CDF Plans at CNAF

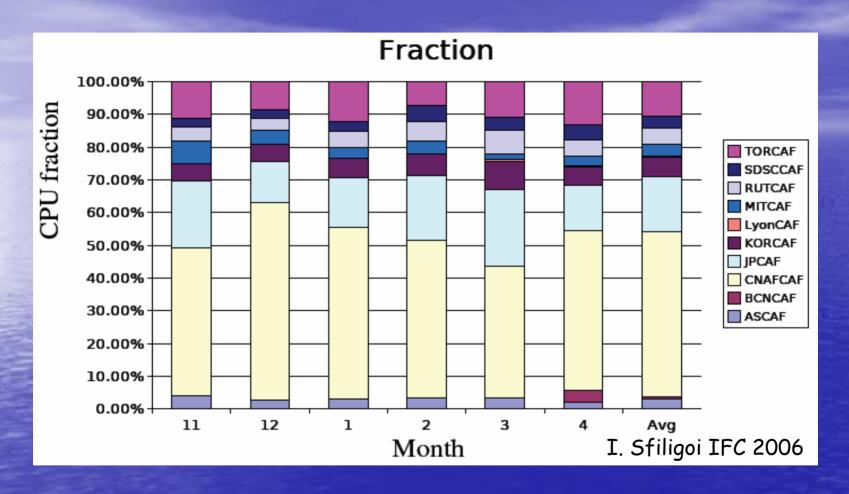
Donatella Lucchesi
University and INFN Padova

CDF Collaboration Meeting
La Biodola - Elba Island - Tuscany - Italy
June 2-10, 2006

Outline:

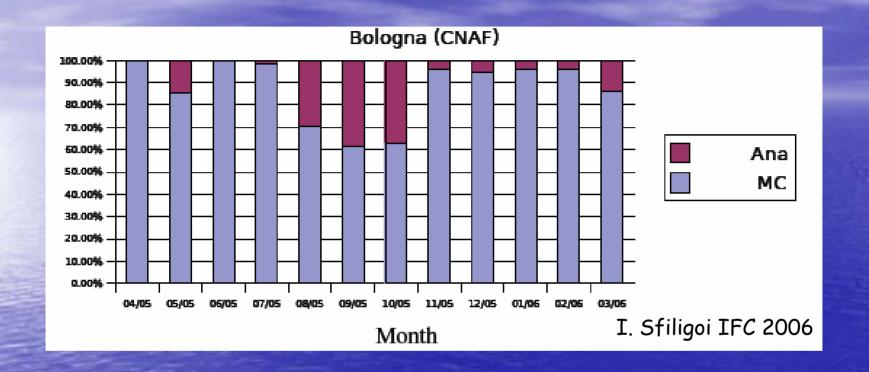
- > CNAF usage up today
- > CNAF data availability and access
- Monte Carlo production and storage

