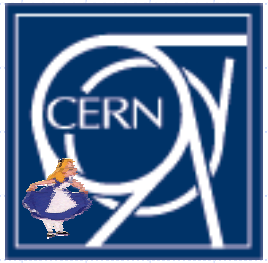
Application status

F.Carminati

11 December 2001



Validation plan timeline – new

October 30 2001

Integration assessment
1 person / application

Application integration + Test plan
1 person / application

Software integration

Party!

8 15 22 29 5 12 19 26 3 WP8 WP9 WP10

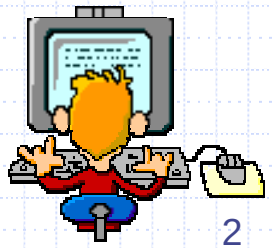
Doc review
WP1 M.Reale
WP2 J.Templon
WP3 I.Augustin
WP4 A.De Salvo
WP5 JJ.Blaising

TWG + WP8-10 General Meeting
Validation plans presented

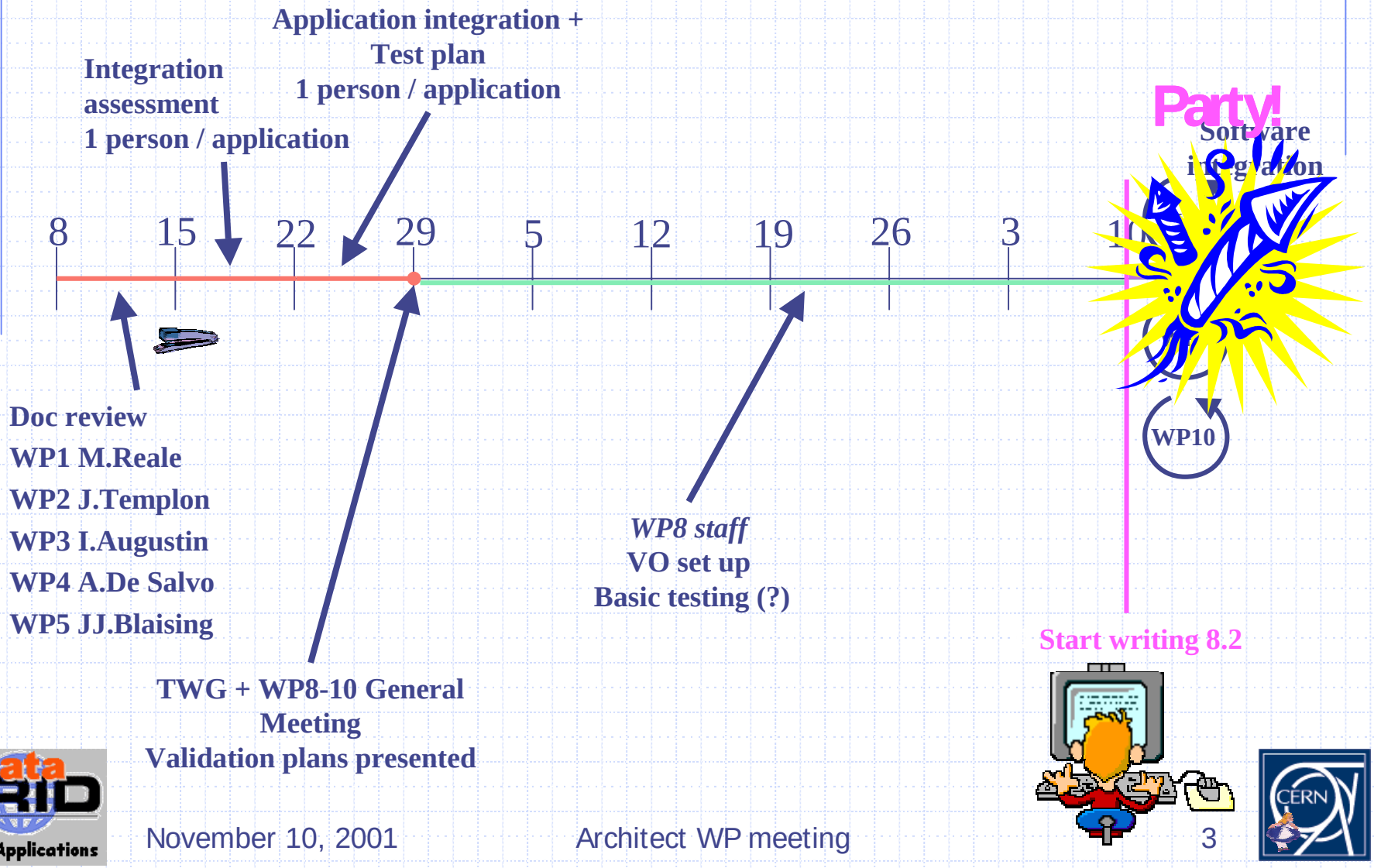
WP8 staff
VO set up
Basic testing (?)

