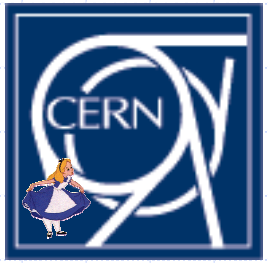
Application status

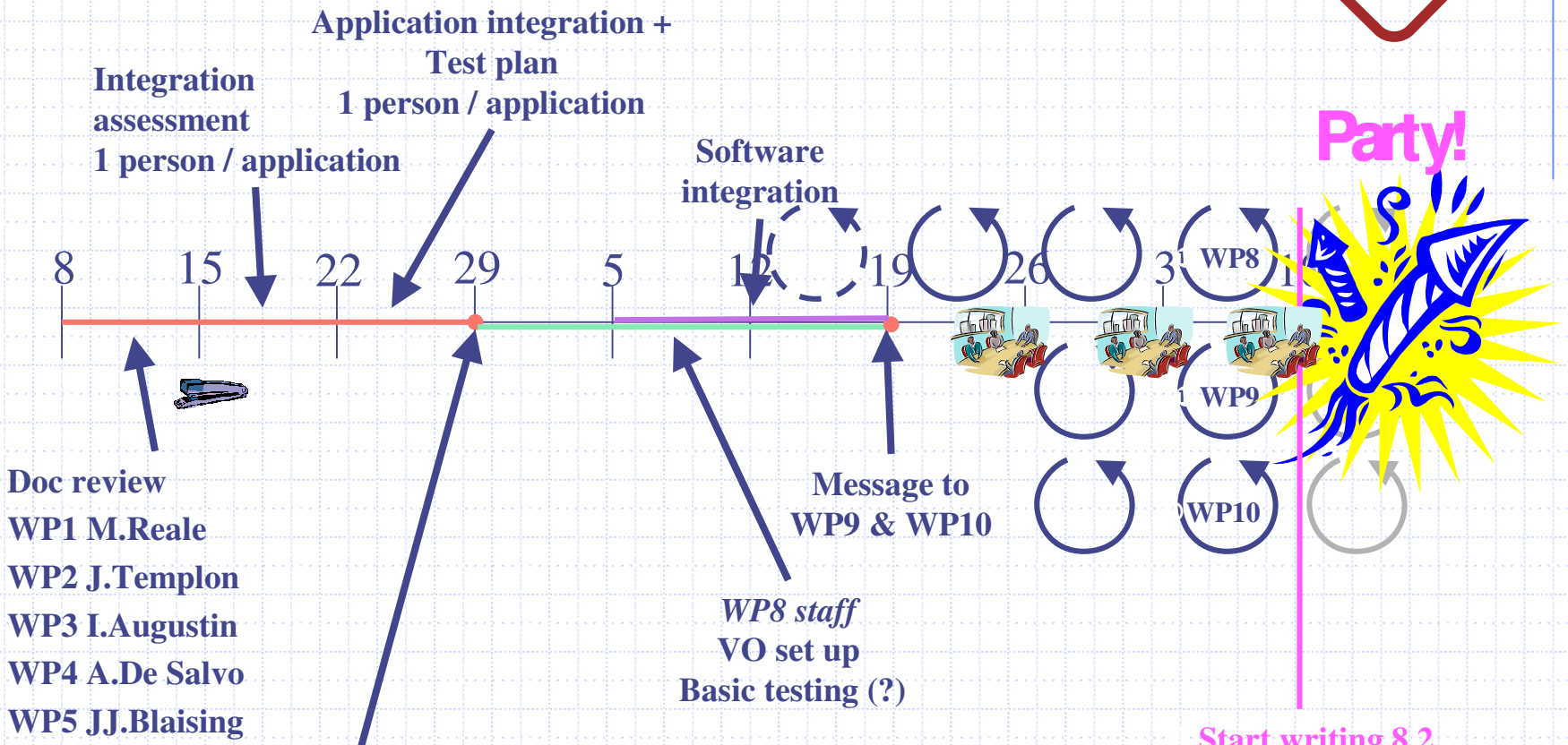
F.Carminati

11 December 2001

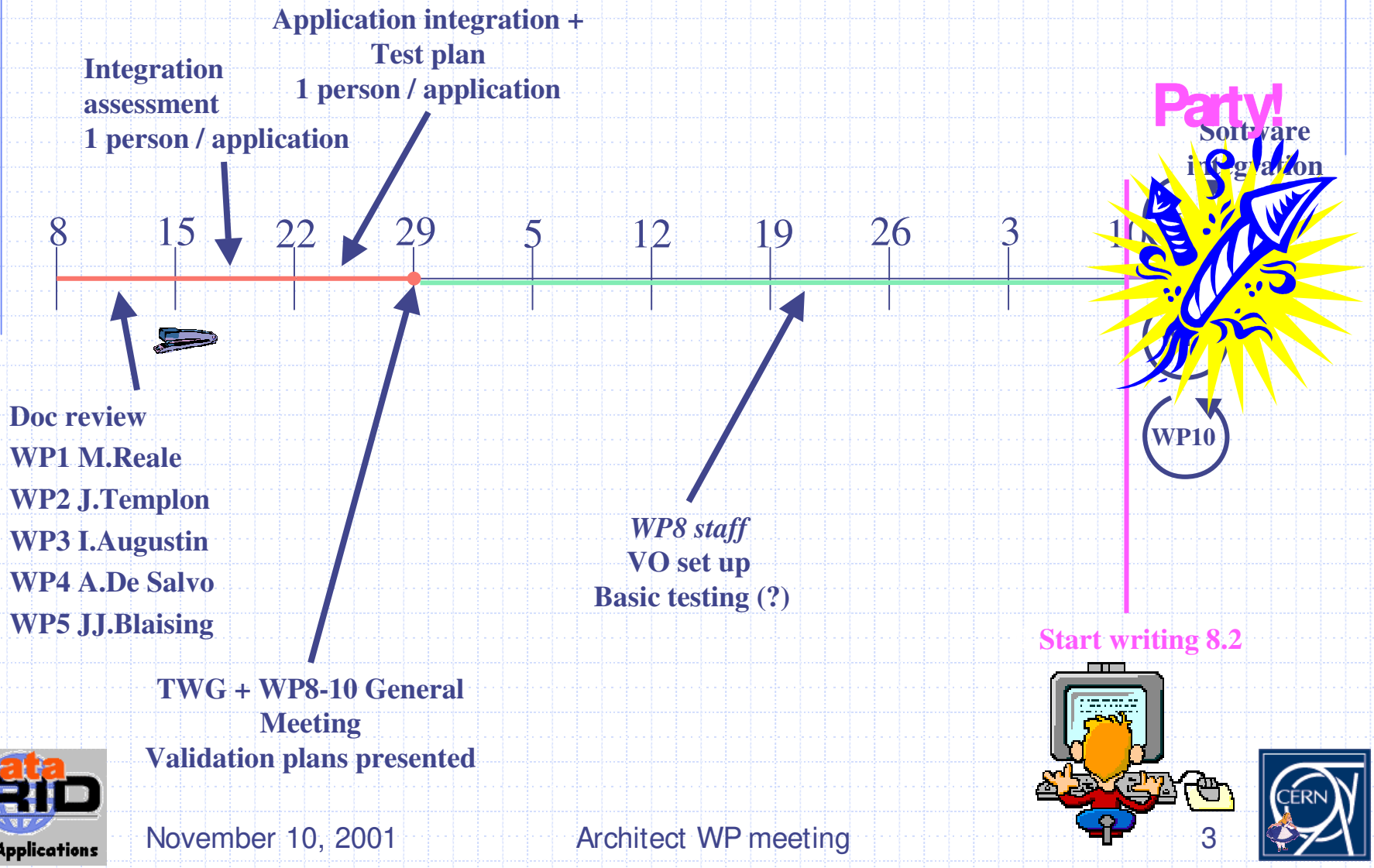


Validation plan timeline – new

October 30 2001



Validation plan timeline – now



What next?

