



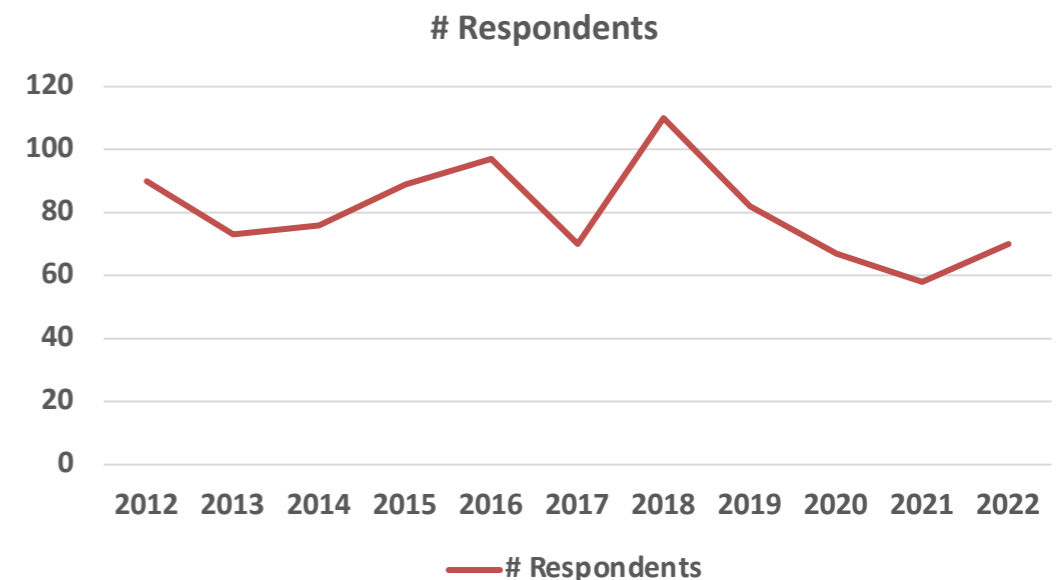
Community Release Update

September 27th 2022

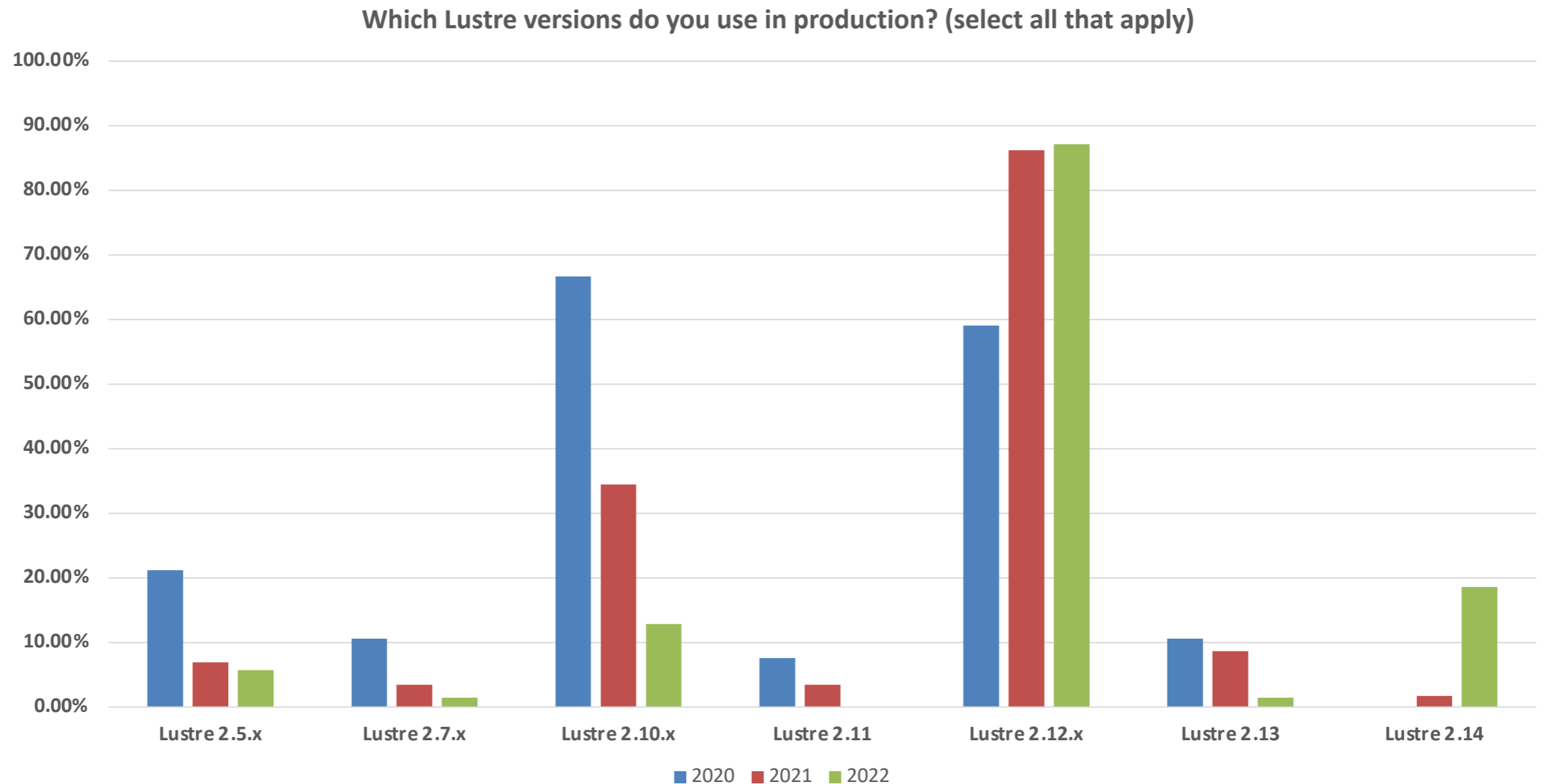
Peter Jones, Whamcloud
OpenSFS Lustre Working Group

