



# THE WHITE ROSE GRID

## e-Science Centre

## Access Grid



Figure 1: AGs are used for Worldwide Universities Network's seminars such as the one with a speaker from the San Diego Supercomputer Centre.

"AG offers an advanced group-to-group video-conferencing type facility based on Internet technologies. It comprises a mixture of resources that also provide a presentation environment, and tools for real-time collaboration."

### Introduction

The Access Grid (AG) provides a large-scale collaborative environment that effectively enables large format audio and video-based group-to-group human interactions across the Internet. It has been initiated by the Futures Laboratory at the Argonne National Laboratories [1] in the USA.

### About Access Grid

Its main features are as follows:

- AG offers an advanced group-to-group video-conferencing type facility based on Internet technologies. It comprises a mixture of resources that also provide a presentation environment, and tools for real-time collaboration. Many sites use instant messaging (e.g. Jabber technologies) for text-based background communication.
- AG installations may be of a different size; from a fully-equipped node through an office size AG to a personal access grid (PIG) operated from a laptop/PC and easily affordable.
- A fully equipped node offers a large-format screen capable of accommodating displays from a number of sites participating in a session, multiple cameras that are able to present multiple views of the session's participants, and a number of speakers and microphones for good quality audio. The AG is driven by the software installed on PCs.
- AG solutions may be supported by a free-to-use open source software suite developed by a worldwide research community or the software provided by

commercial suppliers such as IOCOM (formerly inSORS) [2].

- AGs are widely used in the UK and all over the world. The Wikipedia [3] reports that in 2005 there were well over 500 Access Grid installations around the world within academic, commercial and industrial communities.
- The Access Grid complements computational and data grids.

### Access Grids at the WRG

#### Background

As part of the White Rose Grid's successful bid to the UK e-Science Core Programme [4] supported by both OST and DTI, funds were obtained for two Access Grid installations. These were commissioned at the Universities of Sheffield and York supplementing the already existing Access Grid at Leeds. Since 2003 all three institutions (i.e. Universities of Leeds, Sheffield and York) involved in the White Rose Grid (WRG) project [5] offer Access Grid facilities to their researchers. The AG equipment is being upgraded (in line with technological developments) with higher specification PCs that more effectively manage the display as well as video and audio capture.

#### Usage

Our AGs are used for many large-scale events such as e-Science Centres' Directors' Forums (see Figure 2), frequent meetings of the WRG Executive Board, weekly meetings of the National Grid Service teams, collaborative work sessions with Beihang University in China, training within the WRG, as well as the Worldwide Universities



Network seminars such as that depicted in Figure 1.

### AGs Locations

The three main WRG Access Grids are hosted in the following areas:

- at the University of Leeds in the School of Computing, E C Stoner Building. This facility can be booked by emailing [roombookings@comp.leeds.ac.uk](mailto:roombookings@comp.leeds.ac.uk). Note that this node is self-operated and only light-weight support is offered to potential users.
- at the University of Sheffield the AG is operated by Corporate Information & Computing Services staff. For booking information please refer to [6].

and

- at the University of York the AG node is located in the Computer Science building, room CS/103. To book this facility please refer to [7].

There is also a range of Access Grid nodes round the three Universities' campuses. For example, there is an AG node in the Informatics Collaboratory of the Social Sciences (ICOSS) building at the University of Sheffield, and an AG node in the School of Geography at the University of Leeds.

### Help and Support

For assistance with Access Grid issues users may approach the JANET Access Grid Support Centre [8] established at the University of Manchester with funding from the Joint Information Systems Committee (JISC). This Centre also provides training in Access Grid technologies. Their web pages include links to comprehensive on-line tutorials in this area [8].

A list of virtual rooms in academic institutions is available on the JANET Access Grid Support Centre website [9].

### Further Information

#### Contacts:

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##### University of York:

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#### References:

- [1] <http://www.accessgrid.org/>
- [2] <http://www.iocom.com/>
- [3] [http://en.wikipedia.org/wiki/Access\\_Grid](http://en.wikipedia.org/wiki/Access_Grid)
- [4] <http://www.rcuk.ac.uk/escience/>
- [5] <http://www.wrggrid.org.uk/>
- [6] <http://www.shef.ac.uk/cics/videoconferencing>
- [7] <http://www.wrg.york.ac.uk/WhiteRoseGrid/AccessGrid>
- [8] <http://www.agsc.ja.net>
- [9] <http://www.ja.net/services/video/agsc/services/virtualvenueaddresses.html>



Figure 2: WRG participates in the AG session with 17 UK e-Science Centres.