



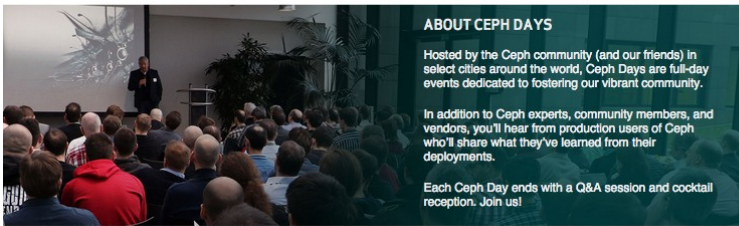
Community Update
Ceph Day Shanghai 2015

CEPH DAYS



TRANSFORM STORAGE IN PERSON

Join the expert team at Inktank, our customers and partners, and the Ceph community as we discuss how Ceph, the massively scalable, open source, software-defined storage system, can radically improve the economics and management of data storage for your enterprise.



ABOUT CEPH DAYS

Hosted by the Ceph community (and our friends) in select cities around the world, Ceph Days are full-day events dedicated to fostering our vibrant community.

In addition to Ceph experts, community members, and vendors, you'll hear from production users of Ceph who'll share what they've learned from their deployments.

Each Ceph Day ends with a Q&A session and cocktail reception. Join us!

UPCOMING EVENTS

CEPH DAY PARIS Le Comptoir General Ghetto Museum Paris, France	September 18, 2014	View details »
CEPH DAY SAN JOSE Brocade Communication Systems Headquarters San Jose, CA	September 24, 2014	View details »
CEPH DAY NYC Humphrey at the Event Hotel New York, NY	October 8, 2014	View details »
CEPH DAY LONDON etc.Venues St. Paul's London, UK	October 22, 2014	View details »

- You're here!
- Turning up the heat
- 100% Community-focused
- Upcoming
 - Tokyo
 - Melbourne
- Beginning 2016 planning
- Volunteer to host!



Ceph Hackathon

- Hosted by Intel in Hillsboro, OR
- 10-13 Aug
- ~20 people
- Design discussions
 - http://pad.ceph.com/p/hackathon_2015-08

METRICS

- Bitergia Platform
- Ceph-brag
- Community-driven
- Good growth
- Code/Tracker/IRC/Lists
- Continuing to evolve