Message to WP9 & WP10

Start writing 8.2



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

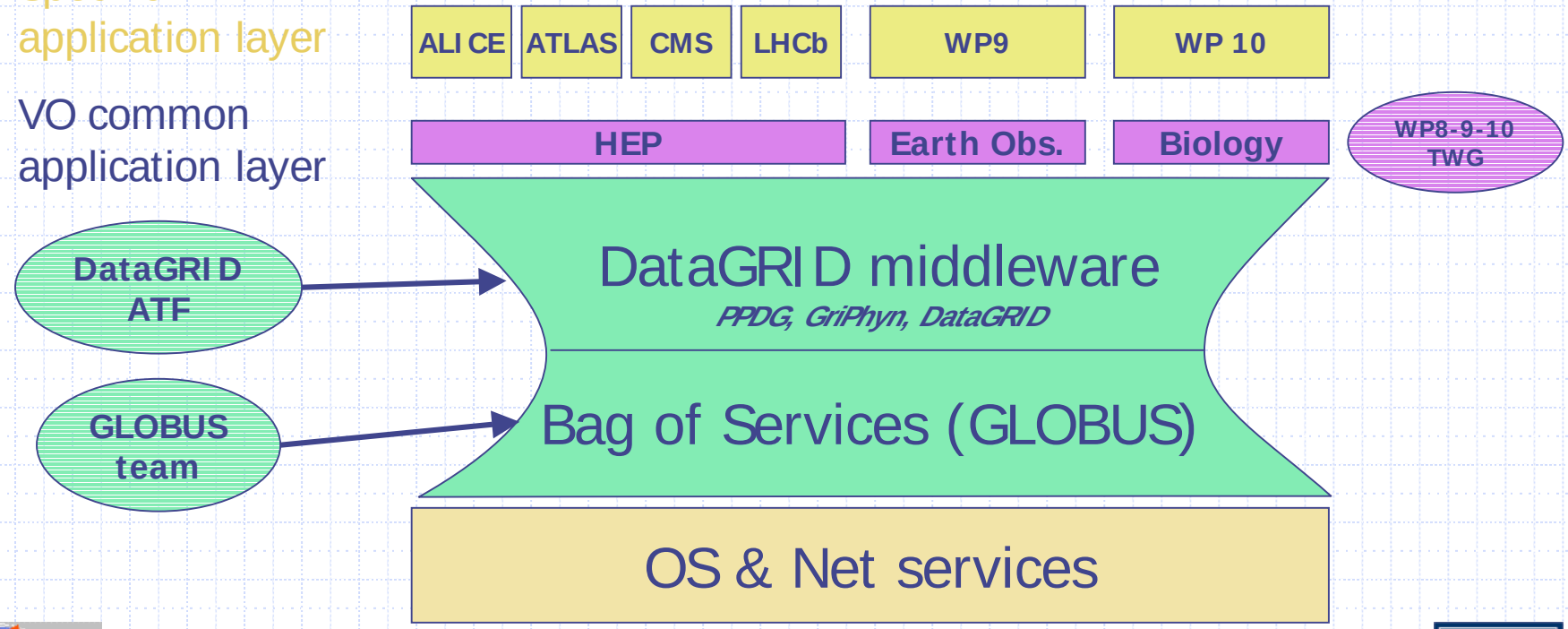
- 8.2 will contain all we can do from today to Christmas
  - It is very important that now we have the access as soon as possible
  - This week one person/application
  - Next week the validation groups
- For the review we may have one more month of testing to report
  - But WP6 must stand by supporting 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

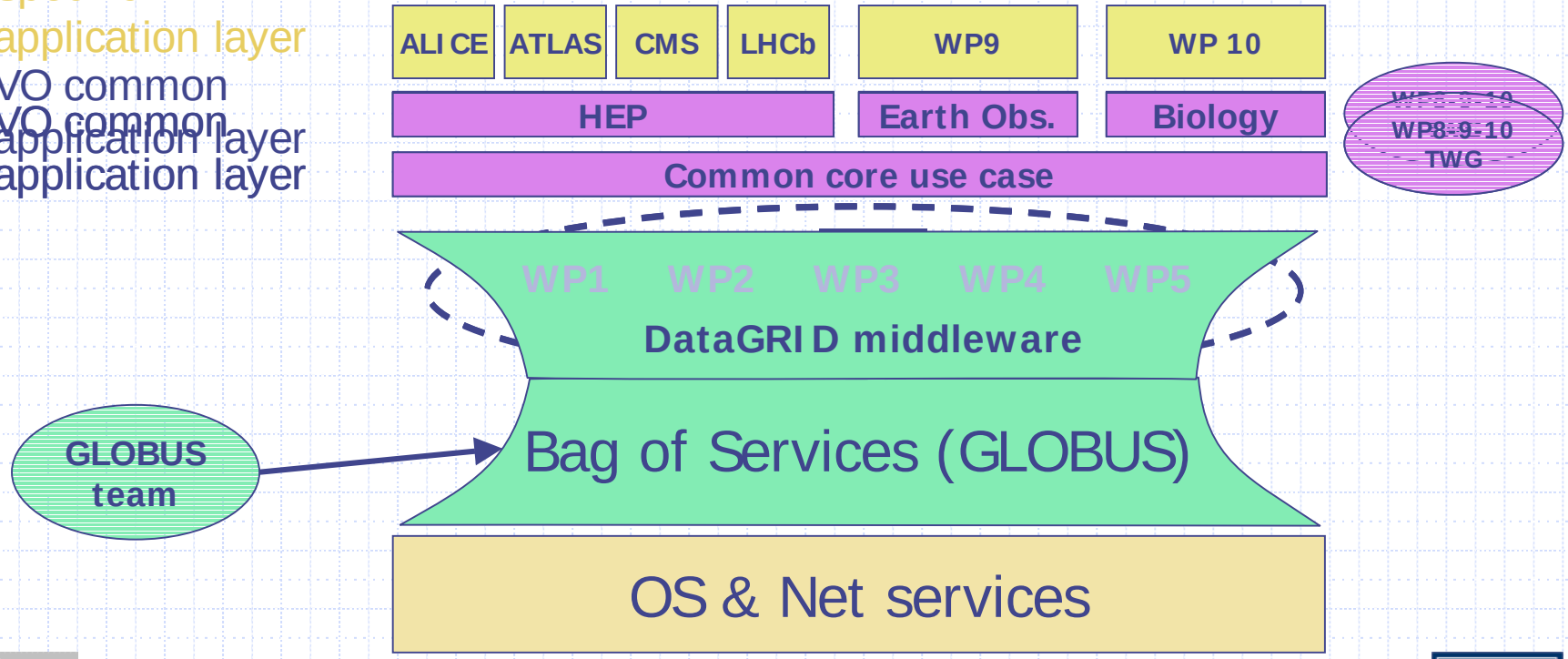
Drive the easier to define

Drive the easier to define

Specific application layer

VO common 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?

