



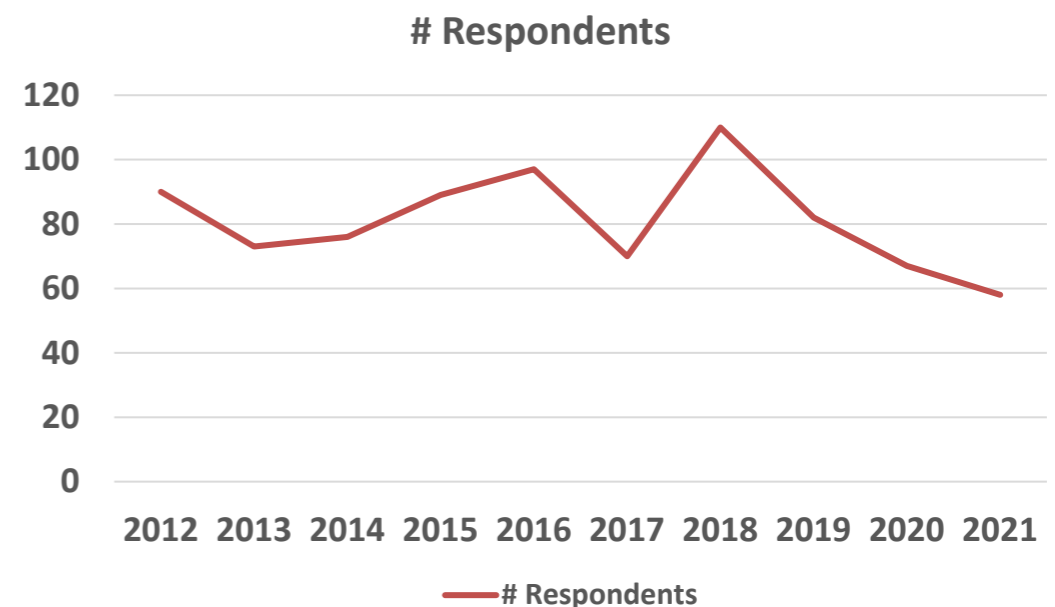
Community Release Update

May 19th 2021

Peter Jones, Whamcloud
OpenSFS Lustre Working Group

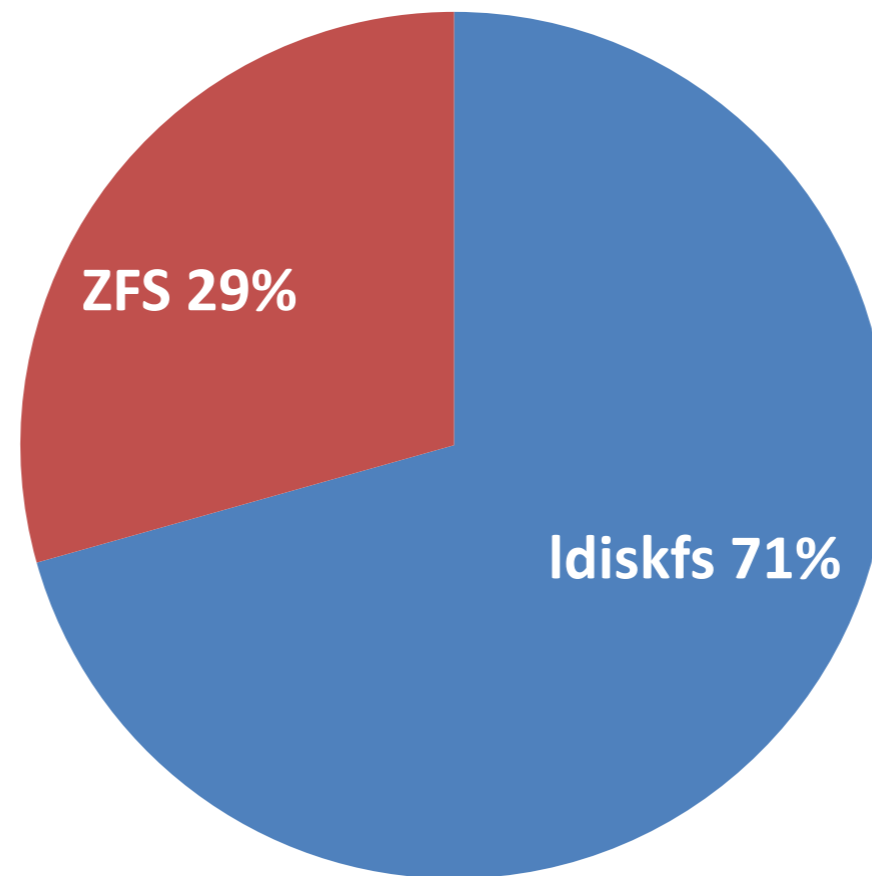
OpenSFS Lustre Working Group

- 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](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](http://wiki.opensfs.org/Lustre_Community_Survey)



