



Lustre* Releases

High Performance Data Division

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* Other names and brands may be claimed as the property of others.



Lustre 2.1.x

RHEL6 servers and larger LUN size main attraction of 2.1.x

Significant number of sites in production on 2.1.x

- LLNL, NASA and CEA all running in production
- OpenSFS survey showed 39% running in production (compared to 21% in 2012)

Superseded by 2.4.x as maintenance release stream

- 2.1.6 released in June
- 2.1.x will only have ad-hoc releases in the future

Lustre 2.4.x

Now the current maintenance release stream

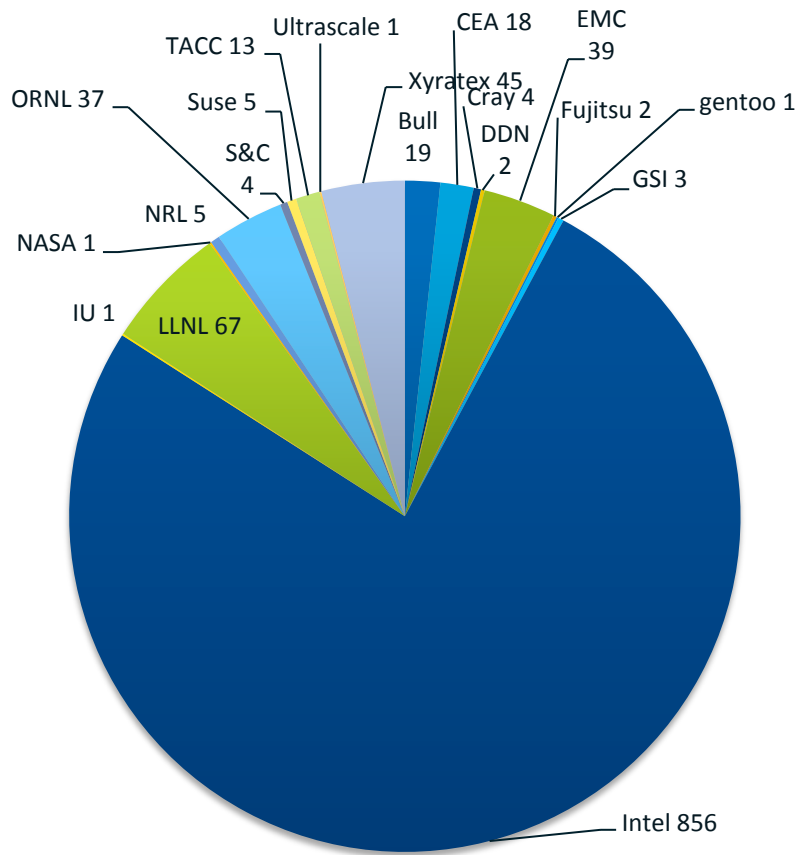
- Lustre 2.4.0 released May 2013
- Lustre 2.4.1 expected shortly; Lustre 2.4.2 in Q4;
- Drops RHEL5/SLES11 SP1 clients
- Adds SLES11 SP2 and Fedora 18 clients
- Many organizations are moving forward with this release (Bull, DDN, LLNL, NASA, ORNL)
- Fuller details at <https://wiki.hpdd.intel.com/display/PUB/Lustre+2.4>

