ceph

Ceph User Survey 2019

General

*Organization type

○ Commercial   ○ Government   ○ Military

○ Academic   ○ Non-profit   ○ Personal

○ Other (Please specify)

[   ]

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*Why use Ceph?

☐ Open source   ☐ Scalability   ☐ Cost

☐ Feature set   ☐ Security   ☐ High availability

☐ Data durability /   ☐ Performance   ☐ Integration with
  reliability / integrity   adjacent technologies

☐ Other (Please specify)

[   ]

How long have you been using Ceph?

○ Less than 1 year   ○ Between 1-2 years   ○ Between 2-5 years

○ More than 5 years   ○ I don't use Ceph yet

*Rank the order of resources you check first if you need help (1 being the highest priority)

	Ceph documentation
	Ceph-users mailing list
	IRC
	Slack
	Commercial provider
	Meet-up or other local groups

*Rank where the Ceph community should focus its efforts (1 being the highest priority)

	Reliability
	Interoperability
	Management and ease of use
	Automated setup and lifecycle management
	Performance
	Scalability
	Monitoring
	Security
	Centralized configuration
	Documentation

*Is telemetry enabled in your cluster?

( ) Yes   ( ) No   ( ) Partially

Why do you not have telemetry enabled?

[ ] Not available in current Ceph version

[ ] Data privacy requirements

[ ] Support for: firewalled / airgapped / non-online envrionment

[ ] Didn't know this feature existed

[ ] Other (Please specify)

[   ]

*How do you participate in the Ceph community?

[ ] IRC / Slack / etc

[ ] Mailing list

[ ] Reporting issues via the bug tracker

[ ] Contributing code

[ ] Contributing / enchancing documentation

[ ] Ceph events (attendee)

[ ] Ceph events (organizer)

[ ] Ceph events (presenter)

[ ] Member of the Ceph Foundation

[ ] Other (Please specify)

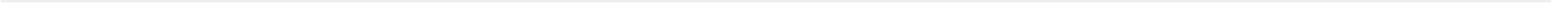[   ]

*How likely are you to recommend Ceph to a colleague?

unlikely   likely

0	1	2	3	4	5	6	7	8	9	10

Please share the top reason for picking the previous answer (optional)

What countries are your deployments in.

- [ ] Afghanistan
- [ ] Albania
- [ ] Algeria
- [ ] Andorra
- [ ] Angola
- [ ] Antigua & Deps
- [ ] Argentina
- [ ] Armenia
- [ ] Australia
- [ ] Austria
- [ ] Azerbaijan
- [ ] Bahamas
- [ ] Bahrain
- [ ] Bangladesh
- [ ] Barbados
- [ ] Belarus
- [ ] Belgium
- [ ] Belize
- [ ] Benin
- [ ] Bhutan
- [ ] Bolivia
- [ ] Bosnia Herzegovina
- [ ] Botswana
- [ ] Brazil
- [ ] Brunei
- [ ] Bulgaria
- [ ] Burkina
- [ ] Burundi
- [ ] Cambodia
- [ ] Cameroon
- [ ] Canada
- [ ] Cape Verde
- [ ] Central African Rep
- [ ] Chad
- [ ] Chile
- [ ] China
- [ ] Colombia
- [ ] Comoros
- [ ] Congo
- [ ] Congo {Democratic Rep}
- [ ] Costa Rica
- [ ] Croatia
- [ ] Cuba
- [ ] Cyprus
- [ ] Czech Republic
- [ ] Denmark
- [ ] Djibouti
- [ ] Dominica
- [ ] Dominican Republic
- [ ] East Timor
- [ ] Ecuador
- [ ] Egypt
- [ ] El Salvador
- [ ] Equatorial Guinea
- [ ] Eritrea
- [ ] Estonia
- [ ] Ethiopia
- [ ] Fiji
- [ ] Finland
- [ ] France
- [ ] Gabon
- [ ] Gambia
- [ ] Georgia
- [ ] Germany
- [ ] Ghana
- [ ] Greece
- [ ] Grenada
- [ ] Guatemala
- [ ] Guinea
- [ ] Guinea-Bissau
- [ ] Guyana
- [ ] Haiti
- [ ] Honduras
- [ ] Hungary
- [ ] Iceland
- [ ] India
- [ ] Indonesia
- [ ] Iran
- [ ] Iraq
- [ ] Ireland {Republic}
- [ ] Israel
- [ ] Italy
- [ ] Ivory Coast
- [ ] Jamaica
- [ ] Japan
- [ ] Jordan
- [ ] Kazakhstan

