



Enabling Grids for E-science

GILDA improvements

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- **GILDA is effectively acting as a t-Infrastructure for several european projects, providing resources and knowledge for training events**
- **Besides training events, GILDA is available around the clock for grid novices, with dedicated facilities**
- **The GILDA t-Infrastructure is currently formed by a dozen of sites, mostly managed on best effort basis**
- **Among the new sites, NeSC and SZTAKI have joined the t-Infrastructure also in the context of ICEAGE**
- **Major efforts since EGEE'06 have been on improving the quality level of services offered, by installing monitoring tools**
- **Efforts have been made also on documentation and facilities offered to grid beginners**

- In 2006, 68 training events have been run using GILDA. Among them, 5 international grid schools:
 - BalticGrid Summer School, Tartu, Estonia July 4-8
 - International Summer School of Grid Computing, Ischia, Italy, July 9-21
 - Cern School of Computing, Helsinki, Finland, 21 August – 1 September
 - First EELA Grid School, Itacuruça, Brazil, 4-15 December
- See: https://gilda.ct.infn.it/tutorials_2006.html

- **GILDA has adopted a tWiki as on line repository for training material:**
<https://grid.ct.infn.it/twiki/bin/view/GILDA/WebHome>
- **A huge number of exercises and tutorials, organized “per topic” (Security, WMS, DMS,) and “per difficulty level” have been written and tested**
- **A collaboration is ongoing with EGEE Editorial Task Force (ETF) for standardizing scheduling of tutorials depending on their target (installation tutorial, user induction, application developer)**
- **tWiki has been chosen also because foster collaboration: everybody’s contribution to write new components is hugely welcome !**

- In order to improve the reliability of the t-Infrastructure, and quickly spotting sites with errors, SAM (Service Availability Monitoring) has been installed
- Sending periodically (4 times per day) tests to grid elements, SAM gives a constantly updated report on sites efficiency, allowing also to take the appropriate action in case of problems.
- <https://sam.ct.infn.it/sam/sam.py>
- Test results are also summarized on a Google MAP page
 - https://gilda.ct.infn.it/google_maps/mysam.html

- **The Imperial College London (UK) Real Time Monitoring is also available**
 - <https://gilda.ct.infn.it/rtm3d.html>
- **RTM shows, with very impressive graphic effects, the real time situation on sites, providing also detailed statistics**
- **GILDA is also monitored by GStat**
 - <http://goc.grid.sinica.edu.tw/gstat/gilda/>
- **GStat summarizes information published by the Information System, providing a compact view of data published in it, spotting when sites have network or efficiency problems**

- **In 2006 the GILDA Team has developed enhancements for some functionalities missing on gLite middleware**
 - Graphical User Interface for Windows (Grid2Win) and gLite Worker Node running on Windows
 - GFAL Java API's
 - Storage Accounting for Grid Elements (SAGE), still under development
 - PHP interface to AMGA (now part of AMGA release)
 - “Encrypted” version of lcg-* commands with AES 256 bits
- **A “GILDA Forge” for code repository is now hosted and mantained at**
 - <https://gilda-forge.ct.infn.it/>

- Besides the support during training events, GILDA is available for applications' porting use with dedicated facilities
- Virtual and Plug'n'Play User Interfaces: preconfigured UI's installable on the most of machines, freeing users from the need of an account on a "real" UI
- Support System : <http://gilda-support.ct.infn.it/>
 - Users are requested to subscribe it, and submit tickets there
 - email support is discontinued
 - Support system allows tracking of problems and solutions adopted, as well scaling to upper levels and building of a knowledge base
- GILDA News: <https://gilda.ct.infn.it/news.html>
 - A "news" section has been added to the GILDA web portal to inform users about new services available
- A better integration has been reached between GILDA and the P-GRADE grid portal from SZTAKI

- **Several big improvements have been made in the last 4 months to the GILDA t-Infrastructure.**
- **Particular care has been devoted to increase reliability, ease of use, and richness of training material (both exercises and code examples).**
- **We are “on track” for what we expect from GILDA in EGEE-III NA4 and SA6.**