



Ceph User Survey 2021

245

Total Responses

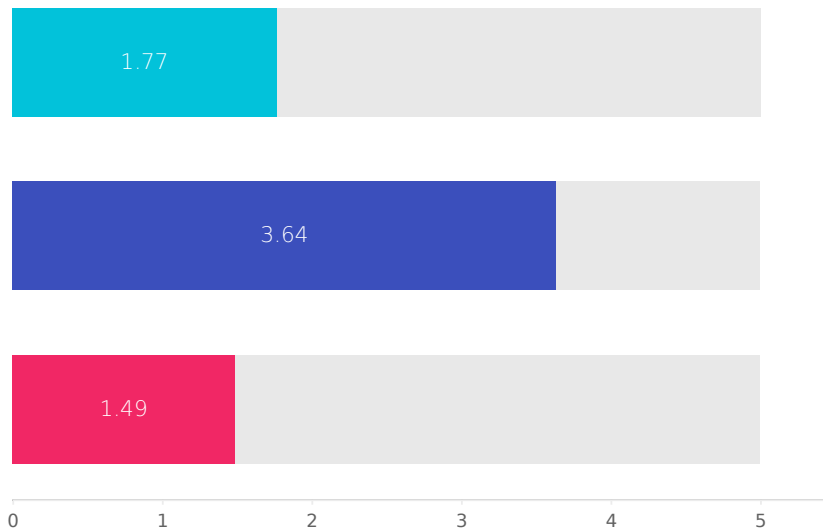
190 Completed Responses

55 Partial Responses

322

Survey Visits

Average Ratings



● Which resources do you check when you need help?

● Where should the Ceph community focus its efforts?

● How often do you use certain dashboard features?

Questions	Average Ratings	Out of
Which resources do you check when you need help?	1.77	5
Where should the Ceph community focus its efforts?	3.64	5
How often do you use certain dashboard features?	1.49	5

Overall average survey rating: 4.65/10

General

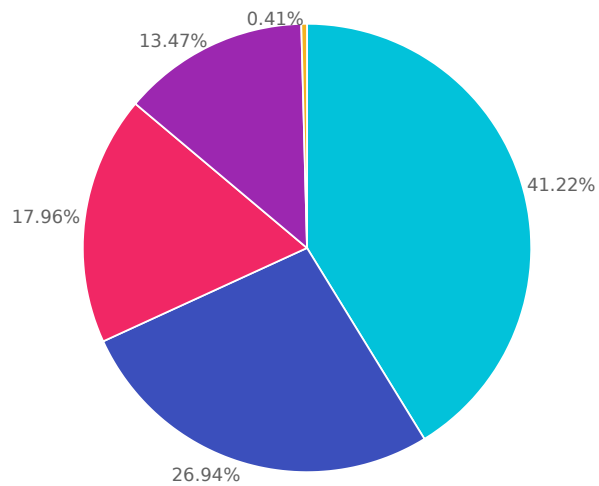
Ceph User Survey 2021

Q1

How long have you been using Ceph?

Answered: 245 Skipped: 0

- Between 2-5 years
- More than 5 years
- Less than 1 year
- Between 1-2 years
- I don't use Ceph yet

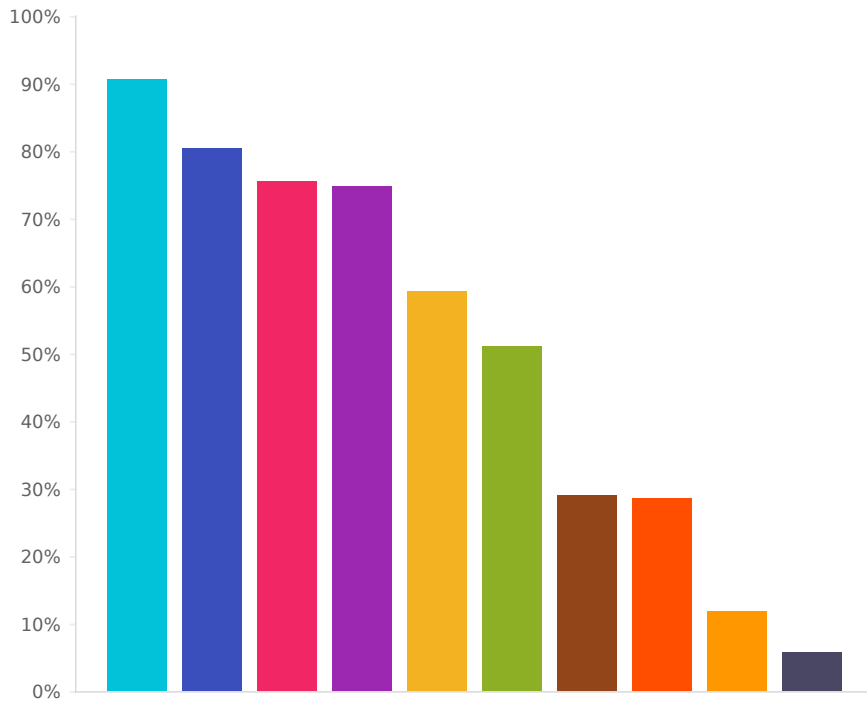


Choices	Response percent	Response count
Between 2-5 years	41.22%	101
More than 5 years	26.94%	66
Less than 1 year	17.96%	44
Between 1-2 years	13.47%	33
I don't use Ceph yet	0.41%	1

Q2

Why do you use Ceph?

Answered: 245 Skipped: 0



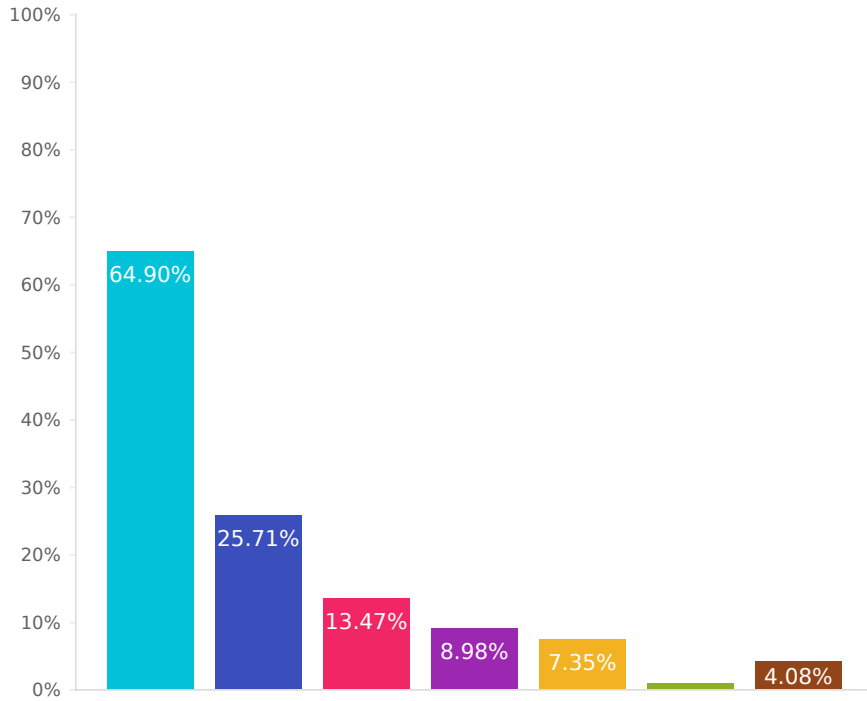
- Open source
- Scalability
- High availability
- Data durability / reliability / integrity
- Cost
- Feature set
- Integration with adjacent technologies
- Performance
- Security
- Other (Please specify)

Choices	Response percent	Response count
Open source	90.61%	222
Scalability	80.41%	197
High availability	75.51%	185
Data durability / reliability / integrity	74.69%	183
Cost	59.18%	145
Feature set	51.02%	125
Integration with adjacent technologies	28.98%	71
Performance	28.57%	70
Security	11.84%	29
Other (Please specify)	5.71%	14

Q3

Sector(s) of your organization?

Answered: 245 Skipped: 0



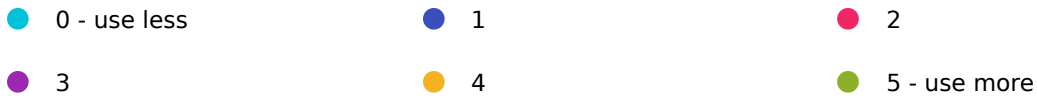
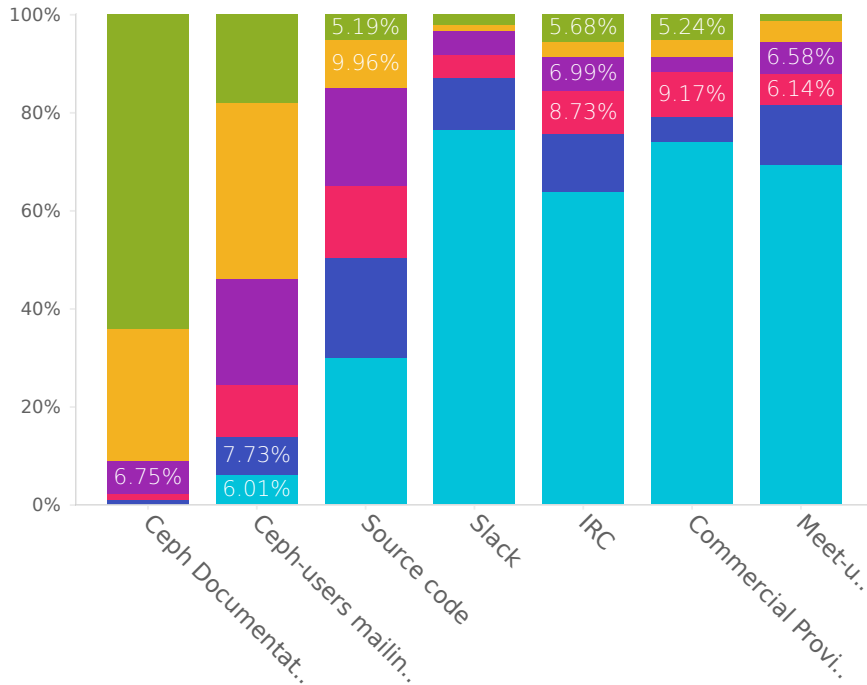
- Commercial
- Academic
- Personal
- Non-profit
- Government
- Military
- Other (Please specify)

Choices	Response percent	Response count
Commercial	64.90%	159
Academic	25.71%	63
Personal	13.47%	33
Non-profit	8.98%	22
Government	7.35%	18
Military	0.82%	2
Other (Please specify)	4.08%	10

Q4

Which resources do you check when you need help?

Answered: 237 Skipped: 8



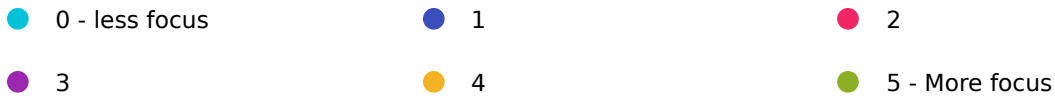
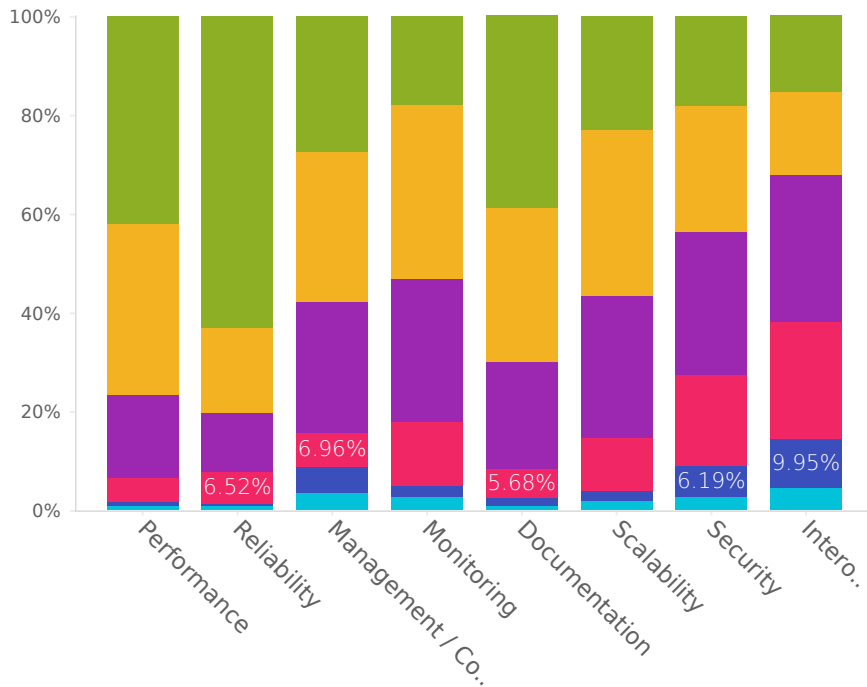
Row	0 - use less (Do not use)	1	2	3	4	5 - use more (Primary source)	Average rating	Response count
Ceph Documentation	0.00% (0)	0.84% (2)	1.27% (3)	6.75% (16)	27.00% (64)	64.14% (152)	4.52	237
Ceph-users mailing list	6.01% (14)	7.73% (18)	10.73% (25)	21.46% (50)	36.05% (84)	18.03% (42)	3.28	233
Source code	29.87% (69)	20.35% (47)	14.72% (34)	19.91% (46)	9.96% (23)	5.19% (12)	1.75	231
Slack	76.42% (175)	10.48% (24)	4.80% (11)	4.80% (11)	1.31% (3)	2.18% (5)	0.51	229
IRC	63.76% (146)	11.79% (27)	8.73% (20)	6.99% (16)	3.06% (7)	5.68% (13)	0.91	229
Commercial Provider	73.80% (169)	5.24% (12)	9.17% (21)	3.06% (7)	3.49% (8)	5.24% (12)	0.73	229
Meet-up or other local groups	69.30% (158)	12.28% (28)	6.14% (14)	6.58% (15)	4.39% (10)	1.32% (3)	0.68	228
Additional Resource								28

Average rating: 1.77

Q5

Where should the Ceph community focus its efforts?

Answered: 236 Skipped: 9

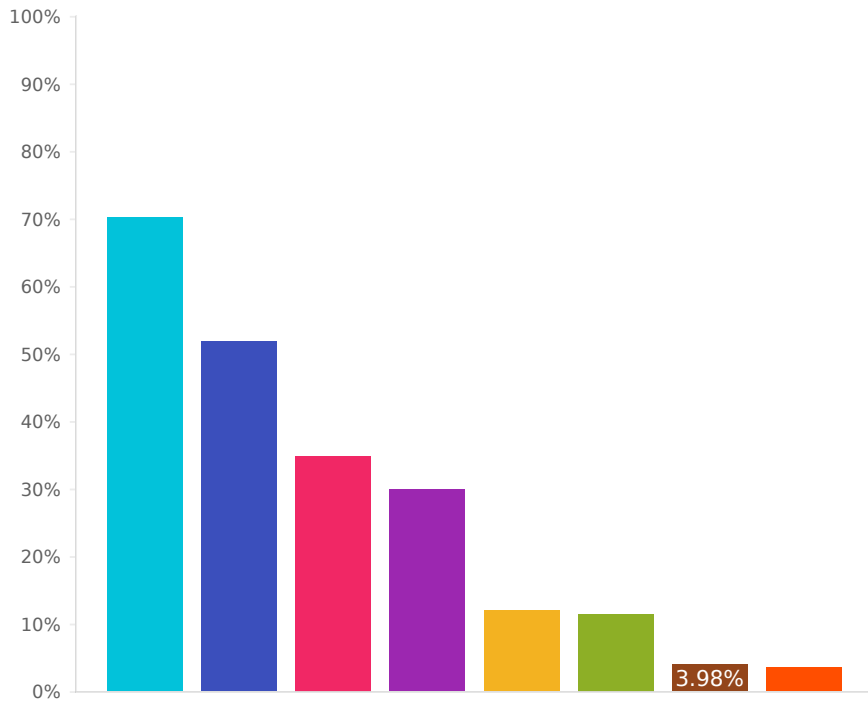


Row	0 - less focus (Not important)	1	2	3	4	5 - More focus (Very important)	Average rating	Response count
Performance	0.87% (2)	0.87% (2)	4.76% (11)	16.88% (39)	34.63% (80)	41.99% (97)	4.1	231
Reliability	0.87% (2)	0.43% (1)	6.52% (15)	11.74% (27)	17.39% (40)	63.04% (145)	4.33	230
Management / Configuration	3.48% (8)	5.22% (12)	6.96% (16)	26.52% (61)	30.43% (70)	27.39% (63)	3.57	230
Monitoring	2.62% (6)	2.18% (5)	13.10% (30)	28.82% (66)	35.37% (81)	17.90% (41)	3.46	229
Documentation	0.87% (2)	1.75% (4)	5.68% (13)	21.83% (50)	31.00% (71)	38.86% (89)	3.97	229
Scalability	1.77% (4)	2.21% (5)	10.62% (24)	28.76% (65)	33.63% (76)	23.01% (52)	3.59	226
Security	2.65% (6)	6.19% (14)	18.58% (42)	28.76% (65)	25.66% (58)	18.14% (41)	3.23	226
Interoperability	4.52% (10)	9.95% (22)	23.53% (52)	29.86% (66)	16.74% (37)	15.38% (34)	2.9	221

Average rating: 3.64

How do you participate in the Ceph community?

Answered: 201 Skipped: 44



- Mailing list
- Reporting issues via the bug tracker
- IRC / Slack / etc
- Ceph events / conferences
- Contributing code
- Contributing / enhancing documentation
- Member of the Ceph Foundation
- Other (Please specify)

Choices	Response percent	Response count
Mailing list	70.15%	141
Reporting issues via the bug tracker	51.74%	104
IRC / Slack / etc	34.83%	70
Ceph events / conferences	29.85%	60
Contributing code	11.94%	24
Contributing / enhancing documentation	11.44%	23
Member of the Ceph Foundation	3.98%	8
Other (Please specify)	3.48%	7

Q7

How likely are you to recommend Ceph to a colleague?

Answered: 245 Skipped: 0



Q8

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

Answered: 103 Skipped: 142

Q9

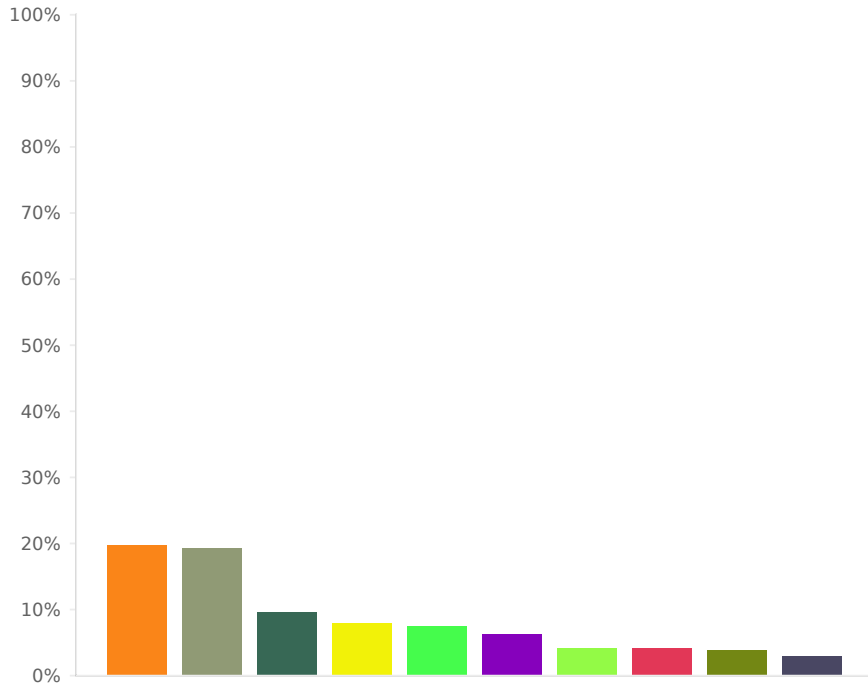
Top 3 wishlist features (add each on a separate line, optional)

Answered: 118 Skipped: 127

Q10

What countries are your deployments in?

