

The ™
Global Quality Assurance
Program

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Personal Information

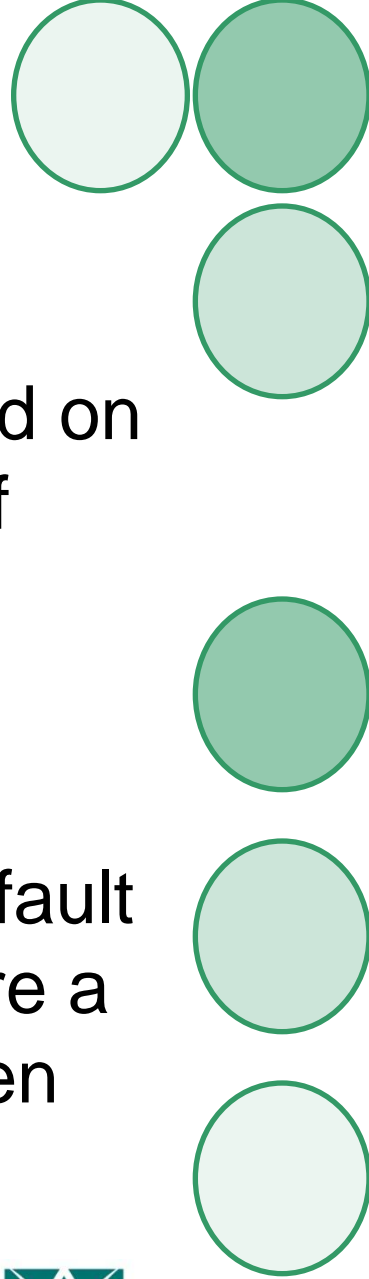
- ✓ Collaboration Services – Australian Research Collaboration Service (ARCS)
- ✓ Research Systems Support Officer – Central Queensland University (Australia)
- ✓ Been using and building Access Grids for over 6 years

(started back in the old days where you fire up “vic” and “rat” manually)

Access Grid Flexibility

- ✓ **An Access Grid Node can be implemented:**
 - ✓ Room based configuration - multiple cameras, projectors, microphones
 - ✓ Portable configuration – laptop, USB Camera
 - ✓ Or something in-between
- ✓ **An Access Grid can utilise different:**
 - ✓ Computer hardware
 - ✓ Computing platforms
 - ✓ Audio visual equipment
- ✓ **Access Grids have no real design limitation**

No Set Standards



- ✓ Access Grid technology can be deployed on multiple platforms utilizing a multitude of commodity hardware and is practically unlimited in design.
- ✓ This flexibility means that there is no default standard or setup configuration to ensure a quality level is provided, particularly when connecting disparate equipment and operating systems.

Standards



- ✓ There's a real need to provide some standard/metrics so that users get a more consistent, high quality AG experience
- ✓ Knowing what is considered high quality is important!
- ✓ Knowing sites measure up to these standards is also essential
- ✓ This is why the Quality Assurance Program is so Critical!

Quality Assurance Process

History

- ✓ Initially used the UK Access Grid Support Centre (AGSC) as the design foundation
- ✓ Initially developed as a QA process for Australian AG nodes, but interest caused me to make it more a global process
- ✓ Been developed and implemented for over two years, though success has been limited in number of nodes QA'ed.
 - ✓ No. Nodes QA'ed.

Global Quality Assurance Program Overview

- ✓ The Quality Assurance process for Access Grids, which is globally applicable to all Access Grids and inSORS nodes, includes the following items:
 - ✓ Quality Assurance Test Protocol
 - ✓ Criteria for assessing quality, includes:
 - ✓ Audio Quality (echo, speech levels and general quality)
 - ✓ Video Quality (picture quality and camera positioning)
 - ✓ Networking (Multicast Beacon, NTP)
 - ✓ Shared Software and Applications (Shared Presentation, VenueVNC, Shared Desktop and others)
 - ✓ Database for recording Quality Assurance Results which is integrated into the Global Node Listing
 - ✓ Documentation
 - ✓ Ways to self assess and improve AG node

QA Particulars

- ✓ Not based on any hardware
 - ✓ For example, it doesn't matter what type of microphones you use, as long as the audio sounds good
- ✓ Not based on any platform
 - ✓ It's important that you can join an AG session and use various shared applications.

