# Lustre Status
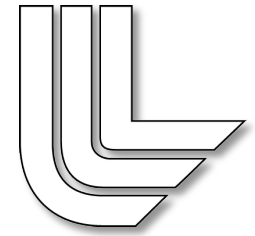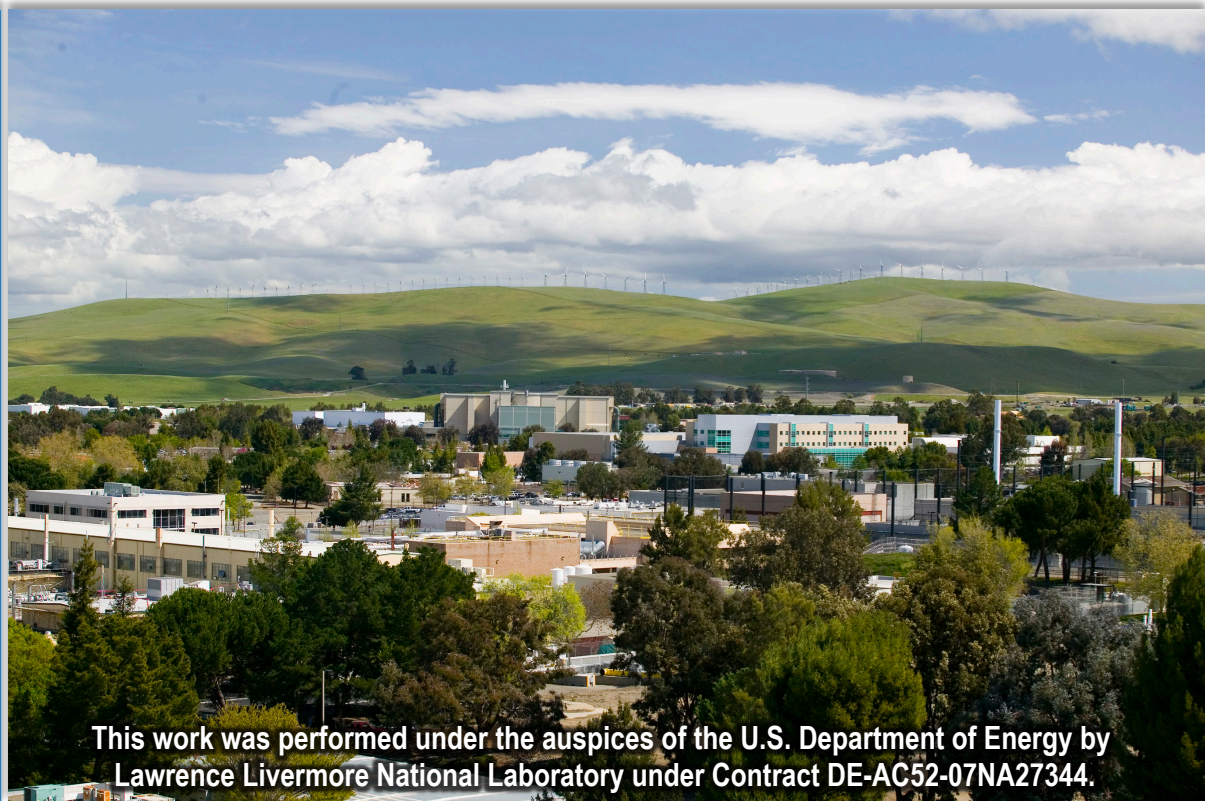
Marc Stearman

## Parallel File System Operations Lead

Lawrence Livermore National Laboratory

4/23/2015

# Changes Since Last User Meeting

- Focused on Stability

- Improved network monitoring and corrective action

- Addressing Out of Memory conditions on Metadata Servers

# Changes Since Last User Meeting

- Fixed a number of Lustre Bugs

- Numerous ZFS improvements

- Continuing to engage Intel on Software Development Practices

# Parallel File System Summary (OCF)

| OCF File Systems | Bandwidth | Capacity | OSS | OSTs | % Full April 2015 |
|---|---|---|---|---|---|
| lscratchrzb | 18GB/s | 1.2PB | 16 | 16 | 68 |
| lscratchf | 36GB/s | 2.4PB | 16 | 32 | 55 |
| lscratchd | 90GB/s | 5.7PB | 80 | 80 | 65 |
| lscratche | 90GB/s | 5.7PB | 80 | 80 | 67 |
| lscratchv | 106GB/s | 6.7PB | 96 | 96 | 53 |

No Changes since last meeting.  Nothing anticipated until
CTS-1 OCF systems arrive.