☐ Kenya	☐ Kiribati	☐ Korea North
☐ Korea South	☐ Kosovo	☐ Kuwait
☐ Kyrgyzstan	☐ Laos	☐ Latvia
☐ Lebanon	☐ Lesotho	☐ Liberia
☐ Libya	☐ Liechtenstein	☐ Lithuania
☐ Luxembourg	☐ Macedonia	☐ Madagascar
☐ Malawi	☐ Malaysia	☐ Maldives
☐ Mali	☐ Malta	☐ Marshall Islands
☐ Mauritania	☐ Mauritius	☐ Mexico
☐ Micronesia	☐ Moldova	☐ Monaco
☐ Mongolia	☐ Montenegro	☐ Morocco
☐ Mozambique	☐ Myanmar, {Burma}	☐ Namibia
☐ Nauru	☐ Nepal	☐ Netherlands
☐ New Zealand	☐ Nicaragua	☐ Niger
☐ Nigeria	☐ Norway	☐ Oman
☐ Pakistan	☐ Palau	☐ Panama
☐ Papua New Guinea	☐ Paraguay	☐ Peru
☐ Philippines	☐ Poland	☐ Portugal
☐ Qatar	☐ Romania	☐ Russian Federation
☐ Rwanda	☐ St Kitts & Nevis	☐ St Lucia
☐ Saint Vincent & the Grenadines	☐ Samoa	☐ San Marino
☐ Sao Tome & Principe	☐ Saudi Arabia	☐ Senegal
☐ Serbia	☐ Seychelles	☐ Sierra Leone
☐ Singapore	☐ Slovakia	☐ Slovenia
☐ Solomon Islands	☐ Somalia	☐ South Africa
☐ South Sudan	☐ Spain	☐ Sri Lanka
☐ Sudan	☐ Suriname	☐ Swaziland
☐ Sweden	☐ Switzerland	☐ Syria
☐ Taiwan	☐ Tajikistan	☐ Tanzania
☐ Thailand	☐ Togo	☐ Tonga

- [ ] Trinidad & Tobago
- [ ] Tunisia
- [ ] Turkey
- [ ] Turkmenistan
- [ ] Tuvalu
- [ ] Uganda
- [ ] Ukraine
- [ ] United Arab Emirates
- [ ] United Kingdom
- [ ] United States
- [ ] Uruguay
- [ ] Uzbekistan
- [ ] Vanuatu
- [ ] Vatican City
- [ ] Venezuela
- [ ] Vietnam
- [ ] Yemen
- [ ] Zambia
- [ ] Zimbabwe

General Cluster Questions

*How many clusters does this information represent?

[   ]

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*Largest cluster capacity in TB

[   ]

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*Total raw capacity

[   ]

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*Total usable capacity

[   ]

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*Which Ceph releases do you run?

☐ Nautilus	☐ Mimic	☐ Luminous
☐ Kraken	☐ Jewel	☐ Infernalis
☐ Hammer	☐ Giant	☐ Firefly
☐ Dumpling	☐ Cuttlefish	☐ Bobtail
☐ Argonaut	☐ Master	

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*Which Ceph packages do you use?

| ☐ Upstream packages | ☐ Distribution packages | ☐ Vendor packages |
| ☐ We build our own packages | ☐ We built a custom version | |

*What operating system are you using on the cluster nodes?

☐ Ubuntu

☐ Debian

☐ CentOS

☐ Red Hat Enterprise Linux

☐ SUSE Linux Enterprise Server

☐ openSUSE

☐ Oracle Linux

☐ Arch Linux

☐ FreeBSD/OpenBSD/Net BSD

☐ Solaris, IllumOS or other OpenSolaris derivatives

☐ Gentoo Linux

☐ Other (Please specify)

_____

*Do you use cache tiering?

