



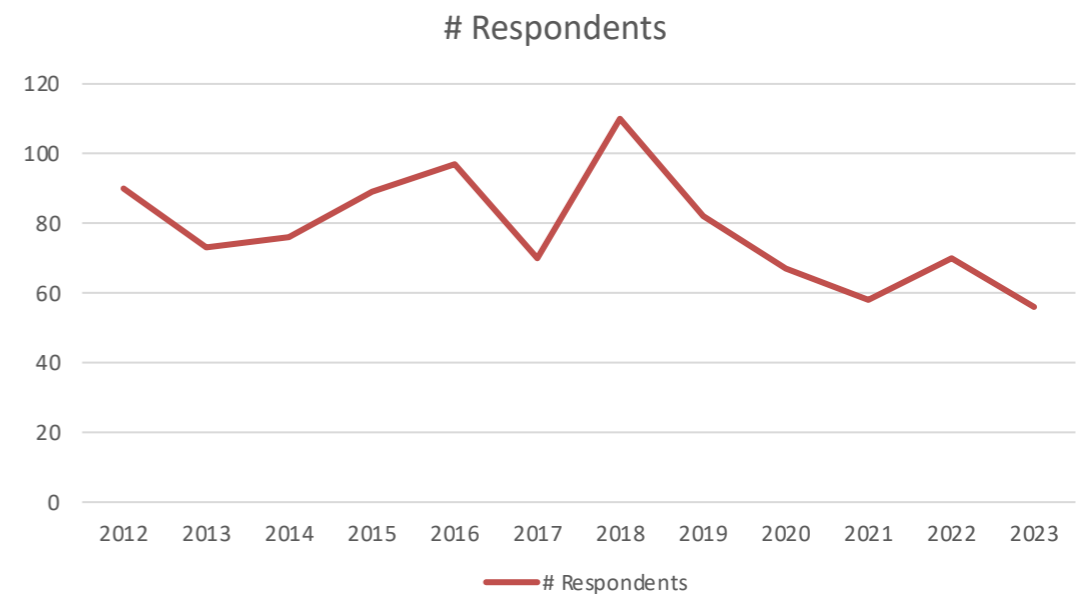
Community Release Update

May 2nd 2023

Peter Jones, Whamcloud
OpenSFS Lustre Working Group

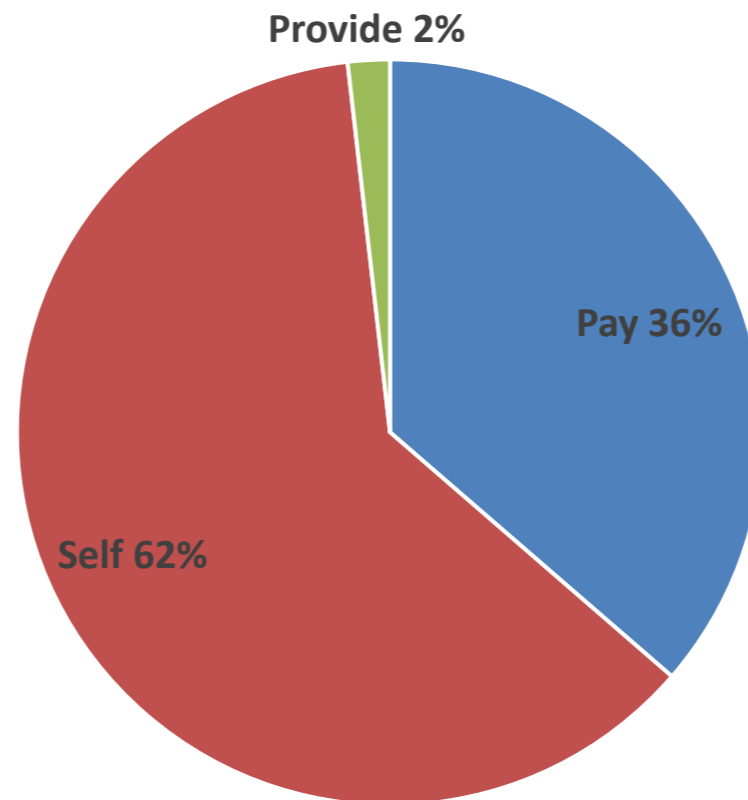
OpenSFS Lustre Working Group