Answered: 245 Skipped: 0



- United States
- Germany
- Netherlands
- France
- United Kingdom
- Russian Federation
- Poland
- That would be Telling :p
- Sweden
- Canada
- Spain
- Afghanistan
- China
- Norway
- Switzerland
- Austria
- Czech Republic
- Denmark
- Finland
- India
- Japan
- Singapore
- Italy
- New Zealand
- Indonesia
- South Africa
- Australia
- Belgium
- Croatia
- Estonia
- Hungary
- Iceland
- Korea South
- Lithuania
- Romania
- Slovakia
- Turkey
- Ukraine
- Algeria
- Andorra
- Argentina
- Brazil
- Faroe Islands
- Georgia
- Greece
- Ireland {Republic}
- Latvia
- Luxembourg
- Macedonia
- Montenegro
- Narnia

 Taiwan	 United Arab Emirates	 Vietnam
 Zimbabwe	 Albania	 Angola
 Antigua & Deps	 Armenia	 Azerbaijan
 Bahamas	 Bahrain	 Bangladesh
 Barbados	 Belarus	 Belize
 Benin	 Bhutan	 Bolivia
 Bosnia Herzegovina	 Botswana	 Brunei
 Bulgaria	 Burkina Faso	 Burundi
 Cambodia	 Cameroon	 Cape Verde
 Central African Rep	 Chad	 Chile
 Colombia	 Comoros	 Congo
 Congo {Democratic Rep}	 Costa Rica	 Cuba
 Cyprus	 Djibouti	 Dominica
 Dominican Republic	 East Timor	 Ecuador
 Egypt	 El Salvador	 Equatorial Guinea
 Eritrea	 Ethiopia	 Fiji
 Gabon	 Gambia	 Ghana
 Grand Fenwick	 Grenada	 Guatemala
 Guinea	 Guinea-Bissau	 Guyana
 Haiti	 Honduras	 Iran
 Iraq	 Israel	 Ivory Coast
 Jamaica	 Jordan	 Kazakhstan
 Kenya	 Kiribati	 Korea North
 Kosovo	 Kuwait	 Kyrgyzstan
 Laos	 Lebanon	 Leng
 Lesotho	 Liberia	 Libya
 Liechtenstein	 Madagascar	 Malawi
 Malaysia	 Maldives	 Mali
 Malta	 Marshall Islands	 Mauritania
 Mauritius	 Mexico	 Micronesia
 Moldova	 Monaco	 Mongolia
 Morocco	 Mozambique	 Myanmar, {Burma}

- Namibia
- Nicaragua
- Oman
- Panama
- Peru
- Qatar
- St Lucia
- San Marino
- Senegal
- Sierra Leone
- Somalia
- Sudan
- Syria
- Thailand
- Trinidad & Tobago
- Tuvalu
- Uzbekistan
- Venezuela
- Zambia
- Nauru
- Niger
- Pakistan
- Papua New Guinea
- Philippines
- Rwanda
- St. Vincent & Grenadines
- Sao Tome & Principe
- Serbia
- Slovenia
- South Sudan
- Suriname
- Tajikistan
- Togo
- Tunisia
- Uganda
- Vanuatu
- Yemen
- Nepal
- Nigeria
- Palau
- Paraguay
- Portugal
- St Kitts & Nevis
- Samoa
- Saudi Arabia
- Seychelles
- Solomon Islands
- Sri Lanka
- Swaziland
- Tanzania
- Tonga
- Turkmenistan
- Uruguay
- Vatican City
- Yuggoth

Choices	Response percent	Response count
United States	19.59%	48
Germany	19.18%	47
Netherlands	9.39%	23
France	7.76%	19
United Kingdom	7.35%	18
Russian Federation	6.12%	15
Poland	4.08%	10
That would be Telling :p	4.08%	10
Sweden	3.67%	9
Canada	2.86%	7
Spain	2.86%	7
Afghanistan	2.45%	6
China	2.45%	6
Norway	2.45%	6
Switzerland	2.45%	6
Austria	2.04%	5
Czech Republic	2.04%	5
Denmark	2.04%	5
Finland	2.04%	5
India	2.04%	5
Japan	2.04%	5
Singapore	2.04%	5

Italy	1.63%	4
New Zealand	1.63%	4
Indonesia	1.22%	3
South Africa	1.22%	3
Australia	0.82%	2
Belgium	0.82%	2
Croatia	0.82%	2
Estonia	0.82%	2
Hungary	0.82%	2
Iceland	0.82%	2
Korea South	0.82%	2
Lithuania	0.82%	2
Romania	0.82%	2
Slovakia	0.82%	2
Turkey	0.82%	2
Ukraine	0.82%	2
Algeria	0.41%	1
Andorra	0.41%	1
Argentina	0.41%	1
Brazil	0.41%	1
Faroe Islands	0.41%	1
Georgia	0.41%	1
Greece	0.41%	1

Ireland {Republic}	0.41%	1
Latvia	0.41%	1
Luxembourg	0.41%	1
Macedonia	0.41%	1
Montenegro	0.41%	1
Narnia	0.41%	1
Taiwan	0.41%	1
United Arab Emirates	0.41%	1
Vietnam	0.41%	1
Zimbabwe	0.41%	1
Albania	0.00%	0
Angola	0.00%	0
Antigua & Deps	0.00%	0
Armenia	0.00%	0
Azerbaijan	0.00%	0
Bahamas	0.00%	0
Bahrain	0.00%	0
Bangladesh	0.00%	0
Barbados	0.00%	0
Belarus	0.00%	0
Belize	0.00%	0
Benin	0.00%	0

Bhutan	0.00%	0
Bolivia	0.00%	0
Bosnia Herzegovina	0.00%	0
Botswana	0.00%	0
Brunei	0.00%	0
Bulgaria	0.00%	0
Burkina Faso	0.00%	0
Burundi	0.00%	0
Cambodia	0.00%	0
Cameroon	0.00%	0
Cape Verde	0.00%	0
Central African Rep	0.00%	0
Chad	0.00%	0
Chile	0.00%	0
Colombia	0.00%	0
Comoros	0.00%	0
Congo	0.00%	0
Congo {Democratic Rep}	0.00%	0
Costa Rica	0.00%	0
Cuba	0.00%	0
Cyprus	0.00%	0
Djibouti	0.00%	0
Dominica	0.00%	0

Dominican Republic	0.00%	0
East Timor	0.00%	0
Ecuador	0.00%	0
Egypt	0.00%	0
El Salvador	0.00%	0
Equatorial Guinea	0.00%	0
Eritrea	0.00%	0
Ethiopia	0.00%	0
Fiji	0.00%	0
Gabon	0.00%	0
Gambia	0.00%	0
Ghana	0.00%	0
Grand Fenwick	0.00%	0
Grenada	0.00%	0
Guatemala	0.00%	0
Guinea	0.00%	0
Guinea-Bissau	0.00%	0
Guyana	0.00%	0
Haiti	0.00%	0
Honduras	0.00%	0
Iran	0.00%	0
Iraq	0.00%	0
Israel	0.00%	0

Ivory Coast	0.00%	0
Jamaica	0.00%	0
Jordan	0.00%	0
Kazakhstan	0.00%	0
Kenya	0.00%	0
Kiribati	0.00%	0
Korea North	0.00%	0
Kosovo	0.00%	0
Kuwait	0.00%	0
Kyrgyzstan	0.00%	0
Laos	0.00%	0
Lebanon	0.00%	0
Leng	0.00%	0
Lesotho	0.00%	0
Liberia	0.00%	0
Libya	0.00%	0
Liechtenstein	0.00%	0
Madagascar	0.00%	0
Malawi	0.00%	0
Malaysia	0.00%	0
Maldives	0.00%	0
Mali	0.00%	0
Malta	0.00%	0

Marshall Islands	0.00%	0
Mauritania	0.00%	0
Mauritius	0.00%	0
Mexico	0.00%	0
Micronesia	0.00%	0
Moldova	0.00%	0
Monaco	0.00%	0
Mongolia	0.00%	0
Morocco	0.00%	0
Mozambique	0.00%	0
Myanmar, {Burma}	0.00%	0
Namibia	0.00%	0
Nauru	0.00%	0
Nepal	0.00%	0
Nicaragua	0.00%	0
Niger	0.00%	0
Nigeria	0.00%	0
Oman	0.00%	0
Pakistan	0.00%	0
Palau	0.00%	0
Panama	0.00%	0
Papua New Guinea	0.00%	0

Paraguay	0.00%	0
Peru	0.00%	0
Philippines	0.00%	0
Portugal	0.00%	0
Qatar	0.00%	0
Rwanda	0.00%	0
St Kitts & Nevis	0.00%	0
St Lucia	0.00%	0
St. Vincent & Grenadines	0.00%	0
Samoa	0.00%	0
San Marino	0.00%	0
Sao Tome & Principe	0.00%	0
Saudi Arabia	0.00%	0
Senegal	0.00%	0
Serbia	0.00%	0
Seychelles	0.00%	0
Sierra Leone	0.00%	0
Slovenia	0.00%	0
Solomon Islands	0.00%	0
Somalia	0.00%	0
South Sudan	0.00%	0
Sri Lanka	0.00%	0
Sudan	0.00%	0

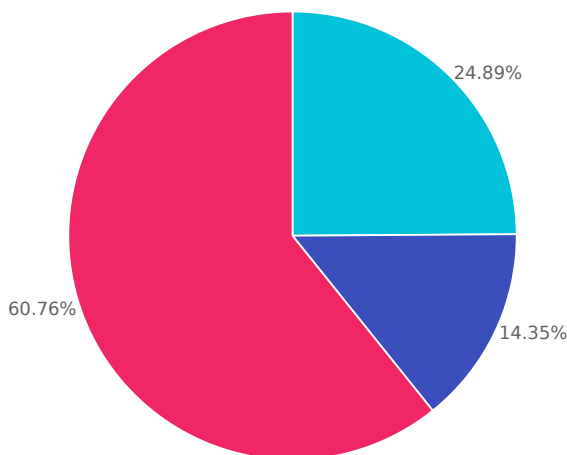
Suriname	0.00%	0
Swaziland	0.00%	0
Syria	0.00%	0
Tajikistan	0.00%	0
Tanzania	0.00%	0
Thailand	0.00%	0
Togo	0.00%	0
Tonga	0.00%	0
Trinidad & Tobago	0.00%	0
Tunisia	0.00%	0
Turkmenistan	0.00%	0
Tuvalu	0.00%	0
Uganda	0.00%	0
Uruguay	0.00%	0
Uzbekistan	0.00%	0
Vanuatu	0.00%	0
Vatican City	0.00%	0
Venezuela	0.00%	0
Yemen	0.00%	0
Yuggoth	0.00%	0
Zambia	0.00%	0

Telemetry

Q11

Do you have Telemetry enabled on your cluster(s)? (Telemetry will automatically report anonymized information about your cluster, like the size of your cluster, what version of Ceph you are running, and what bugs you have encountered.)

Answered: 237 Skipped: 8



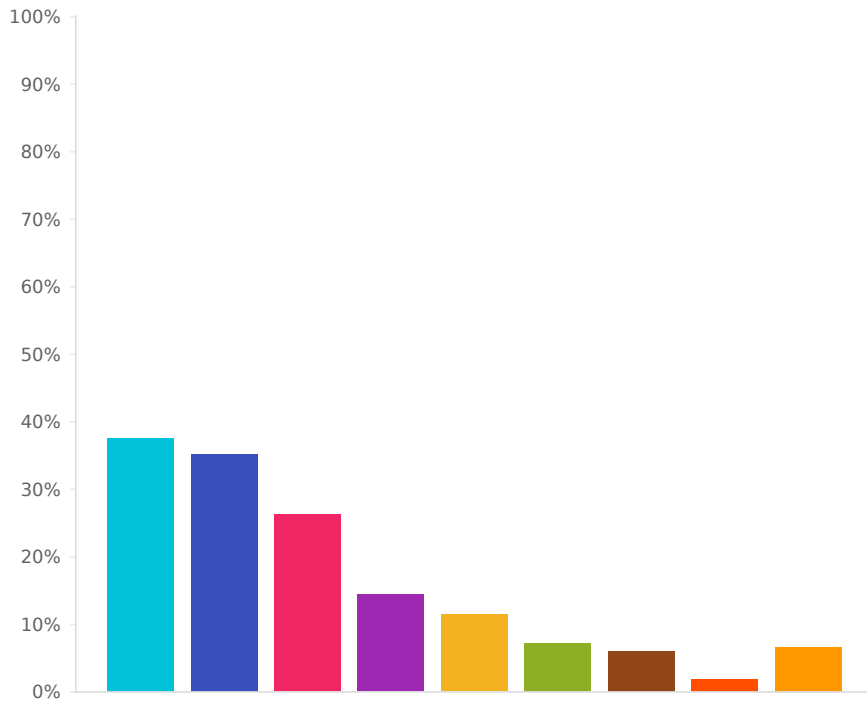
- Yes, telemetry is enabled on all of my clusters
- Yes, telemetry is enabled on some of my clusters
- No, telemetry is not enabled on any clusters

Choices	Response percent	Response count
Yes, telemetry is enabled on all of my clusters	24.89%	59
Yes, telemetry is enabled on some of my clusters	14.35%	34
No, telemetry is not enabled on any clusters	60.76%	144

Q12

Why is telemetry not enabled?

Answered: 168 Skipped: 77



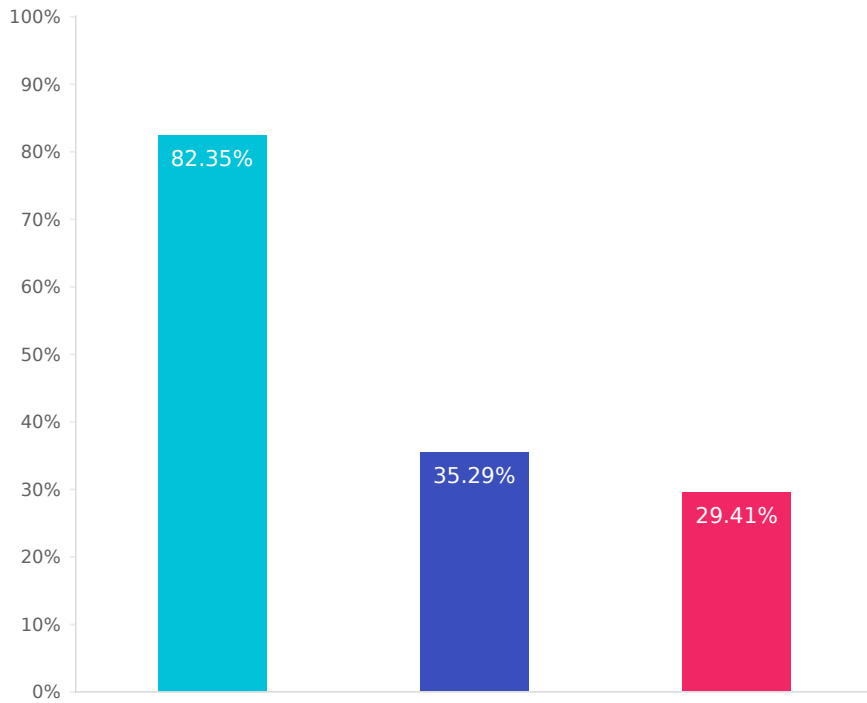
- My cluster(s) are on a protected network that does not have access to the internet
- I haven't gotten around to it yet
- My organization's security policy does not allow storage systems to communicate with vendors or external organizations
- I am worried that even the anonymized information reported by telemetry may compromise my organization's security.
- Enabling telemetry would require review by my organization's security team and I have chosen not request a review
- My cluster(s) are running a Ceph version older than Luminous
- I do not believe that the Ceph community should be collecting any of this information
- My organization's security policy has reviewed the information reported by telemetry and judged that it should not be shared
- Other (Please specify)

Choices	Response percent	Response count
My cluster(s) are on a protected network that does not have access to the internet	37.50%	63
I haven't gotten around to it yet	35.12%	59
My organization's security policy does not allow storage systems to communicate with vendors or external organizations	26.19%	44
I am worried that even the anonymized information reported by telemetry may compromise my organization's security.	14.29%	24
Enabling telemetry would require review by my organization's security team and I have chosen not request a review	11.31%	19
My cluster(s) are running a Ceph version older than Luminous	7.14%	12
I do not believe that the Ceph community should be collecting any of this information	5.95%	10
My organization's security policy has reviewed the information reported by telemetry and judged that it should not be shared	1.79%	3
Other (Please specify)	6.55%	11

Q13

Have you disabled any of the default telemetry channels?

Answered: 17 Skipped: 228



● basic: cluster capacity, cluster size, ceph version, number of pools and file systems, which configuration options have been adjusted)

● device: anonymized device health metrics (e.g., SMART hard disk metrics)

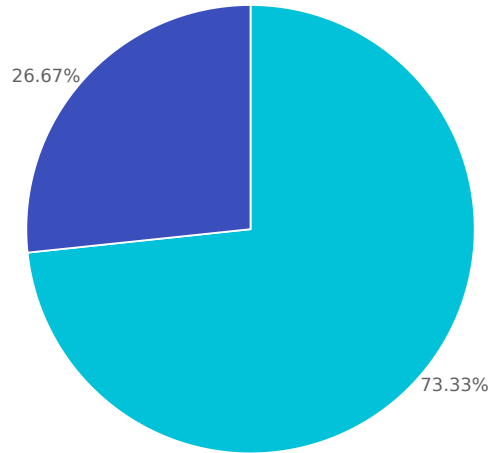
● crash: information about daemon crashes, including the type of daemon, ceph version, and stack trace

Choices	Response percent	Response count
basic: cluster capacity, cluster size, ceph version, number of pools and file systems, which configuration options have been adjusted)	82.35%	14
device: anonymized device health metrics (e.g., SMART hard disk metrics)	35.29%	6
crash: information about daemon crashes, including the type of daemon, ceph version, and stack trace	29.41%	5

Q14

Have you enabled the 'ident' telemetry channel (which allows you to provide a cluster description and contact email address)?

Answered: 90 Skipped: 155



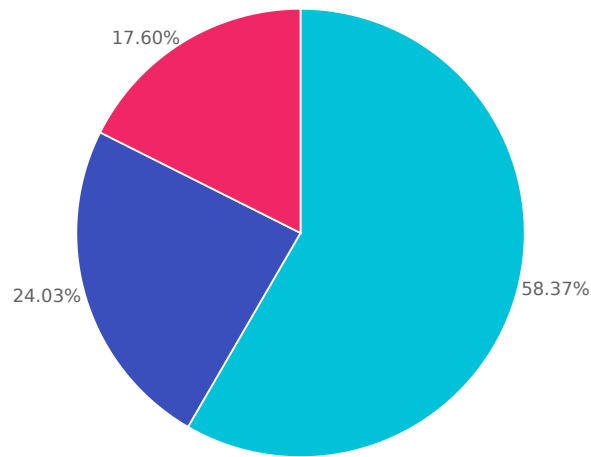
- I left 'ident' disabled (the default)
- I enabled 'ident' and configured a cluster description and/or email address

Choices	Response percent	Response count
I left 'ident' disabled (the default)	73.33%	66
I enabled 'ident' and configured a cluster description and/or email address	26.67%	24

Q15

Have you used the public Ceph Telemetry dashboards and/or Devices dashboard?

