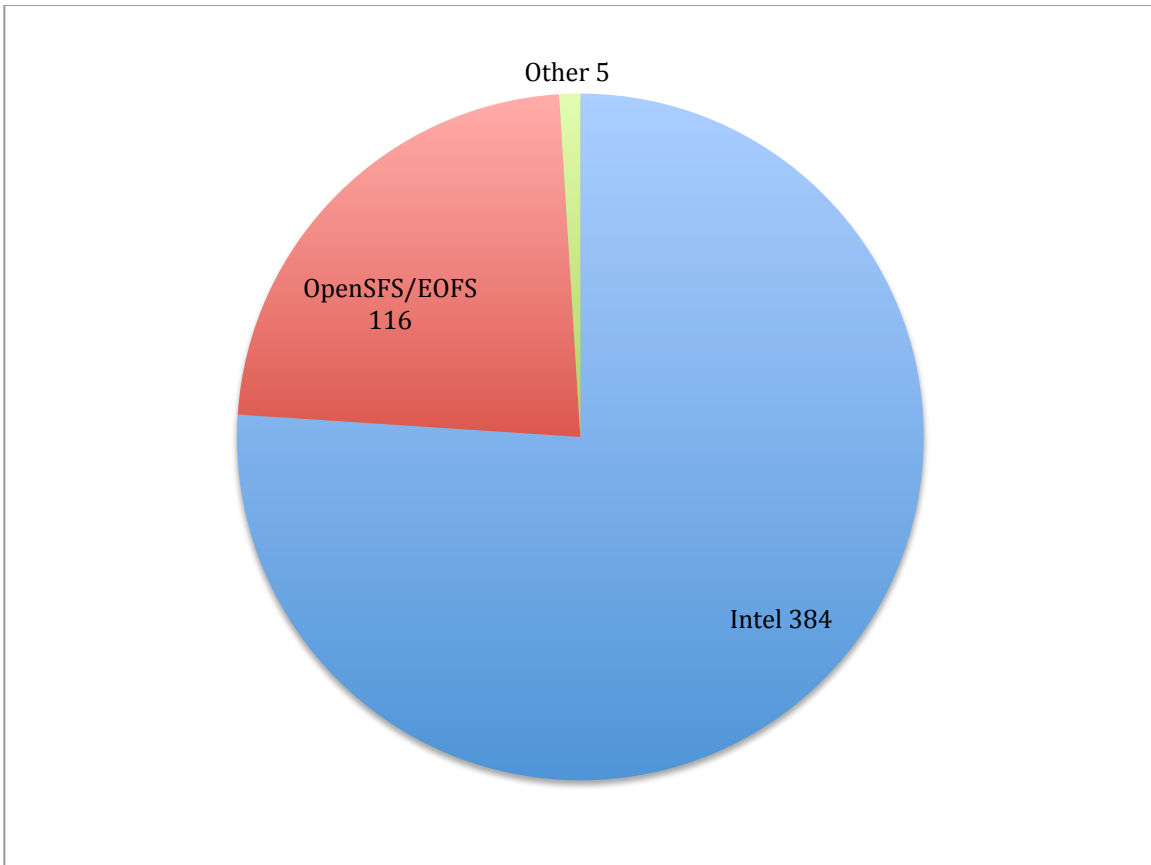## OpenSFS-Intel Lustre Tree Report – Q4 2012

This report provides a brief summary of the highlights of activity on the Lustre master branch for Q4 2012 (and landings to master from Q3 after 2.3 branched that were deferred from the last report). The full details of landings can be seen at **http://tinyurl.com/wcgit** .

