The Road Ahead for OpenShift

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RED HAT CLOUD PLATFORM
SEPT 2018

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OPENSHIFT IN THE NEWS
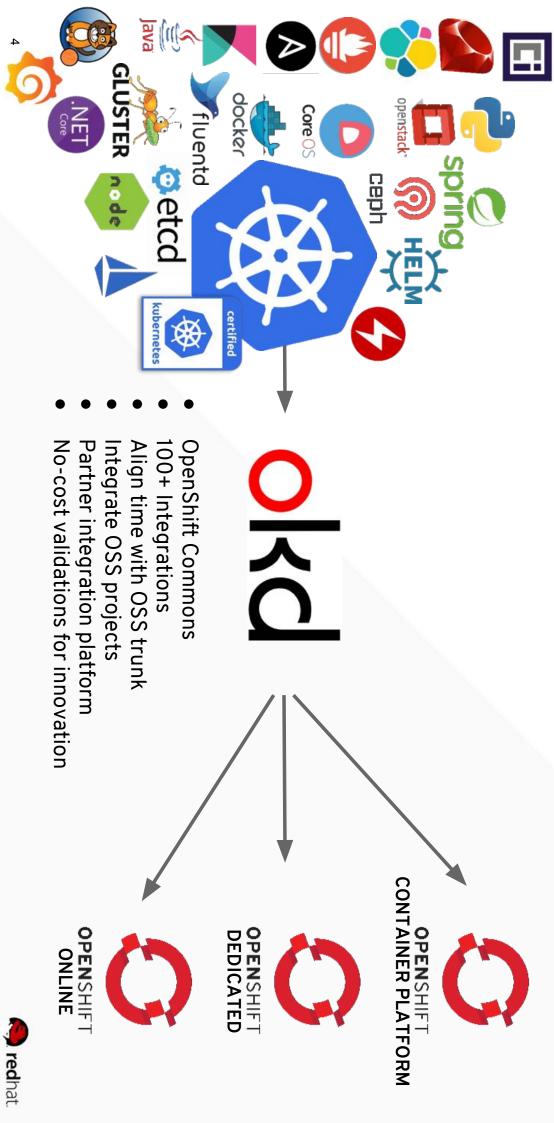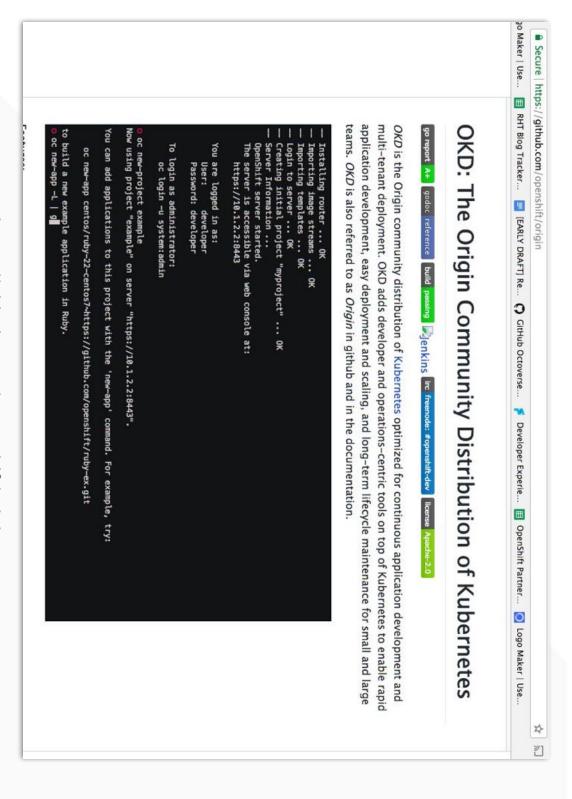
NAME CHANGE: ORIGIN IS NOW "OKD"

okd

The Origin Community Distribution of Kubernetes that powers Red Hat OpenShift.

openshift.org >> okd.io

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HOW DO WE DELIVER OPENSHIFT?

4

okd

- OpenShift Commons
- 100+ Integrations
- Align time with OSS trunk
- Integrate OSS projects
- Partner integration platform
- No-cost validations for innovation

certified kubernetes

OPENSHIFT CONTAINER PLATFORM

OPENSHIFT DEDICATED

OPENSHIFT ONLINE

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5

https://github.com/openshift/origin

OKD: The Origin Community Distribution of Kubernetes

go report A+ · godoc reference · build passing · Jenkins · irc freenode: #openshift-dev · license Apache-2.0

