



27 July 27, 2007

Report for 2007

NZ Workshop in High Performance and Grid Computing

The 2007 NZ Workshop in High Performance and Grid Computing took place on 5th July, 2007. This workshop brought together a number of specialists in the research areas of HPC, grid computing, eResearch and other related fields across New Zealand. Furthermore, as an outcome of a successful workshop undertaken in 2006, two guest speakers from the US were invited to give presentations. The timing of the workshop coincided with the Building KAREN Communities Conference, enabling the two international speakers from Argonne National Laboratory & University of Chicago, Prof Ian Foster and Prof Rick Stevens - as well as others - to attend both events.

The Workshop attracted interest from Industry as well as Universities. The participant organizations were as follows:

- University of Otago
- University of Auckland
- University of Canterbury
- Massey University
- Auckland University of Technology
- Victoria University of Wellington
- University of Christchurch
- Lincoln University
- World 45 Ltd
- Argonne National Laboratory & University of Chicago
- Lincoln Ventures Ltd
- Industrial Research Ltd
- Ministry of Research, Science & Technology
- LIC Ltd
- REANNZ Ltd

The workshop was a one day event which included 10 presentations (the Workshop Program is attached), and a live broadcast via KAREN. Lincoln University participated remotely via the Access Grid facility provided by the University of Auckland (UoA), and Paul Bonnington (UoA) used KAREN connectivity from Auckland University of Technology (AUT) to demonstrate BestGrid.

During the discussion section, several comments were put forward with regard to the Workshop:

- 1) The Workshop should continue next year, even though there are more, related, forthcoming events in 2008 and 2009.
- 2) Linking the Workshop to the KAREN Conference was a positive idea and should be repeated in 2008.
- 3) The Workshop Committee should consider different options to encourage and support students' participation in the workshop.
- 4) The University of Otago has expressed an interest in hosting the 2009 Workshop.

Overall the 2007 Workshop was a great success. Better media coverage should be planned for the next workshop.

The recommendations for the Workshop Committee for 2008 include:

- 1) Hosting the 2008 workshop in the South Island (Dunedin or Christchurch).
- 2) Work towards obtaining more overseas guest speakers.
- 3) Work with REANNZ/KAREN for the 2008 event to increase participation and the number of invited speakers.
- 4) The Committee should work towards better media coverage.
- 5) The Committee should consider allocating ~\$2000 towards travel expenses for students presenting a paper at the workshop.

Financial Report

The venue was provided by the School of Engineering and the Engineering Research Institute (ERI) at AUT.

\$4000 was received from KAREN for the 2007 and 2008 workshops.

Total amount to be reimbursed from Capability Building Fund is \$1,300.00.

Dr Slava Kitaev,

Chair of the Workshop Committee

5 July 2007, Auckland University of Technology

Program

<i>Time</i>	<i>Presentation</i>
8.45 – 9.00	Opening Address and Welcome Notes Slava Kitaev
Morning Session (9.00 – 12.10) Chair: Prof John Hine, Victoria University of Wellington	
9.00 – 9.40	Ian Foster Fast, Reliable, Loosely Coupled Parallel Computation, Argonne National Laboratory & University of Chicago
9.40 – 10.20	Rick Stevens Experiences with the BlueGene computer, Argonne National Laboratory & University of Chicago
10.20 – 10.45	Morning Tea
10.45 – 11.30	Paul Bonnington Live demonstrations of the BeSTGRID pilot services, HPC Initiative University of Auckland, BeSTGRID
11.30 – 12.10	Elizabeth Post Designing a scientific application for e-research, Lincoln Ventures Ltd
12.10 – 13.00	Lunch

Afternoon Session (13.00 – 16.40)	
Chair: Dr Slava Kitaev, Auckland University of Technology	
13.00 – 13.40	Nicolas Erdody & Zhiyi Huang CMT and virtualization, World 45, University of Otago
13.40 – 14.10	Tim Molteno & Patrick Suggate High Performance Processing in Hardware University of Otago
14.10 – 14.40	Shaun Hendy HPC for Materials Science and Nanotechnology Industrial Research Ltd
14.40 – 15.10	Tony Dale Blue Gene, HPC and KAREN at the University of Canterbury University of Canterbury
15.10 – 15.40	Afternoon tea
15.40 – 16.10	Anton Gerdelan Optimising Multiple Commodity Gigabit Ethernet Channels to Maximise Network Attached Storage Throughput Massey University
16.10 – 16.40	Martin Johnson & Chris Messom BeSTGRID@HOME Massey University
16.40 – 17.00	Closing Notes