OpenSFS Lustre Working Group

- Has been operating as the forum for collaboration on the community releases for over a decade
- Led by Peter Jones (Whamcloud) and Dustin Leverman (ORNL)
- All welcome to attend and/or join the mailing list
- For more information visit the wiki
- http://wiki.opensfs.org/Lustre_Working_Group
- LWG issues survey annually in March to track trends in Lustre usage
- Full details available at http://wiki.opensfs.org/Lustre_Community_Survey



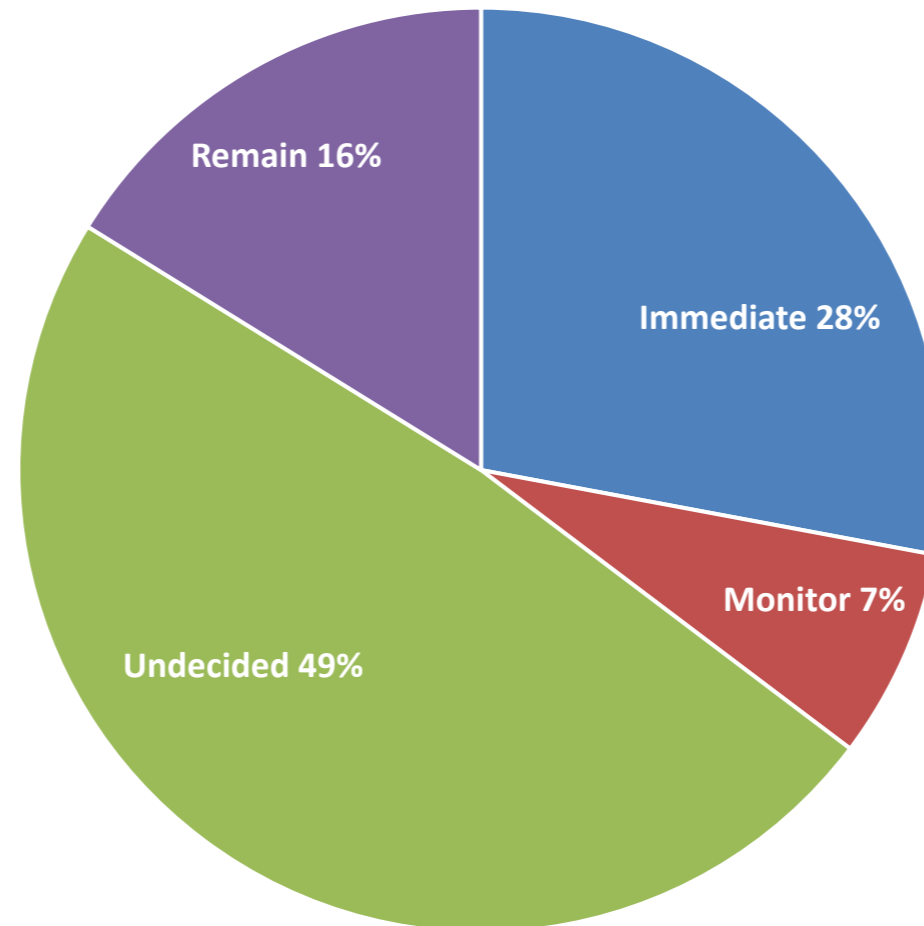
Community Survey – Lustre Versions



Majority of respondents using Lustre 2.12.x LTS in production
Lustre 2.14 usage exceeds that of the former LTS release 2.10.x

Community Survey – LTS Transition

How quickly do you plan to move to a Lustre 2.15.x LTS release?



Significant numbers intend to be earlier adopters but most waiting for more data first

Community Survey - Analysis

- Expect to see strong adoption of Lustre 2.15.x in 2023 survey
 - Lustre 2.15.x LTS means that features in 2.13/14/15 will get more usage
- Responses about LWG/Lustre improvements discussed
 - Limited suggestions for LWG improvements
 - More feedback relating to Lustre improvements
 - Stability mentioned several times (mature feature set)
 - Support for newer ZFS versions on LTS branch
 - Adding/Removing Storage
 - Several comments about kernel patches / distro support