OKD is the Origin community distribution of Kubernetes optimized for continuous application development and multi-tenant deployment. OKD adds developer and operations-centric tools on top of Kubernetes to enable rapid application development, easy deployment and scaling, and long-term lifecycle maintenance for small and large teams. *OKD* is also referred to as *Origin* in github and in the documentation.

```
— Installing router ... OK
— Importing image streams ... OK
— Importing templates ... OK
— Login to server ... OK
— Creating initial project "myproject" ... OK
— Server Information ...
   OpenShift server started.
   The server is accessible via web console at:
      https://10.1.2.2:8443

   You are logged in as:
      User:     developer
      Password: developer

   To login as administrator:
      oc login -u system:admin

○ oc new-project example
Now using project "example" on server "https://10.1.2.2:8443".

You can add applications to this project with the 'new-app' command. For example, try:

   oc new-app centos/ruby-22-centos7~https://github.com/openshift/ruby-ex.git

to build a new example application in Ruby.

○ oc new-app -L | g
```

OPENSHIFT IN THE MARKETPLACE

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Your Application Workloads are Moving to Cloud

Location of Application Workloads
(% of Total Workloads)

	On-Premise Total	Co-Location Total	Managed Hosting Total	Public Cloud Total
End of 2021	40%	6%	10%	44%
End of 2018	59%	9%	7%	25%
Today	62%	10%	7%	21%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

■ On-Premise Total ■ Co-Location Total ■ Managed Hosting Total ■ Public Cloud Total
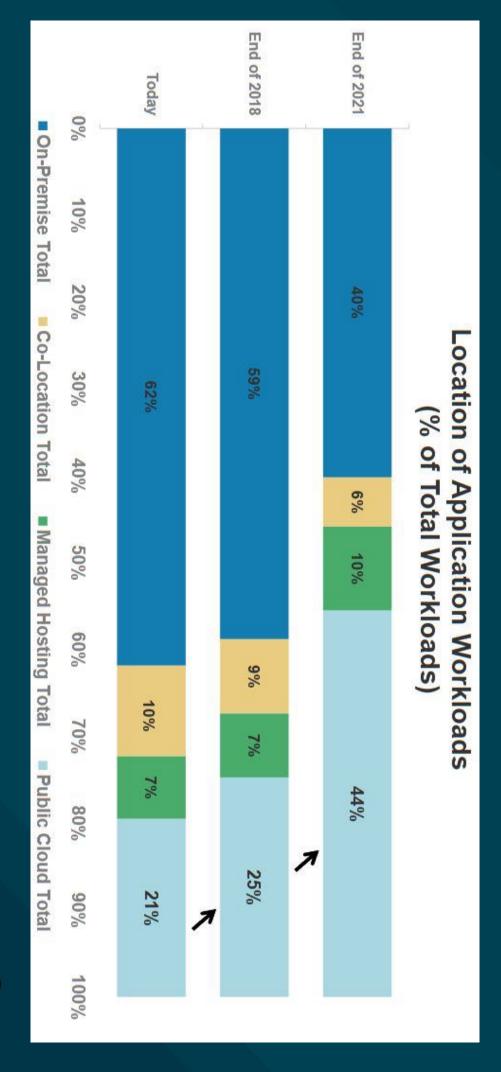
Exhibit 10: CIOs Expect 25% of Application Workloads to Reside in the Public Cloud by the End of 2018
Source: AlphaWise, Morgan Stanley Research. n=100 (US and EU data)

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INDUSTRY HAS STANDARDIZED ON KUBERNETES
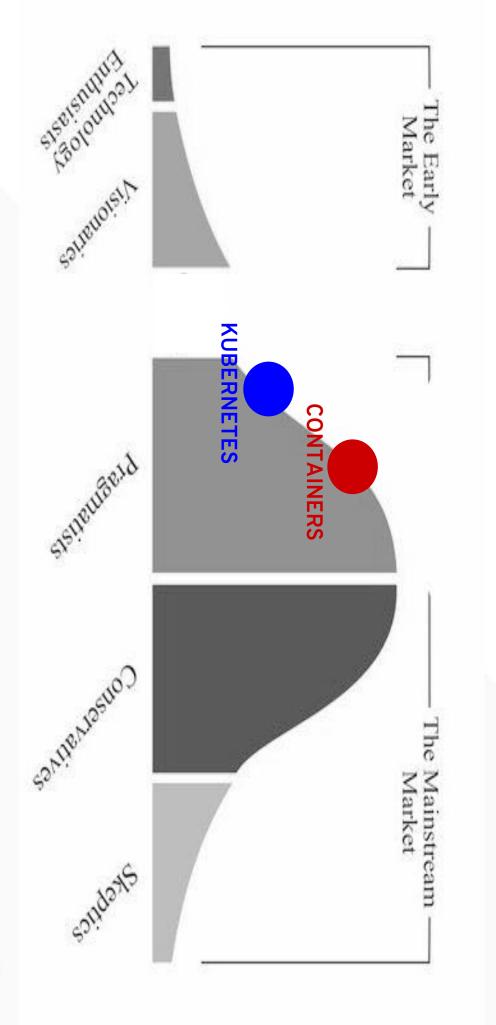
KUBERNETES
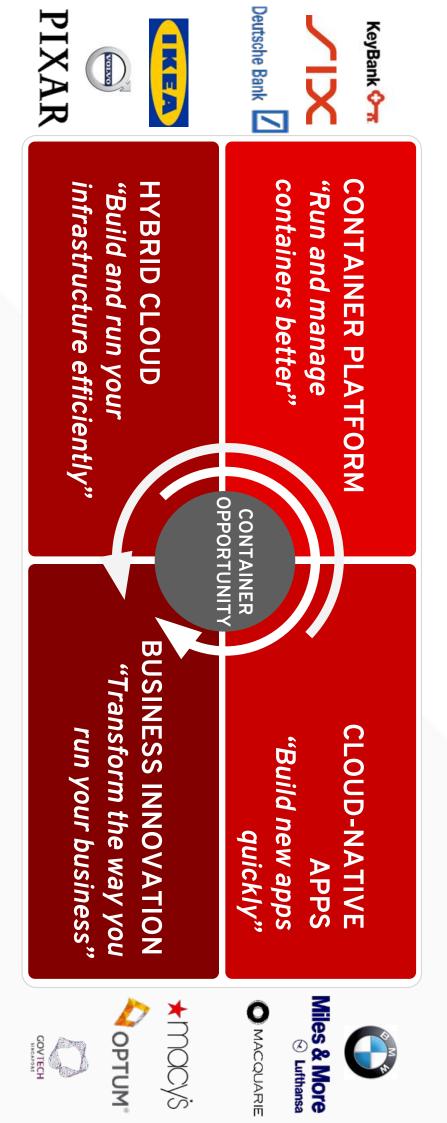