CNAF cpu usage vs. other dCAF



~50% of the outside cpu is coming from CNAF

CNAF cpu usage



Some data has been processed at CNAF

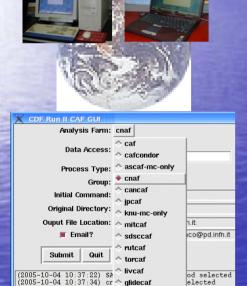
CNAF snapshot

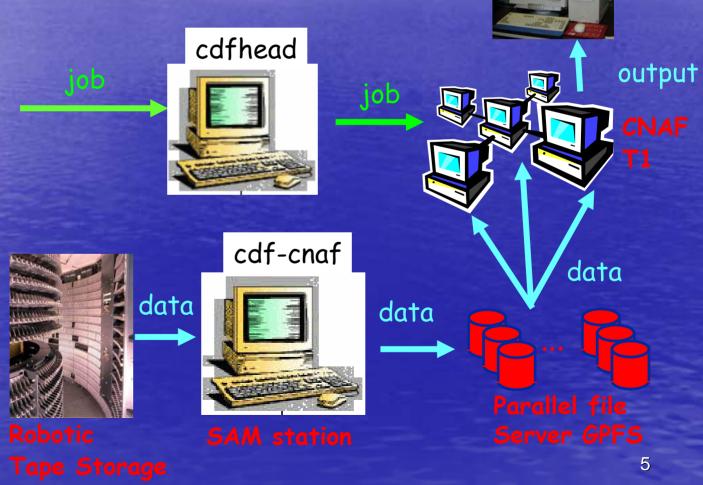
- o Tier 1 resources: ~1800 KSI2K
- o CDF has high priority on ~500 KSI2K
- Fair share calculated over 1 month, now changed to 10 days
- o Two SAM stations: cdf-cnaf, cdf-cnaf-1
- CDF VOMS (Virtual Organization Membership Service)
- o Disk space:
 - 65 TB SAM cache
 - 5 TB icaf
 - 1.7 TB Storage Element

Data Analysis

> The glide-in is used to access CNAF-Tier1 resources

The SAM station "cdf-cnaf" hosts BCHARM datasets, skimmed data.





Physics Center Plan

- > Implement an automatic procedure to store at CNAF:
 - B data in any form: BCHARM dataset and/or skimmed datasets and/or Bs-ntuple
 - o st-ntuples for high-pt analysis, if needed Quite close to that, the "sam get dataset" command works quite well to import data
- List of available datasets:
 http://cdfsam-prd.fnal.gov/~sam/Datasets/cdf-cnaf.html
- Provide users running on data at CNAF with icaf area ~5TB available on total, access via icaf tools and rootd
- Necessary disk space available
- ► A minimum number of cpu guarantee in the future also when LHC will start

Monte Carlo Production

LcgCAF (see Francesco talk): portal to access the European GRID.

Developed by Francesco Delli Paoli, D. Jeans, S. Sarkar, I. Sfiligoi and D.L.

>Access to all Italian resources and many EU sites





> Job output copied to user disks

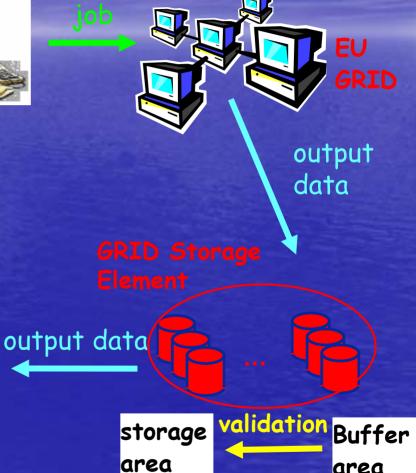
Monte Carlo Production Plans

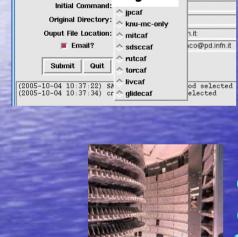


Analysis Farm: cnaf Data Access: ^ cafcondor Process Type: ^ ascaf-mc-only









cdf-cnaf-1 output data



area

Monte Carlo Production Plans cont'd

- ➤ B Monte Carlo produced (and being produced) on LcgCAF by power users:
 - F. Delli Paoli, D. Jeans, S. Pagan, S. Sarkar, D. L.
- > Now open to everyone who wants to try!
- The full schema not in place, the output has to be copied to FNAL

Summary and Conclusions

- CNAF and INFN supported and will support CDF with cpu, disk space and man power
- > Keep maintenance:
 - o CDF VOMS
 - o CondorCNAF
 - o LcgCAF
- CondorCNAF has dedicated resources, under discussion how to balance with LHC arrival.
- Disk space will increase: ______

| Use year | Disk space (TB) |
|----------|-----------------|
| 2005 | 51 |
| 2006 | 112 |
| 2007 | 161 |
| 2008 | 219 |

Open issues:

- ✓ Use LcgCAF to run on data
- ✓ Interface SAM w/ SRM (CNAF-FNAL project? Who?)
- ✓ Usage of Castor

To Conclude