Lustre 2.4.x - Features

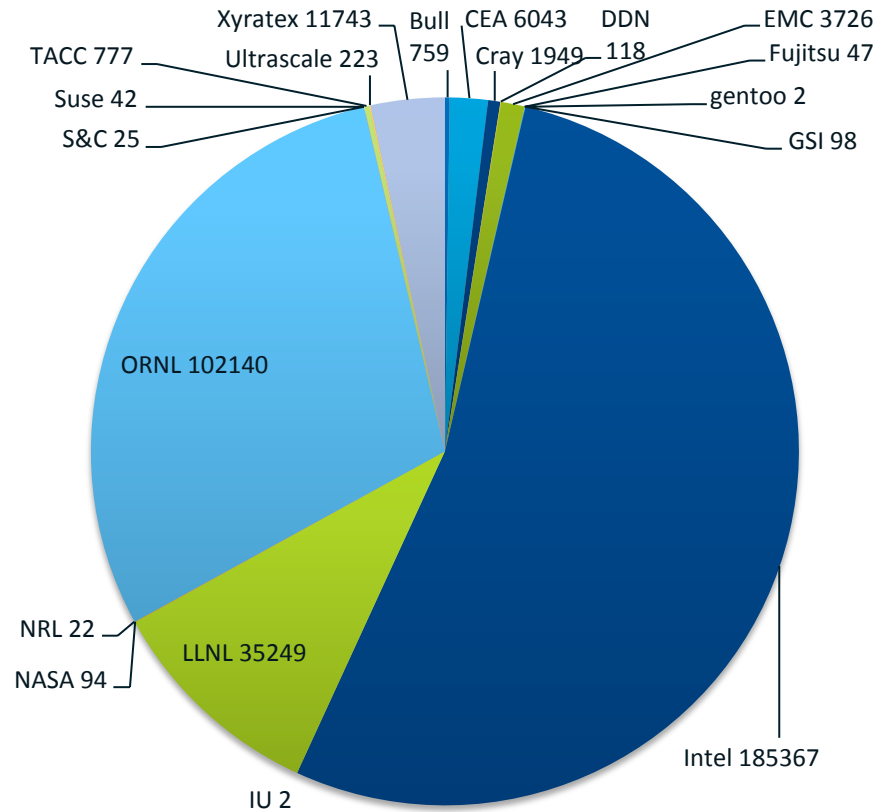
Feature Highlights

- DNE Phase 1 (LU-1187)
 - Funded by OpenSFS; Multiple MDS/MDTs in a single filesystem, partitioned by subdir
- Network Request Scheduler (LU-398)
 - Development by Xyratex; Mechanism to apply policies to how RPC requests are handled
- ZFS Support (LU-1305)
 - Work funded by LLNL; alternative to traditional Idiskfs backend