NOVEMBER 2017
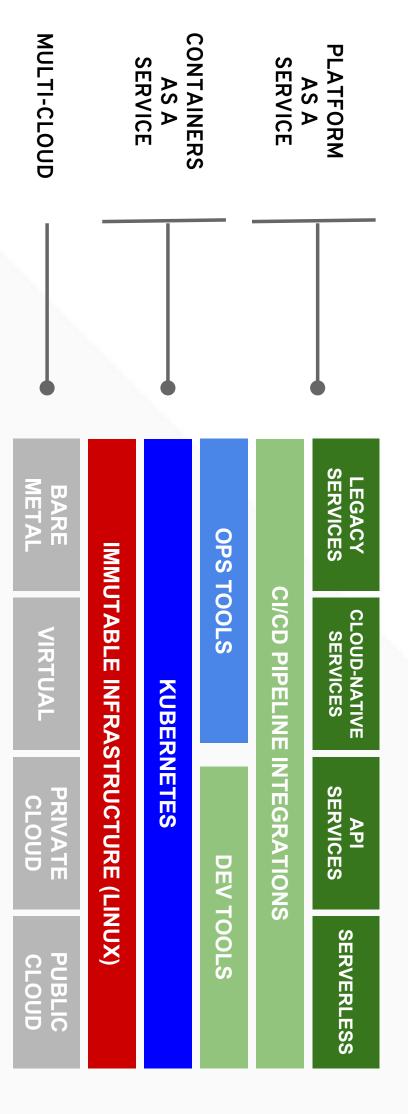
CONTAINERS AND KUBERNETES ADOPTION

Technology Enthusiasts

Visionaries

The Early Market

Pragmatists

Conservatives

Skeptics

The Mainstream Market

KUBERNETES

CONTAINERS

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WHAT IS OPENSHIFT?

THE KUBERNETES PLATFORM FOR BIG IDEAS

PLATFORM AS A SERVICE

CONTAINERS AS A SERVICE

MULTI-CLOUD

LEGACY SERVICES	CLOUD-NATIVE SERVICES	API SERVICES	SERVERLESS

CI/CD PIPELINE INTEGRATIONS

OPS TOOLS | **DEV TOOLS**

KUBERNETES

IMMUTABLE INFRASTRUCTURE (LINUX)

BARE METAL	VIRTUAL	PRIVATE CLOUD	PUBLIC CLOUD

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MULTIPLE STARTING POINTS FOR CUSTOMERS

CONTAINER PLATFORM
"Run and manage containers better"

CLOUD-NATIVE APPS
"Build new apps quickly"

HYBRID CLOUD
"Build and run your infrastructure efficiently"

BUSINESS INNOVATION
"Transform the way you run your business"

CONTAINER OPPORTUNITY

EVERY INDUSTRY, EVERY GEOGRAPHY

IN OVER 40 COUNTRIES

FINANCIAL SERVICES

INSURANCE

AUTOMOTIVE

RETAIL

LOGISTICS

TRAVEL

HOSPITALITY

MEDIA | TELCO

The State of the Octoverse 2017
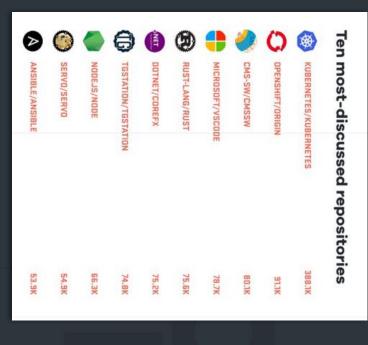
Millions of developers use GitHub to share code and build businesses. You're here to do your job, tinker with new technologies, contribute to open source projects, and so much more. You've shown that when curious people have space to work together, great things happen: Work goes faster, new ideas emerge, and the way we build software fundamentally changes.