Answered: 233 Skipped: 12



● No, I didn't realize they existed

● No, I knew they existed but have not used them

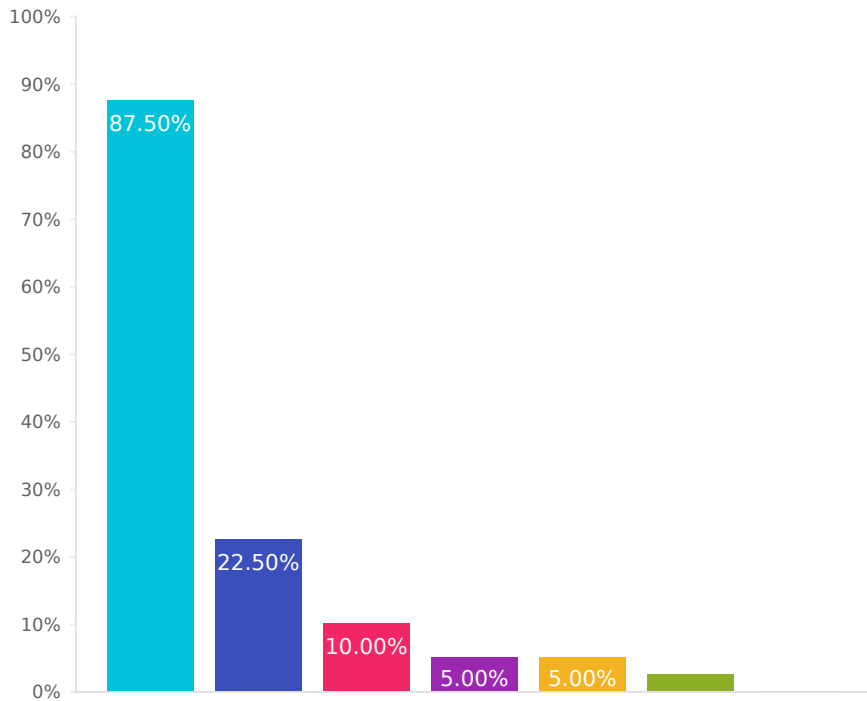
● Yes

Choices	Response percent	Response count
No, I didn't realize they existed	58.37%	136
No, I knew they existed but have not used them	24.03%	56
Yes	17.60%	41

Q16

Why did you use the public telemetry dashboard and/or the device telemetry dashboard?

Answered: 40 Skipped: 205



- Out of curiosity
- To inform my decisions about when or whether to upgrade
- Other
- To make decisions around cluster sizing (for new cluster(s))
- To make decisions about which vendor(s) or model(s) of storage devices to buy
- To make decisions about which type of storage devices to buy (HDD vs SSD)
- To make decisions around cluster expansion (for existing cluster(s))

Choices	Response percent	Response count
Out of curiosity	87.50%	35
To inform my decisions about when or whether to upgrade	22.50%	9
Other	10.00%	4
To make decisions around cluster sizing (for new cluster(s))	5.00%	2
To make decisions about which vendor(s) or model(s) of storage devices to buy	5.00%	2
To make decisions about which type of storage devices to buy (HDD vs SSD)	2.50%	1
To make decisions around cluster expansion (for existing cluster(s))	0.00%	0

General Cluster Questions

Q17

How many clusters does this information represent?

Answered: 211 Skipped: 34

Mean	Median	Total	Standard deviation	Variance
5.12	2	1080	21.02	441.94

Q18

Raw capacity (in TB) of your largest cluster

Answered: 211 Skipped: 34

Mean	Median	Total	Standard deviation	Variance
1899.99	325	400897	4734.59	2.24E7

Q19

Total raw capacity of all clusters (before replication)

Answered: 211 Skipped: 34

Mean	Median	Total	Standard deviation	Variance
3917.68	500	826630	10693.2	1.14E8

Q20

Total usable capacity of all clusters (after replication)

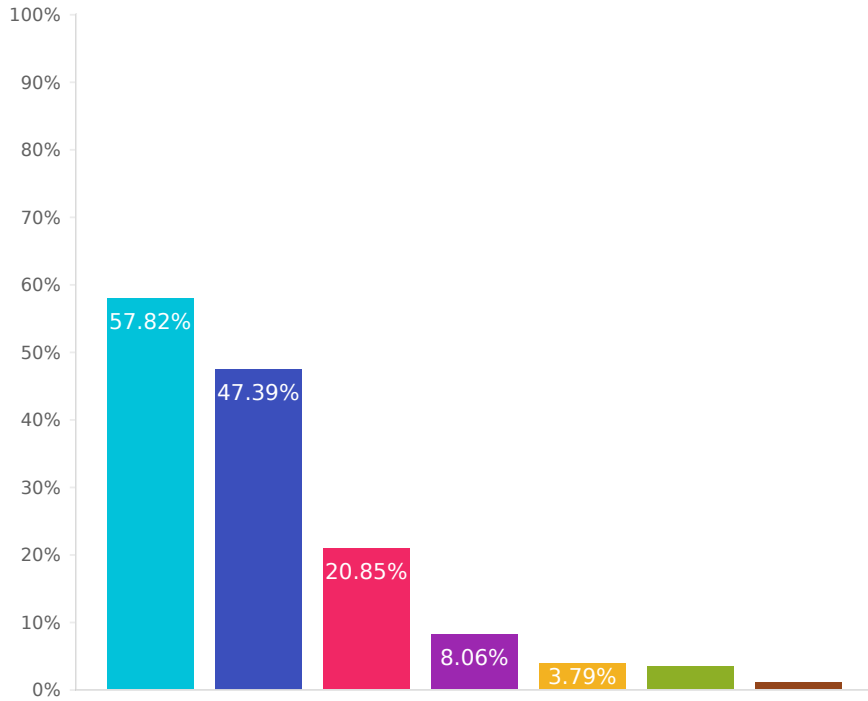
Answered: 211 Skipped: 34

Mean	Median	Total	Standard deviation	Variance
1683.41	200	355200	4391.55	1.92E7

Q21

Which Ceph releases do you run?

Answered: 211 Skipped: 34



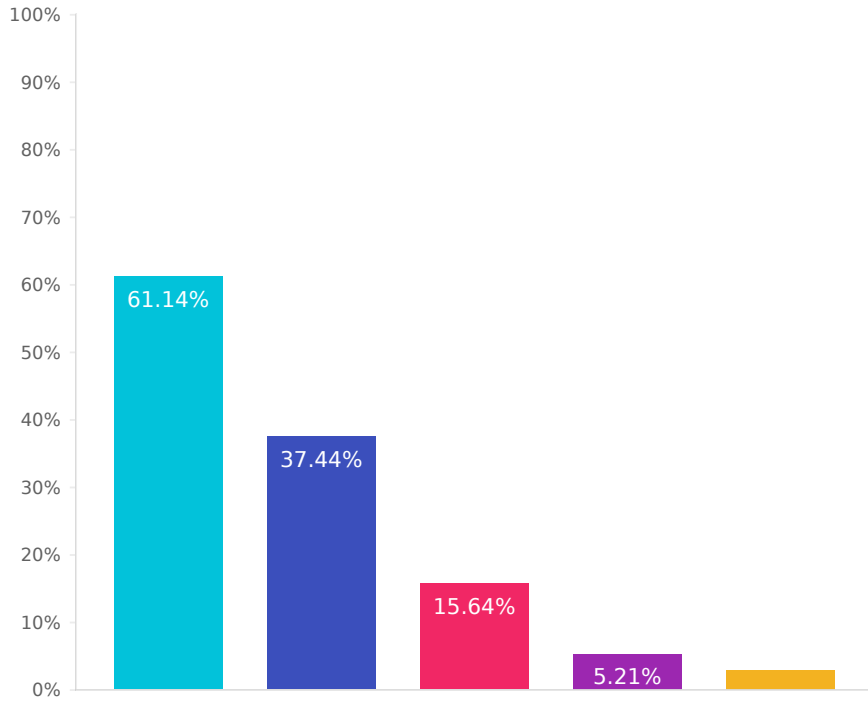
- Nautilus (14.x)
- Octopus (15.x)
- Luminous (12.x)
- Mimic (13.x)
- Jewel (10.x)
- Infernalis (9.x) or older
- Master

Choices	Response percent	Response count
Nautilus (14.x)	57.82%	122
Octopus (15.x)	47.39%	100
Luminous (12.x)	20.85%	44
Mimic (13.x)	8.06%	17
Jewel (10.x)	3.79%	8
Infernalis (9.x) or older	3.32%	7
Master	0.95%	2

Q22

Whose Ceph packages do you use?

Answered: 211 Skipped: 34



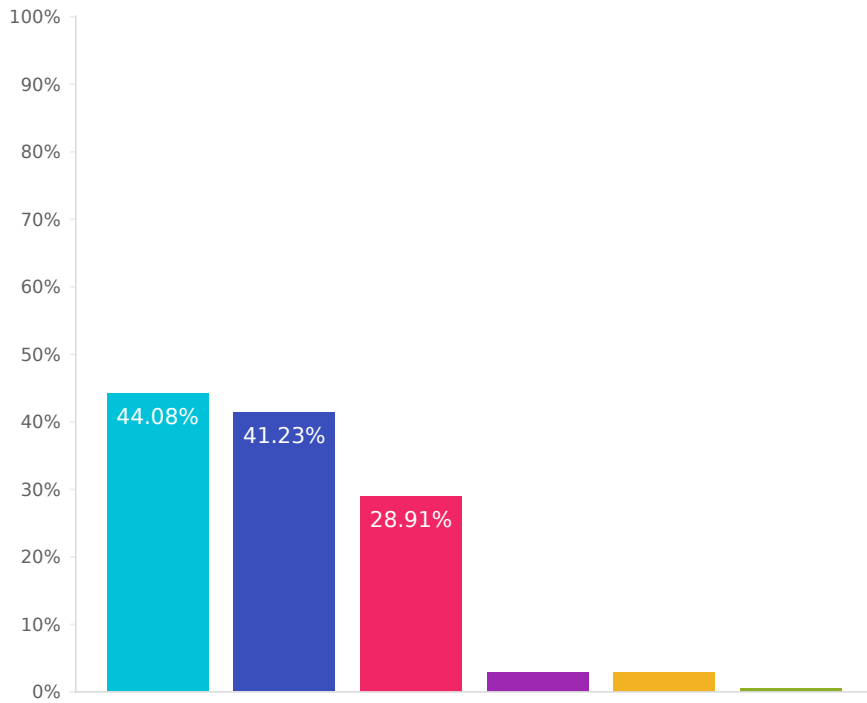
- Upstream packages
- Distribution packages
- Vendor packages
- We build our own packages
- We built a custom version

Choices	Response percent	Response count
Upstream packages	61.14%	129
Distribution packages	37.44%	79
Vendor packages	15.64%	33
We build our own packages	5.21%	11
We built a custom version	2.84%	6

Q23

What operating systems are you using on cluster nodes?

Answered: 211 Skipped: 34



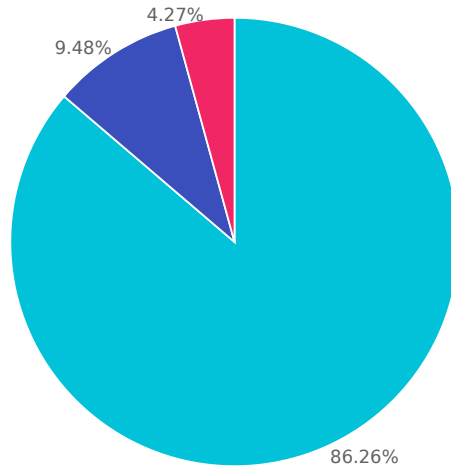
- RHEL / CentOS / Fedora
- Ubuntu
- Debian
- SUSE
- Other OS
- FreeBSD/OpenBSD/NetBSD

Choices	Response percent	Response count
RHEL / CentOS / Fedora	44.08%	93
Ubuntu	41.23%	87
Debian	28.91%	61
SUSE	2.84%	6
Other OS	2.84%	6
FreeBSD/OpenBSD/NetBSD	0.47%	1

Q24

Do you use cache tiering?

Answered: 211 Skipped: 34



● No

● Yes, for performance reasons

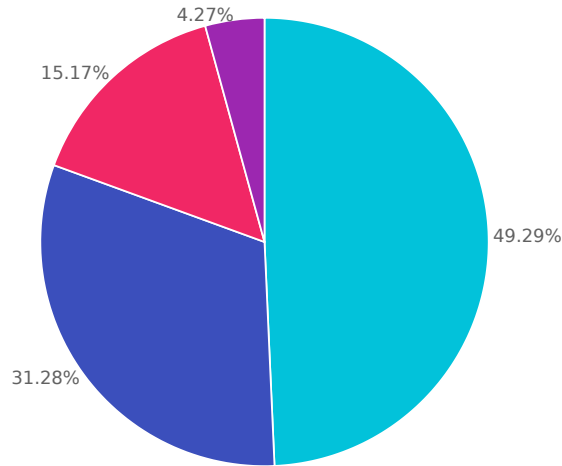
● Yes, in front of EC pools for functionality

Choices	Response percent	Response count
No	86.26%	182
Yes, for performance reasons	9.48%	20
Yes, in front of EC pools for functionality	4.27%	9

Q25

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

Answered: 211 Skipped: 34



● Longer

● Within a month after release

● Within a week after release

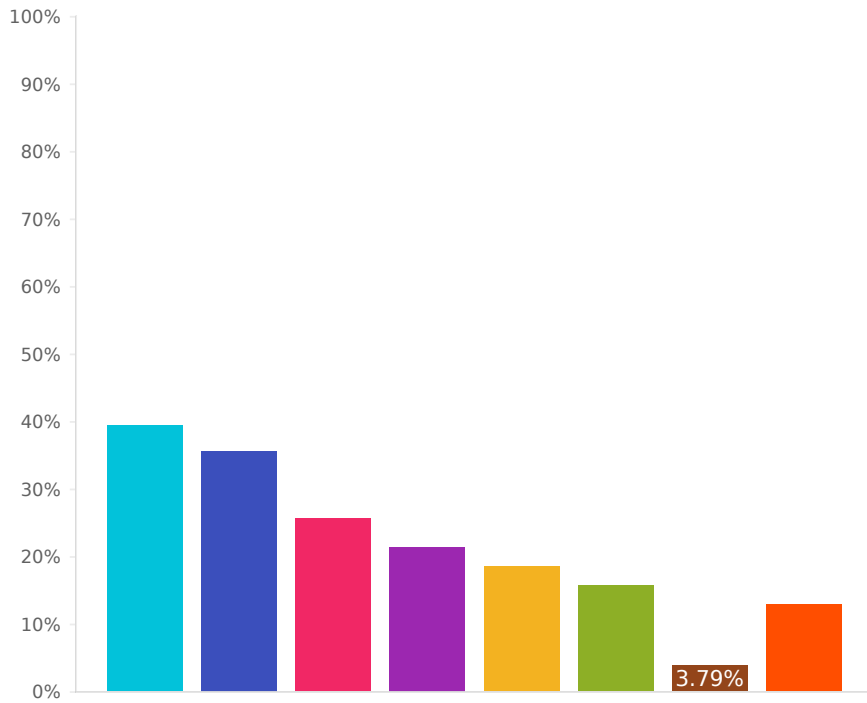
● Never

Choices	Response percent	Response count
Longer	49.29%	104
Within a month after release	31.28%	66
Within a week after release	15.17%	32
Never	4.27%	9

Q26

Why?

Answered: 211 Skipped: 34



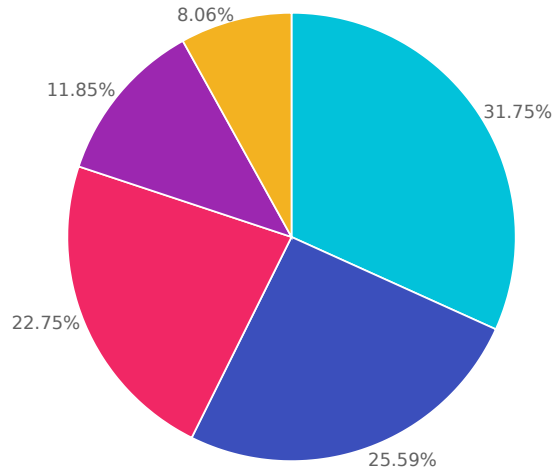
- I delay upgrades due to concerns about regression
- I apply upgrades quickly to get any available bug fixes or security fixes
- I only upgrade as needed to address issues
- I delay upgrades because of the effort involved
- I apply upgrades quickly because they require little effort
- I delay upgrades due to concerns about new functionality
- I delay upgrades because there are too many updates
- Other (Please specify)

Choices	Response percent	Response count
I delay upgrades due to concerns about regression	39.34%	83
I apply upgrades quickly to get any available bug fixes or security fixes	35.55%	75
I only upgrade as needed to address issues	25.59%	54
I delay upgrades because of the effort involved	21.33%	45
I apply upgrades quickly because they require little effort	18.48%	39
I delay upgrades due to concerns about new functionality	15.64%	33
I delay upgrades because there are too many updates	3.79%	8
Other (Please specify)	12.80%	27

Q27

How soon do you perform major version upgrades?

Answered: 211 Skipped: 34



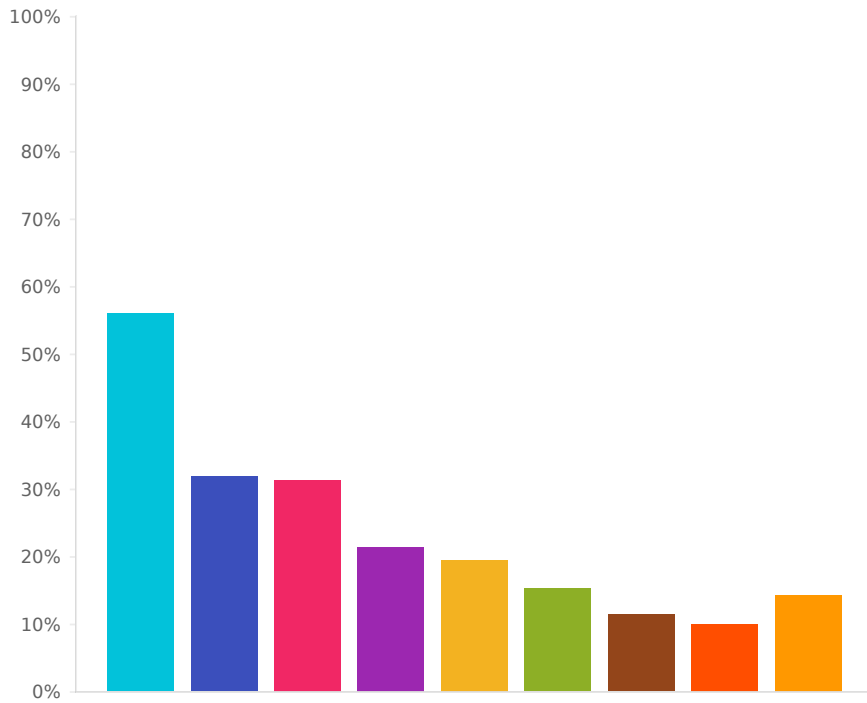
- Within a year
- Longer
- Within half a year of release
- Within a month of release
- Never (clusters remain on major release they were deployed with)

Choices	Response percent	Response count
Within a year	31.75%	67
Longer	25.59%	54
Within half a year of release	22.75%	48
Within a month of release	11.85%	25
Never (clusters remain on major release they were deployed with)	8.06%	17

Q28

Why?

