

Building Blocks for Digital Maturity

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DIGITAL MATURITY DRIVING DRAMATIC CHANGES IN IT

“The business environment today is pushing companies to respond to ever increasing competition.

In order to remain competitive, they have to deliver their services faster, at greater scale, and do so efficiently in order to remain profitable.

These demands drive application developers to create new applications and deliver them faster.

This further places stress on the IT Operations team who has to provide a scalable, on-demand infrastructure that can service the Developers.”

Gartner



CEO

Competitive pressure driving digital transformation



LINE OF BUSINESS

Challenged to deliver services faster, at scale, and more efficiently



DEVELOPERS

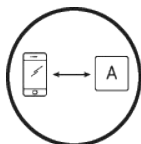
Need to develop applications faster with greater productivity



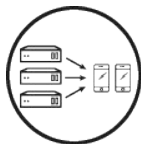
IT OPERATIONS

Must provide infrastructure agility, on-demand that scales as needed

THE CHRONOLOGY OF DIGITAL MATURITY



Monolith



N-Tier



Microservices

Applications



Datacenter

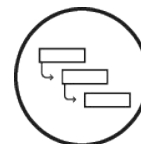


Cloud/Hosted

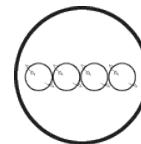


Hybrid

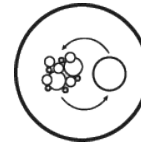
Infrastructures



Waterfall



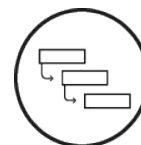
Agile



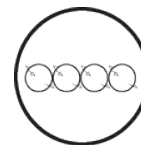
DevOps

Processes

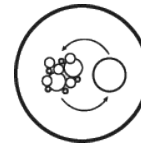
THE CHRONOLOGY OF DIGITAL MATURITY



Waterfall



Agile



DevOps

Processes

The Building Blocks

Standardize

- Lower Operational Cost
- Meet Regulation Compliance
- Manager Risk

Infrastructure as a Service

- Better manage capital and operating expenses
- Minimize downtime to enable Business Continuity
- Technical Agility and Faster time to market

Advanced Management

- Better Operational awareness
- Apply Regulatory Requirements easily
- Manage and Monitor Cost of assets
- User empowerment

Application Deployment

- Streamline Application Development
- Consistency in deployments
- Optimize development time

The Red Hat Offerings

Standardize

RED HAT®
ENTERPRISE
LINUX®

RED HAT®
INSIGHTS

RED HAT®
SATELLITE

ANSIBLE
by Red Hat®

Infrastructure as a Service

RED HAT®
VIRTUALIZATION

RED HAT®
OPENSTACK®
PLATFORM

Advanced Management

RED HAT®
CLOUDFORMS



ANSIBLE
TOWER
by Red Hat®

Application Deployment



RED HAT®
OPENSIFT
Container Platform



RED HAT®
OPENSIFT
Dedicated



COMMON USE CASES

STANDARDIZE: IT Process Automation

BUSINESS DRIVERS

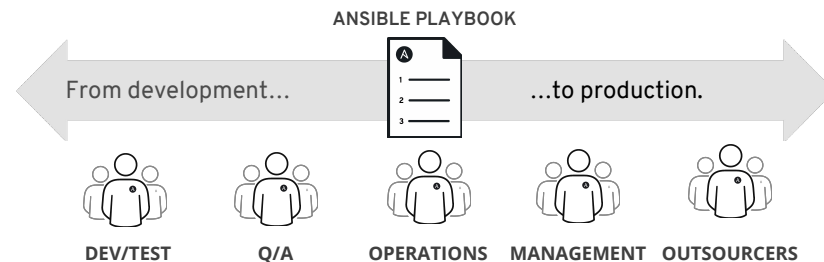
EFFICIENCY: Do more with less

AGILITY: Faster application delivery

RISK MANAGEMENT: Business value as code



SOLUTION



IaaS: Private Cloud Service

BUSINESS DRIVERS

SOFTWARE DEFINED DATACENTER: Extendable Infrastructure ecosystem

CONTROL: Lifecycle and governance policies

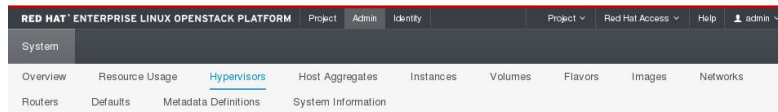
SELF-MANAGED: Empowering end-users

CAPEX: Own the hardware



SOLUTION

RED HAT®
OPENSTACK® PLATFORM + **RED HAT®**
CLOUDFORMS + **RED HAT®**
STORAGE



Hypervisor Summary



VCPU Usage
Used 6 of 224



Memory Usage
Used 14GB of 502.7GB



Local Disk Usage
Used 120GB of 1.4TB

Hypervisor Compute Host

Hostname	Type	VCPUs (used)	VCPUs (total)	RAM (used)	RAM (total)	Local Storage (used)	Local Storage (total)	Instances
overcloud-compute-1.localdomain	QEMU	2	64	4.5GB	125.7GB	40GB	371GB	2
overcloud-compute-2.localdomain	QEMU	2	64	4.5GB	125.7GB	40GB	371GB	2
overcloud-compute-0.localdomain	QEMU	2	64	4.5GB	125.7GB	40GB	371GB	2
overcloud-controller-0.localdomain	QEMU	0	32	512MB	125.6GB	0Bytes	371GB	0

