

Una iniciativa Grid Nacional en España en el marco de EGI

Ibergrid

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Punto de relanzamiento: CIEMAT nov 06

- Interés y experiencia en la Tecnología Grid
- EGEE-3 se está preparando ya
 - Participación cómo JRU
 - **Necesitamos un Coordinador en España** (deputy: Jorge Gomes, Portugal)
- EGI (European Grid Initiative) preparation call
 - Necesitamos un representante/negociador
 - Necesitamos una Iniciativa Grid Nacional
 - Podemos aumentar la visibilidad con Portugal (=Ibergrid)
- Debemos consolidar una iniciativa IBERGRID con Portugal
- Necesitamos (re)lanzar **una** iniciativa Grid Nacional
 - Qué es una iniciativa Grid Nacional exactamente?
 - Tenemos ya una iniciativa académica abierta (IrisGrid)
 - **Una iniciativa Grid Nacional necesita el apoyo del MEC**

Pero no olvidemos algo...

- Por qué queremos usar la tecnología Grid?
 - Porque está bien financiada?
 - O porque resuelve problemas y hace la vida mas sencilla???
 - O porque resolverá problemas y hará la vida más sencilla???????
- Que tecnología Grid se puede usar?
 - Globus2-EGEE/gLite-Globus4 (y herramientas on top)
 - Certificados
- Quién puede/debe usar hoy la tecnología Grid?
 - Mirar ejemplos en Europa
 - Comunidades científicas (grandes?)
 - Confundimos necesidad de Grid? vs clusters/supercomputers/outsourcing/servicios
- Cuál es la clave, infraestructura, middleware o aplicaciones???
- **En el 2002 (en Salamanca) proponíamos:**
 - crear una red de centros de e-Ciencia con los tres componentes balanceados, y una gestión global coordinada (pero no centralizada)

Hay que olvidar este modelo???

Iniciativa Grid Nacional

- Qué es una Iniciativa Grid Nacional exactamente?
 - Ver documento de EGEE-NA5 (o D.Cresti en EGI)
- Tenemos ya una iniciativa académica abierta (IrisGrid)
 - Funciona bien cómo foro/difusión
 - Posibilidades cómo servicios (certificados, repositorio, coordinación...)
 - Qué faltaba?
 - Reconocimiento (= interlocución MEC y nacional?)
 - Financiación de infraestructura propia y de soporte a usuarios
 - Esquema de organización con responsabilidades asignadas?
- Definición “(in) suficiente”?
 - una iniciativa Grid Nacional es la que tiene un apoyo oficial*
 - Presentación en Bruselas en 2003
 - Libro blanco de e-Ciencia , participación en e-IRG
 - Sugerencia de financiación que “toca” varios frentes:
 - SGPCyT: Acción estratégica?
 - DGI: proyectos, infraestructuras científicas, programas internacionales
 - DGPCyT: infraestructuras tecnológicas y grandes instalaciones, Redes Temáticas

European Grid Initiative

(see <http://www.eu-egi.org>)

- Coordination on European level is needed and should be **driven by NGIs**
- The first goal of the European Grid Initiative is to set up a **steering body of NGI representatives** for European grid coordination
- The **NGI representatives decide** about the operation of the European grid infrastructure and provides feedback and advice for the national grid infrastructures
- The **setup of the steering body** needs to be carefully designed

The EGI Design Study should ...

- ... **define the scope, functions, and procedures** of the European grid infrastructure body including the setup of the EGI Council (NGI representatives) and the transition from today's grid infrastructures
- ... **support the advancement of each NGI** to converge into a unique body managing its national grid infrastructure
- ... **feed-back and refine the EGI design** with the NGI representatives
- ... **support the establishment** of the European grid infrastructure body and the EGI Council

EGI Design Study Consortium

- ... is a group of **experts with knowledge and experience** needed for advancing EGI to the next level
- ... **submits the proposal** for the EGI Design Study to the European Commission
- ... **gathers input** from all entities involved in grid infrastructure operations
- ... **distils information** into documents
- ... **interacts with and seeks endorsement** from the NGI representatives
- ... **dissolves** after project end

