

Connecting Large Industry to EGEE Grid

*Pawel Plaszczak, Jakub Dziwisz,
Tomasz Szepieniec & GridwiseTech team*

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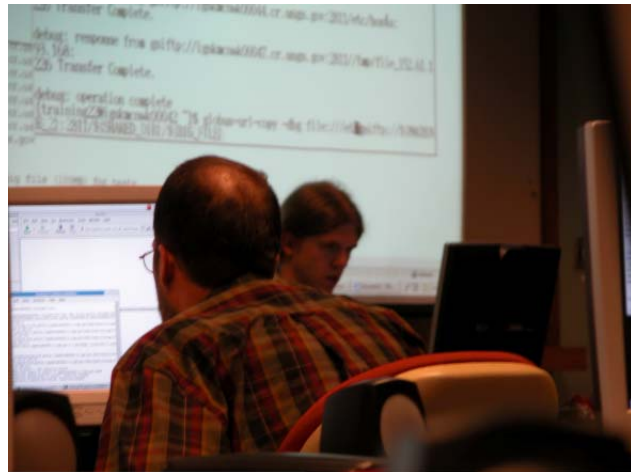
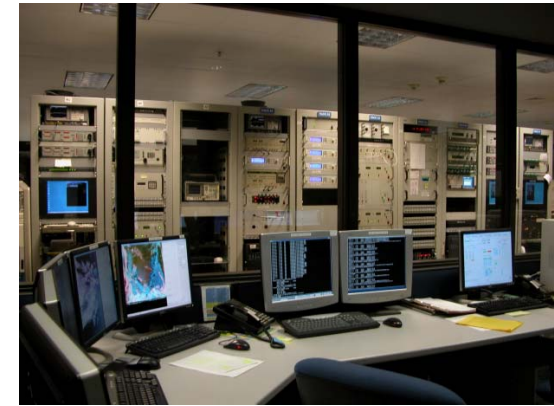
www.gridwisetech.com
tomasz at gridwisetech.com



About GridwiseTech



Our services:
vendor-independent
consulting and
comprehensive technical
assistance in Grid
computing solutions.



Our references:

- ◆ major academic Grid projects: Globus, NEESgrid, CrossGrid, Virolab...
- ◆ commercial clients: BP, Turner Broadcasting, Philips, TRW, SAIC, Combinenet, Univa...
- ◆ nonprofit/government grids: MCNC, U.S. Geological Survey

Active in the City Active in EGEE



- GridwiseTech HQ is located in Krakow, Poland - the major IT hub of Central Europe
- In 2006, we were named the **Innovator of Malopolska** (Krakow metro area). Special award for **deploying scientific result in industry**
- EGEE management asked us to provide **EGEE-related trainings to industry** - service currently available
- EGEE-related packages: **Portal Integration Kit** – available for commercial use (recently used in EUChinaGRID)



- **Client:** large corporation making it's first steps in grid technologies
- **Task:** designing high-end medical equipment characterized by extremely high manufacturing costs and short production lines, used only in top class medical centres
- **Goal:** research for optimizing the simulation process: shorten simulation time in design cycle iteration, increase design quality without increasing IT infrastructure cost
- **Solution:** hook up to external grid resources

- Sun Grid Compute Utility
- IBM Deep Computing Capacity On-Demand
- Gateway Grid
- *EGEE/LCG Infrastructure*
- ... and many more, we are in contact with several medium size providers

Using EGEE Infrastructure: Strong Points



1. Middleware tested in large scale
2. Client's cooperation with academia resource providers
3. Available expertise, user- and operator-level guides
4. Reasonable security level
5. Possibility to integrate internal and external resources
6. Local to European businesses
7. Large amount of resources accessible (potentially)

Using EGEE Infrastructure: Weak Points



1. Unclear status of using network and academia resources by commercial partners
2. Centralised procedure for VO registration
3. API support is not maintained satisfactory
4. LCG to gLite transformation
5. Lack of application level tools (portals, jobs managers) available for commerce

- Two tiers:
 - ◆ EGEE/LCG API – portal enabling kit, support for workflows and data management; now commercially available
 - ◆ Application-centric portal hides grid from users
- Integration of client's internal and external compute environment
 - ◆ VO creation was done based on direct agreements with several EGEE sites

Advantages for the customer



- Research process resulting in better environment for the application:
 - ◆ Design cycle iteration shortened - months to hours
- Additional on-demand capacity available without extra hardware expenses
- No grid knowledge required from user

- GridwiseTech is independent expert in Grid technologies.
- Large corporation connected to EGEE Grid.
- Benefits for customer: save cost and radically beat competition in time-to-market; on-demand resources speed design cycle months to hours.
- Benefits for EGEE: proof-of-concept: commercial customers can very strongly benefit from the EGEE resources.
- **EGEE has great potential to become virtual hub for businesses**

- In early 1950', Stanford University (also academic, and also non-for-profit) allowed using its resources (land) to innovative businesses.



First building of Silicon Valley 50 years ago

Silicon Valley after 50 years

Does EGEE want to become the virtual hub for businesses - Silicon Valley of the future?

How can we work together to this goal?





Thank you.
tomasz at gridwisetech.com
pawel at gridwisetech.com