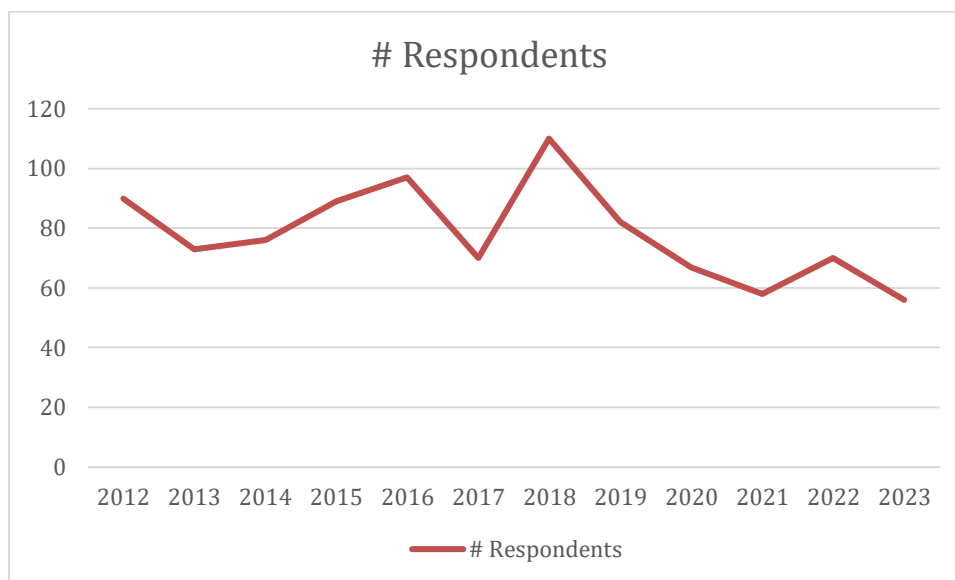## OpenSFS Survey March 2023 Results

Background

A survey was developed and finalized during LWG meetings early in 2023. The intention was to collect information about Lustre usage across the community as input into the OpenSFS long-term support strategy.

Number of Respondents

- 56 respondents completed the survey.

Key Findings

- The Lustre 2.12.x LTS releases are still the most widely used in production
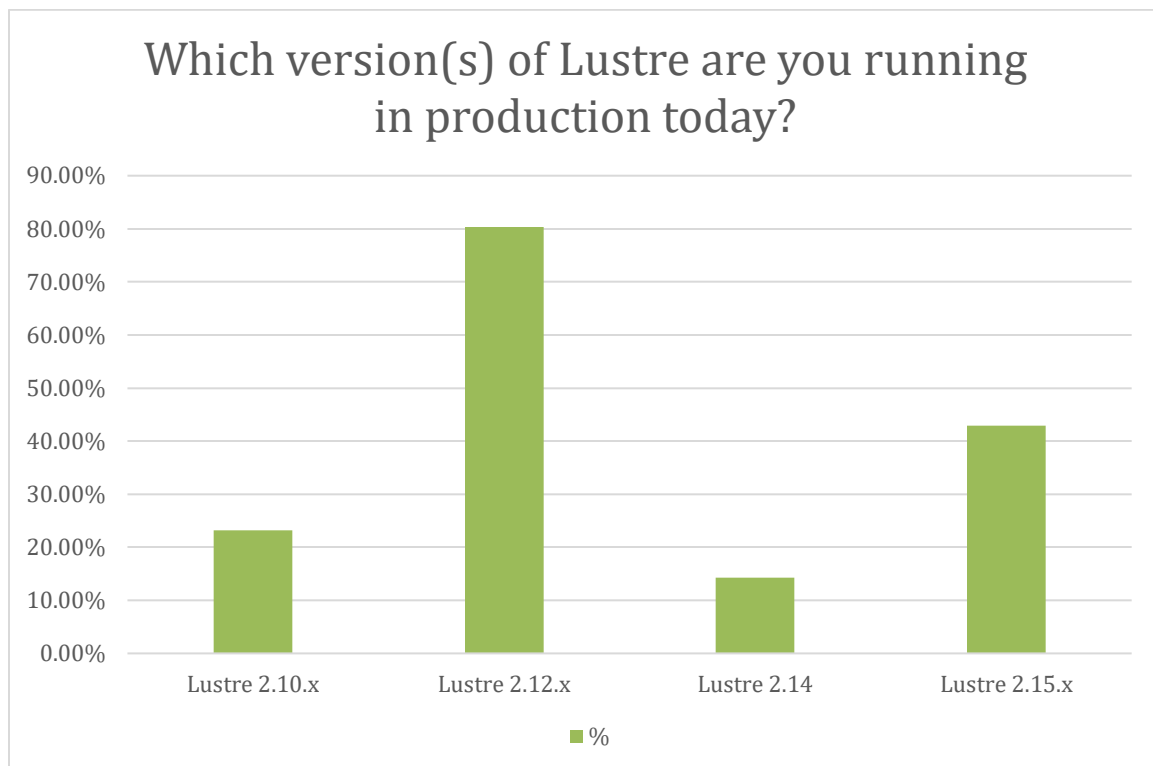- There has been rapid adoption of the Lustre 2.15.x LTS releases

