OpenSFS Survey March 2015 Results

Background

A survey was developed and finalized during LWG meetings early in 2015. The intention was to collect information about Lustre usage across the community as input into the OpenSFS long-term support strategy. The questions were significantly reworked from previous years so comparisons are not always possible but it is believed that the results will now be more useful.
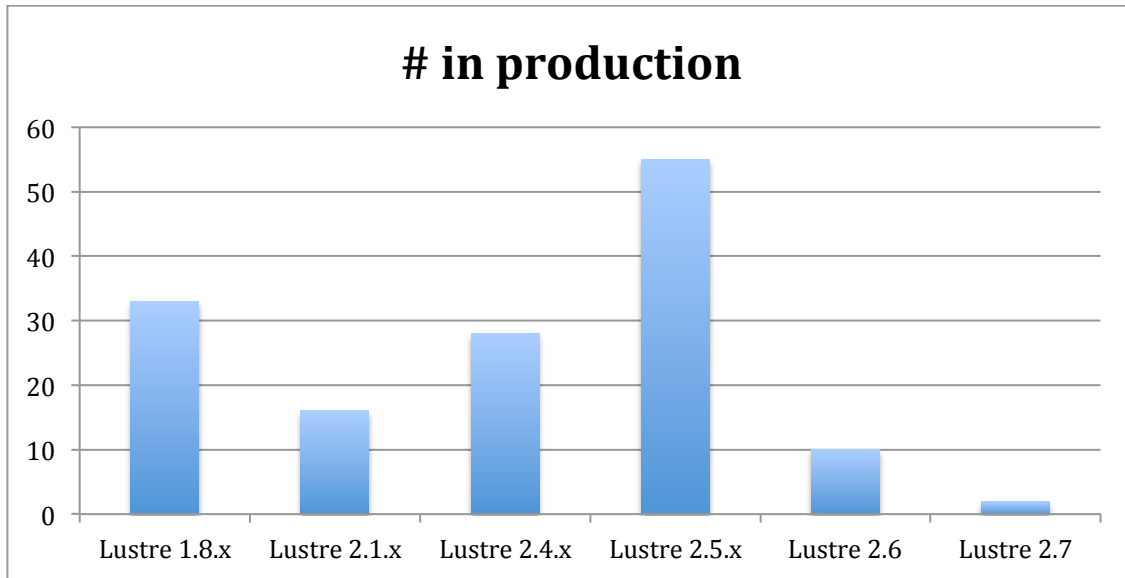
Key Findings

- 89 respondents completed the survey compared to 76 in 2014, 73 in 2013 and 90 in 2012
- There has been strong uptake in adoption of Lustre 2.5.x and it is now by far the most broadly used Lustre version

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.

Lustre version	# in production	% of respondents
Lustre 1.8.x	33	39%
Lustre 2.1.x	16	19%
Lustre 2.4.x	28	33%
Lustre 2.5.x	55	65%
Lustre 2.6	10	12%
Lustre 2.7	2	2%

in production

Three "Other" responses – 1.6.x, 2.2 and "thinking about it".

There has been strong adoption of Lustre 2.5.x.

2. <u>What Linux distribution(s) do you use?</u>

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

Distro	Servers #	Servers %	Clients #	Clients %
RHEL/CentOS 5.x	24	28%	23	27%
RHEL/CentOS 6.x	72	85%	69	81%
RHEL/CentOS 7.x	3	4%	6	7%
SLES 11 SP2	7	8%	8	9%
SLES 11 SP3	4	5%	13	15%
SLES 12	1	1%	3	4%