Community Survey – Storage Capacity

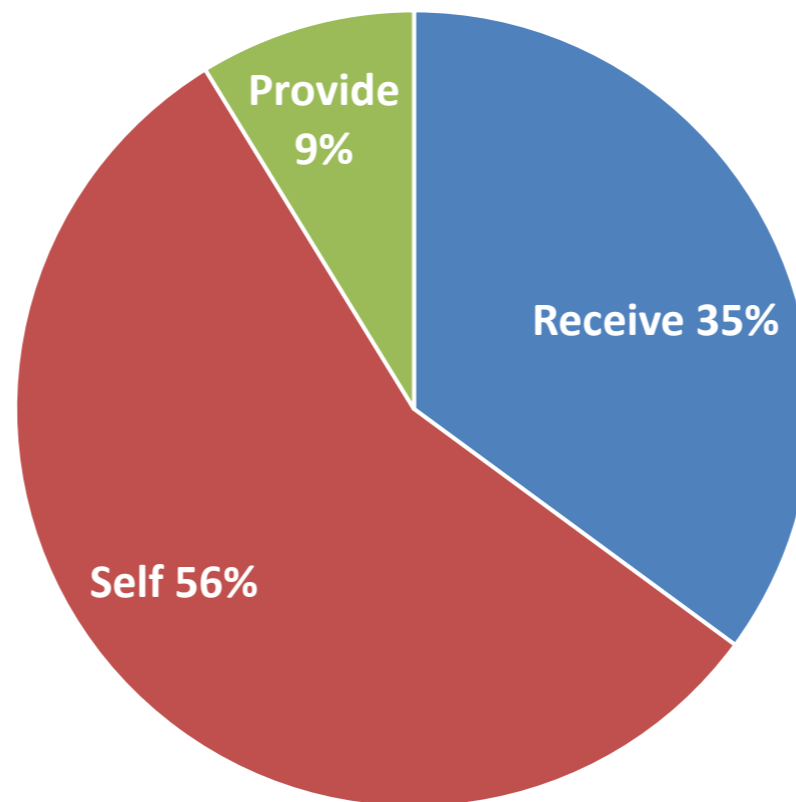
Lustre Storage Capacity



- Over an exabyte of Lustre storage across 229 filesystems (50 respondents)

