



Community Development Working Group

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LUG 2013, April 16, 2013

CDWG Goals

- Facilitate community development of the Lustre software tree.
 - Coordinate efforts of multiple contributors
 - Plan release schedule
 - Develop internet infrastructure
 - Provide forum for settling disputes

Software Development “Iron Triangle”

Scope (Features, Functionality)



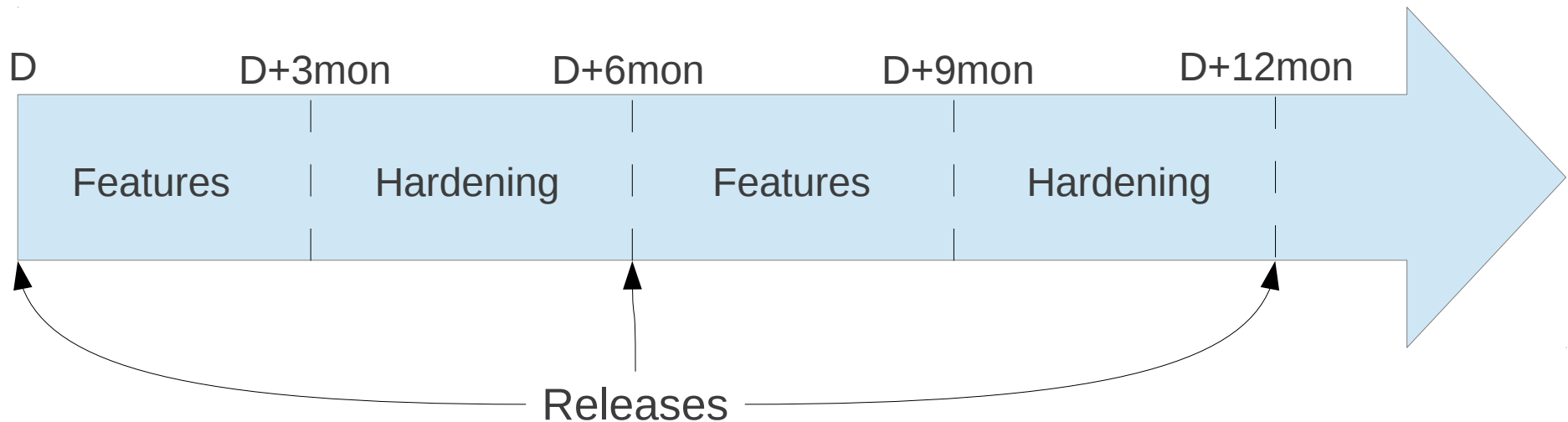
Quality

Resources
(Budget, Manpower)

Schedule
(Time)

Train Development Model

- Published schedule of release dates
- Features that miss the train get left behind



