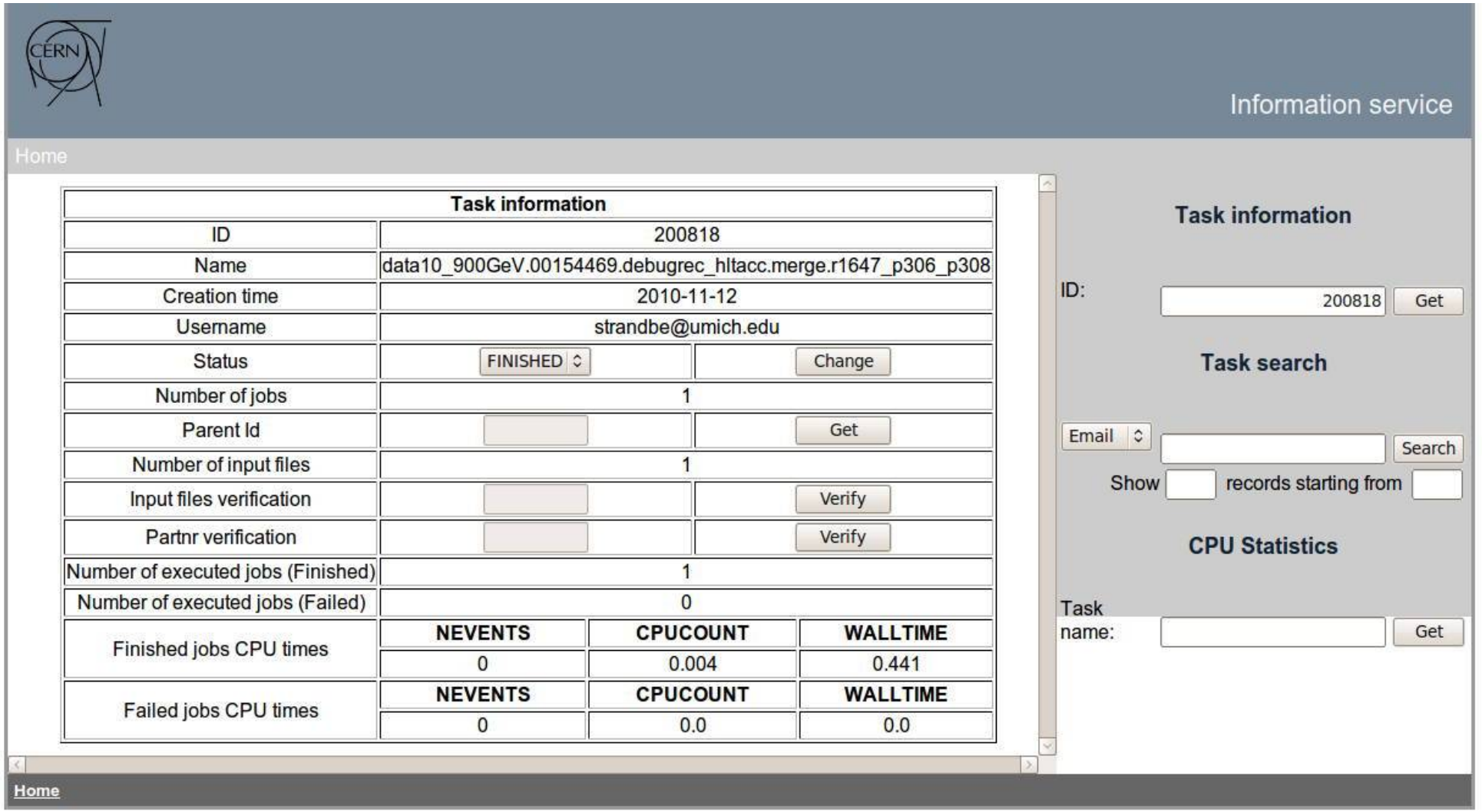
ProdSys Evolution and Dev.

