

Computing at MPI

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ATLAS, OPAL

Computing commission, chairman

MPI Project Review, 16.12.2008

Personell C/N Group

Head of group: Leupold, U.

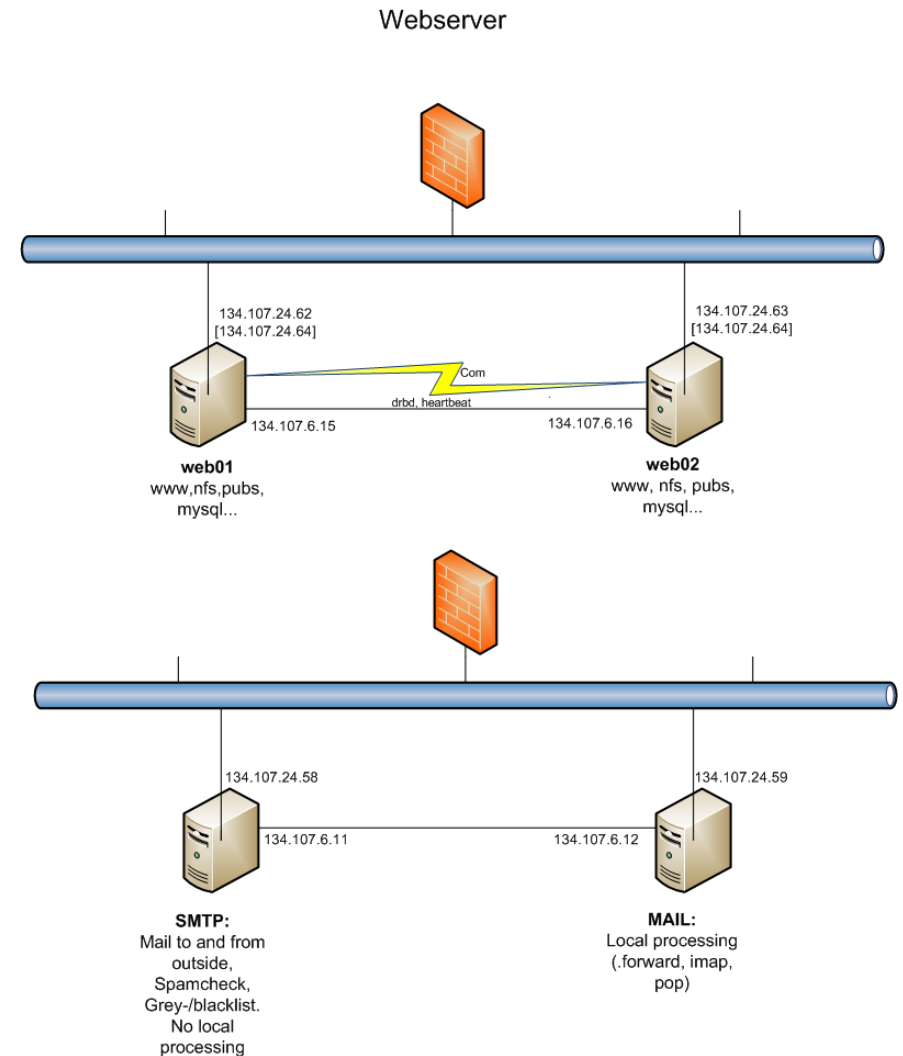
	Linux	MS	SW	LAN	HW	Pr	Grid
Leupold, U.	x	x	x	x	x		
Kriesel, A.	x(reg.)				x	x	
Kraemer, M.				x			
Pan, Y.	(x)	x					
Salihagic, D.	x		x				x
Vidal, M.	x(AIX)		x		x		
Krebs, K.				x			