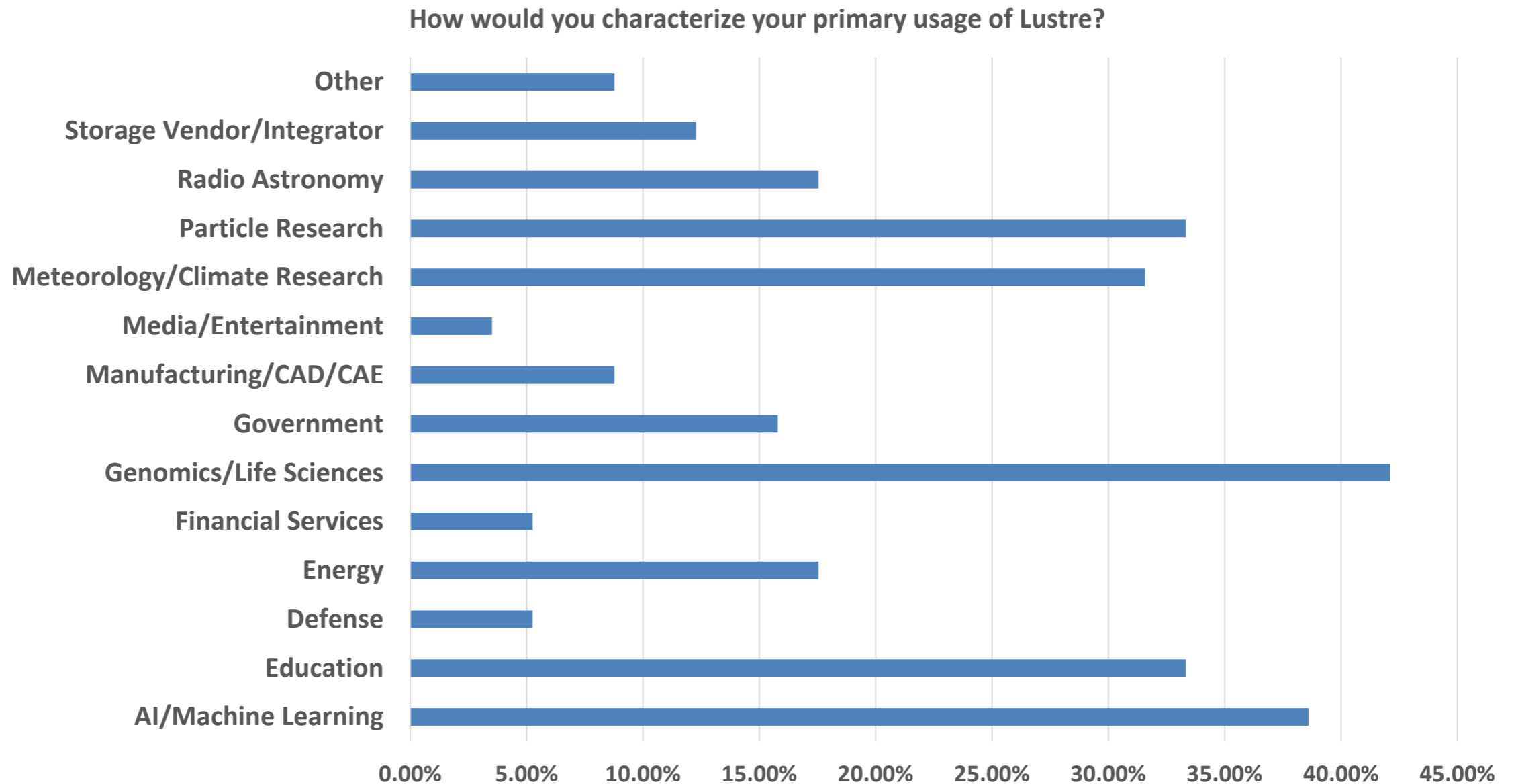
Community Survey – Support

What best describes your Lustre support situation?



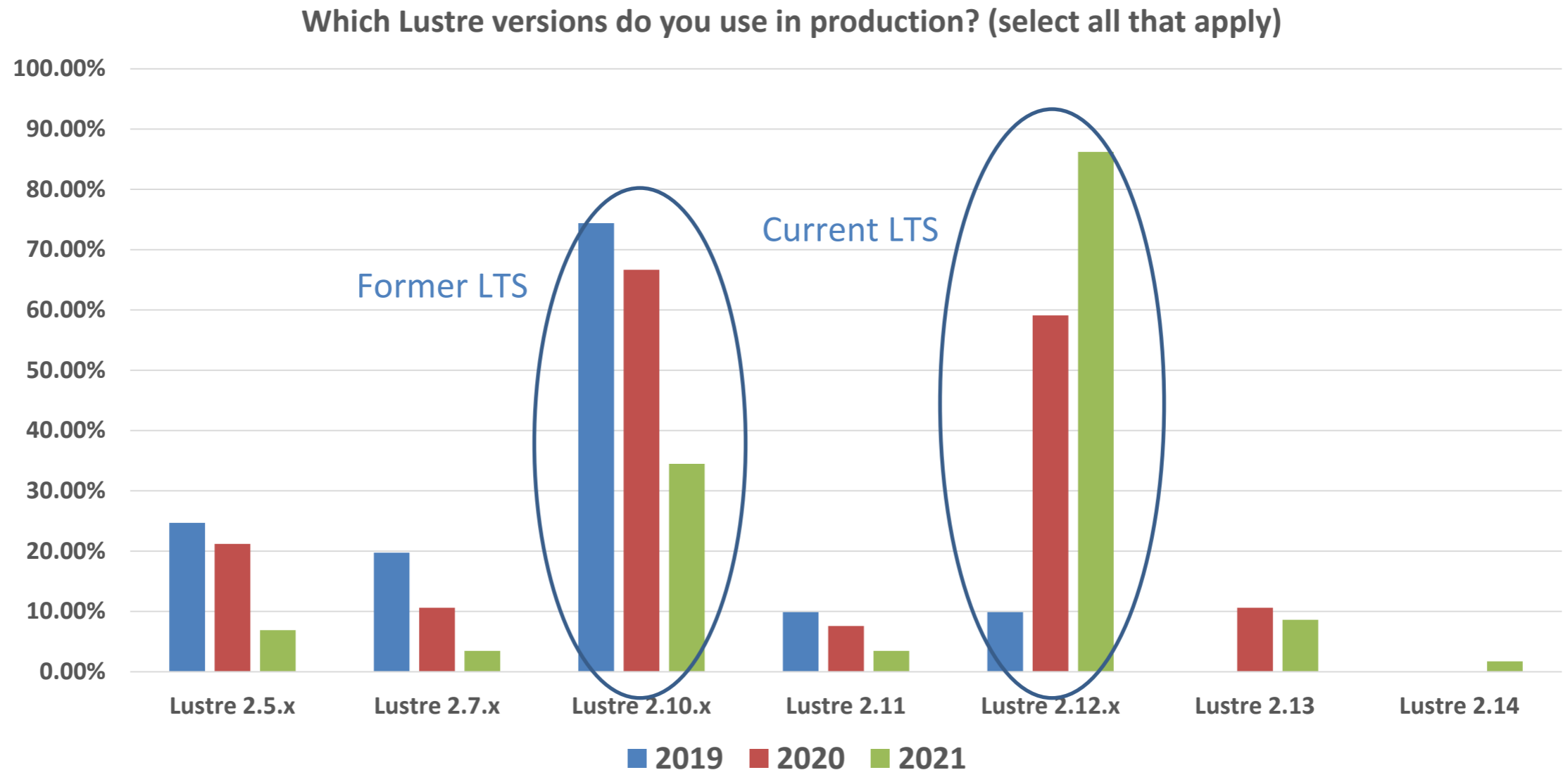
- The survey reaches across the Lustre community