- 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



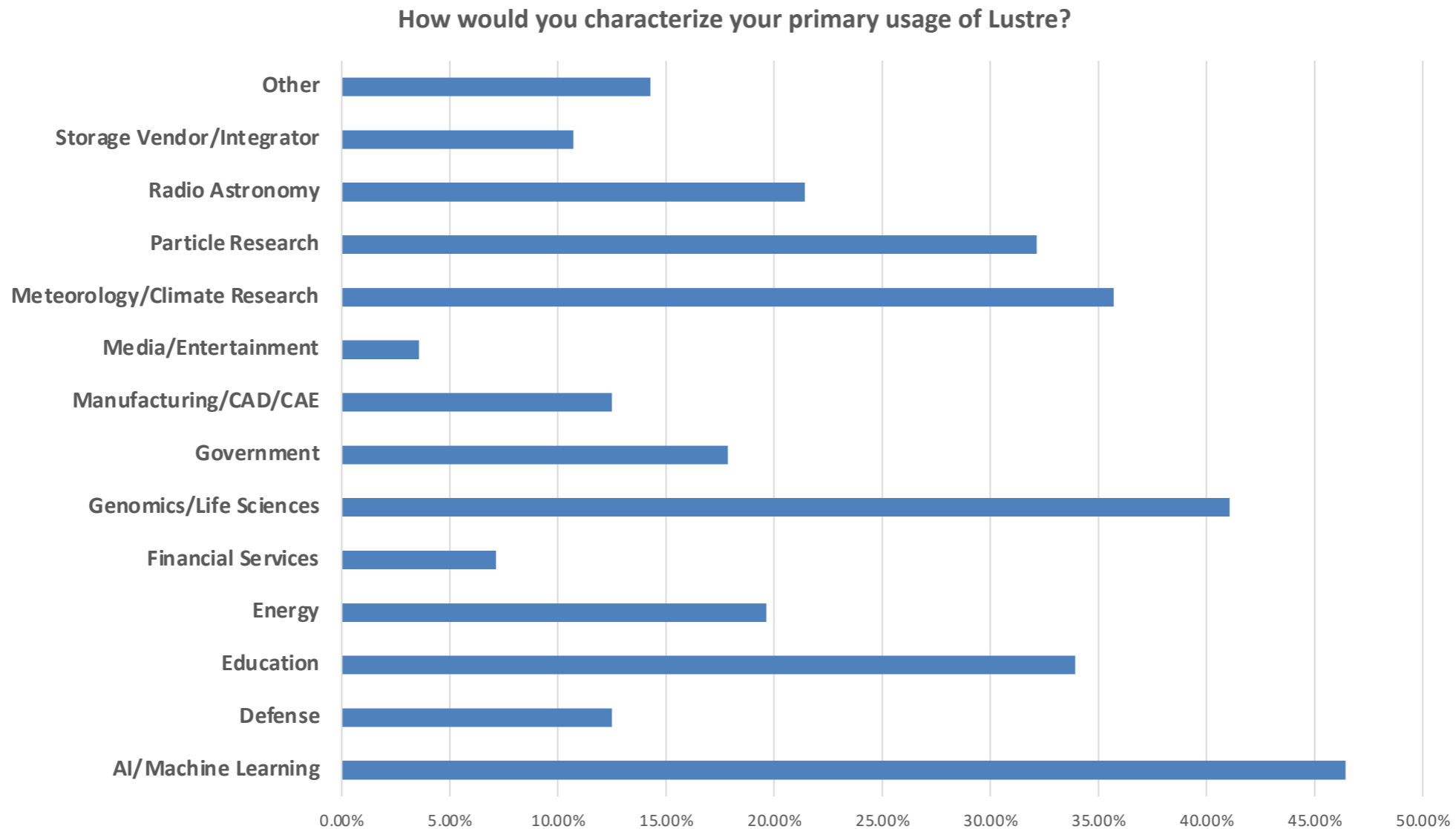
Community Survey – Support

What best describes your Lustre support situation?