○ I don't know what that is

○ No

○ Yes, in front of EC pools for functionality

○ Yes, for performance reasons

*How soon do you apply dot/minor releases to your cluster?

○ Within the week

○ Within a month

○ Longer

*Why?

☐ Concerns about regression

☐ Concerns about new functionality

☐ Too frequent updates

☐ Patching only as needed to address encountered

☐ Effort of update installation

☐ Other (Please specify)

_____

*How soon do you perform major version upgrades?

○ Within a month   ○ Within half a year   ○ Within a year

○ Longer   ○ Never (clusters remain on major release they were deployed with)

*Why?

☐ Concerns about stability   ☐ Concerns about performance regressions   ☐ Effort of upgrade

☐ Changed user experience due to new features

☐ Other (Please specify)

[   ]

*What Ceph Manager modules do you enable?

☐ balancer   ☐ crash   ☐ devicehealth

☐ diskprediction   ☐ iostat   ☐ pg_autoscaler

☐ restful   ☐ I don't know   ☐ Not applicable

☐ Other (Please specify)

[   ]

*Which messenger type is in use?

○ TCP-Posix (default)   ○ DPDK   ○ RDMA

Hardware

*What hardware vendors do you use for the nodes?

- [ ] IBM
- [ ] Lenovo
- [ ] Dell
- [ ] HPE
- [ ] Supermicro
- [ ] QCT
- [ ] Cisco
- [ ] Fujitsu
- [ ] Huawei
- [ ] Raspberry Pi Foundation
- [ ] Prefer not to say
- [ ] Other (Please specify)

[   ]

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*What processor architecture do you use?

- [ ] x86_64
- [ ] ARM
- [ ] Power
- [ ] Other (Please specify)

[   ]

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*Which type of storage devices are used?

- [ ] HDD (SATA, SAS)
- [ ] SSD (SATA, SAS)
- [ ] NVMe
- [ ] MicroSD card

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*Which OSD layout features do you use?

- [ ] LVM (ceph-volume)
- [ ] Partitions
- [ ] Encryption
- [ ] lvm/dm-cache/bcache/iCAS
- [ ] Seperate journal device (FileStore)
- [ ] Separation between RocksDB/WAL and Data device
- [ ] All-in-one OSD

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*Do you use a dedicated network for the OSDs

- ( ) Yes
- ( ) No

*IP protocol usage

○ IPv4 only   ○ IPv6 only   ○ Dual stack

Platforms and Interface Questions

*What platforms do you use Ceph with?

☐ OpenStack ☐ Cloudstack ☐ Eucalyptus

☐ OpenNebula ☐ Kubernetes ☐ VMware

☐ Windows ☐ Hyper-v ☐ Proxmox

☐ KVM ☐ Xen ☐ RBD directly on Linux systems

☐ Other (Please specify)

_____

*Do you use the Rados Block Device (RBD) interface in your Ceph cluster?

○ Yes ○ No

*Do you use the Rados Gateway (RGW) interface in your Ceph cluster?

○ Yes ○ No

*Do you use the Ceph Filesystem interface in your Ceph cluster?

○ Yes ○ No

RADOS Block Device (RBD)

Environment status

○ Test/POC   ○ Development   ○ Staging

○ Production

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*What are the use cases?

☐ HPC   ☐ Virtualization   ☐ Scratch

☐ CDN   ☐ Cloud   ☐ Home directories

☐ Build   ☐ Backups   ☐ Big data and analytics

☐ Containers   ☐ Archive Storage   ☐ Logs

☐ Internet of things

Are you using RBD asynchronous mirroring for Disaster Recovery / Multi-site?

○ Yes   ○ No   ○ Not needed

○ Incompatible with my   ○ Not compatible with my
  performance   RBD feature
  requirements   requirements

Clients accessing Ceph's block storage

☐ librbd   ☐ Linux kernel RBD   ☐ iSCSI (tcmu-runner)

☐ iSCSI (LIO with /dev/rbd)

☐ Other (Please specify)

```
                                    
```

Do you use snapshots?

○ Yes

○ No (Please specify why not)

[   ]

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*Do you use the Rados Gateway (RGW) interface in your Ceph cluster?

○ Yes   ○ No

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*Do you use the Ceph Filesystem interface in your Ceph cluster?

