



**Summary Report of 1st APRU IT Video Conference Session
on Grid Computing
Hosted by National University of Singapore
October 21, 2009 (9 a.m. Singapore time)**

The 1st APRU IT Video Conference Session on Grid computing was hosted by NUS on October 21, 2009. This involved a total of 17 APRU universities from Australia, Chile, China, Indonesia, Japan, Mexico, New Zealand, Singapore and the United States of which 6 universities presented on their campuses' development, management and effective use of Grid resources for research computing and applications.

More than 30 CIOs and Grid faculty researchers attended the session.

Different types of Grid computing technologies were presented by APRU members: Globus-based compute/data/info grid (Osaka University, Zhejiang University, Peking University, UNAM, University of Auckland), Access Grid (University of Auckland) and cycle harvesting grid (NUS).

Some of the grid computing benefits were identified as follows:

- a. Ability to aggregate distributed computing resources to create new computing capability.
- b. Enable large-scale sharing of data and information among participating members.
- c. Maximize resource utilization through cycle harvesting grid.

It was suggested that common application, interest and demand be identified to drive the grid computing collaboration. One common application found among the Globus compute grid and cycle harvesting grid is the bioinformatics application. It is a data parallel application that can be executed in parallel over both types of grid environments. University of Indonesia and ANU have expressed interest in exploring digital museum collaboration.

Some of the challenges in grid computing collaboration noted included:

- a. Finding spare resources and resource owners who are able and willing to share.
- b. Finding a common grid middleware to enable sharing.
- c. Having adequate network capacity between universities to enable effective sharing.
- d. Managing and breaking down silos in the utilization of spare resources amongst APRU member universities at administrative and faculty level.

It was suggested that proper and effective sharing and usage of research/grid computing resources can be established through IT governance. Feedback from individual campus communities, surveying the provision of research computing resources and applications would be useful amongst APRU members. IT governance will be the topic for the next IT video conference session.

The APRU IT Initiatives Standing Committee is currently consolidating data from participating institutions that have active grid computing arrangements with other APRU members. The committee is also involved in the process of finding out which institutions would be interested to explore collaborative opportunities with other APRU members in Grid computing.

List of participating APRU universities

- Australian National University
- California Institute of Technology
- National Autonomous University of Mexico (UNAM)
- National University of Singapore
- Osaka University
- Peking University
- Tecnologico de Monterrey
- Tohoku University
- University of Auckland
- University of California, Los Angeles
- University of Chile
- University of Indonesia
- University of Oregon
- University of Science and Technology of China
- University of Southern California
- University of Sydney
- Zhejiang University