

eResearch Capability in New Zealand

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INTRODUCTION

The Kiwi Advanced Research and Education Network (KAREN) went live in 2006. A relatively small amount of capability development funding was assigned by the New Zealand Government to assist New Zealand's research community taking advantage of the capacity of KAREN. Little acknowledgement was given to the 'ecosystem' underpinning eResearch infrastructure and the coordinated approach needed to support strategic science areas - let alone the long tail of researchers in transition. New Zealand is now catching up in tightened economic circumstances - can we afford to take a project by project approach to eResearch infrastructure in New Zealand? Are we really on our own or is it feasible for us to tap into resources in more mature eResearch ecosystems. This presentation will illustrate New Zealand's current framework for eResearch development in a world with no boundaries(?)

WE HAVE THE BACKBONE?

The Kiwi Advanced Research and Education Network or KAREN went live at the end of 2006. KAREN is a 10Gps optical network connecting 16 points of present and services New Zealand's eight universities and eight Crown research institutions. The approach taken to KAREN has been 'if you build it, they will come' - and to some extent this has been successful, however the government initially supported capability build by establishing a fund which ran over two years. The most successful projects under this fund involved reasonably 'immature' forays into utilising the advanced network through activities like high definition video conferencing, fast data transfer or access to databases and equipment in new ways as New Zealand's research community dipped its toes into the sea of change.

POCKETS OF ERESEARCH

As our understanding of eResearch matured so too did a range of challenges and it became clear that more national coordination was needed. We are not there yet as eResearch struggles for its place on the political R,S and T agenda - but we have recently invested another round of funds to get there. Challenges that we are currently dealing with are around last mile connectivity issues for remote sites for example observatories, radio telescope sites, and small rural research stations: developing a national approach to identity and access management - ensuring security and rights of access to the data and resources over the network: some significant data management and policy issues around access to publicly funded environmental data sets and generally aligning New Zealand's data policy with international data policies. This particular challenge is "deep sea" and we have a lot to learn from developments through ANDS. Finally, we are beginning a more coordinated approach to the development of GRID middleware - in a way which when compared to the approach taken in Australia, can only really be called a "pilot". There is more to come.

It is at this stage that my colleagues in government begin asking if this e-Research business is 'e' for expensive or 'e' for efficient!

EFFICIENT GRIDS IN AN ECOSYSTEM

So policy for eResearch is maturing as we learn about the efficiencies to be gained from sharing resources, data and collaborating both nationally and internationally. In this presentation I will outline the pockets of expertise we have created and cover the pilot approach to nationally coordinated infrastructure while highlighting the pot holes along the way including the axle breaking global economic recession. Are we on our own here or are we really in a world without boundaries able to share eResearch core infrastructures in a mutually beneficial way?