Answered: 211 Skipped: 34



● I delay upgrades due to concerns about stability

● I delay upgrades due to the effort required to upgrade

● I delay upgrades due to concerns about performance regressions

● I only upgrade as needed to address specific bugs or needed features

● I upgrade quickly to get new features

● I upgrade quickly to get any available bug fixes or security fixes

● I delay upgrades to avoid a changed user experience due to new features

● I upgrade quickly because it is easy

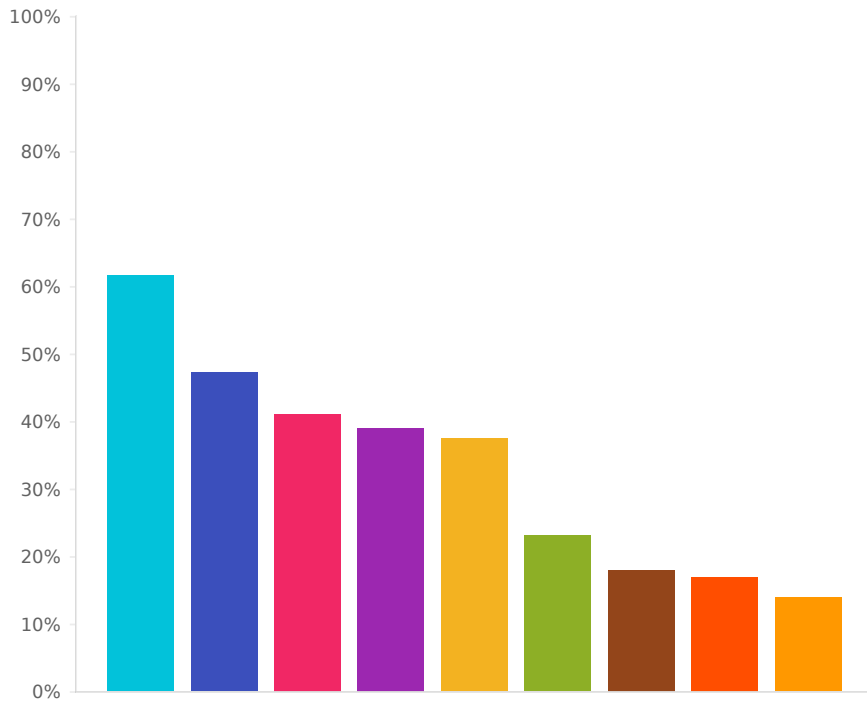
● Other (Please specify)

Choices	Response percent	Response count
I delay upgrades due to concerns about stability	55.92%	118
I delay upgrades due to the effort required to upgrade	31.75%	67
I delay upgrades due to concerns about performance regressions	31.28%	66
I only upgrade as needed to address specific bugs or needed features	21.33%	45
I upgrade quickly to get new features	19.43%	41
I upgrade quickly to get any available bug fixes or security fixes	15.17%	32
I delay upgrades to avoid a changed user experience due to new features	11.37%	24
I upgrade quickly because it is easy	9.95%	21
Other (Please specify)	14.22%	30

Q29

Which Ceph Manager modules do you enable?

Answered: 195 Skipped: 50



● balancer

● pg_autoscaler

● iostat

● crash

● devicehealth

● I don't know / default set

● restful

● diskprediction

● Other (Please specify)

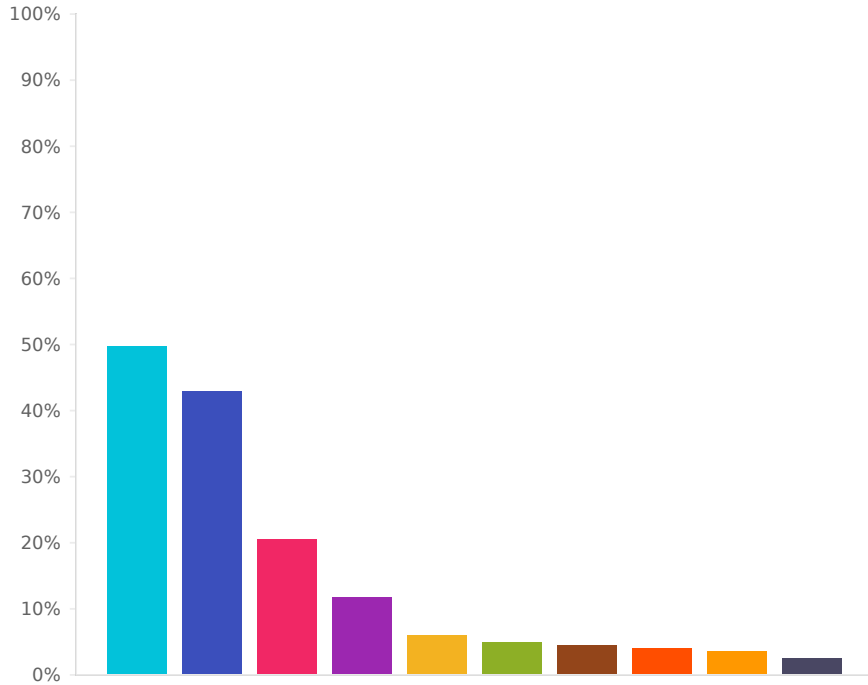
Choices	Response percent	Response count
balancer	61.54%	120
pg_autoscaler	47.18%	92
iostat	41.03%	80
crash	38.97%	76
devicehealth	37.44%	73
I don't know / default set	23.08%	45
restful	17.95%	35
diskprediction	16.92%	33
Other (Please specify)	13.85%	27

Hardware

Q30

Which chassis / server vendors do you use for cluster nodes?

Answered: 206 Skipped: 39



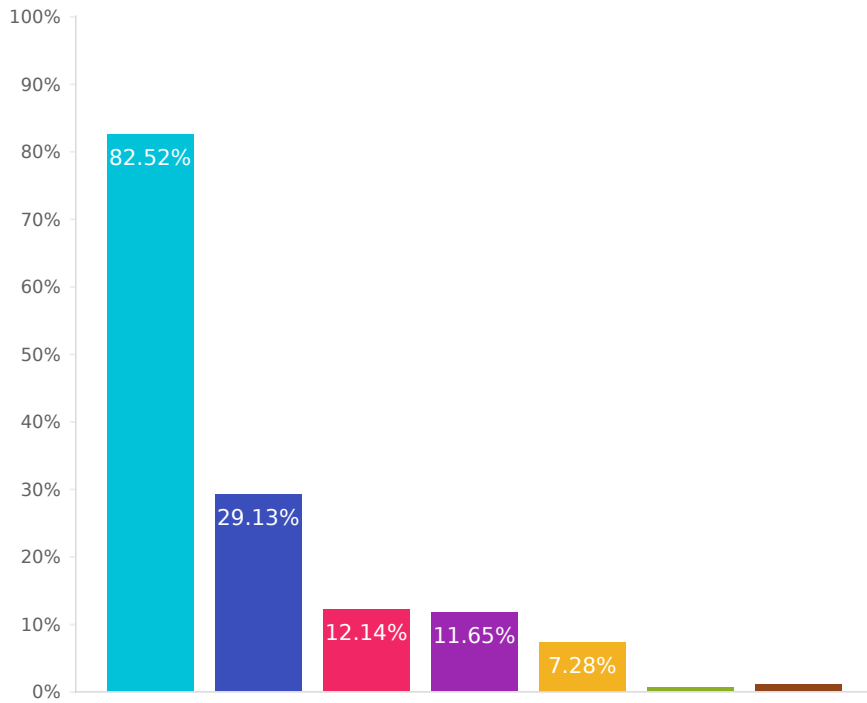
- Supermicro
- Dell
- HPE (Hewlett Packard)
- We build our own
- Intel
- IBM
- Lenovo
- Huawei
- Raspberry Pi
- Prefer not to say
- QCT (Quanta)
- Fujitsu
- Cisco
- SoftIron
- Other (Please specify)

Choices	Response percent	Response count
Supermicro	49.51%	102
Dell	42.72%	88
HPE (Hewlett Packard)	20.39%	42
We build our own	11.65%	24
Intel	5.83%	12
IBM	4.85%	10
Lenovo	4.37%	9
Huawei	3.88%	8
Raspberry Pi	3.40%	7
Prefer not to say	2.43%	5
QCT (Quanta)	1.46%	3
Fujitsu	1.46%	3
Cisco	0.97%	2
SoftIron	0.49%	1
Other (Please specify)	8.25%	17

Q31

Which processor architectures and manufacturers do you use?

Answered: 206 Skipped: 39

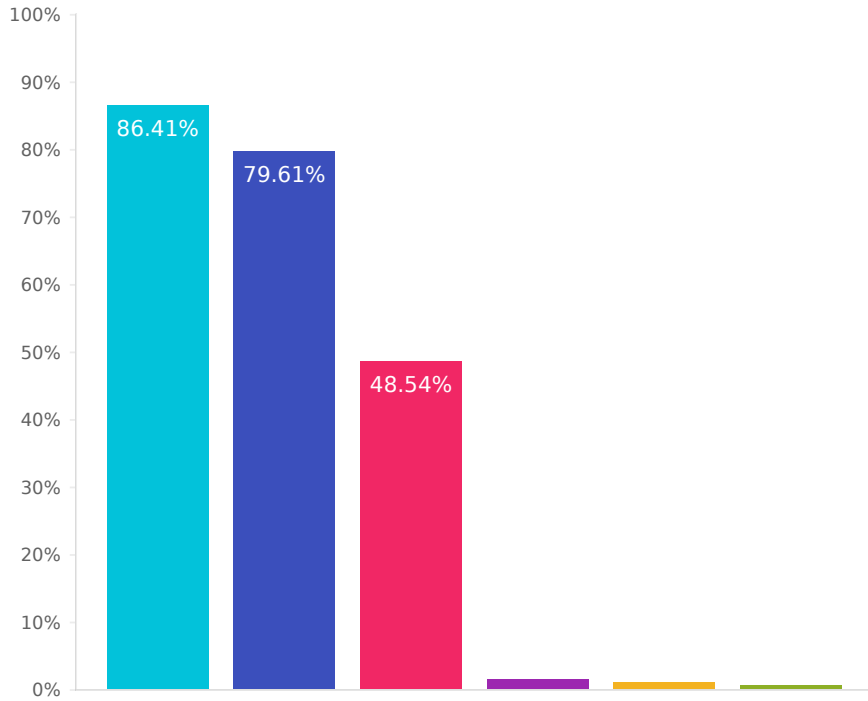


- Intel Xeon
- AMD Epyc
- ARM
- Intel (other)
- AMD (other)
- Power
- Other (Please specify)

Choices	Response percent	Response count
Intel Xeon	82.52%	170
AMD Epyc	29.13%	60
ARM	12.14%	25
Intel (other)	11.65%	24
AMD (other)	7.28%	15
Power	0.49%	1
Other (Please specify)	0.97%	2

Which type of storage devices are used?

Answered: 206 Skipped: 39



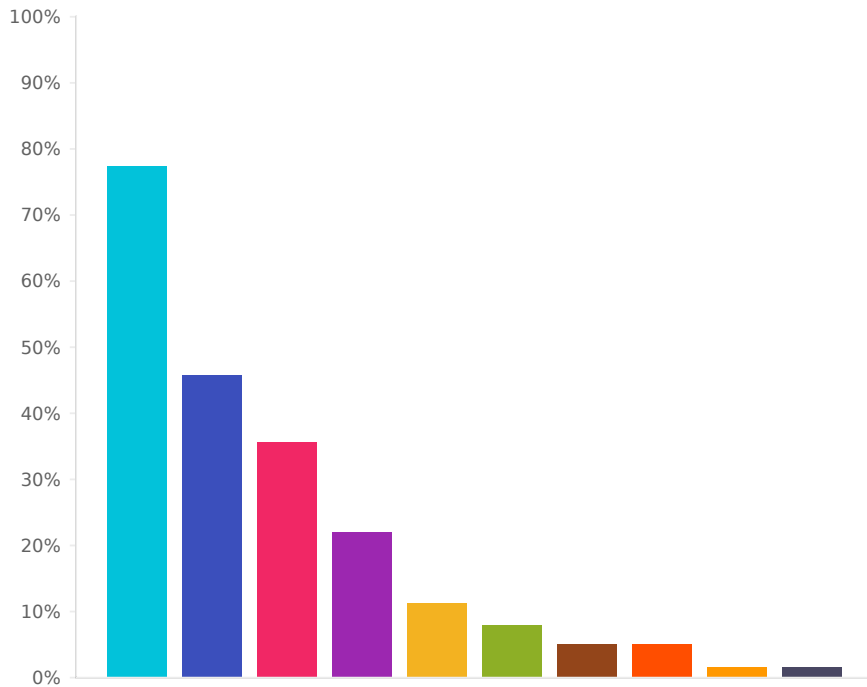
- HDD (SATA, SAS)
- SSD (SATA, SAS)
- NVMe
- Optane
- MicroSD or other low-end flash
- SanDisk InfiniFlash or other AFA (All Flash Arrays)

Choices	Response percent	Response count
HDD (SATA, SAS)	86.41%	178
SSD (SATA, SAS)	79.61%	164
NVMe	48.54%	100
Optane	1.46%	3
MicroSD or other low-end flash	0.97%	2
SanDisk InfiniFlash or other AFA (All Flash Arrays)	0.49%	1

Q33

Which OSD layout strategies do you employ?

Answered: 206 Skipped: 39



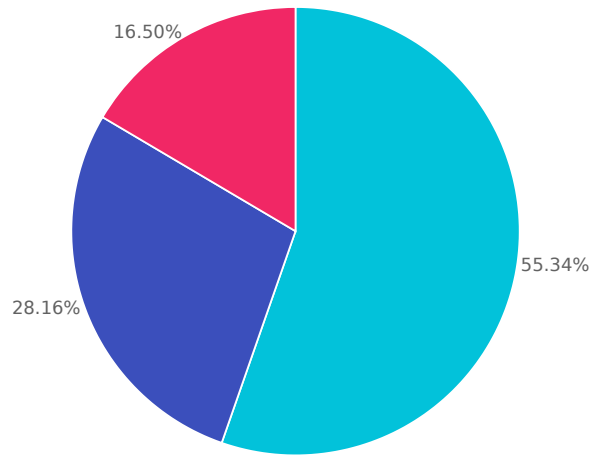
- LVM (ceph-volume)
- Separate journal device (Filestore) or RocksDB/WAL device (BlueStore)
- All-in-one OSD (default, colocated, no separate metadata device)
- Containerized daemons
- At-rest encryption (dmccrypt)
- Partitions
- bcache
- Defaults / I don't know
- Ivncache
- dm-cache
- CAS (Intel)

Choices	Response percent	Response count
LVM (ceph-volume)	77.18%	159
Separate journal device (Filestore) or RocksDB/WAL device (BlueStore)	45.63%	94
All-in-one OSD (default, colocated, no separate metadata device)	35.44%	73
Containerized daemons	21.84%	45
At-rest encryption (dmccrypt)	11.17%	23
Partitions	7.77%	16
bcache	4.85%	10
Defaults / I don't know	4.85%	10
lvmcache	1.46%	3
dm-cache	1.46%	3
CAS (Intel)	0.49%	1

Q34

Do you use a dedicated cluster / replication / private network for OSD node replication and recovery?

Answered: 206 Skipped: 39



● Yes

● No

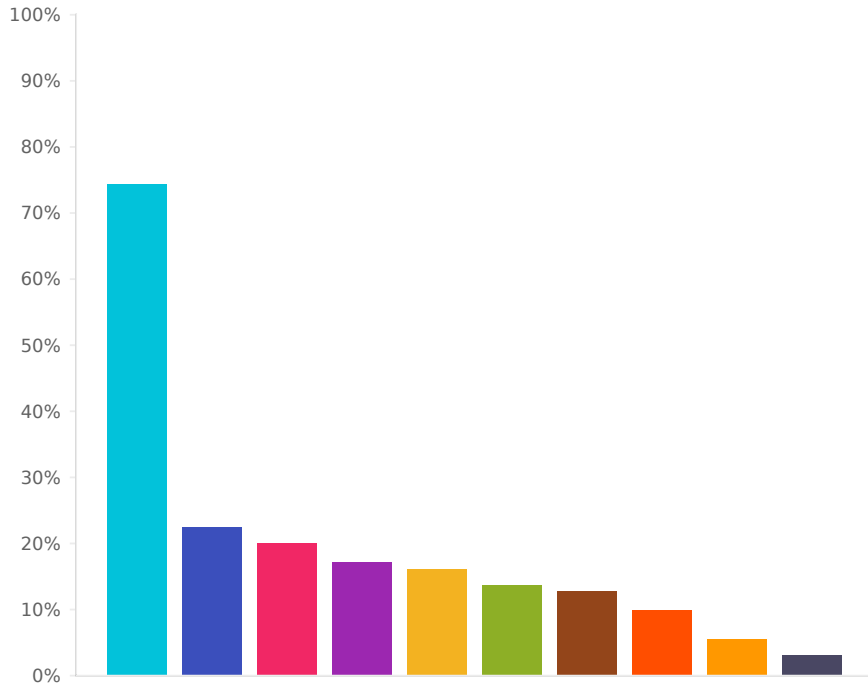
● Mix of yes and no

Choices	Response percent	Response count
Yes	55.34%	114
No	28.16%	58
Mix of yes and no	16.50%	34

Q35

Network technologies in use

Answered: 206 Skipped: 39



10 Gb/s Ethernet

25 Gb/s Ethernet

1000 Mb/s Ethernet (GigE, gigabit)

RJ45 (Copper)

DAC (Copper)

40 Gb/s Ethernet

100 Gb/s Ethernet

AOC / Fiber

100 Mb/s Ethernet

InfiniBand

Wireless

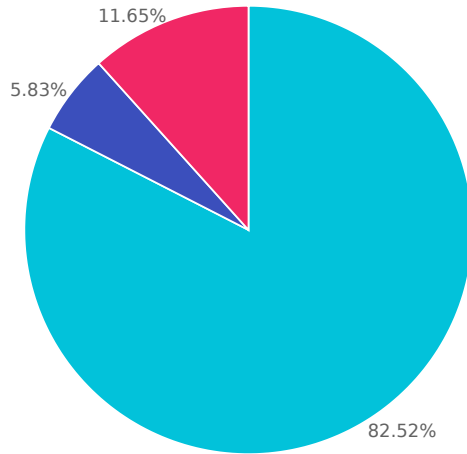
Other (Please specify)

Choices	Response percent	Response count
10 Gb/s Ethernet	74.27%	153
25 Gb/s Ethernet	22.33%	46
1000 Mb/s Ethernet (GigE, gigabit)	19.90%	41
RJ45 (Copper)	16.99%	35
DAC (Copper)	16.02%	33
40 Gb/s Ethernet	13.59%	28
100 Gb/s Ethernet	12.62%	26
AOC / Fiber	9.71%	20
100 Mb/s Ethernet	5.34%	11
InfiniBand	2.91%	6
Wireless	0.00%	0
Other (Please specify)	0.97%	2

