



# **LEARN. NETWORK. EXPERIENCE OPEN SOURCE.**

June 11-14, 2013  
Boston, MA



# COMMUNITY CATALYSTS: The Value of Open Source

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Community Action and Impact

Red Hat

June 12, 2013

# Agenda

- Open source and Red Hat
- The freedoms of open source
- The value to customers
- How to engage with open source projects





*Image credit: opensource.com*

# Open source is in our DNA



**RED HAT® JBOSS®  
OPERATIONS  
NETWORK**

**RED HAT®  
SATELLITE**

**RED HAT®  
ENTERPRISE  
VIRTUALIZATION®**

**MANAGEMENT SYSTEMS**

**RED HAT® JBOSS®  
MIDDLEWARE**

**RED HAT®  
ENTERPRISE  
LINUX®**

**RED HAT®  
STORAGE**



**CLOUD SERVERS**



**VIRTUAL SERVERS**



**PHYSICAL SERVERS**



**NETWORK + STORAGE  
INFRASTRUCTURE**



**OPENSIFT®**  
by Red Hat®

**RED HAT®  
CLOUDFORMS™**

**RED HAT®  
OPENSTACK™**

**OPEN HYBRID CLOUD**



**DEVOPS**

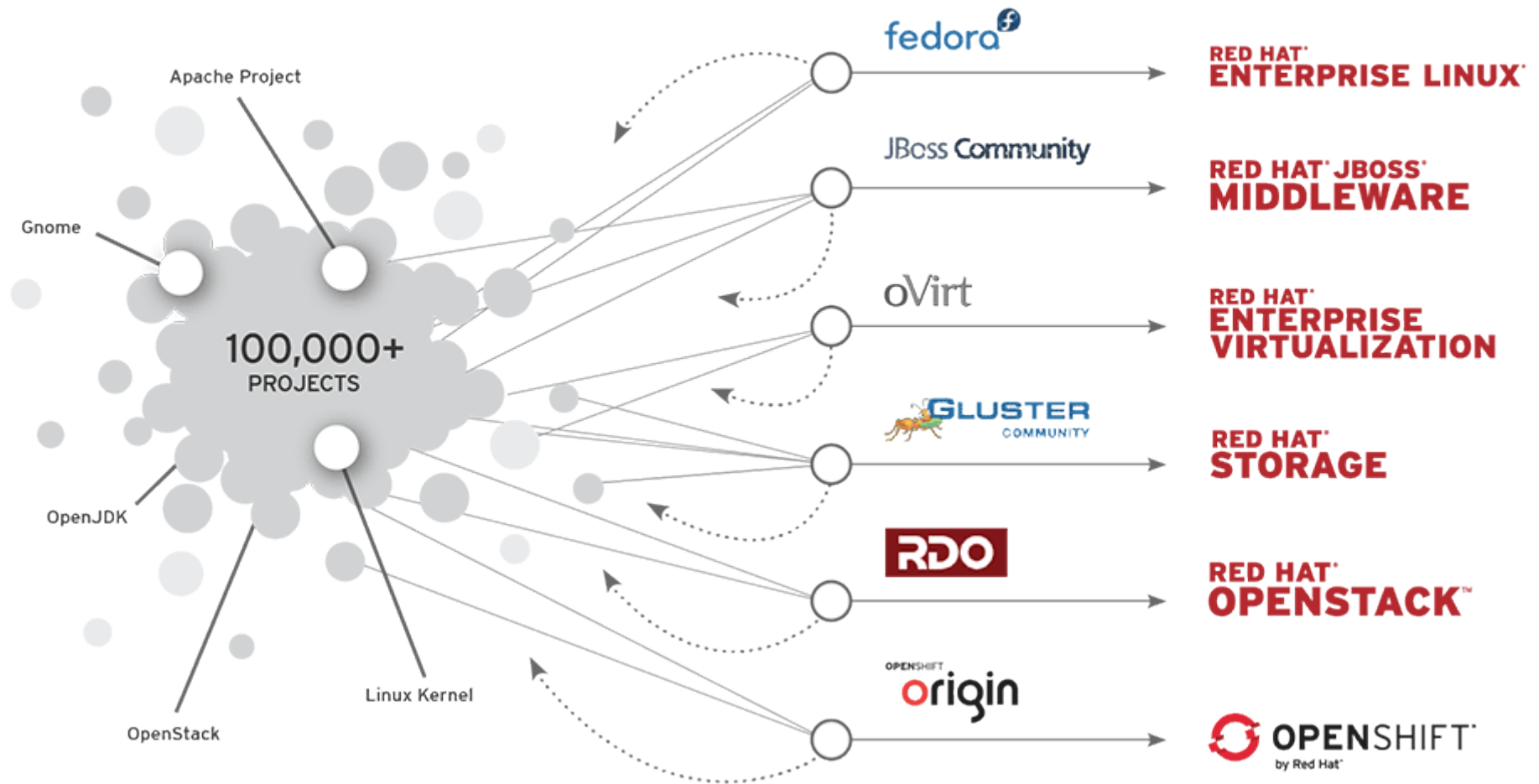


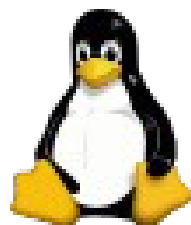
**CLOUD  
BUILDERS**

RH0030



# RED HAT LEADS THROUGH OPEN INNOVATION





<http://community.redhat.com/contributions/>



*Image credit: opensource.com*

## What's in it for Red Hat?





*Image credit: opensource.com*

# What's in it for our customers?

# Recap:

## The freedoms of open source software

# The Four Freedoms of Open Source

- Freedom to use
- Freedom to study
- Freedom to modify
- Freedom to share

“First order” freedoms

# Second order freedoms

The value for  
our customers



*Image credit: opensource.com*

# Creates diversity of use-cases





# Case study: Linux



- Top mobile phone operating system
- Powers 98% of world's super computers
- Hugely popular embedded OS

# Drives adoption



*Image credit: opensource.com*

# Adoption drives marketplace, standards



*Image credit: opensource.com*

# Case study: Mozilla Firefox



- <5% market share at launch in 2001
- Grew to ~25% market share by 2006
- Led adoption of CSS, HTML4, HTML5
- Drove updates to Internet Explorer, entry of Google into browser market
- Browser extensions improve experience for users

## Case study: Deltacloud



Many clouds. One API. No problem.

- De facto reference implementation of CIMI standard
- Liberally licensed open source implementation encourages adoption



Engage early, stay agile



Image credit: [opensource.com](https://opensource.com)



## Case study: NSA and SELinux

- NSA needed access control security policy for Linux
- Engaged Red Hat during development process, patches available in 2000
- Integrated into standard Linux kernel in 2003
- Standard in Red Hat Enterprise Linux

