-contributing-to-openstack-grizzly-analysis/
NEXT GENERATION I.T. INFRASTRUCTURES

APPLICATIONS AND WORKLOADS WITH RED HAT

PLATFORM-AS-A-SERVICE WITH RED HAT
OpenShift by Red Hat

IaaS

CLOUD BROKERING
PUBLIC CLOUD RESOURCES
PUBLIC CLOUD RESOURCES
PUBLIC CLOUD RESOURCES
PRIVATE CLOUD

VIRTUAL RESOURCES

PHYSICAL RESOURCES

RED HAT CERTIFIED CLOUD PROVIDER

INFRASTRUCTURE-AS-A-SERVICE WITH RED HAT
Red Hat Cloud Infrastructure, Red Hat Storage

PaaS

Red Hat CloudForms,
Red Hat Satellite

SERVICE MANAGEMENT
MONITORING AND EVENT MANAGEMENT

AUTOMATION

LIFECYCLE MANAGEMENT

CONFIGURATION MANAGEMENT
MOVING TOWARD IT-AS-A-SERVICE

I.T. OPERATIONS

DEVELOPER

BUSINESS

I.T. AS THE PROVIDER AND BROKER OF SERVICES

CLOUD APPS AND WORKLOADS

PLATFORM-AS-A-SERVICE

INFRASTRUCTURE-AS-A-SERVICE

DATA CENTER

PRIVATE CLOUD

PUBLIC CLOUD

Application portability
Data portability
Cloud application development
Cloud service deployment
Self-service deployment
On-demand platform services
Cloud application platform
Component reuse
Self-service provisioning
Life-cycle management
Resource quotas and metering
Governance
INFRASTRUCTURE-AS-A-SERVICE

Rapidly evolve from traditional IT to open hybrid cloud

Offer platform interoperability and workload portability

Speed service delivery and increase innovation

Reduce capital and operational expenses

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INFRASTRUCTURE-AS-A-SERVICE

Rapidly evolve from traditional IT to open hybrid cloud

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Speed service delivery and increase innovation

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STREAMLINES AND SPEEDS APPLICATION DEVELOPMENT AND RELEASE

AUTOMATES DEPLOYMENT

PROMOTES DEVELOPMENT, INTEGRATION, AND MIGRATION OF CLOUD APPLICATIONS
PLATFORM-AS-A-SERVICE

Streamlines and speeds application development and release

Automates deployment

Promotes development, integration, and migration of cloud applications

OpenShift by Red Hat

Red Hat CloudForms, OpenShift by Red Hat, Red Hat Jboss, Operations Network

OpenShift by Red Hat, Red Hat JBoss Fuse, Red Hat JBoss A-MQ, Red Hat JBoss BRMS, Red Hat JBoss Data Services, Red Hat JBoss Data Grid

Red Hat JBoss Enterprise Application Platform, Red Hat JBoss SOA-P, Red Hat Enterprise Linux, Red Hat Storage
CLOUD APPLICATIONS AND WORKLOADS

**BUILD NEW CLOUD APPS**
- Build new cloud applications

**INTEGRATE CLOUD APPS**
- Integrate legacy applications with services

**DEPLOY CLOUD APPS**
- Deploy and manage cloud applications

**MANAGE HYBRID CLOUD APPS**
- Automate application release processes

- Application release automation
  - Cloud platform services
  - Self-service oriented architectures, integration, messaging, and business rules platforms
  - Cloud application development tools, application, data, and workload portability
CLOUD APPLICATIONS AND WORKLOADS

- **Build new cloud applications**
  - Red Hat CloudForms, OpenShift by Red Hat, Red Hat JBoss Operations Network, Red Hat Satellite

- **Integrate legacy applications with cloud services**
  - Red Hat JBoss Enterprise Application Platform, Red Hat JBoss Developer Studio, Red Hat Enterprise Linux, Red Hat Storage

- **Deploy and manage cloud applications**

- **Automate application release processes**
NEXT GENERATION I.T. INFRASTRUCTURES

**APPLICATIONS AND WORKLOADS WITH RED HAT**
Red Hat Enterprise Linux, Red Hat JBoss Middleware, Red Hat Storage

**PLATFORM-AS-A-SERVICE WITH RED HAT**
OpenShift by Red Hat

**INFRASTRUCTURE-AS-A-SERVICE WITH RED HAT**
Red Hat Cloud Infrastructure, Red Hat Storage

**CLOUD BROKERING**
- **PUBLIC CLOUD RESOURCES**
- **PUBLIC CLOUD RESOURCES**
- **PUBLIC CLOUD RESOURCES**
- **PRIVATE CLOUD**