Community Survey – Primary Usage



- Diverse usage reported by the respondents

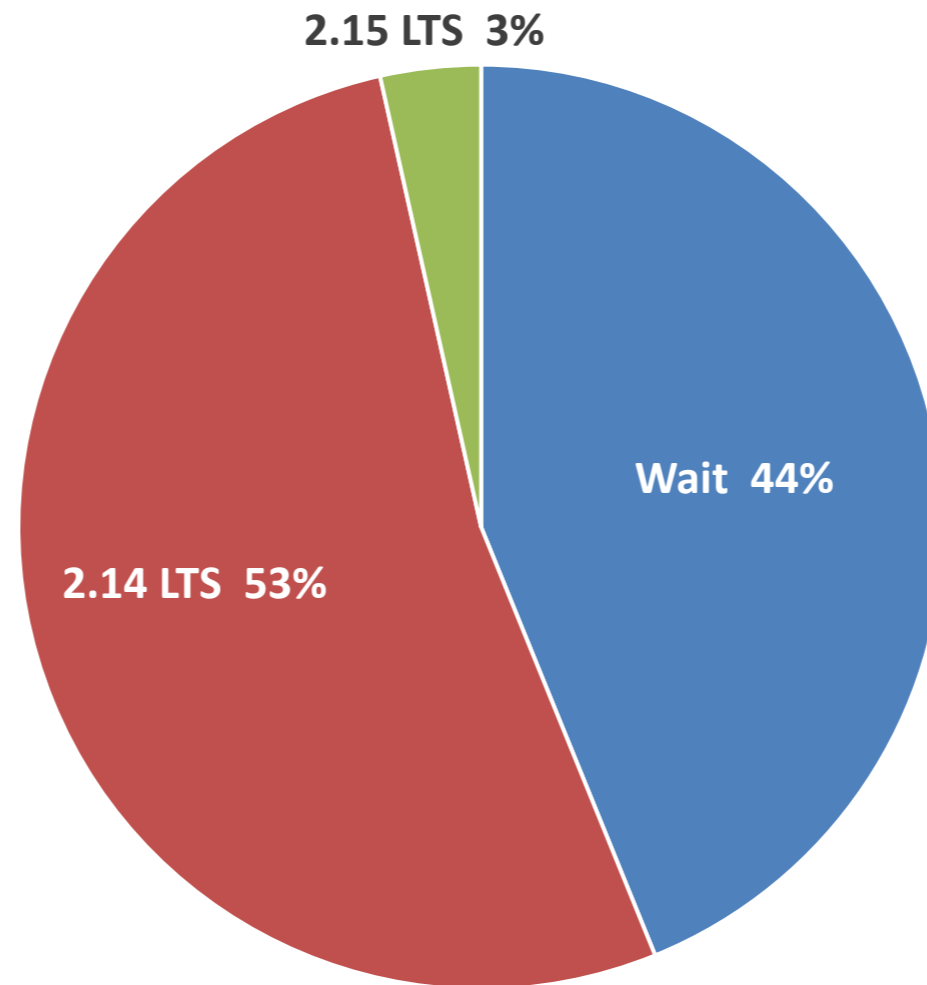
Community Survey – Lustre Versions



Lustre 2.12.x LTS is the most widely-used production release

Community Survey – LTS Options

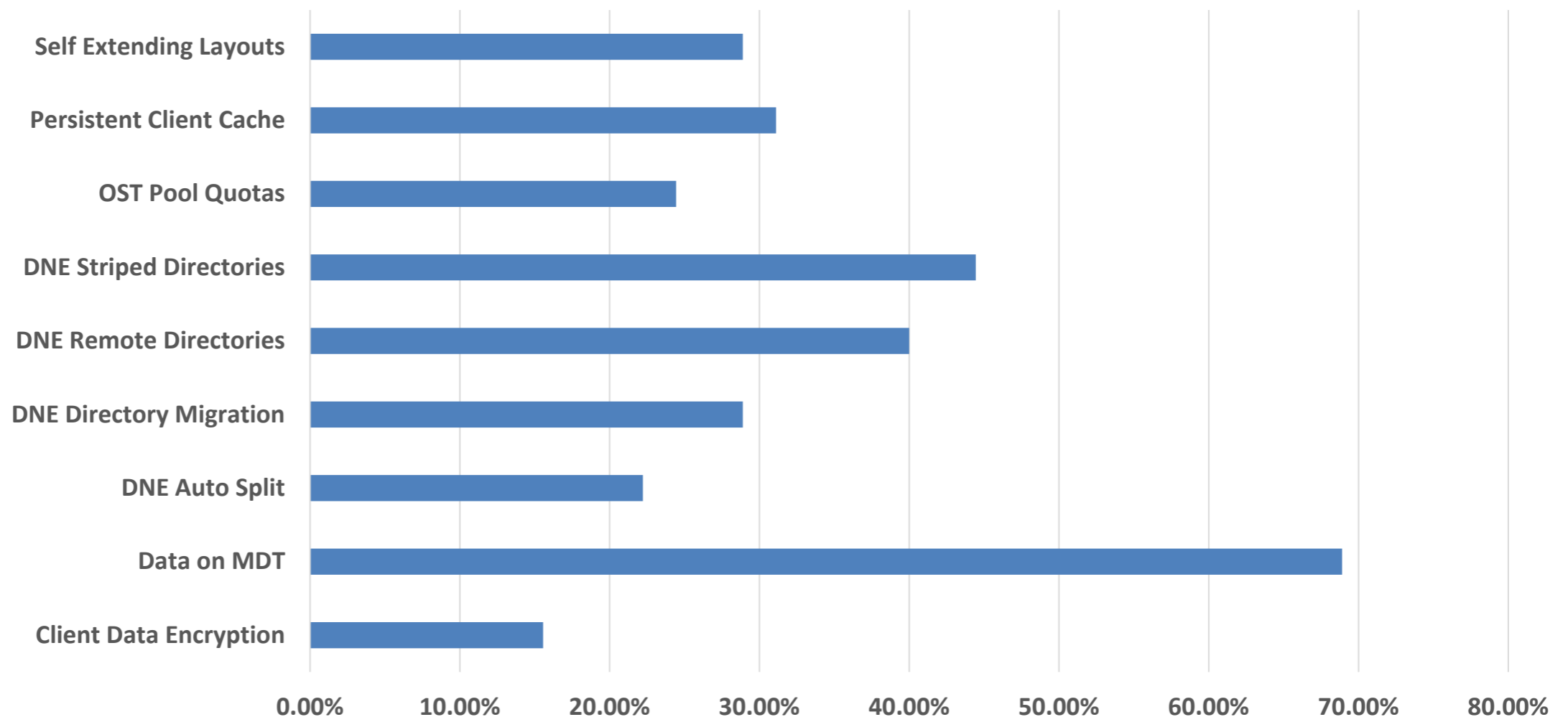
