

Hall A Counting House

Computing: Systems, Software

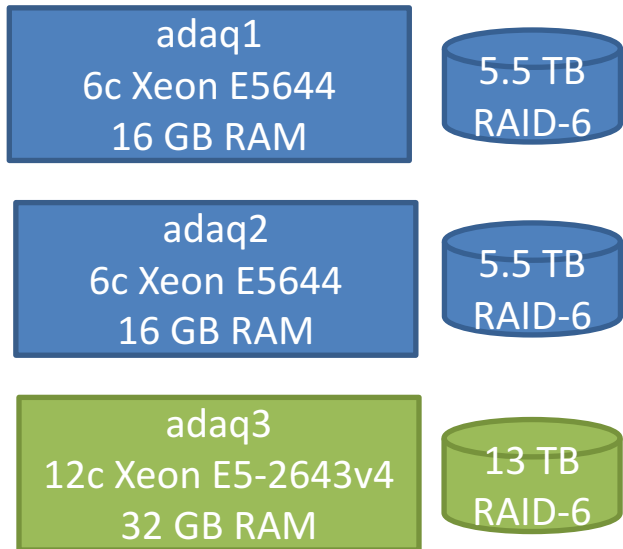
Ole Hansen

Hall A Meeting

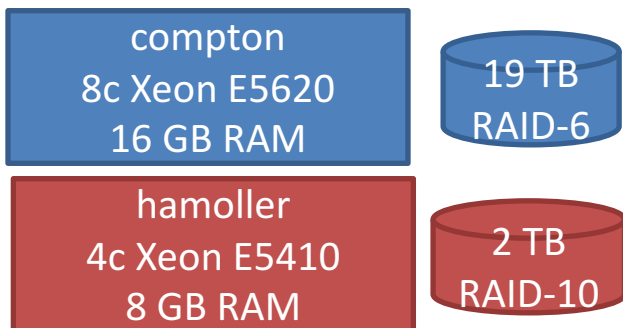
5 September 2017

Hall A Counting House Systems

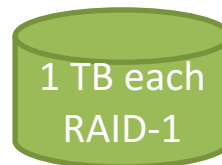
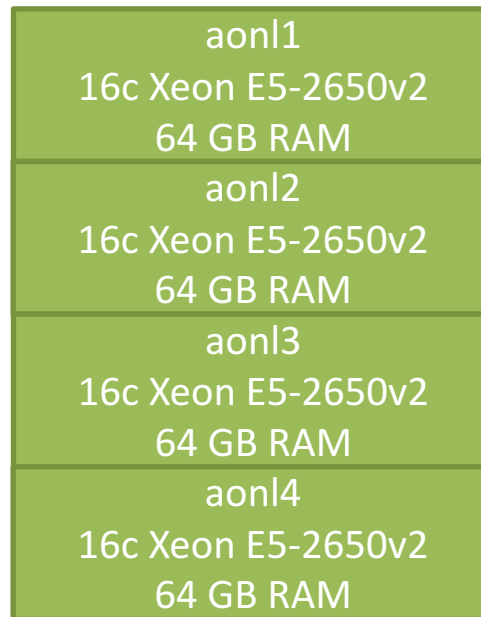
DAQ



