





Services@MediGRID

Introduction and intermediate results



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Why Services@MediGRID?



- It is conceivable that the market potential for Health Grid services continues to grow
- In the future Life Sciences sponsors will probably only support purchasing Grid services instead of funding new IT infrastructures
- The demand for Grid services for small and medium-sized businesses needs to be faced – companies of these sizes should be made independent of public investment



Why Services@MediGRID?



für Bildung

und Forschung

- Accessing Grid services still requires much in-house effort – new Grid service providers and Grid customers need coaching in order to get their applications on the Grid
- The MediGRID infrastructure requires sustainability in order to support Life Sciences on the long term – therefore
 - Grid usage must be chargeable (and charged) monetarily
 - Service availability must be guaranteed
- No standards are defined for accounting and billing in the (Health) Grid environment – such standards have to meet the security requirements



Project overview



Start: 01/2008

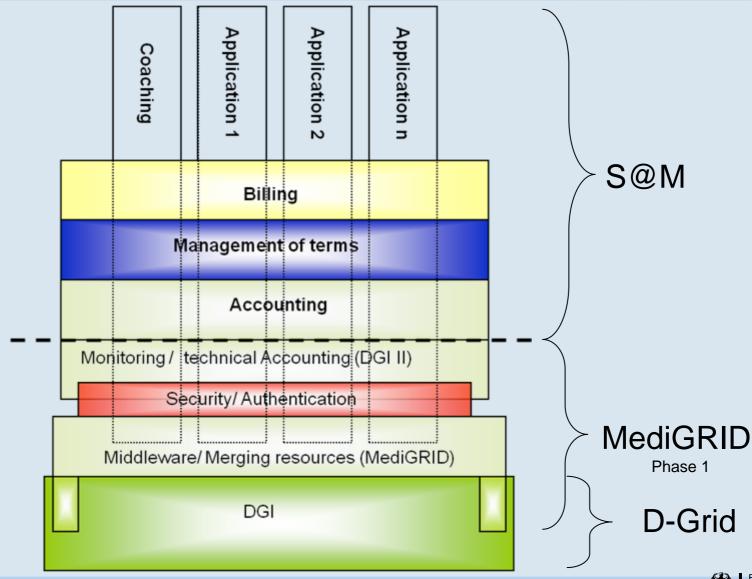
Finish: 12/2010

- Several academic and industrial partners are involved (e.g. BAYER Technology Services)
- Leverage the access to Grid resources
- Establish service and business models including
 - Service Level Agreements
 - Accounting and billing
 - Requirements of privacy and data security
- Industrial service providers can be provider of professional Grid services or obtain services themselves



Classification of S@M







Value chain of S@M



Life-Sciences

Grid service providers

Services@ MediGRID Grid on demand customers

- Services
- Computing
- Storage

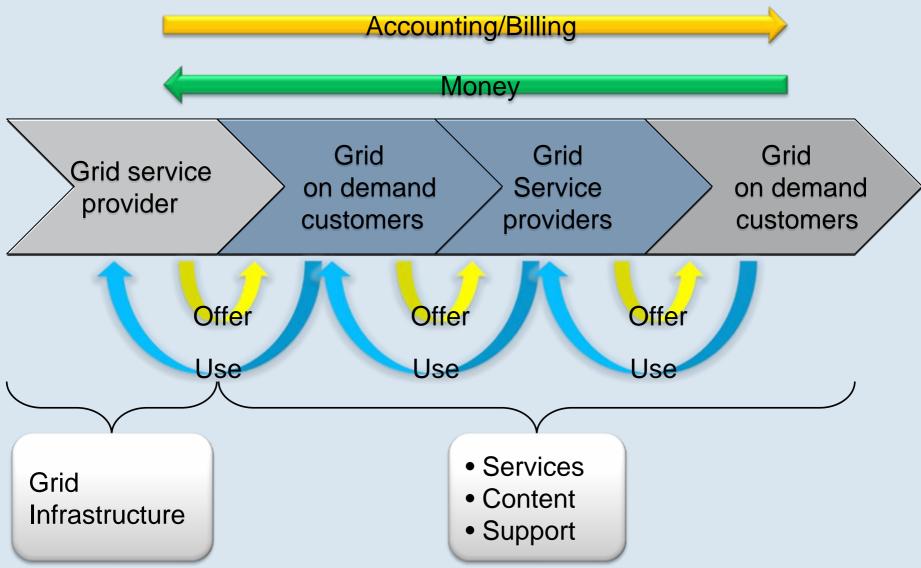
- Integration
- Coaching
- Accounting
- Billing

