## Session 4 Security in GRID Computing

Summary by Paulo Veríssimo

## Security Issues in Grid: Authentication and Authorisation

Jon Kim

- Security in grids very much concerned with Virtual Organisations
  - use grid resources in coordinated fashion
- Key issues:
  - Provide authentication and authorisation
  - Promote integration with existing systems and technologies

- Grid Security Requirements:
  - Authentication, Delegation, Single logon
  - Credential Lifespan/Renewal
  - Authorisation, Confidentiality, Integrity, Privacy
- State of Play in Grid Security
  - Authent and delegation; authorisation
  - Grid Security Infrastructure
  - Open Grid Services Architecture
- Research topics:
  - Authorisation interoperability, Fine-grained authorisation

## Reliability and Security: An application aware approach

Ravi Iyer et al.

- Crash latency and severity distributions show:
  - Failures are not clean crashes: latency, control flow errors
  - Sometimes the after-failure damage impacts availability (time to restore)

## Solutions:

- Fine-grained detectors
- Detector placement strategies
- Detector semantics: value and time
- Metrics: e.g., fanout, lifetime, etc.
- Word of caution:
  - Crash in this presentation does not really mean 'crash'

Security in the grid world

Carl Landwehr

- Perspectives on a model for Grid Security
- or
- How Grid can put zombies out of business...
- Or
- Vice-versa