Douglas Smith

Short Term Changes

- Migration of Interface
  - Provide a more consistent and usable interface
  - Based on Django.
  - Project started by Dmitry Golubkov:
    - http://atlas-infomon.cern.ch/taskinfo/
  - Extended to include config. Creation, task browsing
- Command line tools
  - Extension to pathena to include task creation.
    - Athena job → pathena on grid → task in ProdSys
- Time scale next 3-6 months. Discussed and agreed upon in meeting a couple weeks ago.

New Interface

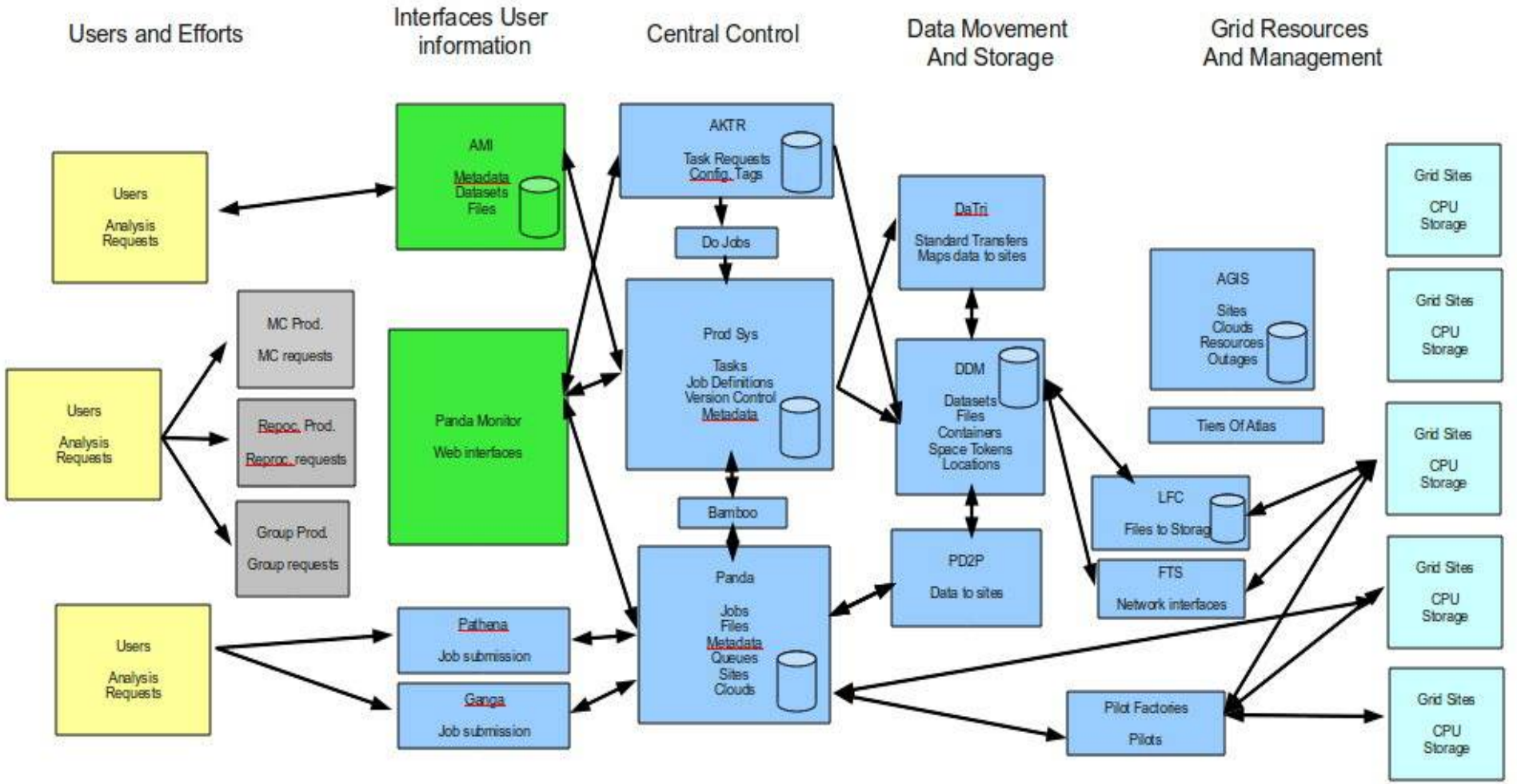


Task information			
ID	200818		
Name	data10_900GeV.00154469.debugrec_hltacc.merge.r1647_p306_p308		
Creation time	2010-11-12		
Username	strandbe@umich.edu		
Status	FINISHED	Change	
Number of jobs	1		
