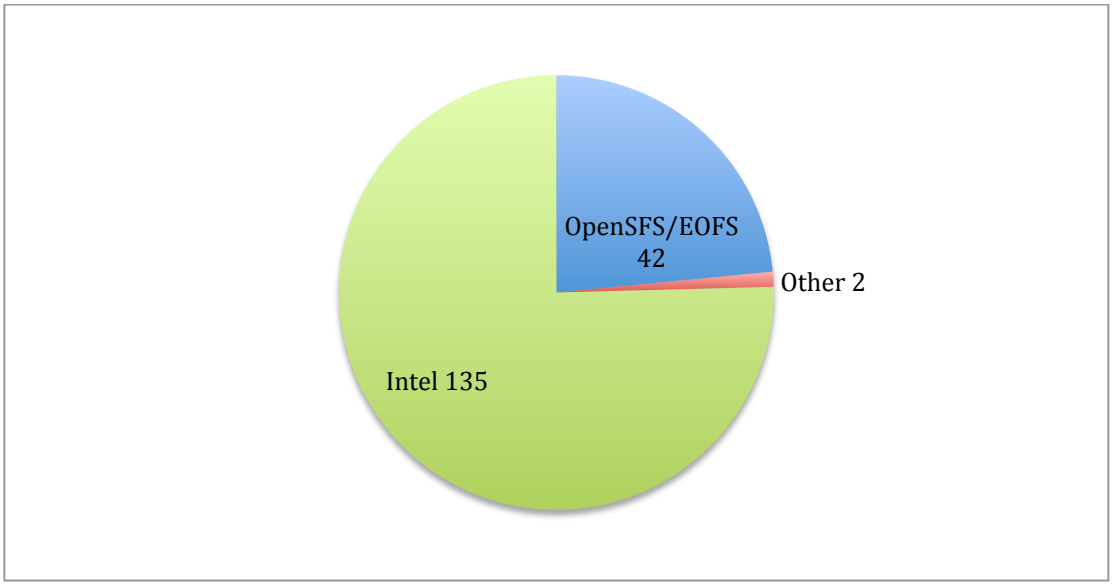
OpenSFS-Intel Lustre Tree Report – Q1 2015

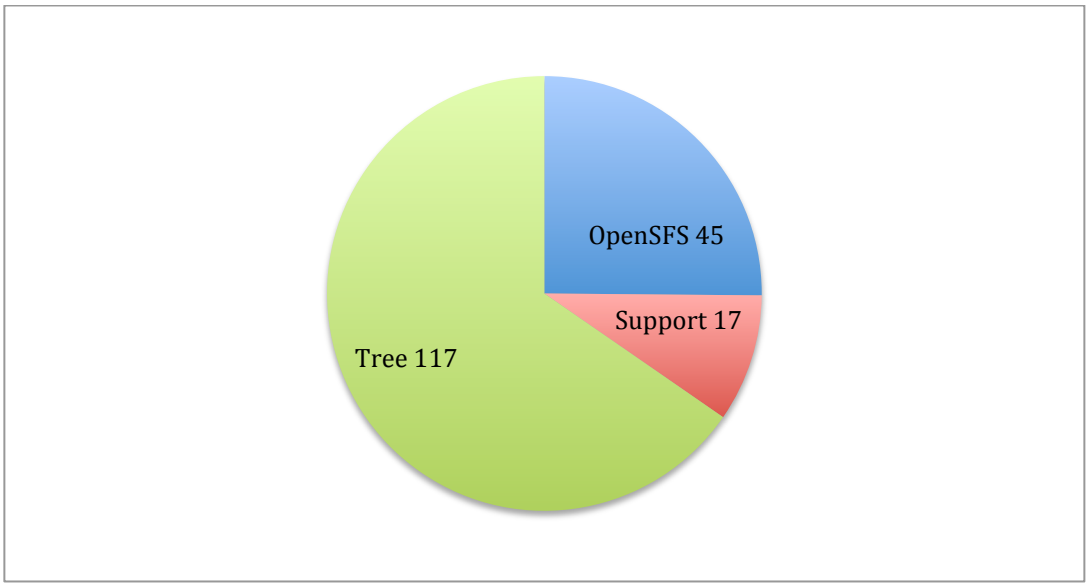
This report provides a brief summary of the highlights of activity on the Lustre master branch for Q1. The full details of landings can be seen at **http://tinyurl.com/wcgit** .