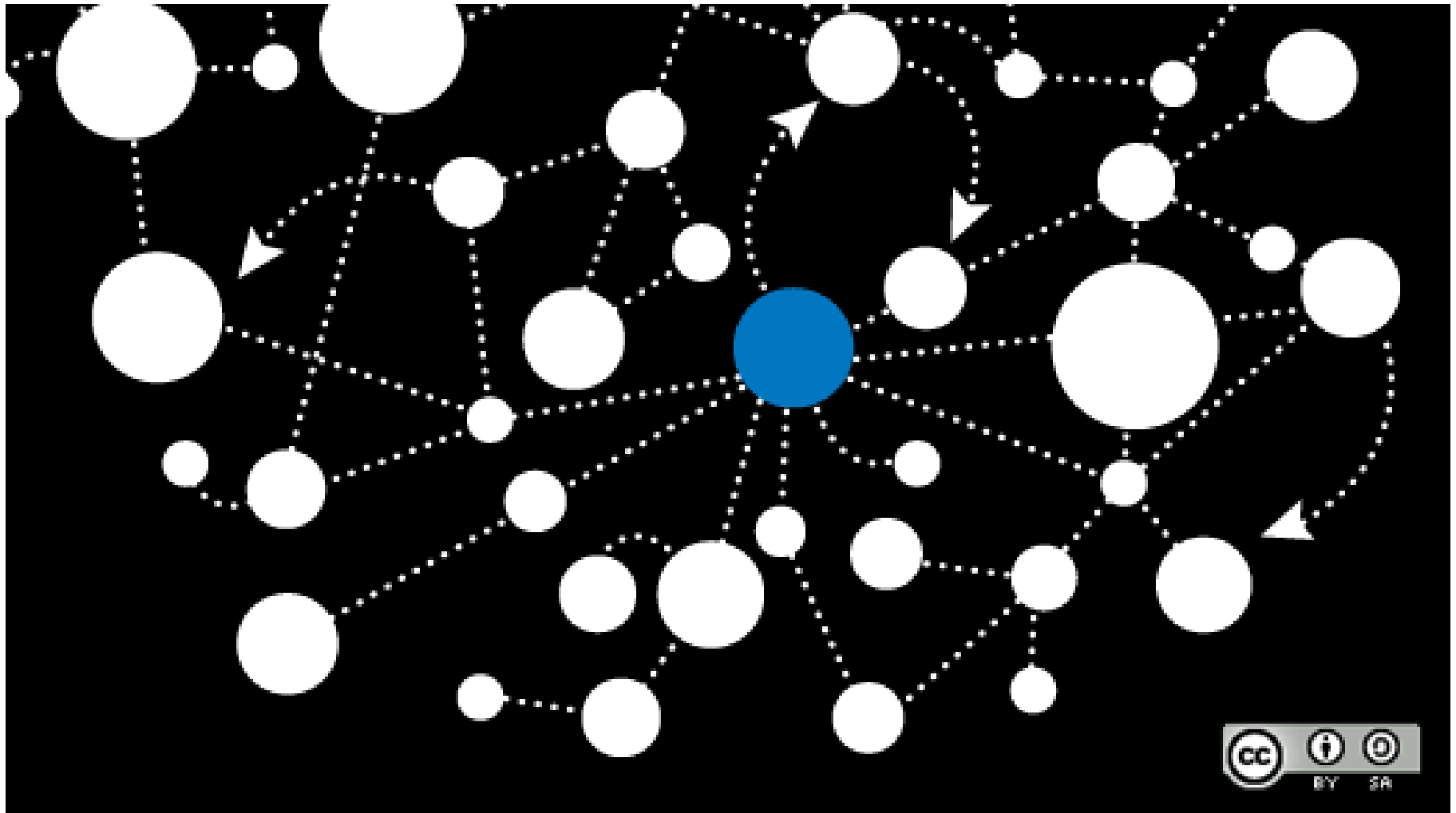
## Case study: AlterWay and oVirt

**Alter Way**

- French services and hosting company
- Running a public cloud offering “H2O” on oVirt, needed features added in oVirt 3.1
- Openness enabled AlterWay to get ahead of the Red Hat Enterprise Virtualization product
- Engaged the project as a sponsor and supporter, influencing project roadmap

Engaging makes better software

# Diverse marketplace of service providers



*Image credit: opensource.com*



# Case study: OpenStack



- OpenStack project launched by NASA and Rackspace in 2010
- Hugely successful in growing an ecosystem of suppliers (distributions, public cloud providers, service companies, consultants)
- A multitude of suppliers gives customers the freedom to leave: opportunity to switch supplier or support vendor

# More eyeballs, fewer bugs



Image credit: [opensource.com](https://opensource.com)

# Case study: Tokyo Stock Exchange

- Regular downtime, server “overheating”
- Moved to Red Hat Enterprise Linux in 2009
- Since move: transaction latency down from seconds to milliseconds
- Zero downtime since migration