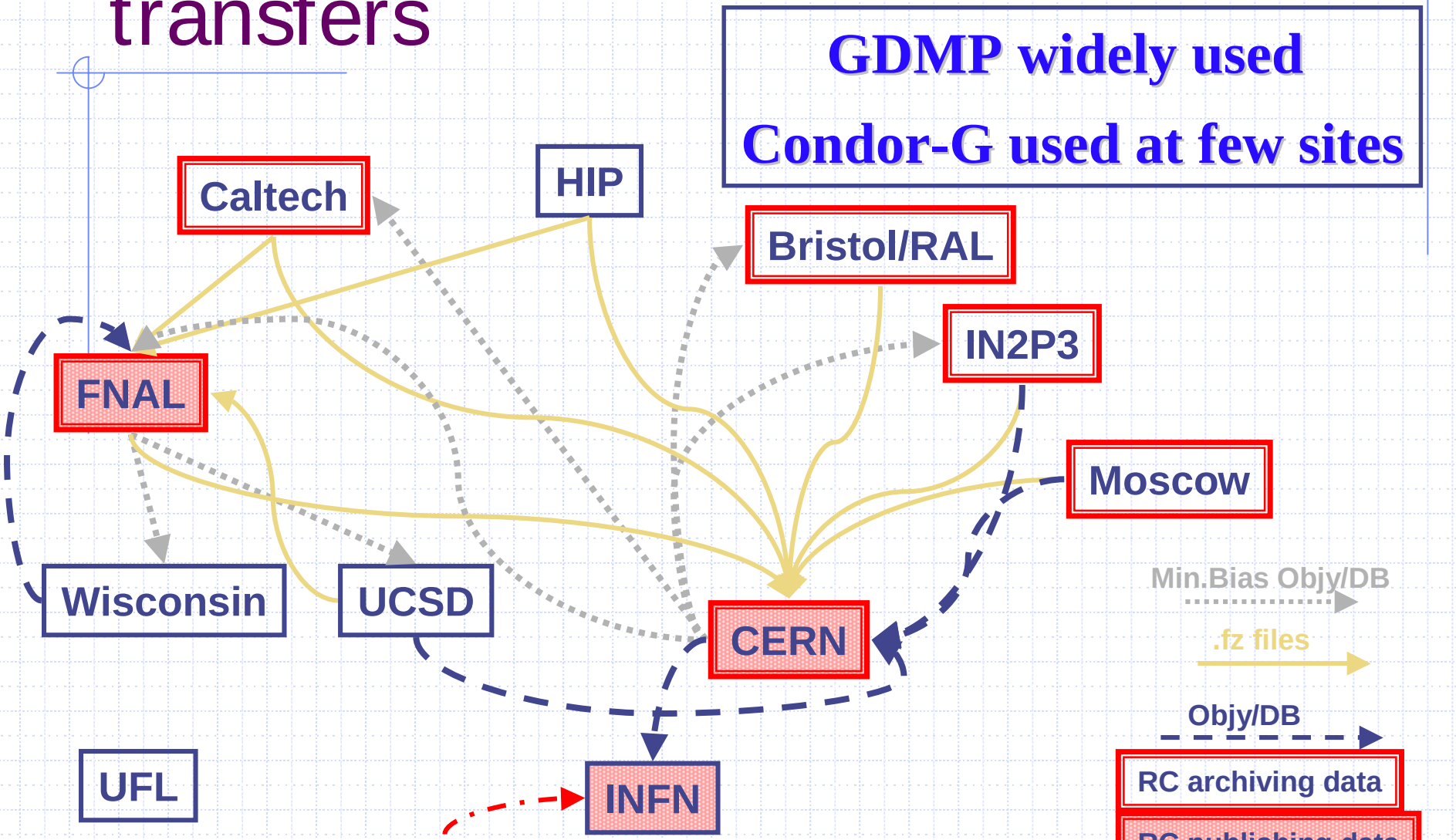
- The LCGP (Lhc Computing Grid Project) will require us to work on common projects
- The HICB (intergrid coordination board) expects proposal from the experiments
  - It would be ***MUCH*** smarter to provide a single core use case
  - Instead of *competing* one with the other
- The different GRID projects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