Q36

IP address families in use

Answered: 206 Skipped: 39



● IPv4 only

● IPv6 only

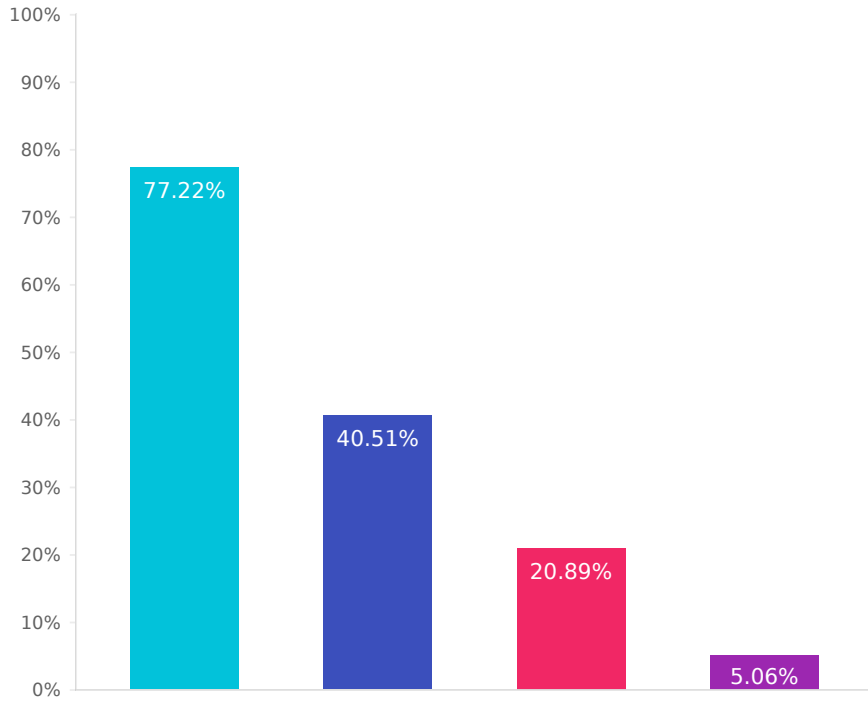
● Dual stack

Choices	Response percent	Response count
IPv4 only	82.52%	170
IPv6 only	5.83%	12
Dual stack	11.65%	24

Q37

Which SSD form factor are important to you

Answered: 158 Skipped: 87



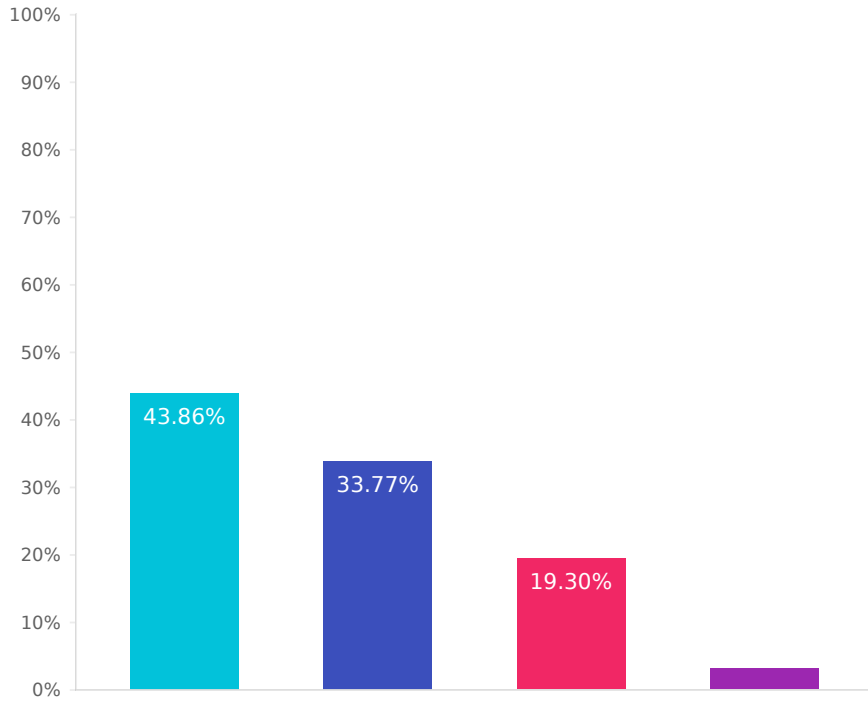
- U.2 (2.5-inch)
- M.2
- Add In Cards
- E1.L (EDSFF, ruler form factor)

Choices	Response percent	Response count
U.2 (2.5-inch)	77.22%	122
M.2	40.51%	64
Add In Cards	20.89%	33
E1.L (EDSFF, ruler form factor)	5.06%	8

Q38

Preferred number of CPU sockets per server and why

Answered: 206 Skipped: 39



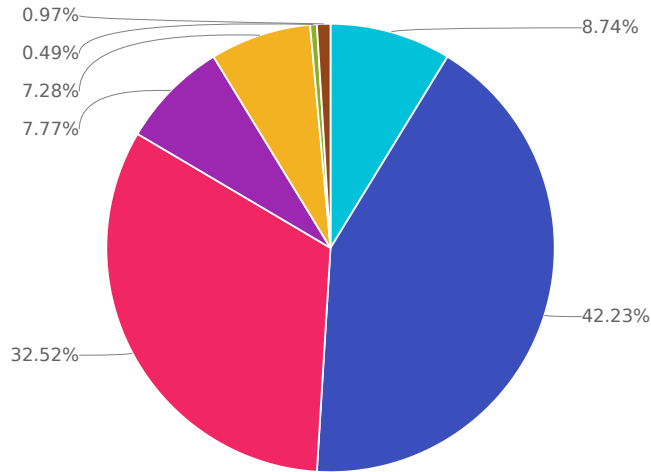
- Dual
- Single
- No preference / beats me
- Quad

Choices	Response percent	Response count
Dual	43.86%	100
Single	33.77%	77
No preference / beats me	19.30%	44
Quad	3.07%	7
Explain why?		102

Q39

How many OSDs in your largest cluster?

Answered: 206 Skipped: 39



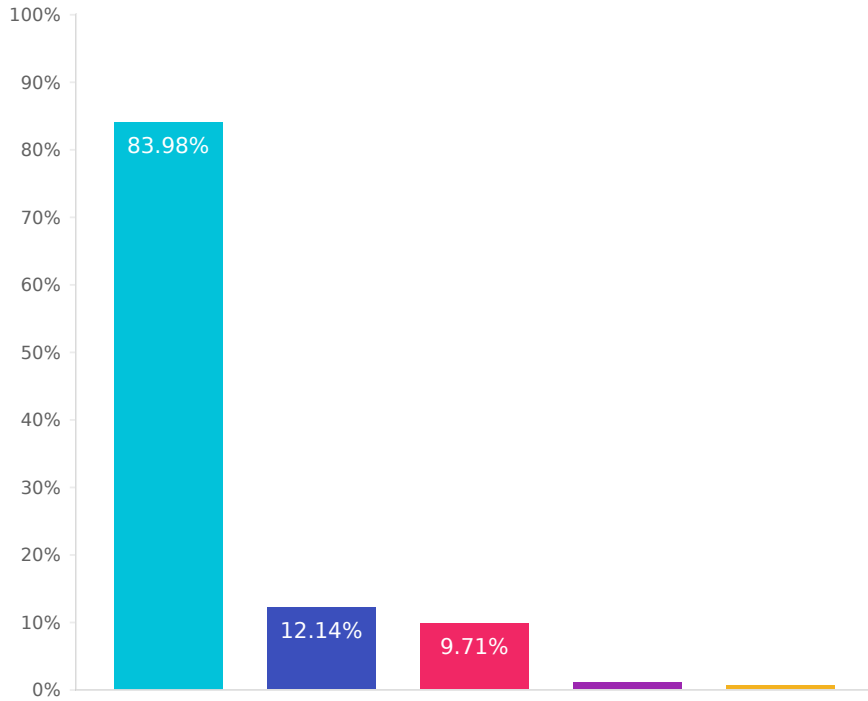
- 10 or fewer
- 10 to 100
- 100 to 500
- 500 to 1000
- 1000 to 3000
- 3000 to 5000
- 5000+

Choices	Response percent	Response count
10 or fewer	8.74%	18
10 to 100	42.23%	87
100 to 500	32.52%	67
500 to 1000	7.77%	16
1000 to 3000	7.28%	15
3000 to 5000	0.49%	1
5000+	0.97%	2

Q40

Which OSD back ends do your clusters employ?

Answered: 206 Skipped: 39



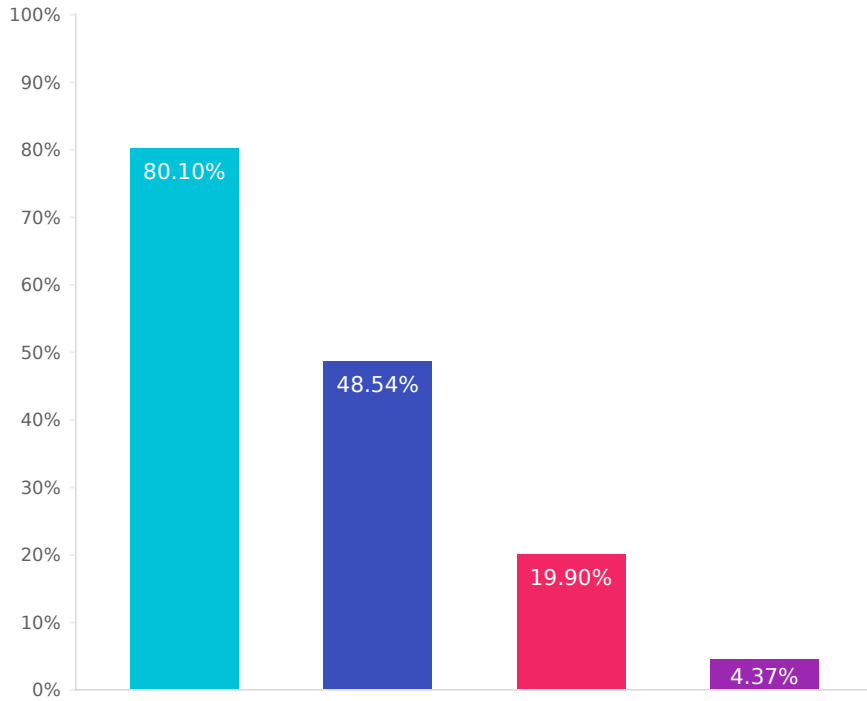
- BlueStore
- Filestore (XFS, EXT4, BTRFS)
- Both Filestore and BlueStore
- Not sure
- Other (Please specify)

Choices	Response percent	Response count
BlueStore	83.98%	173
Filestore (XFS, EXT4, BTRFS)	12.14%	25
Both Filestore and BlueStore	9.71%	20
Not sure	0.97%	2
Other (Please specify)	0.49%	1

Q41

Data protection strategies in use

Answered: 206 Skipped: 39



- Replication (3x)
- Erasure coding
- Replication (2x)
- Replication (4 or more copies)

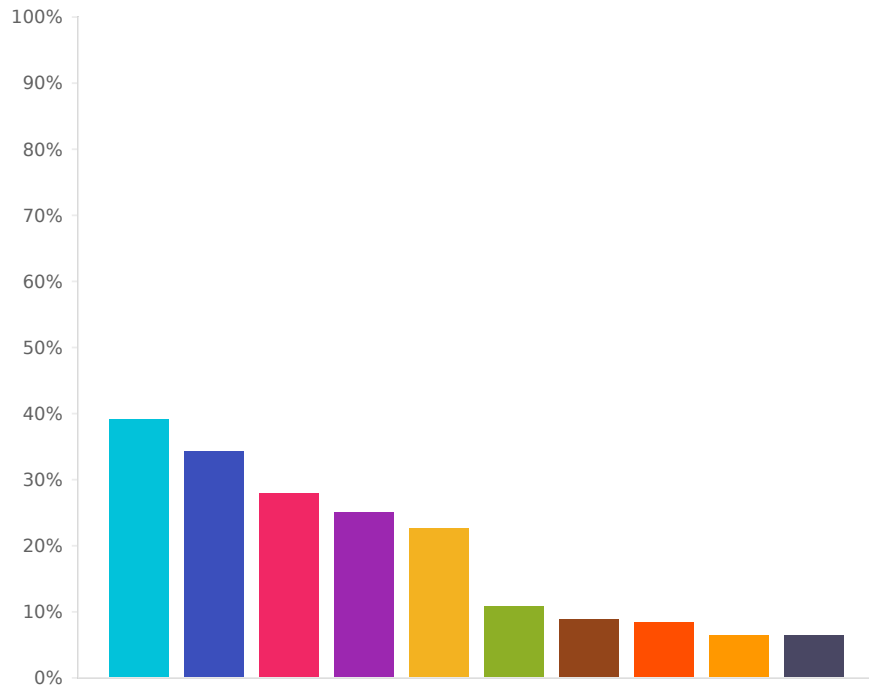
Choices	Response percent	Response count
Replication (3x)	80.10%	165
Erasure coding	48.54%	100
Replication (2x)	19.90%	41
Replication (4 or more copies)	4.37%	9

Platforms and Interface Questions

Q42

With which platforms do you use Ceph?

Answered: 205 Skipped: 40



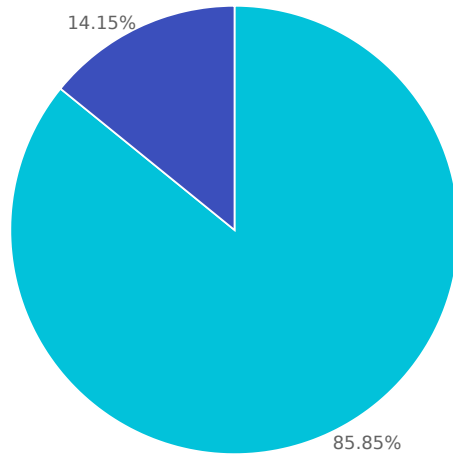
- KVM / QEMU
- OpenStack
- Kubernetes
- Proxmox
- KRBD directly on Linux systems
- None
- OpenShift
- VMware
- Microsoft Windows
- rbd-nbd
- OpenNebula
- Cloudstack
- Xen
- Hyper-v
- Other (Please specify)

Choices	Response percent	Response count
KVM / QEMU	39.02%	80
OpenStack	34.15%	70
Kubernetes	27.80%	57
Proxmox	24.88%	51
KRBD directly on Linux systems	22.44%	46
None	10.73%	22
OpenShift	8.78%	18
VMware	8.29%	17
Microsoft Windows	6.34%	13
rbd-nbd	6.34%	13
OpenNebula	5.85%	12
Cloudstack	1.95%	4
Xen	1.46%	3
Hyper-v	0.49%	1
Other (Please specify)	9.27%	19

Q43

Do you provide RADOS Block Device (RBD) services with your Ceph clusters?

Answered: 205 Skipped: 40



● Yes

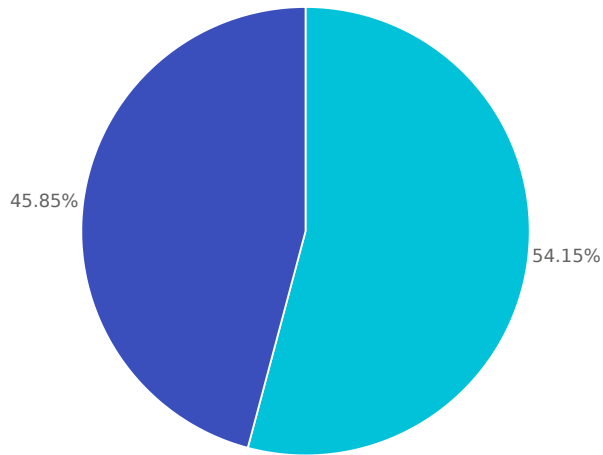
● No

Choices	Response percent	Response count
Yes	85.85%	176
No	14.15%	29

Q44

Do you provide Ceph Object Gateway (RGW, Rados Gateway) services with your Ceph clusters?

Answered: 205 Skipped: 40



● Yes

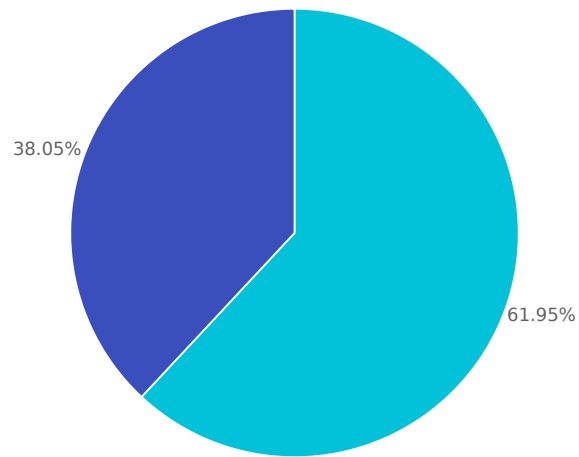
● No

Choices	Response percent	Response count
Yes	54.15%	111
No	45.85%	94

Q45

Do you provide Ceph File system (Ceph FS) services with your Ceph clusters?

Answered: 205 Skipped: 40



● Yes

● No

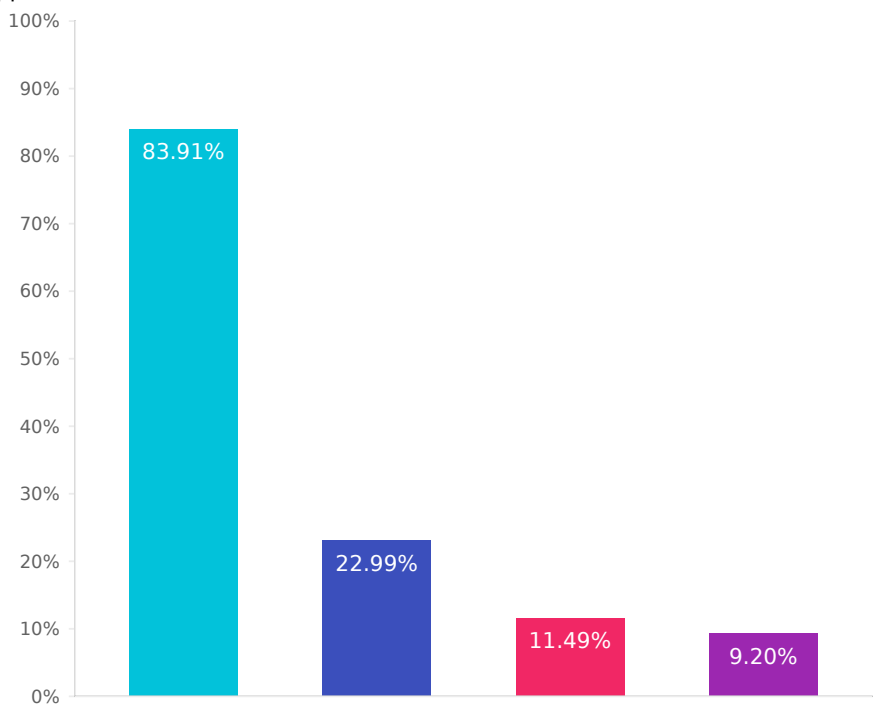
Choices	Response percent	Response count
Yes	61.95%	127
No	38.05%	78

RADOS Block Device (RBD)

Q46

RBD deployment status

Answered: 174 Skipped: 71



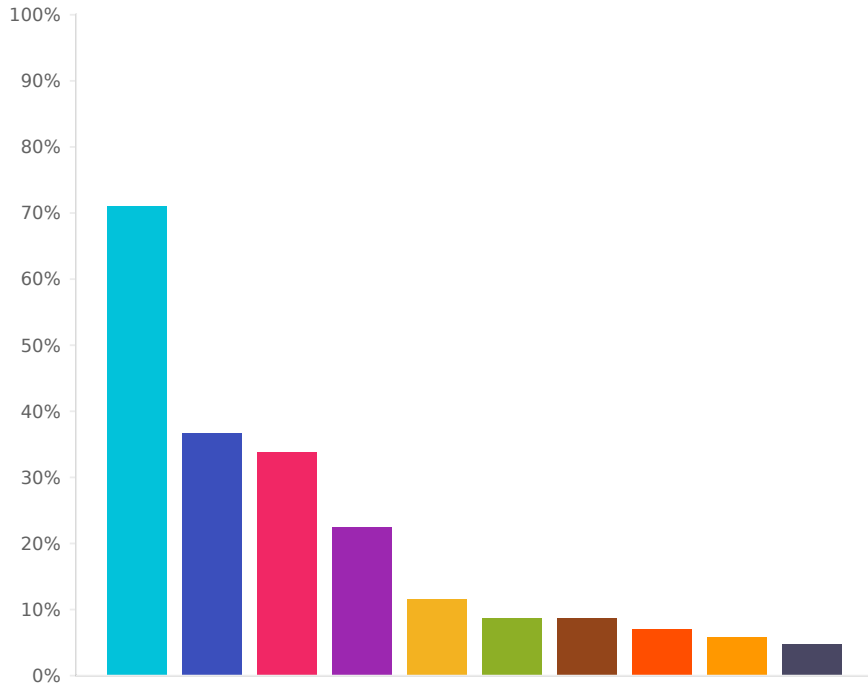
- Production
- Development / Testing
- Staging
- Proof of Concept (PoC)

Choices	Response percent	Response count
Production	83.91%	146
Development / Testing	22.99%	40
Staging	11.49%	20
Proof of Concept (PoC)	9.20%	16

Q47

What are your use cases for RBD?

