



Industry Panel

David Snelling
Fujitsu Labs Europe
Grids@Work, Sophia Antipolis, October 13, 2005





Notions of Grids



Virtual Organization Grids

- Multiple institutions, secure, widely distributed
- Collaborative agreements or commercial partnerships

Intra-Enterprise Grids

- Centralized management of multiple platforms
- Aggregation of enterprise resources and applications

Clusters

- Networks of Workstations, Blades, etc.
- Cycle scavenging, Homogeneous workload

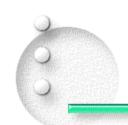
Parallel Processing System

- Distributed memory parallel processing
- Single applications and ensemble suites









Grid Middleware Today



Only Proprietary Implementations

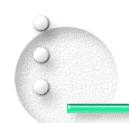
- Unicore
- Globus 2
- LCG2
-

Most Business is Intra-Enterprise

- Oracle 10g
- Fujitsu Triole
- IBM On Demand
-







Grid Middleware Development



Web Service Based

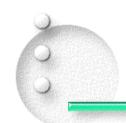
- Globus 4
- Unicore/GS
- gLite
- **....**

Vendor Interest Growing

- Emergence in standards
 - WS-Management, WS-Resource Framework, ...
- Still focused mostly on intra-enterprise Grids







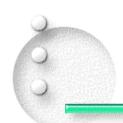
Impediments to Uptake



- Performance and Scalability Focus
 - Security and operational integrity are critical.
- Service Level is Typically only Best-effort
 - Need for a Service Level agreement infrastructure.
- Resource Allocation Done via "Tokens"
 - Transition to an open marketplace needs currencies.
 - Unreliable Costs Estimates
- Diversity of Commercial Applications
- Lack of Stability in Platforms/Standards
- Application Licensing
- Management Complexity







Inspiring Growth in Grid



- Business Models
- Standards
- Business Models
- Standards
- **↓** And
- Business Models