Experiment activities

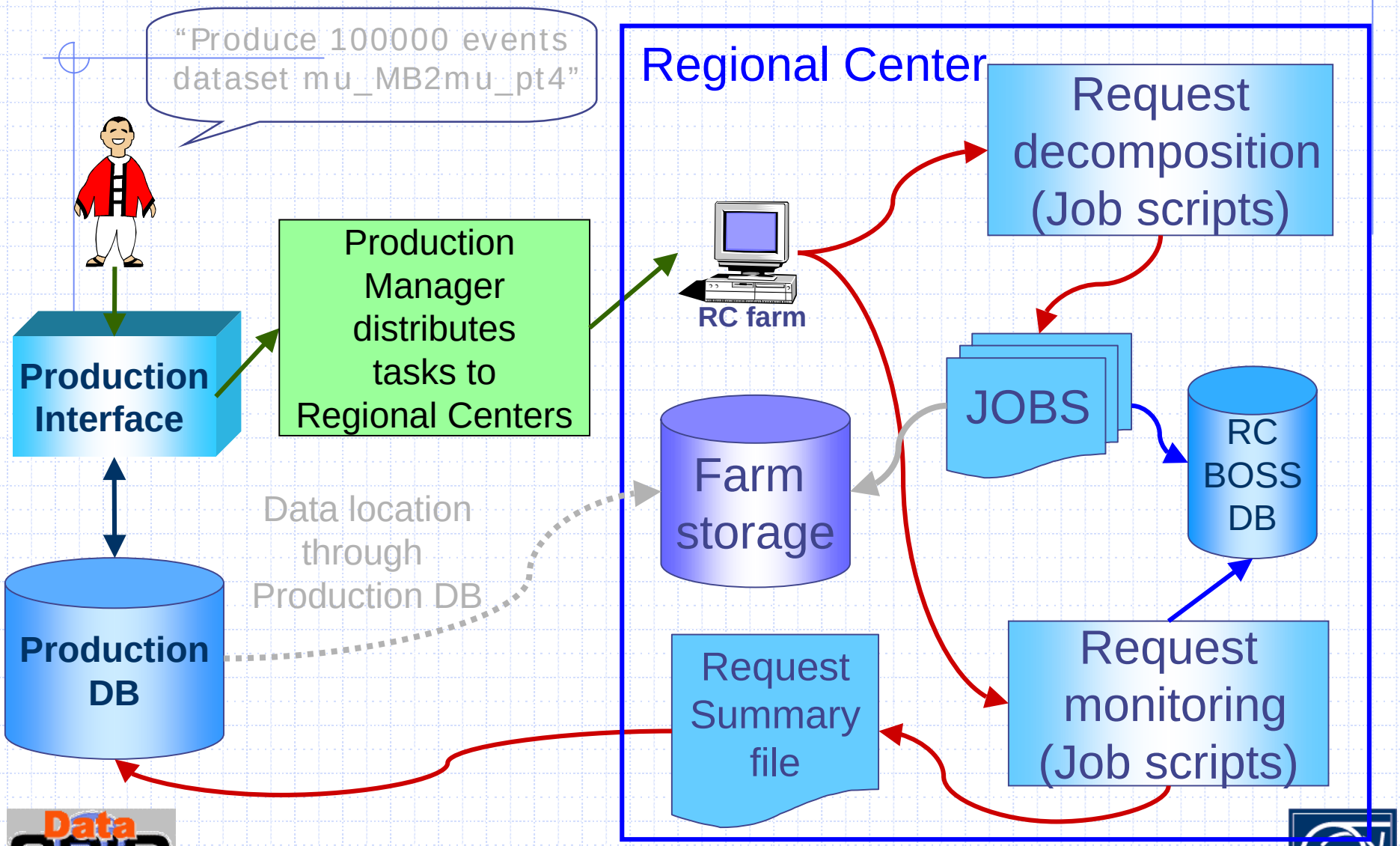
- There is a quite large expertise in the experiments about GRID
- Experiments are already using GRID tools in production
- It is important that this experience is put to work for DataGRID providing qualified feedback