Answered: 175 Skipped: 70



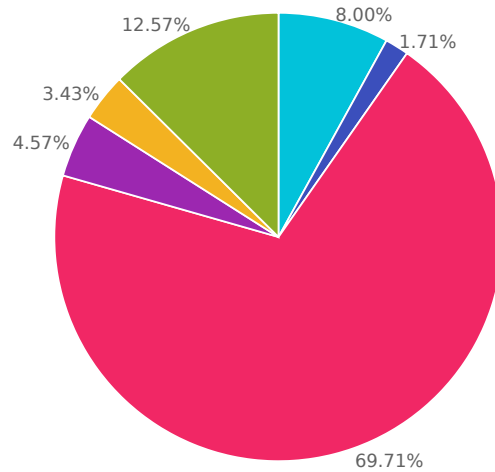
- Virtualization
- Cloud
- Containers
- Archive Storage
- Big Data & Analytics
- Scratch
- Home Directories
- Log
- HPC
- Build
- Video
- AI/ML
- CDN
- Other (Please specify)

Choices	Response percent	Response count
Virtualization	70.86%	124
Cloud	36.57%	64
Containers	33.71%	59
Archive Storage	22.29%	39
Big Data & Analytics	11.43%	20
Scratch	8.57%	15
Home Directories	8.57%	15
Log	6.86%	12
HPC	5.71%	10
Build	4.57%	8
Video	4.57%	8
AI/ML	3.43%	6
CDN	2.29%	4
Other (Please specify)	4.00%	7

Q48

Are you using rbd-mirror?

Answered: 175 Skipped: 70



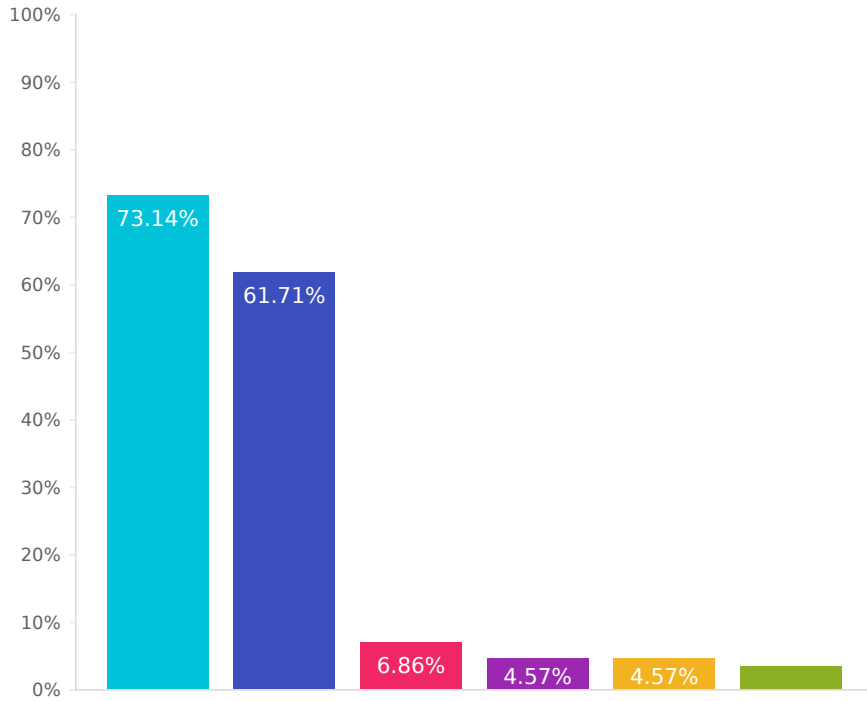
- Yes, for DR
- Yes, to migrate volumes between clusters
- No, it is not needed
- No, it is incompatible with my performance requirements
- No, it is not compatible with my RBD feature requirements
- Other (Please specify)

Choices	Response percent	Response count
Yes, for DR	8.00%	14
Yes, to migrate volumes between clusters	1.71%	3
No, it is not needed	69.71%	122
No, it is incompatible with my performance requirements	4.57%	8
No, it is not compatible with my RBD feature requirements	3.43%	6
Other (Please specify)	12.57%	22

Q49

RBD (block storage) client access methods in use

Answered: 175 Skipped: 70



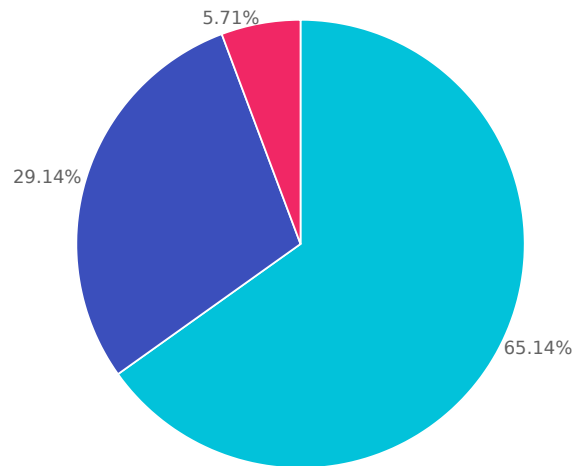
- librbid (e.g., in combination with qemu)
- Linux kernel RBD
- iSCSI (tcmu-runner)
- iSCSI (LIO with /dev/rbd)
- rbd-nbd
- Other (Please specify)

Choices	Response percent	Response count
librbid (e.g., in combination with qemu)	73.14%	128
Linux kernel RBD	61.71%	108
iSCSI (tcmu-runner)	6.86%	12
iSCSI (LIO with /dev/rbd)	4.57%	8
rbd-nbd	4.57%	8
Other (Please specify)	3.43%	6

Q50

Do you use RBD snapshots and / or clones?

Answered: 175 Skipped: 70



● Yes

● No

● Unknown

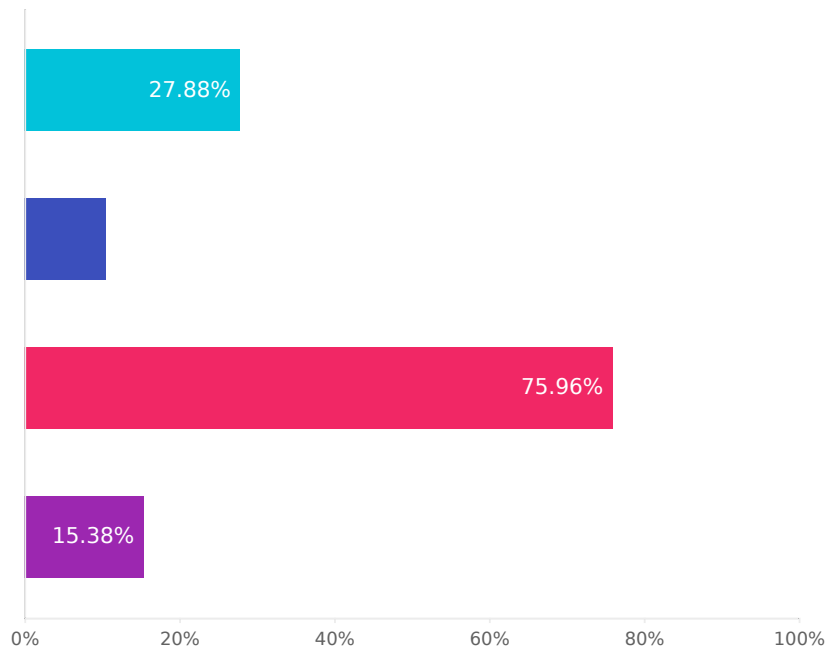
Choices	Response percent	Response count
Yes	65.14%	114
No	29.14%	51
Unknown	5.71%	10

Rados Gateway (RGW)

Q51

RGW Ceph cluster roles (dev, staging, production, PoC)

Answered: 104 Skipped: 141



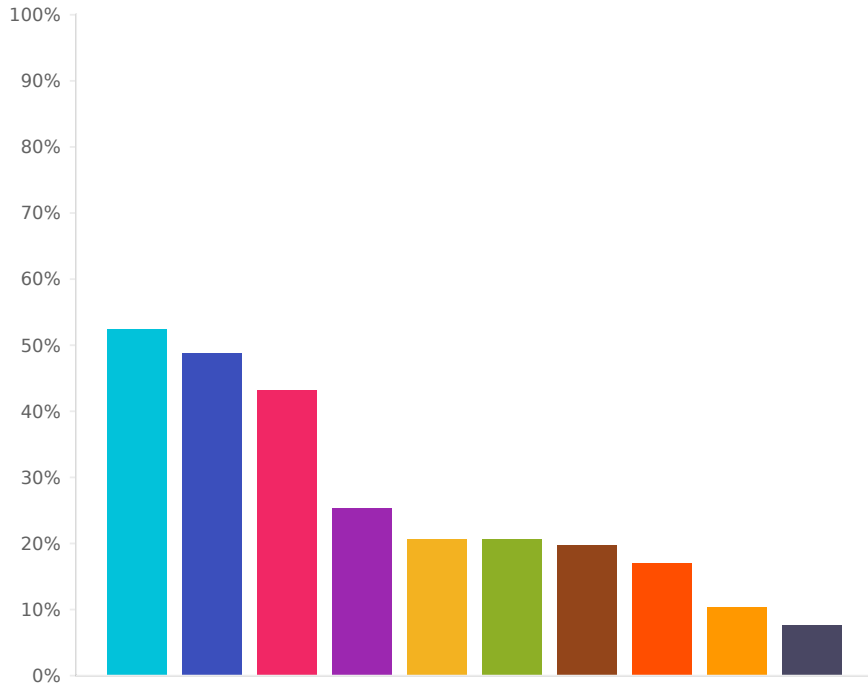
- Development / Testing
- Staging
- Production
- Proof of Concept (PoC)

Choices	Response percent	Response count
Development / Testing	27.88%	29
Staging	10.58%	11
Production	75.96%	79
Proof of Concept (PoC)	15.38%	16

Q52

What are your RGW workloads?

Answered: 107 Skipped: 138



- Backup
- Archive Storage
- Cloud
- Containers
- Log
- Big Data & Analytics
- CDN
- Video
- Build
- Virtualization
- AI/ML
- HPC
- Scratch
- Home Directories
- OLTP
- Other (Please specify)

Choices	Response percent	Response count
Backup	52.34%	56
Archive Storage	48.60%	52
Cloud	42.99%	46
Containers	25.23%	27
Log	20.56%	22
Big Data & Analytics	20.56%	22
CDN	19.63%	21
Video	16.82%	18
Build	10.28%	11
Virtualization	7.48%	8
AI/ML	6.54%	7
HPC	6.54%	7
Scratch	3.74%	4
Home Directories	3.74%	4
OLTP	0.93%	1
Other (Please specify)	4.67%	5

Q53

Average number of RGW daemons per object service cluster

Answered: 107 Skipped: 138

Mean	Median	Total	Standard deviation	Variance
6.67	3	714	15.49	239.85

Q54

Size in GB of the largest S3 / Swift object stored

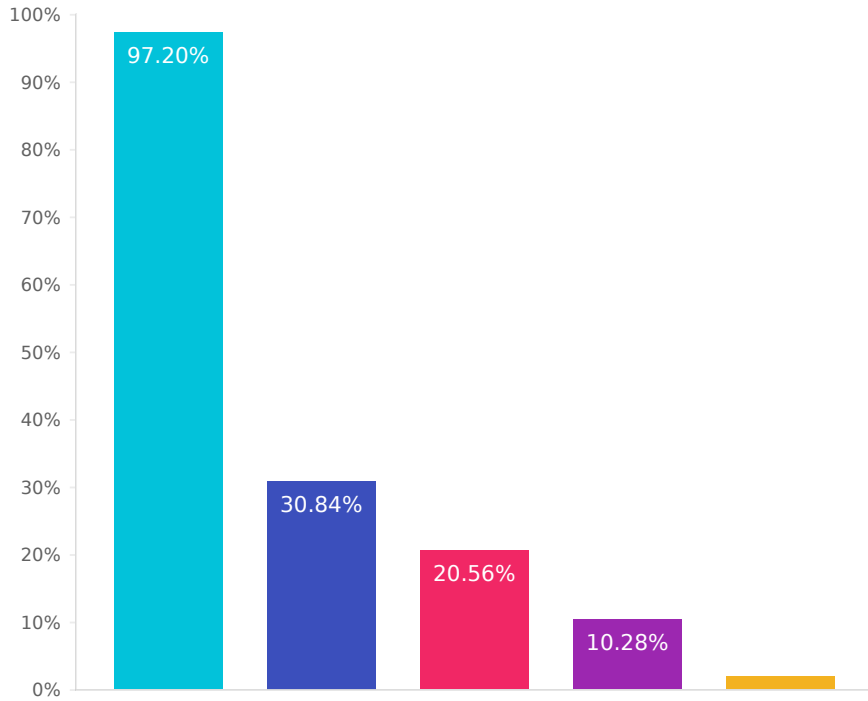
Answered: 107 Skipped: 138

Mean	Median	Total	Standard deviation	Variance
23243.19	5	2487021	141741.75	2.00E10

Q55

RGW APIs used

Answered: 107 Skipped: 138



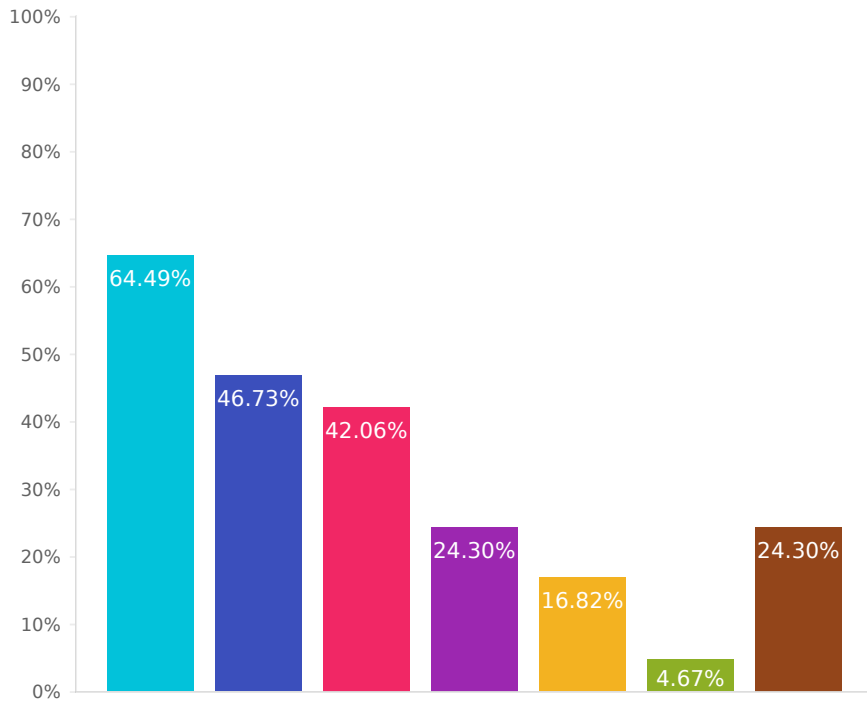
- S3
- RGW admin API
- Swift
- NFS re-export of S3 buckets
- RGW data caching and CDN

Choices	Response percent	Response count
S3	97.20%	104
RGW admin API	30.84%	33
Swift	20.56%	22
NFS re-export of S3 buckets	10.28%	11
RGW data caching and CDN	1.87%	2

Q56

RGW clients and libraries used

Answered: 107 Skipped: 138



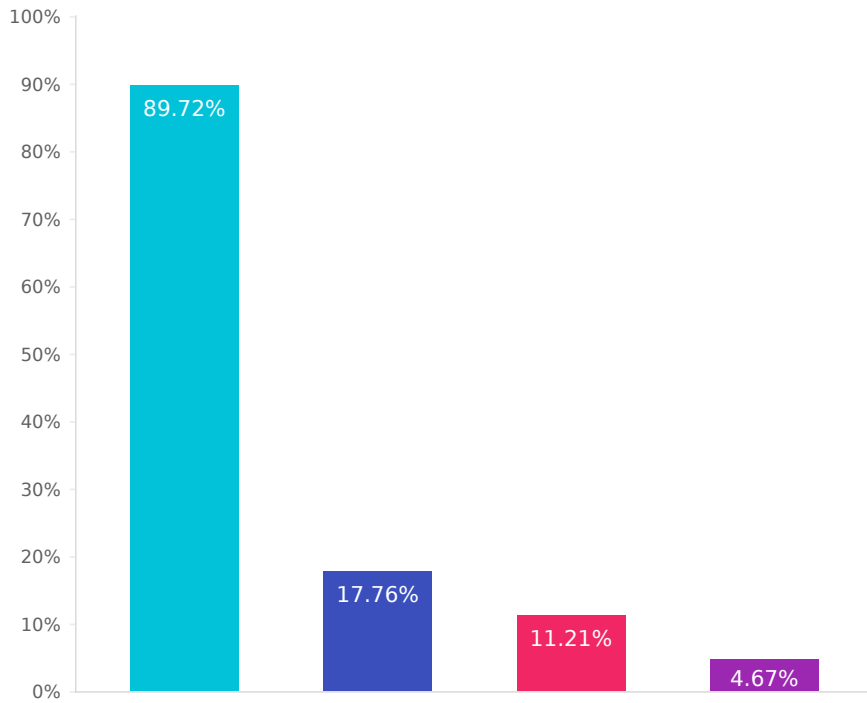
- s3cmd / s3tools
- Boto3
- Amazon SDK
- custom / in-house
- Boto
- None
- Other (Please specify)

Choices	Response percent	Response count
s3cmd / s3tools	64.49%	69
Boto3	46.73%	50
Amazon SDK	42.06%	45
custom / in-house	24.30%	26
Boto	16.82%	18
None	4.67%	5
Other (Please specify)	24.30%	26

Q57

RGW authentication mechanism

Answered: 107 Skipped: 138



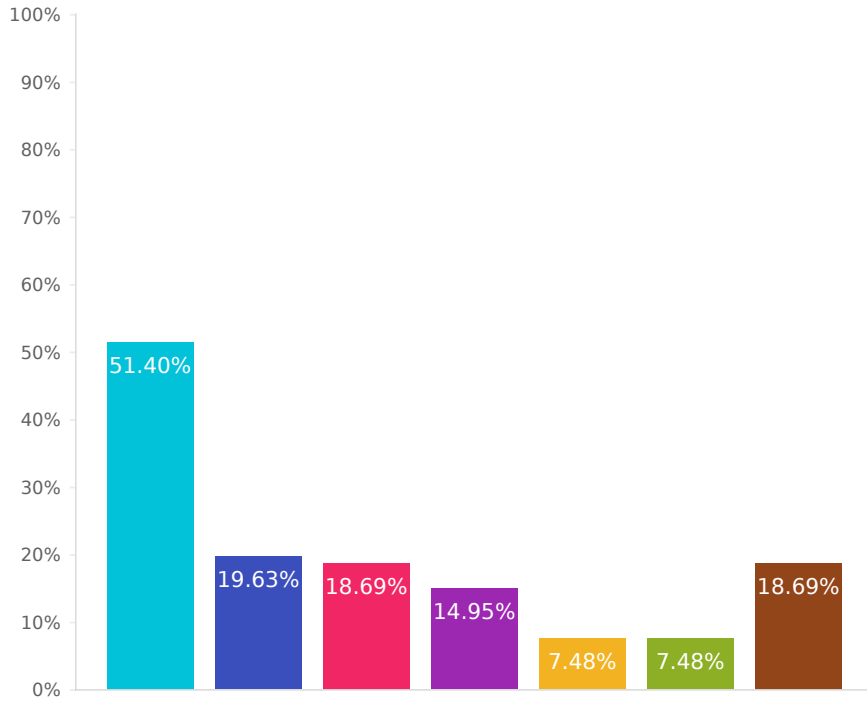
- RGW (built-in)
- Keystone
- LDAP
- Other (Please specify)

Choices	Response percent	Response count
RGW (built-in)	89.72%	96
Keystone	17.76%	19
LDAP	11.21%	12
Other (Please specify)	4.67%	5

Q58

What load balancer(s) or caches do you use with RGW?

