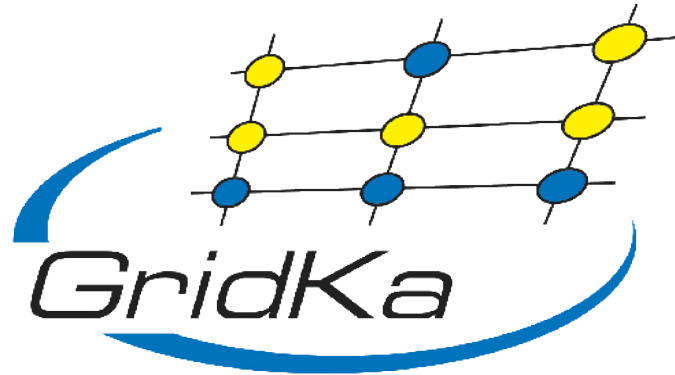




Site Report

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New CPUs:

→ CPU Procurements at GridKa:

- Sum total SPECint_base2000 (not # of boxes!)
- Allowed CPUs:
 - Intel Xeon, or AMD Opteron
- Technical details
- Public, EU wide invitation for tenders
(price estimation exceeded critical limit)

New CPUs:

- Tenders sorted by total cost estimation
(price + power consumption + space + network ports,
administration, software licenses)

New CPUs:

- ➔ Bidders have to prove the compute power by benchmarks
 - SPECint_base2000
 - SL4
 - GCC-3.4.x, fixed set of optimizing flags
 - 1 benchmark run per core in parallel
- ➔ Acceptance tests ...

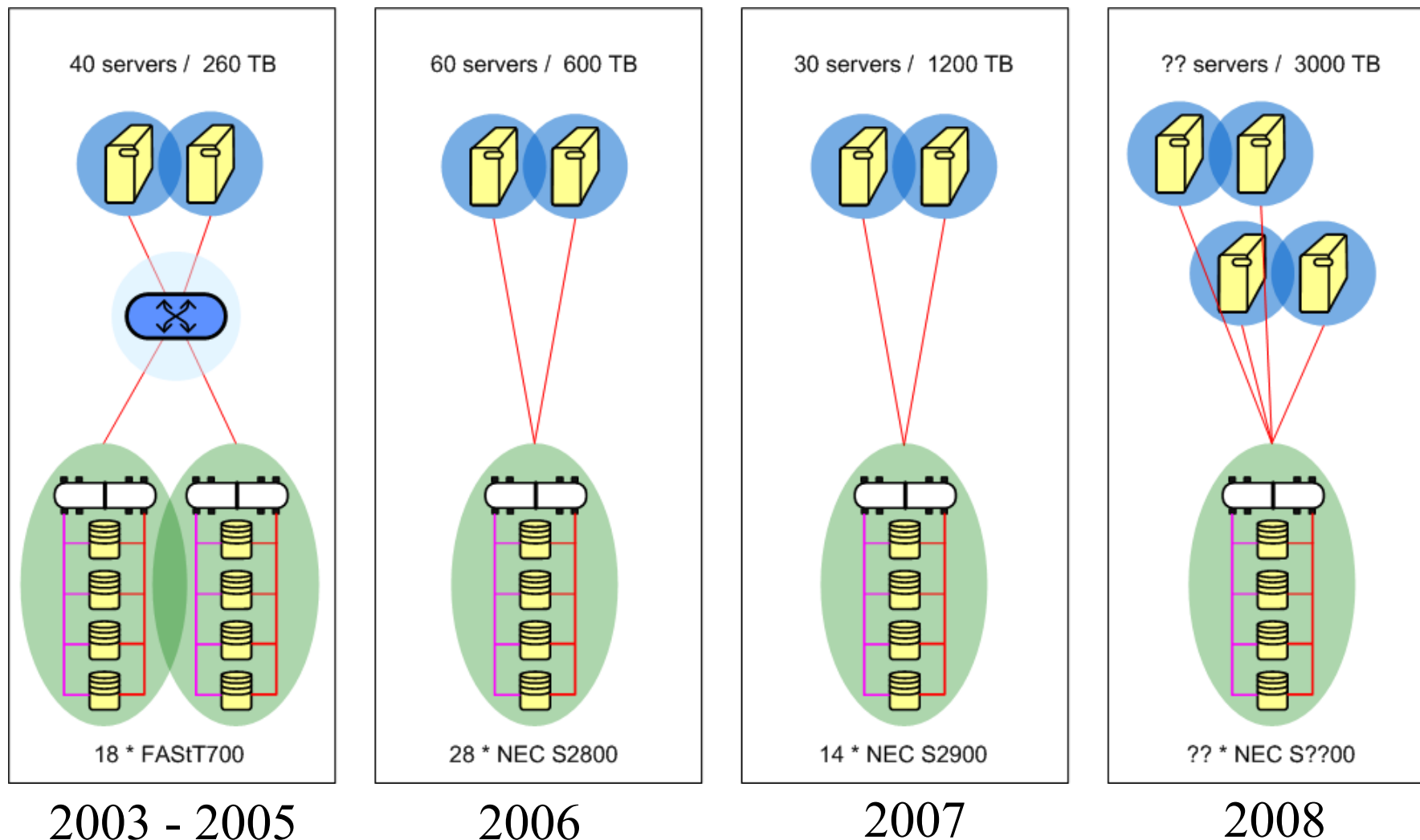
New CPUs:

- 168 dual-socket dual-core
Intel Xeon 5160 (Woodcrest 3.0 GHz),
6 GB (1.5 GB per core) memory,
SL4.4 i386
- Benchmark results: talk on friday

Disk expansion:

- 14 storage controllers NEC S2900
2380 SATA disks (500GB)
400 FC 15krpm disks (300GB)
28 file servers (dual Opteron 2241)
- Total disk space:
2003-2005: 380 TB (RAID5)
2006-2007: 1550 TB (RAID6)
1930 TB

Disk Storage at GridKa – Evolution:



Current issues:

- ➔ 10 Gigabit Ethernet:
 - Preferred / recommended practice.
 - How to connect servers with 10 GbE interfaces to disk storage?
 - Maximum throughput of 1000 MB/s per server does not scale with current interconnects.
 - Asking for experiences in other centers.

Current issues:

- ➔ Future interconnects:
 - FZK is interested in SAS connections to servers.
 - On board SAS?

Current issues:

→ Infrastructure:

- Growth path of hard drives and controllers.
For planning FZK needs manufacturer and vendor estimates of possible key numbers (size per disk or platter, data rates etc) of disk based storage.
- How much floor space and electricity do we need in 2010?

Comments, Questions?