CMS

CMS Production Sites, Data transfers

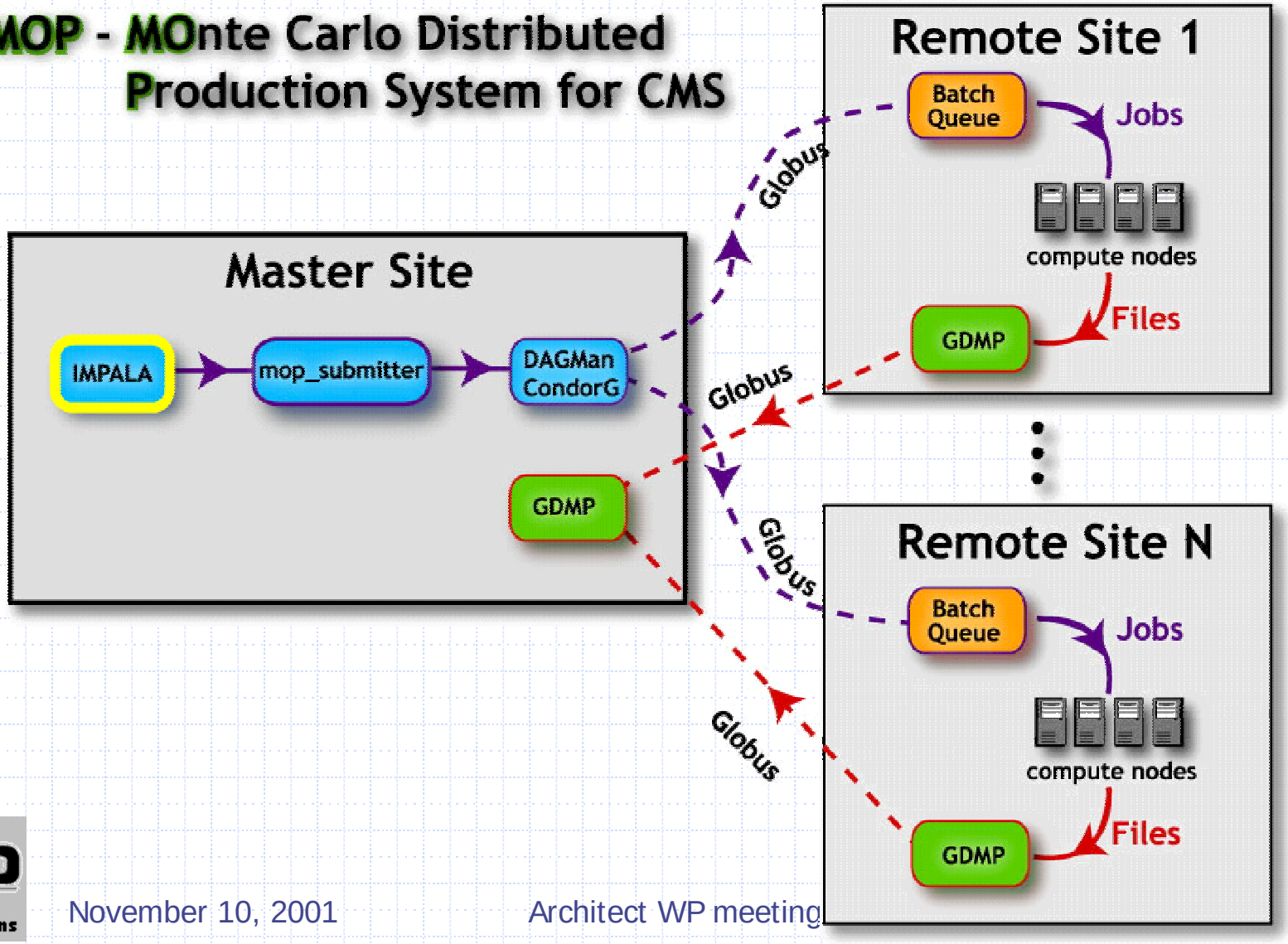


Job scripts – BOSS integration

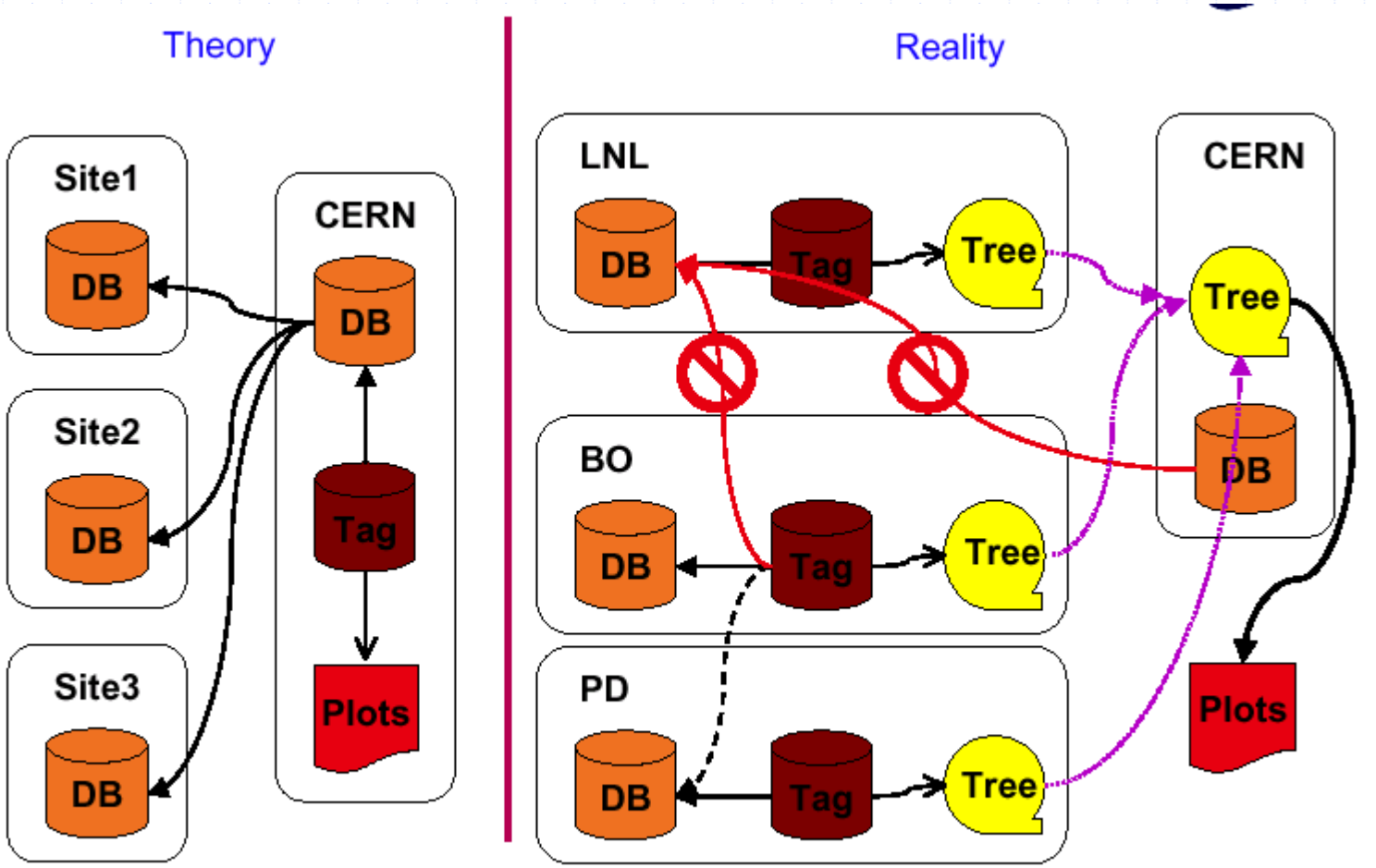


CMS - MOP

MOP - MOnte Carlo Distributed Production System for CMS

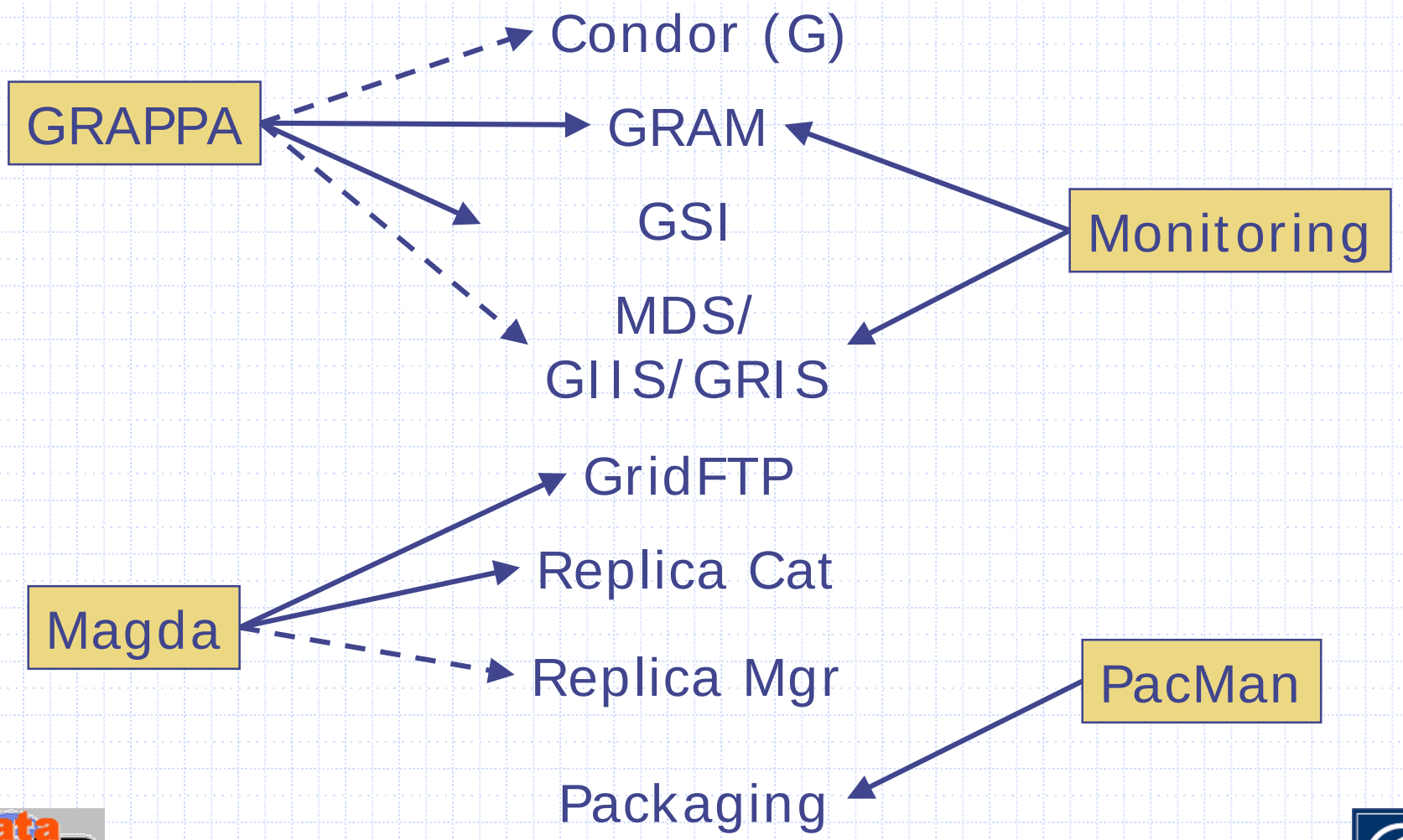


Distributed DB TAG Analysis



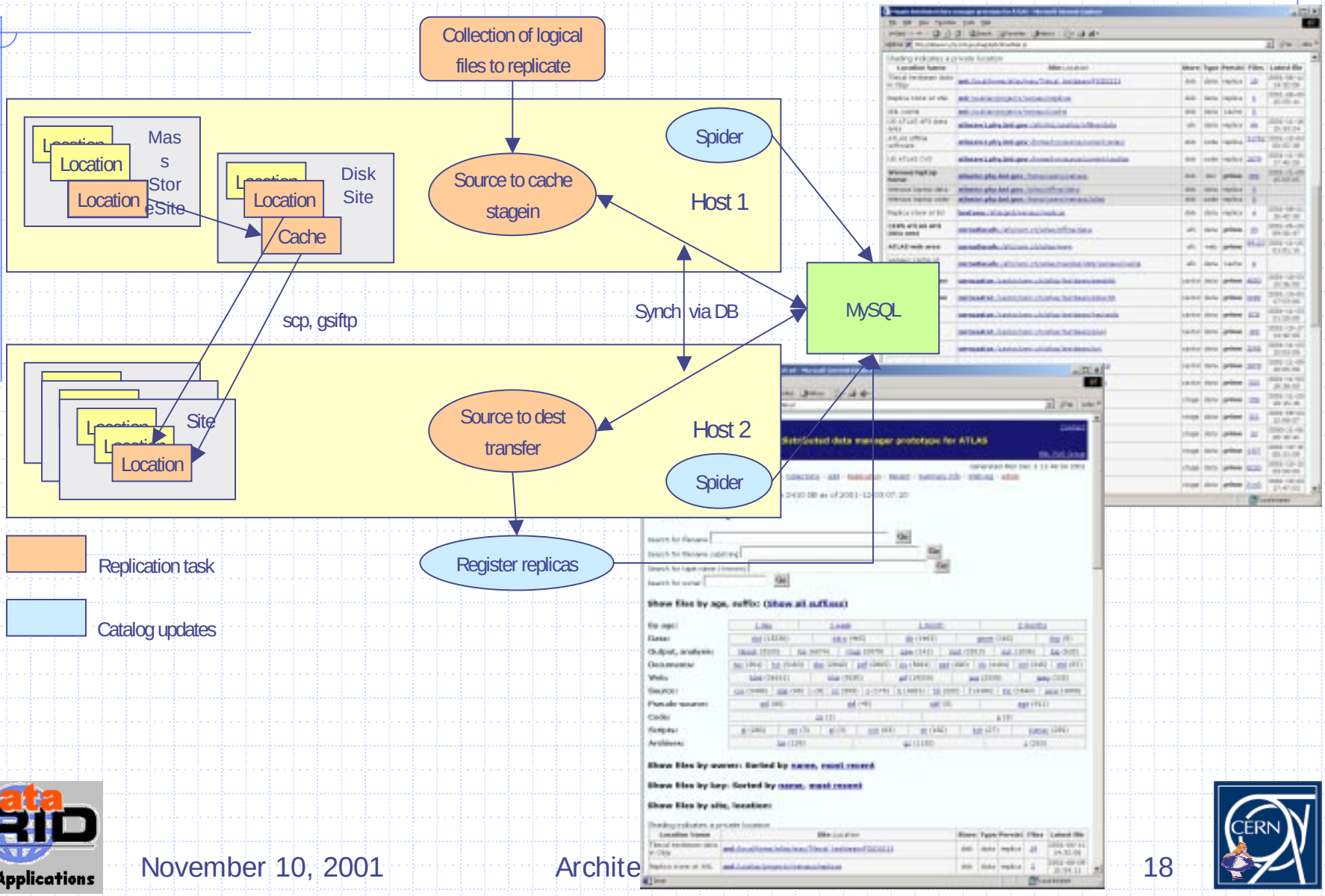