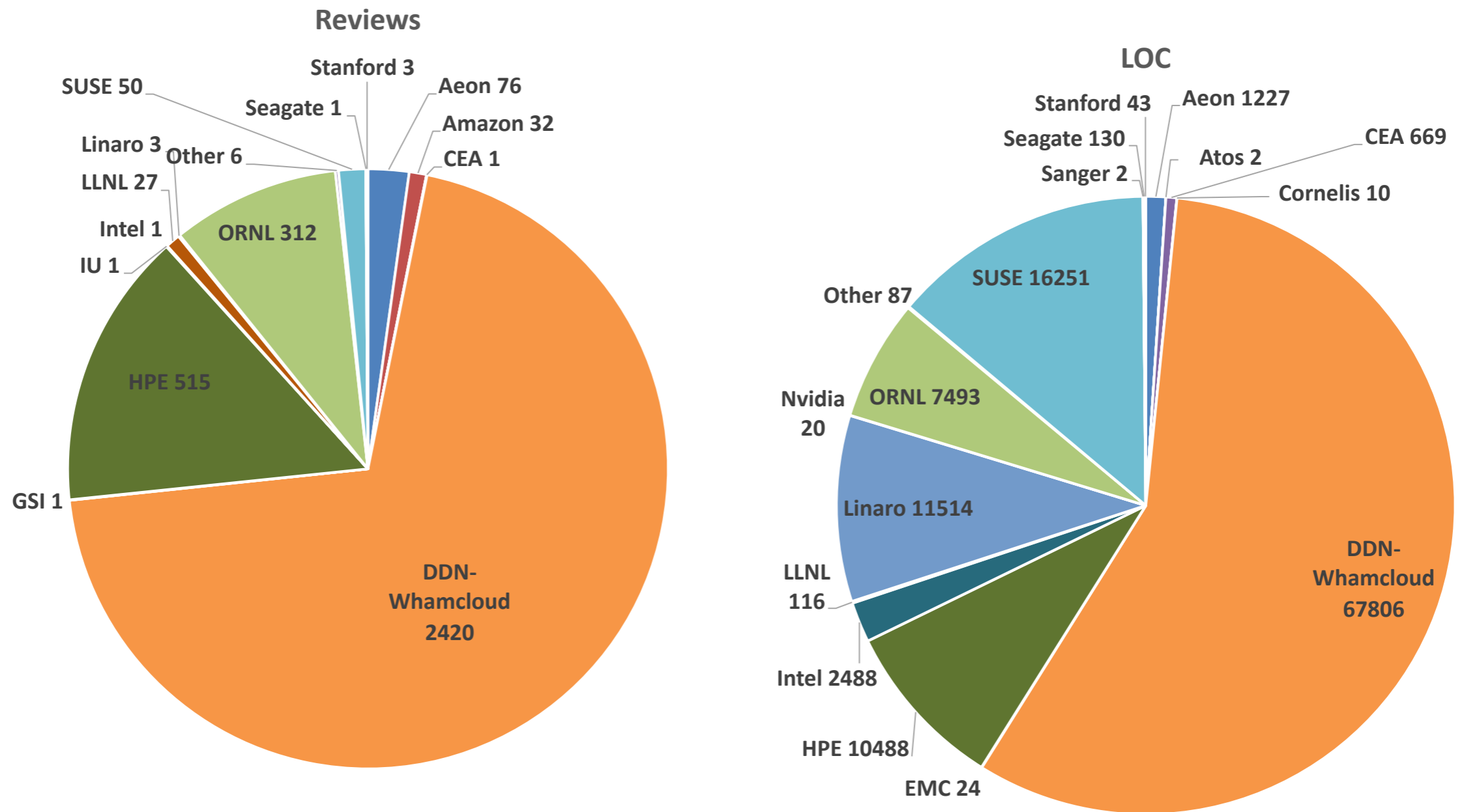
Lustre LTS Releases

- Lustre 2.12.x
 - Lustre 2.12.9 went GA June 17th
 - http://wiki.lustre.org/Lustre_2.12.9_Changelog
 - Lustre 2.12.10 may be issued
 - Driver would be to add support for RHEL 8.7 clients
- Lustre 2.15.x
 - Lustre 2.15.1 went GA August 10th
 - http://wiki.lustre.org/Lustre_2.15.1_Changelog
 - Lustre 2.15.2 will likely come out before the end of the year
 - Support for RHEL 8.7 servers/clients
 - Support for RHEL 9.0/SLES15 SP4 /Ubuntu 22.04 clients