Which option would you prefer relating to the LTS branch?



Split opinions about LTS branch

Community Survey – Feature Usage

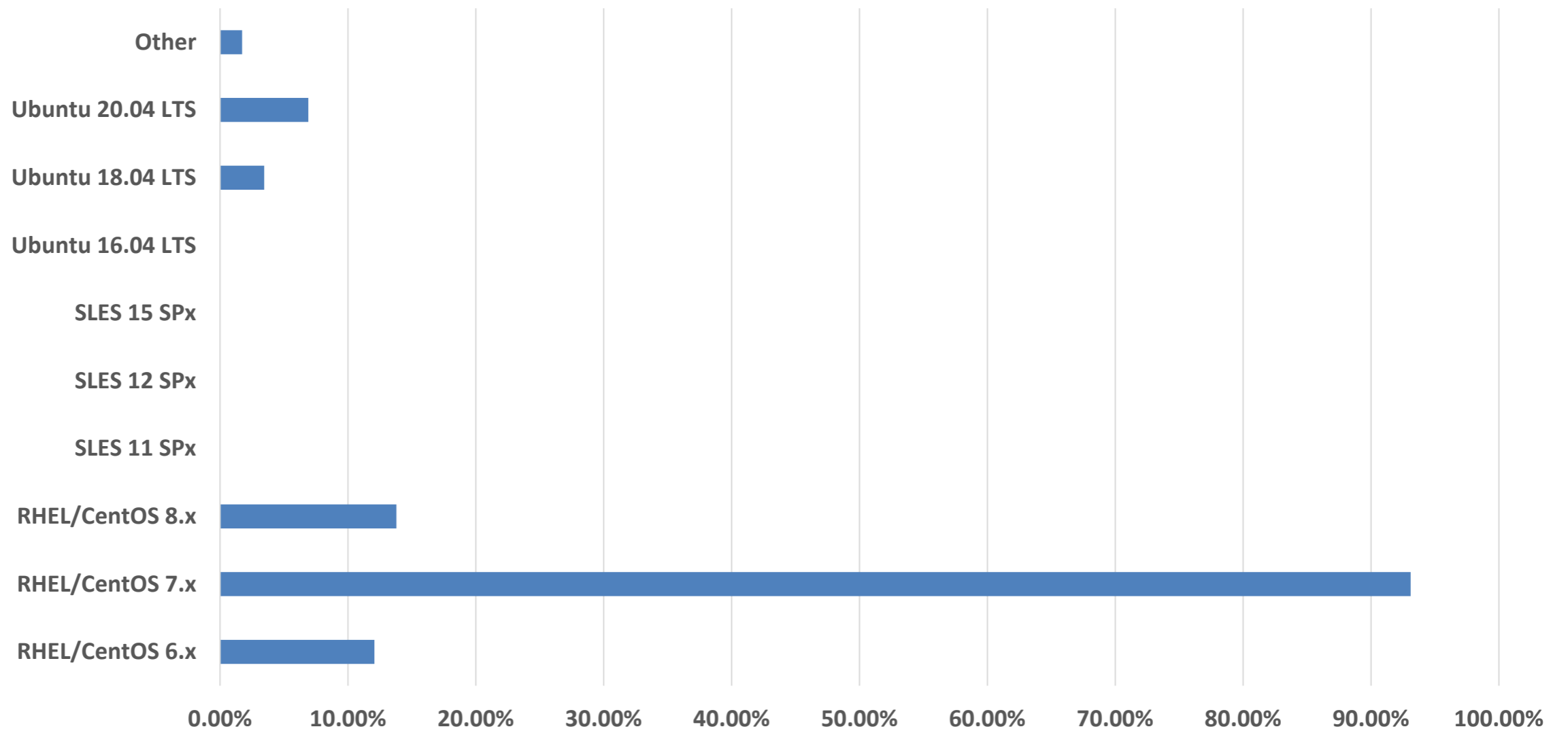
Which of the following recent Lustre features do you plan to use in production within the coming year?



Reasonably high levels projected for features in 2.13 (SEL, PCC) and 2.14 (Encryption, Auto-split, Pool Quotas)

Community Survey - Linux distros (servers)

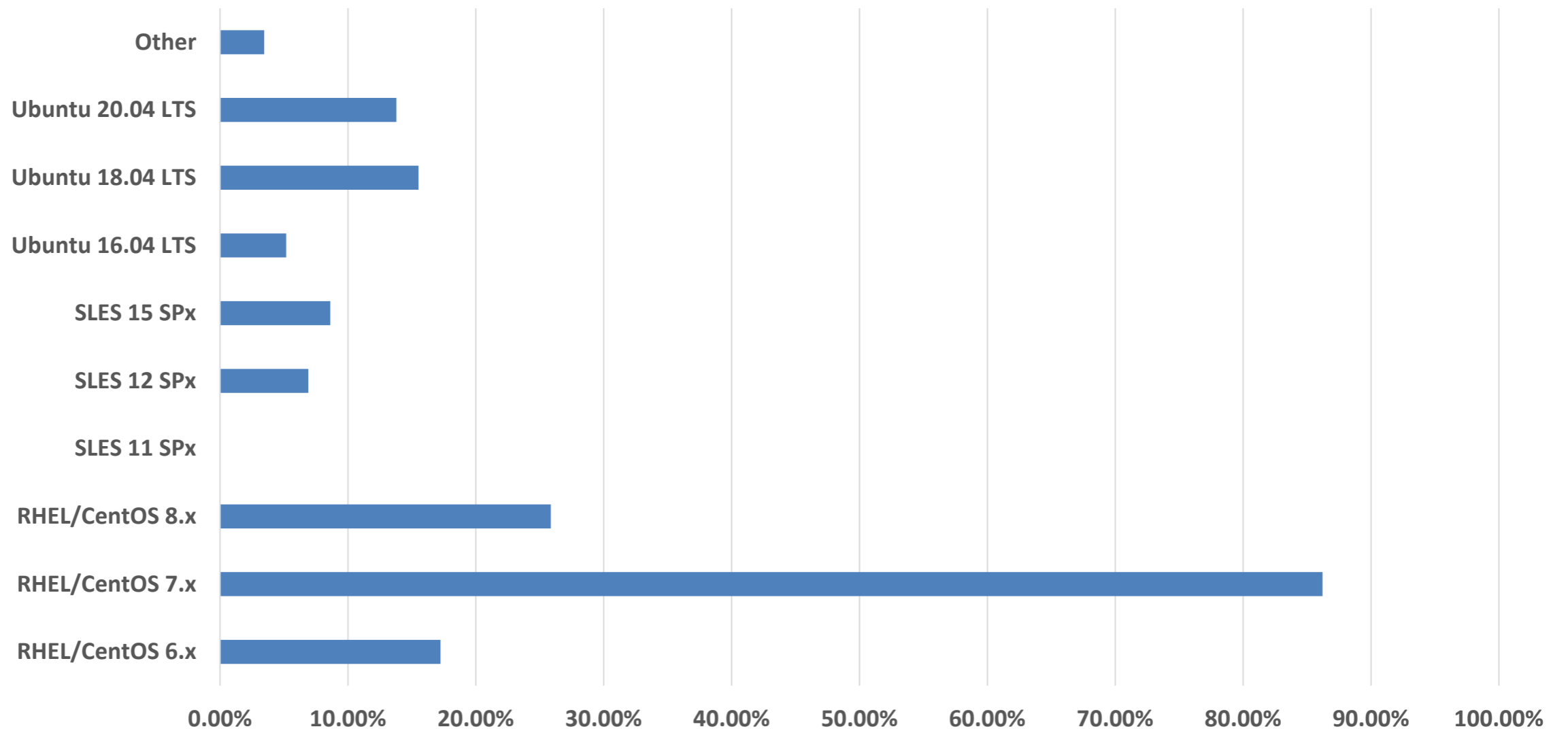
What Linux distribution(s) do you use for servers today?



RHEL/CentOS 7.x most widely-used Linux distribution for servers

Community Survey - Linux distros (clients)

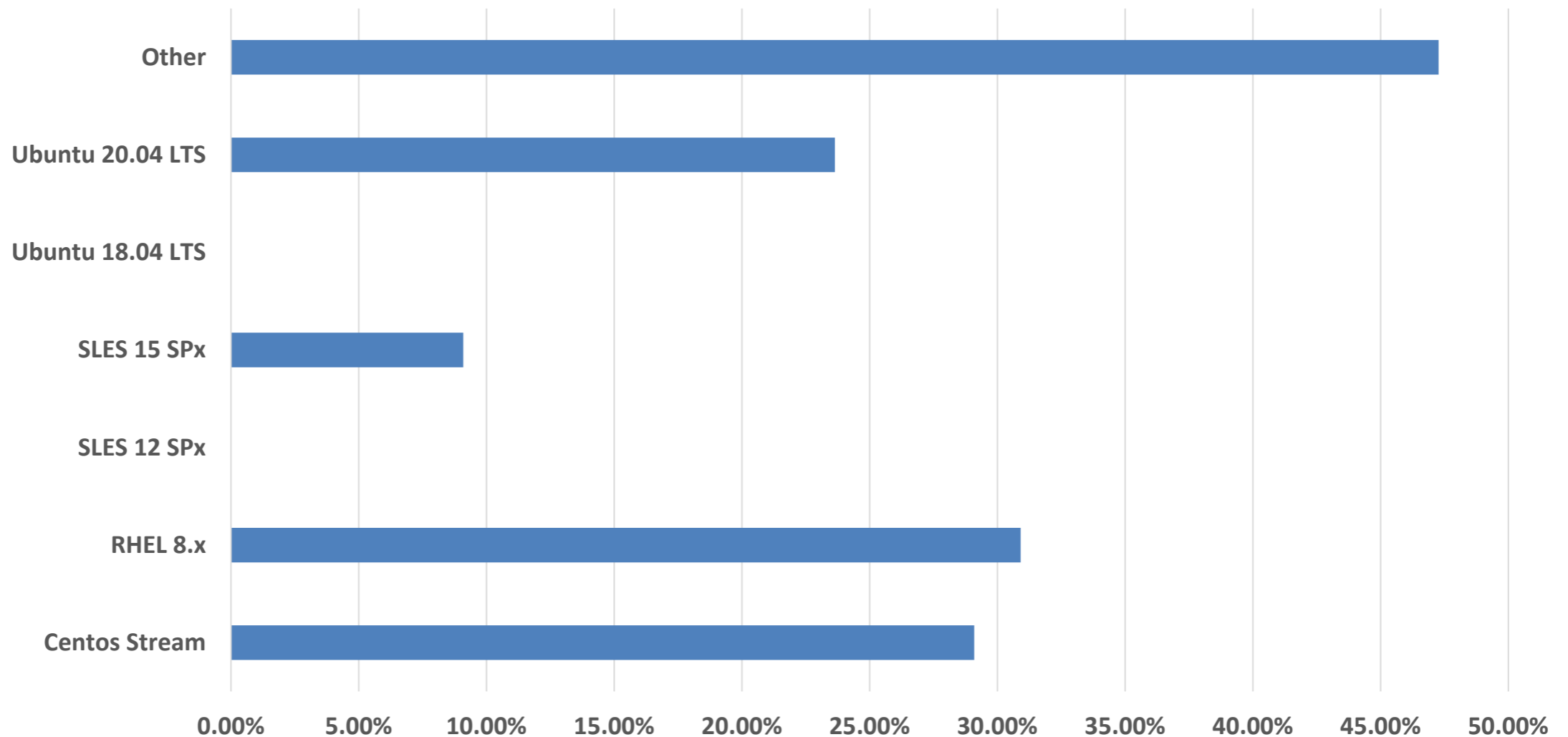
What Linux distribution(s) do you use for clients today?



RHEL/CentOS 7.x most widely-used Linux distribution for clients

Community Survey – Future Linux distros

Which Linux distribution(s) do you plan to introduce in the future?



“Other” dominated by “Next CentOS” options (Alma, Oracle, Rocky)
Strong growth of Ubuntu

Community Survey - Analysis

- Opinions split about timing of moving the LTS branch
- Some interest in newer features
- Need to clarify approach with distros in light of CentOS changes
 - Primary kernel for testing of RHEL 8.x may no longer be optimal
 - Historically, switches to newer kernels for servers has been slow
- Have refined survey to focus on specific issues
 - <https://www.surveymonkey.com/r/HBX3RCR>

Lustre 2.12.x LTS

- Lustre 2.12.6 went GA on Dec 9th
 - RHEL 7.9 servers/clients
 - RHEL 7.9/RHEL 8.3/SLES12 SP5/Ubuntu 20.04 clients
 - Support for building with MOFED 5.x
 - testing still focused on MOFED 4.9.x
 - http://wiki.lustre.org/Lustre_2.12.6_Changelog
- Lustre 2.12.7 will come out when warranted (new distro versions etc)

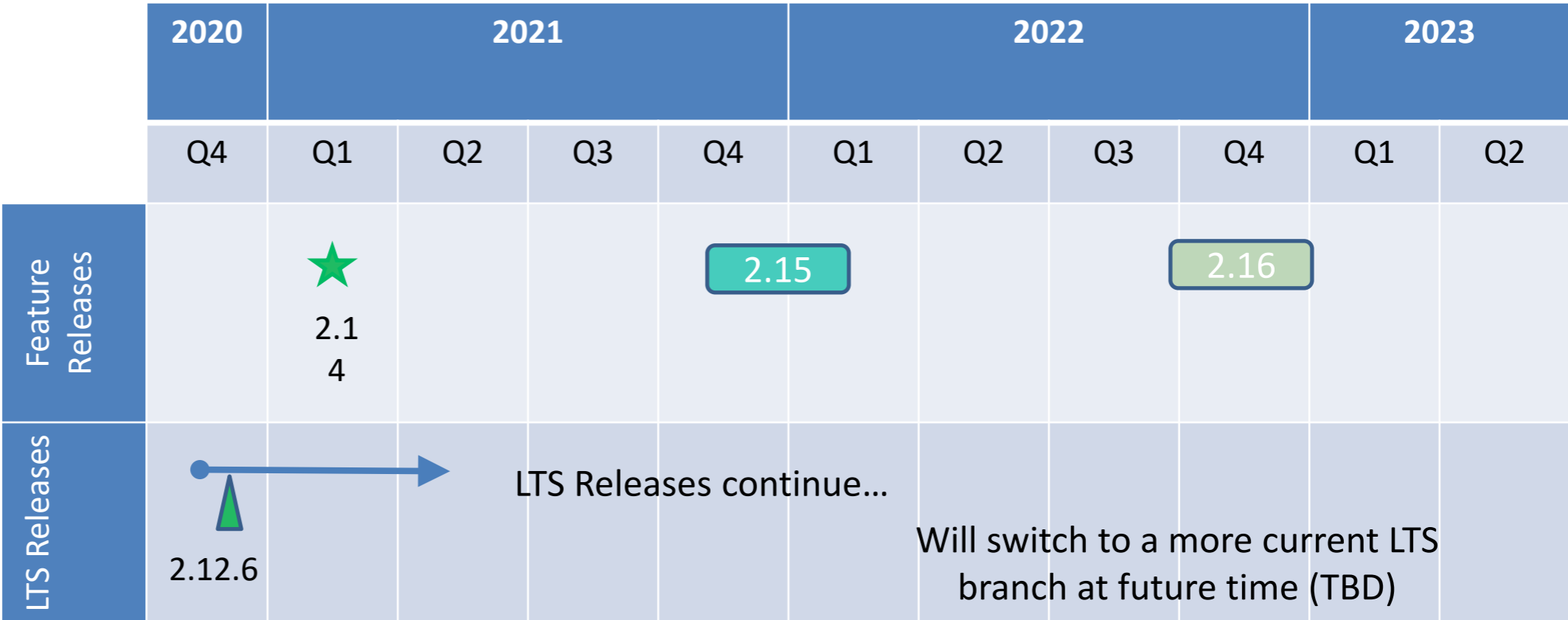
Lustre 2.14

- Lustre 2.14 went GA Feb 19th
- OS support
 - RHEL 8.3 servers/clients
 - RHEL 8.3/SLES15 SP2/Ubuntu 20.04 clients
- Interop/upgrades from 2.13 and latest Lustre 2.12.x
- ZFS 2.0 used for testing of ZFS version
- MOFED 5.2
- Number of useful features
 - Client-side Data Encryption (LU-12275)
 - OST Pool Quotas (11023)
 - DNE Auto Restriping (LU-11025)
- http://wiki.lustre.org/Release_2.14.0

Lustre 2.15

- Targeted for Q4 of this year
- Tentative OS support
 - RHEL 8.3 servers/clients
 - RHEL 8.3/SLES15 SP2/Ubuntu 20.04 clients
- Interop/upgrades from 2.14 and latest Lustre 2.12.x
- Features that are candidates for this release
 - Network Selection Policy (UDSP) (LU-9121)
 - Client Filename Encryption (LU-13717)
 - IPv6 support (LU-10391)
- http://wiki.lustre.org/Release_2.15.0

Lustre Community Roadmap



LEGEND: Completed Expected Timeline Timeline TBD → LTS Branch

- 2.14**
- [Client Data Encryption](#)
 - [OST Pool Quotas](#)
 - [DNE Auto Restripping](#)

- 2.15**
- [FLR Erasure Coding](#)
 - [Client Directory Encryption](#)
 - [LNet IPv6 Addressing](#)

- 2.16**
- [FLR Immediate Mirror](#)
 - [Metadata Writeback Cache](#)

* 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>



Summary

- Lustre 2.12.7 will be out in the near future
- Lustre 2.15 in early stages; targeted for Q4
- Active discussions underway about LTS branch
 - Provide your input
 - <https://www.surveymonkey.com/r/HBX3RCR>
- LWG [http://wiki.opensfs.org/Lustre Working Group](http://wiki.opensfs.org/Lustre_Working_Group)

Thank you

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