Landings By Organization



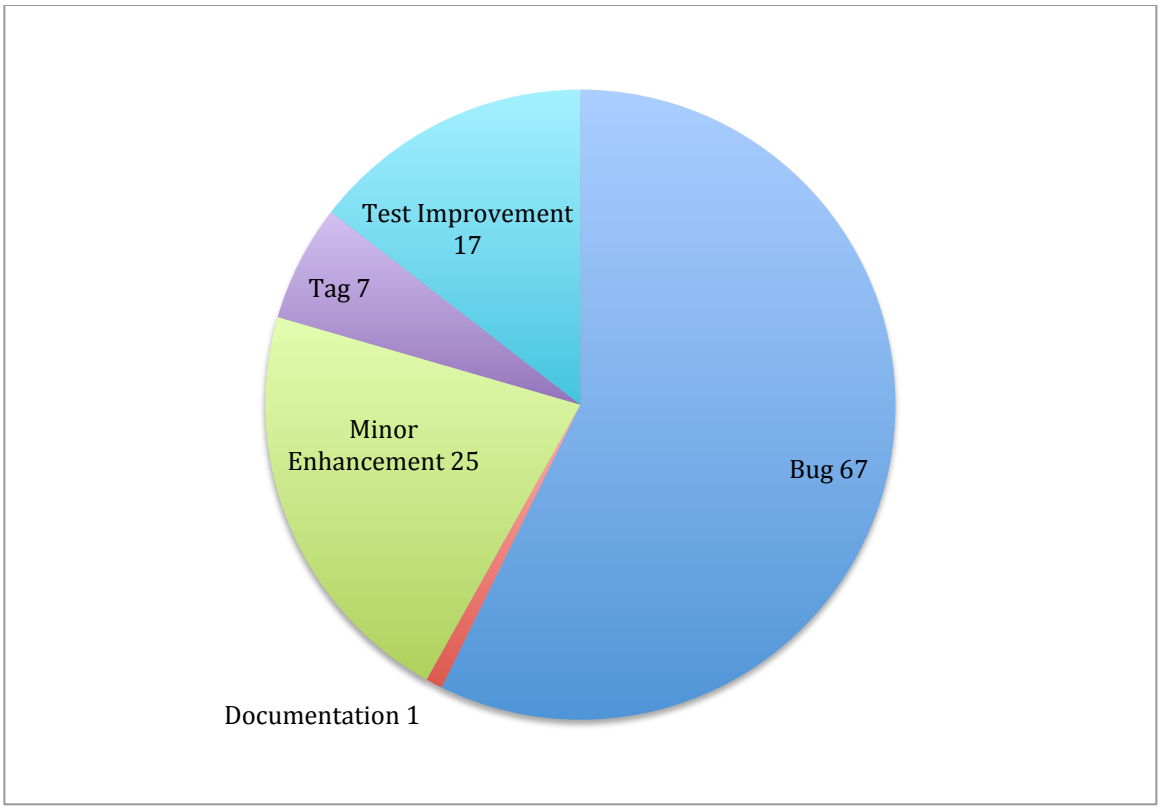
These are just straight totals of the number of landings made to master during the quarter broken down by the organization. Contributions from outside Intel are broken down by the contributing engineer's community affiliation.

Landings By 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
Documentation: Improvements to Lustre documentation (including internal code documentation)
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
Tag: Creation of git tag for testing purposes
Test Improvement: Improvements made to Lustre tests (fixed flaws in the tests that can result in false failures, adding new tests, etc)

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://testing.hpdd.intel.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 - b2_7

