



ENUM@AARNet – A
Registrars overview

ENUM Day

Sydney, Australia

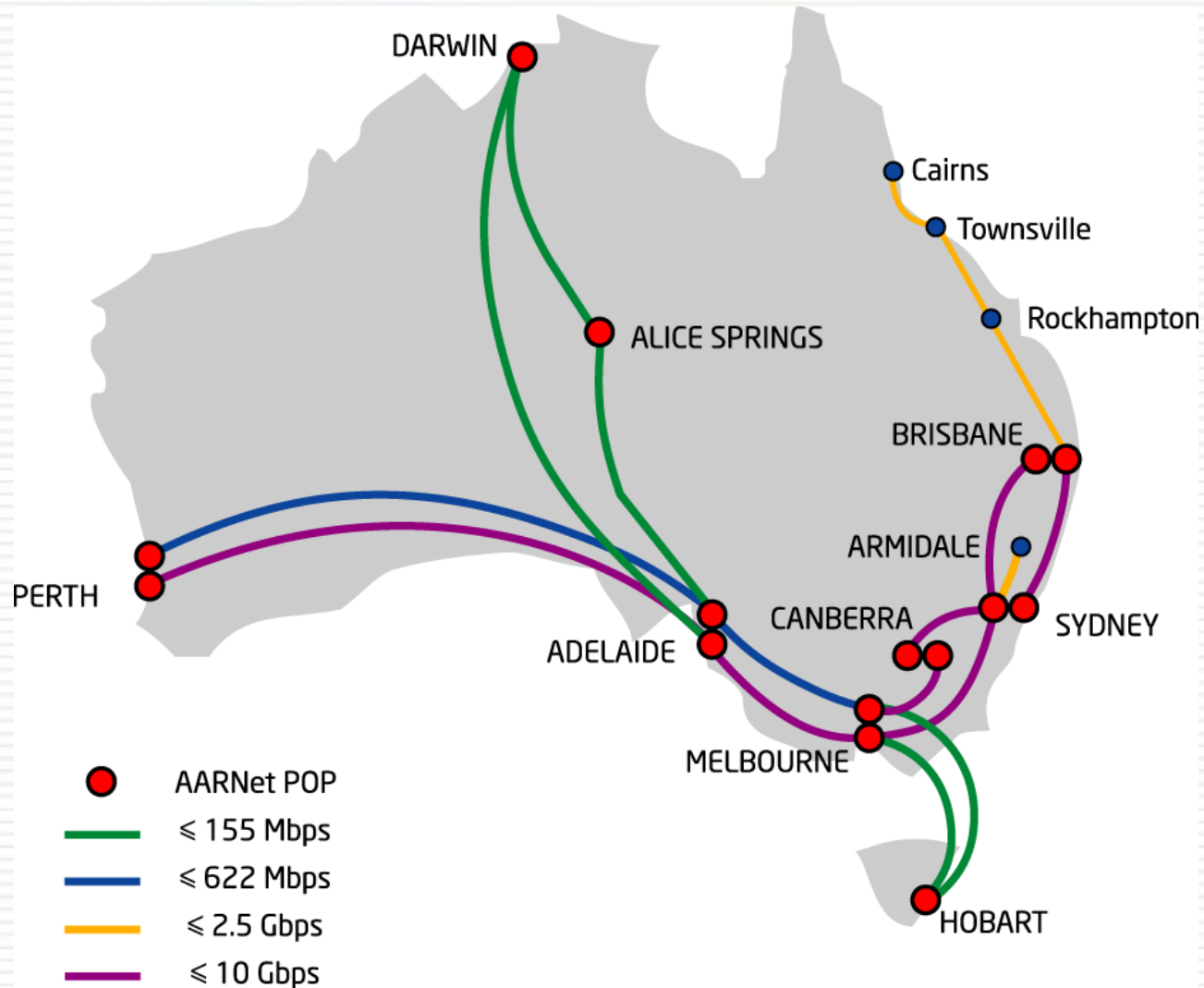
The pace of change is truly amazing!

- Genesis of the Internet in Australia
- Network development
 - **AARNet1** - Commercial business sold to Telstra in '95
 - **AARNet2** – ATM network supplied by Optus
 - **AARNet3** – Fibre optical high speed IP network (dedicated 1 Gbps connections and up to 320 Gbps bandwidth capacity!)

