Lustre* Releases

High Performance Data Division

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October 16th 2013

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)

Superceded by 2.4.x as maintenance release stream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

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Lustre 2.4.x
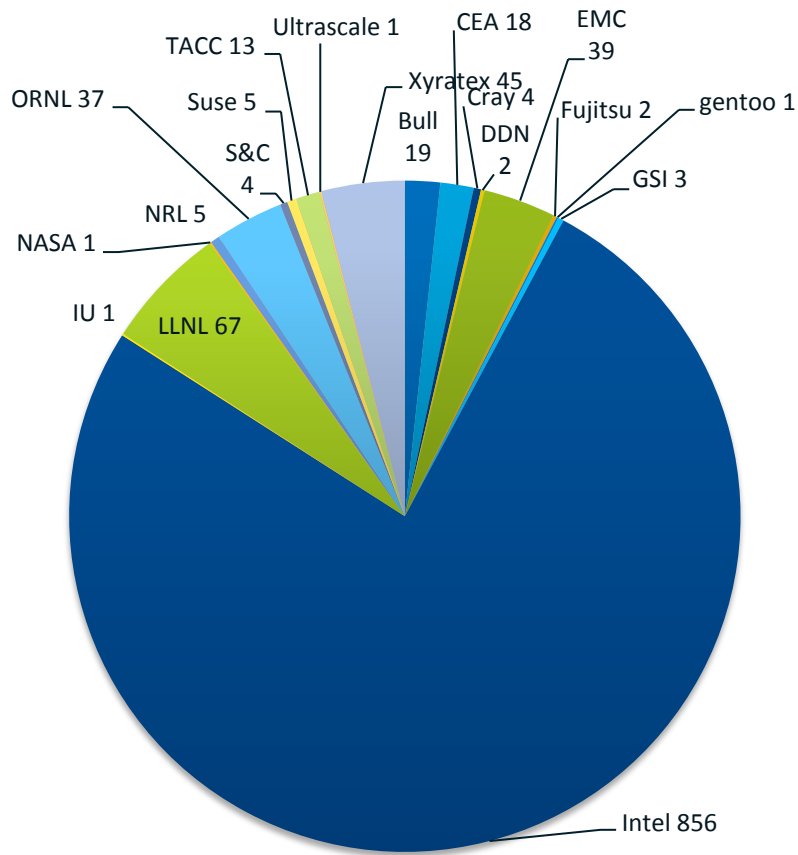
Now the current maintenance release stream

- Lustre 2.4.0 released May 2013

- Lustre 2.4.1 released Sept 2013; Lustre 2.4.2 in Q4;

- Drops RHEL5/SLES11 SP1 clients

- Adds SLES11 SP2

- Many organizations are moving forward with this release (Bull, DDN, LLNL, NASA, ORNL)

- Fuller info: https://wiki.hpdd.intel.com/display/PUB/Lustre+2.4
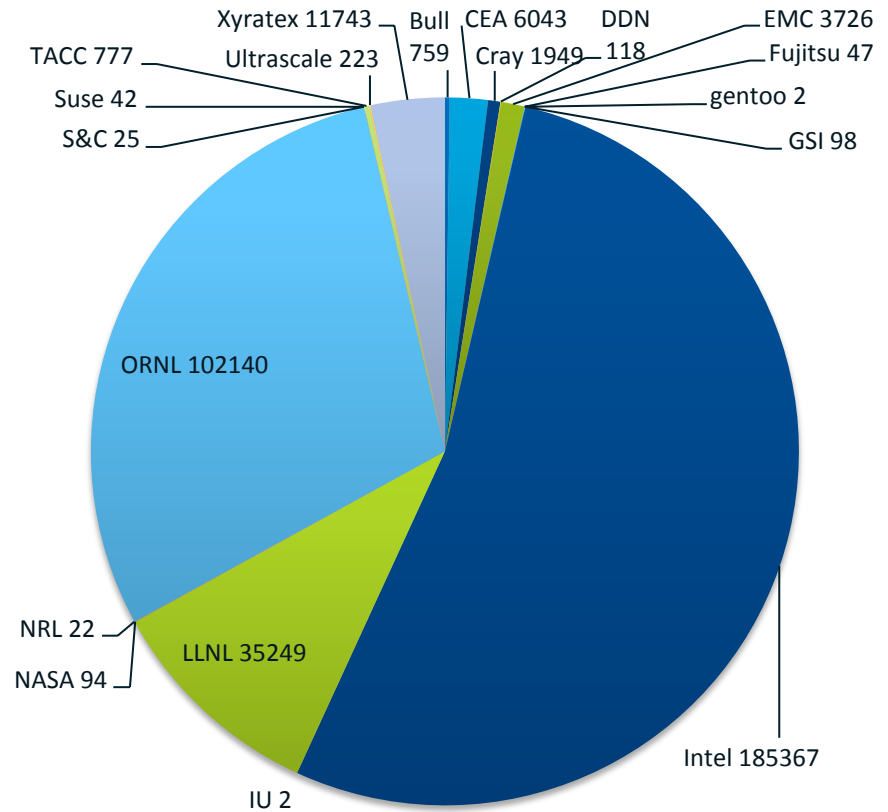
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Lustre 2.4.x - Features