Parent Id		Get	
Number of input files	1		
Input files verification		Verify	
Partnr verification		Verify	
Number of executed jobs (Finished)	1		
Number of executed jobs (Failed)	0		
Finished jobs CPU times	NEVENTS	CPUCOUNT	WALLTIME
	0	0.004	0.441
Failed jobs CPU times	NEVENTS	CPUCOUNT	WALLTIME
	0	0.0	0.0

Larger Scope

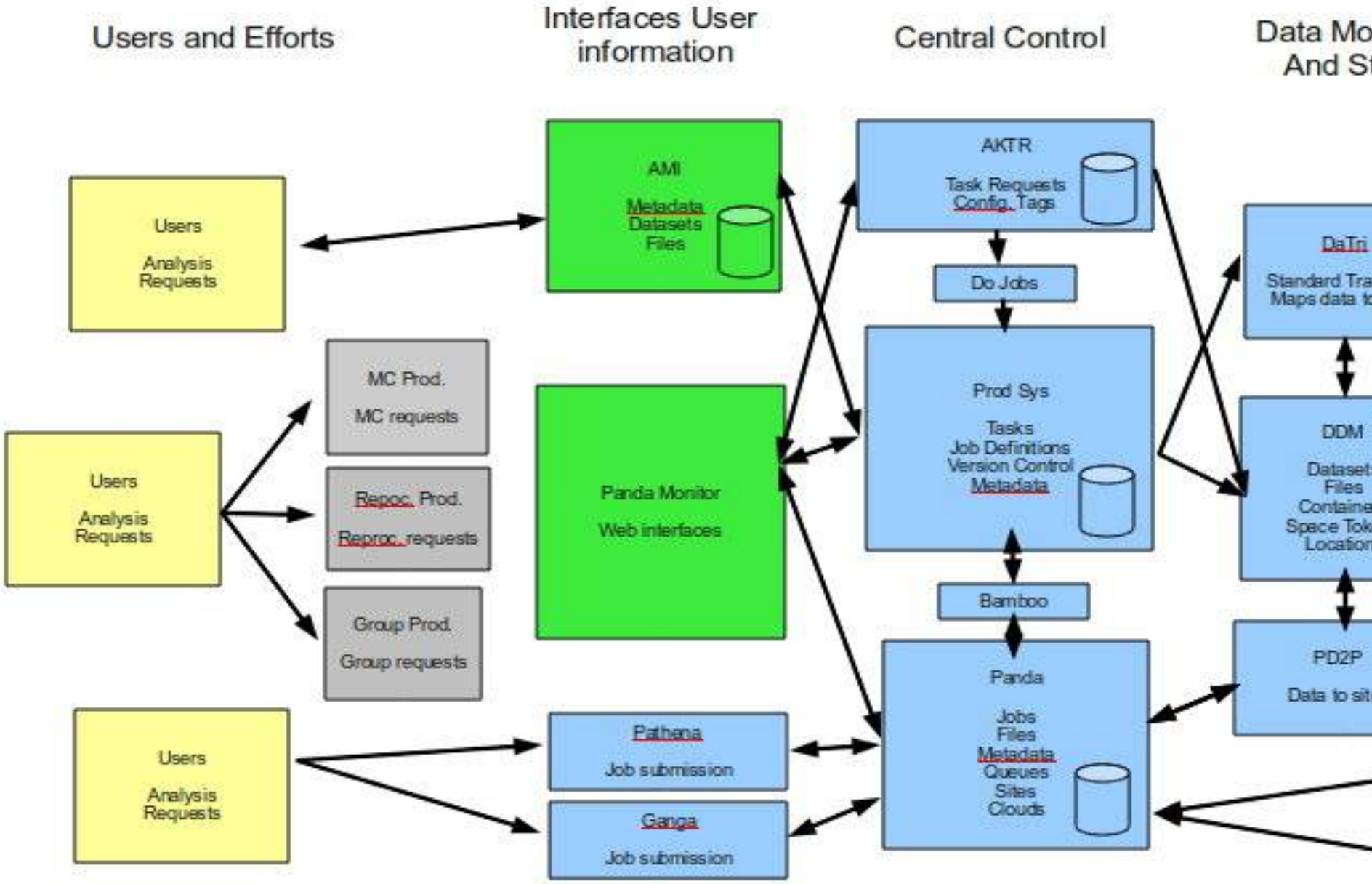
- But it was made clear in meeting couple weeks ago – Short Term changes are not what need to decide or discuss!
- The Production System has developed in a very Ad-hoc way, with month-to-month planning.
- Large changes are coming, and will continue to come in the experiment.
- Experiment will last next ten years, getting larger each year.
- Need a picture of the system to see where we are now.