To celebrate your contributions and a spectacular year together, let's look back at the projects, people, and teams of 2017.

Ten most-discussed repositories

Repository	Count
KUBERNETES/KUBERNETES	388.1K
OPENSHIFT/ORIGIN	91.1K
CMS-SW/CMSSW	80.1K
MICROSOFT/VSCODE	78.7K
RUST-LANG/RUST	75.6K
DOTNET/COREFX	75.2K
TGSTATION/TGSTATION	74.8K
NODEJS/NODE	66.3K
SERVO/SERVO	54.9K
ANSIBLE/ANSIBLE	53.9K

GitHub

WHY IS OPENSHIFT THE BEST CHOICE

THE FOUR Cs plus one more

CODE

Kubernetes commits

Others 17%
Independent 18%
Red Hat 19%
Google 46%

Red Hat is a leading Kubernetes developer & contributor with Google[1].

We make container development easy, reliable, & more secure.

CUSTOMERS

Pioneer • easyJet • FICO • inmarsat • Logical Care • ATK Capital • Schiphol • lenovo • Deutsche Bank • British Columbia • MACQUARIE BANK • AMADEUS • La Poste • Disney • KeyBank • cisco • BARCLAYS • SBB CFF FFS • T·Systems • ATPCO • sky • Lufthansa • GOVTECH

Most reference customers running in production.

We have years of experience running OpenShift Online & OpenShift Dedicated services.

CLOUD

amazon web services
Azure
Google Cloud Platform

Strong partnerships with cloud providers, ISVs, CCSPs.

We have an extensive container catalog of certified partner images.

COMPREHENSIVE

Traditional, Stateful & Microservices-based Apps

| Business Automation | Integration & API Mgmt | Data & Storage | Web & Mobile | 3rd party frameworks |
| CONTAINER | CONTAINER | CONTAINER | CONTAINER | CONTAINER |

APPLICATION LIFECYCLE AUTOMATION
CONTAINER MANAGEMENT
CONTAINER INFRASTRUCTURE

ENTERPRISE-GRADE CONTAINER OS

Physical • Virtual • Private • Public

Satellite • Ansible • CloudForms • CDK • Developer Studio • Red Hat Registry

Our comprehensive portfolio of container products and services includes developer tools, security, application services, storage, & management.

Source: [1] Stackalytics, *Contribution by Companies*. (Release: All, Project type: Kubernetes, Module: kubernetes, Metric: Commits) Retrieved: March 2, 2018.
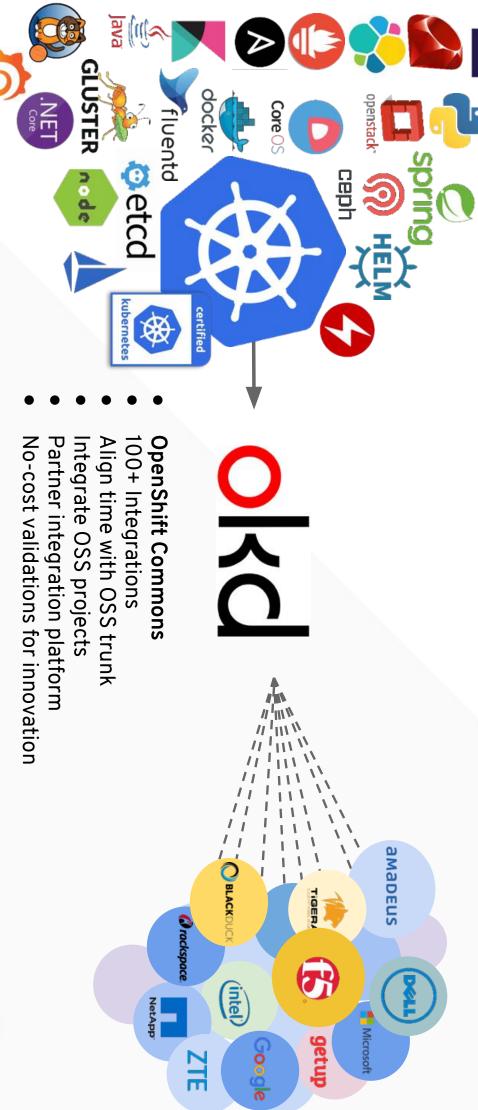
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OPEN SOURCE
OPEN COMMUNITIES
OPEN COLLABORATION

making connections that drive continuous innovation

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Who is OpenShift?