Detailed Findings

1. Which version(s) of Lustre are you running in production today?

This question allowed multiple selections so the sum can exceed the total number of respondents.

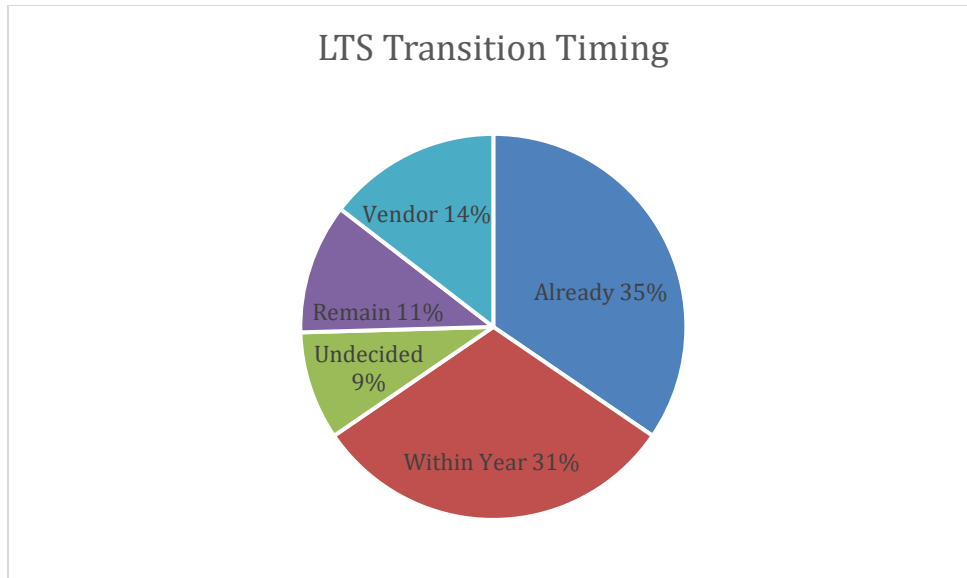| Version	%	#
Lustre 2.10.x	23.21%	13

Lustre 2.12.x	80.36%	45
Lustre 2.14	14.29%	8
Lustre 2.15.x	42.86%	24

Which version(s) of Lustre are you running in production today?

56 completed this question, 0 skipped.

2. <u>How quickly do you plan to move to a Lustre 2.15.x LTS release (once available)?</u>