	2.7.0 8ab2689 2015-03-04	2.7.0-RC2 7eaf572 2015-02-27	2.7.0-RC1 46abff9 2015-02-27	2.6.94 6f47714 2015-02-09	2.6.93 52480e5 2015-01-27	2.6.92 4757bb7 2015-01-02	2.6.91 54d1199 2014-12-05	2.6.90 72813a2 2014-11-06	2.6.54 34ea0cd 2014-10-11	2.6.53 f9cad98 2014-09-26	2.6.52 64a6e56 2014-08-30	2.6.50 0ae652a 2014-07-11	2.6.59 28f2ff9 2014-05-15	2.5.58 21da42e 2014-04-19	2.5.57 c8853f5 2014-03-19	2.5.56 43fbefb 2014-02-25	2.5.55 39964a1 2014-02-03	2.5.54 2166a18 2014-01-11	2.5.53 ef1d121 2014-01-01	2.5.52 48cbaf7 2013-12-02	2.5.51 148935c 2013-11-06	2.5.50 b5fb1fd 2013-10-11
Provisioning-1																						
Provisioning-2																						
clean_post_upgrade																						
clean_pre_upgrade																						
conf-sanity	4/12	3/12	3/12	0/12	3/10	3/11	2/11	2/8	1/6	2/7	4/11	1/7	0/8	1/4	2/7	1/4	2/7	0/9	2/6	1/6	7/7	
insanity	12/12	9/12	9/12	11/11	8/9	10/10	11/11	8/8	6/6	6/6	11/11	7/7	8/8	4/4	6/6	4/4	7/7	6/6	6/6	6/6	7/7	
large-scale	10/12	10/13	9/12	10/11	7/8	8/9	9/10	6/7	5/5	5/5	9/9	6/6	7/7	3/3	5/5	3/3	5/6	2/3	4/5	4/5	3/4	
lfsck							0/8	0/7	0/5	0/6	0/9	1/6	1/7	0/3	1/6	0/3	2/6	1/7	1/5	4/5	4/6	
liblustre																						
lnet-selftest	9/12	9/13	9/12	8/11	6/9	6/10	7/11	5/8	5/6	6/6	9/11	6/7	7/8	3/4	5/6	2/4	6/7	3/4	5/6	6/6	6/6	
lustre-initialization-1	15/15	16/16	15/15	14/15	12/13	13/13	13/14	11/12	8/10	10/12	12/14	8/9	8/9	4/5	9/9	4/4	6/6	8/9	8/9	10/10	6/6	1/1
lustre-initialization-10			1/1																			
lustre-initialization-11																						
lustre-initialization-12																						
lustre-initialization-13																						
lustre-initialization-14																						
lustre-initialization-15																						
lustre-initialization-16																						
lustre-initialization-2	11/11	13/13	12/12	10/10	9/9	13/13	12/12	9/9	7/7	8/8	10/10	5/5	8/8	4/4	6/6	4/4	4/4	8/8	8/8	10/10	5/5	1/1
lustre-initialization-3	7/7	6/6	9/9	5/5	8/8	5/5	5/5	6/6	4/4	6/6	4/4	3/3	3/3	3/3	4/4	1/1	2/2	7/7	5/5	4/4	1/1	1/1
lustre-initialization-4	6/6	5/5	6/6	5/5	5/5	3/3	3/3	2/2	1/1	3/3	3/3		2/2		2/2	1/1	2/2	3/3	2/2	2/2	1/1	1/1
lustre-initialization-5	3/3	4/4	4/4	4/4	2/2	3/3	2/2	2/2		1/1			1/1		1/1		1/1	2/2	2/2	1/1		1/1
lustre-initialization-6	2/2	3/3	3/3	2/2	2/2	1/1	1/1	1/1		1/1							1/1	2/2	2/2	1/1		1/1