Displaying 4 items

ADVANCED MANAGEMENT: Management for Hybrid Cloud

BUSINESS DRIVERS

UNIFIED MANAGEMENT: Operational Awareness

GOVERNANCE: Policies and checks for Regulations

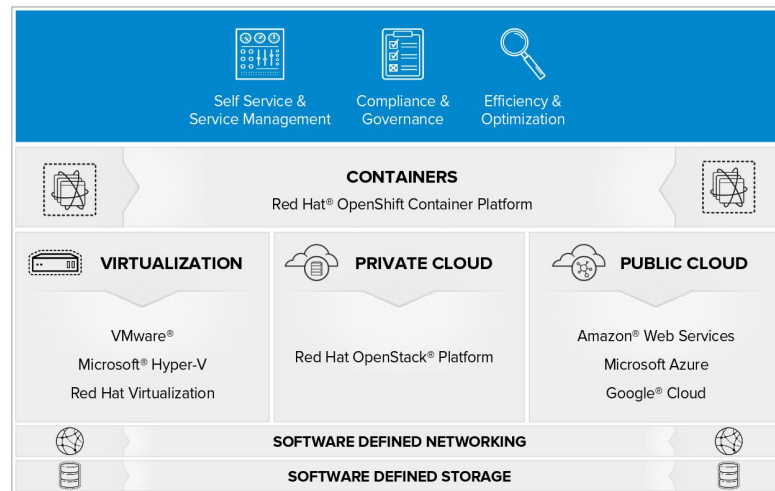
COST MONITORING: Predict consumption using historical data

USER EMPOWERMENT: Cloud-like Self Service



SOLUTION

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CLOUDFORMS + 



ADVANCED MANAGEMENT: Accelerate Service Delivery

BUSINESS DRIVERS

USER EMPOWERMENT: Self Service Portal and Service Catalogs

CONSISTENCY: Automation and Infrastructure as code

MANAGE COST: User Chargeback and Right Size VM

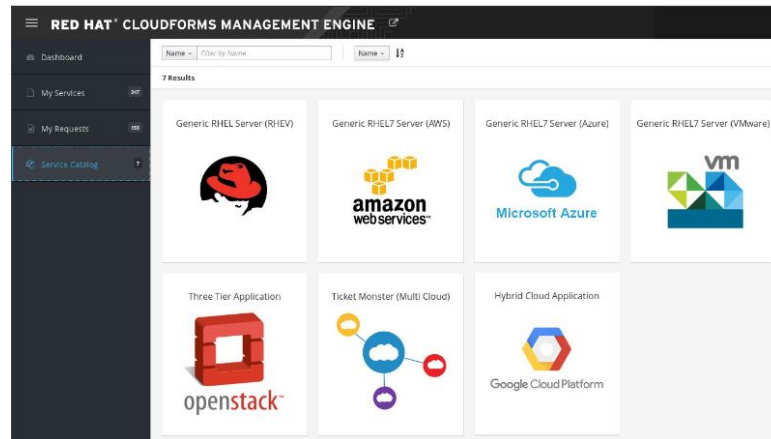
RESOURCE MANAGEMENT: Reports and Monitor