Auxiliary

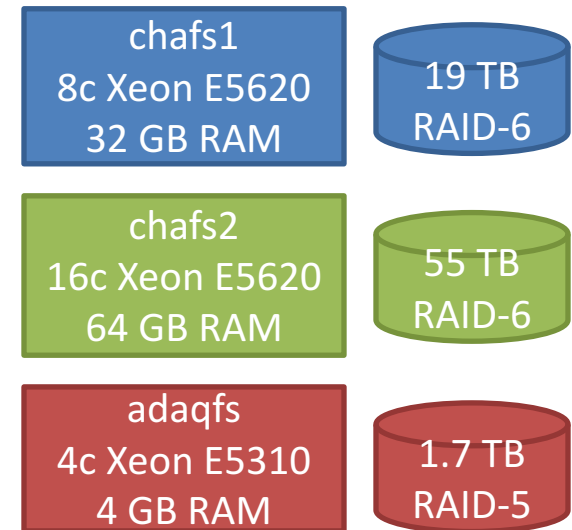


Online Analysis



Networking:
Infiniband 8 Gbps
Ethernet 1/10Gbps

File Servers



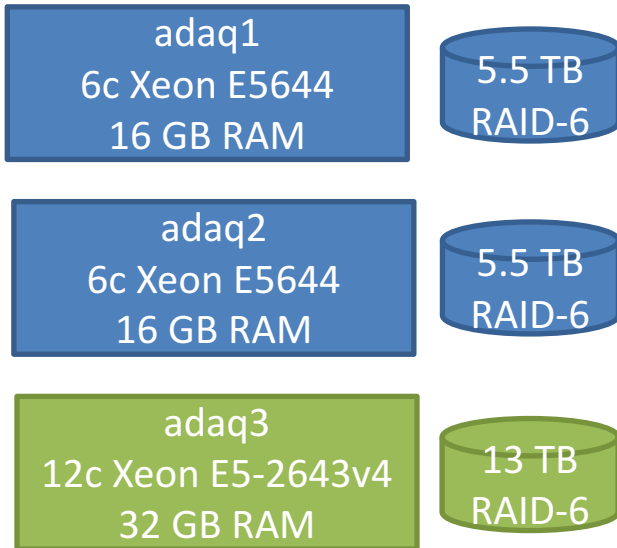
Slow Control



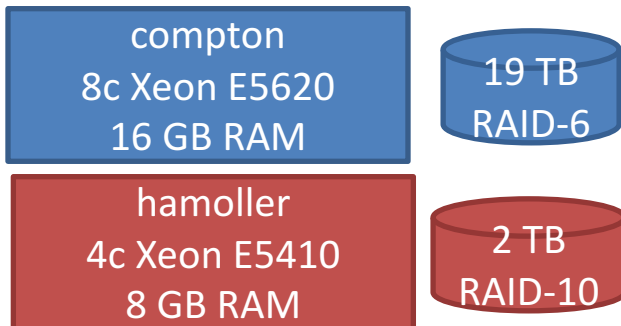
2006-2008
2011-2012
2014-2016

Operating Systems

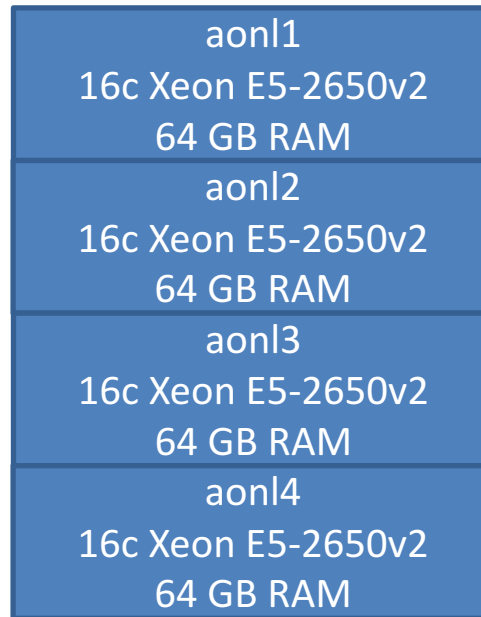
DAQ



Auxiliary

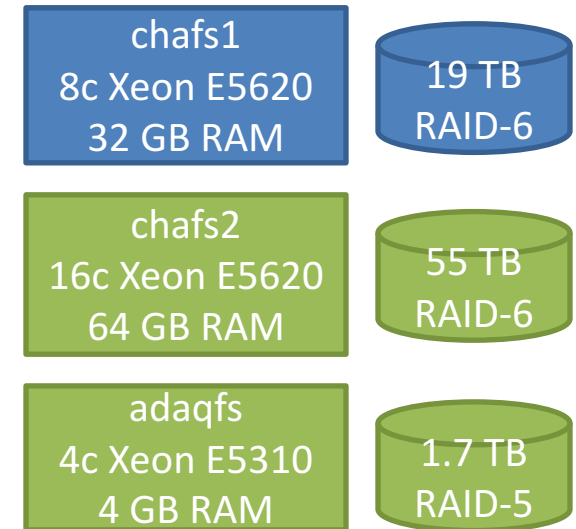


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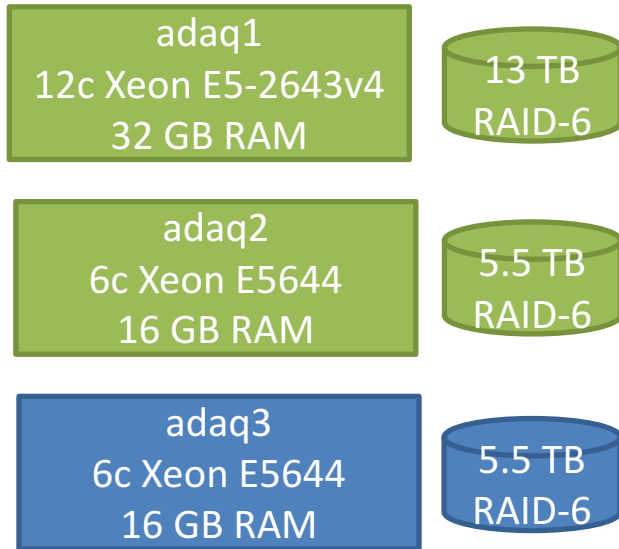
Slow Control