- **OpenShift Commons**
- 100+ Integrations
- Align time with OSS trunk
- Integrate OSS projects
- Partner integration platform
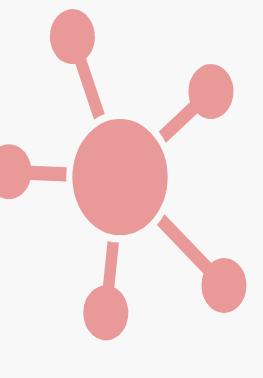- No-cost validations for innovation

Commons Participants

View the Full Participant List (415 members)

Who: Customers, Contributors, Collaborators and Integrators

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So What is OpenShift Commons?
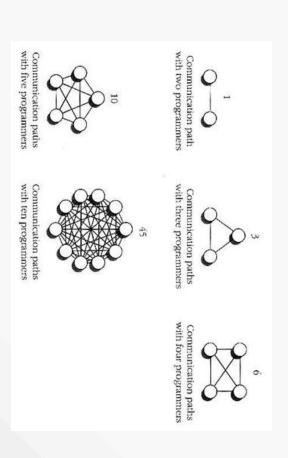
New Community Model + Communications Channel
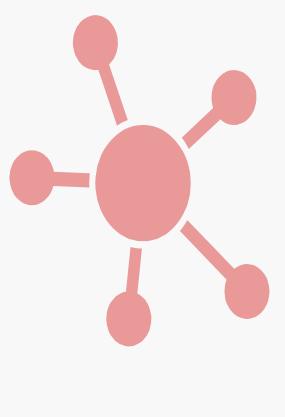
Commons as a Community Collaboration Model

New Community Model
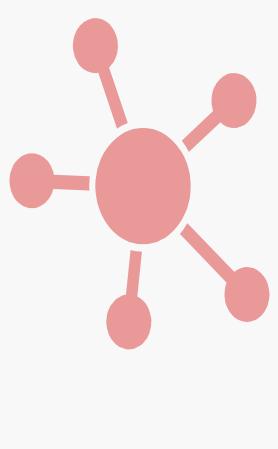
Promote Peer-to-Peer Interactions