Landings By Organization

These are just straight totals of the number of landings made to master during the quarter broken down by the organization. Contributions from outside Intel are broken down by the contributing engineer's community affiliation.
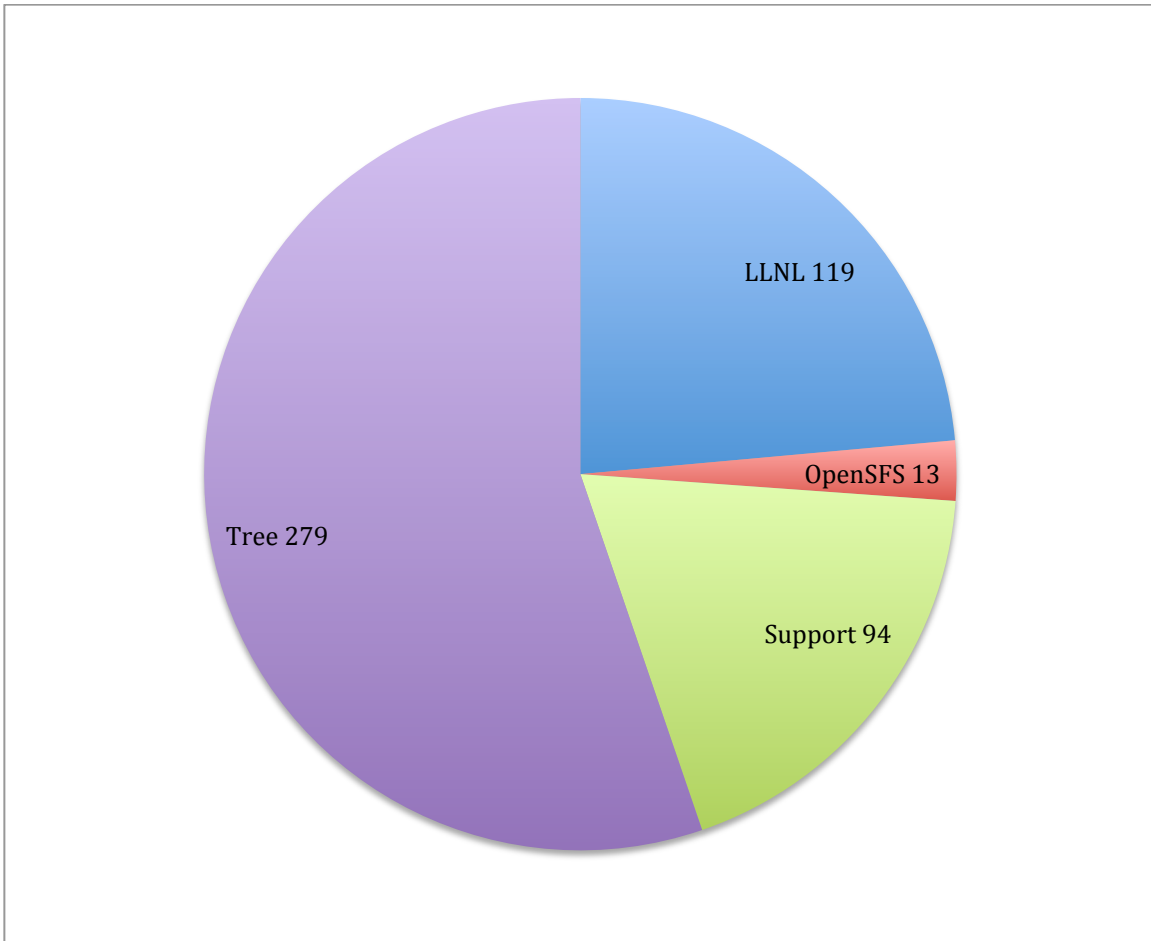
Note that the number of landings is lower than the number of git commits because it excludes

- Landings which were subsequently reverted within the same cycle, thus reinstating the original code