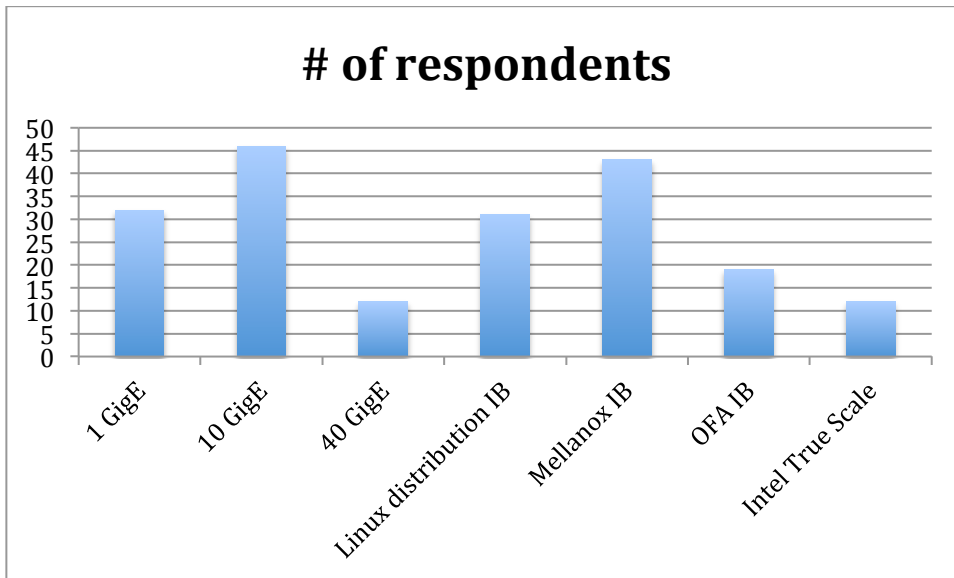Three respondents skipped this question

Other options indicated –3 Debian; 3 Ubuntu; SLES 11 SP0/1 ; and Fedora 20.

3. <u>Which kind of networks do you use with Lustre within your organization?</u>

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

Network type	# of sites	% of

	respondents	
1 GigE	32	38%
10 GigE	46	54%
40 GigE	12	14%
Linux distribution IB	31	36%
Mellanox IB	43	51%
OFA IB	19	22%
Intel True Scale (QLogic) IB	12	14%

of respondents

(Bar chart: 1 GigE ≈32, 10 GigE ≈46, 40 GigE ≈12, Linux distribution IB ≈31, Mellanox IB ≈43, OFA IB ≈19, Intel True Scale ≈12)

No respondents skipped this question

4. <u>What best describes your level of interest in the following recent Lustre features?</u>

	Use now	Within year	Testing	Not ready	Maybe future	Not interested
DNE	3	15	14	2	39	4
HSM	1	15	22	4	30	10
NRS	3	5	13	5	35	10
LFSCK	19	13	11	5	30	2
Wide Striping	5	3	12	1	22	35
ZFS	12	11	18	3	29	8

One respondent skipped this question

5. Which feature(s) would you like to see in upcoming versions of Lustre?

This question permitted free text answers and there was great diversity in the answers. The most popular suggestions had three respondents interested and was for a windows native client.

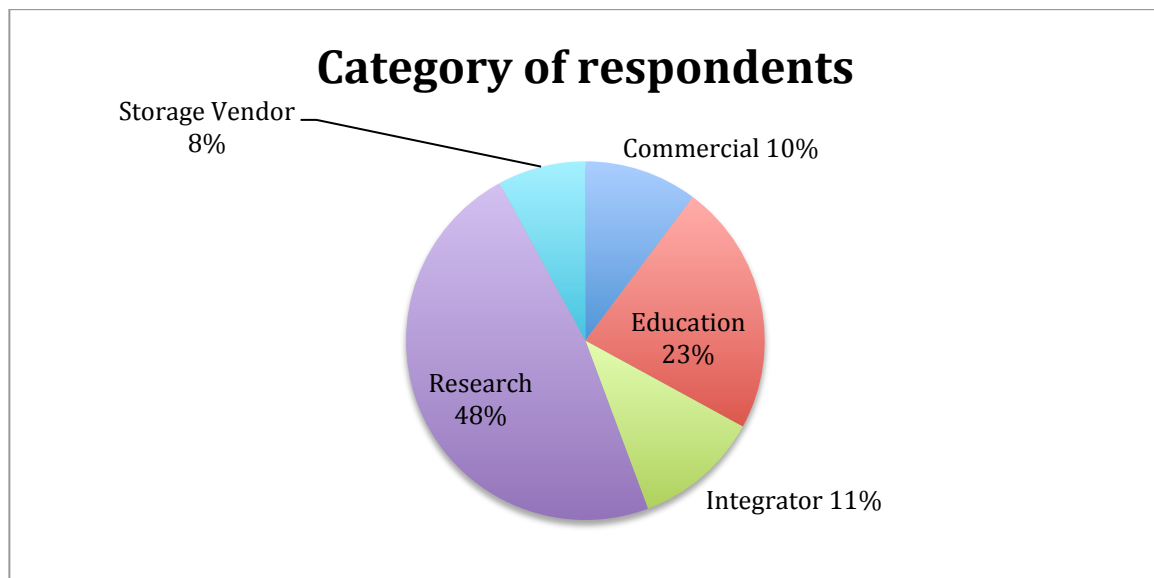Thirty five respondents skipped this question