lustre-initialization-7	1/1	2/2	2/2	1/1	1/1		1/1										1/1	1/1	1/1	1/1		
lustre-initialization-8		1/1	1/1														1/1	1/1	1/1	1/1		
lustre-initialization-9		1/1	1/1														1/1	1/1	1/1	1/1		
lustre-rsync-test	11/12	12/13	11/12	10/11	8/9	9/10	10/11	5/8	6/6	6/6	10/11	7/7	8/8	3/4	5/6	4/4	6/7	4/5	6/6	6/6	7/7	
mds-survey	9/12	10/13	9/12	9/11	7/8	7/8	9/10	6/7	5/5	5/5	8/8	6/6	6/7	3/3	5/5	3/3	6/6	3/3	5/5	5/5	4/4	
metadata-updates	2/12	2/13	2/12	1/11	1/8	2/9	1/10	1/7	0/5	1/5	3/9	1/6	1/7	0/3	1/5	0/3	2/6	0/3	1/5	5/5	5/5	
mmp	10/15	9/15	9/15	11/14	9/11	10/12	10/12	8/10	6/7	5/8	9/10	6/8	7/8	3/4	5/9	3/4	6/7	3/5	5/8	6/7	6/6	0/1
node-provisioning-1	15/15	16/16	15/16	15/15	13/13	13/14	14/16	12/12	10/11	12/12	14/14	9/9	9/9	5/6	9/9	4/6	6/6	9/9	9/9	10/11	6/6	1/1
node-provisioning-10			1/1																			
node-provisioning-11																						
node-provisioning-12																						
node-provisioning-13																						
node-provisioning-14																						
node-provisioning-15																						
node-provisioning-16																						
node-provisioning-2	11/11	13/13	12/12	10/10	9/9	13/13	12/12	9/9	7/7	9/9	10/10	5/5	8/8	4/4	6/6	4/4	4/4	8/8	8/8	10/10	5/5	1/1
node-provisioning-3	7/7	6/6	9/9	5/5	8/8	5/5	5/5	6/6	4/4	6/6	4/4	3/3	3/3	3/3	4/4	1/1	2/2	7/7	5/5	4/4	1/1	1/1
node-provisioning-4	6/6	5/5	6/6	5/5	5/5	3/3	3/3	2/2	1/1	3/3	3/3		2/2		2/2	1/1	2/2	3/3	2/2	2/2	1/1	1/1
node-provisioning-5	3/3	4/4	4/4	4/4	2/2	3/3	2/2	2/2		2/2			1/1		1/1		1/1	2/2	2/2	1/1		1/1
node-provisioning-6	2/2	3/3	3/3	2/2	2/2	1/1	1/1	1/1		1/1							1/1	2/2	2/2	1/1		1/1
node-provisioning-7	1/1	2/2	2/2	1/1	1/1		1/1										1/1	1/1	1/1	1/1		
node-provisioning-8		1/1	1/1														1/1	1/1	1/1	1/1		
node-provisioning-9		1/1	1/1														1/1	1/1	1/1	1/1		
obdfilter-survey	9/12	9/13	9/12	8/11	7/8	8/9	6/10	5/7	5/5	5/5	9/9	6/6	7/7	3/3	5/5	3/3	6/6	3/3	5/5	5/5	4/4	
ost-pools	6/12	5/13	6/12	5/11	5/9	5/10	5/11	4/8	6/6	5/6	10/11	6/7	7/8	3/4	5/6	4/4	7/7	3/4	6/6	6/6	7/7	
parallel-scale	7/12	5/13	8/12	7/11	6/8	7/9	7/10	6/7	5/5	4/5	8/9	1/6	1/7	0/3	1/5	0/3	0/6	0/3	3/5	2/5	3/4	
parallel-scale-nfsv3	9/12	11/13	9/12	7/11	6/8	6/9	8/10	6/7	5/5	4/5	9/9	3/6	2/7	1/3	1/5	1/3	1/6	0/3	2/6	2/5	2/4	
