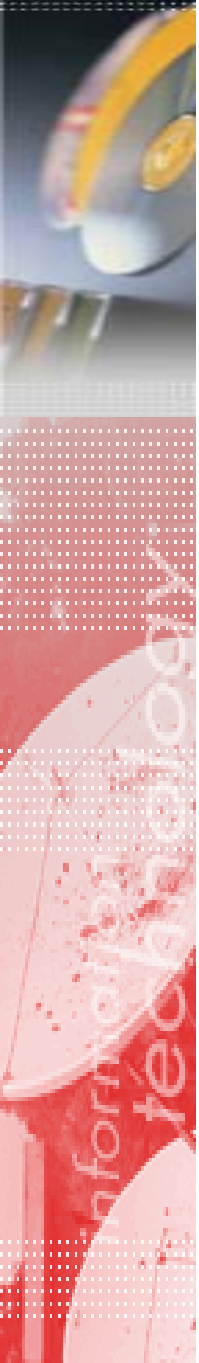




e-Research at La Trobe University

Dr Mark Kosten
Director, e-Research
May 2007



Objective of Federal e- Research initiatives

Access data/instruments/computing and to collaborate through advanced ICT to solve major research challenges.

- Skills
- Collaboration
- Facilities
- Dissemination

Eg is NCRIS PfC (5.16) \$75m



Changing the paradigm

- Researchers can now take advantage of low-cost high availability and performance ICT to enhance research activity (*reduced barriers*)
- Now strong skill and technical expertise in ICT Division (*robust, useful services*)
- But, need to focus and channel ICT resources and services to help research (*increase value to researchers*)

- Examples of new research paradigm:
 - Grid: storage and computing
 - Middleware (abstractions)
 - Collaboration/sharing & federated access
 - Distributed researchers but single virtual workplace
 - Massive data sets and associated information handling



e-Research office

- Joint initiative by PVC (Research) and CIO
- Create an office to –
 - Advocate and promote e-research
 - Inc balance ICT services regarding big three: Teaching/Administration/**Research**
 - Develop external links to grants, projects, collaborations, tools, support
 - Develop an e-Research strategy

Operational Goals 2007-2009

- Creation of e-Research Office
- HPC Computing
- Research Storage
- Information Management Policy/Procedures
- Access to Data Modelling/Processing expertise
- Collaboration/Communication through ICT
- Information sharing through repositories
- Access to electronic resources and tools
- Administer VeRSI

High Performance Computing

- 2007-2008: VPAC expertise on-site
 - 12months
 - Then ongoing local HPC expert
- 2008: HPC
 - 20-24 nodes (160-192 cores) clustered
 - 4 G RAM/cpu, Linux, select apps, job control & management by VPAC, BUT versatile/agile
- HPC Grid (La Trobe/VPAC/xPACs)
- 2009: Research analysis service

Research Storage/Repository

- 2008: Research storage
 - >10 TB initially
 - Tiered service
 - Latency, Robustness, Criticality
 - Archiving, Metadata, AD authorisation
 - Repository (in conjunction with Library)
- 2008: Storage Grid
 - La Trobe/Monash/Melbourne
 - AAF authorisation/SRB