NuComp News

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February 15, 2012

Outline

>> Maintenance day stuff
IF Computing Resource Summary
A closer look at GP Grid usage

Maintenance Day: Tomorrow

- Several SLF4-->5 OS upgrades. Some reboots (minervagpvm's).
- ENCP update, STKEN, Feb, 16 with Chimera support, bug fix for CDMS and logging patch. Estimate 1hour.
- Networking Services will be moving some switches to the new Nexus in FCC2. Work scheduled for 6-8 AM. Most of this maintenance to be transparent, but there may be a few brief disruptions.
    - BlueArc subnet (Scientific and Core-IT). NFS/CIFS should recover if properly configured with 600 second timeout/retry.
    - Intensity Frontier servers (DB servers, nearline, etc.) fmb02, fmb03, fmb04, fmb05, fmb06, fmb07, fmb08, fmb09, fnalmysqldev, fnalmysqlprd, websrv3, websrv4

SLF4 → SLF5 Upgrades

- if01-04   Thursday February 16
- fmb02-09 February 16 (waiting for go-ahead from MB)
- All SLF4 systems for IF experiments have been upgraded or retired (or will be retired soon), except:
    - minos25:   moving to a GPCF (and SLF5) system, in progress
    - minosgpvm02:   variance requested
    - minervagpvm01: variance requested

Maintenance Days:Next Week
2/21, 2/22 to 2/23

- New kernel updates requiring a reboot of fnalMySQLdev on Tuesday, Feb 21 around 9:30 AM. The downtime should be minimal but we would like 30 minutes.
- There will be an 18hr ENSTORE "chimera" migration for STKEN, start at 18:00 on Feb. 22, and end by noon on the 23rd.
- More information in Dmitry's presentation

Maintenance Day: ~ Early May

Possibly Week of May 1

- Major upgrades, require several hours each
  - afs software will be upgraded
  - BlueArc Firmware upgrade
- These need to be coordinated with CDF, D0 an other users at the lab.
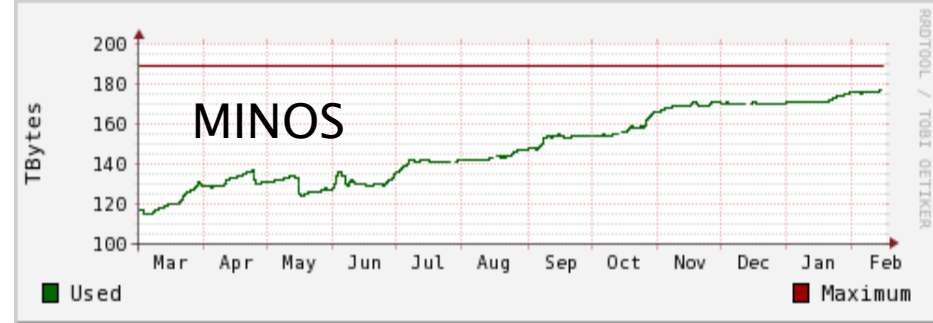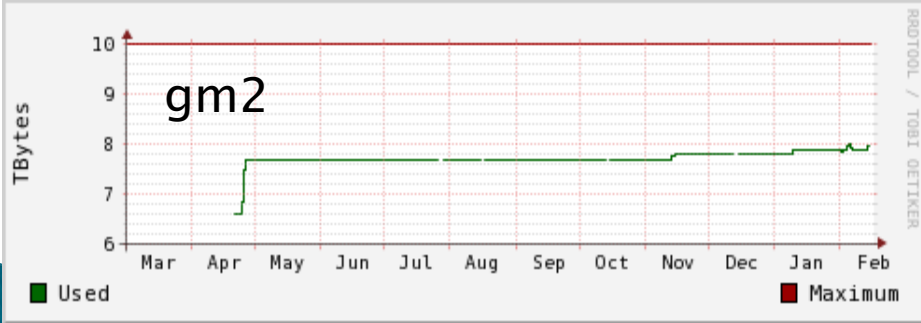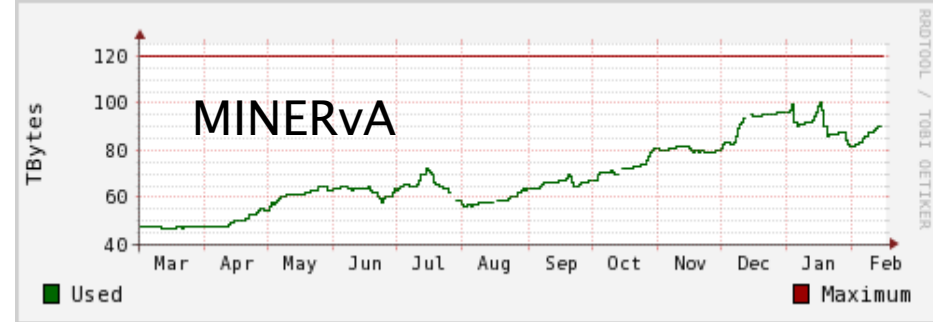- They cannot be done concurrently because the same people are doing both.
- Andy has more info…