Regional Specifics

- ✓ Different Nations and Regions have different requirements (wants and needs)
- ✓ All require good Audio, Video and Network
- ✓ Shared Apps are generally regional specific. For example:
 - ✓ Australia: Shared Presentation & VenueVNC-Client
 - ✓ Canada: Shared Desktop
 - ✓ UK: IGpix
 - ✓ Germany: Shared Desktop & Shared PDF
 - ✓ Louisiana (State): TigerBoard

Finally, Some QA Progress

- ✓ ARCS Buy-In (Australia)
- ✓ Icewarm Buy-In (Australia)
- ✓ AMSI Buy-In (Australia)
- ✓ WestGrid (Canada)

Australian QA Buy-in (ARCS)

- ✓ ARCS - Australian Research Collaboration Service
 - ✓ *The ARCS Mission is to provide long-term eResearch support services for the Australian research community with a particular focus on interoperability and collaboration infrastructure, tools, services and support*
- ✓ Participated in various (regular) AG meetings between a large number sites across most of the states in Australia
 - ✓ Unfortunately some experiences have been quite poor
- ✓ Due to poor experiences and wanting to be seen as leaders in collaboration technology, has mandated that all ARCS AG nodes are to be Quality Assured.
- ✓ Additionally, ARCS provides the support for the QA process for Australia!

Australian QA Buy-in (Icewarm)

- ✓ ICE WaRM -The International Centre of Excellence in Water Resources Management (ICE WaRM) provides a national focus for Australia's education, training and research expertise in water.
- ✓ ICE WaRM works closely with five partner universities in Australia (and a range of water industry associations) to deliver the nested Master of Water Resources Management programmes. Universities include:
 - ✓ University of Adelaide
 - ✓ University of South Australia
 - ✓ Flinders University of South Australia
 - ✓ Deakin University
 - ✓ Central Queensland University
- ✓ Students enrol at any of the universities above and undertake the programme, in which all students complete these courses via Access Grid at their home university.

Australian QA Buy-in (Icewarm)

- ✓ In Semester 2 2007, The QA program was introduced and promoted with the inclusion of regular test sessions between all five nodes. This continued throughout Semester 2, with an additional QA presentation in 2008 to a Board meeting, with all University Program Directors present.
- ✓ All five universities are working together, improving their systems and have upgraded to version 3.1 which has allowed the running of lectures to go smoothly without a glitch.
- ✓ In the space of the last 12 months, ICE WaRM has seen vast improvements in the way the 3 hour weekly Access Grid lectures have been run.
- ✓ ICE WaRM strongly supports this Quality Assurance programme, which ensures that all nodes offer a high quality experience.
 - **Kimberley Darley**
Education Services Coordinator
International Centre of Excellence in Water Resources Management (ICE WaRM)

Australian QA Buy-in (AMSI)

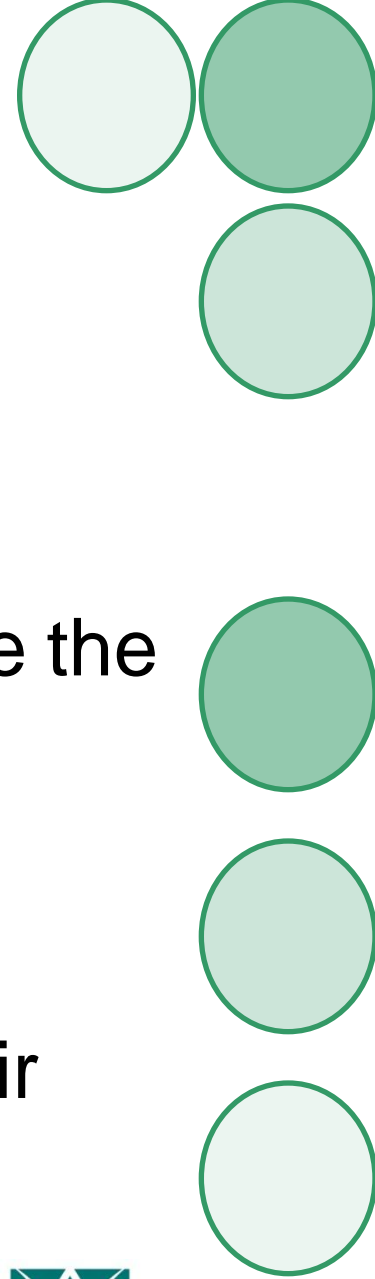
- ✓ AMSI – Australian Mathematical Sciences Institute
- ✓ ICE-EM has established a network of Access Grid Rooms (AGRs) at AMSI member universities on a subsidised basis.
- ✓ On the 7th December, AMSI held a National Symposium on Mathematics Education for 21st Century Engineering Students
 - ✓ 16 Sites connected with a total of 16 presentations for the day from 4-5 different sites;
 - ✓ Many of the sites, including some of the presenting AG nodes, were not too familiar with the best practices for presenting over the AG;
 - ✓ Through following the QA guidelines (Australia), and through QA testing prior to the event, the full day Symposium ran flawlessly;
 - ✓ Though, it should be noted that a considerable effort was conducted in the lead up to get all participating node to an acceptable quality level;
 - ✓ If nodes had previously participated in the QA process, all the effort would not have been concentrated on the week leading up to the Symposium
- ✓ AMSI has agreed to proactively encourage funded nodes to be QA'ed, which will greatly reduce quality issues leading up to other Symposiums and AG related events.