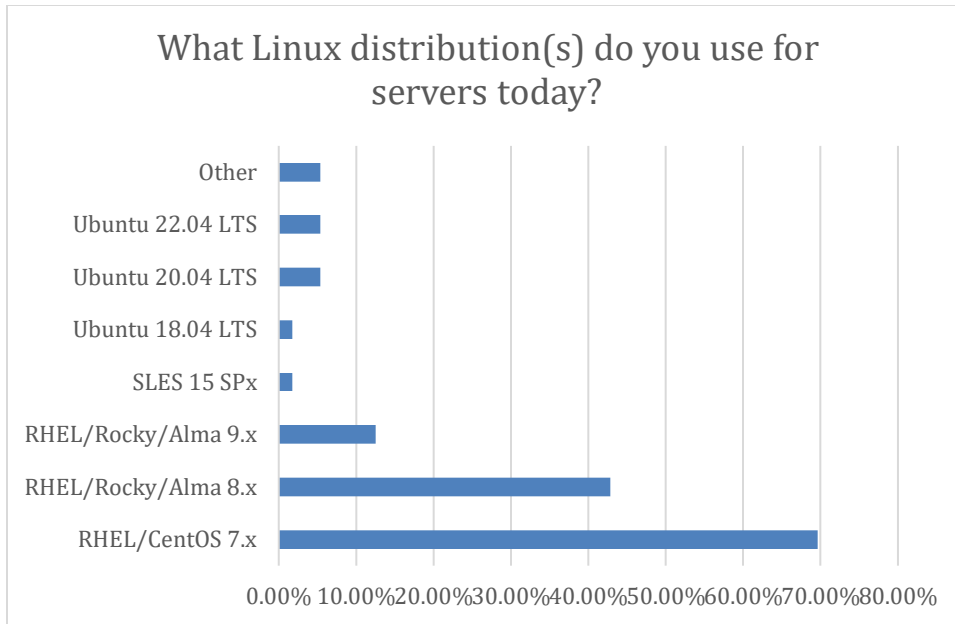| How quickly do you plan to move to a Lustre 2.15.x LTS release?	%	#
Already running 2.15.x in production	34.55%	19
Planning to upgrade in the coming year	30.91%	17
Will assess feedback from early adopters before deciding	9.09%	5
Will remain on current release as long as possible	10.91%	6
As soon as vendor provides option	14.55%	8

LTS Transition Timing

55 completed this question, 1 skipped

3. <u>What Linux distribution(s) do you use for servers today?</u>

This question allowed multiple selections so the sum can exceed the total number of respondents.

Distro	%	#
RHEL/CentOS 7.x	69.64%	39
RHEL/Rocky/Alma 8.x	42.86%	24
RHEL/Rocky/Alma 9.x	12.50%	7
SLES 15 SPx	1.79%	1
Ubuntu 18.04 LTS	1.79%	1
Ubuntu 20.04 LTS	5.36%	3
Ubuntu 22.04 LTS	5.36%	3
Other	5.36%	3

The Other selections included Amazon Linux and Windows (!)

FINAL
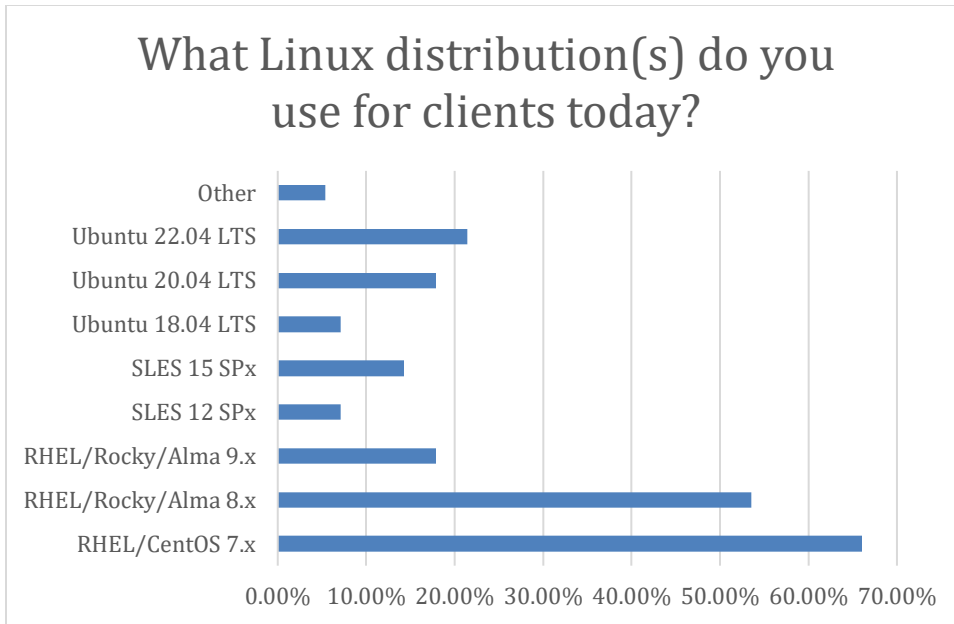
What Linux distribution(s) do you use for servers today?