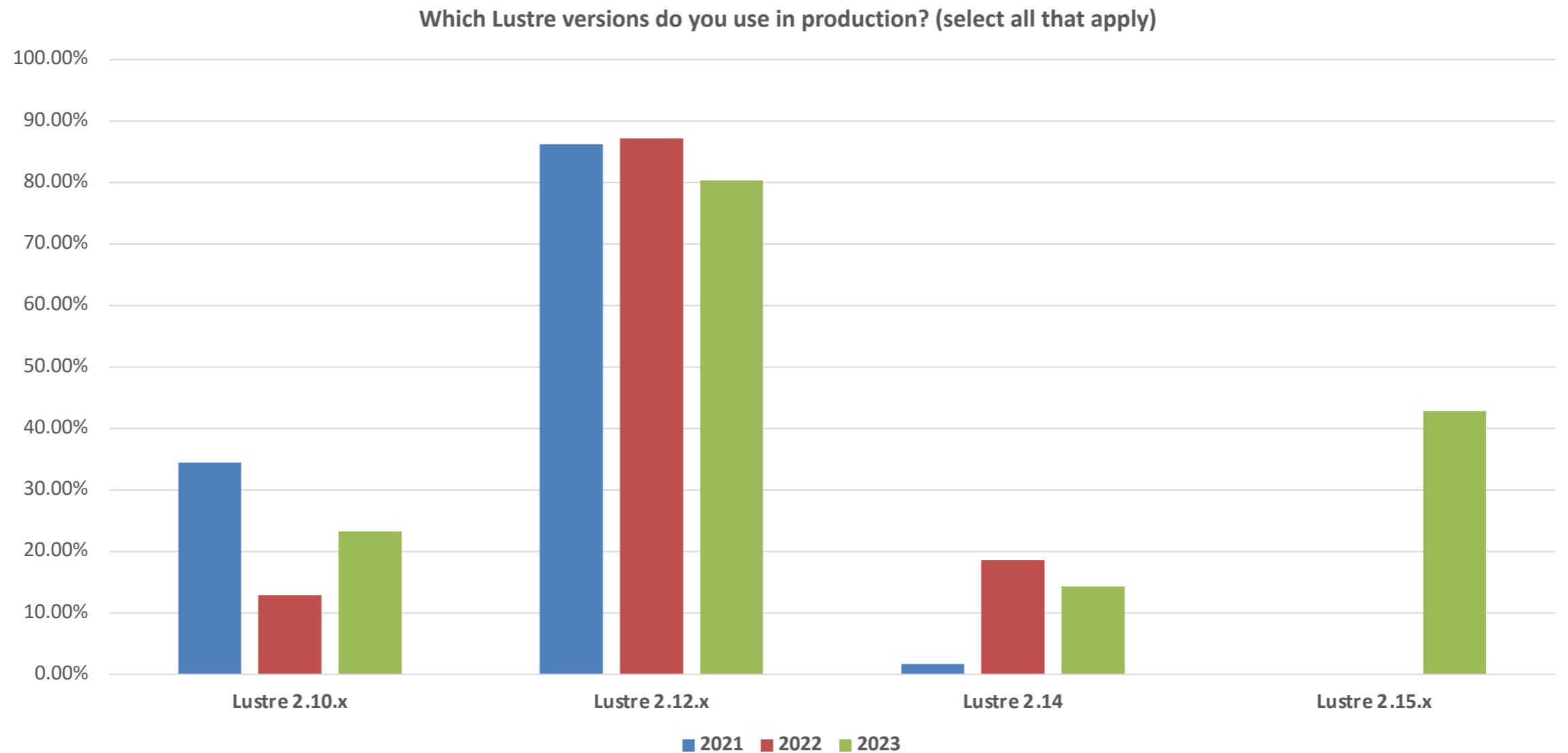
- Strong representation from open-source users

Community Survey – Primary Usage



- AI/ML often paired with other areas
- Other selections included General HPC and Cosmology

