

'Virtual world' aims to provide access to remote resources



Collaborative effort: Dr Rajkumar Buyya – grid technology offers remote or distant users access to vital services. Photo: MICHAEL SILVER

A University of Melbourne computer science and software engineer is leading an international effort to create a virtual computer world where universities, hospitals and businesses can share and exchange resources despite being separated by great distances.

Director of the University's Grid Computing and Distributed Systems Laboratory, Dr Rajkumar Buyya, is lead researcher in the development of a collaborative project called Gridbus, which draws on expertise from research teams in India and Australia.

Gridbus is involved in a range of

applications from reading brainwaves and early detection of breast cancer to searching for cosmic particles and developing finance portfolio analysis.

Major step forward

"The technology works because different groups can use the Grid to access resources and technologies that would otherwise not be available to them. There is even a Gridbus bank which manages the users' account," says Dr Buyya.

Dr Buyya recently visited Anna University's Madras Institute of Technology where the first Indian language interface for Gridbus technology has been developed.

"This is probably the world's first Grid technology with a non-English language interface and is a major step forward for taking Grid technology to the common man," he says.

"All over the world, governments and industries are recognising the potential of Grid technology. The Australian Government has allocated millions of dollars for a special Grid research initiative, while in India the Government has funded a project to develop National Grid Infrastructure that connects several supercomputers installed in industries and universities."

Economics forum looks at creating balanced nation

By Laura A'Bell

Business, political and academic leaders and thinkers gathered at the University of Melbourne last week to consider major economic and social challenges facing Australia in 2005 and beyond.

They participated in the third Economic and Social Outlook Conference – Sustaining Prosperity: New Reform Opportunities for Australia – presented by the University's Melbourne Institute of Applied Economics and Social Research (MIAESR) and *The Australian*.

Among broad questions discussed were how Australia should move to extend expansion of its economy, confront demographic challenges such as ageing, and tackle areas of entrenched disadvantage to further spread prosperity.

University of Melbourne speakers included the Vice-Chancellor Professor Glyn Davis, Professor John Freebairn and Professor Jeff Borland (Economics), Professor Ross Williams, Professor Peter Dawkins, and Professor Tony Scott (MIAESR) and former dean of Education Professor Brian Caldwell.

Professor Williams and Professor Dawkins presented a paper highlighting

Australia's need for a level playing field for both universities and students.

They suggested a number of long-run funding principles which, if adopted, would allow universities more freedom to choose their size and discipline mix ensuring student preferences were more closely met.

Their recommendation was that there may need to be transitional arrangements put in place including, for example, caps on prices that could be gradually relaxed.

Conference papers can be downloaded from the Melbourne Institute's website www.melbourneinstitute.com