

OpenSFS Community Development Working Group

This working group was formed to facilitate a discussion about a community development model for Lustre, taking into consideration the needs/concerns of Lustre vendors. For this to be successful, it's important to have vendor participation.

Path Forward

In an initial discussion, it was acknowledged that any sort of community development model would not be ready in time for Lustre v2.2 and possibly not even v2.3. A proposal was put forth for an interim solution which would allow time for a long term model to be thoroughly vetted with the Lustre community and vendors.

Interim Solution

A singular concern within the community is that the Lustre infrastructure (e.g. code repository, bug tracking/history, etc) not be solely held by one vendor. This concern stems from not wanting to repeat what happened when Oracle decided to drop its support of Lustre.

The interim solution proposed is to have OpenSFS host an independent backup of the Lustre source tree and bug tracking database and archive it so if the worst case ever did happen Lustre can still move forward without an interruption of service.

With the backup in place, the community can take the time necessary to develop a model for the long term which is sustainable and takes into consideration the needs/concerns of the Lustre vendors.

Community Development Model

Canonical Release Support

Before a discussion can take place regarding a community development model, we must define what resources are involved with supporting a canonical release. Based on information from former Oracle staff that supported Lustre, the breakdown of resources necessary to manage the Lustre infrastructure and prepare canonical Lustre releases can be defined as follows:

- Gatekeeping (1 - 2 FTEs)
- Testers (3 - 4 FTEs)
- Release Manager (1 FTE)
- Admin support (.5 FTE)
- Documentation (.25 FTE)
- Dedicated testing equipment (~150K / year)
 - Tech refresh, power, space, cooling

Total costs can approach \$2M US/year .

How do we pay for this?

The Lustre community has to decide how to pay for an activity which in the recent past has been subsidized by vendors such as Oracle. Some options might include:

- Support contracts with a vendor
- Overhead cost on integrated appliances
- Volunteer resources
- Community organization dues

The Community Development Working Group must discuss these and possibly other options before it can reasonably state OpenSFS is in a position to produce any canonical Lustre release.

Discussion Results

The CDWG discussed the above options and came to the conclusion that the only viable one was funding a support contract with a vendor to provide support for Lustre canonical releases. Relying completely on volunteers was deemed unsustainable and likely to fail. It is important to note that volunteer testers exist today and are critical to Lustre's continued success.

We did discuss approaching vendors of integrated storage appliances to determine their willingness to "contribute" as well. It was the feeling of the CDWG that such vendors might be amenable to the idea if OpenSFS showed its commitment by first getting a support contract in place.

What's next?

A plan of action was discussed to approach the key stakeholders in Lustre with our conclusions and to determine if these same stakeholders are willing to subsidize funding a support contract. As it turns out, the identified key stakeholders make up the OpenSFS Executive Board.

Therefore the question before the Execs is (setting aside your OpenSFS responsibility for the moment), do you agree with the CDWG's conclusions? If so, are you willing, as a representative of your respective Lustre site, to help with getting a support contract launched?