Lustre 2.15.x

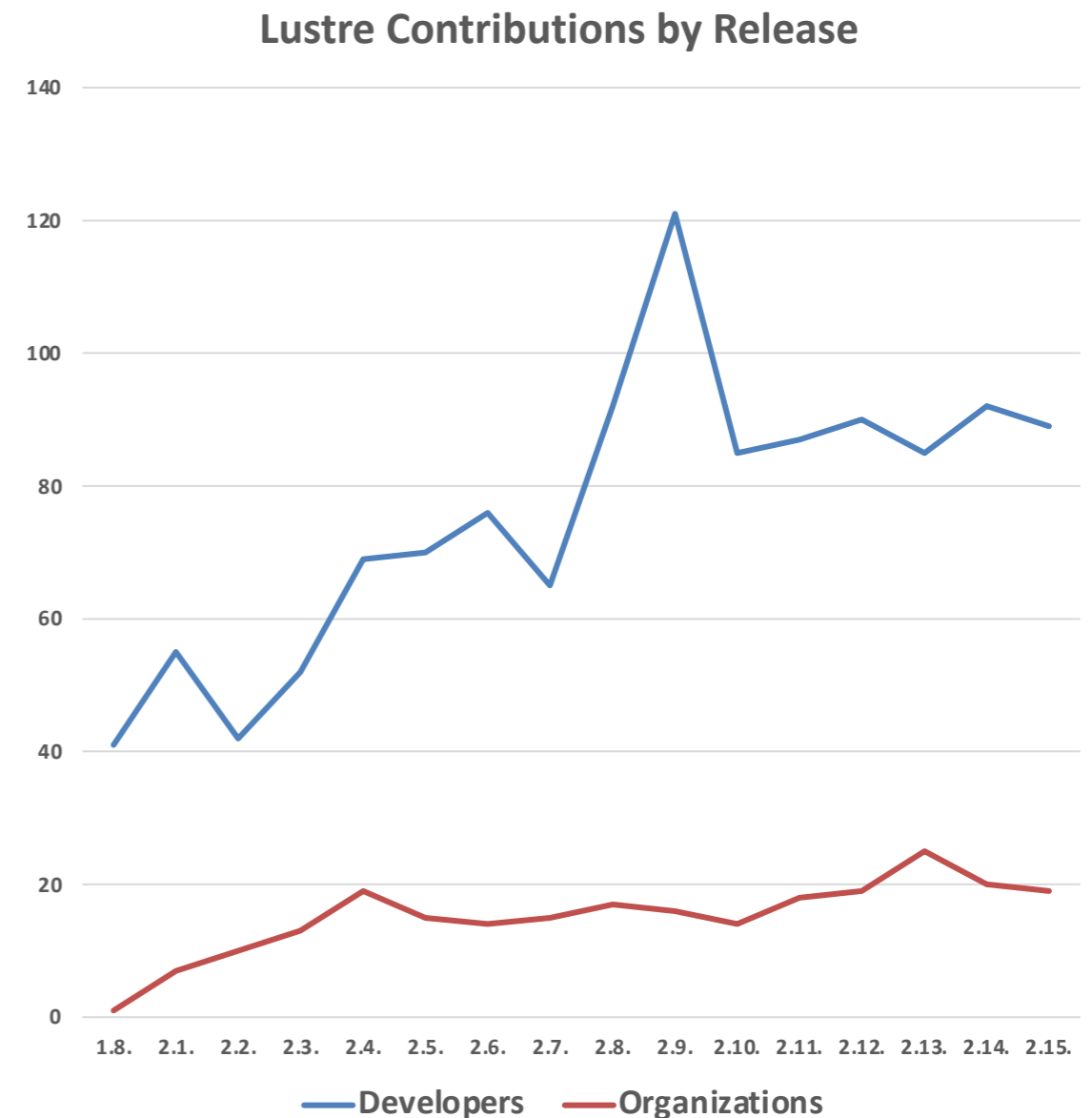
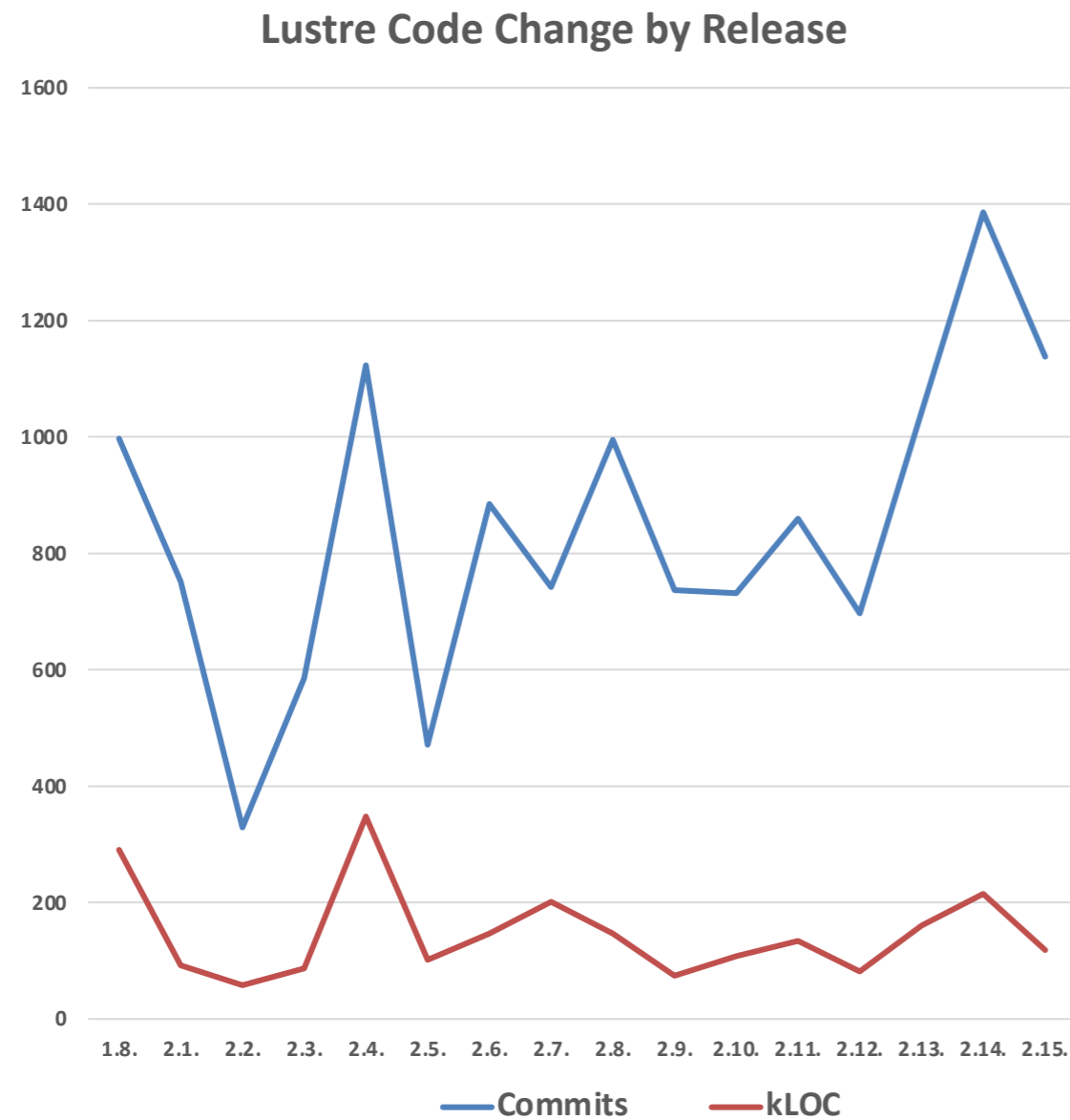
- Went GA June 16th
 - http://wiki.lustre.org/Release_2.15.0
 - RHEL 8.5 servers/clients
 - RHEL 8.5/SLES15 SP3/Ubuntu 20.04 clients
- Interop/upgrades from 2.14 and latest Lustre 2.12.x
- Features in the release
 - Network Selection Policy (UDSP) (LU-9121)
 - Client Filename Encryption (LU-13717)
 - GPU Direct Storage (LU-14798)

