In keeping with emerging trends, SVU continually strives to bring new technologies and services to our users. One service that was recently launched is **NUS Accessgrid (NUSAG)**. This technology makes it easy to set up a multimedia system for group-to-group communication between participating nodes on the network/internet. A basic system consists of a PC running the Access Grid software, display monitor, PC camera and microphone. It is easily scalable to cater for large groups by adding more and sophisticated hardware.

The heart of the system is the communication software/middleware called Access Grid. The middleware was first developed several years ago by researchers at Argonne National Lab, USA. It has since evolved and been improved upon, and may now be downloaded from AccessGrid.org. Besides audio/video equipment, it can connect and share instruments and applications (such as Powerpoint), making it a useful platform for remote collaboration, access and control.

Access Grids come in a range of configurations, depending on the processing, audio and video capabilities. The more extensive and sophisticated the equipment, the larger the scale of presentation and collaboration that can be supported. NUSAG is a low-cost setup consisting of a PC with a three-panel display monitor, two rotating cameras and supporting PC audio/video infrastructure. In this configuration, it is suitable for small group collaborative and interactive meetings between a few participating nodes. The system also has a projection system which may be used in larger scale meetings and presentations. NUSAG is available to all NUS academic/research staff. Since most universities have Access Grid infrastructure on campus, it is convenient for NUS staff to have virtual meetings with overseas collaborators through NUSAG.

Some benefits of NUSAG:
- easy to use, no cost to NUS staff/researchers
- Access Grid nodes are found in most universities around the world
- small or larger group interactions
- multiple audio/video devices for a rich experience
- connection to multiple parties simultaneously
- session recording

NUSAG is housed in SVU Vislab which is located at the third level of Computer Centre. The following diagram summarises the setup:
For small group use, up to three to four NUS researchers sitting comfortably around the Access Grid console at SVU Vislab may set up a multi-party session with their collaborators, who should also have Access Grid capability. For larger groups, users may make or receive presentations, for example, in seminars, lectures or training, to external audiences via NUSAG at SVU Vislab. The external parties must be connected via Access Grid.

Access Grid technology is now well established in universities and used in various ways. For example, at the University of Alberta, a group of students had used Access Grid to demonstrate their work to faculty members at a laboratory in British Columbia. Read the comments on its features in the news article New Access Grid for Research Collaboration.

When the Chemistry Department of Boston University needed to assess the English proficiency of student applicants, they used Access Grid to conduct interviews. Please read the overview of their collaboration with Beijing University in the article Interviewing International Applicants via the Access Grid.

Recently, at the 22nd APAN meeting in Singapore on 18 July 2006 held at NUS, NUSAG was used to stream the ASTRENA-APBioNet Joint Meeting to remote Access Grid participants. As the meeting was held at a different location
campus, a netmeeting two-way relay was set up between the meeting site and the NUSAG node. We have also used NUSAG for remote visualisation with success.

We invite interested NUS staff to try the NUSAG service. More details may be found at the NUSAG home site.

For questions or feedback, please contact us at ccesvuhelp@nus.edu.sg.