# SPRACE Status Report

II DOSAR Workshop

## SPRACE Inventory

#### Present

- 57 dual Xeon nodes = 114 Xeon CPU's = 114 Cores
- 313.2 GHz (626.4 GFlops)
- 91 GB RAM
- 12 TB RAID + 2.4 TB internal = 14.4 TB total

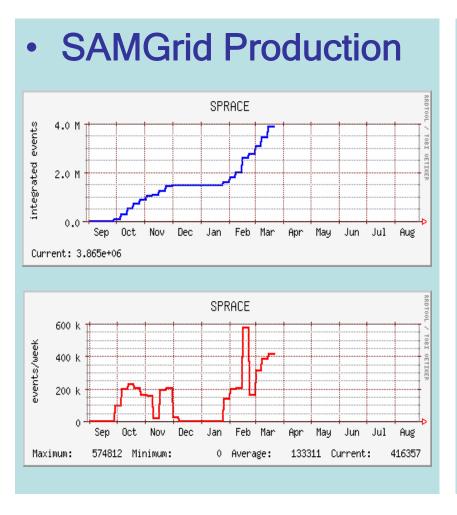
#### Approved upgrade

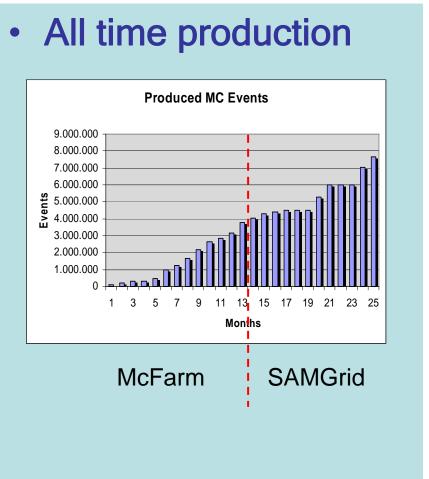
- + 32 dualCore dualXeon nodes = 64 CPU's = 128 Cores
- + 409.6 GHz (+819.2 GFlops)
- + 128 GB RAM
- + 1.2 TB internal

### Future (next workshop)

- 89 Nodes, 178 CPU's, 242 Cores
- 722.8 GHz (1.45 TFlops)
- 219 GB RAM
- 12 TB RAID + 3.6 TB internal = 15.6 TB total

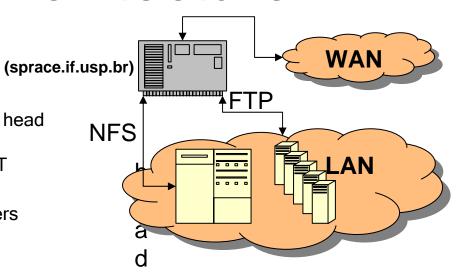
## Monte Carlo Production

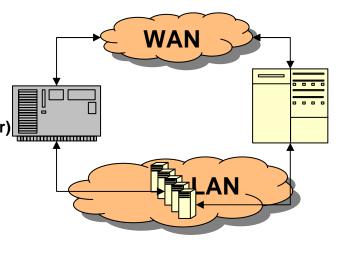




### Cluster Architecture

- Two separate clusters
- **Production Cluster** 
  - Sam Station and Gatekeeper on same head node
  - Data server and working nodes on NAT
  - Heavy network load on the head node
  - 1 Head node, 1 Data Server, 50 Workers
  - SAMGrid exclusive
- **Development Cluster** 
  - Data server on WAN and LAN.
  - Cluster gatekeeper, job and information services on head node (Compute Element).
  - Workers gateway and Data services on the data server (Storage Element).
  - 1 Head Node, 1 Data Server, 2 Workers. (spgrid.if.usp.br)
  - OSG + SamGrid
- Move the workers from the Production to the Development cluster when operational.





## **OSG Deployment Status**

- OSG 0.4.0 Installed on the head node (SPGRID).
  - Seen as operational on OSG Monitoring tools.
  - Small jobs accepted by gatekeeper and distributed by condor.
  - SamGrid jobs not yet running.
  - Storage still on head node
- SAMGrid Partially installed.
- SPRAID SAM Station operational on Data Server.
- To Do:
  - Configure nodes gateway.
    - One of the reasons MC jobs must not be running.
  - Debug MC production on SPRACE OSG site.
  - Finish installing SAMGrid using SPRAID external station



**GridCat Monitoring** 

Status	Site Name	Jobs Pisks	Service	Loc	Facility
•	SPRACE	0/6 16/1646	CS	BRAZIL	UNESP
Site State:		Active			