# Open Source is better quality than proprietary

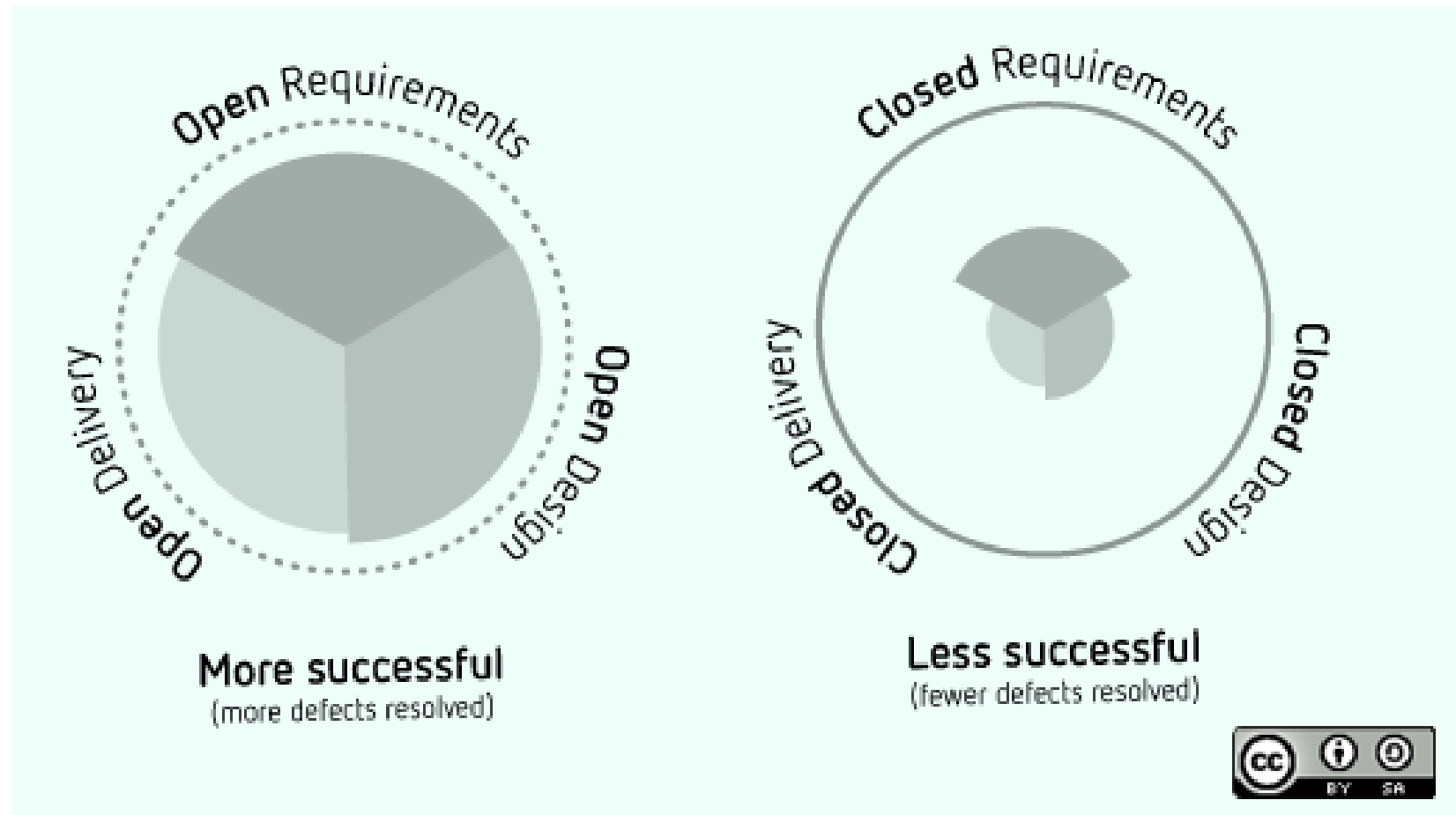


Image credit: opensource.com

# No more zombie projects



*Image credit: Andrew Braithwaite*



# Case study: LibreOffice



- Oracle pulled resources off OpenOffice.org after acquisition
- Community forked LibreOffice project
- Over 600 developers from dozens of companies in recent 4.0 release cycle