Canadian QA Buy-in

(WestGrid and National Lecture Series)

- ✓ Has already begun Quality Assuring Canadian Nodes;
- ✓ Will continue to further QA additional Access Grid Nodes;
- ✓ Strongly encourages that all participating AG nodes in WestGrid Seminars to be QA'ed!

Future Buy-In



- ✓ ANL AG Node to be QA'ed shortly;
- ✓ Louisiana State has agreed to include the QA process for their State Wide AG Nodes;
- ✓ Other groups have also indicated their interest, but simply waiting for some progress!

Risks for not being involved

- ✓ Resources wasted through underutilisation
- ✓ Left out of AG sessions due to having a poor AG node
- ✓ Unable to attract users, thereby reducing potential income or cost savings

Advantages in involvement

- ✓ Increases the chance for future clients and networking opportunities
- ✓ Encouraging previously disgruntled clients back to using the technology
 - ✓ Not just AG clients, but Video Conferencing Clients in general
- ✓ Endorse cost saving measures, through the utilisation of a high quality communication tool.
 - ✓ Reduce Travel;
 - ✓ Reduce wasted time through failed or poor sessions;

Don't be kept in the Dark!



Why is it important?

- ✓ Building an AG, and having it work, is only half the job completed. It is becoming ever so critical that the Access Grid works to a consistently high standard.
 - ✓ People are happy to fund research projects, but not general running costs.
 - ✓ People will spend money on better computer hardware, but who generally considers funding better lighting?
- ✓ Access Grid nodes are no longer simply research “toys”, as many are becoming production nodes.
- ✓ People are looking towards using quality technology to reduce their Carbon footprint.
- ✓ Some people are looking at other Video Conferencing Technologies, due to experience with poor AG sessions.
 - ✓ Interestingly, many of the other VC programs, are experiencing similar issues as many problems can be related to hardware and not the software.

Outcomes for the QA Process

- ✓ The aim is to improve the general quality of the Access Grids. This in turn will hopefully:
 - ✓ Improve the reliability of AG sessions
 - ✓ Improve overall AG experience (good video, audio)
 - ✓ Provide an indication of high quality AGs
 - ✓ Provide feedback to poor AG's where improvement is required (it's not about failing bad AG nodes)
- ✓ Promote confidence when connecting to a new access grid node – if it has been Quality Assured, you know it should work and work well