6. Which organization do you represent?

73 Answered this question; 14 skipped it.

7. Which category best describes your organization?

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

Category	2012 #	2013 #	2014 #	2015 #
Commercial	13	8	8	9
Education	18	11	8	20
Integrator	4	1	5	10
Research	46	41	50	42
Storage Vendor	6	9	5	7

Category of respondents

Storage Vendor 8%
Commercial 10%
Education 23%
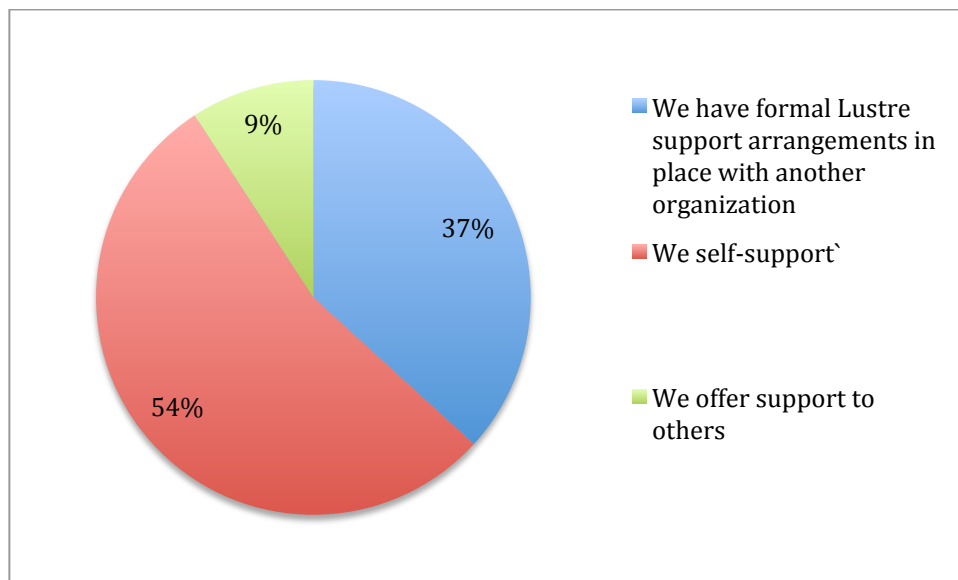Research 48%
Integrator 11%

One respondent skipped this question

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.

This year the options were simplified to consolidate different responses that mean self-supporting. Data from previous years has also been consolidated for comparison purposes.

Support Arrangement	2012 #	2013 #	2014 #	2015 #
We have formal Lustre support arrangements in place with another organization	32	24	23	32
We self-support`	57	45	48	47
We offer support to others	N/A	4	5	8

Two respondents skipped this question

9. <u>What is the total number of Lustre filesystems you have in production?</u>

470 filesystems were declared across all respondents.

Ten respondents skipped this question

10. How many of the following components do you have in your largest Lustre filesystem?

Component	Total
MDS	126
MDT	117
OSS	2,464
OST	11,270
Client	160,460

Ten respondents skipped this question.