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 ldiskfs backend

Lustre 2.4.0 – Code Contributions

Number of commits between 2.3.50 and 2.4.0

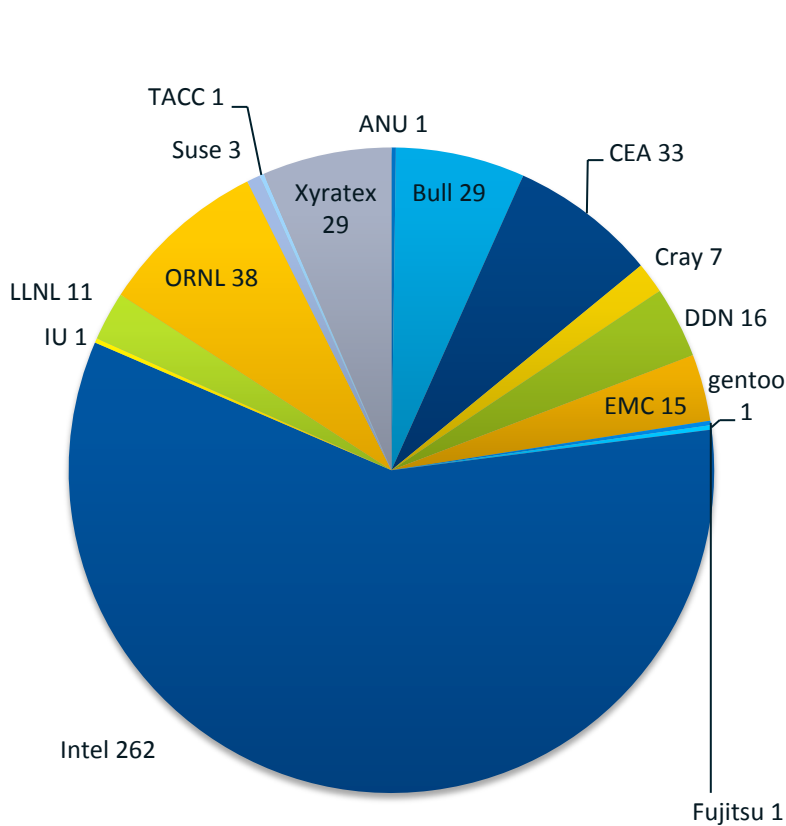Number of Lines of Code Changed between 2.3.50 and 2.4.0

Lustre 2.5.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
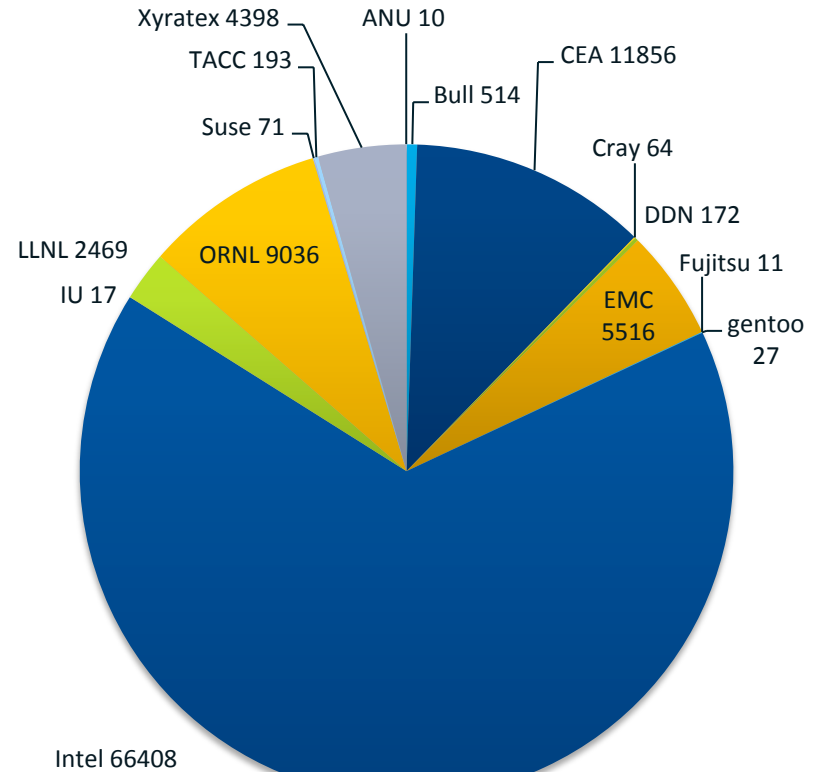
- Fuller info: https://wiki.hpdd.intel.com/display/PUB/Lustre+2.5