56 completed this question, 0 skipped

4. What Linux distribution(s) do you use for clients today?

This question allowed multiple selections so the sum can exceed the total number of respondents.

Distro	%	#
RHEL/CentOS 7.x	66.07%	37
RHEL/Rocky/Alma 8.x	53.57%	30
RHEL/Rocky/Alma 9.x	17.86%	10
SLES 12 SPx	7.14%	4
SLES 15 SPx	14.29%	8
Ubuntu 18.04 LTS	7.14%	4
Ubuntu 20.04 LTS	17.86%	10
Ubuntu 22.04 LTS	21.43%	12
Other	5.36%	3

What Linux distribution(s) do you use for clients today?

Bar chart with categories (top to bottom):
- Other
- Ubuntu 22.04 LTS
- Ubuntu 20.04 LTS
- Ubuntu 18.04 LTS
- SLES 15 SPx
- SLES 12 SPx
- RHEL/Rocky/Alma 9.x
- RHEL/Rocky/Alma 8.x
- RHEL/CentOS 7.x

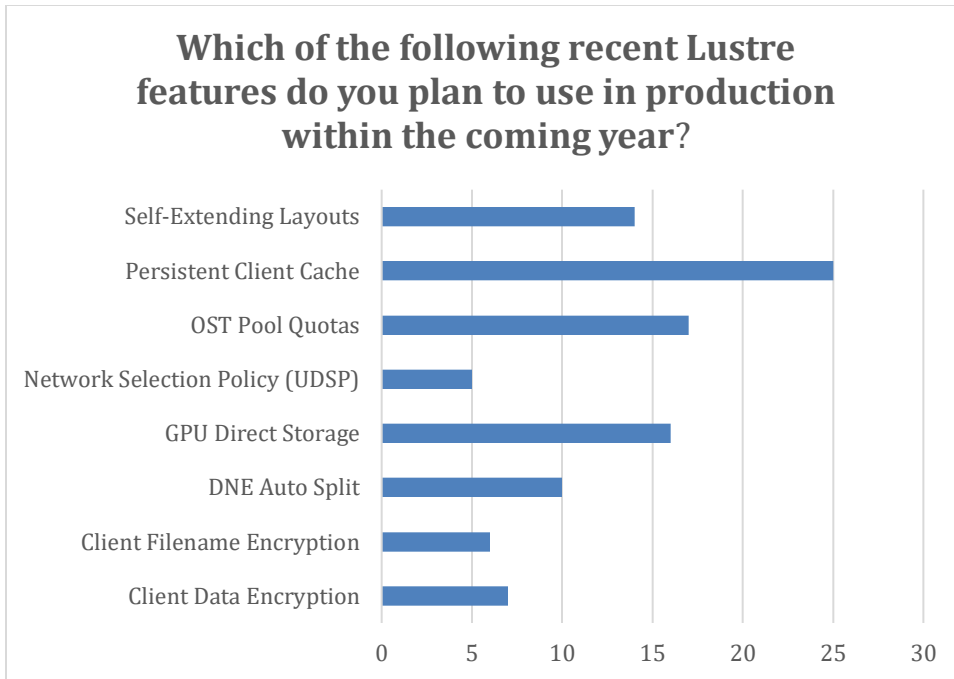X-axis: 0.00% 10.00% 20.00% 30.00% 40.00% 50.00% 60.00% 70.00%

Other responses included Debian and Centos Stream releases.

56 completed this question, 0 skipped.

5. <u>Which of the following recent Lustre features do you plan to use in production within the coming year?</u>

This question allowed multiple selections so the sum can exceed the total number of respondents.