- The creation of tags

Landings By Contract

LLNL: Landing of work related to the LLNL-Intel NRE contract
OpenSFS NRE: Landing of work funded by the OpenSFS-Intel NRE contract
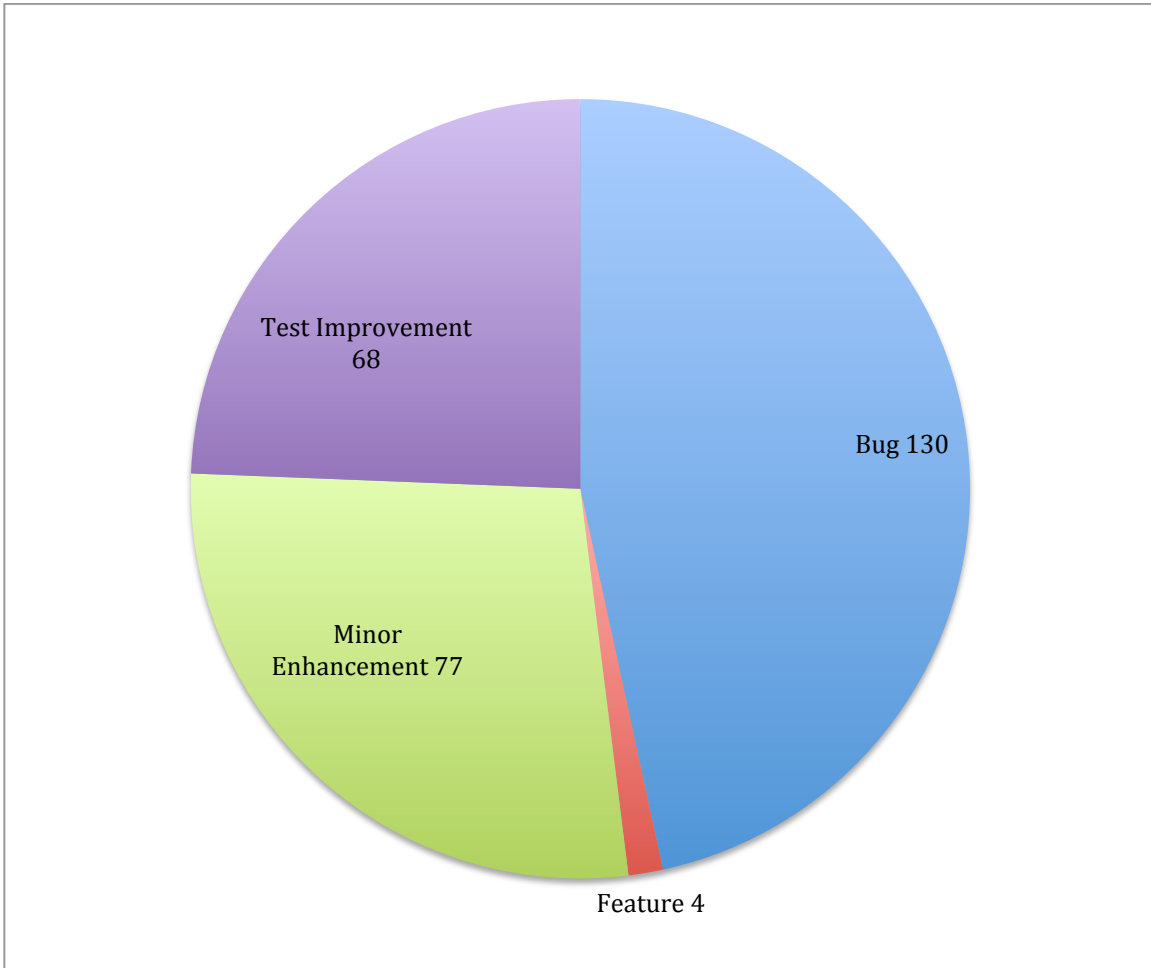**Support**: Landing of work funded by Intel support contracts
Intel Funded/Open SFS Tree: Landing of work not covered by other contracts. This work is partially funded by the OpenSFS-Intel Lustre Tree contract and otherwise covered by Intel.

Intel Funded/OpenSFS Tree Contract Landings by Type

Bug: Correcting Lustre code in response to a defect discovered by Intel or an unsupported organization

Feature: Enhancing Lustre to provide new functionality not funded by other NRE contracts

Minor Enhancement: Enhancing Lustre to provide minor new capabilities e.g. supporting new kernels, etc

Test Improvement: Improvements made to Lustre tests (fixed flaws in the tests that can result in false failures, adding new tests, etc)

Third Party Landing: Performing inspections and testing on contribution from organization without support arrangements in place.

Quality Metrics

The below report shows a summary of testing results from maloo.

Note that many test failures are due to issues with the testing environment or the test scripts themselves, rather than bugs in Lustre.

This report can be generated dynamically at https://maloo.whamcloud.com/reports and the individual details can be drilled into and mapped to issues in JIRA.

Tests highlighted in red have either declined compared to the previous revision or else are new tests with at least one failure.

Tests highlighted in orange have one or more failures but an improved pass rate compared to the prior revision.