# Parallel File System Summary (SCF)

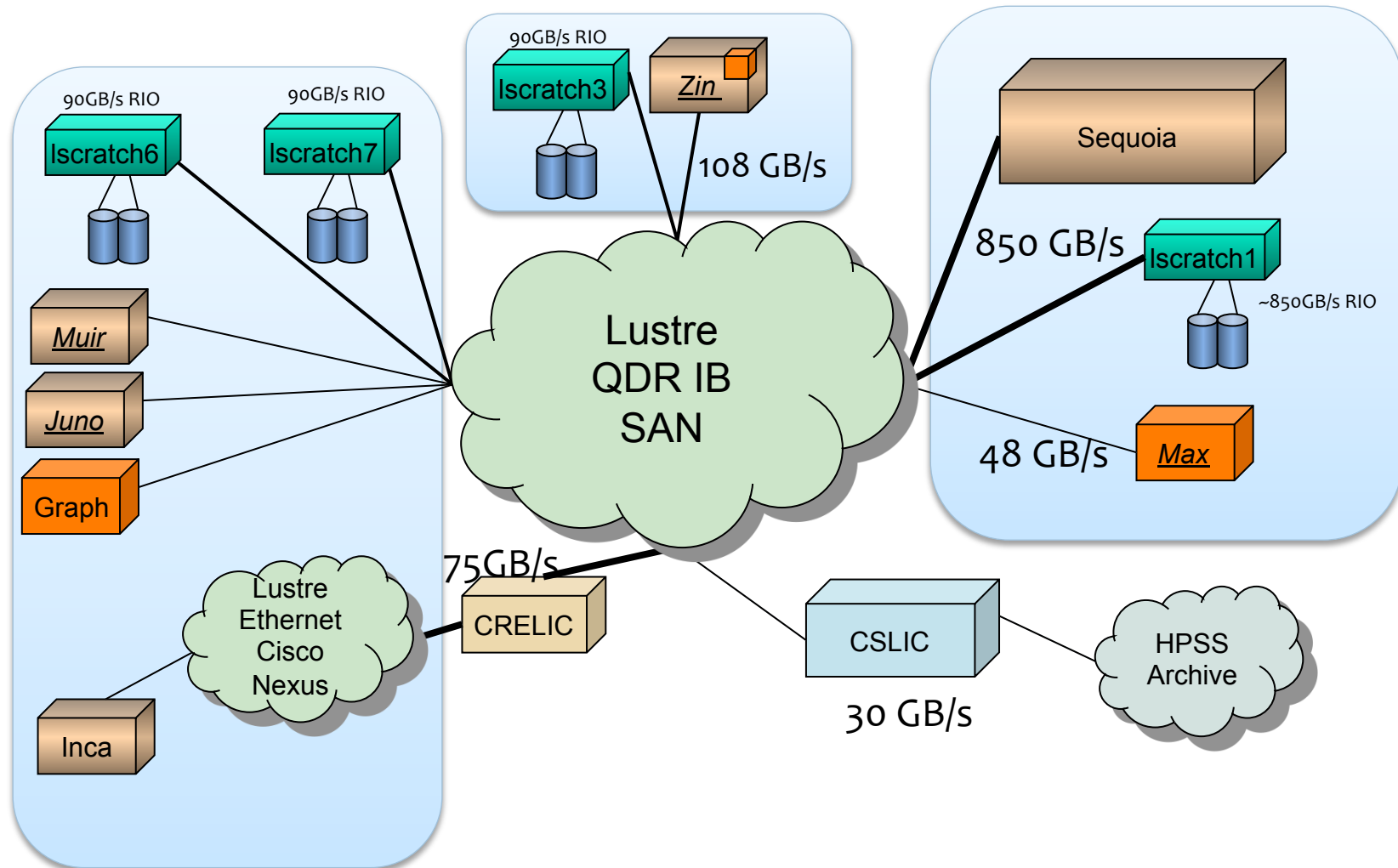| SCF File Systems | Bandwidth | Capacity | OSS | OSTs | % Full April 2015 |
|---|---|---|---|---|---|
| lscratch1 | 850GB/s | 53PB | 768 | 768 | 27 |
| lscratch3 | 90GB/s | 5.7PB | 80 | 80 | 50 |
| lscratch6 | 90GB/s | 5.7PB | 80 | 80 | 10 |
| lscratch7 | 90GB/s | 5.7PB | 80 | 80 | 66 |