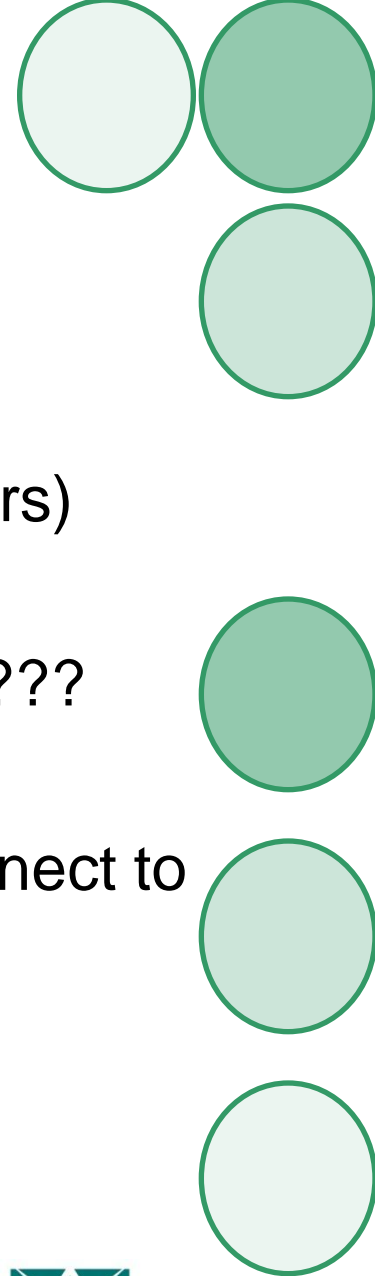
Supporting Documentation

- ✓ Global Quality Assurance Program Information
<http://www.accessgrid.org/qa-improve>
- ✓ Improving your AG in Preparation for a Quality Assurance Test
<http://www.accessgrid.org/qa-improve>
- ✓ Quality Assurance Test Protocol
<http://www.accessgrid.org/qa-protocol>
- ✓ Quality Assured Access Grids
<http://www.accessgrid.org/nodes>
- ✓ QA Marking Template
<http://www.accessgrid.org/qa-marking>
- ✓ QA Regional Contact List
<http://www.accessgrid.org/qatesters>

Service Orientated Funding

- ✓ Much more difficult to convince those who sponsor AG funding, to fund support rather than hardware!
- ✓ How much has the Access Grid saved in Travel Cost, or increase value and exposure to your researchers and colleagues?
 - ✓ If you don't have an high quality AG node, how much are you missing out on?
- ✓ Funding often relies on outcomes - having a node quality assured could be one such positive outcome.

Future Direction

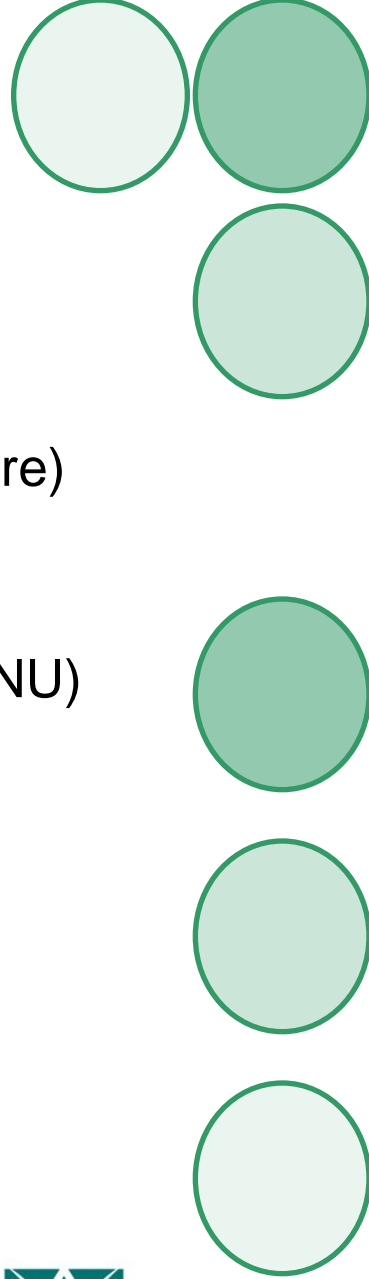


- ✓ Continue to Quality Assure additional nodes
(with the assistance of other regional QA testers)
- ✓ Add better metrics for assessing an AG node ???
- ✓ Making it possible for external websites to connect to the node-listing database
 - ✓ Example, UK or Australian nodes could be displayed on a local website

Call for Quality Assurance Testers

- ✓ I would like to call for volunteers for Access Grid Quality Assurance testers for the various regions.
- ✓ If you would be interested in becoming a QA tester for your region, please let me know.

Acknowledgements



- ✓ **Global Quality Assurance Process**
 - ✓ University of Manchester (Access Grid Support Centre)
 - ✓ Thomas Uram (and the Access Grid team)
 - ✓ Douglas Kosovic and Chris Willing (UQ)
 - ✓ Darran Edmundson (ex ANU) and Rhys Hawkins (ANU)
 - ✓ Carlos Isaza (CQU)

- ✓ **AG Retreat**
 - ✓ Australian Research Collaboration Service (ARCS)
 - ✓ Central Queensland University
 - ✓ Queensland Cyber Infrastructure Foundation (QCIF)

Thankyou

- ✓ Feel free to contact me during any of the breaks if you have any questions
- ✓ Alternatively, contact me via email at jason.bell@arcs.org.au or visit <http://ag.cqu.edu.au/>
- ✓ Generally connected to the APAG Lobby (Jastest)