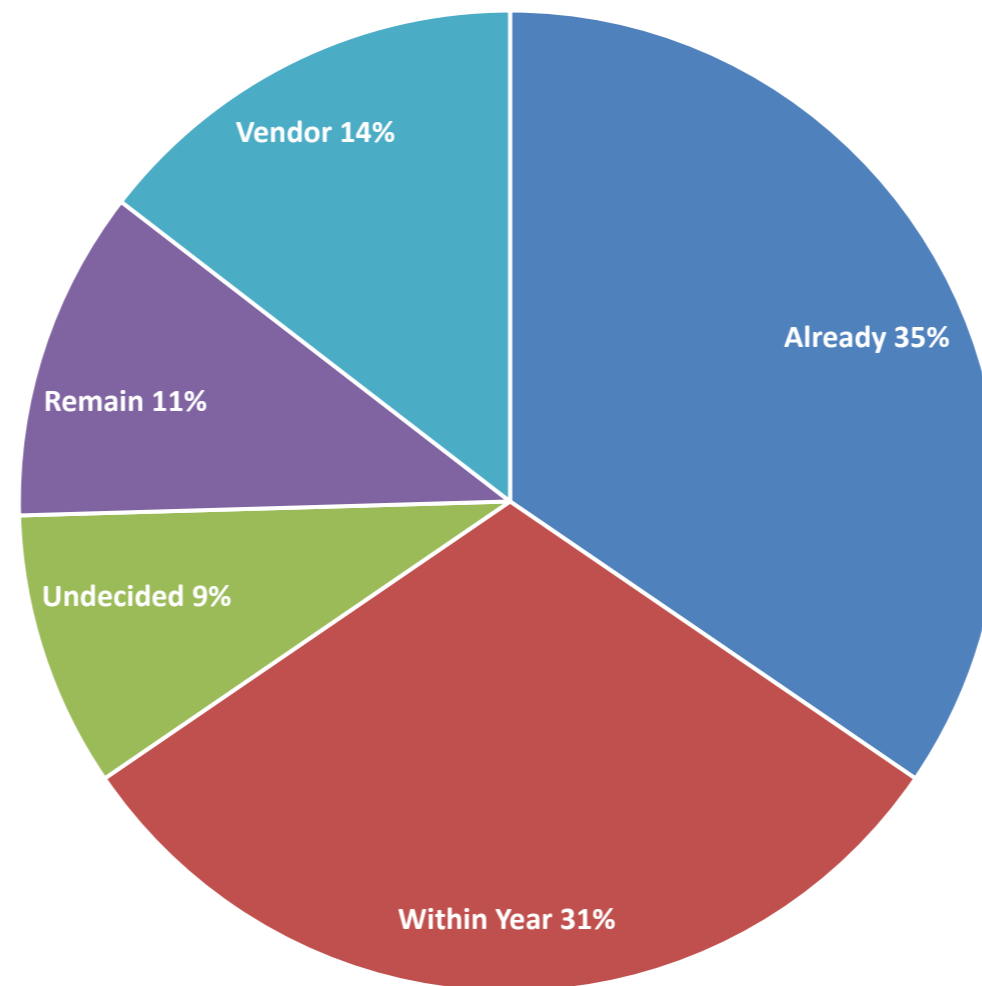
Community Survey – Lustre Versions



Majority of respondents using Lustre 2.12.x LTS in production
Very strong adoption of 2.15.x