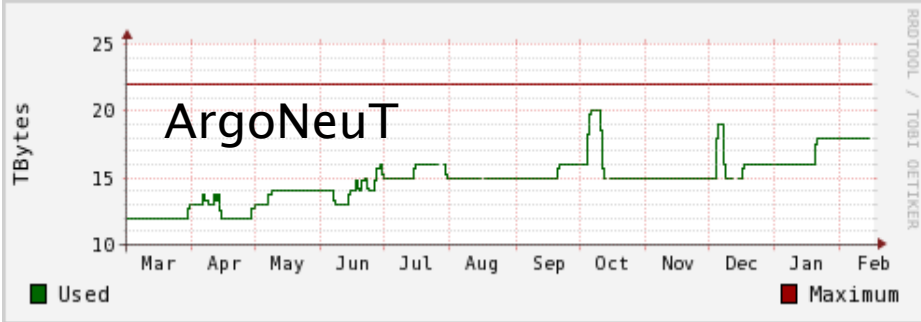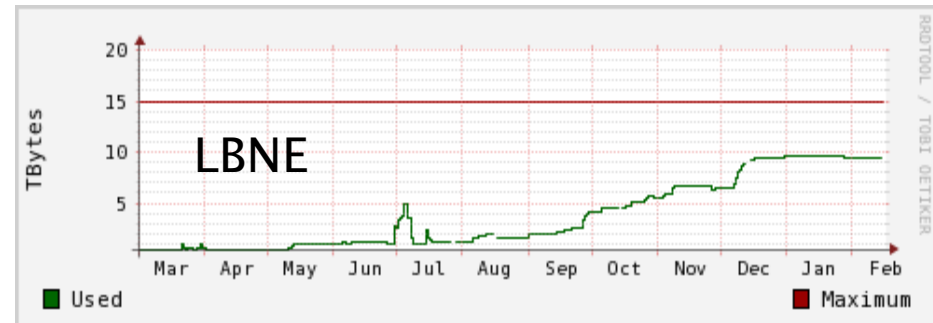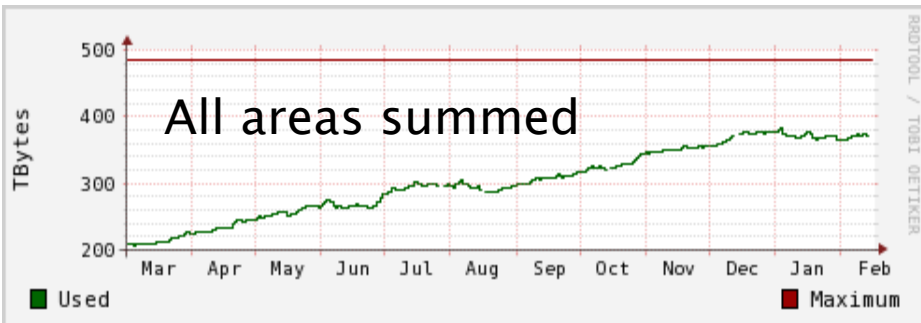# BlueArc and AFS upgrades

- BlueArc Firmware Upgrade ------------------------ Current Version v6.1 Proposed Version v8.1 –bug fixes – support for 512 LUNs/cluster Proposed Date April 30 ...pm (beam-shutoff) through May 1 ...am (start of business day) Impact drain-jobs / no new jobs till end of upgrade