**VIRTUAL RESOURCES**
- Red Hat
- VMware
- Microsoft

**PHYSICAL RESOURCES**
- Red Hat
- Cisco
- HP
- IBM

**SERVICE MANAGEMENT**
- Red Hat CloudForms
- Red Hat Satellite

**MONITORING AND EVENT MANAGEMENT**
- ServiceNow
- Bmc software
- HP

**AUTOMATION**
- Cisco
- IBM
- HP

**LIFECYCLE MANAGEMENT**
- IBM
- ServiceNow
- Bmc software
- Microsoft

**CONFIGURATION MANAGEMENT**

**BUSINESS / CONSUMER**

**I.T. MANAGEMENT / PROVIDER**
SPENDING SHIFT TO HYBRID I.T.

Private cloud is the near-term strategy for the enterprise

GET STARTED WITH PRIVATE CLOUD TODAY

PLATFORM-AS-A-SERVICE
- Agile
- Framework and language choice
- Developer productivity

CLOUD MANAGEMENT
- OpenShift Enterprise by Red Hat
- Self-service
- Orchestration
- Interoperability

INFRASTRUCTURE-AS-A-SERVICE
- Massive scalability
- On demand
- Increased efficiency

VIRTUALIZATION
- Secure
- Cost effective
- High performance

Red Hat
- Enterprise Linux OpenStack Platform
- Cloud Infrastructure
- Enterprise Virtualization
JOIN US TODAY

• MEET THE RED HAT EXPERTS HERE!

• CHECKOUT OUR PARTNERS HERE!

• READ ABOUT IT!
  http://www.redhat.com/open-hybrid-cloud/
Backup / product detail
RED HAT ENTERPRISE LINUX
Portable workloads across hybrid clouds

PORTABLE APPLICATIONS
PORTABLE PROGRAMMING MODELS
PORTABLE SERVICES
PORTABLE COMPUTING

PHYSICAL SYSTEMS
VIRTUAL DATACENTER
PRIVATE CLOUD
CERTIFIED PUBLIC CLOUD
RED HAT STORAGE
Software-defined storage across hybrid clouds

FILE SERVICES
OPEN OBJECT APIs
CONVERGED COMPUTE AND STORAGE
OPEN, SOFTWARE-DEFINED STORAGE PLATFORM

PHYSICAL
Standard x86 systems
Scale-out NAS solutions

VIRTUAL
Include idle or legacy resources

CLOUD
EBS
EBS
Scale-out storage architecture

PERSISTANT DATA STORES
RED HAT ENTERPRISE LINUX
OPENSTACK PLATFORM

Cloud infrastructure solution

- Modular Architecture
- Designed for scale out
- Based on a set of core shared services

- Flexible Networking Models
- Redundant Scalable Storage
- Dashboard for Self-Service
RED HAT CLOUDFORMS
Cloud operations management

GOVERNANCE AND COMPLIANCE
EXECUTIVE AND OPS DASHBOARDS
IT PROCESS ORCHESTRATION
IT SERVICE CATALOGS
MONITORING, ANALYTICS, ALERTING
METERING, CHARGEBACK, QUOTAS
OUT-OF-THE-BOX INTEGRATION

RED HAT CLOUDFORMS
ADAPTIVE MANAGEMENT PLATFORM
RED HAT CLOUDFORMS
Built for enterprise scale cloud operations management

AGENT-FREE, VIRTUAL APPLIANCE ARCHITECTURE
Rapid deployment, non-invasive (Industry Standard OVF)

WEB-BASED OPERATIONS, ADMIN AND SELF-SERVICE
Access anywhere from any browser

ENTERPRISE DIRECTORY SUPPORT
Leverage directory for authentication and role

SUPPORTS MULTI-TENANCY
Securely share infrastructure

HORIZONTALLY SCALABLE
Highly scalable, load balancing

LOAD BALANCING, FAILOVER/BACK
Provides reliability, high availability

MANAGEMENT ACROSS MULTIPLE LOCATIONS
Single pane of glass, unified management

MANAGEMENT ACROSS VIRTUAL PLATFORMS & PUBLIC CLOUDS
Single pane of glass, unified management
RED HAT CLOUD INFRASTRUCTURE

BENEFITS:
• Fast Time to Cloud
• Low Acquisition Cost

• Tool Reduction
• Low Implementation Costs
• Continuous Optimization

• Increased Automation
• Open/Flexible
OPENSIFT ENTERPRISE BY RED HAT

Automation and efficiency for operations
Self-service for developers

Web Console
Eclipse IDE
Cmd Line

RED HAT ENTERPRISE LINUX