
STATUS & PLANS - AACHEN TIER-2(/3)

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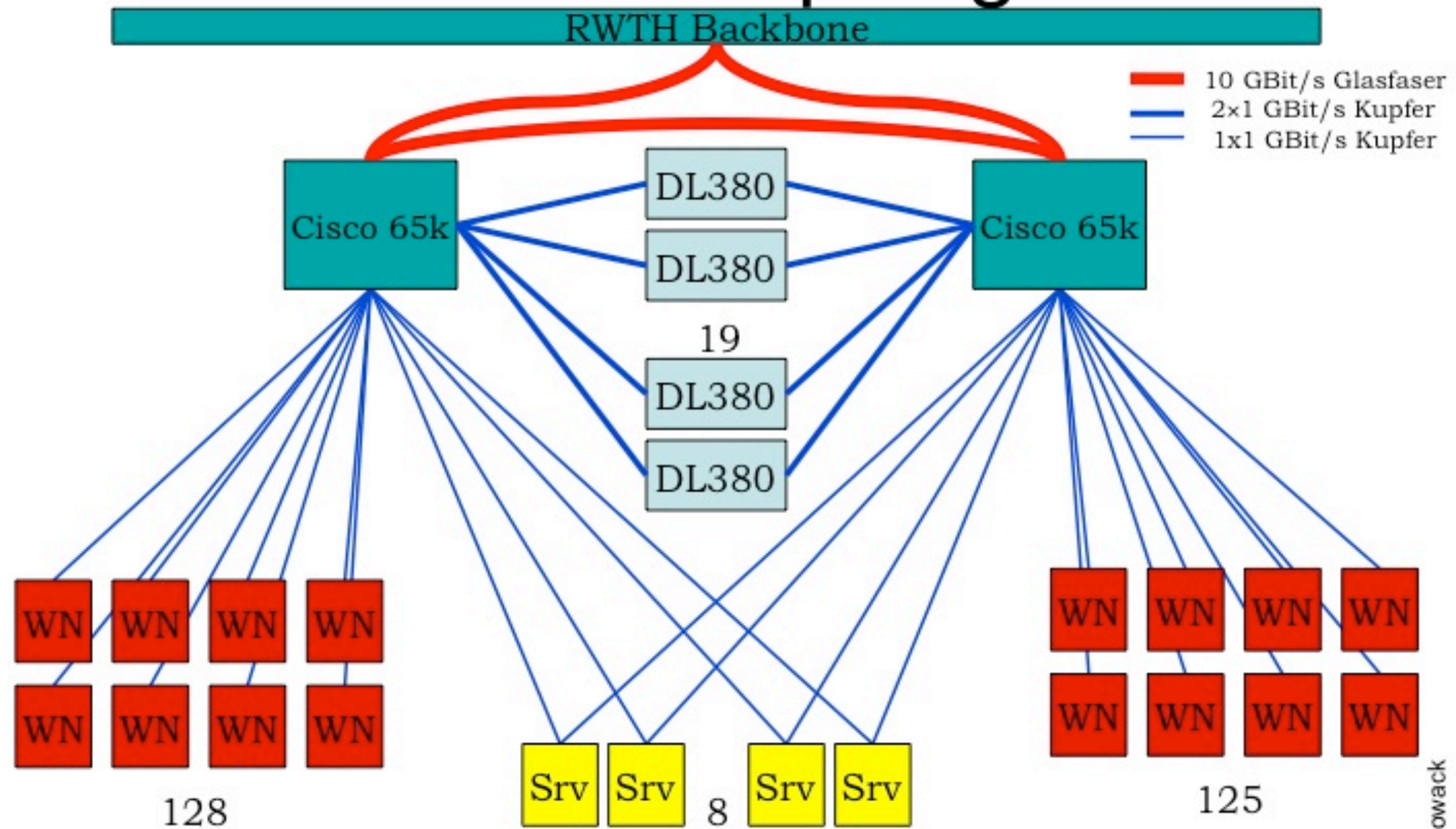
Thomas Kreß, CMS, RWTH Aachen III B, Feb. 10th, 2009, Munich

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Hardware Setup

- * Since June 2008 now water-cooled racks in RWTH IT center
- * **Two** coupled **Ciscos 65k** CU switches
- * **HP-Enclosures & BL460c Blades** (WN (Raid0), Admin-Nodes (Raid1)) & **HP-DL380 G5** (4 GBit/s) + MSA60 SATA arrays (Storage dCache)
 - * **>2000 worker node cores** (Intel Clover- & Harpertown)
 - * **550 TB netto** disks dCache
 - * **2 * 10 Gbit/s WAN**, RWTH<->XWIN

Netzwerktopologie



Tier Utilization

- * Supported VOs/VOMS:

- * CMS & D-CMS (90%), Auger (5%), IceCube (5%)

