

Earth Sciences Applications for EGEE

IPSL: M. Petitdidier, C. Boonne, D. Weissenbach,

CRS4: G. Lecca, DKRZ: J. Biercamp, S. Kindermann,

ESA-ESRIN: L. Fusco, J. Linford, IPGP: JP Vilotte, G. Molguiny

KNMI: W. Som de Cerff, Nikhef: S. Grijpink, SCAI: M. Lob,

UTV: F. del Frate, UNINE: P. Renard

EARTH SCIENCES

•COMMUNITY

Earth Observations: ESA(IT), IPSL(FR), KNMI(NL), UTV(IT), SRON(NL), RIVM(NL)

Climate: DKRZ (DE), BADC(UK), IPSL(FR), KNMI(NL) (information)

Solid Earth Physics : IPGP(FR), laboratory (Munche, DE)

Hydrology: UNINE (CH), CRS4(Sardaina), Laboratory in Tunisie

Geosciences:CGG(FR)

VIRTUAL ORGANISATION

CERTIFICATES: large delay for some users

VO:

ESR (Earth Sciences Research): at Sara(NL) since the end of July

VO Manager: W. Som de Cerff(KNMI); VO administrator:T. Trompert (Sara)

Connection problem between the registration at CERN and the VO manager, solved only on 4 October.

7 persons registered and at least 4 not yet registered waiting for certificates or being registered at CERN before the 4 October-they need to do it again.

EGEODE(Expanding GEOsciences on Demand): being created at IN2P3 (Lyon, FR) since a few days

VO Manager: D. Thomas (CGG)

ES ORGANISATION

Large variety of partners as it concerns the applications and Grid experience

⇒ Development of tools to collaborate, discuss and solve common problems, and share knowledge

➤ The **ESR web site** is a Twiki site that permits communication and collaboration between the ES partners.

<http://datagrid.nadc.nl/twiki/bin/view/ESR/WebHome>

➤ **Phone conference** on monday (14h-15h) every two weeks (2)

➤ Creation of **temporary working groups** about: Metadata access, MPI and, software installation and licensing like idl, fortran77 and 90, Geocluster

➤ The metadata and software installation **WG** have proposed some actions and take some decisions (see Twiki site)

ES SITES

IPSL + IPGP: LCG2 deployed on UI, CE and SE with the help of the French ROC. Administrator: David Weissenbach (IPSL)

The site has belonged to the test zone since October 6.

ESA: Cluster of 8PC By the end of the week the last hardware part will be there

CGG; 10WN available

SCAI: available CE & 14 WN, SE with 0.5 TB (within October)

Sites that accept ESR VO: Nikhef, Sara, IN2P3 (Lyon) , CERN

APPLICATION DEPLOYMENT

Earth Observation:

(1) The application deployed on Datagrid is not yet entirely deployed on EGEE but it will occur in a near future.

- Delay due to registration problem, site installation, environment installation like IDL, no tools for application metadata catalogue....
- Metadata database access by SQL script and test to be done with OGSA-DAI
- IDL is installed at IPSL site; other sites will install it
- Satellite data registered on the Replica catalogue
- Lidar data registered this week

(2) The portal developed by ESRIN was upgraded and works

Climate:

Discussions DKRZ with BADC on security token exchange mechanisms

Next video conference with BADC on 1.Nov

APPLICATION DEPLOYMENT (part 2)

Hydrology:

Definition of an application and the corresponding software.

Solid Earth Physics:

Tomography application ported in June: 110 jobs

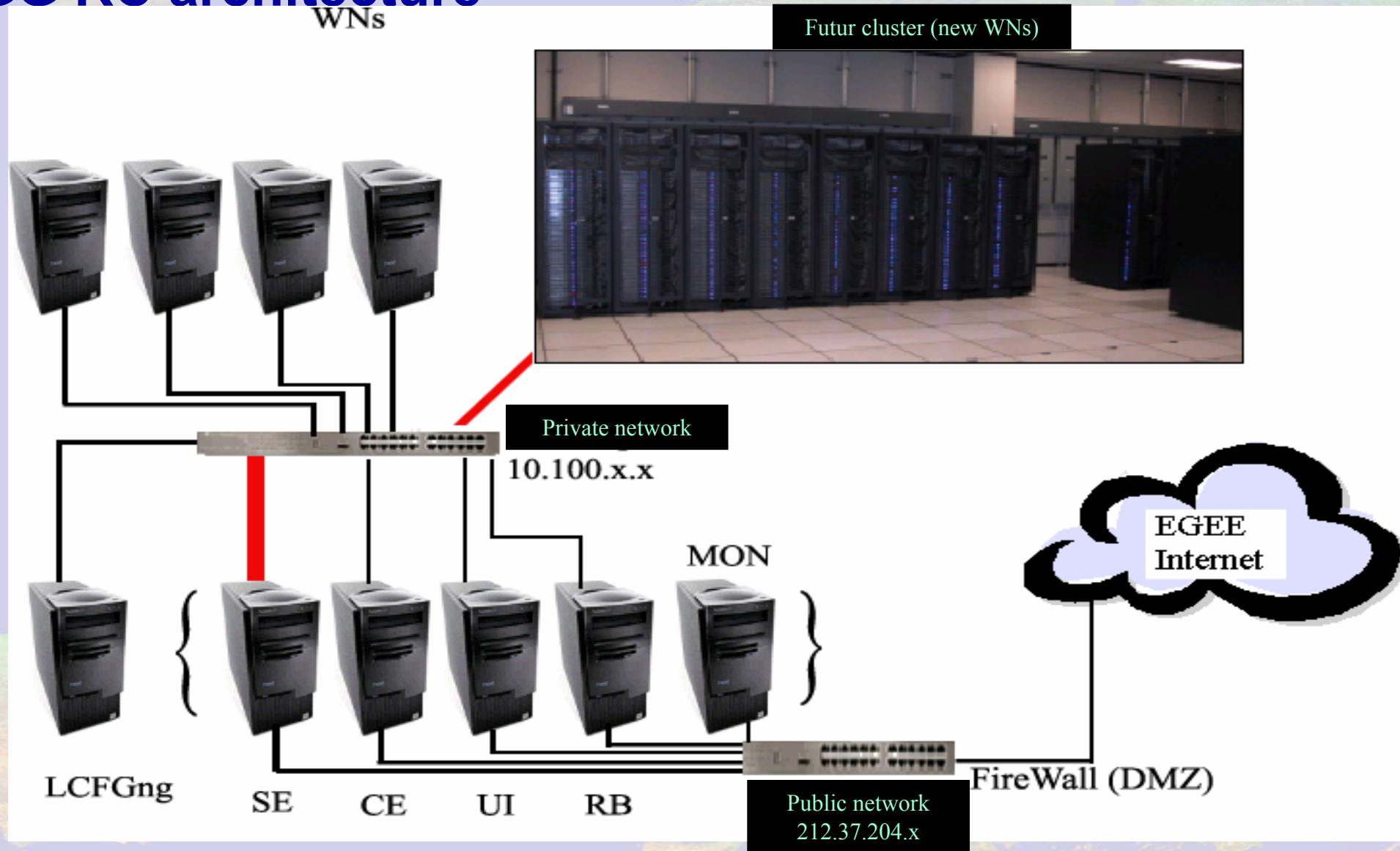
Planning for deployment of the proposed applications on 14 October