ceph

All history ▾

Project Overview

53,913 commits

338 developers

11,812 tickets

33,556 mail messages

Code Developers

338

Core	Regular	Casual
12	18	306

Commits



Authors



Ticket Participants

564

Fixers	Submitters
52	440

Closed



Closers

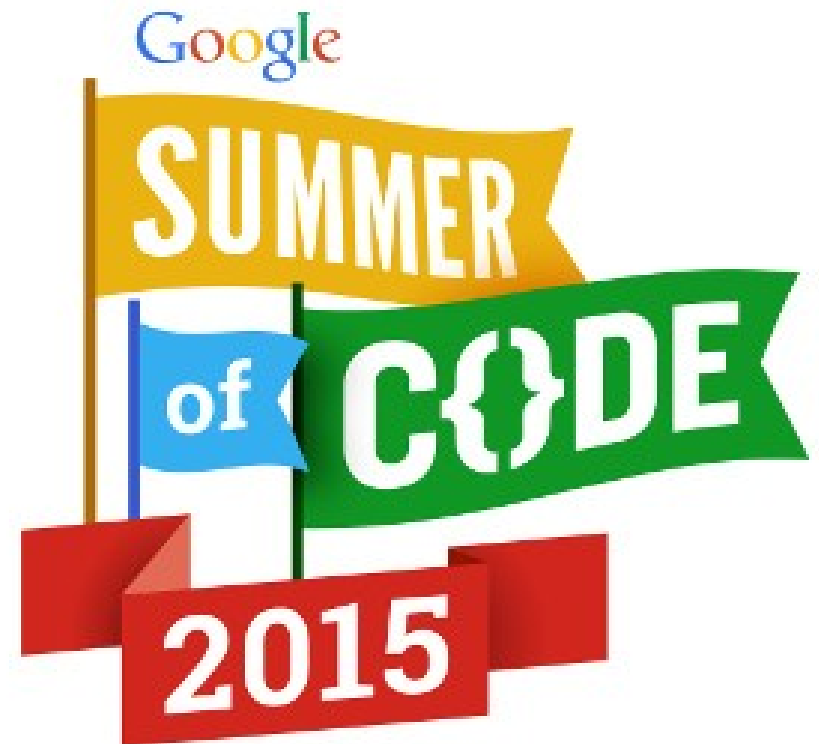


USER COMMITTEE

- Started after Dumpling
- Current chair: Wido den Hollander
- Periodic meetings to discuss community matters
- Most recently:
 - Release cadence
 - Contributor credits
 - Global mirror network
- First steps towards broader governance

Google Summer of Code

- Ceph project's second year
- Just completed
- 6 slots, used 4
- Last year
 - Wireshark
 - Reliability Model
- Work published on Ceph wiki
- Outreachy too
- Get involved!



CentOS Storage SIG



- Creating a collection of packages
- <http://wiki.centos.org/SpecialInterestGroup/Storage/Proposal>
- Easier to deploy CentOS as a storage node
- Early days
- Packages for Ceph & Gluster
- New package maintainer

GOVERNANCE



We haven't forgotten about you!

Ceph Tech Talks

- Monthly technical presentation about Ceph
- 4th Thursday of the month
- Online via BlueJeans tool
- <http://ceph.com/ceph-tech-talks/>
- We welcome any community member who would like to present

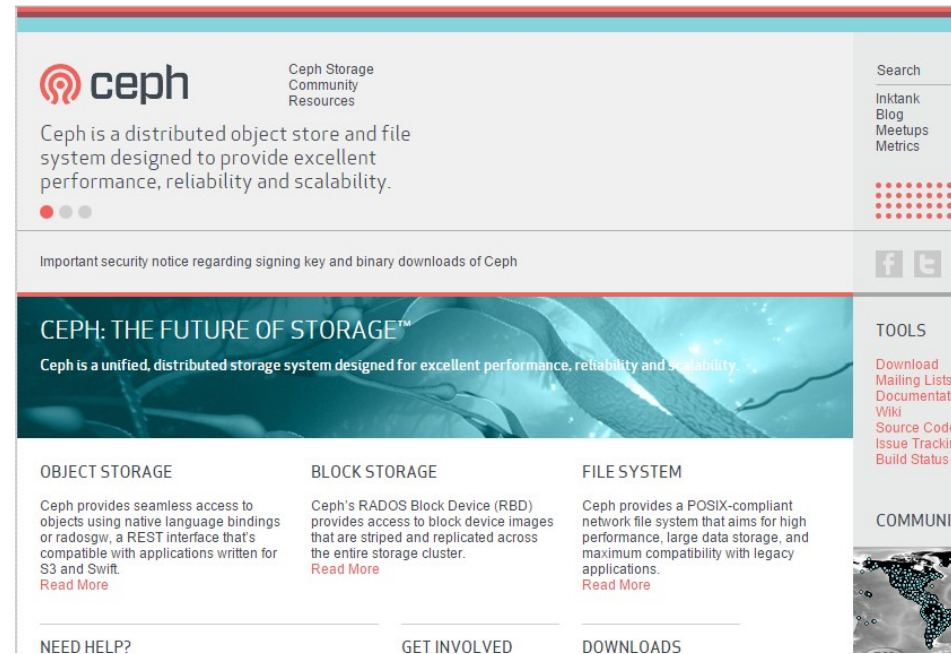
CEPH DEVELOPER SUMMIT

- “Quarterly” developer summit
- 100% online (Blue Jeans / IRC)
- Jewel summit most recent
- Videos on Ceph YouTube channel
 - <https://goo.gl/7Eig8A>
- Next up: “K”



CEPH.COM

- New host due to security breach
- Some things didn't port over well
- Designing new update
- Will solicit community feedback
- Stay tuned to lists!