Cartoon of Systems

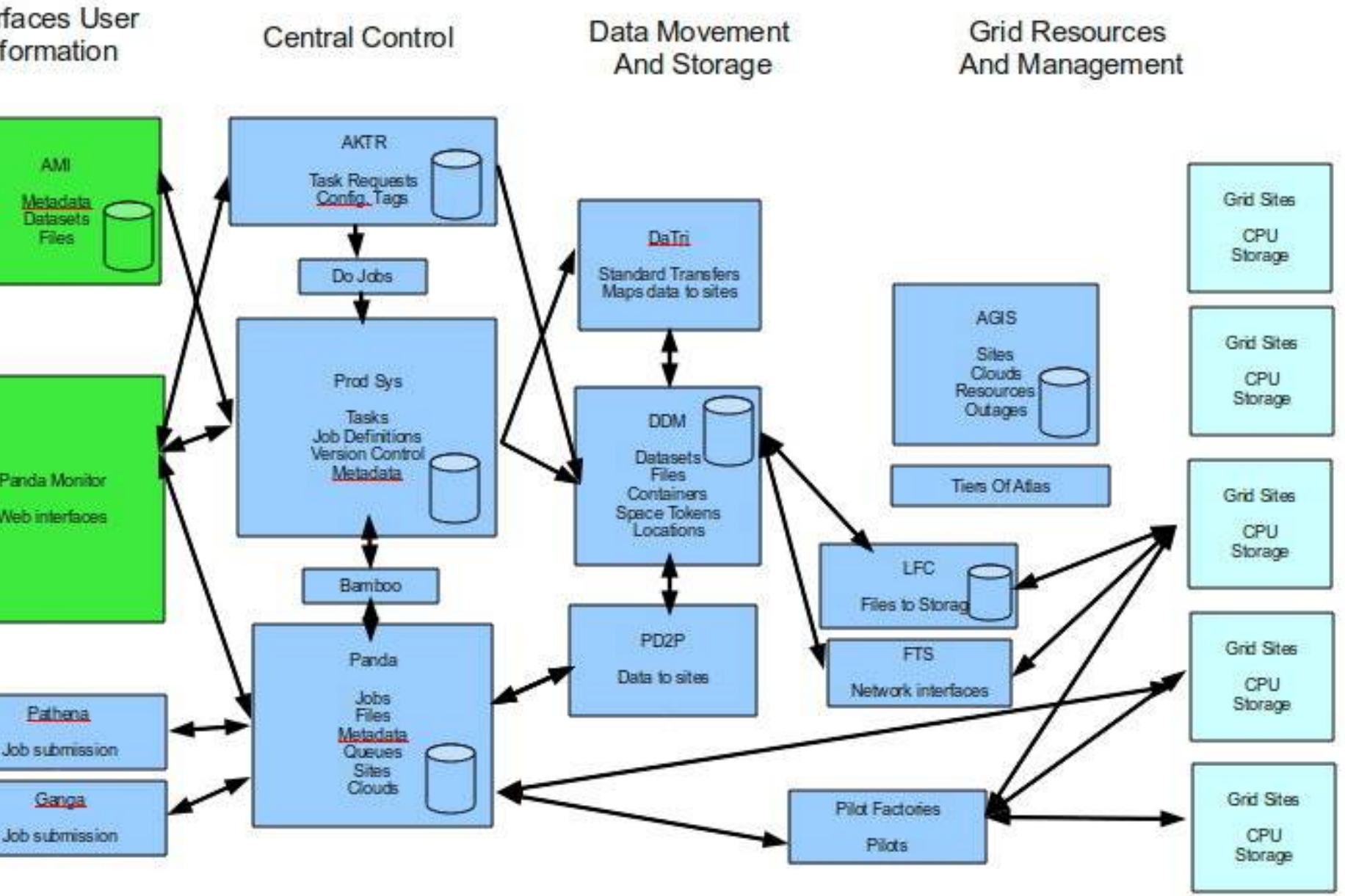


ADC Production Systems