- AFS Upgrade --------------- Current Version openafs 1.4.11 Proposed Version openafs 1.4.14 Support for Compound Kerberos principal, used with kcron to access AFS space Proposed Date Several days after BlueArc upgrade. Downtime estimate (approx): 2-4 hours during early morning hours Impact We believe that AFS is mainly used interactively; however, groups that do use it for batch will have to refrain from running jobs during maint window.
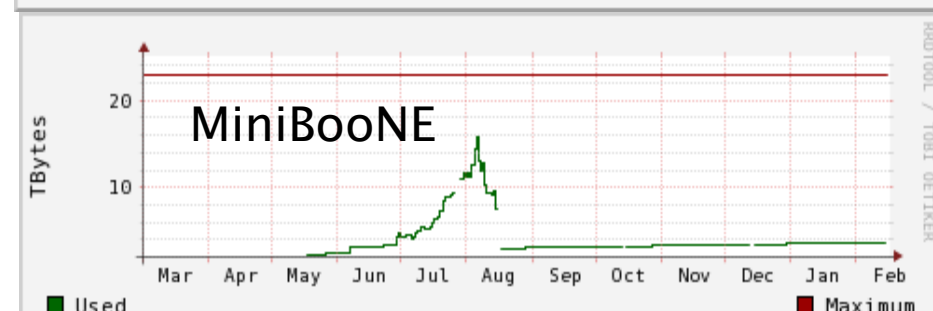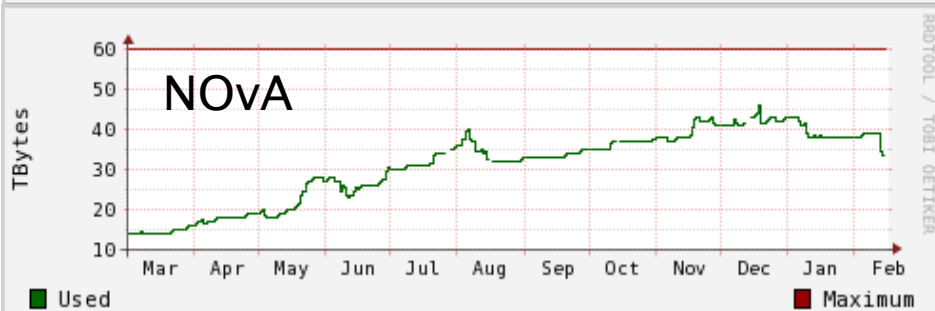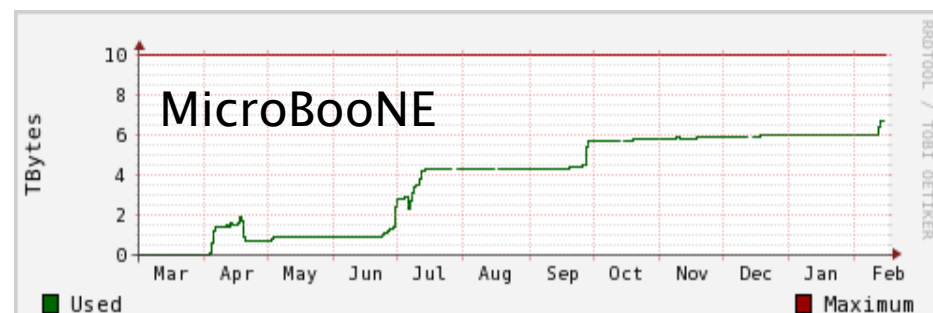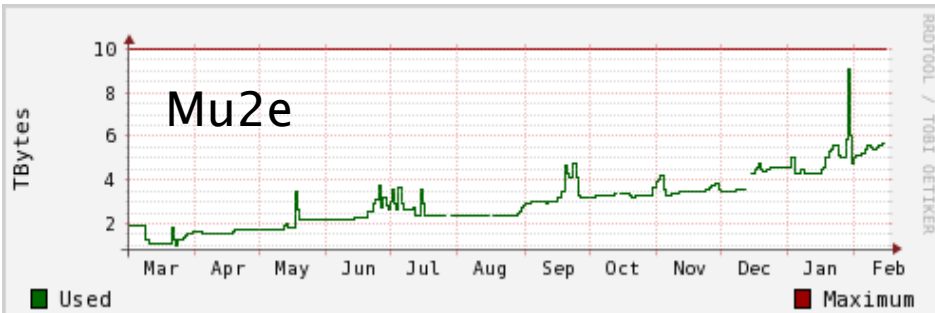
IFront Computing Resource Summary

