



Panel Discussion on KAREN, PlanetLab NZ and Research NGN/NGI

Panellists:

Krys Pawlikowski (Univ. of Canterbury)
Adnan Al-Anbuky (AUT, Auckland)
Brian Carpenter (University of Auckland)
Richard Harris (Massey University)
Peter Komisarczuk (University of Victoria, Wellington)
Tony McGregor (University of Waikato, Hamilton)
Max Ott (NICTA, Sydney, Australia)
Harsha Sirisena (Univ. of Canterbury)
Thomas Zinner (University of Wuerzburg, Germany)



Problem:

How to overcome barriers for innovations in designing Next Generation Networks/Next Generation Internet/Future Internet/... ?

Answer:

The size of the current Internet dictates the scale of the solution:
use global experimental overlay testbeds



Numerous research programs/initiatives aimed at constructing experimental network infrastructures (testbeds) in the USA, Europe, Japan ...

USA: GENI (\$12mln for 2009-2011) , PlanetLab, ...

Europe: FIRE, OneLab, GLab, PlanetLab Europe, ...
EU funding of ICT: 2 billion Euros for Jan 2009-June 2010

Japan: PlanetLab Japan, CORE, ...

New Zealand: PlanetLab New Zealand ?



2002:

Original PlanetLab installation at UoC was halted due to huge commercial Internet costs (for incoming traffic)

June 2008-June 2009:

PlanetLab NZ project funded by **REANNZ** for installing three PlanetLab nodes (UoC, UoO & UoA)

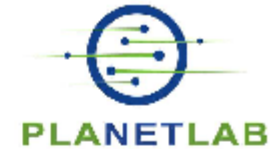
PlanetLab NZ depends on totally on **KAREN** (Kiwi Advanced Research & Education network: high-speed, low-latency, zero-cost/byte networking)

2009- ?:

PlanetLab NZ linking all universities in New Zealand ?



PLANETLAB NZ



University of Auckland,
Computer Science:
research on network traffic
measurements and the
behaviour of the Internet's
Domain Name Systems

University of Canterbury,
Computer Science &
Software Eng. and
Electrical & Computer
Eng.: research on
distributed discrete-event
simulation and
performance of peer-to-
peer systems

University of Otago,
Computer Science: studies
of new Internet multimedia
streaming protocols

PlanetLab is a global research network infrastructure, a world-wide distributed computer laboratory. Research institutions use it for studying new concepts and technologies for distributed processing, peer-to-peer systems, grid processing, multimedia networking, etc. As of June 2008, PlanetLab was composed of 880 nodes at 460 sites world-wide.



KAREN is a high-speed telecommunications network established for supporting New Zealand research and education sectors. It provides high-capacity, ultra high-speed interconnections between research institutions in New Zealand, and their overseas counterparts. **PlanetLab NZ** uses KAREN for accessing the vast world-wide distributed computing resources of PlanetLab.



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Panel Discussion on
**Research and Experimentation with Overlay
Testbeds:**

1. From international perspective:
 - Max Ott (NICTA, Australia)
 - Thomas Zinner (Univ. of Wuerzburg, Germany)
2. From New Zealand perspective:
 - Adnan Al-Anbuky (AUT, Auckland)
 - Brian Carpenter (University of Auckland)
 - Richard Harris (Massey University)
 - Peter Komisarczuk (University of Victoria)
 - Tony McGregor (University of Waikato)
 - Harsha Sirisena (Univ. of Canterbury)
3. Discussion

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