Communication path with two programmers — 1

Communication paths with three programmers — 3

Communication paths with four programmers — 6

Communication paths with five programmers — 10

Communication paths with ten programmers — 45

Commons as a Community Collaboration Model

New Community Model

Promote Peer-to-Peer Interactions

Commons
Briefings
&
Gatherings

Code
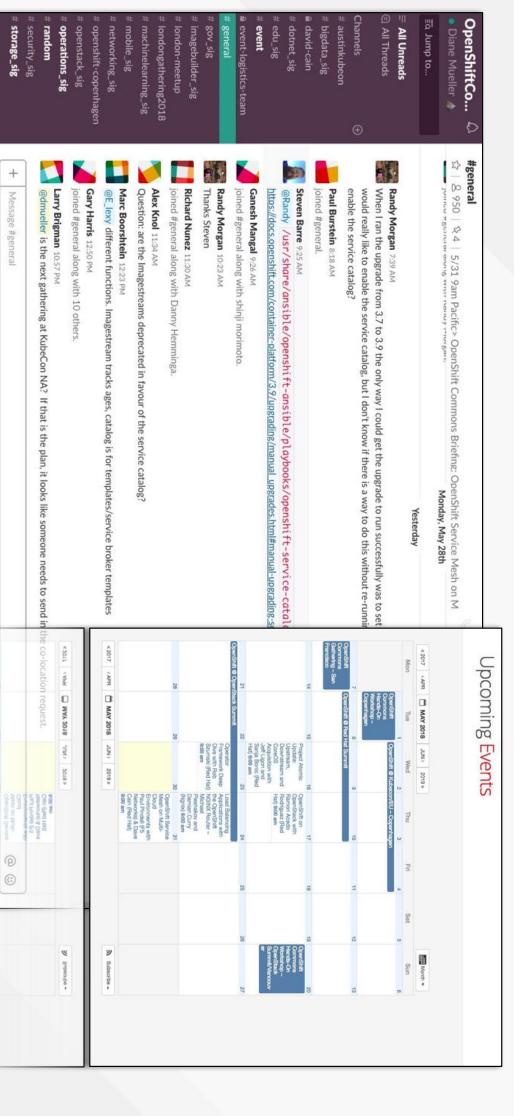Contributions

SIGs

Mailing
Lists

slack
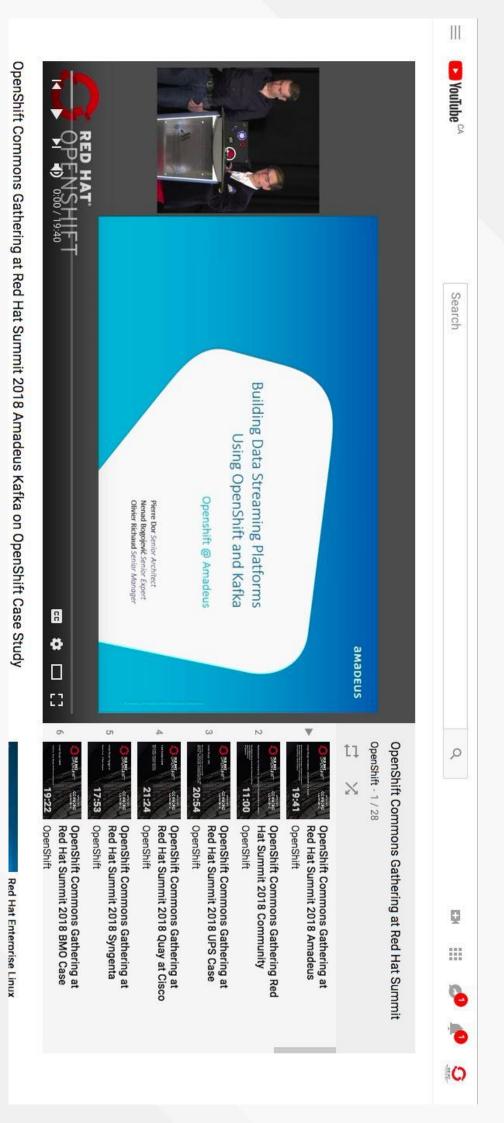
What: Community-driven content generation ++

How: Gatherings, Briefings, SIGs, Slack and story-telling

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New Commons Members in past 60 Days

Across Industries

In the Upstream

Across Tech Sectors

And .EDU & .GOVs too

ADVALO

HOSPITAL ITALIANO de Buenos Aires

PROPHETSTOR

GE

Ambedded Technology Co., Ltd.

avanzit

GE Digital

ECSIT ENLIGHTED CONSULTANCY SWEDEN IT

AMAN digital.Media.Solutions

DB

riverbed

Royal Mail

a· amdocs

CYBRIC

NIMBIX supercomputing made super human™

PlanetScale

Layered Insight™

KOHL'S

HighVail

CloudHedge

OSS

McMaster University

datto

redhat.

OpenShift Commons' Reach is Global

400+ Organizations

55+ Countries
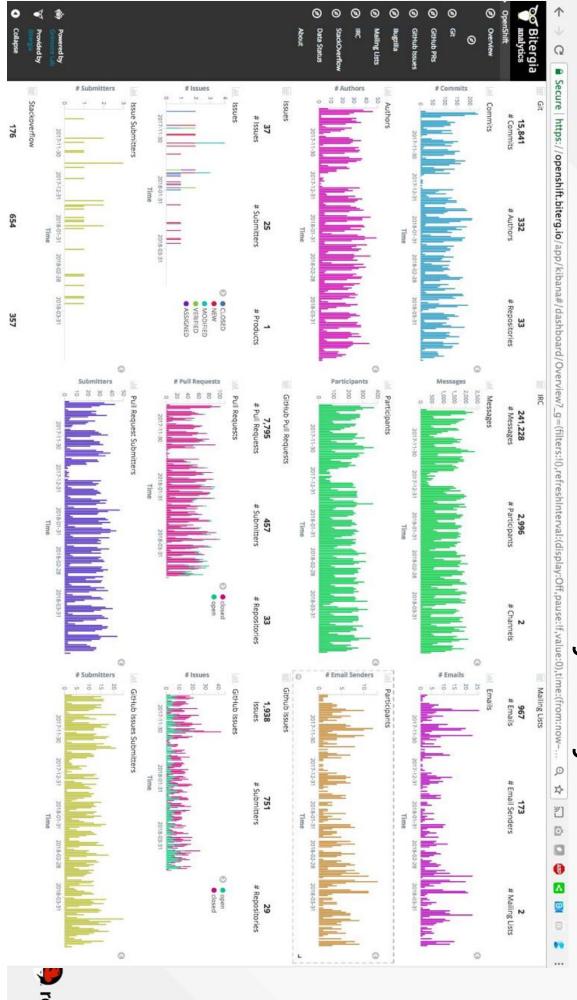
COMMONS PARTICIPATION
DRIVING CONTRIBUTION
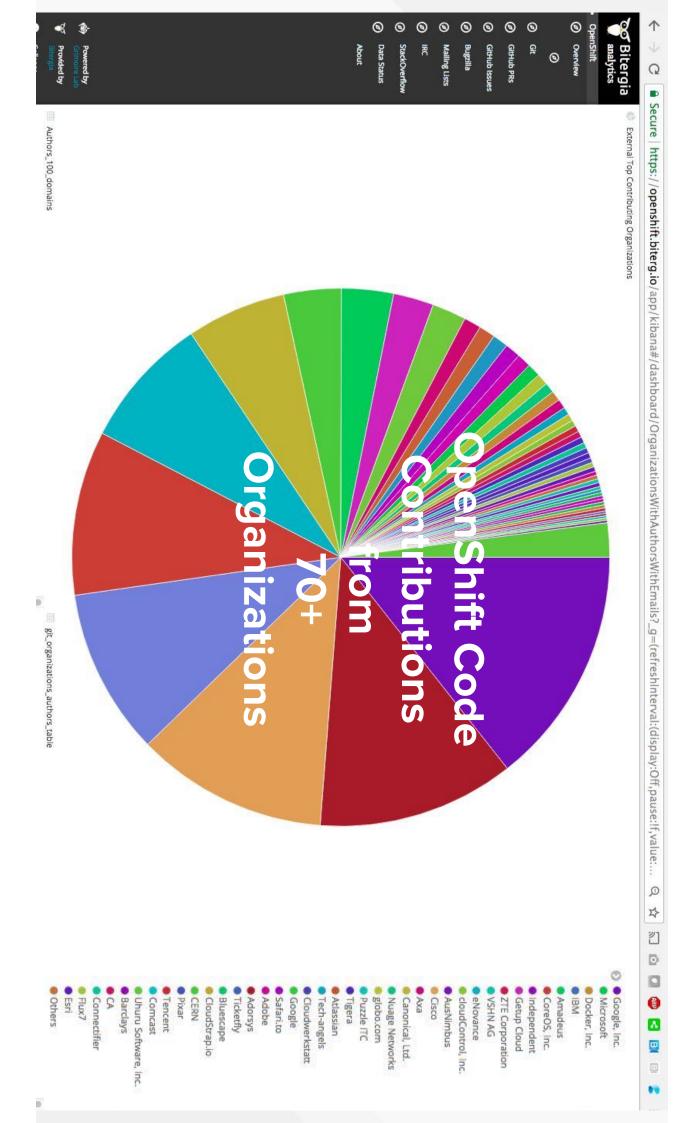
The Last Six Months has been very busy..