parallel-scale-nfsv4	9/12	9/13	9/12	8/11	6/8	6/9	8/10	6/7	5/5	5/5	9/10	4/6	2/7	1/3	1/5	1/3	1/5	0/3	2/5	3/5	3/4	
performance-sanity	10/12	10/13	9/12	9/11	7/8	8/9	9/10	6/7	5/5	5/5	9/9	6/6	7/7	3/3	5/5	3/3	5/6	2/3	4/5	4/5	3/4	
posix	8/12	9/13	8/12	6/11	6/8	5/9	8/10	6/7	5/5	5/5	9/9	6/6	7/7	3/3	5/5	3/3	5/5	3/3	4/5	4/5	4/4	
racer	9/12	10/12	10/12	7/11	3/9	9/10	9/10	6/7	3/5	5/6	6/9	4/6	4/7	0/3	1/6	1/3	4/6	4/5	2/5	0/6	0/6	
recovery-double-scale	0/3	0/3	0/3	0/3	0/3	0/3	0/2	0/3	0/2	0/3	0/1	0/1			0/3			0/2	0/2	0/1		1/1
recovery-mds-scale	0/3	0/3	0/3	0/3	0/3	0/3	0/2	0/3	0/2	0/3	0/1	0/1			0/3			0/2	0/2	0/4		1/1
recovery-random-scale	3/3	3/3	3/3	3/3	3/3	3/3	1/2	2/3	2/2	3/3	0/1	1/1			3/3			2/2	1/2	0/4		1/1
recovery-small	10/15	9/15	9/15	11/14	8/12	9/14	8/13	9/11	6/8	7/9	8/12	6/8	6/8	4/5	9/10	4/4	5/7	8/9	5/8	6/7	7/7	0/1
replay-dual	13/15	9/15	9/15	12/14	2/11	0/13	1/12	1/10	0/7	6/8	9/10	6/7	7/7	3/3	7/8	2/3	5/6	4/6	4/7	5/6	4/5	1/1
replay-ost-single	12/15	11/15	12/15	12/14	10/12	12/14	11/13	9/11	7/8	7/9	9/12	7/8	8/8	4/4	8/9	3/4	7/7	6/9	6/8	5/7	7/7	0/1
replay-single	9/15	10/15	10/15	9/14	9/13	10/14	9/13	8/11	5/8	3/10	7/12	3/8	7/8	3/4	6/10	4/4	7/7	6/7	6/8	5/7	7/7	0/1
replay-vbr	11/15	10/15	9/15	12/14	4/11	4/12	9/12	8/10	5/7	7/8	3/10	5/7	7/7	2/3	7/8	3/3	4/6	2/6	1/7	5/6	5/5	0/1
runracer																						
runtests	13/13	12/12	12/12	11/11	11/11	11/11	11/11	9/9	6/6	7/8	11/11	7/7	8/8	4/4	7/7	4/4	7/7	6/6	6/6	6/6	8/8	
sanity	4/13	4/12	4/12	3/11	3/11	3/11	3/11	1/9	3/6	1/8	3/11	2/7	3/8	2/4	4/7	3/4	4/7	4/6	4/6	4/6	5/8	
sanity-benchmark	10/12	9/12	10/12	10/11	9/9	10/10	10/10	7/7	5/5	6/7	9/9	5/6	7/7	3/3	5/6	3/3	4/6	3/7	4/5	5/5	4/5	
sanity-hsm	10/12	10/12	10/12	9/11	9/10	9/10	9/11	8/8	6/6	5/7	8/10	6/7	6/8	4/4	6/7	3/4	5/7	4/7	1/1	0/1	2/2	
sanity-lfsck	8/12	9/12	8/12	7/11	6/10	6/10	5/11	4/8	4/6	2/8	5/10	4/7	1/8	4/4	6/7	3/4	6/7	6/7	5/6	6/6	7/7	
sanity-quota	9/12	8/12	7/12	8/11	7/9	7/10	8/11	8/8	5/6	5/6	10/11	7/7	8/8	4/4	5/6	4/4	7/7	4/6	4/6	5/6	7/7	
sanity-scrub	7/12	8/12	7/12	7/11	6/9	7/9	5/10	5/7	5/5	5/7	6/8	5/7	5/8	2/4	6/7	3/4	6/7	6/7	5/6	6/6	6/7	
sanity-sec	7/12	6/12	6/12	6/11	2/8	2/9	7/10	5/7	4/5	5/5	5/9	6/7	7/8	3/4	5/6	2/4	5/7	3/5	5/6	6/6	7/7	
sanityn	9/12	9/12	9/12	8/11	8/10	9/11	8/11	7/8	5/6	6/7	9/11	6/7	6/8	3/4	6/7	4/4	7/7	7/7	6/6	6/6	6/7	
sgpdd-survey																						