- The integration is now finished
  - All the actors should be praised
- However the integration process took 300% more time than planned
  - May be this was physiological in such a large project
  - But it should not happen again
  - We should not let it dis-integrate again
- Single WPs must integrate regularly their new versions in the TB
  - We need development and production environment
  - They do not need to be released at once
  - This has to be a continuous process

Application validation

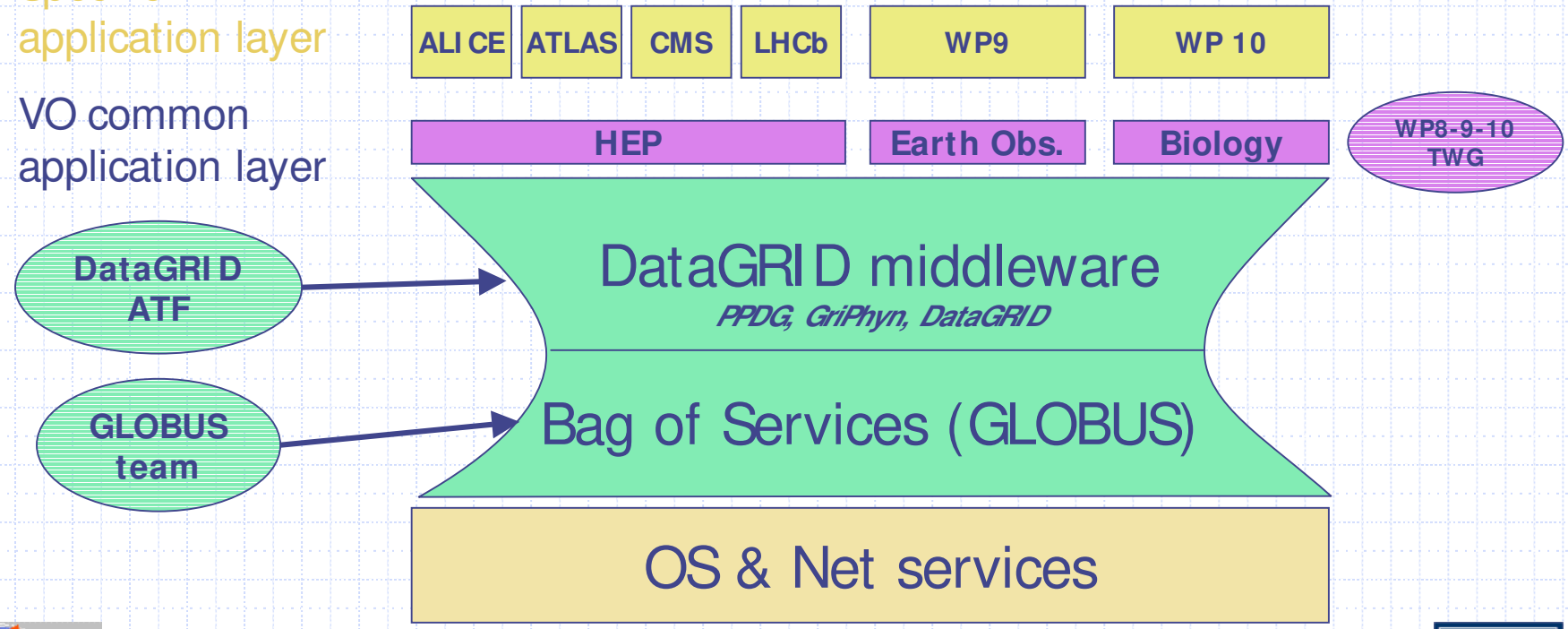
- 8.2 will contain all we can do from today to Christmas
  - It is very important that now we have the access as soon as possible
  - This week one person/application
  - Next week the validation groups
- For the review we may have one more month of testing to report
  - But WP6 must stand by supporting the users
  - We may hint this in 8.2
- We can still do a reasonable job, with a bit of luck

What we want

March 9 2001

Specific application layer

VO common application layer

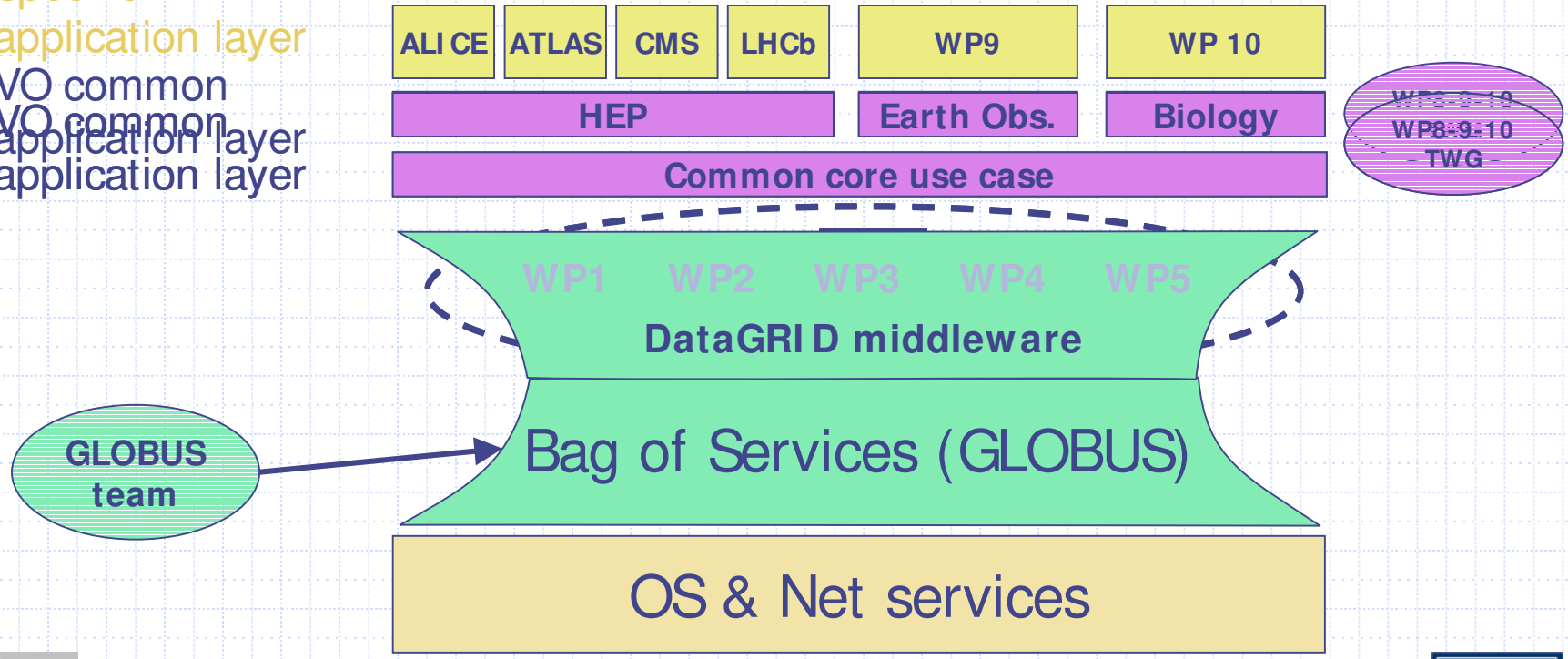


What we have

Drive the process to define

Specific application layer

VO common application layer



A modest proposal

- Identify one / two experts from each application
- Have them meet regularly for some limited amount of time to produce a proposal
  - Ideally a couple of months
  - Meet in person or via videoconf
- Discuss this proposal at the next architect – WP meeting
  - Have the different applications accept this proposal as their GRID baseline

Why this is fundamental?