Answered: 107 Skipped: 138



- HAproxy
- Nginx
- None
- DNS round-robin
- Varnish
- Dedicated custom hardware (Alteon, F5, etc)
- Other (Please specify)

Choices	Response percent	Response count
HAproxy	51.40%	55
Nginx	19.63%	21
None	18.69%	20
DNS round-robin	14.95%	16
Varnish	7.48%	8
Dedicated custom hardware (Alteon, F5, etc)	7.48%	8
Other (Please specify)	18.69%	20

Q59

Number of RGW federated multi-sites?

Answered: 107 Skipped: 138

Mean	Median	Total	Standard deviation	Variance
0.46	0	49	1.03	1.07

Q60

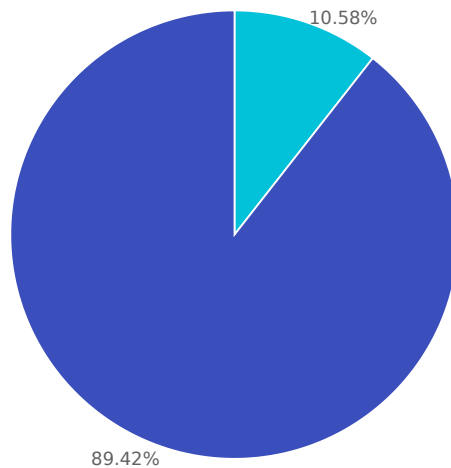
Is RGW Data Caching and CDN feature useful to you? if so list your use case/s?

Answered: 107 Skipped: 138

Q61

Do you have Ceph Multisite Clusters?

Answered: 104 Skipped: 141



● Yes

● No

Choices	Response percent	Response count
Yes	10.58%	11
No	89.42%	93

Q62

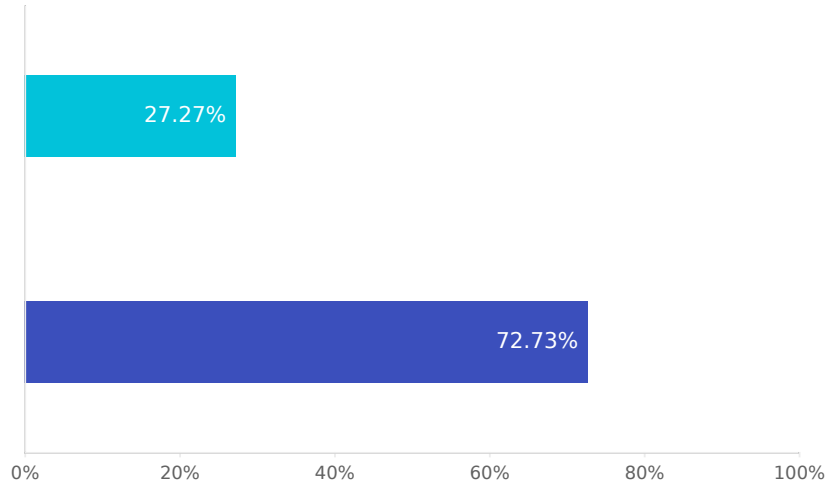
Do you have more than one realm in your setup? if so, how many?

Answered: 11 Skipped: 234

Q63

Do you have more than one zone group in your setup?

Answered: 11 Skipped: 234



● Yes

● No

Choices	Response percent	Response count
Yes	27.27%	3
No	72.73%	8

Q64

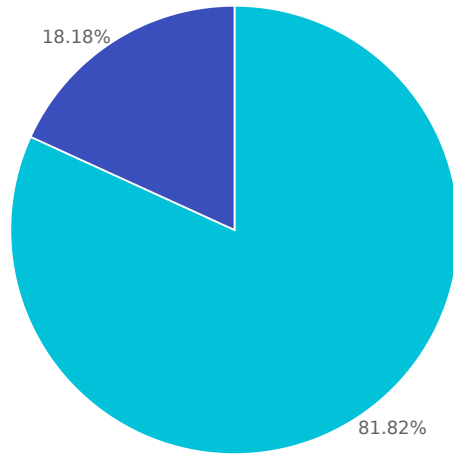
Do you have more than one zone in your setup? if so, how many in the largest zone group?

Answered: 11 Skipped: 234

Q65

Is the syncing policy between zones global or per bucket?

Answered: 11 Skipped: 234



● Global

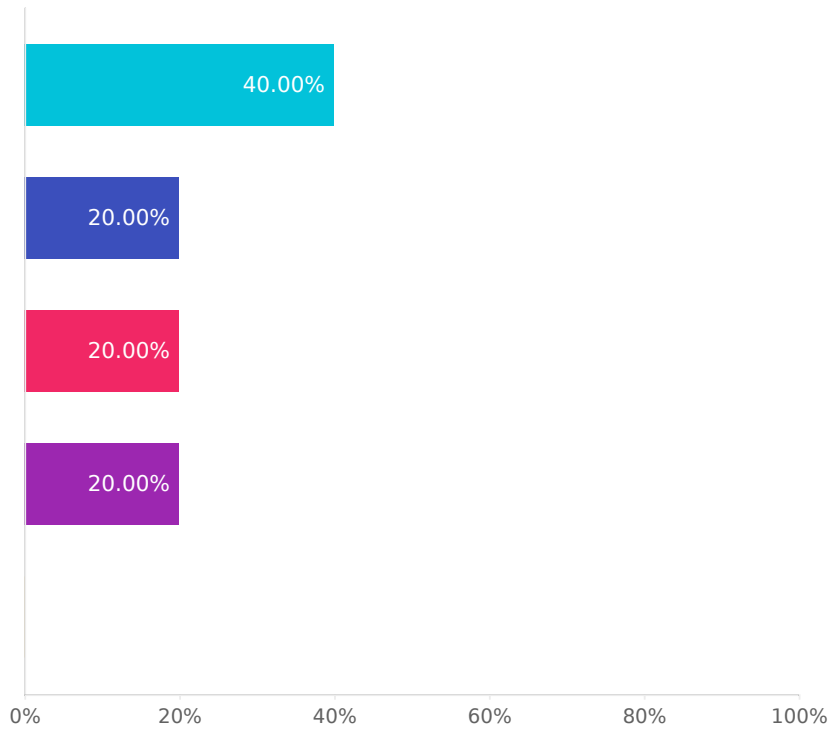
● Per bucket

Choices	Response percent	Response count
Global	81.82%	9
Per bucket	18.18%	2

Q66

Do you use Sync Modules? if so, which modules? and list with which cloud providers.

Answered: 3 Skipped: 242



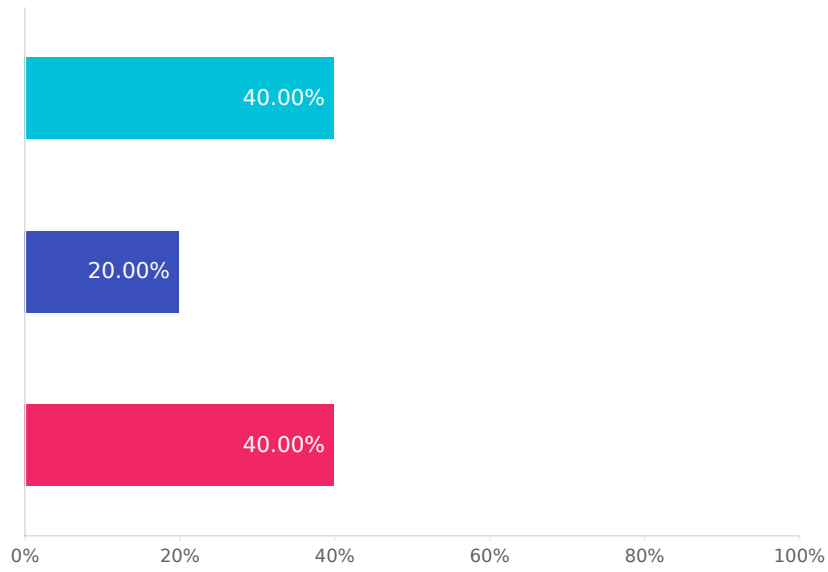
- ElasticSearch Sync Module
- Cloud Sync Module
- PubSub Module
- Check if you use an archive zone
- Archive Sync Module

Choices	Response percent	Response count
ElasticSearch Sync Module	40.00%	2
Cloud Sync Module	20.00%	1
PubSub Module	20.00%	1
Check if you use an archive zone	20.00%	1
Archive Sync Module	0.00%	0
List with which Cloud providers: No Responses		0

Q67

Do you use Bucket Notifications? if so, which endpoints do you use?

Answered: 18 Skipped: 227



● Kafka

● Amqp

● Http

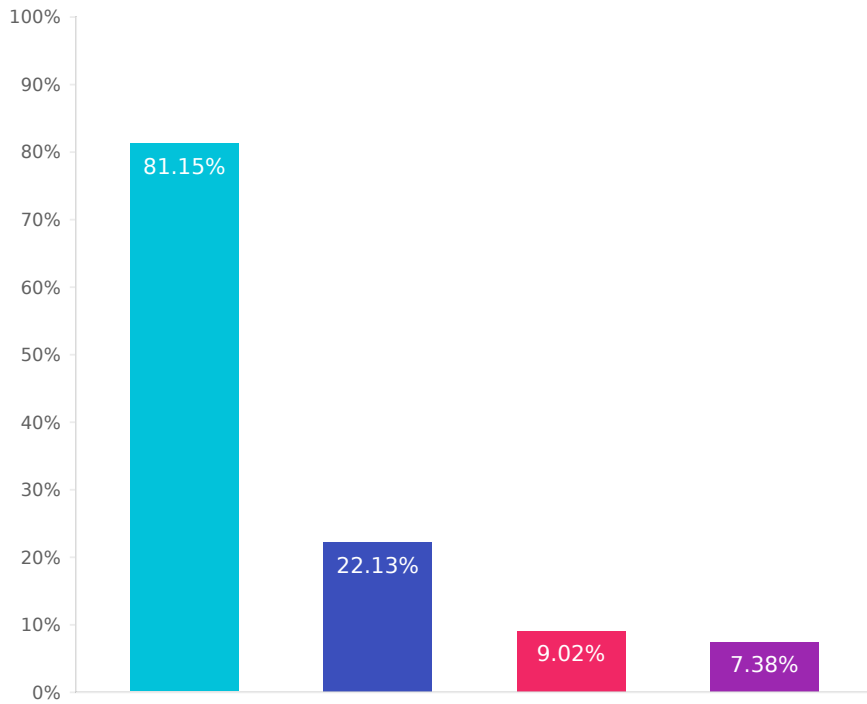
Choices	Response percent	Response count
Kafka	40.00%	8
Amqp	20.00%	4
Http	40.00%	8
Which other endpoints would you like to have?		6

CephFS

Q68

CephFS deployment status

Answered: 122 Skipped: 123



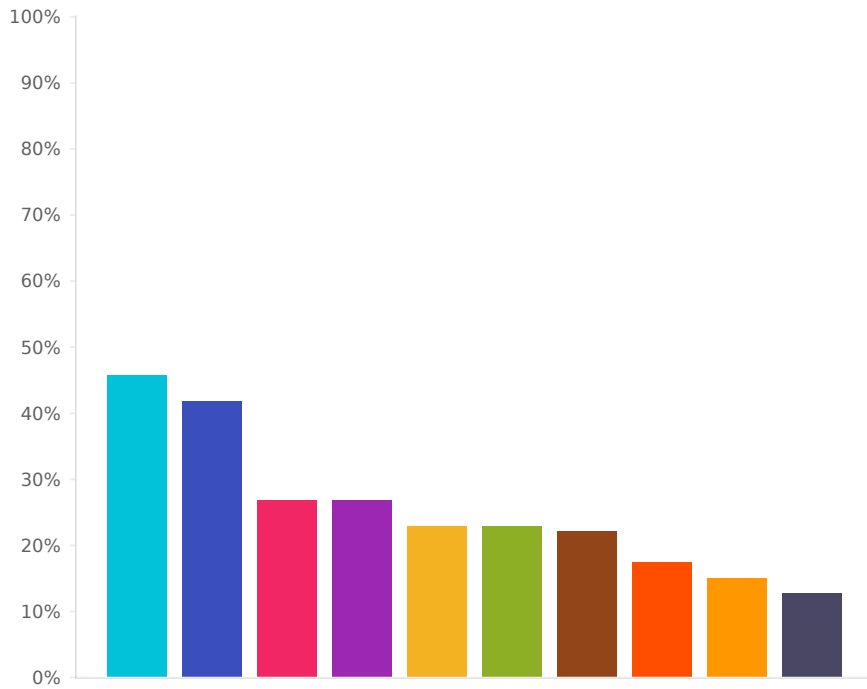
- Production
- Development / Testing
- Proof of Concept (PoC)
- Staging

Choices	Response percent	Response count
Production	81.15%	99
Development / Testing	22.13%	27
Proof of Concept (PoC)	9.02%	11
Staging	7.38%	9

Q69

What are your use cases for CephFS?

Answered: 127 Skipped: 118



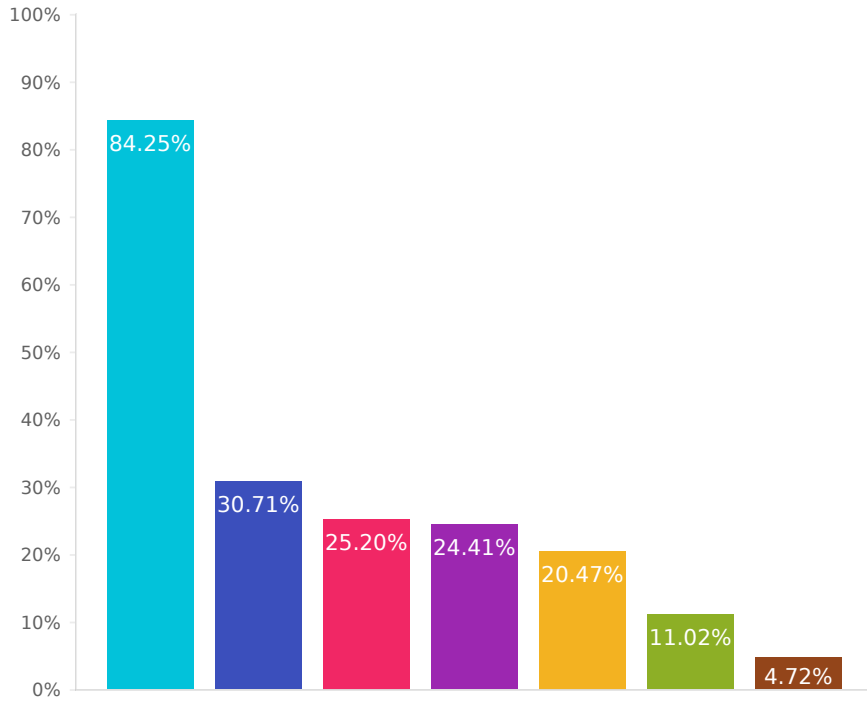
- Archive Storage
- Home Directories
- Containers
- Virtualization
- Scratch
- Cloud
- Big Data & Analytics
- HPC
- Video
- Log
- Build
- CDN
- AI/ML
- Other (Please specify)

Choices	Response percent	Response count
Archive Storage	45.67%	58
Home Directories	41.73%	53
Containers	26.77%	34
Virtualization	26.77%	34
Scratch	22.83%	29
Cloud	22.83%	29
Big Data & Analytics	22.05%	28
HPC	17.32%	22
Video	14.96%	19
Log	12.60%	16
Build	11.02%	14
CDN	4.72%	6
AI/ML	3.15%	4
Other (Please specify)	16.54%	21

Q70

CephFS consumption methods

Answered: 127 Skipped: 118



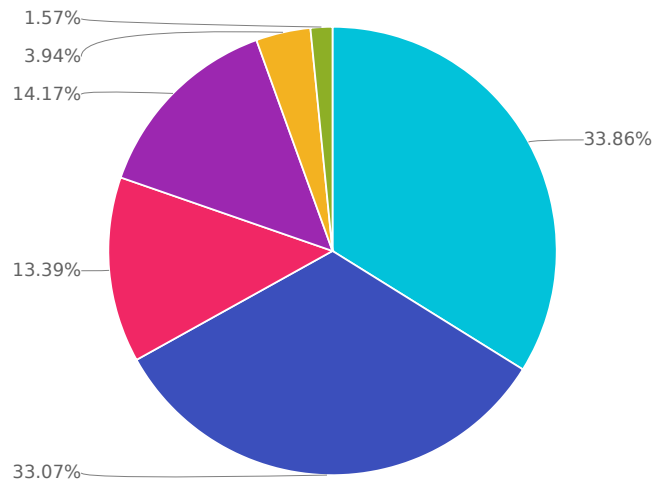
- Linux kernel CephFS mount
- ceph-fuse
- NFS (nfs-ganesha)
- CIFS (SMB, Samba)
- NFS (Kernel NFS server)
- libcephfs
- Other (Please specify)

Choices	Response percent	Response count
Linux kernel CephFS mount	84.25%	107
ceph-fuse	30.71%	39
NFS (nfs-ganesha)	25.20%	32
CIFS (SMB, Samba)	24.41%	31
NFS (Kernel NFS server)	20.47%	26
libcephfs	11.02%	14
Other (Please specify)	4.72%	6

Q71

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

Answered: 127 Skipped: 118



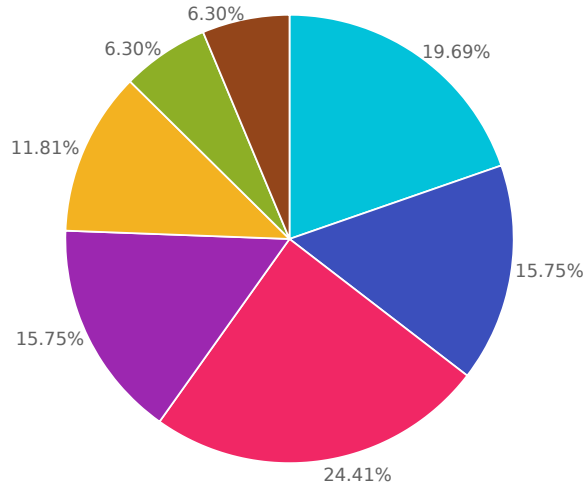
- 1 - 5
- 6 - 50
- 51 - 100
- 101 - 500
- 501 - 2500
- 2500+

Choices	Response percent	Response count
1 - 5	33.86%	43
6 - 50	33.07%	42
51 - 100	13.39%	17
101 - 500	14.17%	18
501 - 2500	3.94%	5
2500+	1.57%	2

Q72

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

Answered: 127 Skipped: 118



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

Choices	Response percent	Response count
1G	19.69%	25
2G - 3G	15.75%	20
4G - 15G	24.41%	31
16G - 31G	15.75%	20
32G - 64G	11.81%	15
65G - 127G	6.30%	8
128G+	6.30%	8

Q73

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

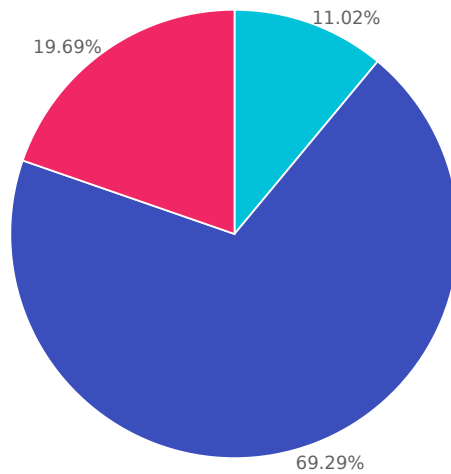
Answered: 127 Skipped: 118

Mean	Median	Total	Standard deviation	Variance
19.27	2	2447	125.81	15829.11

Q74

Do you use CephFS subtree pinning?