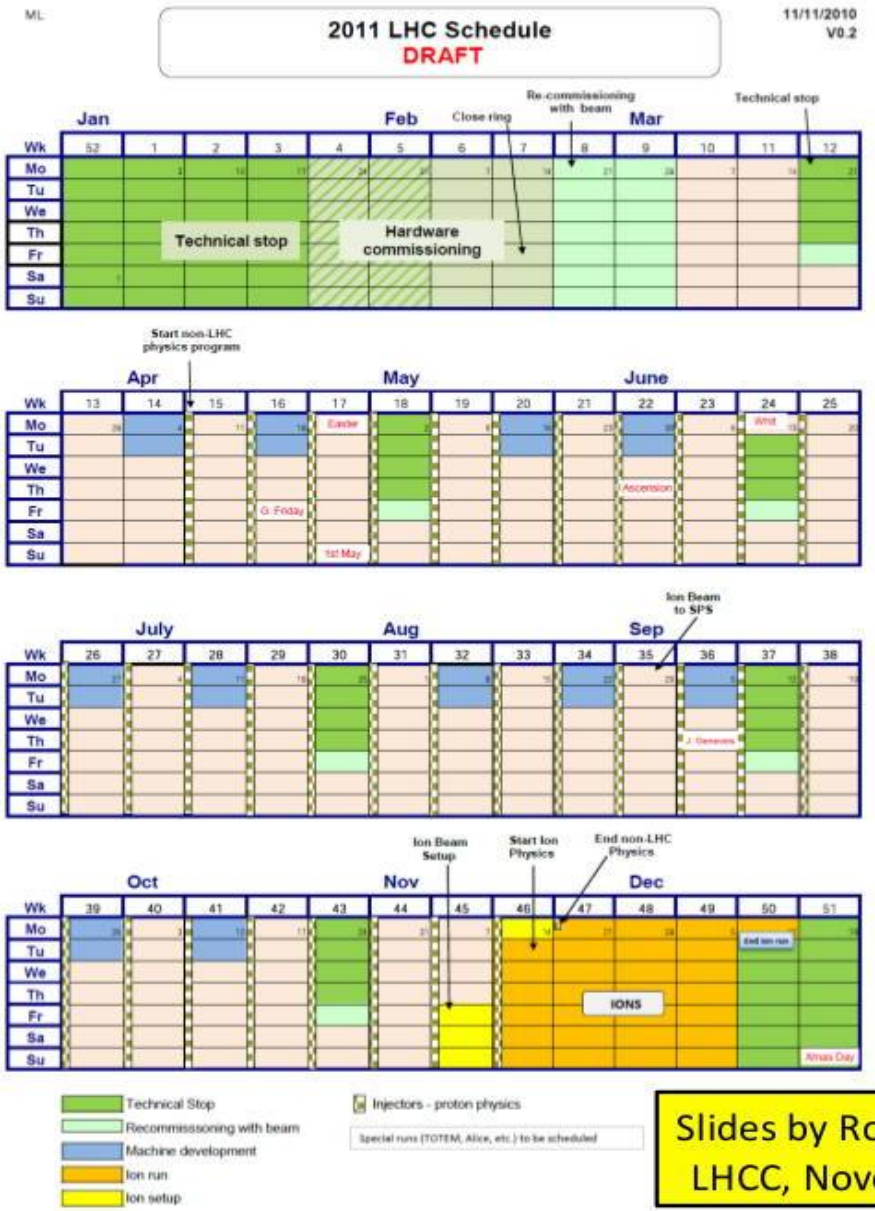
User interfaces and Control