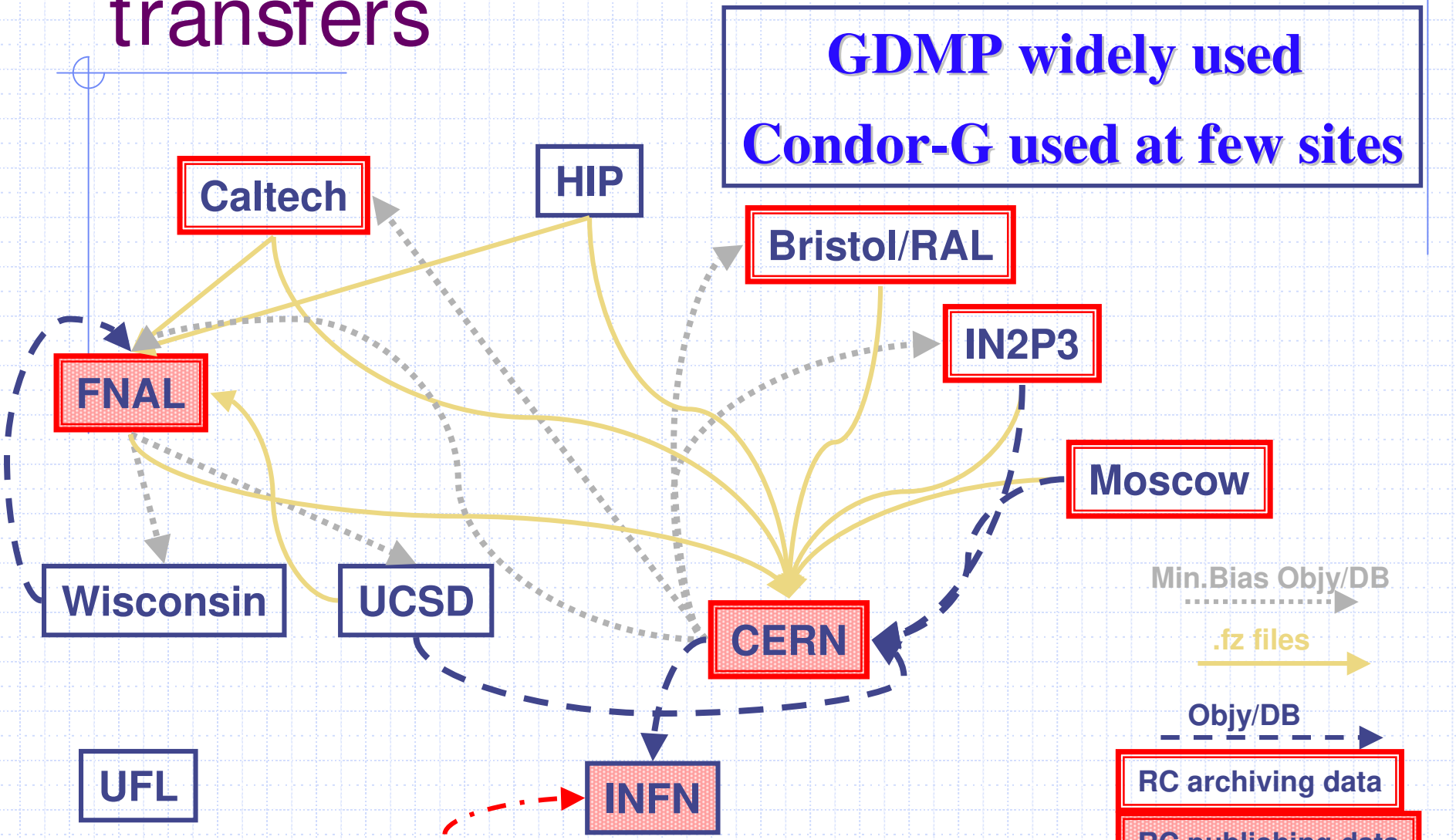
- The LCGP (Lhc Computing Grid Project) will require us to work on common projects
- The HICB (intergrid coordination board) expects proposal from the experiments
  - It would be ***MUCH*** smarter to provide a single core use case
  - Instead of ***competing*** one with the other
- The different GRID projects risk to diverge
  - A common core use case could help them to develop coherent solutions
  - Or ideally complementary elements

Experiment activities

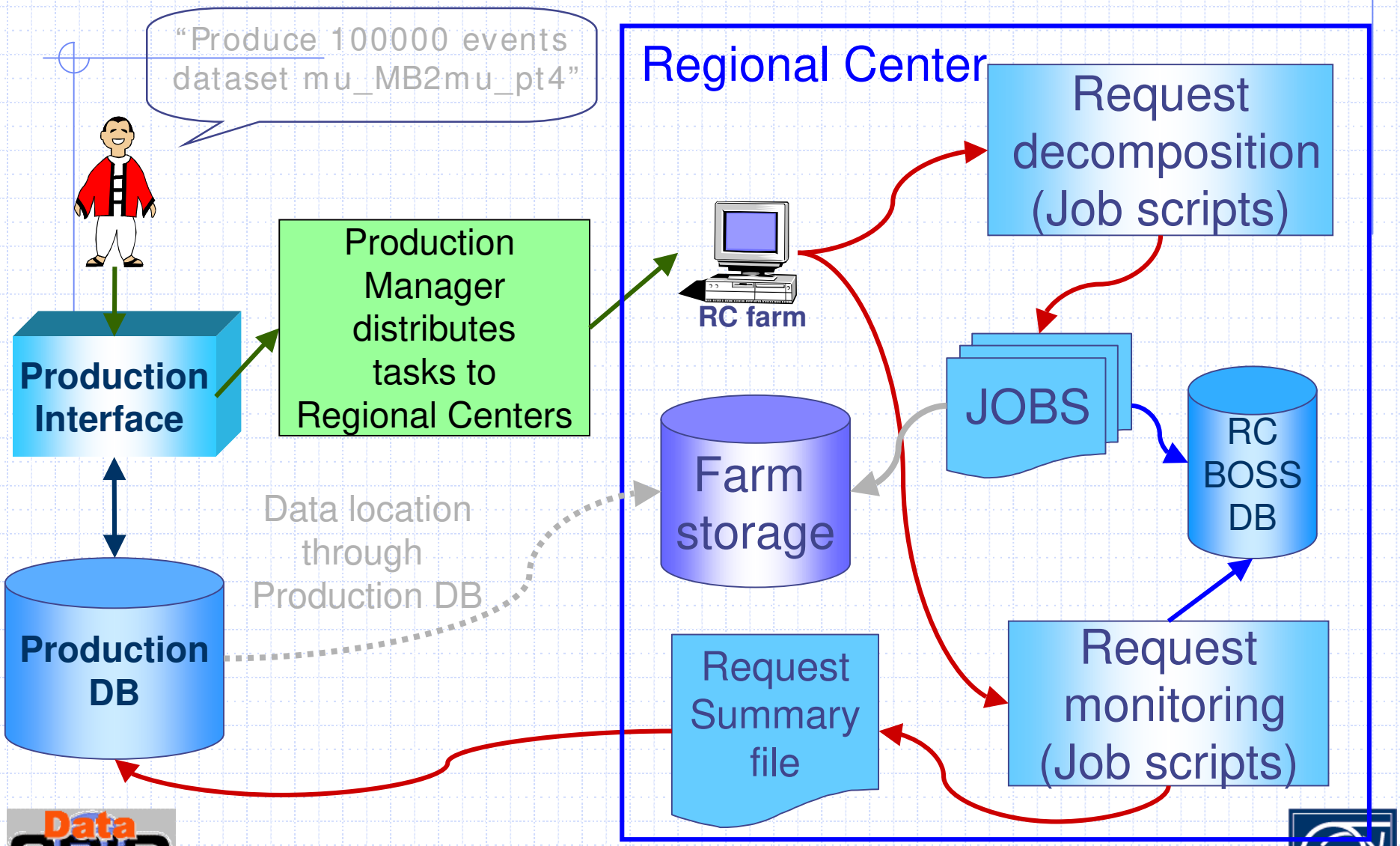
- There is a quite large expertise in the experiments about GRID
- Experiments are already using GRID tools in production
- It is important that this experience is put to work for DataGRID providing qualified feedback