Answered: 127 Skipped: 118



● Yes

● No

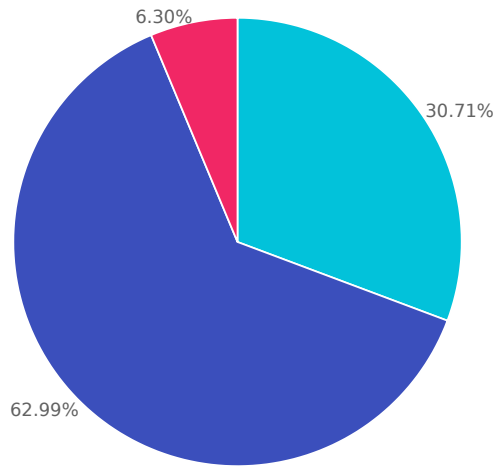
● Unknown

Choices	Response percent	Response count
Yes	11.02%	14
No	69.29%	88
Unknown	19.69%	25

Q75

Do you use CephFS snapshots?

Answered: 127 Skipped: 118



● Yes

● No

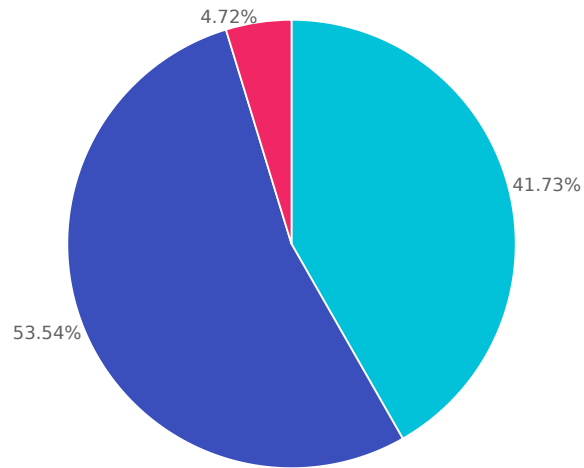
● Unknown

Choices	Response percent	Response count
Yes	30.71%	39
No	62.99%	80
Unknown	6.30%	8

Q76

Do you use CephFS Quotas?

Answered: 127 Skipped: 118



● Yes

● No

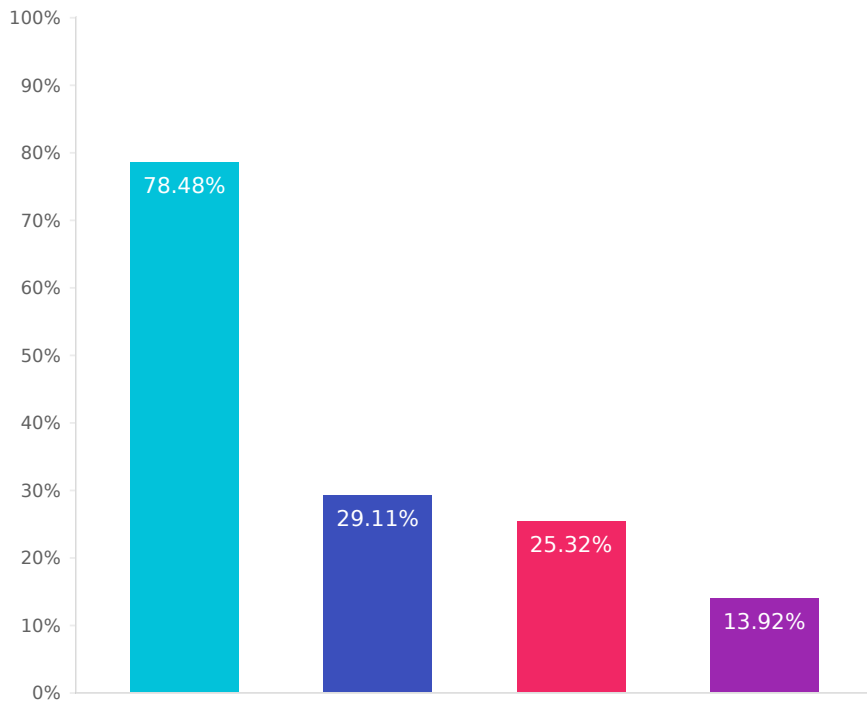
● Unknown

Choices	Response percent	Response count
Yes	41.73%	53
No	53.54%	68
Unknown	4.72%	6

Q77

Which of these experimental Ceph FS features are important to you?

Answered: 79 Skipped: 166



- Multiple File Systems within a Ceph Cluster
- LazyIO
- Inline Data
- Mantle (Programmable Metadata Balancer)

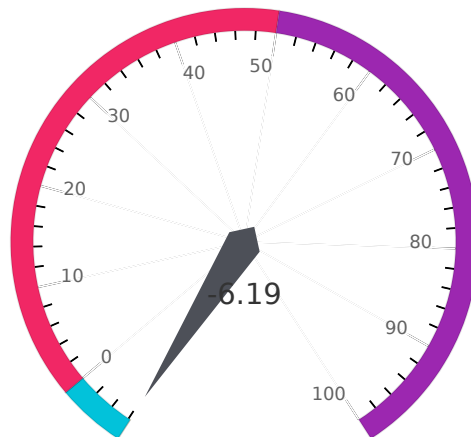
Choices	Response percent	Response count
Multiple File Systems within a Ceph Cluster	78.48%	62
LazyIO	29.11%	23
Inline Data	25.32%	20
Mantle (Programmable Metadata Balancer)	13.92%	11

Ceph Dashboard

Q78

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

Answered: 194 Skipped: 51

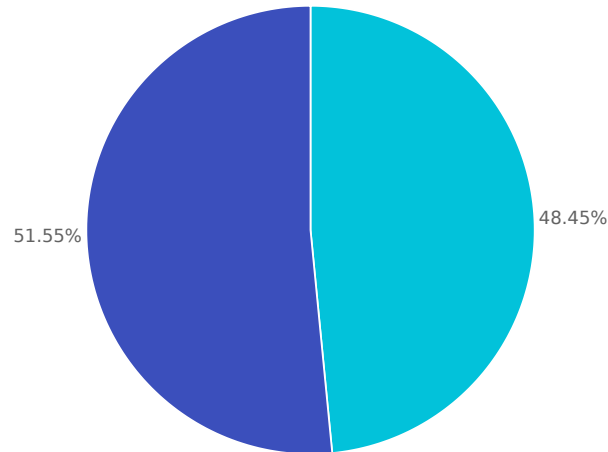


Detractors (0-6)	Passives (7-8)	Promoters (9-10)	Net Promoter Score
80	46	68	-6.19

Q79

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

Answered: 194 Skipped: 51



● Yes

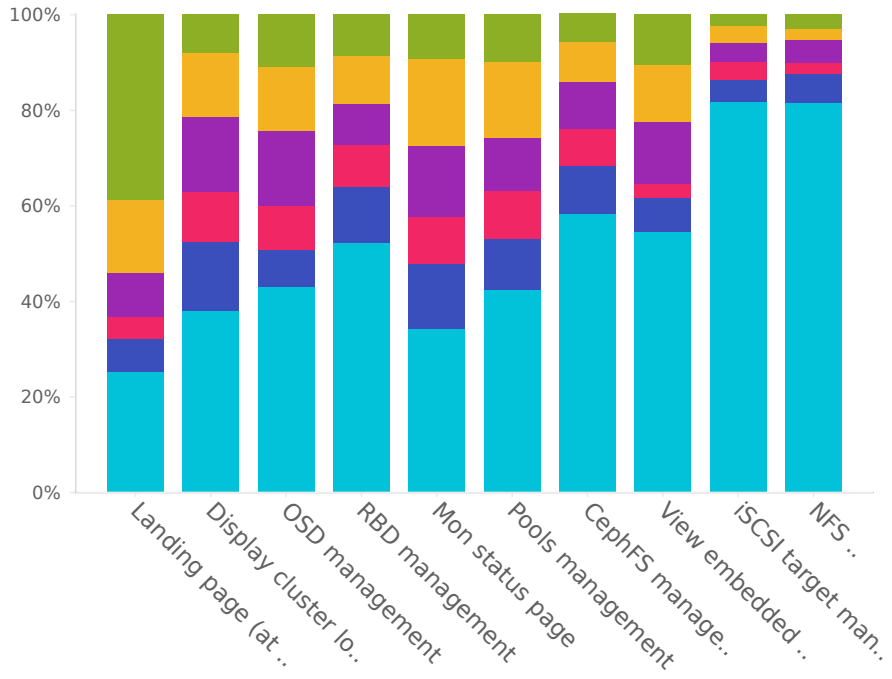
● No (Please specify)

Choices	Response percent	Response count
Yes	48.45%	94
No (Please specify)	51.55%	100

Q80

How often do you use certain dashboard features?

Answered: 176 Skipped: 69



0
3

1
4

2
5

Row	0 (Do not use)	1	2	3	4	5 (Primary Source)	Average rating	Response count
Landing page (at a glance monitoring)	25.14% (44)	6.86% (12)	4.57% (8)	9.14% (16)	15.43% (27)	38.86% (68)	2.99	175
Display cluster logs	37.79% (65)	14.53% (25)	10.47% (18)	15.70% (27)	13.37% (23)	8.14% (14)	1.77	172
OSD management	43.02% (74)	7.56% (13)	9.30% (16)	15.70% (27)	13.37% (23)	11.05% (19)	1.82	172
RBD management	52.05% (89)	11.70% (20)	8.77% (15)	8.77% (15)	9.94% (17)	8.77% (15)	1.39	171
Mon status page	34.12% (58)	13.53% (23)	10.00% (17)	14.71% (25)	18.24% (31)	9.41% (16)	1.98	170
Pools management	42.35% (72)	10.59% (18)	10.00% (17)	11.18% (19)	15.88% (27)	10.00% (17)	1.78	170
CephFS management	58.24% (99)	10.00% (17)	7.65% (13)	10.00% (17)	8.24% (14)	5.88% (10)	1.18	170
View embedded Grafana dashboards	54.44% (92)	7.10% (12)	2.96% (5)	13.02% (22)	11.83% (20)	10.65% (18)	1.53	169
iSCSI target management	81.55% (137)	4.76% (8)	3.57% (6)	4.17% (7)	3.57% (6)	2.38% (4)	0.51	168
NFS Ganesha management	81.44% (136)	5.99% (10)	2.40% (4)	4.79% (8)	2.40% (4)	2.99% (5)	0.5	167
RGW management	68.07% (113)	6.02% (10)	3.61% (6)	7.83% (13)	9.64% (16)	4.82% (8)	0.99	166

Average rating: 1.49

Q81

What functionality do you miss most in the dashboard?

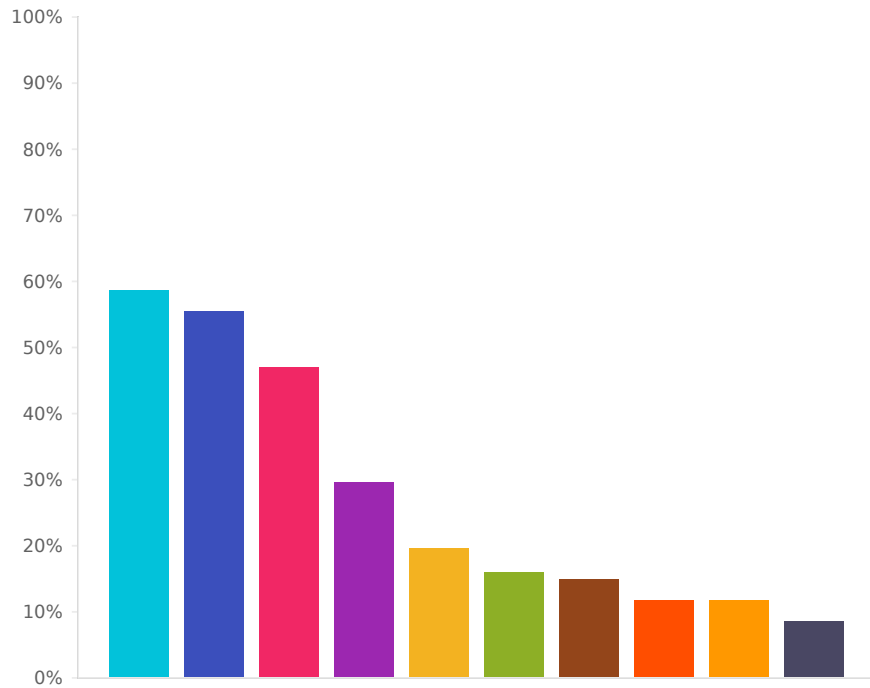
Answered: 194 Skipped: 51

Management and Operation

Q82

What metrics and monitoring tools do you use?

Answered: 190 Skipped: 55



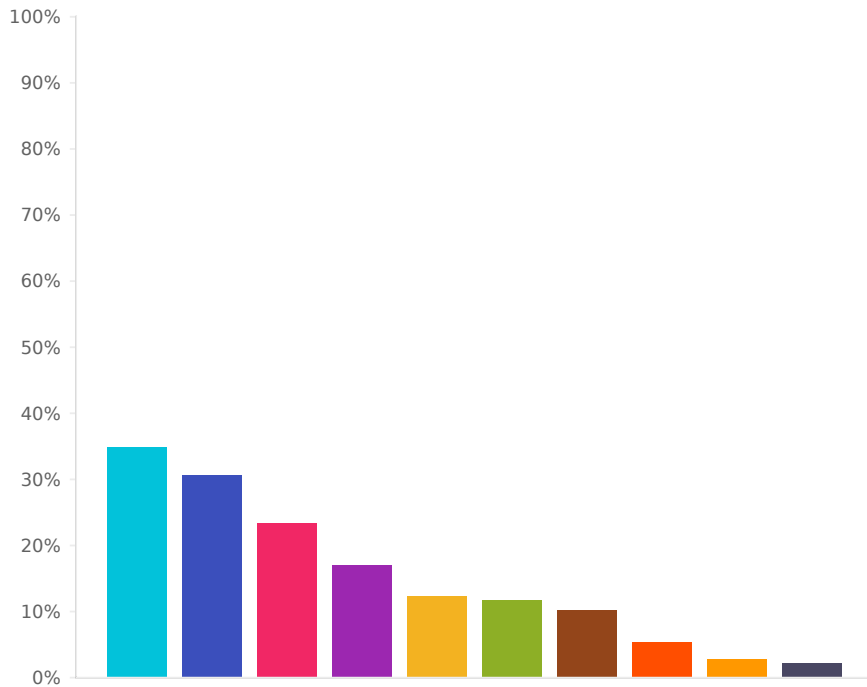
- Ceph Dashboard
- Prometheus
- Grafana (custom)
- node_exporter
- Nagios/icinga
- ceph_exporter
- Zabbix
- Proxmox
- Telegraf
- InfluxDB
- Graphite
- Collectd
- Ceph-metrics
- croit
- Ceph-Dash
- Calamari
- openATTIC
- Performance co-pilot
- Inkscope
- Intel VSM
- Other (Please specify)

Choices	Response percent	Response count
Ceph Dashboard	58.42%	111
Prometheus	55.26%	105
Grafana (custom)	46.84%	89
node_exporter	29.47%	56
Nagios/icinga	19.47%	37
ceph_exporter	15.79%	30
Zabbix	14.74%	28
Proxmox	11.58%	22
Telegraf	11.58%	22
InfluxDB	8.42%	16
Graphite	5.26%	10
Collectd	4.21%	8
Ceph-metrics	3.16%	6
croit	2.63%	5
Ceph-Dash	2.11%	4
Calamari	0.53%	1
openATTIC	0.53%	1
Performance co-pilot	0.53%	1
Inkscope	0.00%	0
Intel VSM	0.00%	0
Other (Please specify)	11.05%	21

Q83

Which deployment and configuration platforms do you use to manage your Ceph clusters?

Answered: 190 Skipped: 55



- Ansible (ceph-ansible)
- ceph-deploy
- cephadm
- Ansible (other / homebrew)
- Rook
- Proxmox
- Puppet
- Salt / DeepSea
- Croit
- Chef
- Juju
- SoftIron Storage Manager
- OSNEXUS QuantaStor
- Other (Please specify)

Choices	Response percent	Response count
Ansible (ceph-ansible)	34.74%	66
ceph-deploy	30.53%	58
cephadm	23.16%	44
Ansible (other / homebrew)	16.84%	32
Rook	12.11%	23
Proxmox	11.58%	22
Puppet	10.00%	19
Salt / DeepSea	5.26%	10
Croit	2.63%	5
Chef	2.11%	4
Juju	1.05%	2
SoftIron Storage Manager	0.53%	1
OSNEXUS QuantaStor	0.00%	0
Other (Please specify)	13.68%	26