Data storage and resources



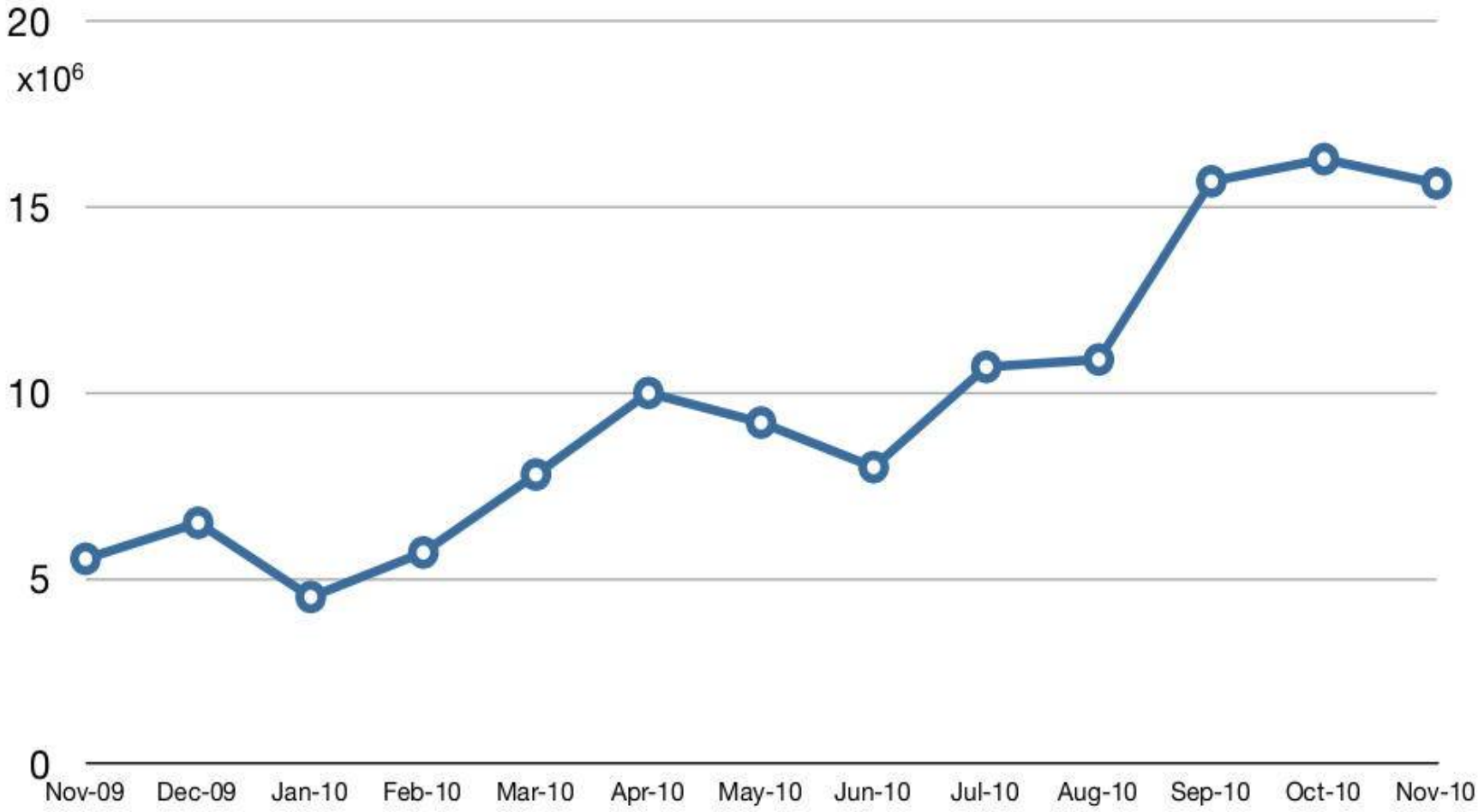
Changes – more data.