CMS

CMS Production Sites, Data transfers

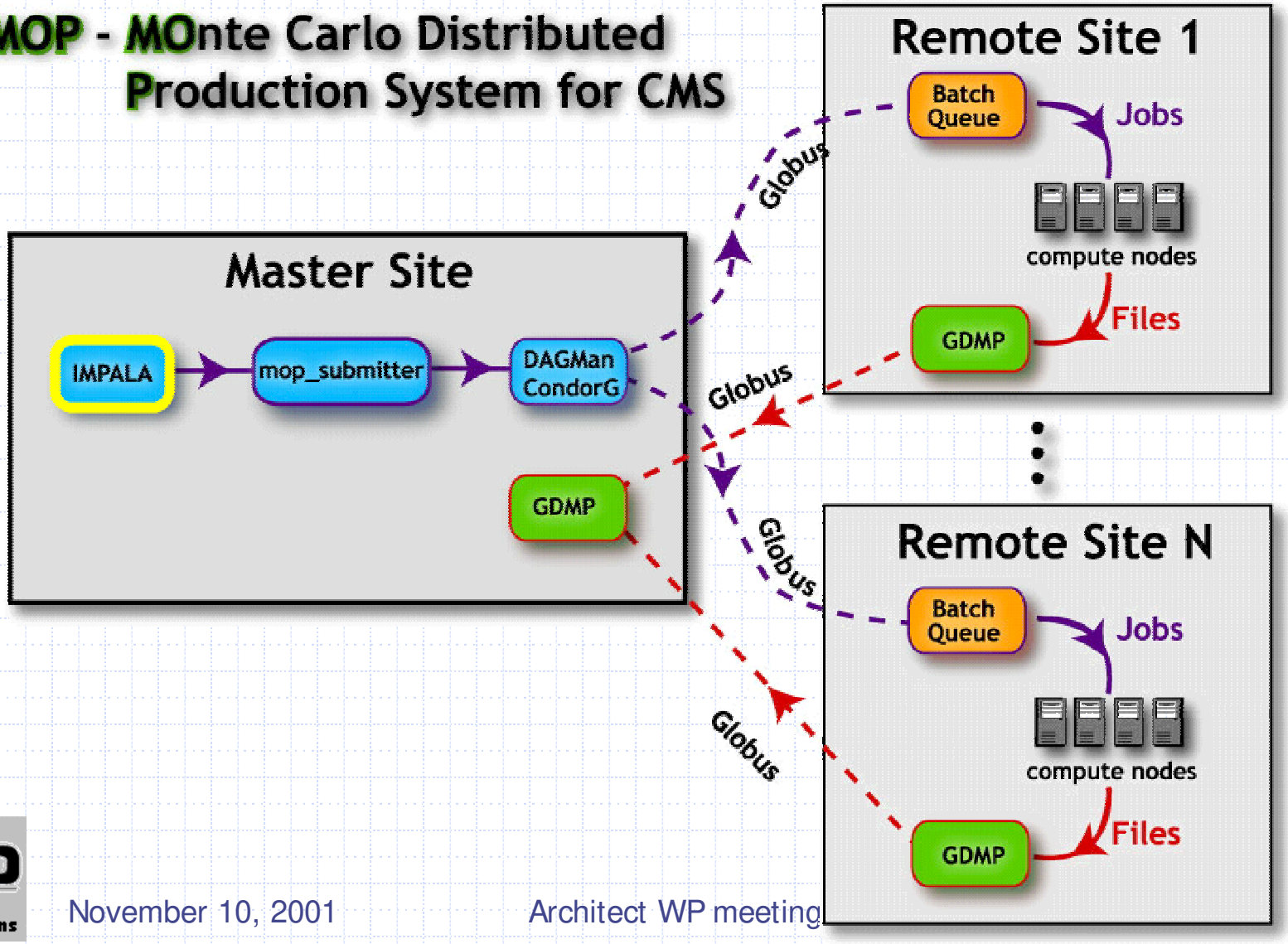


Job scripts – BOSS integration

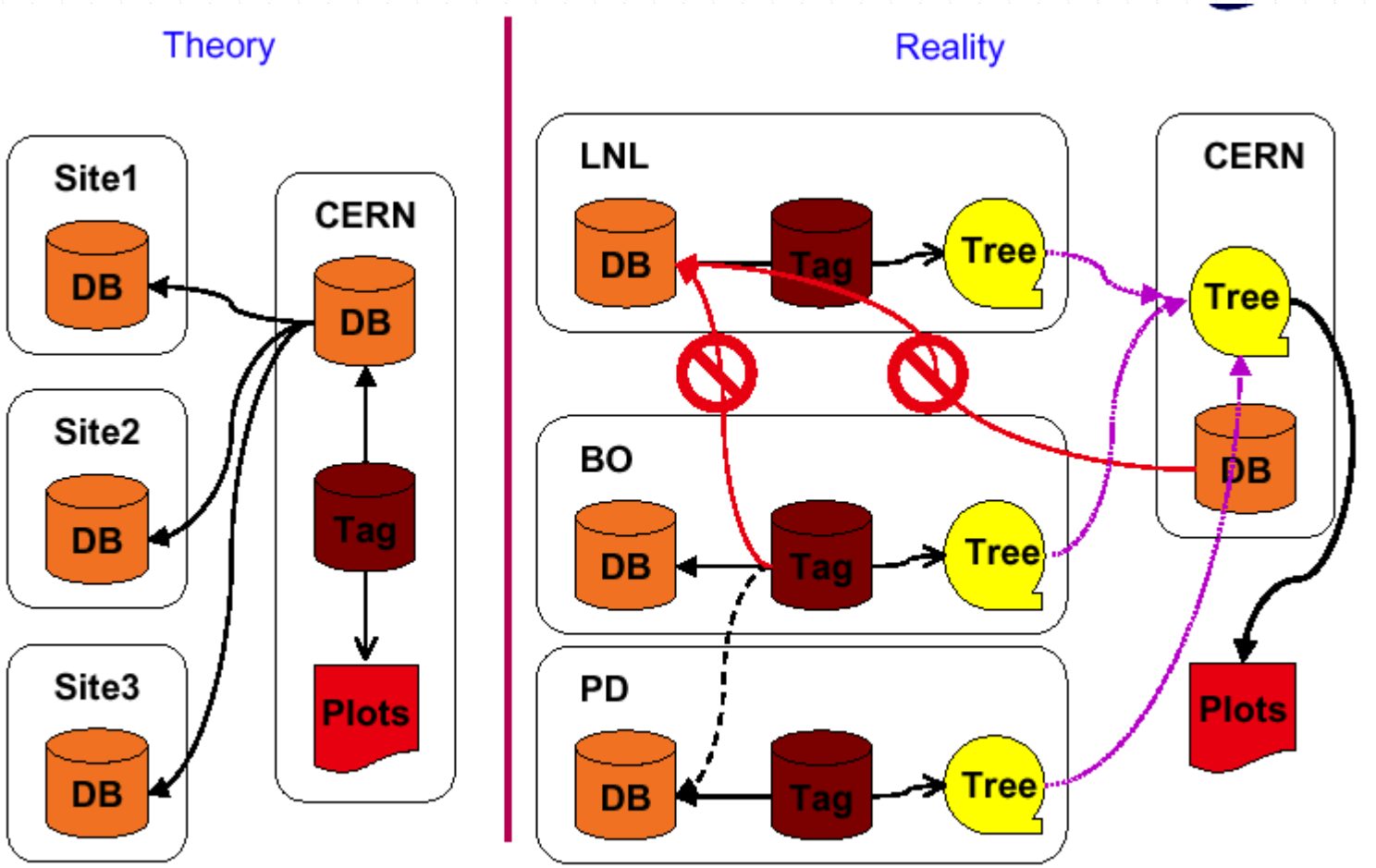


CMS - MOP

MOP - MOnte Carlo Distributed Production System for CMS

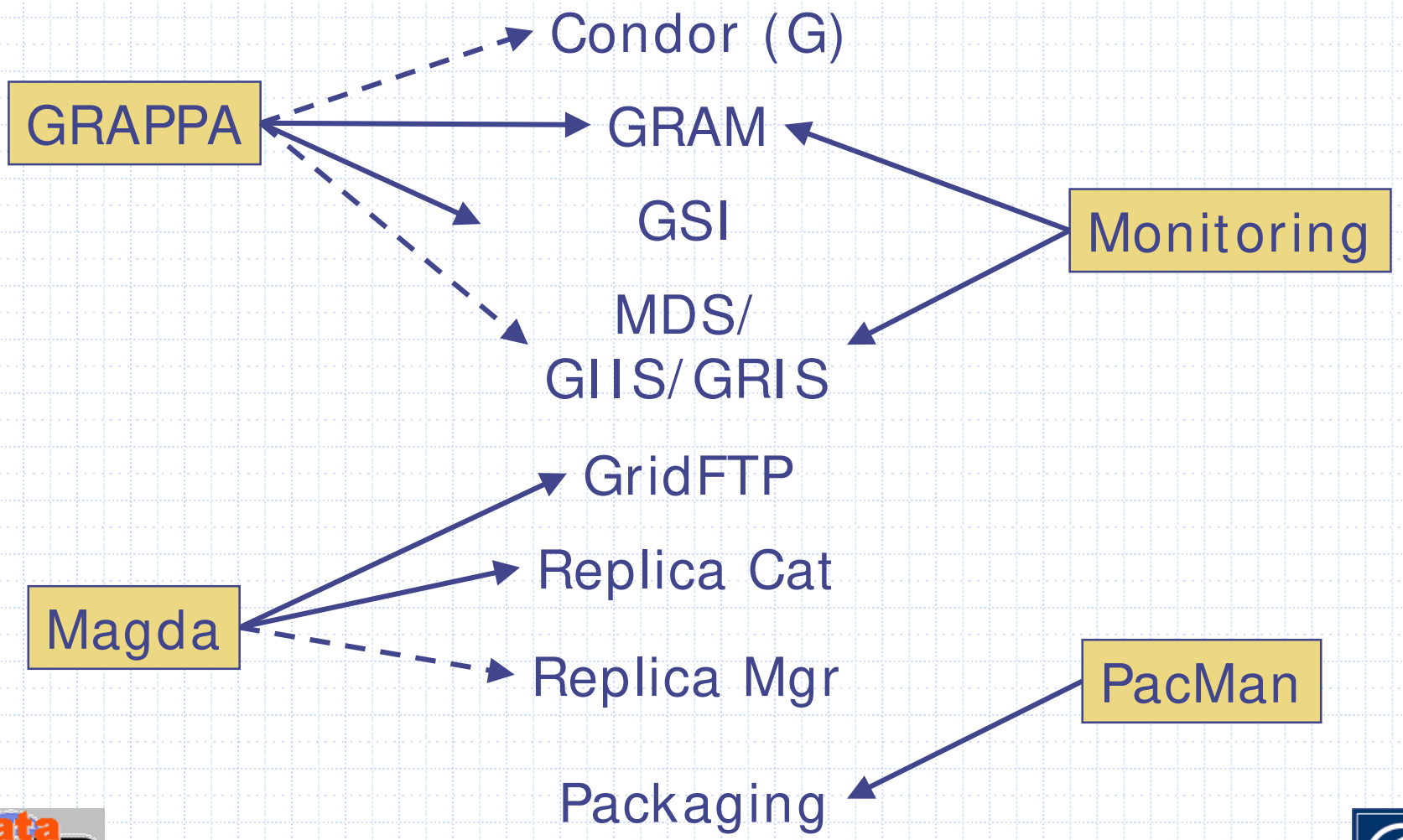


Distributed DB TAG Analysis



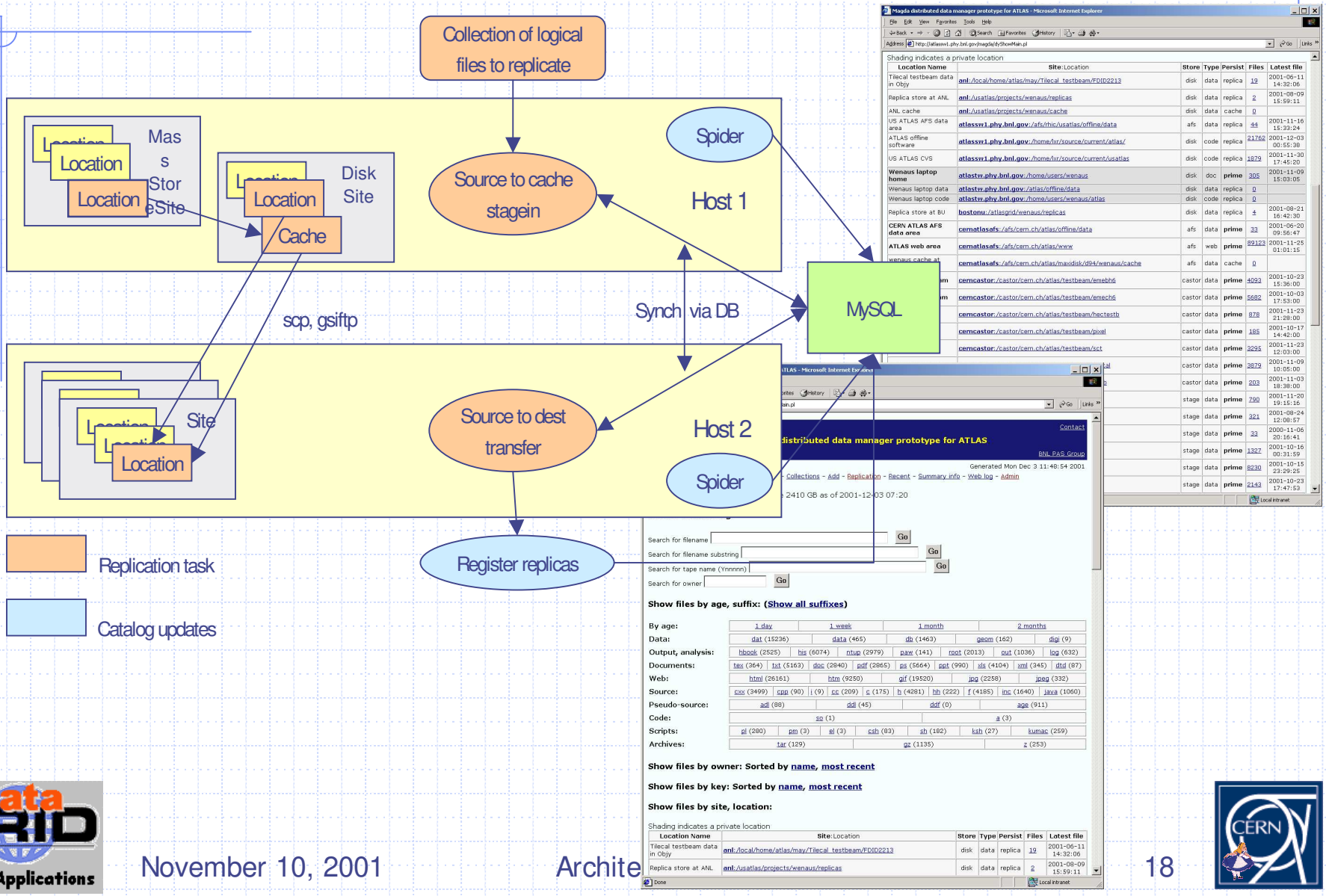
ATLAS

USAtlas Tool Development



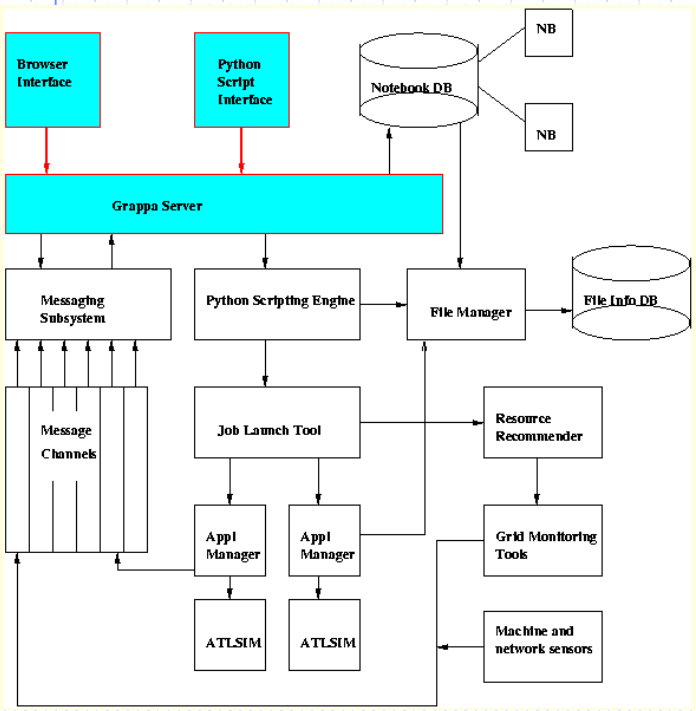
Magda Architecture Diagram

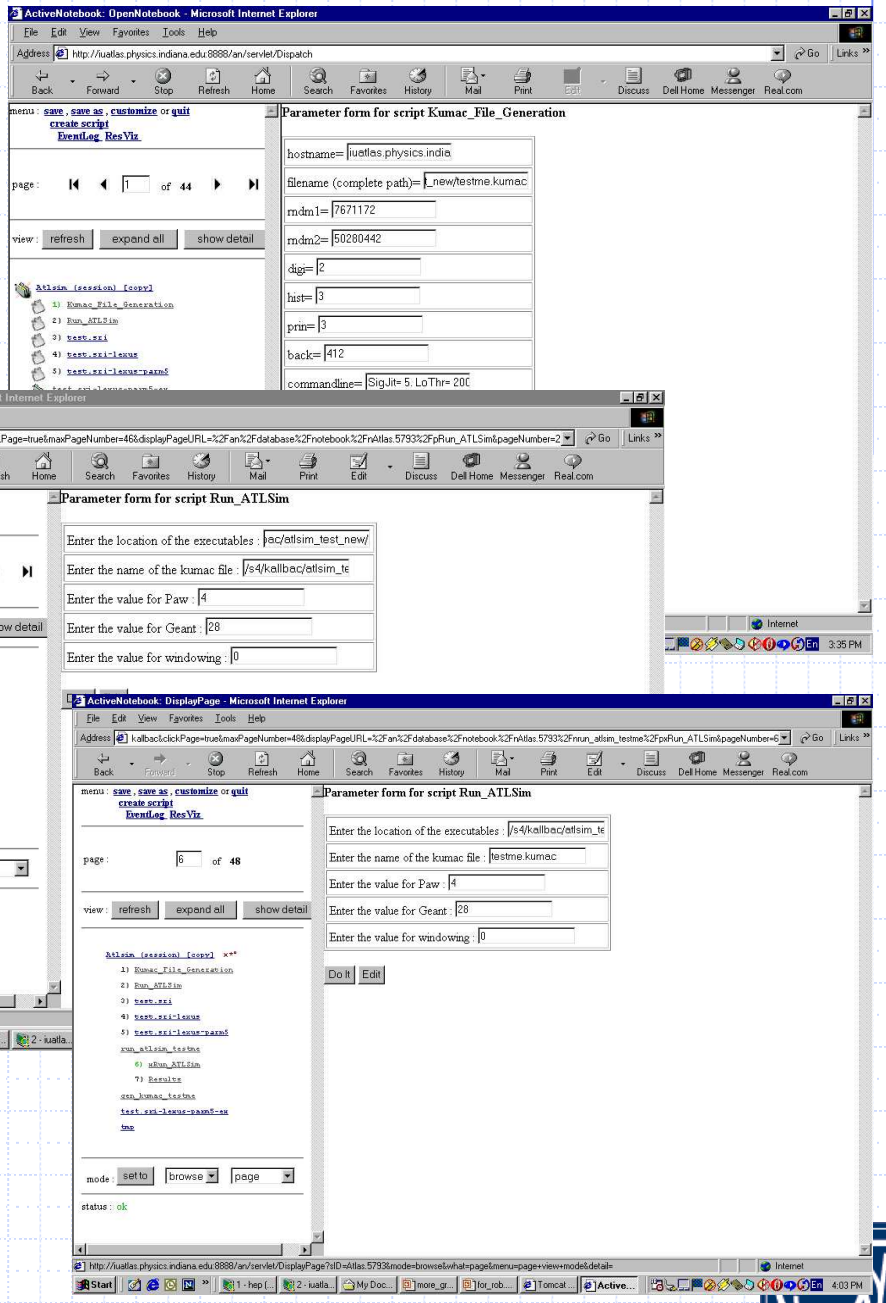
www.usatlas.bnl.gov/magda/info



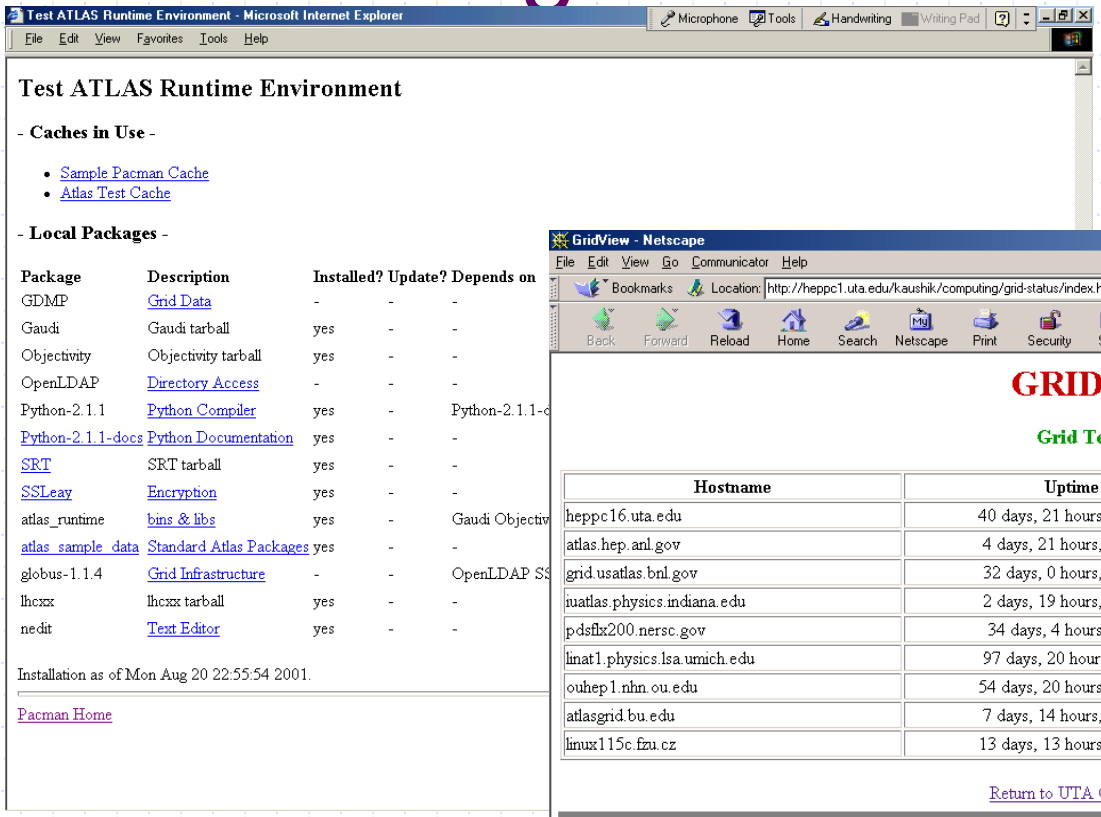
Grappa