Community Survey – LTS Transition

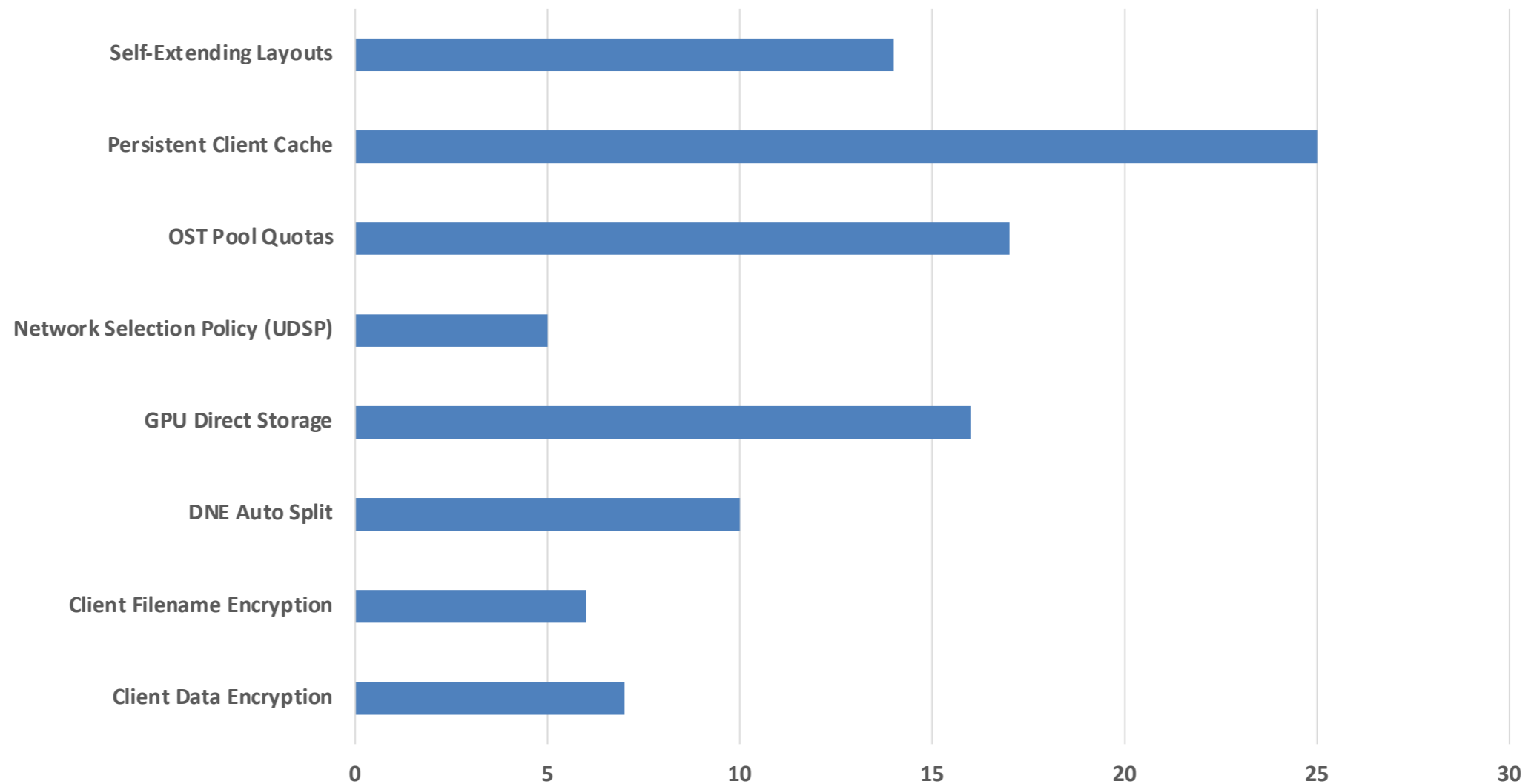
How quickly do you plan to move to a Lustre 2.15.x LTS release?