EGI Design Study Consortium

- CERN*, Switzerland (Wolfgang von Rueden)
- CESNET, Czech Republic (Ludek Matyska)
- CNRS, France (Guy Wormser)
- CSC, Finland (Kimmo Koski)
- DFN, Germany (Klaus Ullmann)
- GRNET, Greece (Fotis Karayannis)
- GUP Linz, Austria (Dieter Kranzlmüller)
- INFN, Italy (Mirco Mazzucato)
- STFC/CCLRC, UK (Michael Wilson)

EGI vision/objectives :

- **Ensure the long-term sustainability of the European e-infrastructure**
- Coordinate the integration and interaction between National Grid Infrastructures
- Operate the European level of the production Grid infrastructure for a wide range of scientific disciplines to link National Grid Infrastructures;
- Provide global services and support that complement and/or coordinate national services (Authentication, VO-support, security, etc);
- Coordinate middleware development and standardization to enhance the infrastructure by soliciting targeted developments from leading EU and National Grid middleware development projects;
- Advise National and European Funding Agencies in establishing their programs for future software developments based on agreed user needs and development standards;
- Integrate, test, validate and package software from leading Grid middleware development projects and make it widely available;
- Provide documentation and training material for the middleware and operations. (NGIs may wish to make the material available in turn in their local language);
- Take into account developments made by national e-science projects which were aimed at supporting diverse communities.
- Link the European infrastructure with similar infrastructures elsewhere;
- Promote Grid interface standards based on practical experience gained from Grid operations and middleware integration activities, in consultation with relevant standards organizations;
- Collaborate closely with industry as technology and service providers, as well as Grid users, to promote the rapid and successful uptake of Grid technology by European industry.

Initial Consensus on:

- **Vision on EGI**
 - documented in the EGI vision paper, has been endorsed unanimously by the NGI representatives.
 - It has been recognized that creation of EGI and consolidation of NGIs is of mutual interest.
- **Involvement of NGIs during the design project**
 - The NGI Representatives requested to have a means of interaction with the EGI Design Project. An EGI Design Project Advisory Board consisting of NGI representatives will be created to accompany the EGI design project during the whole project duration.
 - Participating countries will formally appoint their representative in the EGI Design Project Advisory Board.
 - The EGI design project will organize a series of workshops for the NGIs, at minimum four workshops.
 - A mailing list for internal NGI communication will be set up and all relevant material on the project will be available on the EGI web page, thus allowing contributions from the NGI representatives.
- **Letter of support for the EGI design project**

Próximos Pasos

- Que iniciativa se lanza:
 - SGPCyT: REDES TEMATICAS
 - Convocatoria publicada, entre otras, e-CIENCIA
 - Nombramiento de un coordinador: Vicente Hernández (UPV)
 - Documento Base (Enero 2007): GRID, SUPERCOMPUTACIÓN, APLICACIONES, MIDDLEWARE
 - Grupos iniciales de trabajo: Red, NGI, JRU e IberGrid
- Grupo NGI
 - Presencia en reunión preparatoria EGI
 - España no está en el proyecto de preparación (CORE cerrado?)
 - Representación a través del Advisory Committee
 - Aprovechar el trabajo previo en IrisGrid
 - Primera reunión en CONFERENCIA IBERGRID (Santiago, 16 de mayo 2007)
- REFLEXION (e INFLEXIÓN)?
 - Qué evolución se sigue en otros países? (ej. UK, Nurdugrid, DGrid, HellasGrid)
 - Dónde pensamos que hay que hacer el esfuerzo inicial?
 - Coordinación? Horizontal, Vertical, por Planes, por Instituciones?
 - **Selección de Usuarios/Aplicaciones y Soporte Adecuado**
 - NGS (National Grid Service con Infraestructura "propia") a la UK?
 - Problemas "orientables":
 - Middleware
 - Esquema de interrelación con EGEE

Example: Sustainability of the effort

How to profit from the INT.EU.GRID experience in IBERGRID ?

- 1. We need a defined structure at the Iberian level to support “i2g” type of applications**
- 2. Partners Ibergrid in the project: IFCA, LIP, CESGA, UAB, BIFI:**
We have the **technical skills** to build a Quality level infrastructure supporting:
 - Parallel computing on the grid
 - Simulation steering
 - Graphical interfaces
- 3. We need an effort of coordination and organization from IBERGRID**
Eg. Catalogue of “pilot” applications (flagship) of IBERGRID