Which of the following recent Lustre features do you plan to use in production within the coming year?

Feature	Value
Self-Extending Layouts	14
Persistent Client Cache	25
OST Pool Quotas	17
Network Selection Policy (UDSP)	5
GPU Direct Storage	16
DNE Auto Split	10
Client Filename Encryption	6
Client Data Encryption	7

37 completed this question, 19 skipped.

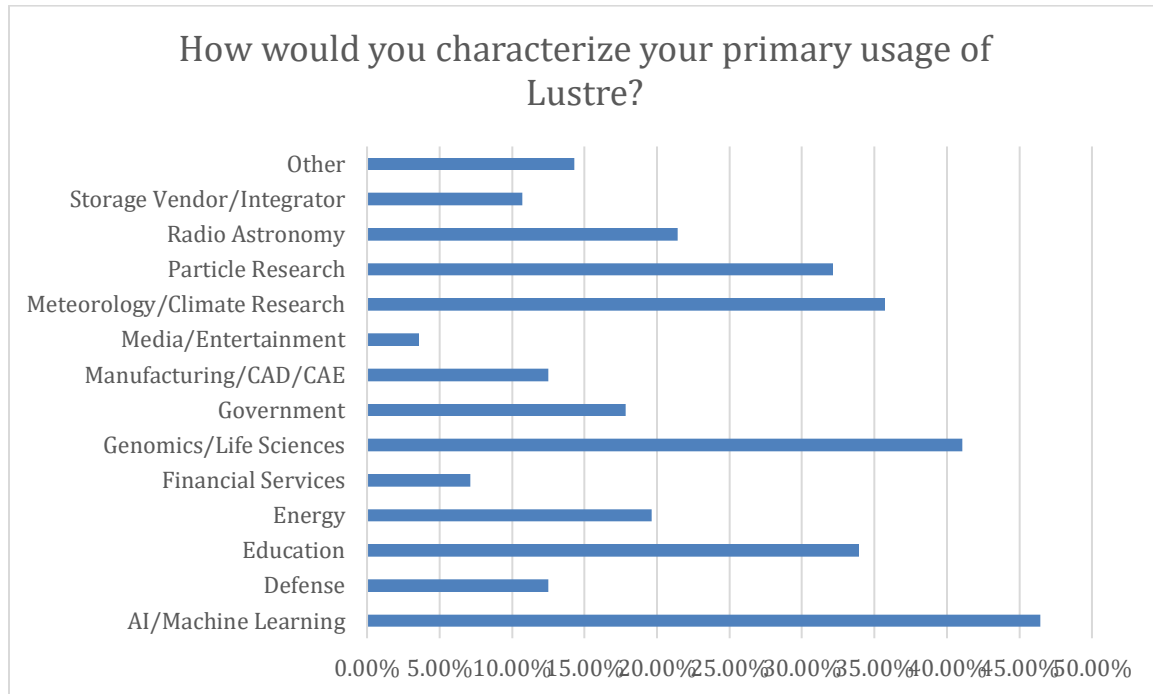6. Which organization do you represent?

46 Answered this question; 10 skipped.

7. Which categories best describes your organization's usage of Lustre?

This question allowed multiple selections so the sum can exceed the total number of respondents.

Primary Usage	%	#
AI/Machine Learning	46.43%	26
Defense	12.50%	7
Education	33.93%	19
Energy	19.64%	11
Financial Services	7.14%	4
Genomics/Life Sciences	41.07%	23
Government	17.86%	10
Manufacturing/CAD/CAE	12.50%	7
Media/Entertainment	3.57%	2
Meteorology/Climate Research	35.71%	20
Particle Research	32.14%	18

Radio Astronomy	21.43%	12
Storage Vendor/Integrator	10.71%	6
Other	14.29%	8

How would you characterize your primary usage of Lustre?