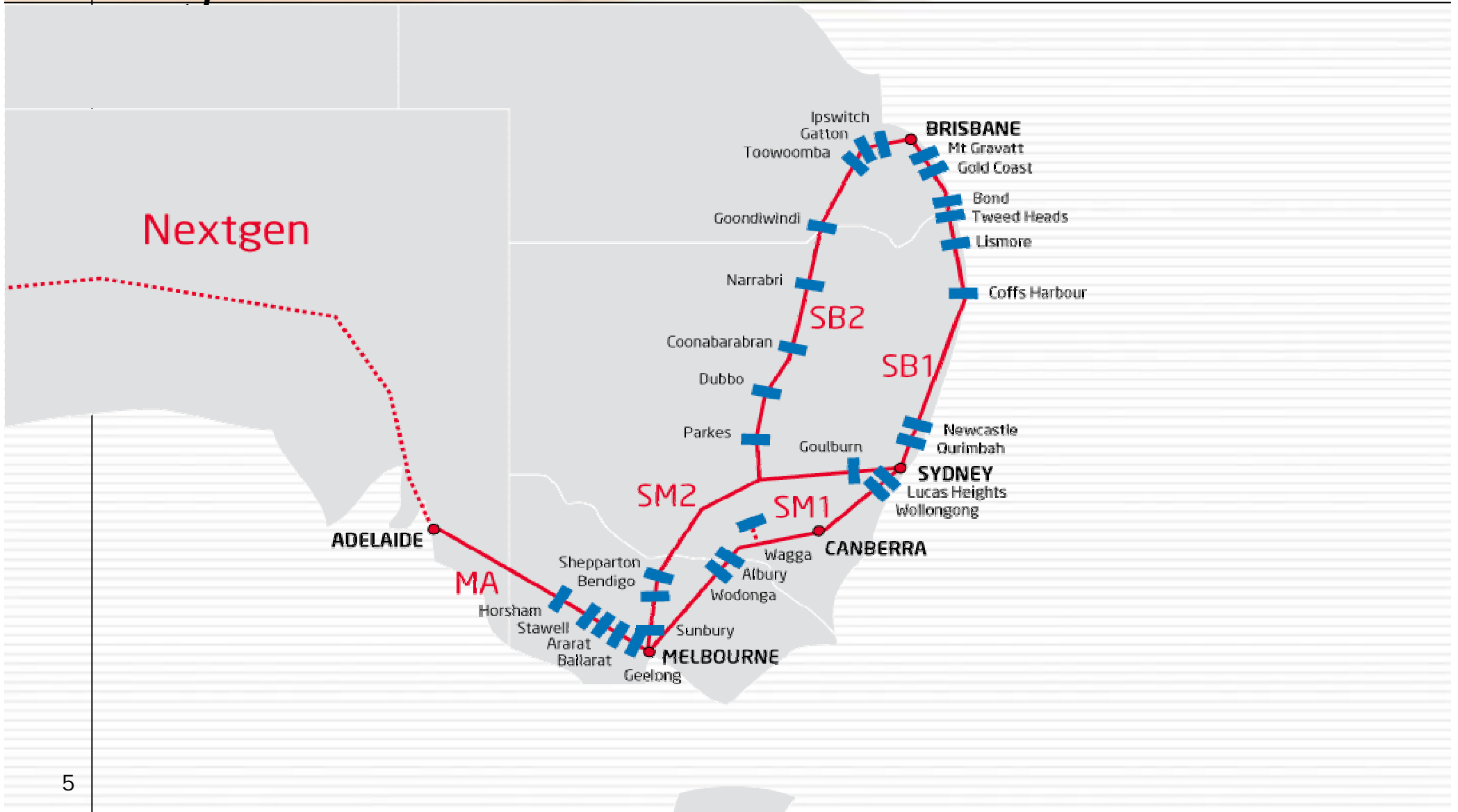
AARNet – its place in Australia

- Not for profit
- Carrier licence # 61
- Distributed staff across Australia
- Network connecting majority of Australian Universities & CSIRO in all states and territories
- Links to the major international ARENs (Academic & Research Networks)

National Network



Regional Network



Dark Fibre Deployed across Australia



About AARNet3

Roll the AARNet3 launch video!



Focus on Underpinning e-learning & collaboration through technology, toolkits, services

Planned initiatives to 2010 are focussed on meeting customer needs for enhanced learning, collaborative eResearch and efficient administrative processes.



Tech streams →	Real Time Communications			Content Management & Delivery	Middleware & Security	
Key customer needs ↓						
Enriched Learning Access to teaching materials (notes, podcasts, video, dynamic websites for interactive learning)	Unified Comms (integrated VoIP, Video, Chat, presence, etc)	Enhanced Conference Booking Services For VoIP & Video (Codian Booking system)	Immersive Multimedia (Telepresence)	Digital Media access to content (Research Channel) (Australian Screenonline) (ABC)	Access to Offsite Storage (Disaster Recovery) (research data repositories)	Secure web access to online content such as e-journals (Shibboleth)
Collaborative eResearch Secure Access to voice/video/chat/grid apps/shared apps to collaborate	VC Service Support				Secure Wireless Roaming (eduroam)	
Efficient Admin Processes Economies of scale to support RTC, off-site DR and security solutions	Funded research to improve real time communications (SIP/Skype)				Security partnership (AARNet/AUSCERT security hub)	

AARNet's Applications & Services area

ENUM sits firmly in our Real Time Communications technology area and plays a role in the following projects

- ENUM Infrastructure
 - We are working to “ENUM enable” our customer’s number ranges so that they can deploy dynamic secure VoIP call routes. We will also consider whether an ENUM applications can be developed.
- Unified communications
 - AARNet will continue to develop VoIP, Video, chat and presence services with a range of communication and collaboration applications, some will depend on ENUM.
- VoIP/Video conferencing booking system/services
 - AARNet will ENUM enable multiple services including our MCU services
- Technical papers
 - AARNet will fund technical papers on SIP & ENUM, In conjunction with RMIT we hope to apply for research in ENUM from a privacy/security perspective