Lustre 2.4.0 – Code Contributions

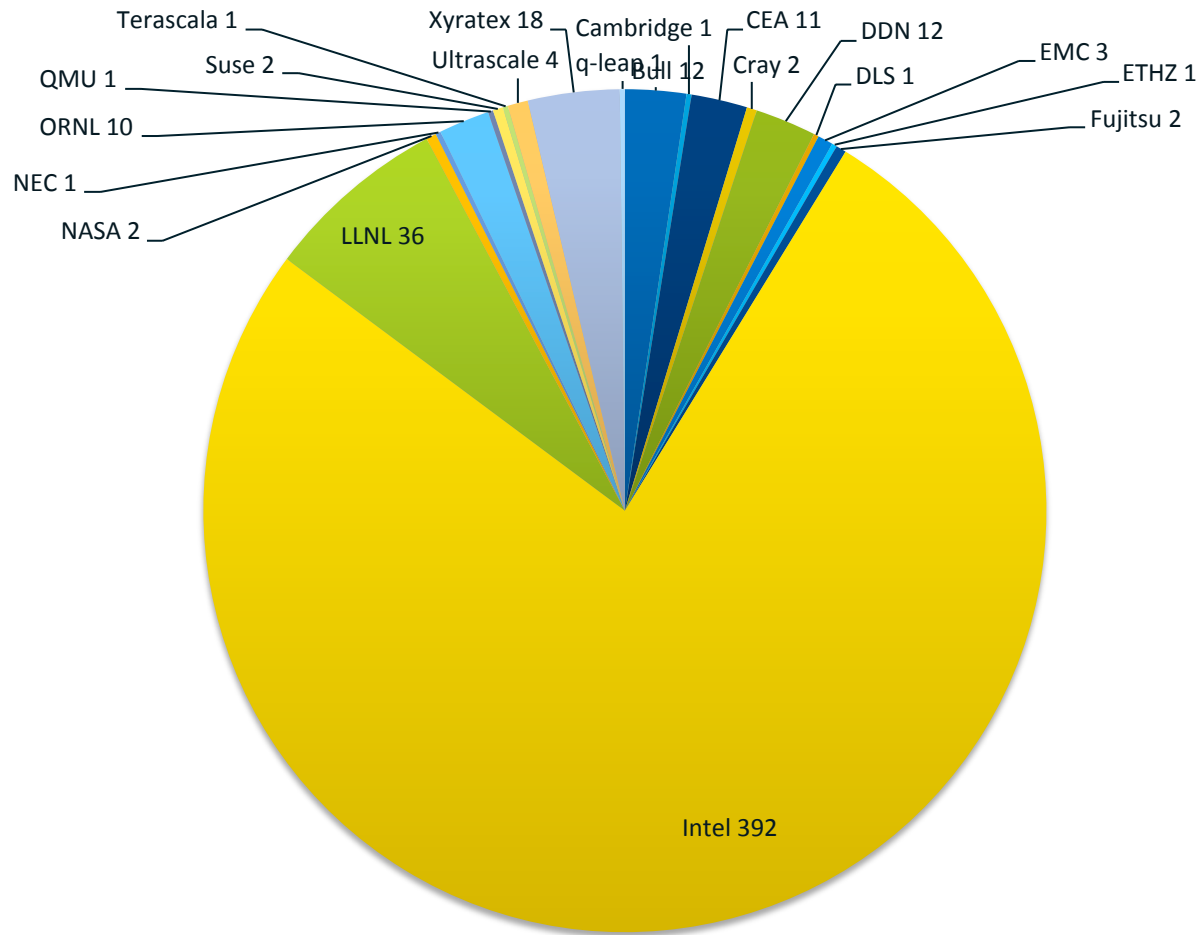


Number of commits between 2.3.50 and 2.4.0



Number of Lines of Code Changed between 2.3.50 and 2.4.0

Lustre 2.4.0 – Testing Contributions



Number of 2.x bugs reported in Jira between Feature Freeze and 2.4.0 GA

Lustre 2.5.x

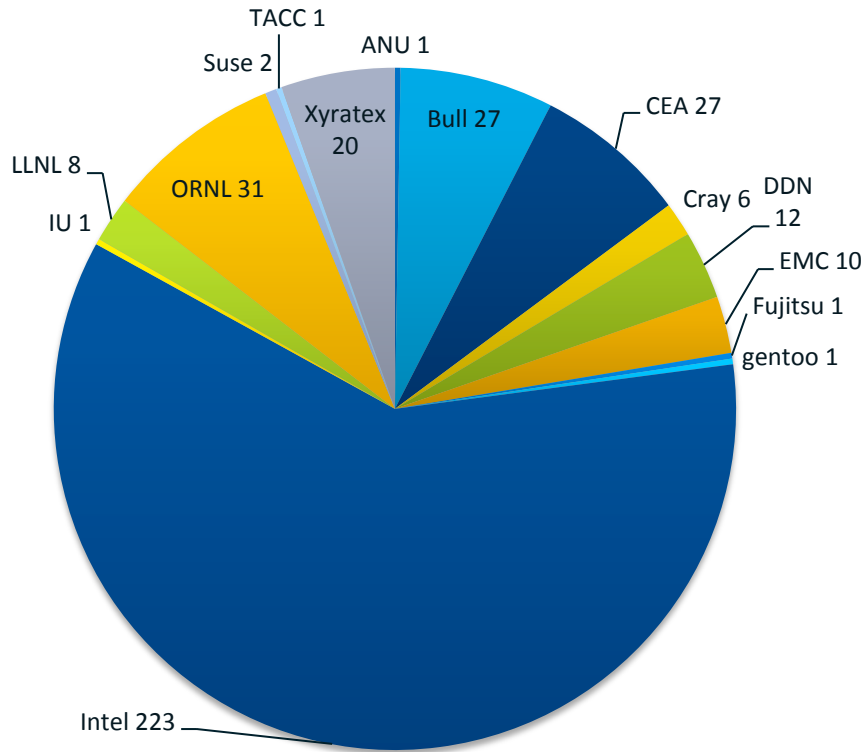
Will take over from Lustre 2.4.x as maintenance release stream in Q1 2014

- 2.5.0 targeted for GA October 2013; Lustre 2.5.1 scheduled for Q1 2014
- Replaces SLES11 SP2 with SLES11 SP3 client support
- Interop with 2.4.x only; 2.1.x upgrade should be possible
- Fuller information at http://wiki.opensfs.org/Lustre_2.5.0

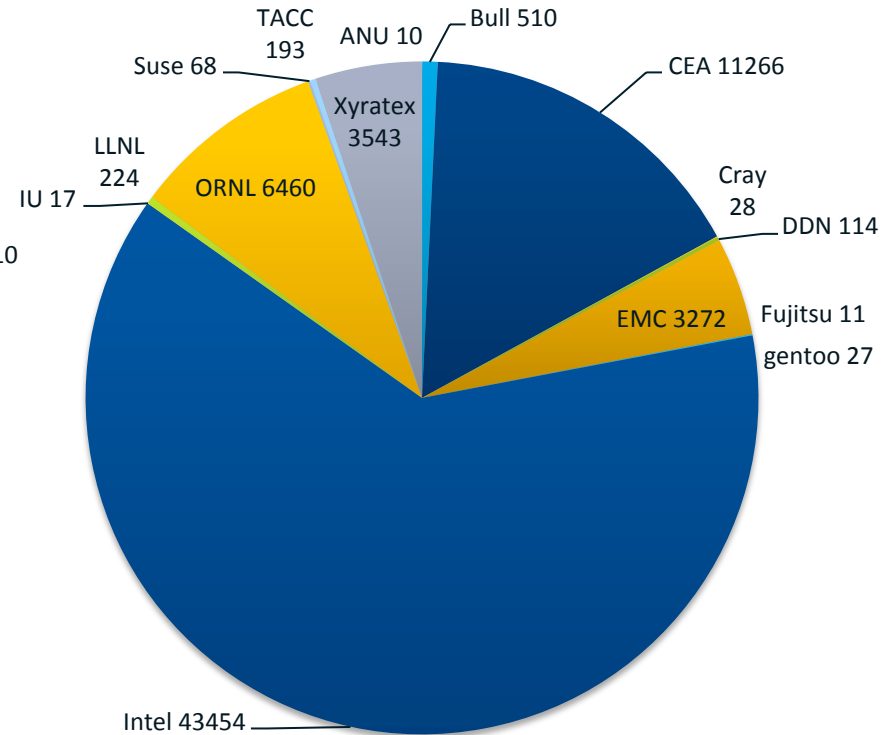
Feature Highlights

- HSM (LU-3608)
 - CEA Primary developers; enables data to be transferred between different storage types