Lustre 2.15 Contribution Statistics



Data courtesy of Dustin Leverman (ORNL)
 Source: <https://git.whamcloud.com> 2.14.0 to 2.15.0

Historic Contribution Statistics



Data courtesy of Chris Morrone (LLNL) and Dustin Leverman (ORNL)

Source: <https://git.whamcloud.com>

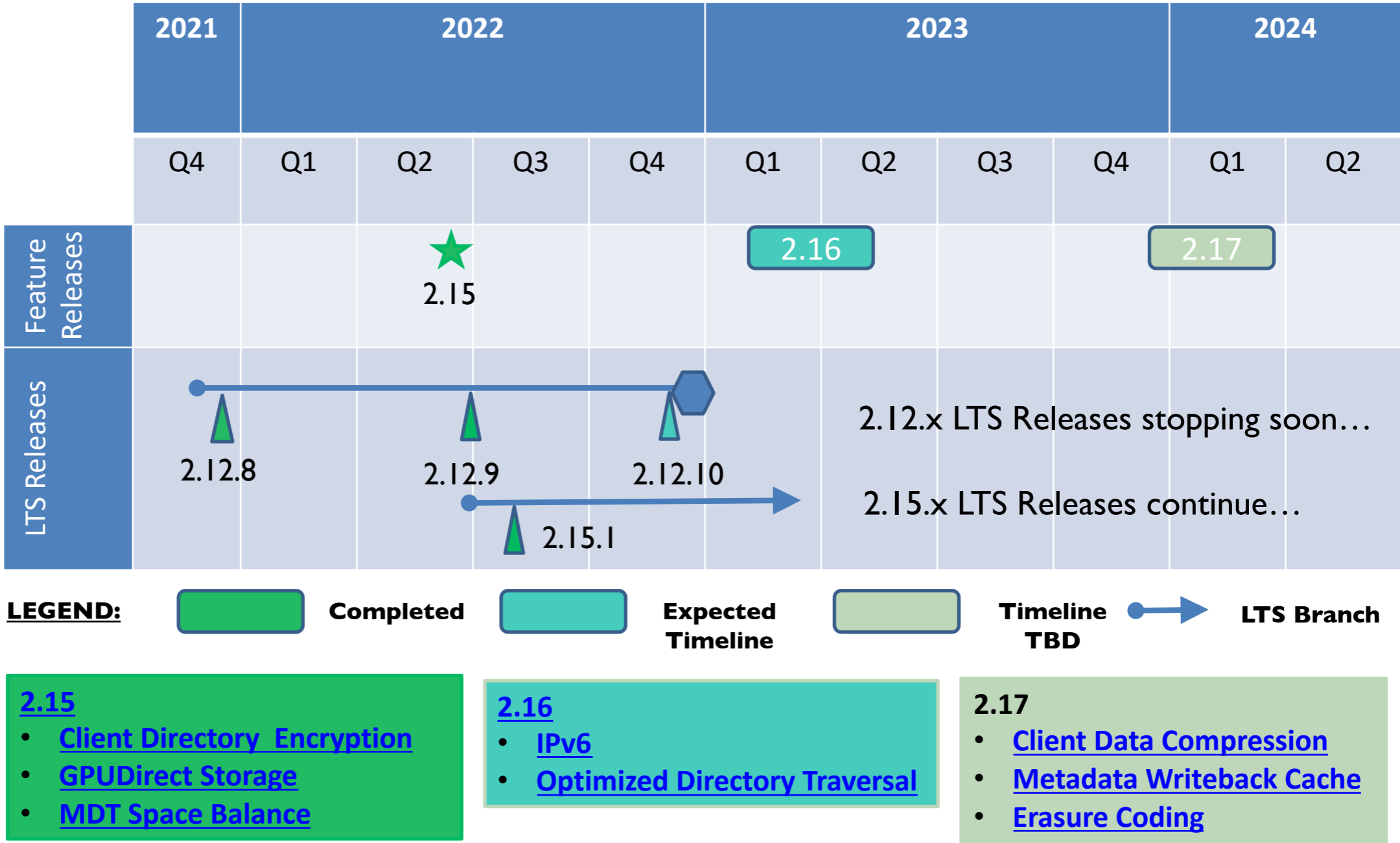
How to Contribute?