Tests highlighted in green passed all test runs.

Note that runracer test suite was renamed to racer and liblustre testing was suspended because this code has been deprecated.

Pass rate report for lustre-release - master

	2.3.58 1f77320 2012-12-31	2.3.56 e72ffc3 2012-11-19	2.3.54 241615b 2012-10-29	2.3.53 5fbe428 2012-10-08	2.2.93 861105f 2012-08-16	2.2.92 fee5548 2012-07-30	2.2.91 cae478c 2012-07-19	2.2.90 1934a98 2012-07-10	2.2.59 84a414b 2012-07-02	2.2.57 b3b8bc5 2012-06-19	2.2.56 68ab992 2012-06-18	2.2.55 4ae3a06 2012-06-14	2.2.54 2405f4f 2012-05-29	2.2.53 d4635b8 2012-05-23	2.2.52 3535f0e 2012-05-08	2.2.50 368b67d 2012-03-06	2.1.56 e41a9f9 2012-02-18	2.1.55 1255aa5 2012-01-25	2.1.54 107a010 2012-01-11	2.1.52 3156b07 2011-11-12	2.1.0 9d71fa8 2011-09-16	2.1.0-RC1 1f1c672 2011-08-23
clean_post_upgrade							1/1															
clean_pre_upgrade							1/1															
conf-sanity	2/3	1/3	1/1		6/6	9/10	4/6	10/10	6/6	6/6	3/3	4/4	5/7		9/9	3/3	5/5	6/13	2/3	7/7	1/20	1/2
insanity	3/3	3/3	1/1		6/6	10/10	6/6	10/10	6/6	6/6	3/3	0/4	7/7		9/9	3/3	5/5	8/8	3/3	7/7	20/20	3/3
large-scale	3/3	3/3	1/1		6/6	6/9	4/6	10/10	6/6	6/6	3/3	3/4	6/6		8/8	2/2	5/5	7/7	3/3	7/7		
lfsck	3/3	2/3	0/1		2/6	2/10	2/6	3/10	4/6	1/6	1/3	0/4	3/7		6/9	2/3	7/8	1/10	1/3	5/7	23/25	2/2
liblustre																3/5		10/16	2/3	1/7	7/25	2/2
lnet-selftest	3/3	3/3	1/1		6/6	6/9	5/6	10/10	6/6	6/6	3/3	3/4	6/6		8/8	2/2	5/5	7/7	3/3	7/7	16/16	3/4
lustre-rsync-test	3/3	2/3	1/1		5/5	6/9	4/5	7/8	5/5	5/5	2/2	3/4	5/6		9/9	2/2	5/5	9/9	2/2	7/7	13/13	
mds-survey	3/3	3/3	1/1		5/5	3/7	3/4	7/7	4/4	4/4	2/2	2/3	2/5		5/8							
metadata-updates	3/3	2/3	1/1		6/6	10/10	5/6	10/10	6/6	6/6	3/3	3/4	7/7		9/9	2/2	5/5	10/10	3/3	7/7	20/20	3/3
mmp	3/3	3/3	1/1		6/6	7/10	5/8	10/14	6/8	6/7	3/3	4/5	7/9		9/9	2/2	5/5	8/8	2/3	7/7	18/19	4/4
obdfilter-survey	3/3	2/3	1/1		1/6	6/9	5/6	10/10	6/6	6/6	3/3	3/4	6/6		8/8	2/2	5/5	6/8	3/3	0/7	16/16	4/4
ost-pools	2/3	1/3	1/1		0/6	9/10	5/6	10/10	6/6	6/6	3/3	3/4	7/7		9/9	2/2	5/5	4/10	2/3	3/7	11/20	2/3