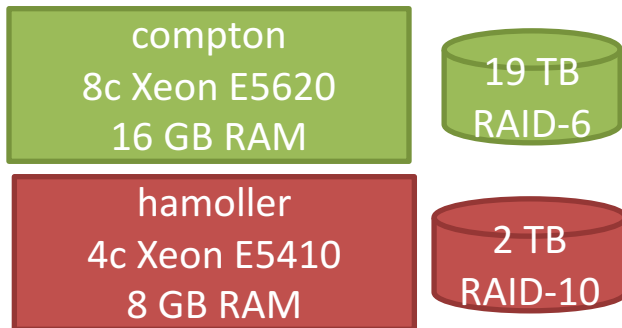
■ RHEL5 32-bit
■ RHEL6 64-bit
■ RHEL7/CentOS 7 64-bit

Planned Fall Run Configuration

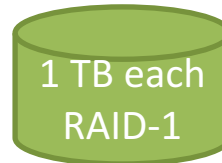
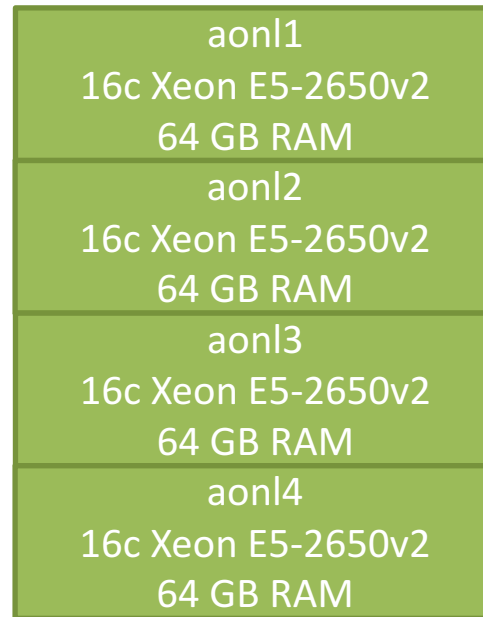
DAQ



Auxiliary

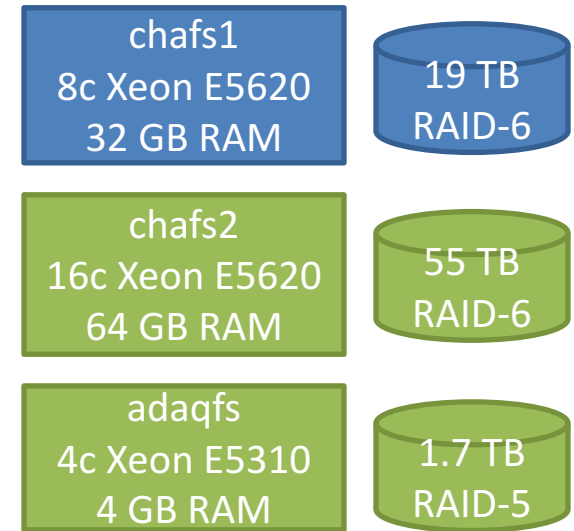


Online Analysis



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Slow Control



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Task List for next 1-2 years

- **Replace aging systems, esp. **adaqfs****
 - Temporary mitigation: use chafs2 as backup server
 - **Counting house router** is addt'l single point of failure
- Networking: upgrade to 10 Gbps LAN
- DAQ performance tests, goal 300 MB/s
- Harden systems against network outages
 - Local copy of CODA on adaq1/adaq2
 - Local home directory for adaq on adaq1/adaq2?
 - Minimize dependencies on main site (/group, /cache)

Analysis Software

- ROOT 5.34 & 6.10
- Analyzer 1.5 & 1.6
 - Working on finalizing version 1.6
- Setup of online replay in progress (Tritium students)

Tips & Tricks

- See Brad's talk at this year's summer analysis workshop:
 - https://hallcweb.jlab.org/DocDB/0008/000868/001/Counting_House_TipsTricks-Jun2017.pdf