No Changes since last meeting.  Nothing anticipated for near future.
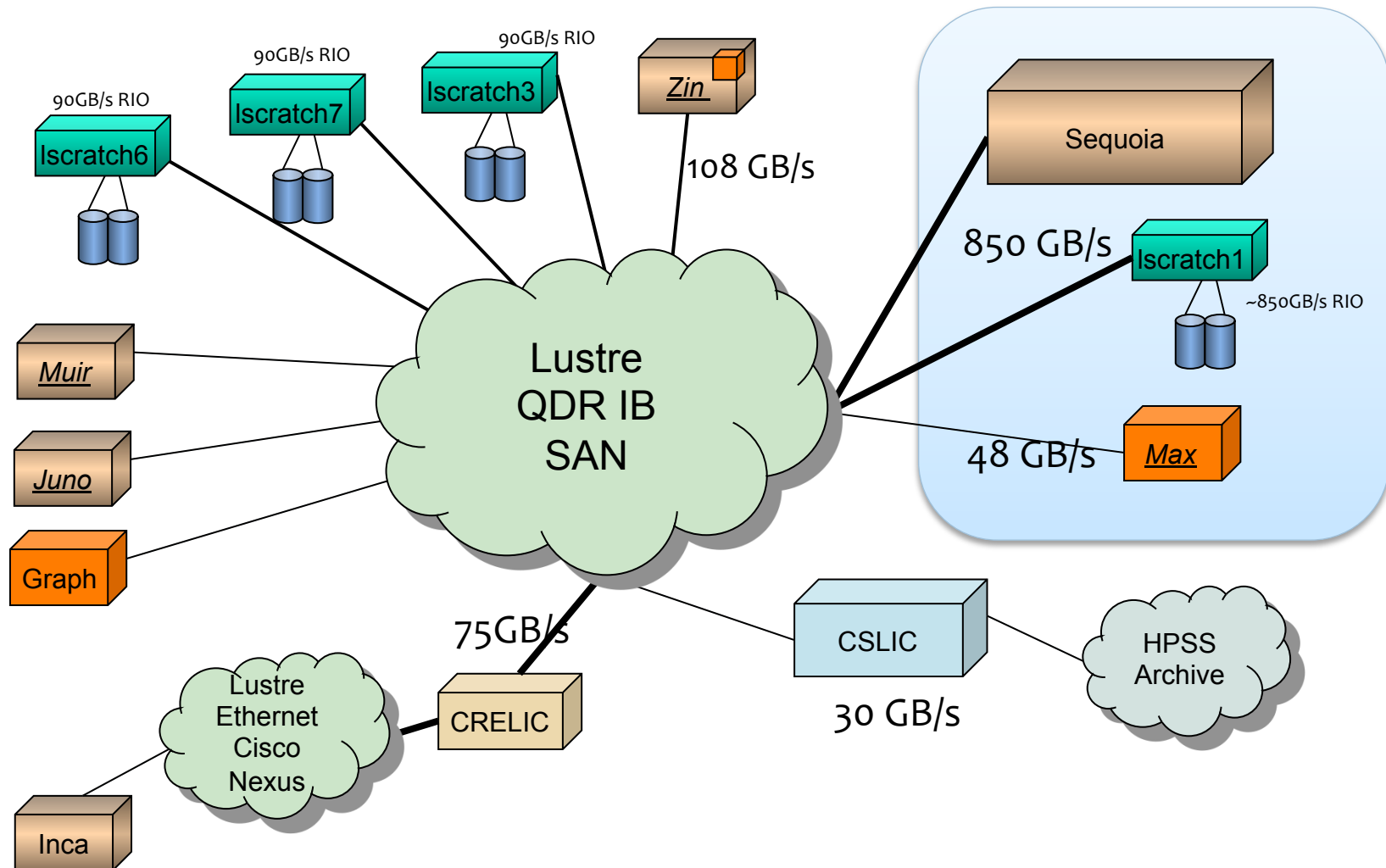
# Upcoming plans

- Add SSD storage to MDS
    - increases performance
    - allows for more files

- Prototyping Non-Purgeable project space

- The Return of Globally Mounted Lustre?!

# File System Locality – November 2014

# Proposed File System Locality – May 2015

# Questions?

Marc Stearman
stearman2@llnl.gov
925.423.9670