

Recent purchases

NAF future

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Purchases NAF: End 2010

> New server nodes in HH

- Old HW is three years old
- For Login-VMs, control machines, ... : users usually do not see these machines, but we nevertheless need them

> Additional AFS server nodes

- Space is not an issue in NAF AFS
- Number of disk spindles is!
- Distribute AFS volumes over different machines: Increase stability, limit effects
- Have passed burn-in tests, will start migrating volumes in near future

> Replacement and moderate increase of CPU capacity in HH

- Old HW is three years old – and some systems already are broken
- 64*8 cores out 48*12 cores in, expect (at least) 50% performance/core improvement\
- No InfiniBand, 10 Gbit instead (not ready now, under investigation), 4GB RAM/core
- Status: Passed burn-in tests, start putting into production soon
- Batch shares needs to be recomputed with new HEPspec and #cores values
- Preparing for decommissioning of old HW (WGS to be migrated)



Purchases: End 2010: Disks

> The “easy” part: Lustre: +100 TB

- Ok, not so easy: Purchased HW for dCache, free 100 TB to give to Lustre ...

> The difficult part: dCache

- Shared between official Tier-2 pledge business, NAF requirements and local needs (and of course purchases)
- In 2010 (in HH) we had 100% pledges +~40% more (NAF, local, Uni)...
- Want to do the same in 2011 – in quantity
- Planning for quality increase: Making some data resilient

> ATLAS (HH) picture

- 2011: 525 TB pledges $\times 1.4 = 735$ TB on April 1st
- Now: 650 TB, +240 TB in preparation, -50 TB Lustre switch

> CMS picture

- 2011: 640 TB pledges $\times 1.4 = 960$ TB on April 1st
- Now: 730 TB, +320 TB in preparation, -80 TB resilience, -50 TB Lustre switch
- ... and -200 TB purchased by Uni-CMS ?



Future:

- > During 2011 (for 1.4.2012): Expect at least increase in the same order than for 1.4.2011
- > Clear commitment from DESY to NAF
- > Expecting outcome of GridCenter review task force
- > ... function of available budget
- > ... and your requirements / wishes

- > ... and pending technology changes: Lustre -> NN

