



<http://www.grid-support.ac.uk>



<http://www.ngs.ac.uk>

NGS Update

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Gaining Access

NGS core nodes

- data nodes at RAL and Manchester
- compute nodes at Oxford and Leeds
- free at point of use
- apply through NGS web site
- accept terms and conditions of use
- light-weight peer review
 - 1-2 weeks
- to do: project or VO-based application and registration
- all access is through digital X.509 certificates
 - from UK e-Science CA
 - or recognized peer

National HPC services

- HPCx



- CSAR



Must apply separately to research councils

Digital certificate and
Conventional (username/ password)
access supported



Expansion

Resource providers join the NGS by

- Defining level of service commitments through SLDs
- Adopting NGS acceptable use and security policies
- Run compatible middleware
 - as defined by NGS Minimum Software Stack
 - and verified by compliance test suite
- Support monitoring and accounting

Two levels of membership

1. Affiliates run compatible stack, integrated support
2. Partners also contribute "significant resources"

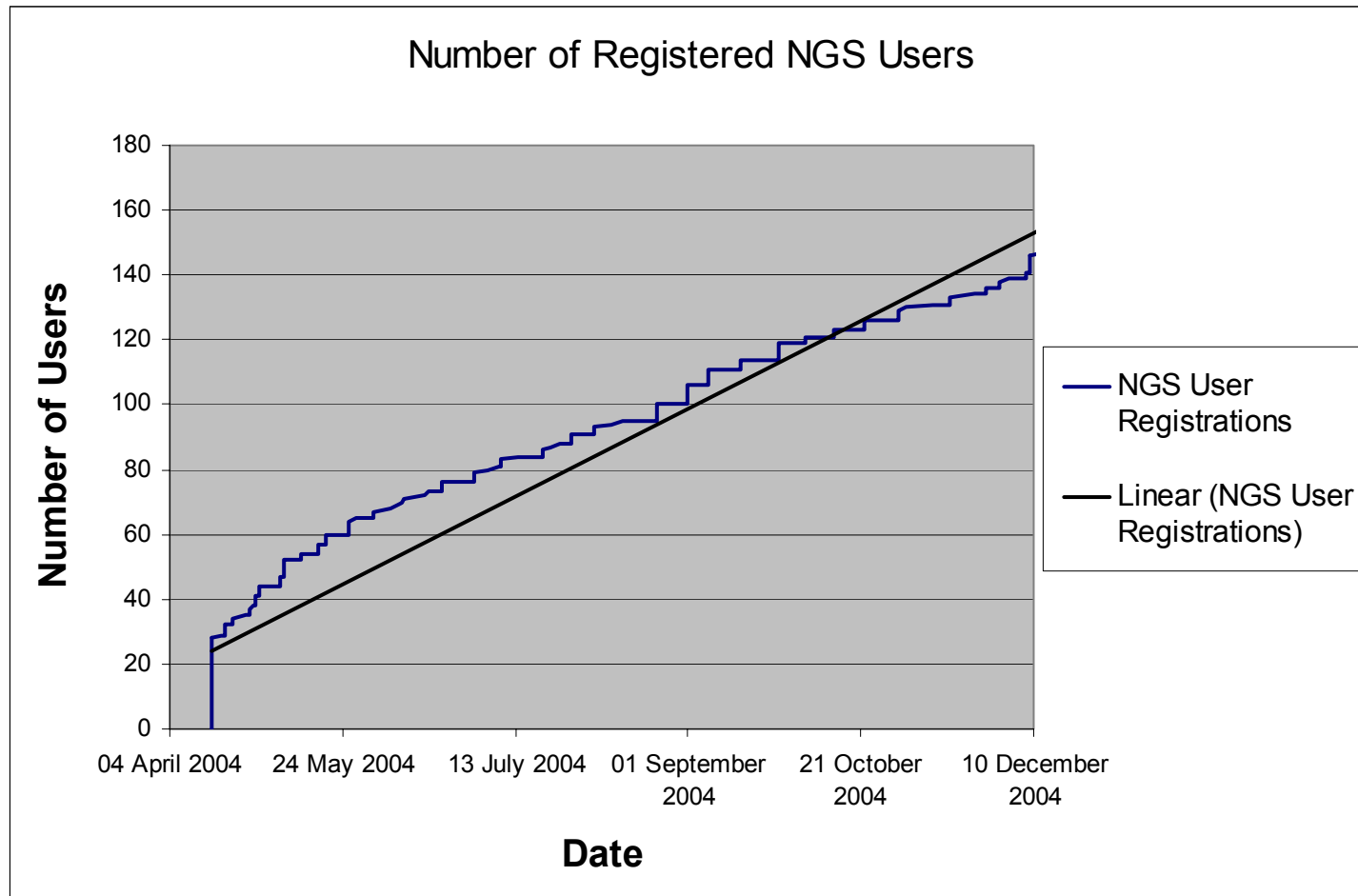
Bristol and Cardiff going through certification process now.