- From Intro by Kors Bos.
- 200 days of running.
- Starting with best running of 2010, apr. 1000 bunches.
- Higher efficiency, more time running per day.
- Higher trigger rates.
- Many times more data.

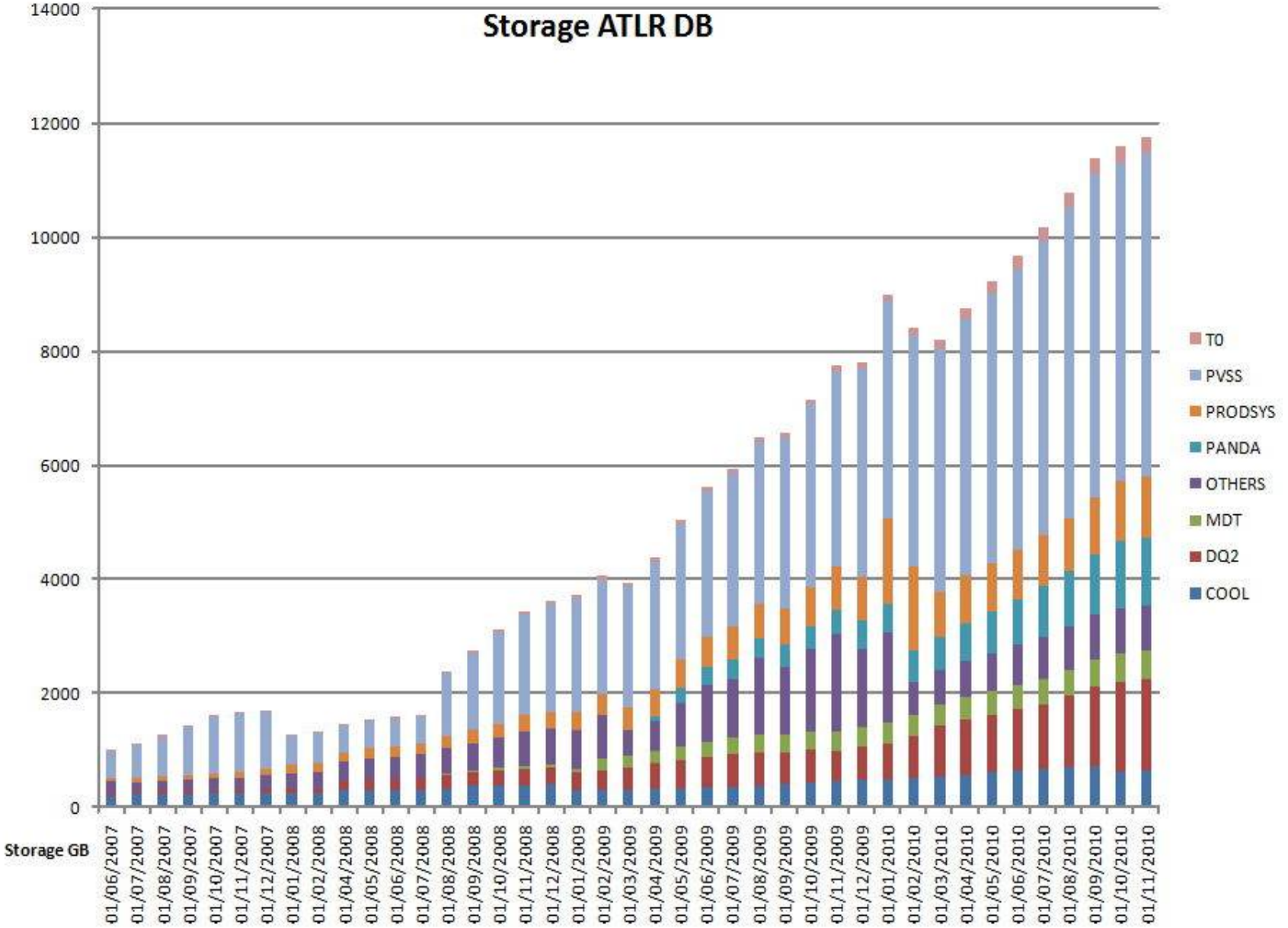
Slides by Roger Bailey
LHCC, November 17

