

Beyond the enterprise - video that 'just works'

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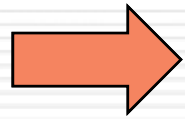
Video Collaboration @ Monash University

25th May 2009





Contents



- Why “video on demand” does not always work
- What are the NVCS features?
- AARNet Quality Assurance Scheme
- Going live with QA
- Who is participating and why ?
- Summary

Why “video on demand” doesn’t always work

DIFFICULTIES	TYPE	ROOT CAUSE
Call set up ok but no video/audio, call drop off	Network	Firewalls (H.323 ports blocked)
Call time-out or fail	Network	NAT (H.225 and H.245 call set up fail as NAT addresses are unroutable in the public Internet)
Aliases (E.164) dialling fail	Network	Gatekeepers (end-points not registered to GKs, peering not configured)
Poor video quality, pixilation, delay	Network	Low bandwidth, packet loss , jitter , incorrect routing
Audio issues, echo, background noise	End-point	Desktop systems with low quality speakers/ microphones ; noisy in room equipment (AC, projector fans, etc)
Poor video quality	End-point	Poor room set up , in-room lighting , camera positioning

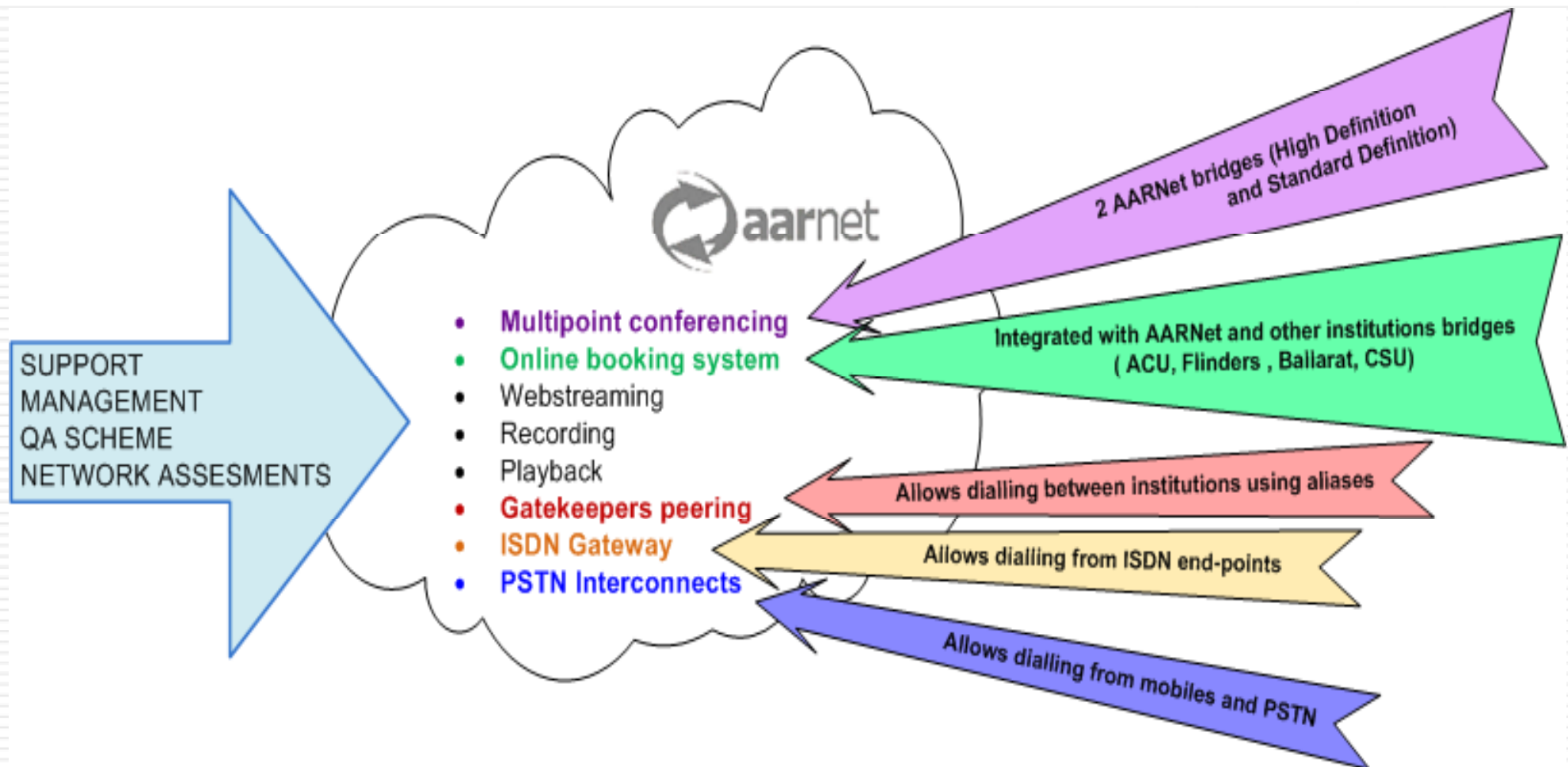


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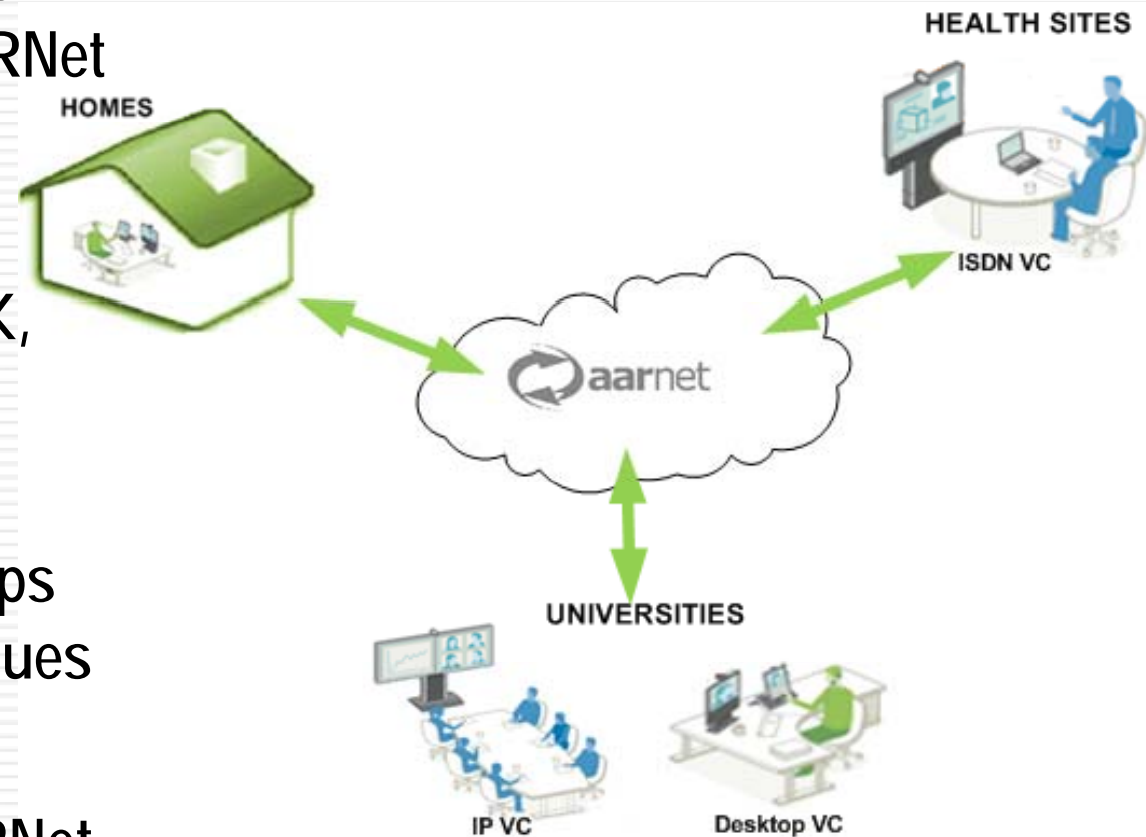
What are the NVCS features?

NVCS = National Video Conferencing Service



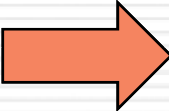
What are the NVCS features? (cont.)