ATLAS

USAtlas Tool Development



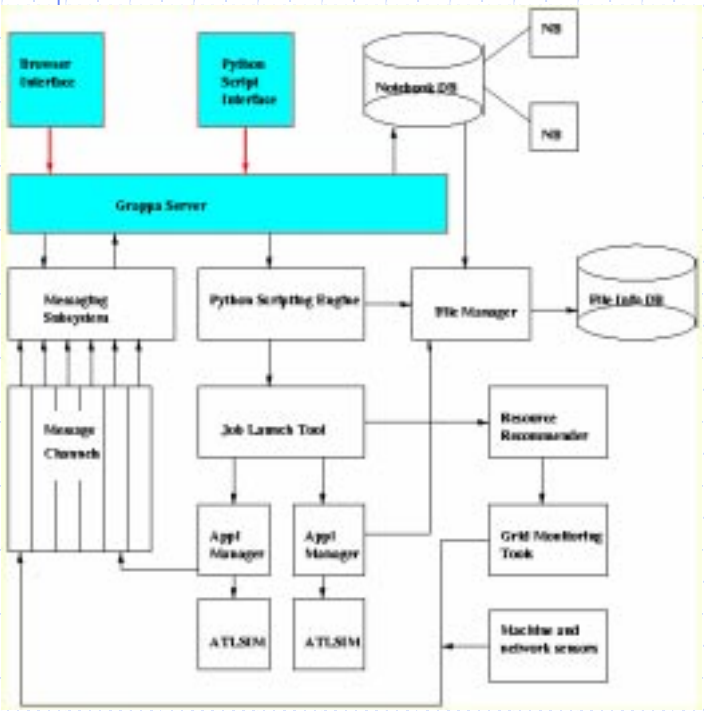
Magda Architecture Diagram

www.usatlas.bnl.gov/magda/info

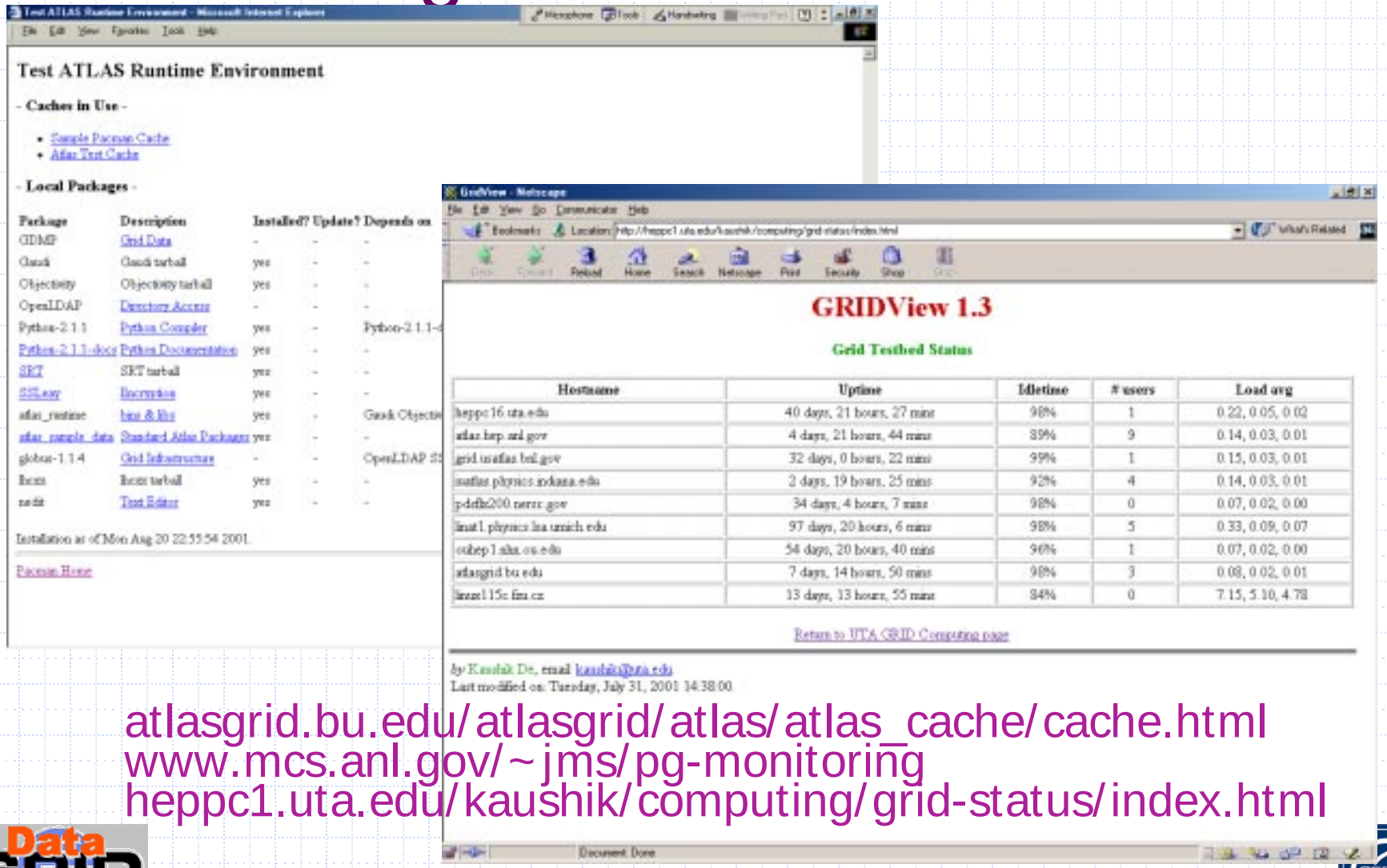


Grappa

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

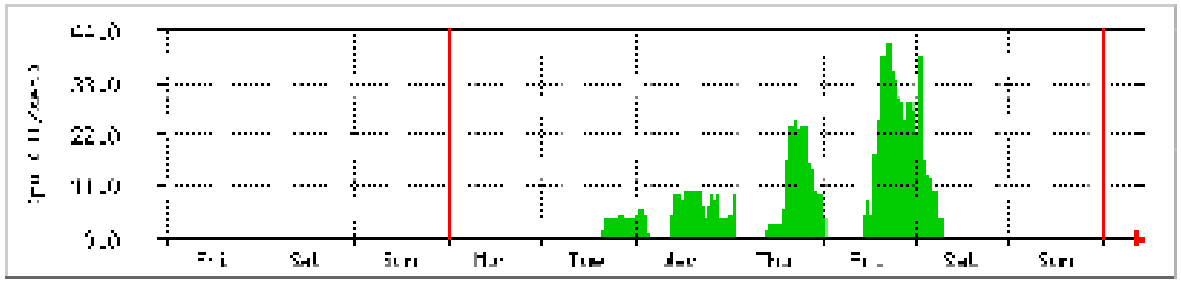
ALICE

ALICE GRID August Production