The screenshot shows the Ceph website homepage. At the top, the Ceph logo is on the left, and 'Ceph Storage Community Resources' is on the right. Below the logo, a description states: 'Ceph is a distributed object store and file system designed to provide excellent performance, reliability and scalability.' A search bar is in the top right corner. A red banner below the header contains the text 'Important security notice regarding signing key and binary downloads of Ceph'. The main content area features a large blue banner with the text 'CEPH: THE FUTURE OF STORAGE™' and 'Ceph is a unified, distributed storage system designed for excellent performance, reliability and scalability.' Below this banner, there are three columns: 'OBJECT STORAGE', 'BLOCK STORAGE', and 'FILE SYSTEM', each with a brief description and a 'Read More' link. At the bottom, there are three links: 'NEED HELP?', 'GET INVOLVED', and 'DOWNLOADS'. On the right side, there is a 'TOOLS' section with links to 'Download', 'Mailing Lists', 'Documentation', 'Wiki', 'Source Code', 'Issue Tracking', and 'Build Status'. Below the 'TOOLS' section is a 'COMMUNITY' section with a map of the world.

ceph Ceph Storage Community Resources

Ceph is a distributed object store and file system designed to provide excellent performance, reliability and scalability.

Important security notice regarding signing key and binary downloads of Ceph

CEPH: THE FUTURE OF STORAGE™

Ceph is a unified, distributed storage system designed for excellent performance, reliability and scalability.

OBJECT STORAGE

Ceph provides seamless access to objects using native language bindings or radosgw, a REST interface that's compatible with applications written for S3 and Swift. [Read More](#)

BLOCK STORAGE

Ceph's RADOS Block Device (RBD) provides access to block device images that are striped and replicated across the entire storage cluster. [Read More](#)

FILE SYSTEM

Ceph provides a POSIX-compliant network file system that aims for high performance, large data storage, and maximum compatibility with legacy applications. [Read More](#)

NEED HELP? GET INVOLVED DOWNLOADS

TOOLS

[Download](#)
[Mailing Lists](#)
[Documentation](#)
[Wiki](#)
[Source Code](#)
[Issue Tracking](#)
[Build Status](#)

COMMUNITY

librados

- Many more deployments/apps using direct librados
- Native library for accessing RADOS
 - Librados.so shared library
 - C, C++, Python, Erlang, Haskell, PHP, Java (JNA)
- Direct data path to storage nodes
 - Speaks native Ceph protocol with cluster
- Exposes
 - Mutable objects
 - Rich per-object API and data model
- Hides
 - Data distribution, migration, replication, failures

Object Classes

- Making your intelligent nodes, intelligent-er!
- Allows you to dynamically extend objects in RADOS
- Examples
 - MD5 hash
 - Image thumbnail service
 - Log post-processing
 - Whatever you build!
- Uses LUA
- Ask Noah!

CephFS

- Lots of hard work!
- Dogfooding
- Code
 - Src/mds: 366 commits, 19,417 lines added/removed
 - Src/client: 131 commits, 4289 lines
 - Src/tools/cephfs: 41 commits, 4179 lines
 - Ceph-qa-suite: 4842 added lines of FS-related python
- Tracker
 - 108 FS tickets resolved since Firefly (of which 97 were created since Firefly)
 - 83 ticket currently open for FS, of which 35 were created since Firefly
 - 31 feature tickets resolved

DEPLOYMENT / ORCHESTRATION

- Ceph-deploy in a good place to start
- Puppet (ruby, largest mindshare -- devops)
- Chef (git, ruby -- devops)
- Ansible (python, fast -- sysadmins)
- Salt (python, yaml, scalable – sysadmins)
- Juju (any language, yaml – simple)
- Crowbar (started for Dell OpenStack, now FOSS)

TESTING

- Teuthology! – a whole project just to test ceph!
- Ceph core lab (Sepia)
 - Old Dell machines
 - Old hardware
 - New Intel donated cluster
- Ceph community lab (coming soon-ish)
 - Seamicro boxes that fell over
 - Shopping for something new
- OpenStack integration
 - <http://dachary.org/?p=3828>

THANK YOU!

Sam Just
Developer



[sjust@
redhat.com](mailto:sjust@redhat.com)

