TAKING THE OPENSTACK JOURNEY
WITH CONFIDENCE

Frank Feldmann
Head of APAC Office of Technology

Red Hat Asia Pacific - frank.feldmann@redhat.com
DIGITAL TRANSFORMATION
Changing entire industries in fundamental ways

New ways of developing, delivering, and integrating applications
Modernize existing and build new cloud-based infrastructure
More agile process across both IT and the business

By 2018, 67% of Global 2000 CEO's will have Digital Transformation at the center of their corporate strategy – IDC, 2016
DIGITAL TRANSFORMATION
Different demands, Same Journey

Economic drivers

Specific industry needs

What organizations require to transform

DIGITAL TRANSFORMATION

Government
Telecommunications
Retail
Finance

INFRASTRUCTURE MODERNIZATION
Of respondents expected OpenStack to play a role in their overall cloud strategy in the next three years” [1]
OPENSTACK CLOUD JOURNEY

- Complexity vs. Scale
- How am I cloud proficient?
- How can we move faster?
- How do we run at scale?
- How do we optimize our cloud?
- How do we manage at scale?
You are acting as both the vendor and the end user, supporting your cloud and the code!

- Least expensive software acquisition costs
- Highest cost per VM due to salaries, hiring, training, loaded costs, benefits, raises, retention
- Maintaining a Software Engineering team + Operations team!
OPENSTACK CLOUD JOURNEY

COMPLEXITY

SCALE

ASSESSMENT
UPSTREAM
COMMERCIAL DISTRIBUTION
HOW DO WE OPTIMIZE OUR CLOUD?
HOW DO WE MANAGE AT SCALE?
COMMERCIAL DISTRIBUTION

Multi Year Product Lifecycle
Expertise in the underlying operating system
Security response
Certification and compliance
Vertical consulting
Code indemnification
Extended cloud management
Per VM Cost Analysis Commercial vs DIY

Hire people in areas that are core / differentiate your business, rely on others where it is not!

- Higher cost of software acquisition (vs free)
- Significantly lower per VM costs due to reduced software engineering team
- Increased uptime through hardware certification and product lifecycle

$0 $5,000 $10,000 $15,000
100 VMs Year 1 200 VMs Year 2 400 VMs Year 3 800 VMs Year 4 1600 VMs Year 5 3200 VMs Year 6

Upstream Commercial Distribution

OPENSTACK CLOUD JOURNEY

COMPLEXITY

OPENSTACK

SCALE

AUTOMATE

UPSTREAM

COMMERCIAL DISTRIBUTION

COMMERCIAL Distro + AUTOMATION

HOW DO WE MANAGE AT SCALE?
hosts: webservers

vars:
  http_port: 80
  max_clients: 200
remote_user: root

tasks:
  - name: ensure apache is at the latest version
    yum: name=httpd state=latest
  - name: write the apache config file
    template: src=/srv/httpd.j2 dest=/etc/httpd.conf
    notify:
      - restart apache
  - name: ensure apache is running (and enable it at boot)
    service: name=httpd state=started enabled=yes
    handlers:
      - name: restart apache
        service: name=httpd state=restarted
Configuration and Change Management

Capacity and Performance Management

Self-Service Provisioning and Service Catalog

Chargeback

Orchestration

External Cloud Brokering

Virtual Infrastructure Manager

IaaS Cloud Manager

Virtual Infrastructure

Cloud Management Platform
average organization, with average automation levels, supports 53 OS instances per administrator. A
more people will not address scalability challenge. Automation & CMP will!

Source: http://tinyurl.com/j8sa74n

OPENSTACK CLOUD JOURNEY WITH RED HAT

SCALE

COMPLEXITY

ASSESSMENT

UPSTREAM

COMMERCIAL DISTRIBUTION

COMMERCIAL DISTRO + AUTOMATION

COMMERCIAL DISTRO + AUTOMATION + CMP
CUSTOMER SUCCESS

LARGE GLOBAL CREDIT CARD COMPANY

**Migrated** over 12,000 Virtual Machines to OpenStack to reduce cost of virtual infrastructure

**Enabled** data center consolidation and reduced complexity of IT’s portfolio

**Managing** more workloads with fewer resources
MORE THAN JUST LINUX.