



IPv6 Technical Workshop – December 2009

Following the successful series of IPv6 Hui held earlier this year, the New Zealand IPv6 Steering Group is hosting an IPv6 technical workshop in Auckland from 7 – 11 December.



The experienced team of instructors includes Nathan Ward (Braintrust), Faraz Shamim (Cisco) and Andy Linton (Victoria University).



This hands-on workshop has been delivered at several APRICOT / APNIC / SANOG meetings in recent years. The lab equipment consists of Cisco routers and switches.

The workshop is being run on a cost-recovery basis at a fee of \$295 ex GST.

Responding

The workshop is strictly limited to 28 attendees, on a first come, first served basis.

Braintrust



Please confirm your attendance by emailing Campbell Gardiner at campbell@internetcz.net.nz.

InternetNZ will invoice you. Please include in your reply your daytime telephone contact number, postal and email address and who you would like the invoice made out to.

Regards,

Murray Milner

Convenor – New Zealand IPv6 Steering Group

Where:

University of Auckland
Architecture Building
Room ALR6

When:

Monday 7 Dec – Friday 11 Dec
9am to 5pm each day.
Morning and afternoon tea and
lunch will be provided.

What:

Five day, hands-on workshop -
IPv6 lab equipment, for up to 28
participants. Details next page.

Who:

Any technical people wanting
in-depth knowledge of IPv6

Cost:

\$295 ex GST

Anticipated course outline: IPv6 Technical Workshop

Who should attend:

Engineers and operational staff at ISPs and other network operators who are planning to use IPv6 either as research or on production networks. Anyone who wants to learn how IPv6 works in practice can also attend.

Pre-Requisites:

Good knowledge of IPv4 addressing, network operations as well as knowledge of DNS, Routing with both IGP and BGP. It is important that students have good prior knowledge of operations in IPv4 in order for them to attend this workshop.

The workshop will be a combination of theory and lab. The lab will constitute about 60% of the total course.

Class Size: 28

What you will learn:

History of IPv6

- What were the problems to be solved?
- What were the proposed solutions
- Why was IPv6 chosen?

IPv6 Design & Addressing

- What's an IPv6 address?
- Packet formats
- Comparison between IPv4 and IPv6 packets
- Addressing architecture
- Address allocation

IPv6 Mechanisms

- Neighbour Discovery
- Autoconfiguration (Stateless, DHCPv6, etc.)
- Address Selection
- Multicast

IPv6 Routing

- RIP
- OSPFv3
- ISIS
- BGP and BGP Multihoming

Access & Services

- DHCPv6-PD
- Ethernet services
- PPP services
- Co-location and web hosting

Transition from IPv4 to IPv6

- Applications
- Dual-stack
- 6RD (recent development)
- 6PE
- Dual-stack lite (recent development)
- Teredo
- 6to4
- ISATAP

Layer 8+

- Strategies
- Problems faced today
- Discussion