Most sites not reliant on a vendor expect to be running 2.15.x within the year

Community Survey – Feature Usage

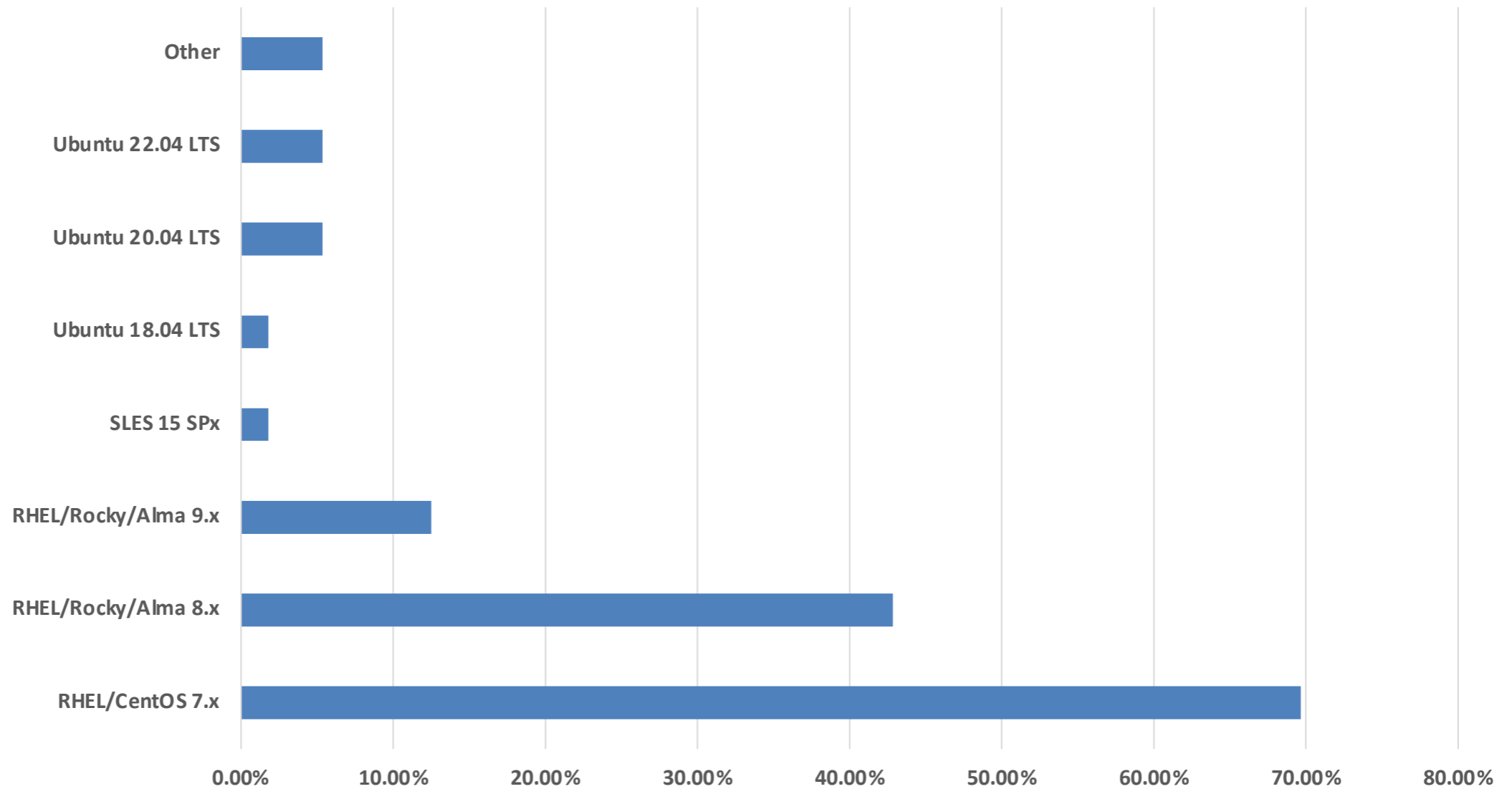
Which of the following recent Lustre features do you plan to use in production within the coming year?



Strong interest in most of the newer features

Community Survey - Linux distros (servers)