## Case study: Evolution

- Ximian and CodeFactory developers worked on Evolution 1.0
- Ximian acquired by Novell, Novell reduce involvement
- Red Hat continues development and maintenance

# Payment at the point of value



## Case study: OpenShift Origin



- Evaluation possible with OpenShift online at [openshift.redhat.com](https://openshift.redhat.com)
- Install and support OpenShift Origin yourself, evaluate and prepare for deployment
- Buy support for OpenShift Enterprise once you move to production



# Engaging with open source projects



# Engaging with open source projects

- “When in Rome...”
- Learn community processes
- Be bold
- Be persistent

# Getting involved

## Project: WildFly



- Standards adoption – AMQP, Java EE
- Dozens of projects build on the WildFly platform:
  - TorqueBox, Arquillian, Infinispan, AeroGear
- Get involved: <http://www.jboss.org/contribute>

<http://wildfly.org>



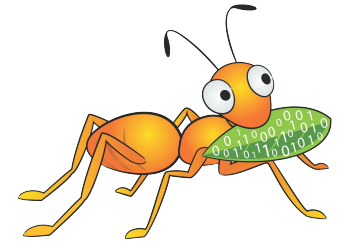
# Project: Fedora



- Millions of users, thousands of community members
- Open governance architecture – community debates future direction
- Drive to innovate – early adoption of technologies like SELinux, systemd, GNOME 3 enables better Red Hat Enterprise Linux product
- Great recruitment and mentorship program:  
<http://fedoraproject.org/join-fedora>

<http://fedoraproject.org>

# Project: Gluster



- Shared storage – distributed POSIX filesystem and object storage
- Extensible core enable plug-in community:  
<http://forge.gluster.org>
- Get involved: <http://www.gluster.org/>

<http://gluster.org>

## Project: oVirt



- Datacenter virtualization similar to vSphere
- Broad support and engagement: IBM, NetApp, Intel, ...
- Diverse and growing user community
- Get involved: <http://www.ovirt.org/Community>

<http://ovirt.org>

## Project: RDO



- RDO is a community-supported distribution of OpenStack
- Opportunity to engage directly with OpenStack project
- Integration work, PackStack installer all open source
- Wiki and forum enable community support
- Get involved:  
[http://openstack.redhat.com/Get\\_involved](http://openstack.redhat.com/Get_involved)

<http://openstack.redhat.com>

# Project: OpenShift Origin



- OpenShift Origin source code is on github (Apache License v2)
- Vibrant cartridge community and distribution channel
- Huge collection of kickstarts for applications
- IRC: #openshift on FreeNode
- Get involved:  
<https://www.openshift.com/developers/get-involved>

<http://openshift.redhat.com>

Come visit our stands!

origin

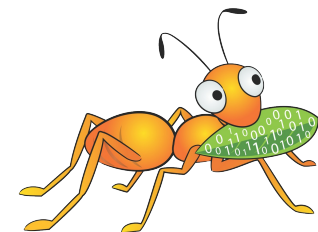


oVirt

Find us in the Developer Lounge in the expo hall



fedora 



# Related presentations

Time	Title	Presenter	Room
Thurs 10:40am	SELinux for mere mortals	Thomas Cameron	302
Thurs 3:40pm	Writing cartridges for OpenShift	Jhon Honce	207
Thurs 10:40am	GlusterFS Internals & Roadmap	Vijay Bellur, Jeff Darcy, JM Walker	209
Thurs 3:40pm	How the Red Hat ecosystem works	Mike Werner	209
Thurs 2:30pm	Introduction & overview of OpenStack for IaaS clouds	Keith Basil	310
Thurs 3:40pm	OpenStack architecture	Russell Bryant	310
Wed 7pm	Build applications the JBoss way	Pete Muir, Ray Ploski	301

# Questions?



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