- * CPU utilization (Jul. - Feb.): about 40%

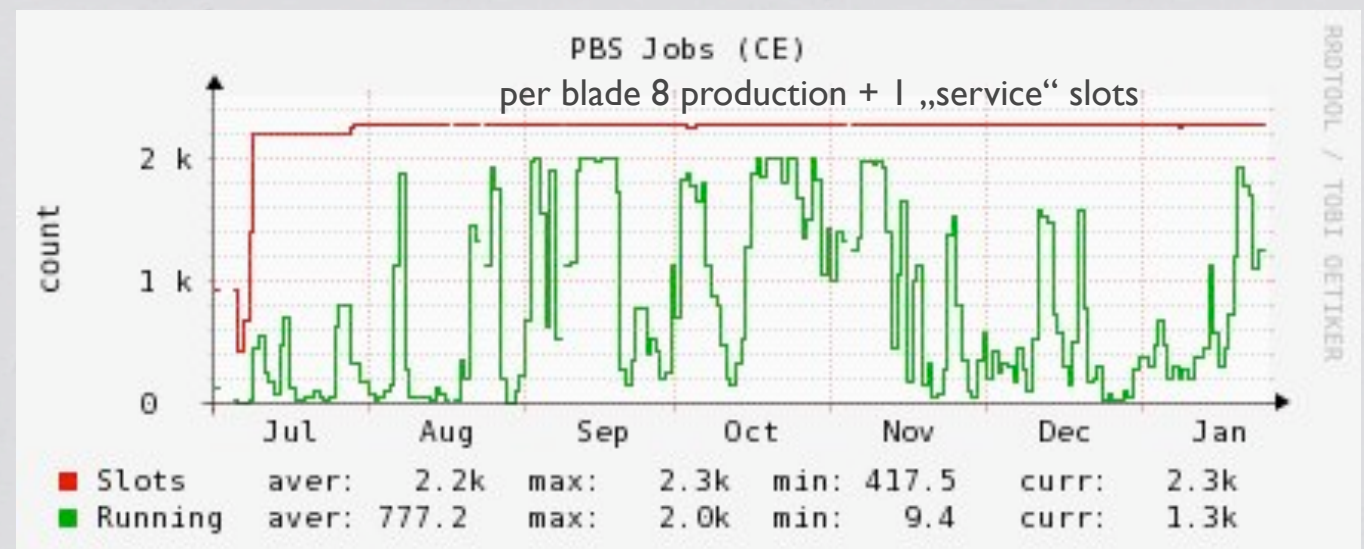
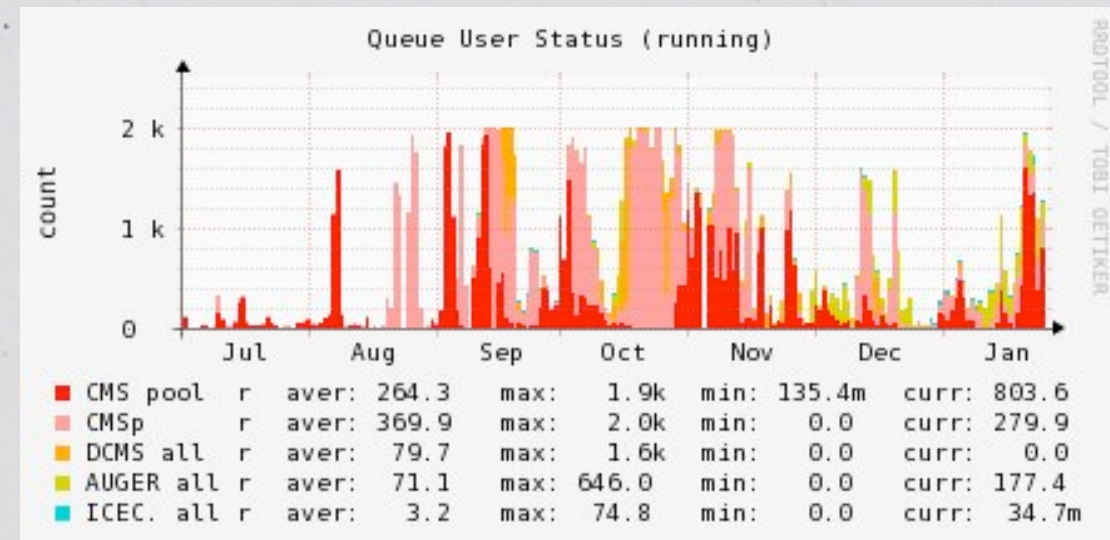
- * LHC „real data“ delay

- * huge local resources

- * migrat. of CMS users to T-2s just started

- * CMS MC prod. bottlenecks (teams, WMS)

- * Storage utilization similar ...



Financing Plan

- * Various funding sources:
 - * HBFG, local University funds, HGF Terascale Alliance, D-Grid
- * We spent already a major fraction of our money (HBGF 2y-expenditure profile!)
- * From **HGF Terascale Alliance 2009 - Q2/2012: 166/153/148/45 k€**
- * **This year at least 85 k€** to pay 2008 delivered & installed second Cisco switch
- * **Next major HGF CPU/disk purchase at the earliest in fall 2009 or even spring 2010:**
 - * We have already huge resources in place and the cluster is still not fully utilized
 - * Interesting processor / HP hardware models expected for late summer/fall
 - * LHC delay / operation efficiency not fully clear / not predicable
 - * **Should be flexible to shift HGF Alliance Tier-2 money forward or backward according to need !**