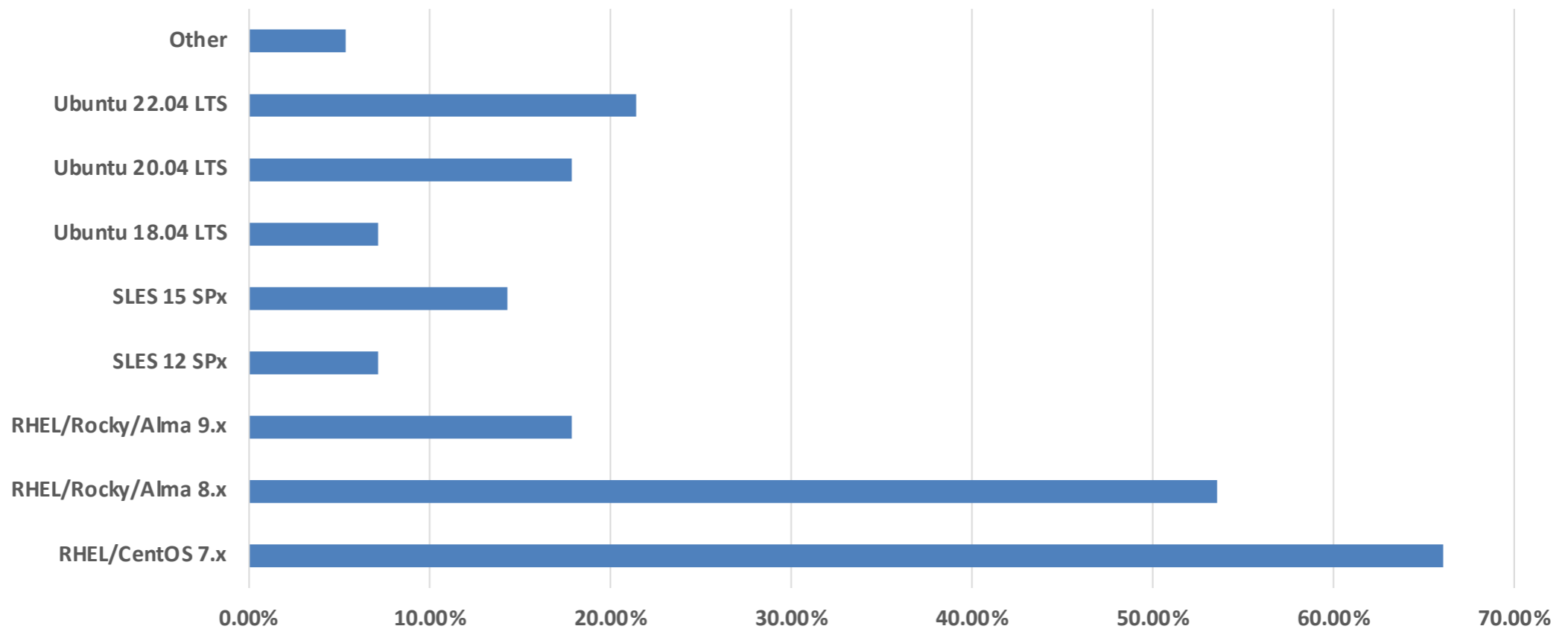
What Linux distribution(s) do you use for servers today?



RHEL 8.x servers closing gap on RHEL 7.x servers

Community Survey - Linux distros (clients)

What Linux distribution(s) do you use for clients today?



RHEL 8.x clients close second to RHEL 7.x clients
Ubuntu 22.04 also widely used

Community Survey - Analysis

- Expect to see Lustre 2.15.x overtake Lustre 2.12.x and RHEL 8 surpass RHEL 7.x in 2024 survey
- Suggestions for Lustre improvements from multiple respondents
 - NFS
 - S3 interface
 - Small file IO
 - Snapshots