parallel-scale	2/3	2/3	1/1		5/6	6/10	4/6	7/10	6/6	5/6	3/3	3/4	4/7		4/8	2/2	4/5	2/7	3/3	2/7	10/19	0/4
parallel-scale-nfsv3	3/3	1/3	0/1		4/5	0/8	2/5	6/9	4/5	4/5	2/3	2/3	5/5		2/7	0/1	1/5					
parallel-scale-nfsv4	3/3	2/2	1/1		5/5	0/7	1/4	7/9	5/5	1/5	1/3	0/3	2/5		2/7	0/1	1/6					
performance-sanity	3/3	3/3	1/1		6/6	7/10	4/6	9/10	6/6	6/6	3/3	4/4	6/7		6/8	2/2	4/5	5/7	3/3	3/7	15/19	0/4
posix	3/3	0/2	1/1		3/4	2/6	0/3	0/7	0/4													
racer	2/3	2/3	1/1		2/6	6/10	5/6	10/10	5/6	6/6	3/3	4/4	7/7		9/9	3/3	6/6	1/10	3/3	7/7	17/21	
recovery-double-scale							0/2	0/4	0/2	1/1		0/2	1/2									
recovery-mds-scale							0/2	0/4	0/2	1/1		0/2	1/2		0/1		2/5	1/1				
recovery-random-scale							0/2	0/4	0/2	1/1		0/2	0/2				2/5	0/1				
recovery-small	2/3	2/3	1/1		6/6	9/10	5/8	10/14	6/8	6/7	3/3	0/5	7/9		9/9	4/4	5/7	10/10	3/3	7/7	19/20	2/2
replay-dual	3/3	2/3	1/1		6/6	8/10	5/8	10/14	6/8	6/7	3/3	2/5	7/9		9/9	5/5	5/5	10/10	3/3	7/7	18/20	2/2
replay-ost-single	3/3	2/3	0/1		6/6	10/10	6/8	10/14	6/8	6/7	3/3	2/5	7/9		9/9	4/4	5/5	10/10	3/3	7/7	20/20	2/2
replay-single	3/3	1/3	0/1		6/6	7/10	4/8	0/14	6/7	5/7	3/3	0/5	5/9		8/9	3/3	5/6	9/11	2/3	6/7	19/20	2/2
replay-vbr	3/3	3/3	1/1		6/6	9/10	6/8	10/14	6/8	6/7	3/3	0/5	7/9		9/9	3/5	5/5	1/10	2/3	7/7	18/20	2/2
runracer																						1/1
runtests	3/3	3/3	1/1		6/6	9/10	5/6	10/10	7/7	8/8	3/3	3/4	7/7		10/10	3/3	9/9	13/13	3/3	7/7	26/29	1/1
sanity	0/3	0/3	0/1		5/6	8/10	2/7	4/10	1/7	3/8	1/3	0/4	4/7		3/10	0/3	0/9	0/13	0/3	5/7	9/30	0/1
sanity-benchmark	3/3	2/3	1/1		6/6	9/10	5/6	10/10	6/6	6/7	3/3	4/4	6/7		7/9	3/3	8/10	10/10	3/3	5/7	2/28	0/1
sanity-quota	2/3	1/3	0/1		6/6	9/10	5/6	10/10	6/6	6/6	3/3	3/4	7/7		9/9	2/3	5/5	7/8	3/3	7/7	18/20	3/3
sanity-scrub					5/5	2/2																
sanity-sec	3/3	3/3	1/1		5/5	9/9	5/5	8/8	5/5	5/5	2/2	3/4	6/6		9/9	2/2	5/5	9/9	2/2	7/7	13/13	2/2
sanityn	3/3	2/3	1/1		6/6	9/10	5/6	10/10	6/6	6/6	3/3	4/4	7/7		9/9	3/3	8/8	10/10	3/3	7/7	24/26	2/2
sgpdd-survey																0/1				0/7	0/16	0/4