- Bioinformatics
- Image processing
- Clinical trials



Classification of Grid Roles







Intermediate results



- Coaching for applications which need to be "gridified"
 - Usage of Windows/.NET porting to Linux
 - No parallel/distributed algorithms implemented
 - Connecting Grid infrastructure components
- High bandwith requirements for connecting the end user: 10/100 Mbit
- Predicted Grid resource usage
 - Storage is not necessarily in focus for long term storing like in digital preservation
 - Compute power is dominant without the Grid the applications could not be used at all



Intermediate results

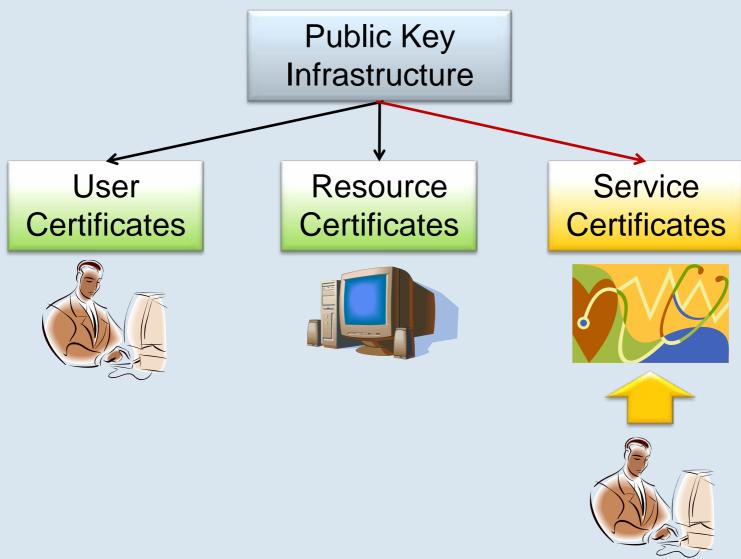


- Grid usage by the service providers can not be estimated reliably
- On demand usage of Grid resources is the predominant advantage of the Grid
- Accounting still focuses on wall time and storage usage
- Billing will mostly build on monthly/quarterly invoices
- For service providers service certificates are necessary in order to keep administrative overhead to a minimum – otherwise every service customer would need a Grid certificate for each emloyee

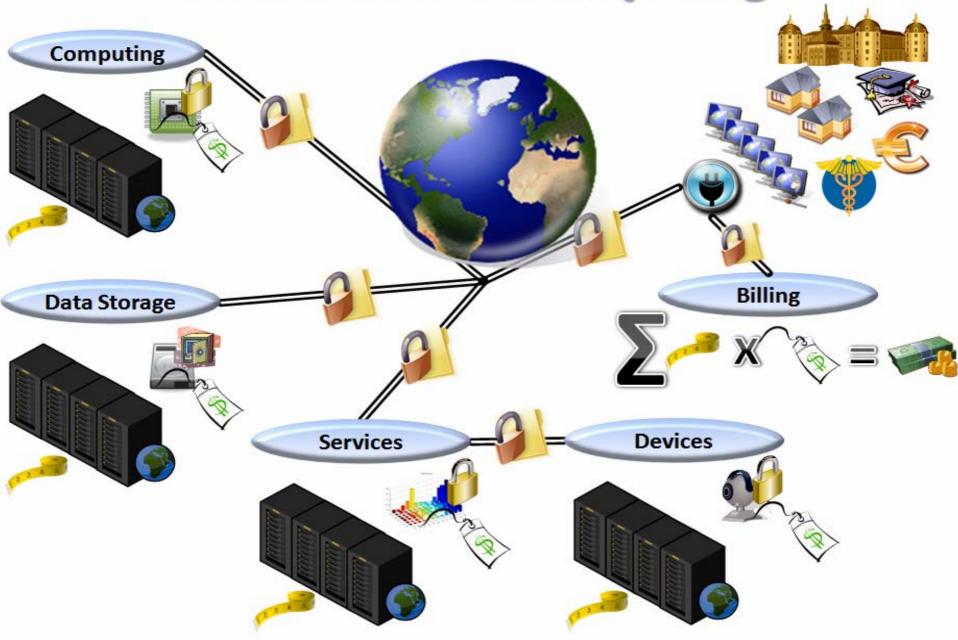


Service Certificates





Future of Grid Computing







Thank you for your attention!



Project partners



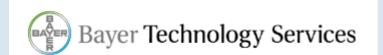
Partners:

















Associated Partners:





