Community Release Update

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OpenSFS Lustre Working Group
OpenSFS Lustre Working Group

- Has been operating as the single forum for planning activities for the community releases for 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

- 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)
Lustre 2.12.x LTS has the highest rate for production usage.
Community Survey - Analysis

- Would phase out updates on 2.12.x once switch made
- Opinions split about timing of moving the LTS branch
  - Newer features and support for new hardware drivers for change
  - Uncertainty around CentOS and desire for stability drivers to delay

Which option would you prefer for the LTS branch?

<table>
<thead>
<tr>
<th>Option</th>
<th>RICE-OG</th>
<th>LUG21</th>
<th>ISC21</th>
</tr>
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<tbody>
<tr>
<td>2.12.x</td>
<td>5</td>
<td>18</td>
<td>4</td>
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<tr>
<td>2.14.x</td>
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<td>2.16.x</td>
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<tr>
<td>Total</td>
<td>8</td>
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LTS Recommendation

• Designate Lustre 2.15 the new LTS branch with RHEL 8.x as primary distro for servers
  • Allows time for broader testing ahead of the initial GA
    • Will improve the quality of initial release
    • Provides time to work out alternative to CentOS (Alma/Rocky)
• What about those who prefer to remain on 2.12.x?
  • 2.12.x releases should continue for about another year
  • Interop between LTS releases means 2.12.x servers could be used with 2.15.x clients
  • Open source means that it is easy for interested parties to collaborate and publish any updates needed
• This is a _recommendation_ so there is still a chance to lobby for alternative approach if you wish
Lustre 2.12.x LTS

• Lustre 2.12.7 went GA in July
  • RHEL 7.9 server and client support
  • RHEL 8.4 and SLES12 SP5 client support
  • Bug fixes from production 2.12.x deployments
  • [http://wiki.lustre.org/Lustre_2.12.7_Changelog](http://wiki.lustre.org/Lustre_2.12.7_Changelog)

• Lustre 2.12.8 expected towards the end of the year
Lustre 2.14

- Went GA in February
- 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
- Number of useful features
  - Client-side Data Encryption (LU-12275)
  - OST Pool Quotas (11023)
  - DNE Auto Restriping (LU-11025)
Lustre 2.14 Contributions

Lustre Contributions by Release

Lustre Code Change by Release
Lustre 2.15

• Targeted for Q4 release
• OS support
  • RHEL 8.4 servers/clients
  • RHEL 8.4/SLES15 SP2/Ubuntu 20.04 clients
• Interop/upgrades from 2.14 and latest Lustre 2.12.x
• Number of useful features
  • Client-side Directory Encryption (LU-13717)
  • GPU Direct (LU-14798)
  • Network Selection Policy (UDSP) (LU-9121)
• [http://wiki.lustre.org/Release_2.15.0](http://wiki.lustre.org/Release_2.15.0)
# Lustre Community Roadmap

<table>
<thead>
<tr>
<th>Feature Releases</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
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<td></td>
<td>Q4</td>
<td>Q1</td>
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<td>GPU Direct</td>
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<td>Network Selection Policy</td>
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<td>FLR Immediate Mirror</td>
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<td>Metadata Writeback Cache</td>
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- 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](http://wiki.lustre.org/Projects)

**LEGEND:**
- Green: Completed
- Blue: Expected Timeline
- Light Blue: Timeline TBD
- Orange: LTS Branch
Summary

• Recommending switching the LTS to 2.15
• Lustre 2.12.8 coming soon
• Lustre 2.15 in release testing
• Plenty of options for those interested in contributing to Lustre
Thank you

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