FINAL

Work Completed

The two main areas of focus for Q4 2012 were testing and stabilization for the Lustre 2.3 release and feature landings for the upcoming Lustre 2.4 release (targeted for April 2013).

The following feature was landed during the quarter

ZFS OSD: funded by the LLNL NRE contract. (LU-1305)

Release testing was completed according to the 2.3 test plan on the following tags – 2.3.0-RC2, 2.3.0-RC3, 2.3.0-RC5, and 2.3.0-RC6. A number of bugs were found and fixed as a result.

Release testing was completed according to the 2.4 test plan on the following tags – 2.3.50, 2.3.53, 2.3.54, 2.3.56, and 2.3.57. A number of bugs were found and fixed as a result.

Patches to support clients for the 3.3 kernel were landed (LU-1337).

SLES11 SP2 clients are now routinely tested.

Exclusive Hyperion access was provided for five days and 2.3.57 was tested at scale with 437 clients.

Work In Progress

Some initial landings have taken place for DNE (LU-1187), HSM, and NRS (LU-398).

Many patches have already been landed in preparation for supporting clients for newer 3.x kernels. It is expected that Fedora 18 clients will be routinely tested early in Q1 2013 (LU-2148).


Peter Jones
HPDD, Intel
January 3rd 2013

Appendix A: Timeline for Lustre 2.3

Milestone	Planned Date	Actual Date
Open for Landings	April 1st 2012	March 6th 2012
Feature Freeze	June 30th 2012	June 30th 2012
Code Freeze	August 31st 2012	August 16th 2012
GA	September 30th 2012	October 23rd 2012

Appendix B: Landings for Lustre 2.3 By Organization

This combines the data from Q2, Q3 and Q4 2012. Note that the Q2 data has been retroactively adjusted to reflect current OpenSFS/EOFS membership status.

Other 4

OpenSFS/EOFS 119

Intel 435
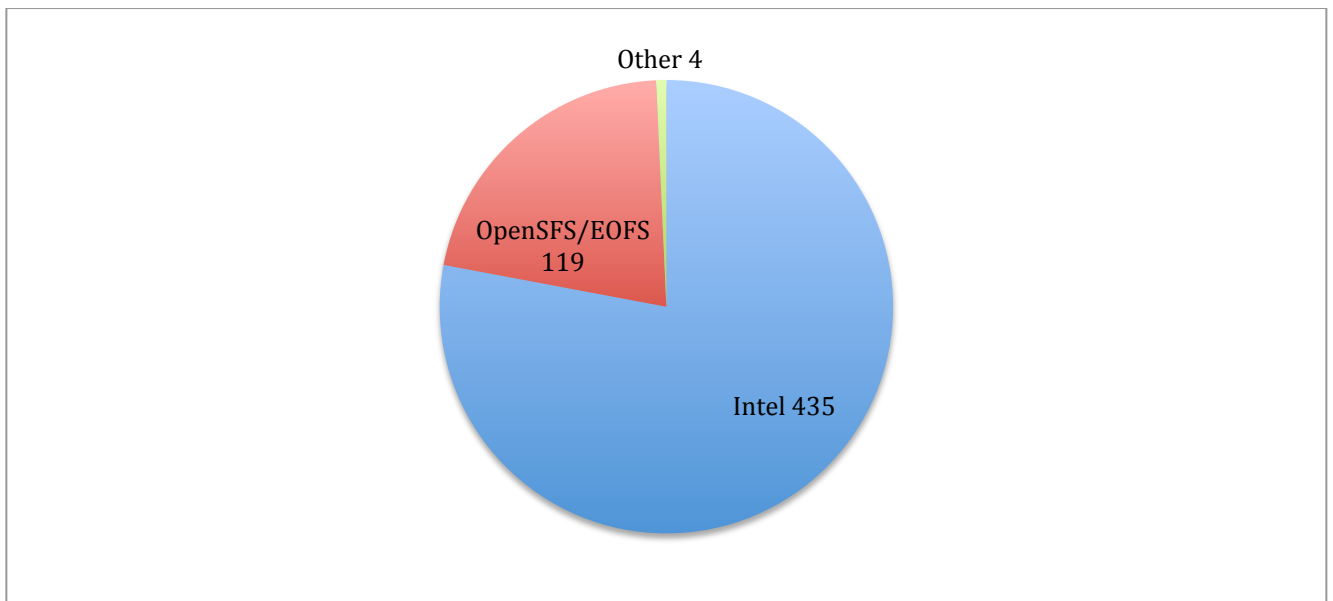
Appendix C: Timeline for Lustre 2.4

Release criterion is zero blockers remaining on the Lustre 2.4 Blockers filter in JIRA - http://jira.whamcloud.com/secure/IssueNavigator.jspa?mode=hide&requestId=10292.

Milestone	Planned Date	Actual Date
Open for Landings	October 1st 2012	August 21st 2012
Feature Freeze	January 31st 2013	TBD

| Code Freeze | March 31st 2013 | TBD |
| GA | April 30th 2013 | TBD |