Hardware Overview

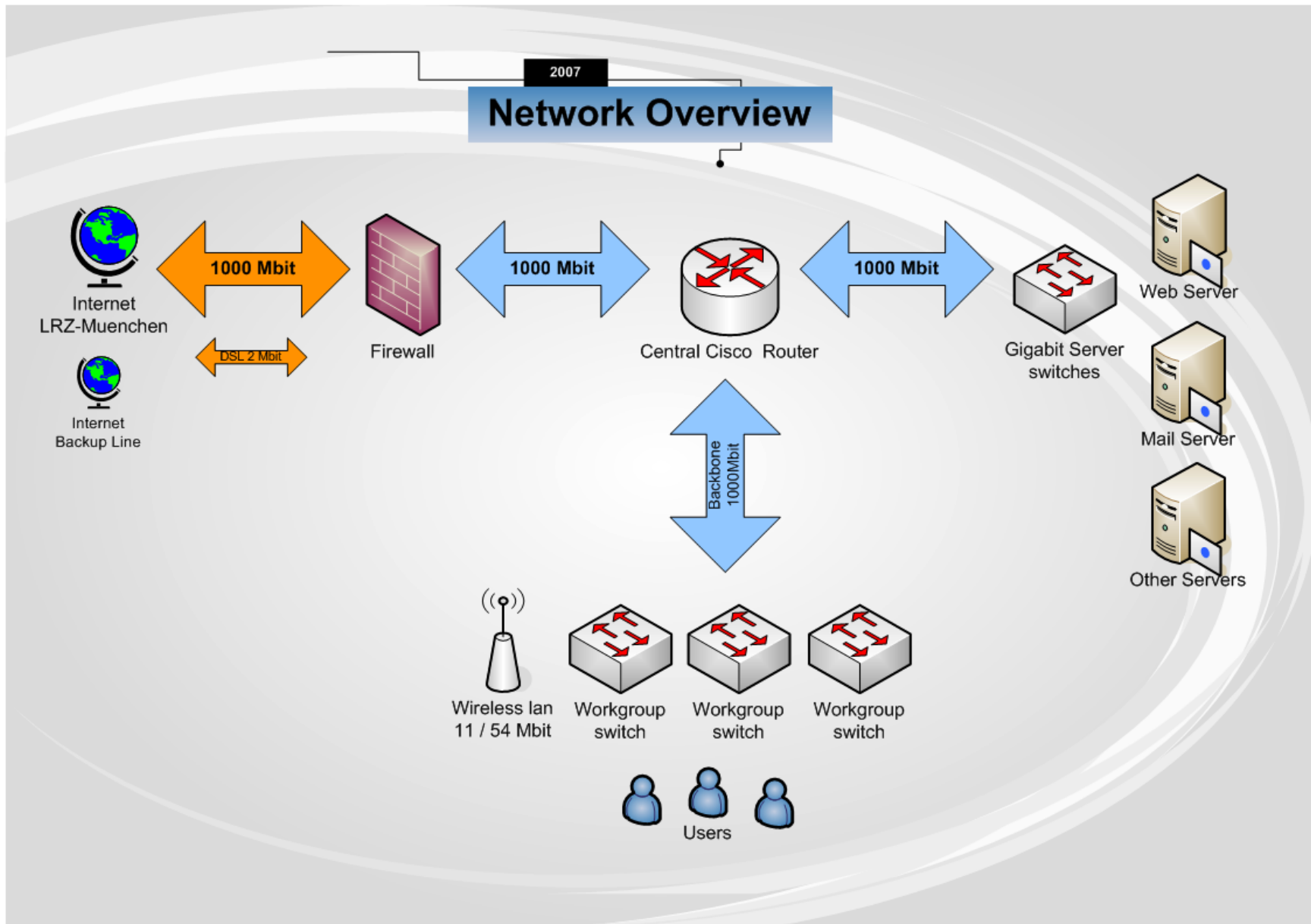
- Central servers
 - batch farm (9 dual CPU servers), condor
 - 21 file servers with ~77 TB
 - mail, web, DNS, accounts, backup
- Experimental and engineering groups
 - ~300 PCs, 2/3 Linux, 1/3 MS, Intel and AMD, partially condor
- Theory group
 - ~80 PCs (Linux), Intel and AMD, condor

Hardware News

- Homedir servers
 - RAID, failover
 - ATLAS/ILC/(s)BELLE
- WWW/indico
 - failover
- Mail service
 - 2 servers to handle load (~350.000 smtp req./d)



LAN



Software overview

- OS
 - Linux (MPI, Debian (ATLAS), peb (theory))
 - AIX (1 server left), Solaris (Elektronik)
 - MacOSX, VMS without C/N support
 - MS Windows (Admin, Labs, h1win, thwin)
- Applications/libraries
 - Mathematica, Maple, Portland pgf compiler, IDL, NAG, Matlab (Theory); xlf on OSX (Exp.)
 - OSS in consultation with C/N group

Software Applications

- Commercial
 - Oracle 10, Infoparc cms Fiona, Tivoli (backup), Wilma (WLAN manager), Gleitzeitserver
- OSS
 - Indico, mysql, root, CERNLIB, etc