Background

- AARNet was fully accredited Tier-2 Registrar since the beginning of the trial in June 2005
- AARNet has regularly participated at the AEDG (Australian ENUM Discussion Group)
- AARNet has an Information Portal and FAQ online since June 2005
- AARNet supports a Registration and ENUM Management ("MyENUM") Portal online since Mid-June 2005
 - <http://www.aarnet.edu.au/services/enum/registration/>
 - <http://www.aarnet.edu.au/services/enum/myenum/>
- AARNet has registered the <http://www.enum.edu.au> domain name as a sign of its ongoing commitment to ENUM for the sector
- AARNet hosted an ENUM BoF was held during the 20th APAN meeting in Taipei, Taiwan, providing a discussion forum for the Asia-Pacific Region AARNet & Instra wrote the first draft documents for the Authentication & Validation Process (now an official ACMA document)

AARNet view on ENUM

- ENUM enables Researchers to control their personal communications
- ENUM provides Australia's R&E sector will the ability to
 - More easily manage communications across our high speed core network infrastructure to support our VoIP/Video applications.
 - Deploy more secure communication infrastructures
 - Offer our institutions with options to control call routes on their number ranges
 - Test and trial software to demonstrate the potential of ENUM to end users in the R&E sector

How AARNet will use ENUM

- Use of ENUM for the VoIP network
 - Reducing the maintenance of static VoIP routing tables (individual tables used for each member/associate)
 - Move more traffic on the IP network away from PSTN → Forwarding cost reductions to our members/associates
 - {Testing of infrastructure ENUM}
- Use of ENUM for the Video network
 - Reducing the maintenance of static routing tables
 - (Replacement)/Enhancement of the current GDS (Global Dialing Scheme → VoIP Peering session later)
- Explore/Develop new applications making use of this technology

AARNet & ENUM - The Registration

- Registration only available to members & associates
- Using a standard web form
 - [Note: This interface may change as AARNet moves to a new website in January 2007]

The screenshot shows a web browser window titled "ENUM Registration - Application Form for ENUM Registrants Only - Mozilla Firefox". The address bar shows the URL "http://www.aarnet.edu.au/services/enum/reg_su_form.html". The page header includes the AARNet logo and the text "Australia's Academic and Research Network". A navigation menu contains links for NEWS, EVENTS, CONTACTS, ABOUT, SEARCH, NETWORK, SERVICES (highlighted in red), ENGINEERING, APL INTERNAL, and HOME. Below the menu, there are links for "AARNet Home", "Services", and "ENUM".

The main content area is titled "ENUM Registration" and contains the following text:

To successfully register an ENUM for personal use you must be [eligible](#) and the ENUM you request must be one that is currently available (you can check by looking at the [whois lookup](#) tool). In the event that an ENUM is not available you will have to re-register using this form.

If you want to register multiple ENUM on behalf of your organisation in the role of an ENUM Administrator - click [here](#).

Please note that fields marked with a single asterisk are mandatory. Fields marked with two asterisks are mandatory and are publicly available via whois lookup.

The form is titled "Personal Information" and contains the following fields:

Title:	Mr * *
Familyname:	<input type="text"/> *
Firstname:	<input type="text"/> *
Address:	<input type="text"/>
City:	<input type="text"/>
Suburb:	<input type="text"/>
Postcode:	<input type="text"/>
State:	ACT
Phone:	+61xxxxxxxx
Mobile:	+61xxxxxxxx

AARNet & ENUM - MyENUM

- Maintenance portal to manage:
 - Your ENUM
 - (Additional numbers; only 059 range)
 - Personal/Technical/Administrative contact
 - NAPTR records

My ENUM - Main menu

Welcome to AARNet's 'My ENUM' Service

This is the main menu of your ENUM account. Using this page, you can maintain your ENUM account. You can register an additional ENUM, view and change your contact information, including your administrative and technical contact, or if you do not want to participate in the trial delete your account.

If you have any problems or questions about the 'My ENUM' service, please send an email to enum-trial@aar.net.edu.au.

Options:

- [Register an additional ENUM](#)
- [View/Change your personal information](#)
- [View/Change your technical contact](#)
- [View/Change your administrative contact](#)
- [Change password](#)
- [Logout](#)

Account	
Customer ID	1120702344
Login:	kewin.stoeckigt@aar.net.edu.au
First login:	0000-00-00
Last login:	2006-11-09
Logins so far:	206

Your ENUMS

- Confirmed ENUMs
 - +61590023546 - [Update](#)
 - +61590027509 - [Update](#)
 - +61590000275 - [Update](#)
- Pending ENUMs
 - +61590018756

The background of the slide is a dark, almost black, field filled with a bokeh effect of out-of-focus light spots. These spots are primarily in shades of red and orange, with some appearing as bright yellow or white. The spots vary in size and intensity, creating a soft, atmospheric glow. The text 'Thank You' is centered in the upper half of the image.

Thank You