>> Central Storage
GP Grid Cluster
GPCF VM load averages

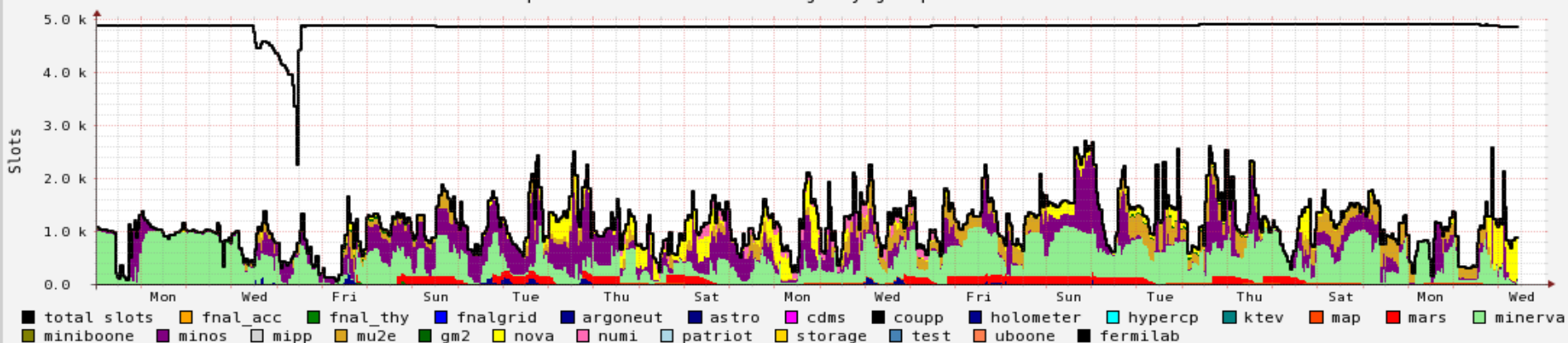# /experiment/data areas (1/2)

All areas summed

ArgoNeuT

gm2

LBNE

MINERvA

MINOS

/experiment/data areas (2/2)

GP Grid Cluster Use Last Month

fnpc11x2 - fermilab VO Usage by group - Last Month

Legend: total slots, fnal_acc, fnal_thy, fnalgrid, argoneut, astro, cdms, coupp, holometer, hypercp, ktev, map, mars, minerva, miniboone, minos, mipp, mu2e, gm2, nova, numi, patriot, storage, test, uboone, fermilab

	Maximum	Average	Minimum	LastVal
total slots	4906	4851.15	2250	4842
fermilab	2688	1119.82	59	882
fnal_acc	0	0.00	0	0
fnal_thy	64	0.32	0	0
fnalgrid	2	0.01	0	0
argoneut	196	6.01	0	0
astro	0	0.00	0	0
cdms	0	0.00	0	0
coupp	0	0.00	0	0
holometer	0	0.00	0	0
hypercp	0	0.00	0	0
ktev	0	0.00	0	0
map	25	0.11	0	2
mars	151	52.92	0	0
minerva	1028	464.92	12	63
miniboone	0	0.00	0	0
minos	1624	307.06	1	25
mipp	0	0.00	0	0
mu2e	501	142.35	0	1
gm2	46	4.92	0	2
nova	990	106.76	0	789
numi	246	28.44	0	0
patriot	0	0.00	0	0
storage	0	0.00	0	0
test	0	0.00	0	0
uboone	0	0.00	0	0

Data for fnpc11x2 between 15-Jan-2012 and 15-Feb-2012
Plot generated at 15-Feb-2012 09:24:59 on fermigrid0.fnal.gov

GPVM Ganglia 1minute Load Avg Stats

for the last month

VM	Average	STD	Max.	Max. Date
minervagpvm01	0.21153025	0.467876691	2.58037103	1/26-10:48:00
minervagpvm02	0.554468251	0.708454717	4.9686002	1/27-20:24:00
minervagpvm03	0.304821098	0.670999754	6.99700298	2/11-18:48:00
minervagpvm04	0.098926997	0.330898702	4.12225694	2/11-18:48:00
minervagpvm05	0.057957736	0.146813024	1.76947024	2/13-01:36:00
novagpvm01	1.924431059	1.036308088	5.87722024	1/30-21:12:00
novagpvm02	0.149927919	0.274438826	1.97569444	1/27-00:48:00
novagpvm03	0.797596863	0.898417488	5.14992063	1/24-19:36:00
novagpvm04	0.451374913	0.494306981	2.02910714	1/30-21:12:00
novagpvm05	0.477614027	0.556400613	3.02738889	1/26-02:24:00
argoneutgpvm01	0.063351368	0.092136553	0.642244048	1/18-18:00:00
uboonegpvm01	0.049975361	0.108682649	0.968209325	1/25-15:12:00
uboonegpvm02	0.048890983	0.078813792	0.544076389	1/27-12:00:00
gm2gpvm01	0.046142096	0.080423428	0.687311508	2/14-14:00:00
lbnegpvm01	0.196815574	0.349988133	2.20190873	2/6-07:12:00
lbnegpvm02	0.18756297	0.397087959	2.18086111	2/14-14:00:00
mu2egpvm01	0.01048245	0.045930649	0.692962302	2/6-15:36:00
mu2egpvm02	0.064251144	0.142356022	1.01132044	2/6-21:12:00

March NuComp

- Grid job monitoring
- Small file archiving
- SAM project update
- New ECL features
- MINERvA and NOvA conditions data access

Let me know if there are additional topics to discuss.

finish