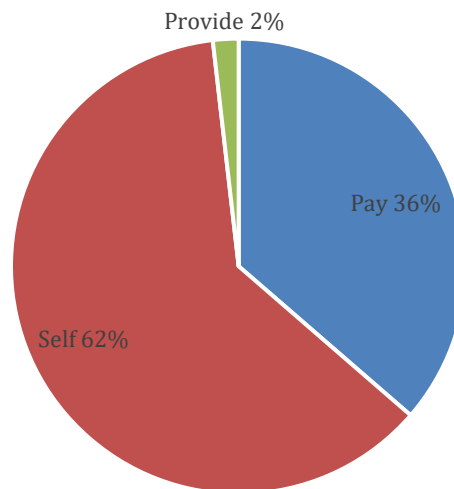The Other category had several selections of General HPC and two of Cosmology.

56 respondents answered the question; 0 skipped.

8. <u>What best describes your Lustre support situation?</u>

This only permitted a single selection so the sum of respondents should equal the total number of respondents.

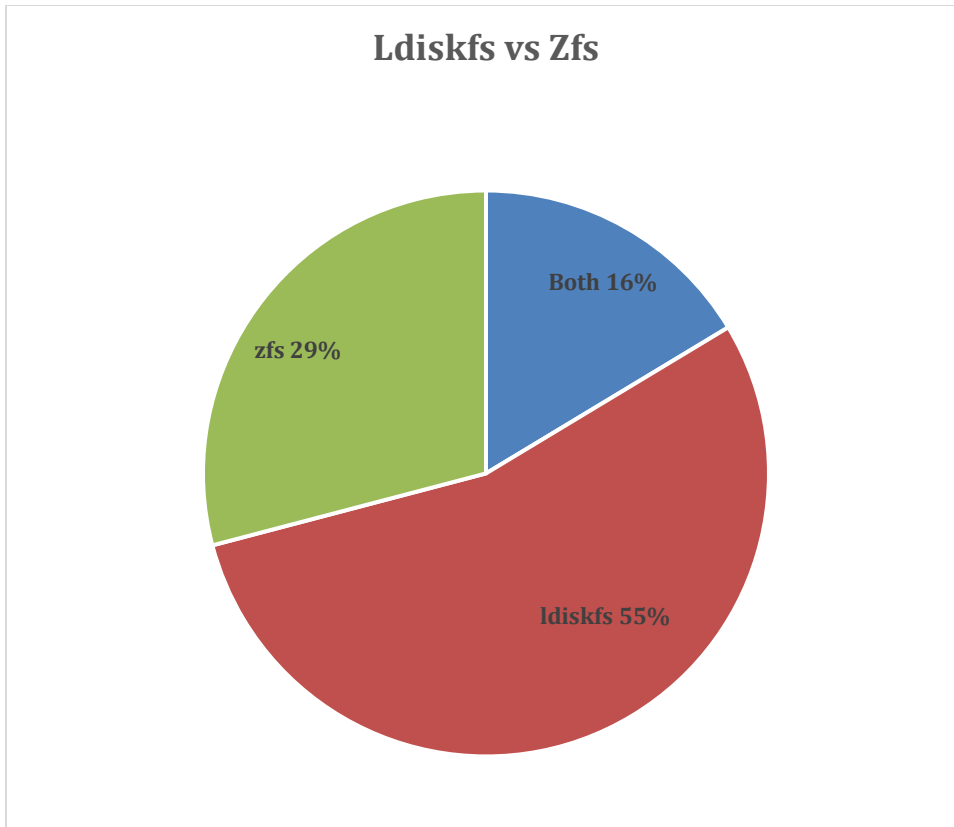|	
We have formal Lustre support arrangements in place with another organization	36.36%
We self-support	61.82%
We offer support to others	1.82%

What best describes your Lustre support situation?

Provide 2%

Pay 36%

Self 62%

55 respondents answered the question; 1 skipped.

9. <u>What backend filesystem do you use for Lustre?</u>

Ldiskfs vs Zfs

Both 16%

zfs 29%

ldiskfs 55%

55 respondents answered the question; 1 skipped.

10. <u>Do you have any requirements that you prefer to use something other than Lustre for? If so, please provide some details.</u>

Feedback discussed at May 2nd LWG meeting.

33 respondents answered; 23 skipped this question.