○ Yes   ○ No

Rados Gateway (RGW)

Environment status

○ Test/POC   ○ Development   ○ Staging

○ Production

Workloads

☐ Archive   ☐ Backup   ☐ Big data and analytics

☐ Other (Please specify)

RGW APIs used

☐ S3   ☐ Swift   ☐ RGW admin API

☐ NFS re-export of S3 buckets

RGW client-side libraries used

☐ Amazon SDK   ☐ Boto   ☐ Boto3

☐ None

☐ Other (Please specify)

RGW authentication mechanism

☐ RGW (built-in)   ☐ Keystone   ☐ LDAP

☐ Other

☐ Other (Please specify)

RGW external load balancers used

☐ HAproxy   ☐ Nginx   ☐ Dedicated custom hardware

☐ None

☐ Other (Please specify)

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*Number of RGW federated multi-sites?

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*Do you use the Ceph Filesystem interface in your Ceph cluster?

○ Yes   ○ No

CephFS

Workloads

- [ ] Backup
- [ ] Build
- [ ] Big data (Hadoop, Spark)
- [ ] Static archive
- [ ] Home directories
- [ ] OpenStack Manila
- [ ] Media/streaming
- [ ] HPC
- [ ] General purpose NAS
- [ ] Other (Please specify)

Environment status

- ( ) Test/POC
- ( ) Production
- ( ) Development
- ( ) Staging

Interfaces to access CephFS

- [ ] Linux kernel CephFS mount
- [ ] NFS (nfs-ganesha)
- [ ] ceph-fuse
- [ ] NFS (Kernel NFS server)
- [ ] libcephfs
- [ ] CIFS (samba)

Typical number of file system clients (for largest cluster, if multiple clusters)

- ( ) 1 - 5
- ( ) 101 - 500
- ( ) 6 - 50
- ( ) 501 - 2500
- ( ) 51 - 100
- ( ) 2500+

Number of files (getfattr -d -m ceph.dir.rfiles /mnt/cephfs) (for largest cluster, if multiple clusters)

- ( ) >1k or less
- ( ) >10k
- ( ) >100k
- ( ) >1M
- ( ) >100M
- ( ) >1G
- ( ) >10+

MDS cache size (for largest cluster, if multiple clusters)

- ( ) 1G
- ( ) 2G - 3G
- ( ) 4G - 15G
- ( ) 16G - 31G
- ( ) 32G - 64G
- ( ) 65G - 127G
- ( ) 128G+

Number of active MDS (for largest cluster, if multiple clusters)

[   ]

Do you use subtree pinning?

- ( ) Yes
- ( ) No
- ( ) Unknown
- ( ) Not applicable

Do you use snapshots?

- ( ) Yes
- ( ) No (Please specify)

  [   ]

Management and Operation

Management and monitoring tools

- [ ] Ceph Dashboard
- [ ] Calamari
- [ ] Ceph-Dash
- [ ] croit
- [ ] Inkscope
- [ ] Intel VSM
- [ ] openATTIC
- [ ] Proxmox
- [ ] InfluxDB
- [ ] Prometheus
- [ ] Ceph-metrics
- [ ] Grafana (custom)
- [ ] Zabbix
- [ ] Nagios/icinga
- [ ] Graphite
- [ ] Collectd
- [ ] Performance co-pilot
- [ ] Other (Please specify)

Deployment and configuration

- [ ] Ansible
- [ ] Chef
- [ ] Juju
- [ ] Puppet
- [ ] Salt / DeepSea
- [ ] ceph-deploy
- [ ] Rook
- [ ] croit
- [ ] Other (Please specify)

Ceph Dashboard

How likely are you to recommend the Ceph Dashboard to a colleague?

Unlikely   Likely

0	1	2	3	4	5	6	7	8	9	10

Does the dashboard help you to perform tasks better/faster than using the CLI?

◯ Yes

◯ No (Please specify)

Rank how often you use certain feature-sets (1 being frequently)

	Landing page (at a glance monitoring)
	Display cluster logs
	MON status page
	OSD management
	Pools management
	RBD management
	iSCSI target management
	NFS Ganesha management
	CephFS management
	RGW management
	View embedded Grafana dashboards

What functionality do you miss most in the dashboard?