- Lustre development
 - Submitting/Reviewing/Testing Lustre code
 - <https://wiki.lustre.org/Development>
- Lustre documentation
 - Lustre Ops Manual – report issues in LUDOC JIRA project
 - https://wiki.lustre.org/Lustre_Manual_Changes
 - Lustre.org wiki (Lustre internals and sysadmin info)
 - http://wiki.lustre.org/Category:Lustre_Systems_Administration
- Participate in Community events
 - LUG, LAD, Regional LUG events, SC/ISC BOFs, online
- Complete the annual OpenSFS survey
 - https://wiki.opensfs.org/Lustre_Community_Survey
- Participate in the LWG
 - https://wiki.opensfs.org/Lustre_Working_Group
- Join a Lustre community organization (OpenSFS/EOFS)

Lustre 2.16

- Targeting for release in Q2 2023
 - http://wiki.lustre.org/Release_2.16.0
 - RHEL 8.6 servers
 - RHEL 8.6/SLES15 SP4/Ubuntu 22.04 clients
- Interop/upgrades from latest Lustre 2.15.x
- Features in the release
 - IPv6 Support (LU-10391)
 - Optimized Directory Traversal (LU-13717)

Lustre Community Roadmap



* Estimates are not commitments and are provided for informational purposes only
 * Fuller details of features in development are available at <http://wiki.lustre.org/Projects>

Some General Advice

Compiled from common misunderstandings

- **Always use the latest version of e2fsprogs**
 - Not tied to the version at the time of your Lustre release
 - Ensures that you always have the latest bugfixes
 - <https://downloads.whamcloud.com/public/e2fsprogs/latest/>
- **Development builds are not suitable for production**
 - If $z > 50$ in the x.y.z release number then it is a dev build
 - Tags are created through the release cycle as part of QE process
- **Lustre clients can usually be built against older kernel**
 - Lustre releases are tested against the latest available version of a given distro at the time but usually will build and work fine with down-rev versions

Summary

- Lustre 2.15.2 out before the end of the year
- Lustre 2.16 targeted for Q2 2023
- LWG [http://wiki.opensfs.org/Lustre Working Group](http://wiki.opensfs.org/Lustre_Working_Group)

Thank you

Open Scalable File Systems, Inc.

3855 SW 153rd Drive
Beaverton, OR 97006
Ph: 503-619-0561
Fax: 503-644-6708
admin@opensfs.org



www.opensfs.org