Panda use in 2010



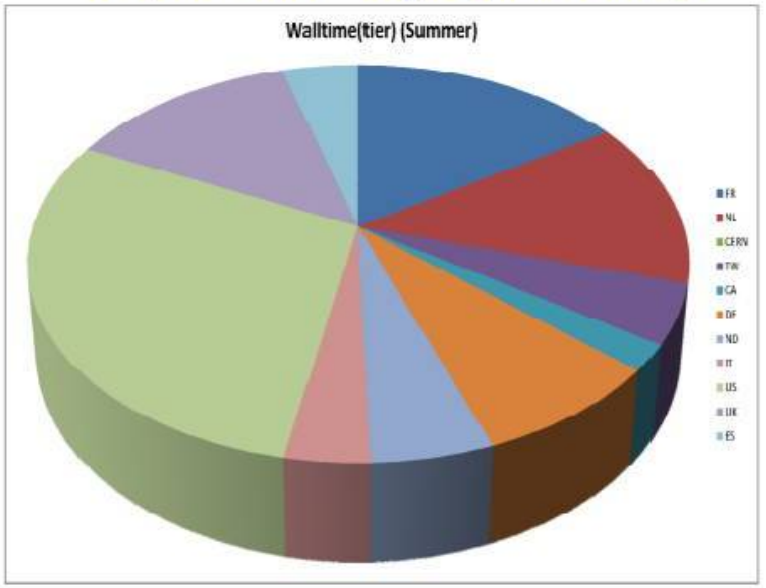
Panda Use increased by a factor of 3 over past year.

Database sizes

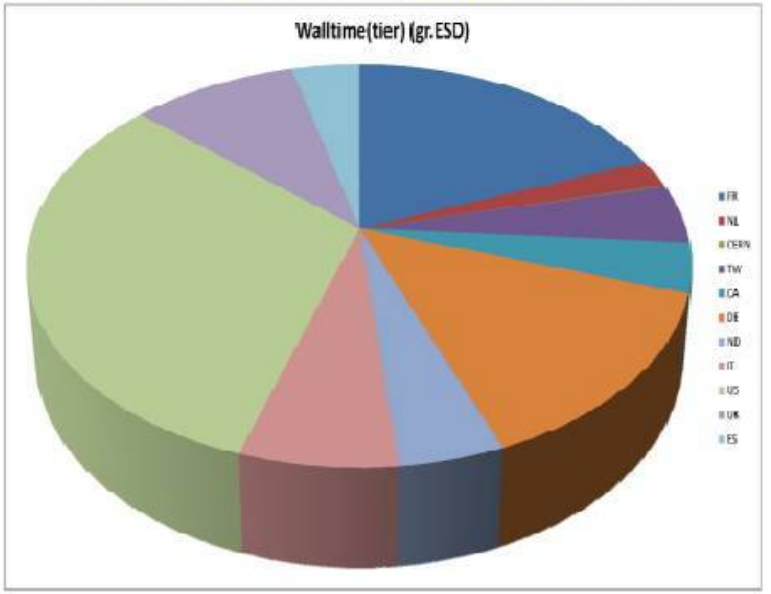


Group Production

Summer'10 reprocessing
35,255 CPU-days (wall-time)



Group Production on T0 ESD
66,556 CPU-days (wall-time)



- Already in Summer 2010 Group production used more CPU then the central Data Reprocessing

- Group Production is already much larger than reprocessing.
- Unknown how much it will grow.
- Linear by data? Or geometric by data, as more productions are defined?

Scaling issues for 2011

- Parts of system scale by data, many times increase (3):
  - Production efforts, ProdSys, AKTR, AMI
- Part of system scale by resources, percentage increase (30%):
  - Panda, DDM, Pilots
- Need to reconcile this for next year's running.
- And part of discussions, the experiment goes beyond 2011. (2012 running? Next 10 years.)

Need discussion

- Discussions of “interested parties” will happen.
  - First meeting : propose Dec. 10.
  - Second meeting : propose Jan 7.
  - Third meeting : propose Jan 21.
- ADC Workshop -
  - Feb 2-4, 2011.
  - Present better picture and plans, and start to make some decisions.