



# Performance Testing Overview

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# Release performance testings

- **What tests:**

- > I/O: IOR(LLNL), PIOS(ours bug#11810/#13624)
- > METADATA: Metabench (Cray)
- > Compile: Compilebench (Oracle)
- > Lnet: Selflnet(ours)
  - Binary file located in Its-head, export as NFS directory

- **What test scenarios:**

- > Single file, share file, multi-single file and multi-share file with quotas on/off, using MPI
  - IOR
- > Lustre
- > NFSv3 over Lustre
- > NFSv4 over Lustre
  - PIOS, Metabench, Compilebench
- > Lnet: Selftest bug#14916

# Release performance testings

- Test environment:
  - > Small configuration: 1MDS,2OSS(1OST),1Lustre\_client(NFS server), 1NFS\_client
  - > Network: TCP/IB/Elan
  - > Test steps: scripts
    - Setup nodes
    - Configure MDS and OSSs
    - Mount Lustre(NFS client), disable Inet debug, set stripes: lfs setstripe \$options
    - Run tests with sub-scenarios
    - Gather test data into .ods
    - Graphs
    - Upload .ods file upon release track, example

# Feature performance testings

- I/O team:
  - > DARPA.HPCS.IO testing, improvement of PIOS
- Engineer:
  - > Oleg: NFS testing, RHEL4/RHEL5 blocked bug#13371, #15179, Oops issue
  - > Matt: pCIFS (support windows client)
  - > Test plan, discuss with engineers
- Test Automation:
  - > Ongoing by Minh

# Test tools maintenance:

- Located in Its-head:/testsuite/tests/
  - > i686, x86\_64, ia64
  - > Export as NFS
- Test tools:
  - > lozone
  - > dbench
  - > bonnie++
  - > cascading\_rw
  - > MPI
  - > Others needed by type2 and acc-sm testing

# Issues and Improvement

- Equipments
- Compare performance test results by Buffalo(accepted by me)
- Performance test report referring to some standard template



**Thank You!**  
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