

Bridging Global Computing with Grid Programming Models Session

Moderator: Mike Fisher - BT

Speaker: Ugo Montanari - Univ. of Pisa

Speaker: Marco Danelutto - Univ. of Pisa

“Session should be interactive. Don’t hesitate to interrupt.”



Programming the Global Information Utility

■ Programming model

- Need to support a wide range of “programmers”
 - scientific, enterprise, database, web, users, ...
 - different programming models?
- Inherently shared environment
 - incomplete management information
 - details unknown at time of programming
- Non-functional properties
 - how does a programmer know how a program will behave?
- Failures and exceptions

Programming the Global Information Utility

- Requirements on infrastructure
 - Capabilities and interfaces
 - multiple levels of abstraction?
 - what information needs to be exposed?
 - what controls need to be provided?
 - Non-functional properties
 - service level agreements
 - interactions between applications and infrastructure
 - Security
 - testing, isolation
 - how can one tell when a program is not behaving properly?