ENABLING
USERS

SERVICE
LIFECYCLE

EFFICIENCY
& AGILITY

SOLUTION



APP DEPLOYMENT: Accelerate Service Delivery

BUSINESS DRIVERS

STREAMLINED DEPLOYMENT: Common Platform for Development and Operations

CONSISTENCY: Build and Deploy containerized applications

RISK MITIGATION: CI/CD and Canary Deployments

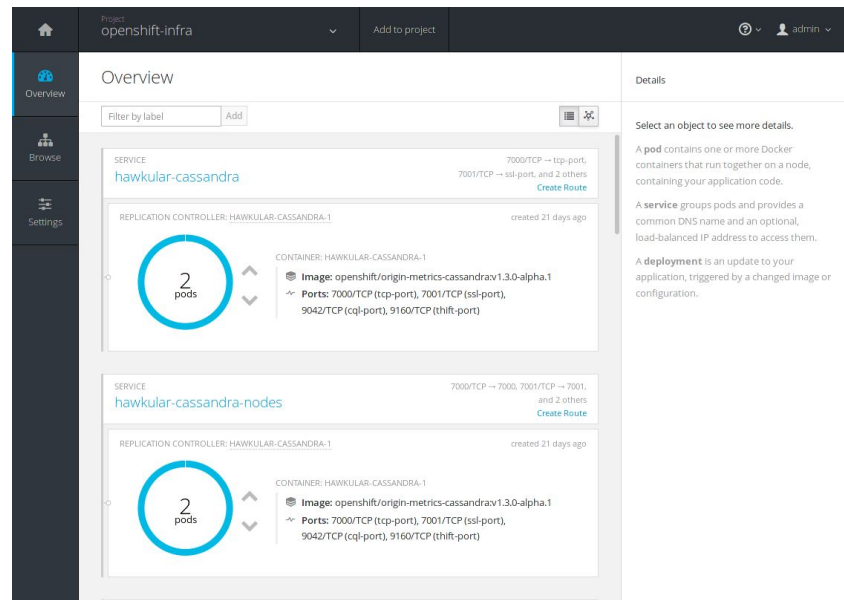
RESOURCE MANAGEMENT: Reports and Monitor

DevOps

Containers

EFFICIENCY
& AGILITY

SOLUTION



Benefits of the Building Blocks

Standardize

- Optimizing Linux server infrastructure costs — saving \$3,566 per 100 users per year
- Enhancing IT staff productivity — lowering the labor costs of supporting services by \$3,318 per 100 users per year while improving IT services quality
- Driving end-user productivity by delivering more reliable operational performance — adding \$2,319 in value per 100 users per year
- Increasing business productivity — lowering operations costs and adding new revenue totaling \$2,345 per 100 users per year

IDC White Paper : <http://bit.ly/2iVwUB8>

Advanced Management

- Enabling organizations to deliver services and infrastructure in much less time and with greater frequency.
- Enhancing productivity with self-service capabilities
- Improving business outcomes by making DevOps and application development teams more effective and supporting more reliable and robust IT operations
- Freeing up IT staff time from discovering, tracking, and optimizing IT resources

*IDC calculates that they will realize benefits with an average value of \$11,937 per 100 users per year a return on investment (ROI) of 436%

IDC Whitepaper: <http://red.ht/2jiS8H3>

Infrastructure as a Service

- IT infrastructure cost savings (CAPEX)
 - 22% fewer servers required to run the same workload when Red Hat Enterprise Linux is deployed
 - 43% lower server maintenance costs
 - 27% more users per Red Hat Enterprise Linux server,
- IT staff productivity benefits (OPEX)
 - 45% less staff time per 100 users to support equivalent workloads
 - \$13,044 per 100 users over three years

Red Hat IDC Infograph: <http://red.ht/2jvumwz>

Application Deploy

- Enabling developers to deliver more timely, robust, and functional applications and features
- Improving business results and operational efficiency by meeting customer and user demand
- Requiring less staff time for ongoing management of applications
- Reducing the proportion of application development costs associated with infrastructure and development platforms

*IDC 531% average five-year ROI, 66% faster application development lifecycle, 35% less IT staff time required per application developed, 38% lower IT infrastructure cost

IDC Whitepaper: <http://red.ht/2i6EXOm>

Thanks!

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Draft Use Cases

Policy Based Governance & Compliance

BUSINESS DRIVERS

MONITORING: Identify and manage vulnerabilities

PROACTIVE GOVERNANCE: Security, policy, and compliance

REMEDIATION: Fixes generation and automation

AUTOMATION enables **CONSISTENCY** for **SECURITY** across the Enterprise.



SOLUTION

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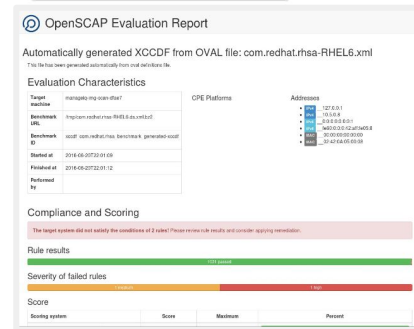
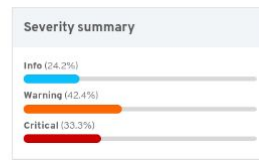
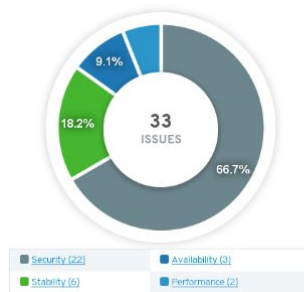
+



ANSIBLE
TOWER
by Red Hat®

+

RED HAT®
INSIGHTS



IaaS: MODERN VIRTUALIZATION

BUSINESS DRIVERS

MANAGE COST: Break free of the ELA

MODERNIZE: Virtualization with Cloud-like features

COMPREHENSIVE SUPPORT: One place for entire support lifecycle.



SOLUTION

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