- Most universities have all video ports open to and from the AARNet bridges
- Gatekeeper peering within institutions and the AARNet GK, allows E.164 dialling in both directions
- Quality Assurance Scheme helps in network assessment and issues identification
- Reliable connection to the AARNet MCUs





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Quality Assurance Scheme Benefits

- Improves the reliability of videoconferencing sessions
- Allows for more effective support from NVCS
- AARNet customer sites are registered in CMP booking system for automated video call set-up and tear-down from MCU
- Site listing allows users to find facilities within education sector
- Automated set-up for participation in Ozeconferences
- Recommend that endpoints are in 'available to receive calls' mode and no security/privacy concerns
- QA sites listing : <http://tinyurl.com/aarnet-qa-listing>
- QA flyer (pdf version) is now available on the “publications” page of the AARNet website

The Quality Assurance Test Criteria

The QA Process provides a method to assess facility/end-point based upon a number of criteria:

CRITERIA	CHECKING
Networking Requirements	Gatekeeper, firewall , NAT etc
Audio Quality	echo, speech levels and quality etc
Video Quality	picture quality, blurring, jerkiness, distortion of smooth motion, FECC etc
Data Sharing capabilities	H.239 support or local switching between PC and camera view



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QA VC facilities in Google Maps

NVCS @ AARNet

"NVCS" when posting publicly



About NVCS @ AARNet

AARNet is the company that operates Australia's Academic and Research Network (AARNet).

The National Video Conferencing Service (NVCS) consolidates support services for video conferencing technologies. It serves as a central repository f...

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videoconferencing facilities

Find businesses, addresses and places of interest.

Overview

[Reviews](#)

[Maps](#) (12)

Recent Maps



[Monash University - Videoconferencing facilities »](#)

Updated 10 minutes ago - Public

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- Clayton VCF Room G.21 (ITS)
- Clayton Peter Wade Room
- Caulfield VCF H782
- Gippsland VCF 2W263

[University of Tasmania - Videoconferencing Facilities »](#)

Updated yesterday - Public

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- SANDY BAY - Room B106 - Underground Morris Miller Library
- SANDY BAY - Room 205 - Social Sciences Building
- CRADLE COAST - Room B159 (CC.B159) - Maing Building

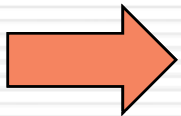
[See all 12 maps »](#)

<http://tinyurl.com/aarnet-google-maps>



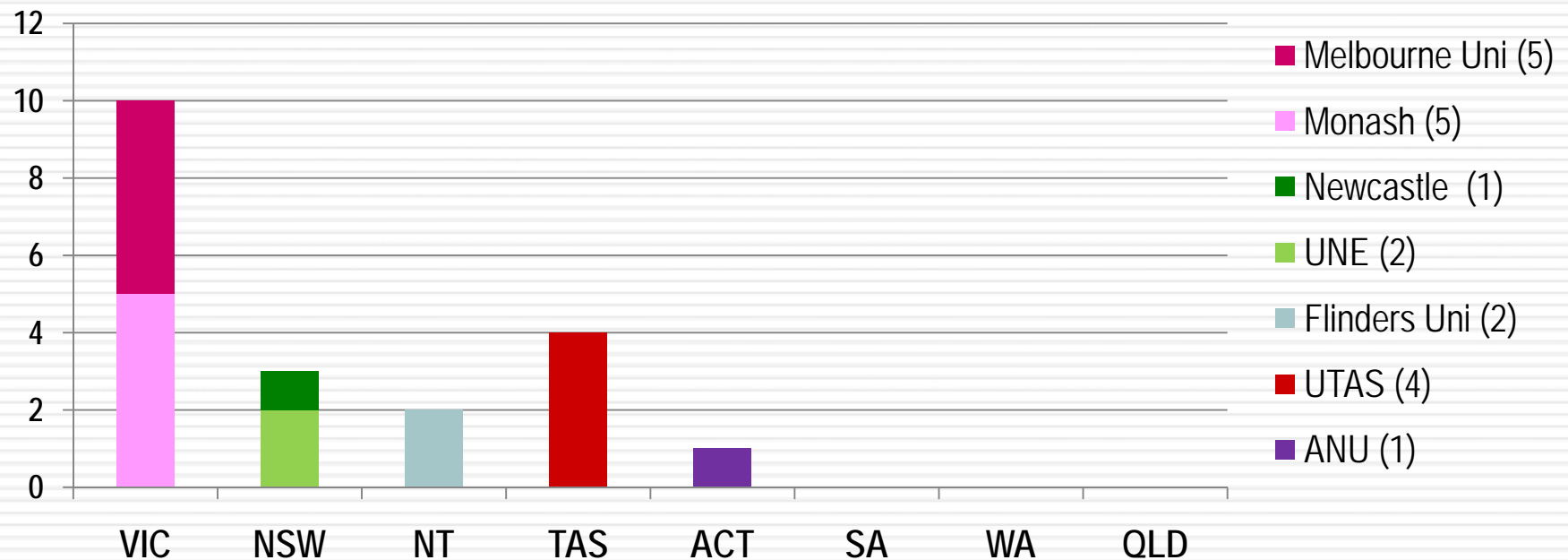
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Who is participating?