ALICE Physics Performance Report: Simulation Status

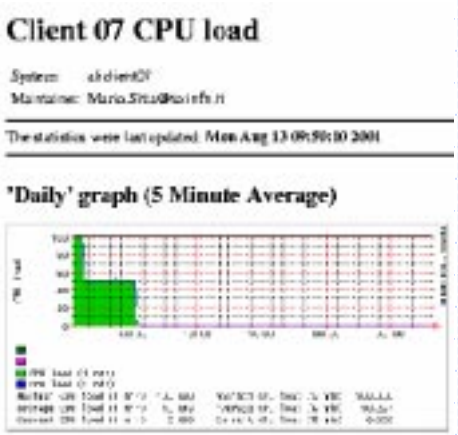
RUN	EVENT	SUBMITTER	WORKER	STATUS	START	STOP	FTP	ROOT	CONFIG	OUT	ERR	COMMENT
1	336	gridct1.ct.infn.it	alifarm9.ct.infn.it	DONE	2001-08-26 13:48:03	2001-08-26 13:49:18	ERROR	disk	show	show	show	show
1	337	gridct1.ct.infn.it	alifarm9.ct.infn.it	DONE	2001-08-26 14:08:14	2001-08-26 14:09:13	ERROR	disk	show	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	-				

'Weekly' Graph (30 Minute Average)



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

Client 07 CPU load



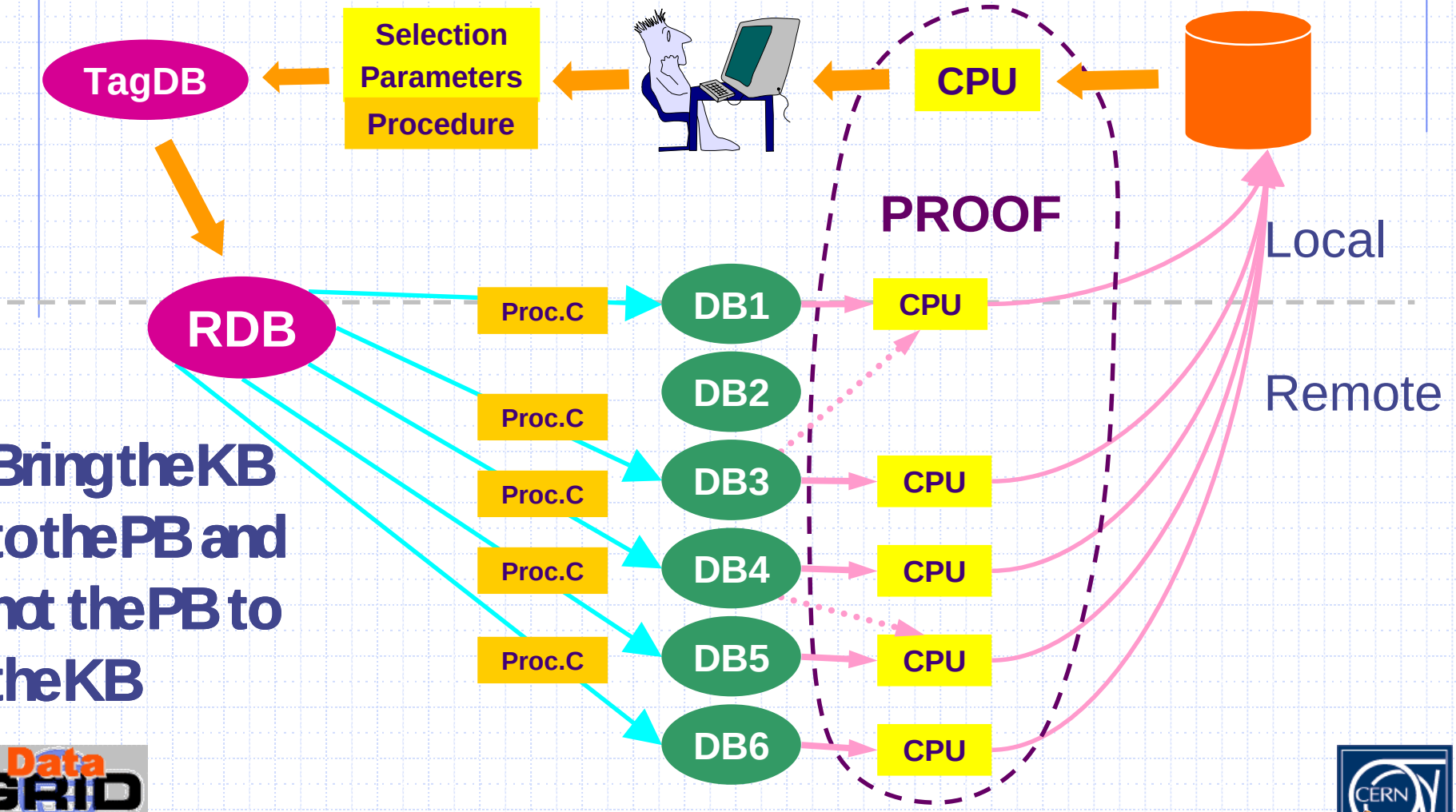
ALICE GRID

- 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!