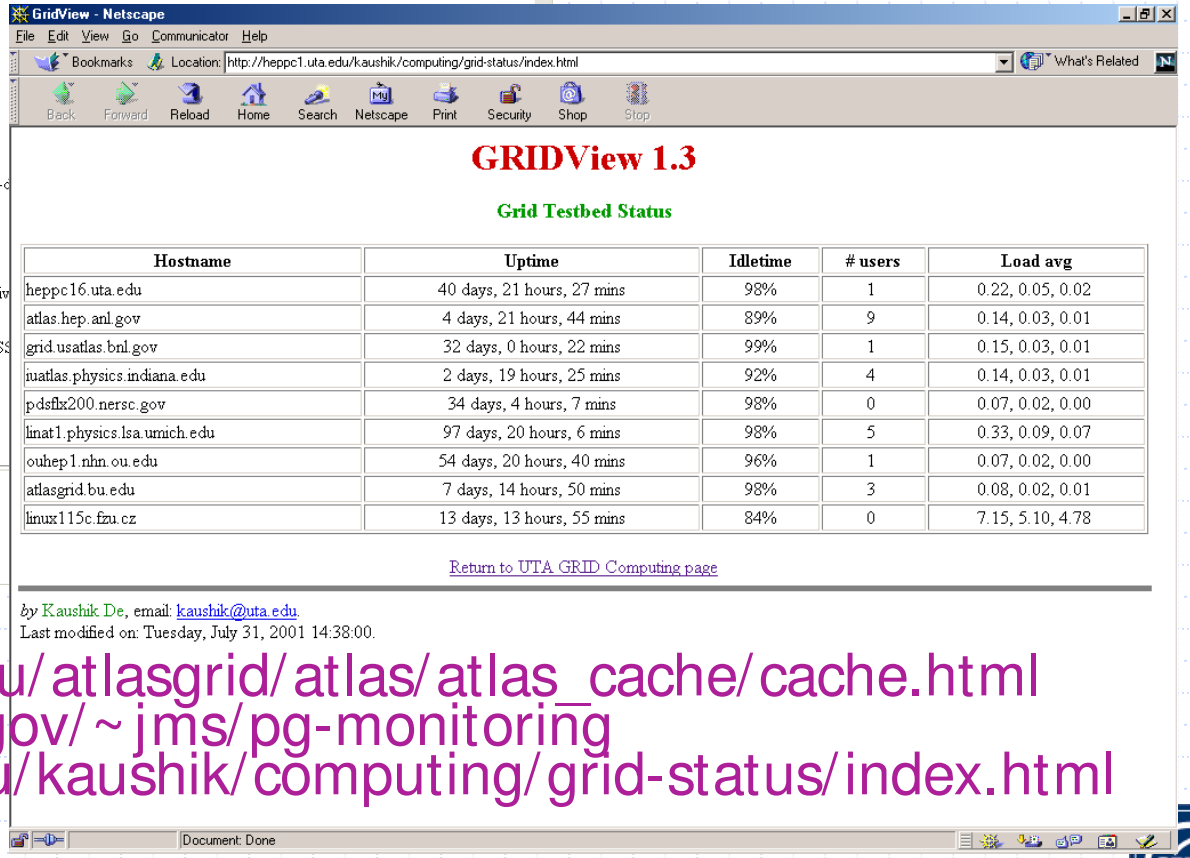
lexus.physics.indiana.edu/~griphyn/grappa/





ATLAS run time environment & monitoring





atlasgrid.bu.edu/atlasgrid/atlas/atlas_cache/cache.html
www.mcs.anl.gov/~jms/pg-monitoring
heppc1.uta.edu/kaushik/computing/grid-status/index.html

LHCb

Globus use in LHCb

- Globus-job-submit (tested, works in production) to:
  - Testbed 0
  - Csflnx01.rl.ac.uk (RAL)
  - Ccali.in2p3.fr (IN2P3)
- Don't use Globus RSL, give options on Globus-job-submit command line
- Some instability in service
- Need Globus client s/w on LXPLUS
- Globus-rcp tested, not reliable enough