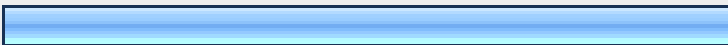
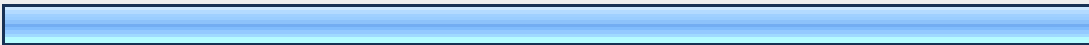


Number of QA end-points per institution by state



✓ 7 participating institutions

✓ 20 Quality Assured sites

Why?

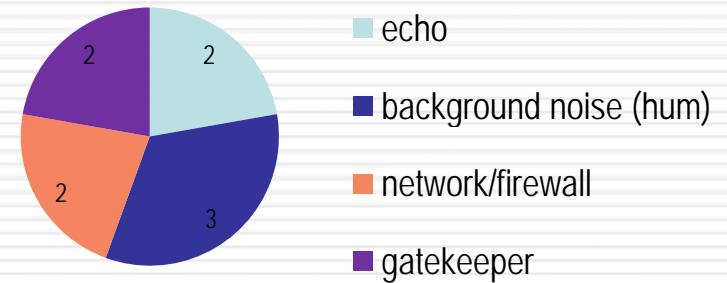
What aspect of Quality Assurance scheme is the most important for your institution ?		
		Response Percent
Improving reliability of videoconferencing facilities		66.7%
Improving overall videoconferencing experience (good video and audio quality)		100.0%
Enabling automated outdial to your videoconferencing facilities when scheduling via CMP booking system		66.7%
Easing call set up procedure (no dialing to MCU required)		33.3%

Quality Assurance Statistics

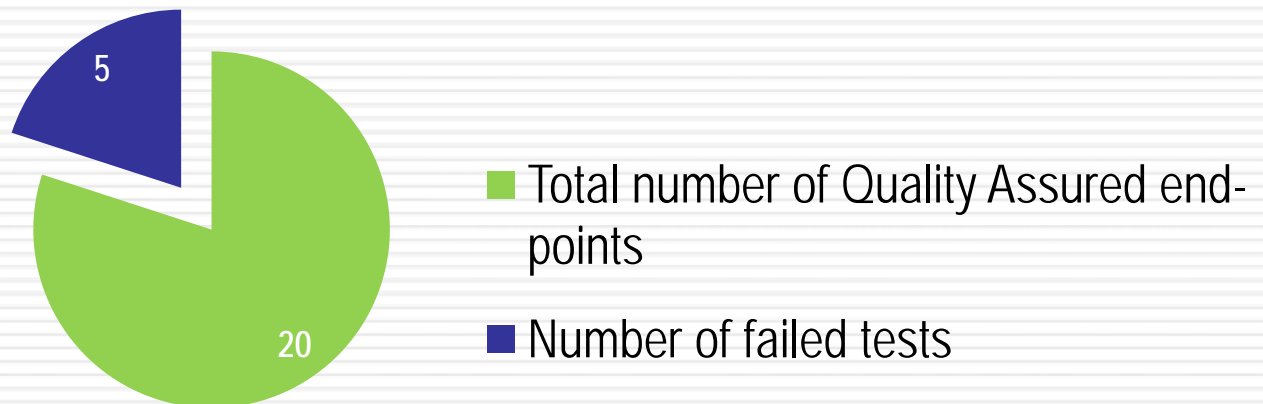
✓ Issues identified include:

- ✓ Audio- echo
- ✓ Audio – background noise (hum)
- ✓ Network – firewall initiated disconnection
- ✓ Gatekeeper – out of date configuration

Issues identified



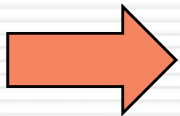
The AARNet Quality Assured sites listing : <http://tinyurl.com/aarnet-qa>





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Summary

- The NVCS focus on providing and supporting video services between various institutions
- Various difficulties due to network/endpoint/software can cause 'on demand' video to sometimes fail
- Connecting via the AARNet bridges can overcome some of the network problems due being a common point for many institutions (firewalls and gatekeepers already configured to support videoconferencing)
- The NVCS ventured on standards (Quality Assurance Scheme) to improve the overall videoconferencing experience and ease of call setup procedures
- The Quality Assured Sites public listing and Google Maps place marks help to share information about available VC facilities within the sector

A close-up photograph of several fiber optic cables. The cables are dark, and their ends are glowing with bright, warm light in shades of orange, yellow, and red. The background is dark, making the glowing tips stand out prominently.

Thank you and questions?