Feature Highlights

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

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Lustre 2.5.0 – Code Contributions (So Far)

Number of commits between 2.4.50 and Sept 30th

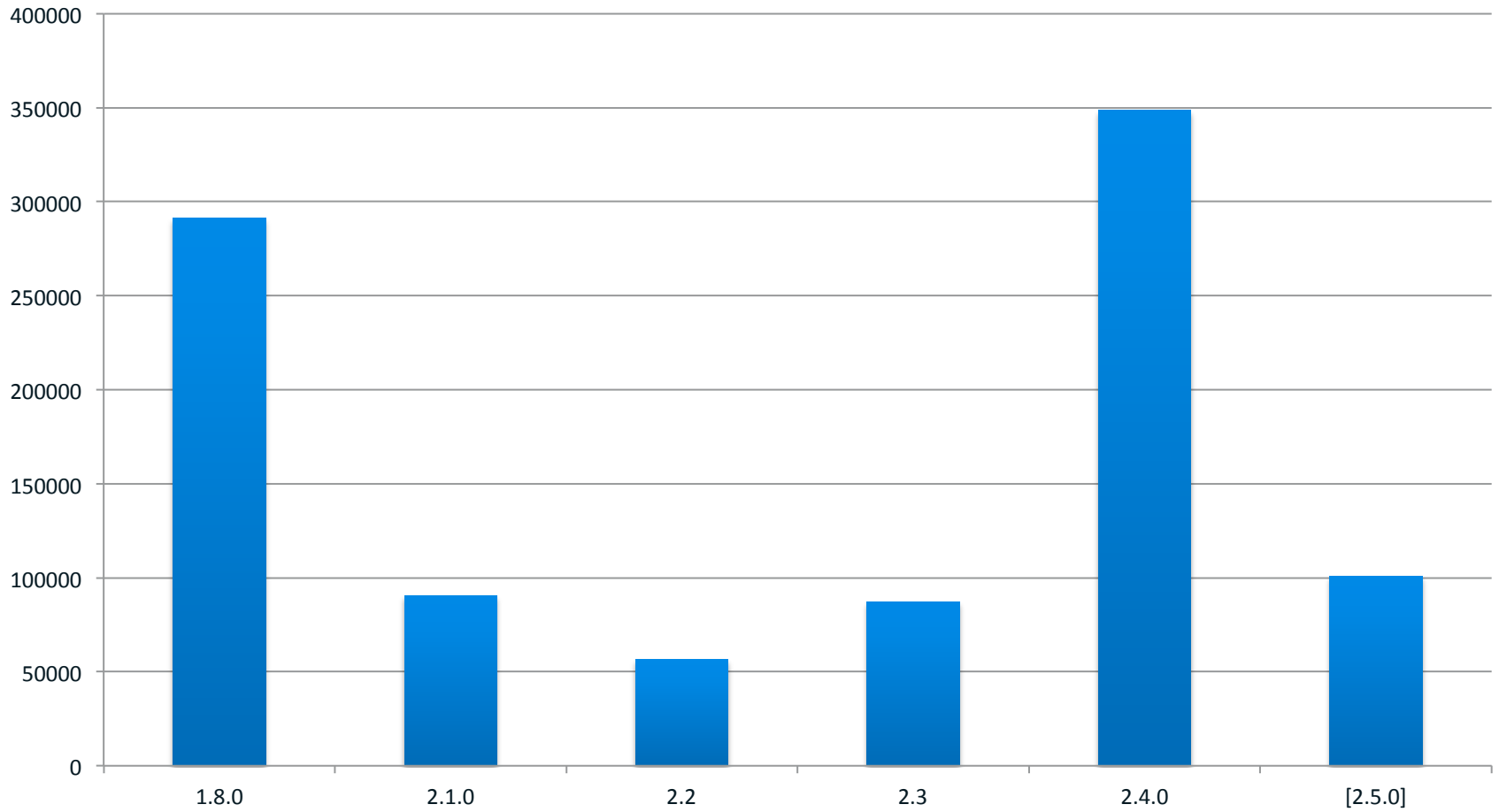Number of Lines of Code Changed between 2.4.50 and Sept 30th

Lustre 2.6.x

Feature release only; no maintenance releases planned

- Targeted for GA April 2014

- Adds 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

- Fuller info: https://wiki.hpdd.intel.com/display/PUB/Lustre+2.6

Feature Highlights

- UID Mapping and Shared Key (LU-3527)
  - IU Primary developers; sharing Lustre over a WAN between institutions

- Further LFSCK development (LU-1267)
  - Funded by OpenSFS; MDT-OST Consistency

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Lustre Releases LOC

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 Japan…**

Thank You