FINAL

Work Completed

The focus for Q1 2015 was stabilization and testing for 2.7 and after the GA of 2.7 on March 13th on feature landings for 2.8. For clarity, the small amount of 2.8 work will be reported in the Q2 report.

Release testing was completed according to the 2.7 test plan on the following tags – 2.6.92, 2.6.93, 2.6.94, and 2.7.0-RC4. A number of bugs were found and fixed as a result.

Work In Progress

Support for 3.12 kernel (LU-4416).

Peter Jones
HPDD, Intel
April 1st 2015

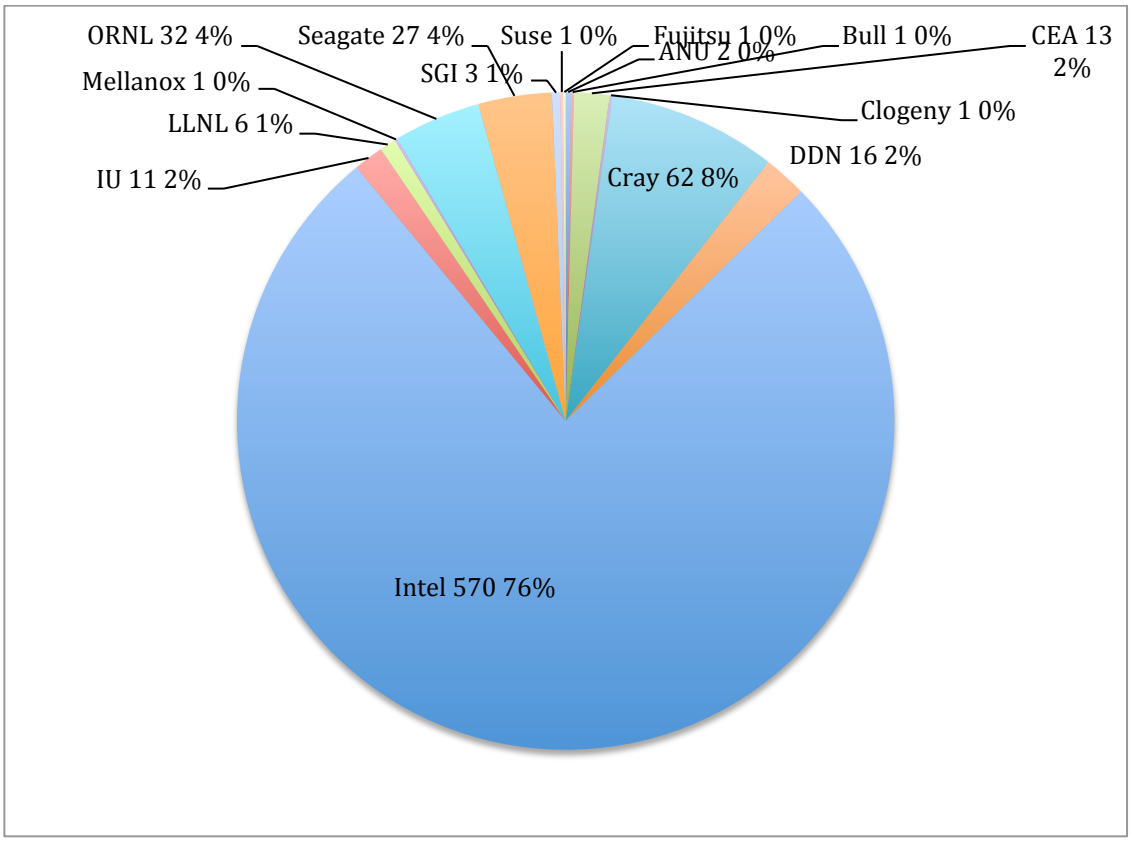
Appendix A: Timeline for Lustre 2.8

Release criterion is zero issues remaining on the Lustre 2.8 unresolved issues filter in JIRA - https://jira.hpdd.intel.com/issues/?jql=fixVersion = 'Lustre 2.8.0' AND project = LU AND resolution = Unresolved ORDER BY priority DESC