- supported by "buddies" and NGS-Rollout list
- useful feedback on viability of NGS Minimum Software Stack
- ratification to be considered at next GOSC board

Will solicit visualization partners in next phase of expansion



User registrations so far





NGS Core Services today

- Globus Toolkit version 2 from VDT
 - GRAM, GridFTP
- GSI-SSH
- Information Services (MDS/GIIS/GRIS)
 - Information providers from GLUE schema
 - Use BDII implementation of MDS2 (as does EGEE)
- Storage Resource Broker
 - Clients on compute nodes, Servers on data nodes
 - licensing issues (SDSC pursuing)
 - to do: MCAT replication and failover
- Oracle 9i (only on data nodes)
 - NGS DBA's maintain infrastructure, users populate
- Experimental OGSA-DAI service on Manchester data node



NGS Core Services: other

Operated by *GOSC* for NGS and UK e-Science programme

In production:

- Certificate Authority
- Information Services (MDS/GIIS)
- MyProxy server
- Integration tests and database
- Cluster monitoring
- LCG-VO

In testing:

- VOMS
- LCG Resource Broker
- Portal

In development:

- Accounting
 - GGF Usage Record standard for interchange
 - using software from MCS project and TeraGrid
- Certification tests based on GITS; looking at integration with TeraGrid's INCA

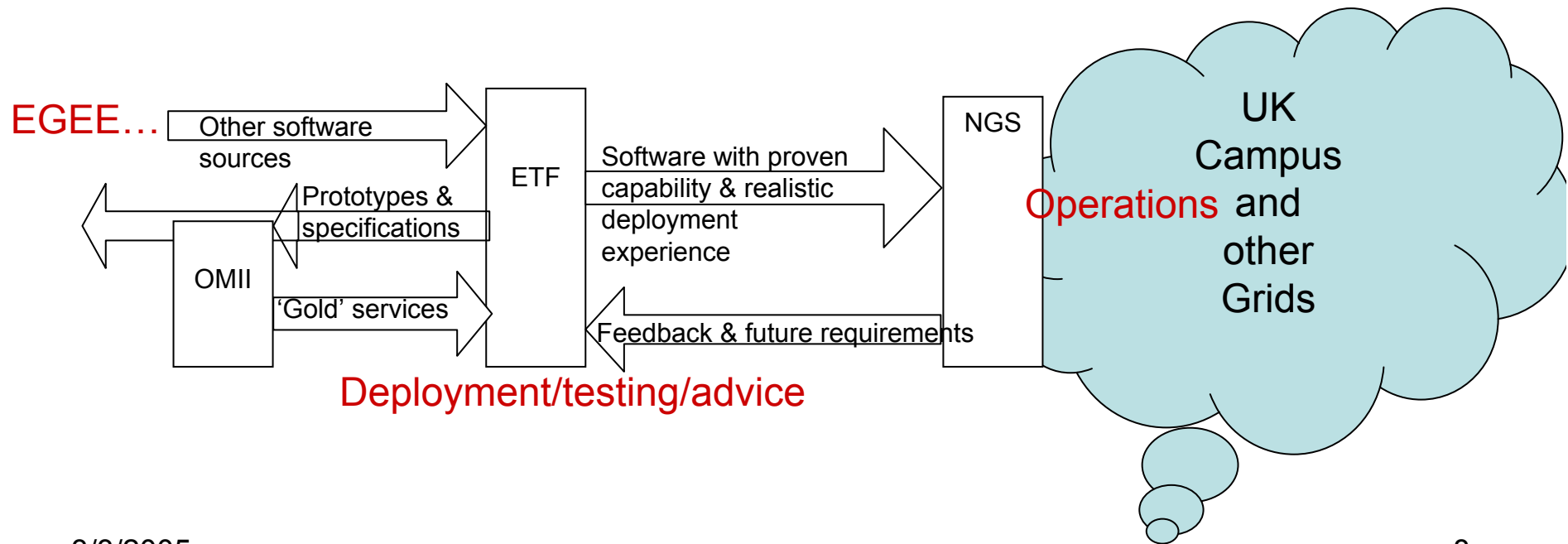


Summary of Recent Developments

- NGS newsletter
- OMII helpdesk
- Resource Broker (LCG) available for early adopters
- TeraGrid
 - UK certificates accepted on TeraGrid
 - Looking at INCA monitoring with Jenny Schopf
- Trial of RUS accounting software from MCS project
 - using GGF Usage Record draft standard (as EGEE)
- First NGS user induction course in March 2005
- Increasing demands for visualization facility, advance reservation, and internet access for compute jobs
 - requirements from RealityGrid, Integrative Biology and others

Managing middleware evolution

- Important to coordinate and integrate this with deployment and operations work in EGEE, LCG and similar projects.
- Focus on deployment and operations, NOT development.





Decisions ahead

- Originally hoped for Web services by Easter 2005; clearly late
 - Contenders: gLite, GT4, OMII
 - ETF evaluations of these in progress
- No demand for complete LCG stack, but some capabilities (VO management, Resource Brokering) urgent



Discussion

Can NGS and GridPP usefully collaborate?

- On gLite evaluation?
- gLite deployment?
- VOMS?
- Resource Broker?
- Anything else?