Bitergia
analytics

OpenShift

Overview

Git

GitHub PRs

GitHub Issues

Bugzilla

Mailing Lists

IRC

StackOverflow

Data Status

About

Powered by
Grimoire Lab

Provided by
Bitergia

Authors_100_domains

git_organizations_authors_table

OpenShift Code Contributions from 70+ Organizations

- Google, Inc.
- Microsoft
- Docker, Inc.
- IBM
- Amadeus
- CoreOS, Inc.
- Independent
- Getup Cloud
- ZTE Corporation
- VSHN AG
- eNovance
- cloudControl, Inc.
- AusNimbus
- Cisco
- Axa
- Canonical, Ltd.
- Nuage Networks
- globo.com
- Puzzle ITC
- Tigera
- Atlassian
- Tech-angels
- Cloudwerkstatt
- Google
- Safari.to
- Adobe
- Adorsys
- Ticketfly
- Bluescape
- CloudStrap.io
- CERN
- Pixar
- Tencent
- Comcast
- Uhuru Software, Inc.
- Barclays
- CA
- Connectifier
- Flux7
- Esri
- Others

The Future is all about Collaboration - Upstream

STACKALYTICS

Release: Queens | Project Type: Kubernetes | Module: Any module | Company: Any company | Contributor: Any contributor | Metric: Commits

Code Contribution | Vendor Drivers β | Member Directory | About

Contribution by companies

- *independent — 33%
- Google — 30%
- Red Hat — 12%
- Huawei — 4%
- ZTE Corporation — 4%
- FathomDB — 9%
- IBM
- Ghostcloud
- Microsoft
- others

Contribution by modules

- kubernetes — 25%
- test-infra — 25%
- website — 16%
- charts — 8%
- community — 6%
- kops — 5%
- federation — 5%
- ingress-nginx
- cri-o
- others

KUBERNETES SIGs & WGs- ENGINEERING LEADERSHIP
RED HAT LEAD or CO-LEAD

CONTAINER IDENTITY	STORAGE	OPENSTACK	DOCS	AZURE	API MACHINERY
KUBEADM ADOPTION	TESTING	PRODUCT MANAGEMENT	INSTRUMENTATION	BIG DATA	AWS
RESOURCE MANAGEMENT	UI	RELEASE	MULTI CLUSTER	CLI	APPS
IOT EDGE	WINDOWS	SCALABILITY	NETWORK	CLUSTER LIFECYCLE	ARCHITECTURE
POLICY	APP DEF	SCHEDULING	NODE	CLUSTER OPS	AUTH
	CLUSTER API	SERVICE CATALOG	ON-PREM	CONTRIBUTOR EXPERIENCE	AUTO SCALING

