



Enabling Grids for E-sciencE

Building international e-Infrastructure

Mike Mineter Seoul, 30 August 2005

www.eu-egee.org





- EGEE view of e-infrastructure
- Some frontiers where research and development are particularly active or needed

This presentation attempts to open discussion rather than being a complete review!



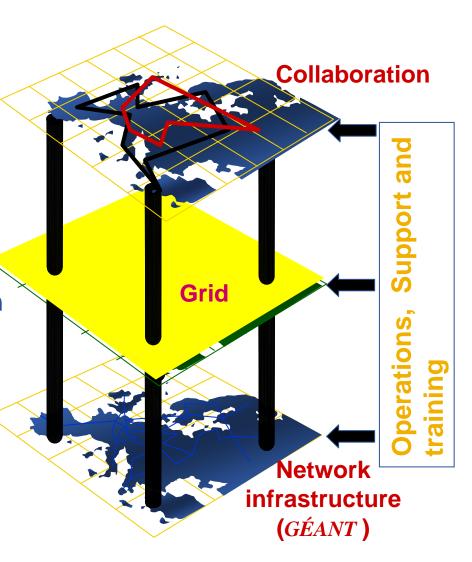
EGEE- building e-Infrastructure

Enabling Grids for E-sciencE

To underpin collaboration

 Link with and build on national, regional and international initiatives

Foster world-wide international cooperation both in the creation and the use of the e-infrastructure





Collaborating in 4 dimensions

Enabling Grids for E-sciencE

- Across geography Networks
- Across administrative domains Grids EGEE focus
- Across disciplines Semantics
- Across time Curation

e-Infrastructure: enables all these (Ok, it *will* do so!)



Policy and International Cooperation

Enabling Grids for E-science

EGEE's "NA5" activity – goals:

- To foster cooperation between EGEE and other Grid activities around the world
 - Globus Alliance, Condor
 - Training/workshop events (like this one)
- To participate in an elnfrastructure reflection group in Europe http://www.e-irg.org/
- To play a leading role in standard setting through attendance at global standard bodies such as the Global Grid Forum.
 - Grid Storage Management GGF working group -http://sdm.lbl.gov/gsm/
 - Security, Authentication: US EU cooperation
- Mutual recognition of CA's
 - Requires collaboration to establish policy and mutuality

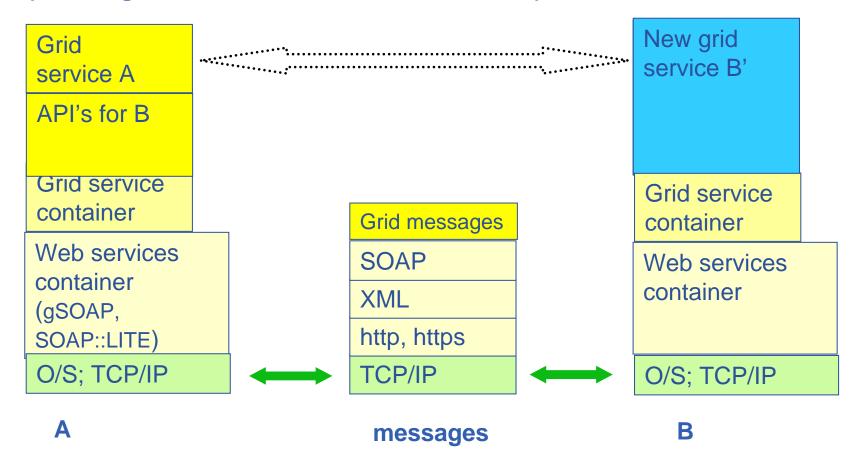


Some frontiers



Interoperability

- Using service B from service A
- Replace B with B' if:
- a) messages conform to same standard, or b) APIs are the same





Frontiers in...

Support for broader domains of research

- Increasingly see interest in humanities, social science, arts
- Service Orientation, semantic approaches will stimulate crossdisciplinary research

University research

- Campus grids, regional/disciplinary grids ...
- But for international collaboration need an international infrastructure

Using "legacy databases" – not "just" new experimental results

- Many priceless resources can be exposed by grid-enabled services
- Grid-enabled digital libraries, for example in the EU, DILIGENT
- Need to enable wider re-use of data / information gained by research

Creation of e-infrastructure

- Federation of regional, national infrastructures
- Interoperablity adopt the best development in the Grid ecosystem
- Establishing new Certificate Authorities; t-Infrastructure