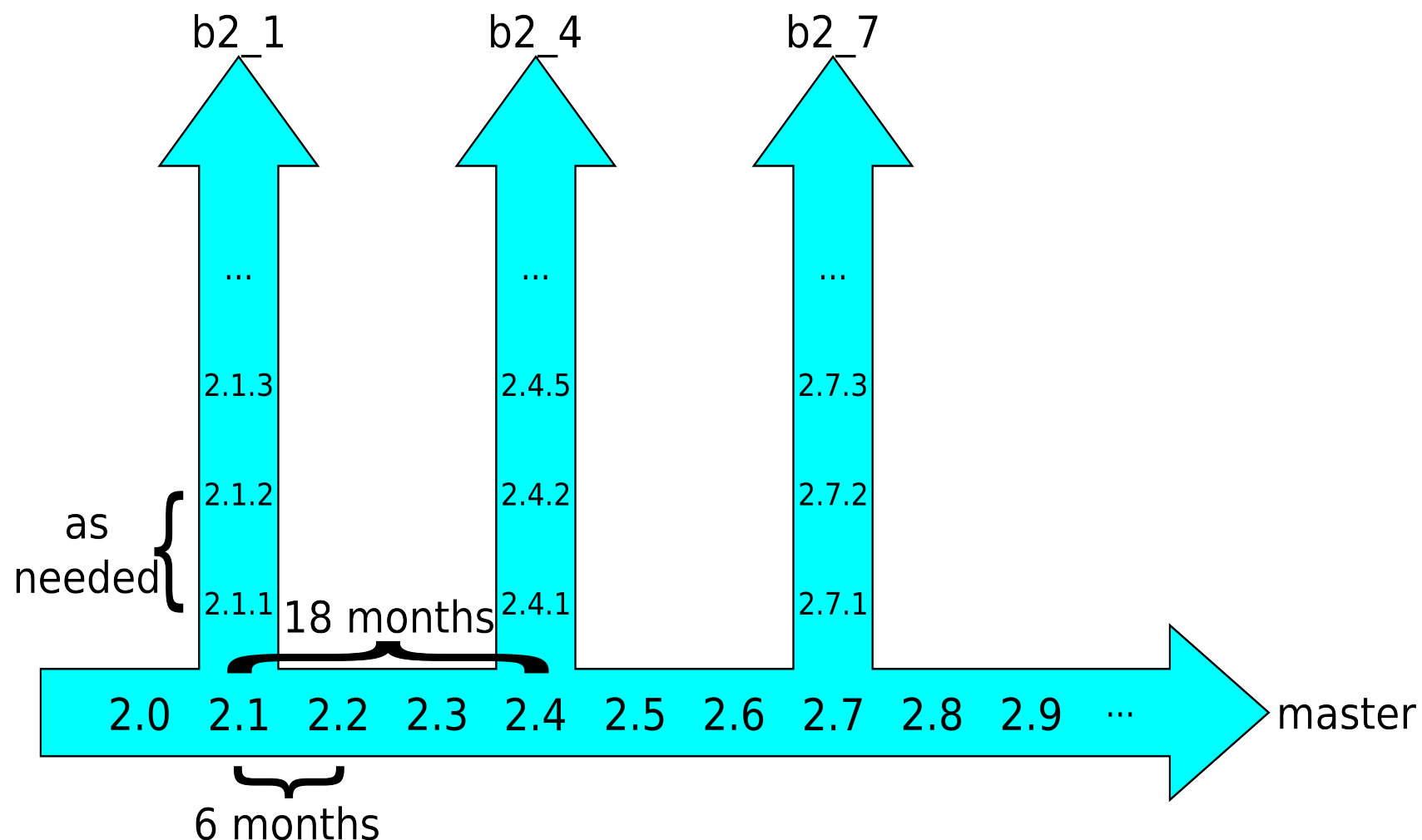
Advantages of Train Model

- Well known time table
 - Better coordination between organizations
 - More efficient scheduling of resources

Disadvantages of Model

- Timescale mismatch
 - Users often stick with one version for 3+ years
- Interoperability testing requirements grow exponentially
- Too few resources to patch more than 2 or 3 branches

Maintenance Branches



Community Tree Development Contract

- *Partially* funds care, testing, and development of *master* branch
- Granted to Whamcloud (now Intel) Nov. 2011
- Ongoing at OpenSFS/Intel mutual agreement
- Collection of requirements for refresh begun
 - http://wiki.opensfs.org/Community_Tree_Development_Contract

2012 Lustre Feature Releases

- Lustre 2.2.0 (March 30, 2012)
 - Improved Performance
 - Faster Recovery
 - Max stripe size increased to 2000 (was 160)
- Lustre 2.3.0 (October 22, 2012)
 - Object Index (OI) Scrub
 - Improved MDS SMP performance of shared dir

Lustre 2.4.0

(Late April 2013)

- Feature release + begins maintenance branch
- Features
 - ZFS support (new OSD architecture)
 - Stage 1 of Distributed NamespaceE (DNE1)
 - Lustre File System Check 1.5 (LFSCK 1.5)
 - Network Request Scheduler (NRS)
 - Hierarchical Storage Management (HSM)

Lustre 2.4 Contributors

- Wide community involvement
-

Lustre 2.5.0

(Late October 2013)

- Feature Release
- Currently revising expected feature list
- Expected Features
 - Blah

Lustre 2.6.0

(Late April 2014)

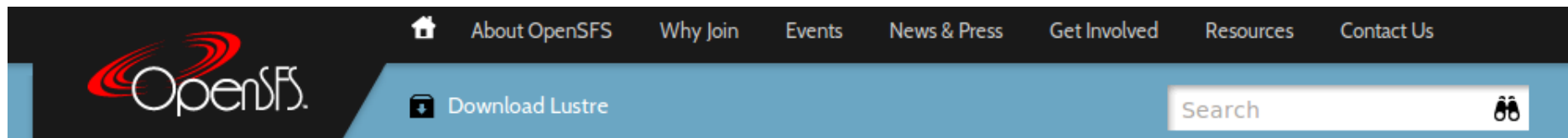
- Feature Release
- Expected Features
 - Blah

2013 Lustre Survey

- Lots of interesting stats
- Compare with 2012 stats

New OpenSFS Website

<http://www.opensfs.org>



Events

OpenSFS organizes and sponsors multiple open source file system events throughout the year. We pull together Lustre superstars and move forward roadmap discussions. If you are interested in participating on any level, please contact us for more information.

UPCOMING EVENTS

Lustre User Group (LUG) 2013

[LUG 2013](#) will be in San Diego April 15 – 19, 2013. (Includes arrival and registration Monday, April 15, full LUG sessions Tuesday through Thursday, and departure Friday, April 19th.)

Lustre Links

-  [Join a Mailing List](#)
-  [Get started with Lustre](#)
-  [Read Documentation](#)
-  [Download Lustre](#)
-  [Submit an Issue](#)
-  [Lustre Wiki](#)



Lustre Portal

<http://lustre.opensfs.org>

LUSTRE
COMMUNITY



[Download Lustre](#)

[Documentation](#)

[Resources](#)

[Join the Community](#)

[Contribute Code](#)

[Opensfs.org](#)

[About OpenSFS](#)



Welcome to the Lustre Community Portal

Lustre is an open-source, parallel file system that supports many requirements of leadership class HPC simulation environments. Whether you're a member of our diverse development community or considering Lustre as a parallel file system solution, this portal offers a wealth of resources and support to meet your needs.

Lustre: The basics

- [Community Lustre Roadmap](#)



Upcoming Events

APR
3
Wed

9:00 am CDWG Call

APR
10
Wed

9:00 am CDWG Call

APR
15
Mon

All Day LUG 2013 @
Omni Hotels & Resorts



OpenSFS and Lustre Wiki

<http://wiki.opensfs.org>



Main page

- OpenSFS
 - Website
 - Participants
 - Working Groups
 - Contracts
 - Infrastructure
- Lustre
 - Development
- Toolbox

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Community Development Working Group

Basic information about the CDWG including details about the email list and conference calls are located at opensfs.org.

The CDWG has crafted the [Community_Tree_Development_Contract](#) and is working on updates. The CDWG has also crafted the maintenance and feature release strategy for the [Community Lustre Roadmap](#).

Also, there is an effort started to improve testing and quality assurance, see [Improving_the_test_framework](#).

Resources

- [CDWG Mailing List](#)

Meeting Minutes

We want YOU!
(to help with testing)

Resources:

<http://wiki.opensfs.org/CDWG>

<http://lustre.opensfs.org>