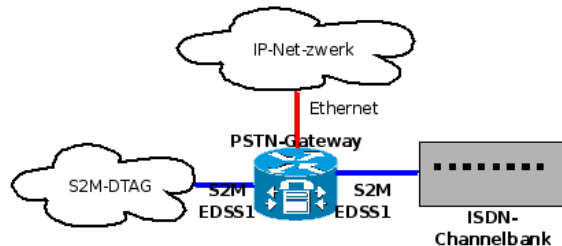
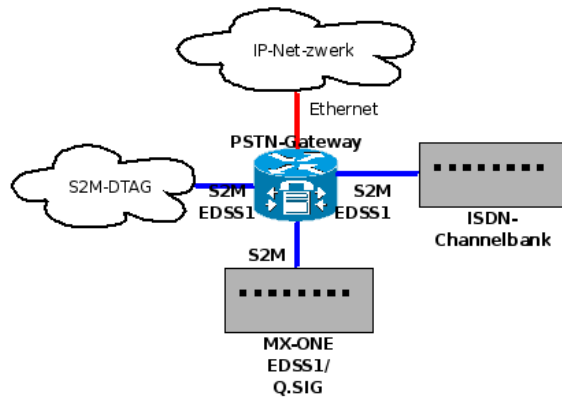
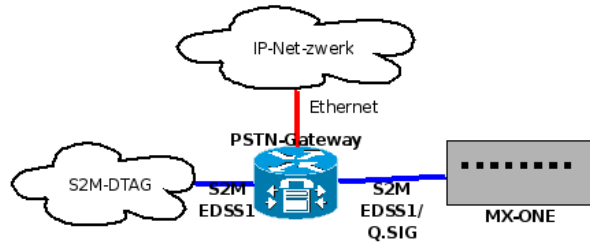
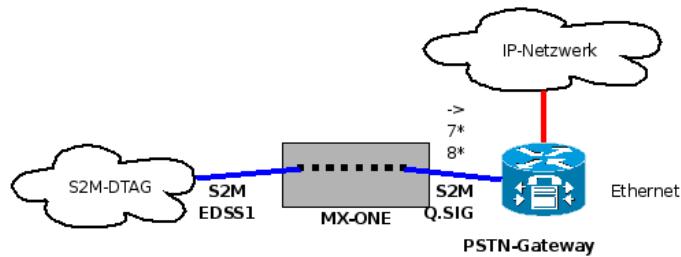
New MPP WWW Pages

- Online since summer 08 (50th anniversary)
- Improvements
 - publications, seminars, DE/EN pages
 - 8 h/w dedicated assistant (H. Ohlendorf)
- Open issues
 - Indico integration incl. room booking
 - MPP member search
 - software support

New Phonesystem

- Existing system upgraded to MX-ONE
- Contract with consultants (BayCom)
 - design and implement VoIP system
 - smooth migration from MX-ONE to VoIP
- VoIP?
 - phone via LAN, more phones, more services (AB, Fax)
 - new phones work just like old ones

Phonensystem Migration



- 1 MX-ONE und VoIP parallel, replace phones, keep numbers
- 2 Phones replaced, MX-ONE serves old legacy phones
- 3 Connect ISDN channelbank, connect ISDN legacy phones
- 4 MX-ONE switched off

MPI computing commission

- Subcommittee of IA
 - Members: Bethke, Hahn, Kluth, Leupold, Wagner, (Schieck), (Reimann)
- Mandate
 - oversight of C/N operations
 - medium- and longterm planning
- Please consult before buying hardware or requiring services

Rahmenverträge

- MPG joined procurement contracts for IT
 - Hardware, LAN, software, services
 - order without tendering procedure
 - competitive prices (still check F&L prices)
 - FSC, HP(LAN), Acer, IBM, Dell, ...
- Experience
 - Good for standard orders
 - Companies respond well

Computing at RZG

- MPP Linux cluster at RZG
 - 8 IBM BladeCenter, 112 servers
 - HS21 dual Xeon quad-core, 16 GB RAM, 74/146 GB 10k SAS disk
 - ca. 250 TB Fileserver
 - SLES10, SGE, LCG3/glite, mr-afs, dcache
 - 1 Gb/s link to RZG
- New hardware for christmas
 - 8 new fileserver (Jan 09)

Computing at RZG

- Operation
 - Main users ATLAS (WLCG), MAGIC
 - Open for all MPI groups (10% share)
- Usage
 - need RZG account (via web-form)
 - direct access e.g. “ssh at01.t2.rzg.mpg.de”
 - direct access to dcache storage (dccp, dcap)

Computing at RZG

- Major expansion ongoing
 - ATLAS Tier-2/3 and MDT calibration centre
 - MAGIC analysis centre
 - (s)Belle analysis centre
- Other tasks possible at RZG
 - AIX (xlf)
 - Parallel computing