Lustre 2.6* Scope Statement

Introduction

The following Scope Statement applies to the 2.6 Release project. Lustre* feature releases follow a release train model, with feature releases targeted every 6 months.

Problem statement

Lustre 2.6 is planned to be a regular feature release as a follow-on to Lustre 2.5 which will be made generally available (GA) in the fall of 2013. There are several new features, improvements, and bug fixes that have been, or are currently being developed for landing to the Lustre Master branch. Lustre 2.6 will use the train model approach where only those features landed prior to the Feature Freeze Date (2014-01-31) will be included in the release.

Project goals

In addition to the goals listed in the Problem Statement, the goals listed below are being added for the Lustre 2.6 release:

- The stability and performance levels of Lustre Master will meet or surpass that of the 2.5 release, based on Simulated Workload (SWL) - (will run for a minimum of 48 hours) and Hyperion performance testing results (release over release)

In Scope

Since the Lustre Feature releases are being managed using the train model, there are often many more proposed features that will make it into any one release. Below is a listing of all known features that are being targeted for completion within the required timing of the 2.6 feature freeze date.

Proposed Features & Enhancements (Developing Organization)

The following are Candidate Features for Lustre* 2.6:

- LFSCK Phase II: (Intel)
    - LU-3335 - LFSCK II: MDT-OST OST local consistency checking
    - LU-1267 - LFSCK II: MDT-OST consistency check/repair
    - LU-3336 - LFSCK II: MDT-OST OST orphan handling
    - LU-3469 - OSP dt_sync() operation should flush pending destroys
- LU-3527 (Indiana University) - UID/GID Mapping
- LU-3289 (Indiana University) - IU Shared Secret Key authentication and encryption
- LU-4017 (DDN) - Add pool support to quota

2.6 Full Candidate Feature/Bug List: https://jira.hpdd.intel.com/issues/?filter=10828

Kernel Versions/OFED Versions/e2fsprogs Versions:

Upgrades submitted after the Feature Freeze date will be considered on a case by case basis

Server Kernel Version:

RHEL 6.4 (2.6.32-358.18.1.el6)

Client Kernel Versions:

RHEL 6.4 (2.6.32-358.18.1.el6)

SLES11 SP3 (3.0.92-0.8)

FC/19 (3.11.2)

OFED Versions:

o2iblnd - OFED 3.5.1

e2fsprogs Version:

1.42.7.wc1

Interoperability Support:

- Interop (clients and servers) with latest 2.5.x

Upgrade Support:

- Upgrade supported from latest 2.4.x or latest 2.5.x

Key Deliverables and Milestones

Baseline Test Plan: 2013-10-31

Feature Freeze: 2014-01-31

Code Freeze: 2014-03-31

2.6 Release GA: 2014-04-30

* Other names and brands may be claimed as the property of others.