Lustre 2.5.0 – Code Contributions (So Far)

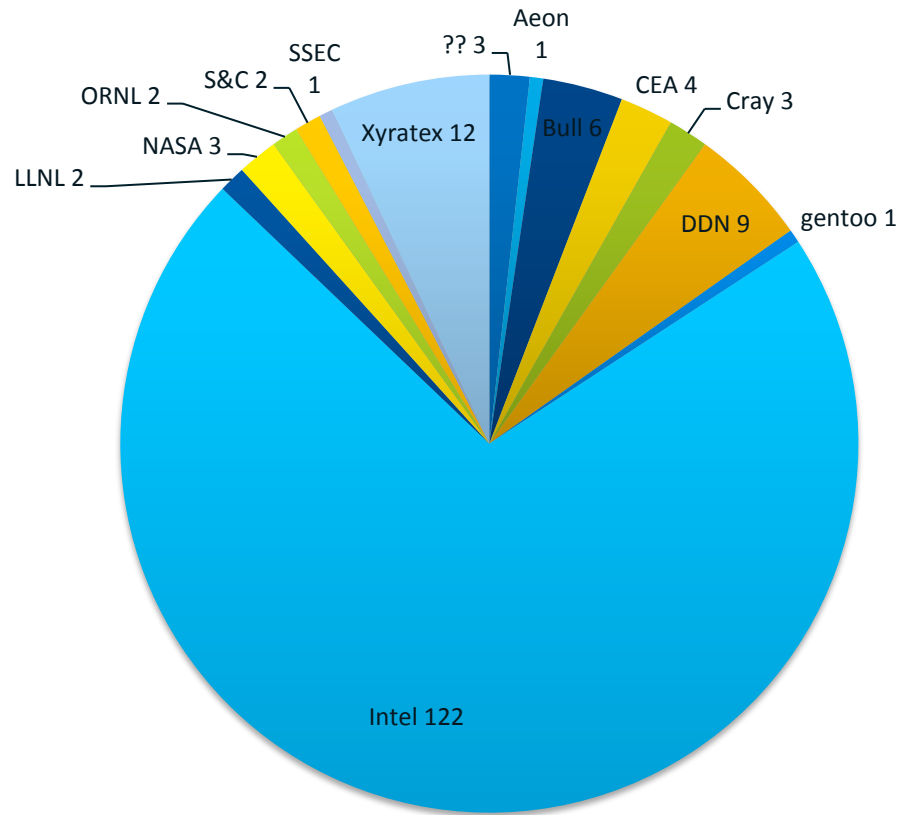


Number of commits between 2.4.50 and Sept 7th



Number of Lines of Code Changed between 2.4.50 and Sept 7th

Lustre 2.5.0 – Testing Contributions (So Far)



Number of 2.x bugs reported in Jira between Feature Freeze and Sept 7th

Lustre 2.4.x/2.5.x – European Contributions

Features

- CEA: Huge amount of work to complete HSM
- Suse: Participated in efforts to support newer kernels
- Xyratex: 4MB IO, NRS, and Xattr cache

Bugfixes

- Bull fixed large number identified by Coverity
- GSI/Science & Computing

Testing

- ETH Zurich ran 2.4 pre-release versions in production!
- Others reported issues (Cambridge, Diamond, NEC, q-leap, QMU)

Lustre 2.6.x

Feature release only; no maintenance releases planned

- Targeted for GA April 2014
- Replaces FC18 with FC19 client support
- Testing with Lustre client in 3.11 Linux kernel
- Interop with 2.5.x only; 2.4.x upgrade should be possible

Feature Highlights

- UID Mapping and Shared Key (LU-3527)
 - IU Primary developers; sharing Lustre over a WAN between different insitutions
- Further LFSCCK development (LU-1267)
 - Funded by OpenSFS; MDT-OST Consistency

CDWG

OpenSFS CDWG serves as a forum to discuss Lustre development matters

- Agreeing priorities for test matrix
- Maintaining roadmap
- Sharing test results
- Warning others of known issues
- Reminders of release deadlines
- CDWG wiki repository for development in progress
- http://wiki.opensfs.org/Community_Development_Working_Group
- **We would welcome greater participation from Europe...**



Thank You