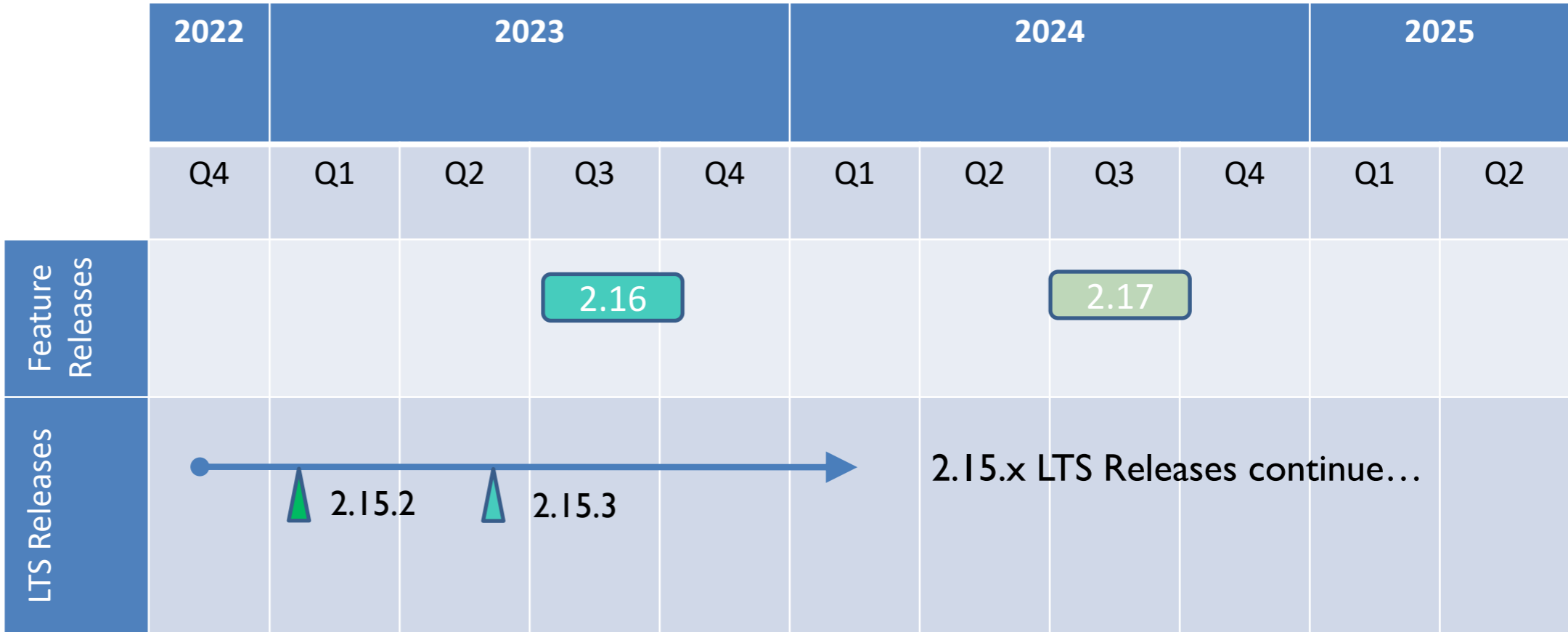
Lustre 2.15.x LTS

- Lustre 2.15.0 GA June 2022
 - Replacing 2.12.x as LTS branch
 - http://wiki.lustre.org/Lustre_2.15.2_Changelog
- Lustre 2.15.1 GA Aug 2022
 - RHEL 8.6 servers/clients; Ubuntu 22.04 clients
 - http://wiki.lustre.org/Lustre_2.15.2_Changelog
- Lustre 2.15.2 GA Jan 2023
 - RHEL 8.7 servers/clients; SLES15 SP4/ RHEL 9.0 clients
 - http://wiki.lustre.org/Lustre_2.15.2_Changelog
- Lustre 2.15.3 expected in Q2
 - RHEL 8.8 servers/clients(LU-16755); RHEL 9.2 clients (LU-16756)

Lustre 2.16

- Targeting for release in Q3 2023
 - http://wiki.lustre.org/Release_2.16.0
 - Feature freeze targeted for end of May
 - RHEL 9.2 servers/clients
 - SLES15 SP5/Ubuntu 22.04 clients
- Interop/upgrades from latest Lustre 2.15.x
- Features in the release
 - IPv6 Support ([LU-10391](#))
 - 9 patches remaining on Lustre side; also patches on LNet side
 - Optimized Directory Traversal ([LU-15975](#))
 - Aka "Improved Statahead"
 - Last couple of patches landing soon

Lustre Community Roadmap



LEGEND: Completed Expected Timeline Timeline TBD → LTS Branch

- 2.15 (GA Q2 2022)**
- [Client Directory Encryption](#)
 - [GPUDirect Storage](#)
 - [MDT Space Balance](#)

- 2.16**
- [RHEL9 Server Support](#)
 - [IPv6](#)
 - [Optimized Directory Traversal](#)

- 2.17**
- [Client Data Compression](#)
 - [Metadata Writeback Cache](#)
 - [Erasure Coding](#)

* 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>



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)

Summary

- Lustre 2.16.0 targeted for Q3 2023
- Lustre 2.15.3 coming soon with RHEL 8.8 support
- LWG [http://wiki.opensfs.org/Lustre Working Group](http://wiki.opensfs.org/Lustre_Working_Group)

Thank you

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