- Globus-FTP tests underway NIKHEF-SARA

ALICE

ALICE GRID August Production

ALICE Physics Performance Report: Simulation Status

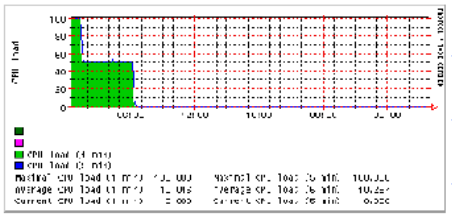
RUN	EVENT	SUBMITTER	WORKER	STATUS	START	STOP	FTP	ROOT	CONFIG	OUT	ERR	COMMENT
1	336	gridct1.ct.infn.it	alifarm9.ct.infn.it	DONE	2001-08-26 13:48:03	2001-08-26 13:49:18	ERROR	disk	show	show	show	show
1	337	gridct1.ct.infn.it	alifarm9.ct.infn.it	DONE	2001-08-26 14:08:14	2001-08-26 14:09:13	ERROR	disk	show	show	show	show
1	338	lxbatch028.cern.ch	lxbatch028.cern.ch	DONE	2001-08-27 10:47:54	2001-08-27 10:49:40	ERROR	disk	show	show	show	show
1	339	lxbatch106.cern.ch	lxbatch106.cern.ch	DONE	2001-08-27 15:42:02	2001-08-27 15:43:27	ERROR	dis				
1	340	alifarm01.to.infn.it	alifarm01.to.infn.it	DONE	2001-08-28 12:31:05	2001-08-28 12:31:19	ERROR	dis				
1	341	alifarm01.to.infn.it	alifarm01.to.infn.it	DONE	2001-08-28 12:33:58	2001-08-28 12:34:55	ERROR	dis				
1	342	gridct1.ct.infn.it	alifarm9.ct.infn.it	DONE	2001-08-28 12:40:28	2001-08-28 12:41:58	ERROR	dis				
5	18	juno.nikhef.nl		ERROR	2001-08-28 14:15:28	2001-08-28 14:15:42	not done	fil				
1	343	testbed001.cern.ch		QUEUED	2001-08-28 14:47:38		not done	-				