17 of 40 GROUPS

redhat. *

THIS IS WHAT THE
FUTURE LOOKS LIKE

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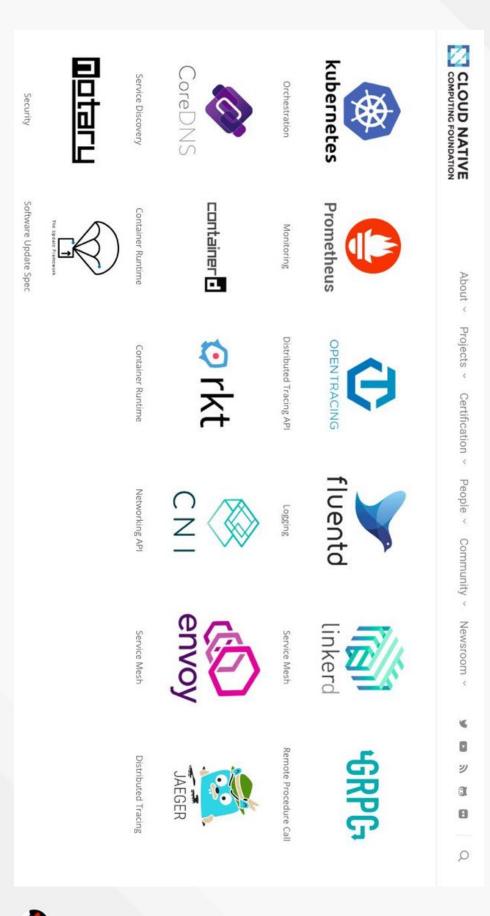
The Future is all about Collaboration - Across Streams

The Future is all about Collaboration - With Peers

OPENSHIFT COMMONS

An interactive community for all OpenShift PaaS Users, Customers, Contributors, Partners, Service Providers and Developers to share ideas, code, best practices, and experiences.

More at http://commons.openshift.org

Upcoming OpenShift Commons Gatherings

August 2 - LATAM - Buenos Aires

Sept 10 - Nordic - Helsinki

Oct 30 - Machine Learning - San Fran

Nov 12 - OpenShift @ OpenStack Summit- Berlin

Dec 10 - North America/Kubecon/Seattle

Jan 30 - London, UK

Feb TBD - APAC/Singapore

See: commons.openshift.org/events.html

OpenShift Commons

Commons builds connections and collaboration across OpenShift communities, projects and stakeholders. In doing so we'll enable the success of customers, users, partners, and contributors as we deepen our knowledge and experiences together.

Our goals go beyond code contributions. Commons is a place for companies using OpenShift to accelerate its success and adoption. To do this we'll act as resources for each other, share best practices and provide a forum for peer-to-peer communication.

Join Now
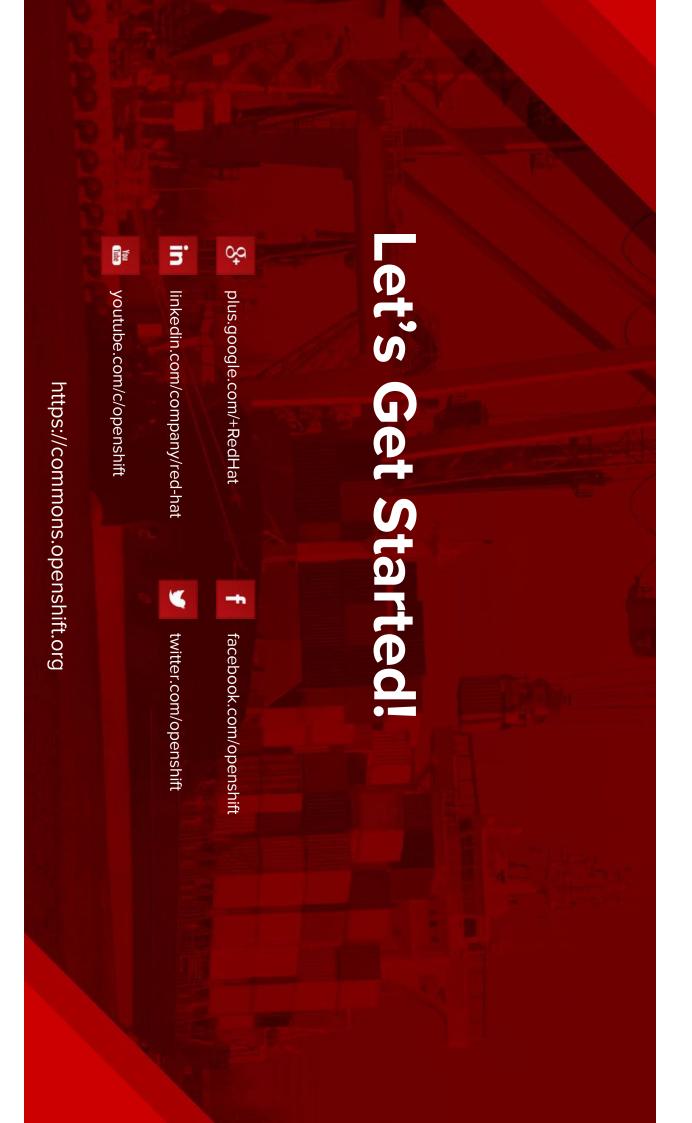
★ First name

★ Last name

★ Work email

★ Company

Privacy Statement

SUBMIT

https://commons.openshift.org/#join

redhat.

Let's Get Started!

plus.google.com/+RedHat

linkedin.com/company/red-hat

youtube.com/c/openshift

facebook.com/openshift

twitter.com/openshift

https://commons.openshift.org

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COMMUNITY

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