OpenSFS Test Cluster Description

Overview

- 32 total servers
  - 24 client (compute) nodes
  - 4 MDS nodes
  - 4 OSS nodes
- 2 42U racks included
- Hardware is assumed to be fully functional but hasn’t been tested recently
- Current software state is unknown

Networking & Management

- 48 port HP E6600-48G-4XG 1GbE Ethernet Switch
- 36 port Mellanox IS5030 QDR InfiniBand Switch
- Avocent LCD Local Rack Access Console

Client Nodes

- 24 total client nodes, c01-c24
- 6 SuperMicro SuperServer 6026TT-HIBQRF in SuperChassis 827H-R1400B
- 2U per 4 nodes, blade type, each node has
  - (1) Intel E5620 2.4GHz Westmere (Total 4 Cores)
  - 32GB DDRIII 1333MHz ECC/REG
  - (1) 500GB SATA
  - (1) Mellanox QDR 40GB QSFP Port
  - (2) 10/100/1000T Ports

MDS and OSS Nodes

- 4 total MDS nodes, mds01-mds04
- 4 total OSS nodes, oss01-oss04
- 8 SuperMicro 2U SuperServer with X8DTH-iF motherboard
  - Each node has
  - (2) Intel E5620 2.4GHz Westmere (Total 8 Cores)
  - 64GB DDRIII 1333MHz ECC/REG - (8x8GB Modules Installed)
  - (1) 40GB SSD
  - (1) 500GB SATA
○ (1) Mellanox QDR 40GB QSFP Single Port
○ (2) 10/100/1000T Ports
○ (2) LCI 9200-8E 2xSAS External Ports to Storage

Headnode

● 1 total headnode
● 1 SuperMicro 1U SuperServer
  ○ Headnode has
  ○ (1) Intel E5620 2.4GHz Westmere (Total 4 Cores)
  ○ 24GB DDRIII 1333MHz ECC
  ○ (1) 500GB SATA
  ○ (2) 10/100/1000T Ports

Storage Devices

● 4 MDS devices
● 4 OSS devices

Storage Hardware

● 8 Infortrend EonStore DS S12S-R2240 12-disk storage arrays
● 4 Infortrend EonStore DS S12S-J2000-R SAS 12-disk expansion for OSS
● 2 LSI SAS6160 Switches

MDS Configuration

● (4) 100GB SSD
  ○ INTEL SSDSA2BZ100G3
● (8) 2TB SATA
  ○ HITACHI HUS723020ALS640

OSS Configuration

● (2) 100GB SSD
  ○ INTEL SSDSA2BZ100G3
● (22) 2TB SATA
  ○ HITACHI HUS723020ALS640