Client 07 CPU load

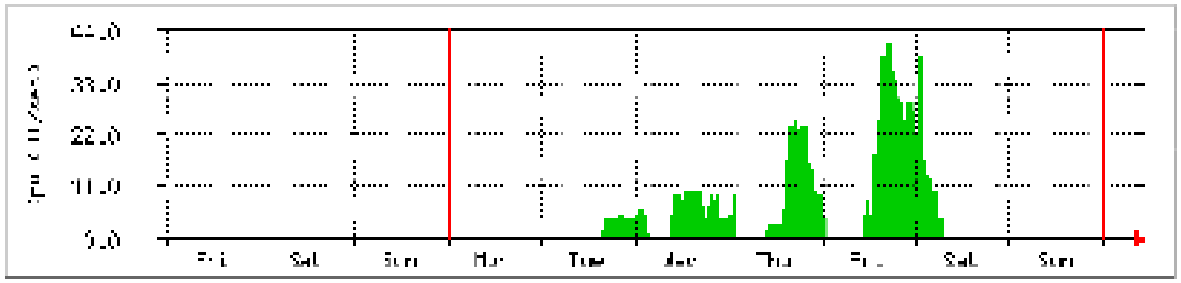
System: alclient07
Maintainer: Mario.Sitta@to.infn.it

The statistics were last updated: **Mon Aug 13 09:50:10 2001**

'Daily' graph (5 Minute Average)

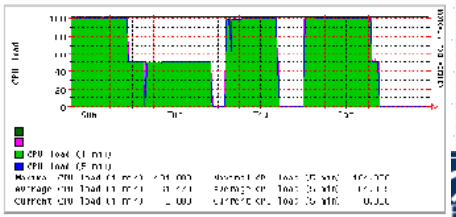


'Weekly' Graph (30 Minute Average)



Max Cpu: 41 UI/sec. Average Cpu: 3 UI/sec. Current Cpu: 0 UI/sec.

'Weekly' graph (30 Minute Average)

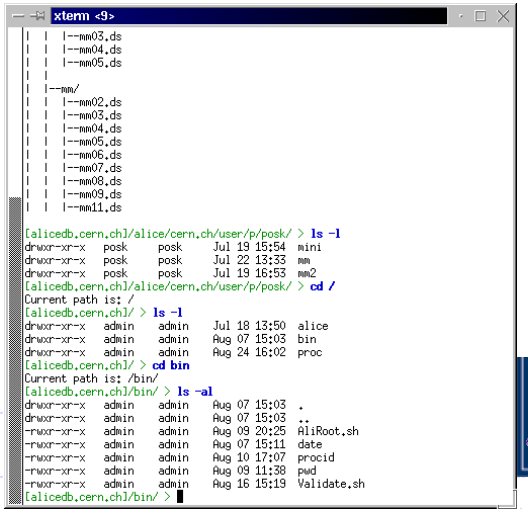


ALICE GRID

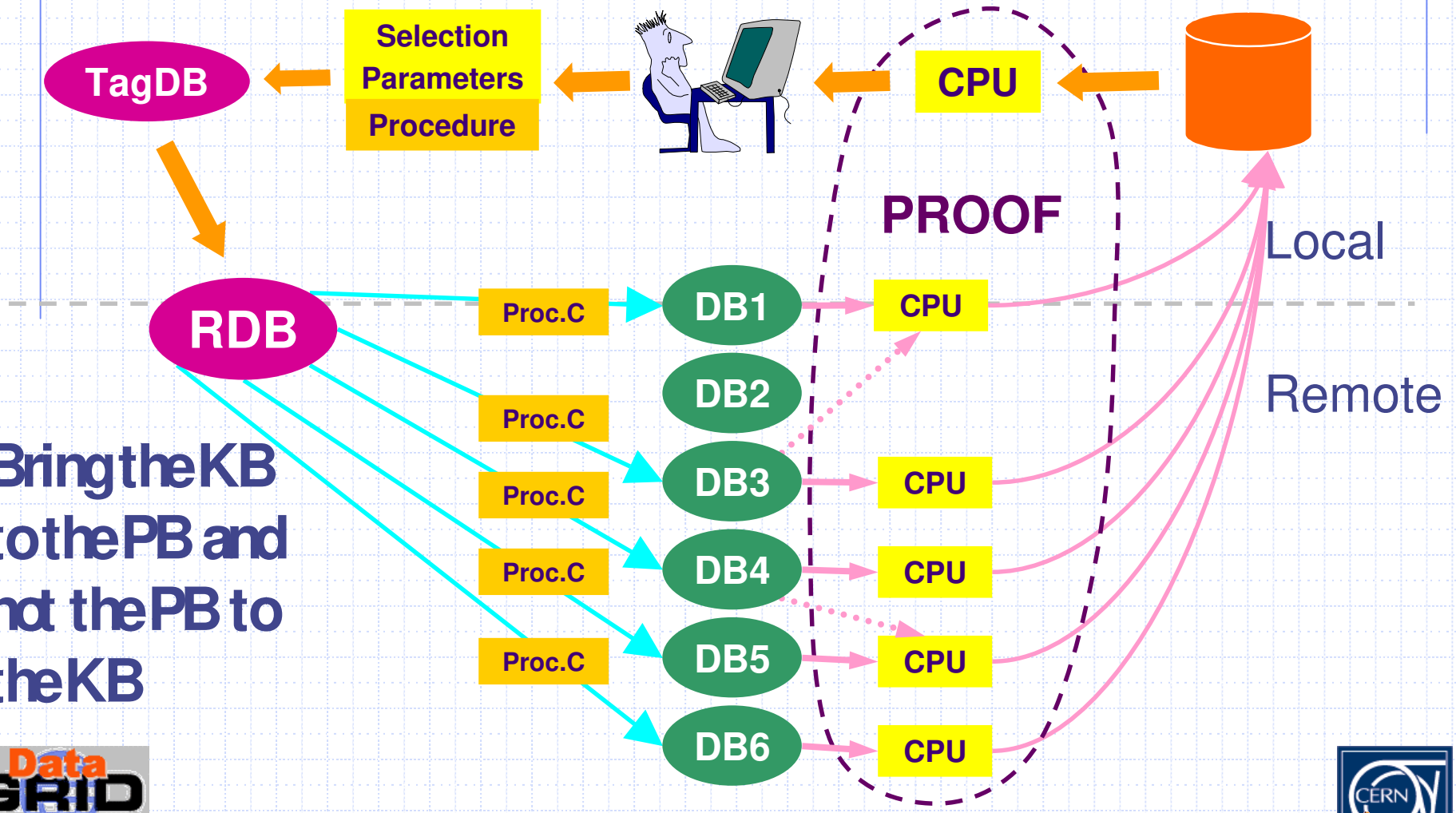
- File Catalogue as a global file system on top of a RDB
- TAG Catalogue, as extension
- Secure Authentication
  - Interface to Globus under development
- Central Queue Manager ("pull" vs "push" model)
- Monitoring infrastructure

The CORE GRID functionality

- http://alien.cern.ch



DataGrid & ROOT



Conclusion

- Time is very tight for validation before the review
- The release process will be of fundamental importance for the further development of the project
  - We have to follow it closely
- Some work needs to be done to integrate and streamline products and procedures
  - But for this you need real users!
- Some work needs to be done on the user side to provide a more usable/useful picture to developers
- A huge potential is there, up to us to exploit it correctly!