Geosciences: Geocluster

Successful Tests on Gilda and EGEE (see next slides)

Contact with Academic and industrial partners

CGG RC architecture

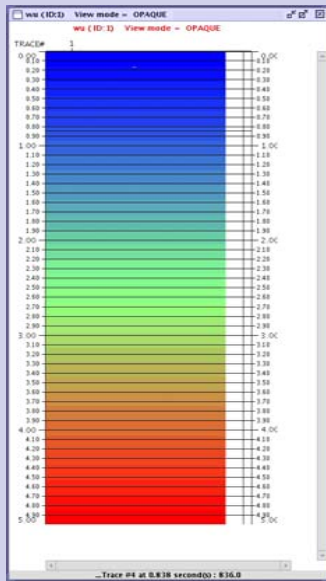


GEOCLUSTER Job submission

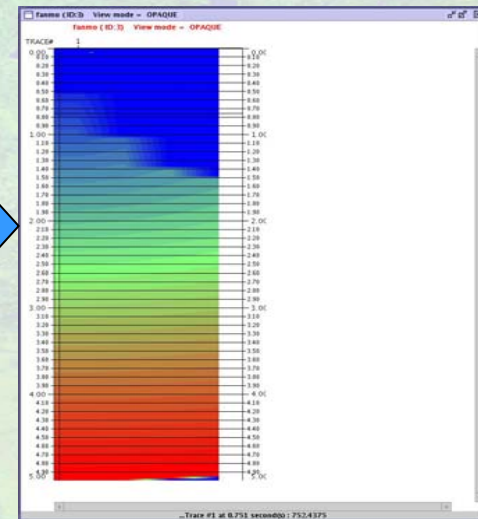
JDL +

```
edg-job-submit -vo dteam -o Status.1 egeode.jdl
edg-job-status -i $HOME/EGEODE/Status.1
edg-job-get-output -i $HOME/EGEODE/Status.1
```

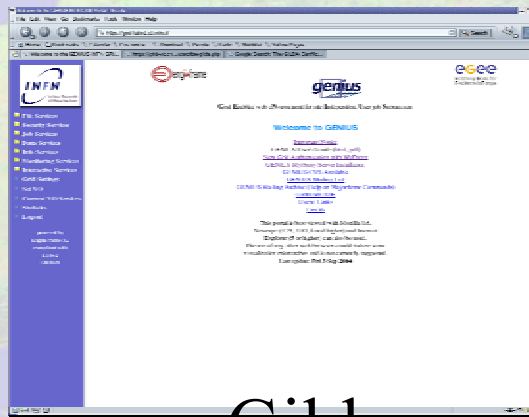
```
Type = "job";
JobType = "normal";
Executable = "run.sh";
VirtualOrganisation = "dteam";
#-----
RetryCount = 100;
OutputData={ [
OutputFile="gct_job.out.tar.bz2";
LogicalFileName="lfn:gct_job.out.tar.bz2"
] };
#-----
StdOutput = "log";
StdError = "err";
OutputSandbox = {"log","err"};
#-----
InputSandbox = {"run.sh","gct.in.tar.bz2"};
#-----
```



or



+
Geocluster
(egeode)



Gilda

REQUIREMENTS

- List with priority for each domain in the EGAAP documents
- User case for « outbound Connectivity » on september to NA3
- Actions: update of ES list and user cases, check the biomed requirement site and update it if needed

DISSEMINATION

- Demonstration with the ESRIN portal
- Oral presentation, posters to new ES domains and partners during scientific meetings