

## CPUs, Grid Storage and Virtual Services:

WNs/UIs	Processors	Cores/Node	HS06/node	HS06/core	Tot. cores	Tot. HS06
20 * WN SL5	X5560	8	117.53	14.69	160	2350
11 * WN SL5	E5-2670	16	263	16.44	176	2893
<b>5 * WN SL6</b>	AMD 6272	32	241	7.53	160	<b>1205</b>
Tot. 36 WN					Tot. ~ 500	Tot. ~ 6450
<b>5 * UI SL6</b>	AMD 6272	32	241	7.53	160	<b>1205</b>

•Missing very old 8 \* UI SL5, to be decommissioned during '14.

Systems	TB Net per System
4 * SUN x4500	16
5 * SUN x4540	35
SGI IS5500	260
NetApp E5400	260
	Tot. ~ 760

Virtual Services
Sun Grid Engine master + MySQL DB
Site BDII, dCache SRM, dCache PostgreSQL
Ganglia Web, LDAP Server , Nagios
CMS Frontier ( Squid ), CMS PhEDEx

About the 10 servers got from CSCS that I installed as 5 \* UI SL6 and 5 \* WN SL6:

- PSI users demand **huge** /scratch → replaced the 2\*10 250GB disks with 4\*10 1TB disks ; also these 4\*10 1TB disks are a precious CSCS inheritance.
- To make the huge /scratch I could make RAID0, RAID5 or RAID10 ; I selected RAID10 ; natively the servers couldn't make HW RAID10 but by using SW RAID **mdadm** I could; only limitation is about **/boot** that must to be installed on a **RAID1**; so the RAID10 can tolerate max 1 broken disk that in real life is perfectly OK.
- So made a fast **but** reliable 1.7 TB /scratch
- Kickstart conf <http://pastebin.com/zzYA8AKL>
- **Future tasks at PSI:**
  - Our SUN x45XX servers got very old, both the 2 NFS servers and the 9 dCache servers ; need to plan a HW replacement.
  - Need to migrate all the WN SL5 to SL6 during '14 ; there I'll keep on using mdadm.

