Enhancing video conferencing bridging and support services in the Australian Research and Education sector

Jason Bordujenko

Wednesday 8th July, QUESTNet 2009
Gold Coast, Australia

Apps & Svcs team – all 4.5 of us
Apps & Svcs team - Introducing Darren French

Since we last met – engage, build, support
AARNet Apps and Services – 50,000 foot view

<table>
<thead>
<tr>
<th>Apps &amp; Services Current Service Portfolio</th>
<th>Apps &amp; Services Development Activity</th>
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<tbody>
<tr>
<td>VoIP on.net – extending quality services</td>
<td>GK Cluster</td>
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<tr>
<td>Video – simplifying processes to scale and enable positive video outcomes</td>
<td>SIP/ENUM/</td>
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<tr>
<td></td>
<td>Skype test bed / pilot</td>
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<td></td>
<td>IP-IP GW for VoIP on.net</td>
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<td>Unified Comms B2B pilot (Cisco, Avaya)</td>
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Secure federated wifi – driving to production grade service + broader coverage, uniform service.

NVCS – Where we are today - current services

- Highly reliable, high speed network
- 320+ users of online booking system
- 2000+ hrs customers use of AARNet MCU use in 2009
- Video recording, streaming
- Live and “on-demand” recorded CAUDIT & standard Ozeconferences
- More manageable Gatekeeper cluster service
- Quality Assurance Scheme in place
NVCS Quality Assurance statistics after 5 months

"The QA scheme has been extremely beneficial for us in helping improve our service and the automated MCU dialing feature is great." Ben Loveridge, The University of Melbourne

"The AARNet quality assurance scheme is great. It not only gives me the peace of mind knowing that conferences will connect reliably and of an approved quality, it also connects automatically on-time without manual intervention I can basically set and forget. Since participating in the QA scheme it has helped to identify a few issues with our video facilities that have now been resolved". Matt Suffolk, University of Tasmania

NVCS used for disaster preparedness planning
2009 Applications & Services

• Development Focus:
  – Develop booking system – experiences (CMP -> TMS, Renovo, others)
  – Ultimate aim for booking system (pool resource, meeting exp focus)
  – Broaden services – desktop ↔ TP (significant technical, $, resource)

• Engagement Focus:
  – AARNet workshops – 2 day events September/October (NSW and QLD)
  – Customer forums: Monash event (past) – Deakin event (Nov/Dec)
  – SPUSC – Desktop Video Project Group presentation – NZ Nov 09

• Under the hood stuff:
  – SIP platform, TP interchange testbed (experimental), security, privacy factors
  – Vendor engagement - CISCO, Polycom, TANDBERG engagement relationships
  – Assess Networking/Application “gateways” and opt-in directory/presence services

The NVCS of tomorrow

<table>
<thead>
<tr>
<th>Management overlays</th>
<th>Interoperability key design aspects</th>
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<tbody>
<tr>
<td>Call admission</td>
<td>SIP, H.323, H.320</td>
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<tr>
<td>Call control</td>
<td>• Why should the user know/care?</td>
</tr>
<tr>
<td>Firewall traversal</td>
<td>• VoIP/Video seamless integration</td>
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<td>NAT traversal</td>
<td>• How to (de)escalate a call</td>
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<td>Presence</td>
<td>• Unified Communications</td>
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<td></td>
<td>• Beyond ‘buzzword bingo’</td>
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<td></td>
<td>• Standards compliance</td>
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<td>• Future ‘resilient’ solutions</td>
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The NVCS of tomorrow

- No one size fits all - go for ‘one size fits best’ instead
- Follow the ‘you can teach a person to fish’ approach for support
- Don’t cost anybody a heap of money, but add value to investment instead
- Focus on consultation, research, education and professional development
- Strive for the ‘big red button’ theory of operation
NVCS HD Report TP Snapshot

- Most Telepresence systems are expensive
  - Typically $300k and upwards
- Some are proprietary and do not use standards based protocols (ie H.323) and incompatible
- Telepresence has generally been limited:
  - To small multipoint conferences
  - By type of endpoint
  - To single vendor endpoints and systems
  - By inflexible architecture, thus reducing functionality

Telepresence market globally

<table>
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<tr>
<th>Vendor</th>
<th>Market Share</th>
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<tr>
<td>Polycom</td>
<td>46%</td>
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<tr>
<td>Cisco</td>
<td>16%</td>
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<tr>
<td>Teliris</td>
<td>10%</td>
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<tr>
<td>Hewlett-Packard</td>
<td>6%</td>
</tr>
<tr>
<td>Tandberg</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>17%</td>
</tr>
</tbody>
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Images courtesy and © Wintergreen Research
Polycom RPX (rear projection)

Image courtesy and © Polycom

Cisco ‘TelePresence 3000’

Image courtesy and © CISCO
Cisco TP Interoperability & Scaling

Image courtesy and © CISCO

Tandberg Telepresence

Image courtesy and © TANDBERG
Teliris Telepresence/Touch Table/Easel

Images courtesy and © Teliris

New products from InfoComm2009
Carrier class MCU’s – towards 1080p

Images courtesy and © Polycom, Radvision and TANDBERG

Introductory HD Conferencing

- Polycom HDX6000
- TANDBERG C20
- Lifesize Express 200

Images courtesy and © Lifesize, Polycom and TANDBERG
What about my desktop video backyard?

Current technology blockers:
- Computers with outdated browser software (E.g. IE6)
  - Have a resource dedicated to looking at new browser software
- No access to install browser plug-ins or add-ons
  - OR: Installed plug-ins (eg Flash, Quicktime, WMP) are out of date
- No software installation privileges
  - USB headset/Echo cancelling speaker/mic not used/can’t install
- System sign up confirmation emails get caught in spam filter

Other AARNet opportunities

- Look out for information on the training workshops (Sept/Oct)
- Desktop BoF this afternoon (5.10pm in this room)
- Streaming BoF tomorrow (also 5.10pm in this room)
- Leon Li’s RTC infrastructure talk on Friday 11.00am (Stream 3)

- Follow us on Twitter – [http://twitter.com/AARNet](http://twitter.com/AARNet)