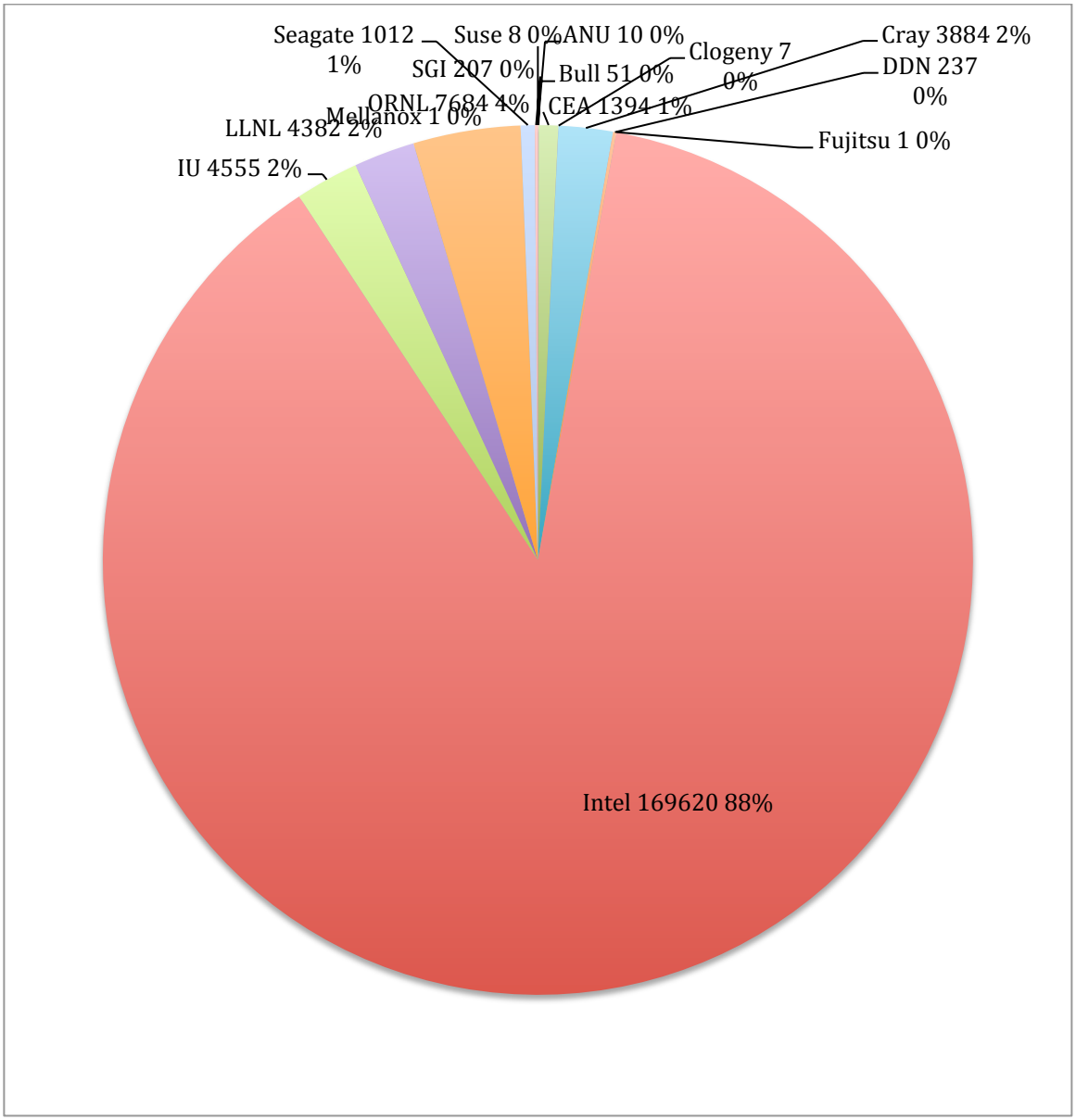
The timeline for 2.8 can be found at http://wiki.opensfs.org/Lustre_2.8.0

Appendix B: Landings By Organization for Lustre 2.7

Number of commits between 2.6.50 and 2.7.0.



Number of Lines of code change between 2.6.50 and 2.7.0


Seagate 1012 1%
Suse 8 0%
ANU 10 0%
Clogeny 7 0%
Cray 3884 2%
SGI 207 0%
Bull 51 0%
DDN 237 0%
ORNL 7684 4%
CEA 1394 1%
Mellanox 1 0%
LLNL 4382 2%
Fujitsu 1 0%
IU 4555 2%
Intel 169620 88%