



The IPv6 Network at RIPE 56

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Overview

- IPv6 at RIPE Meetings until now
- IPv6 at RIPE 56
- IPv6 Transition Mechanisms
- The RIPE Meeting IPv6 network
- The IPv6 Hour
- Remaining dual-stack network coverage
- Thanks
- Questions



IPv6 at RIPE Meetings until now

- Dual-stack IPv4/IPv6 network
 - available on the wireless network as SSIDs **ripemtq** (802.11b/g) or **ripemtqa** (802.11a)
 - 2001:4120:1::/64 at this meeting



IPv6 at RIPE 56

- Two additional “IPv6-only” networks
 - **ripemtg-v6**
 - IPv6-only network
 - 2001:4120:1:1::/64
 - **ripemtg-v6-xp**
 - 2001:4120:1:2::/64
 - But, since Windows XP doesn't do DNS over IPv6, this network has local RFC1918 IPv4 address space providing an IPv4 transport to a local DNS server
- IPv6/IPv4 Transition Mechanisms
 - NAT-PT & DNS ALG



IPv6 Transition Mechanisms

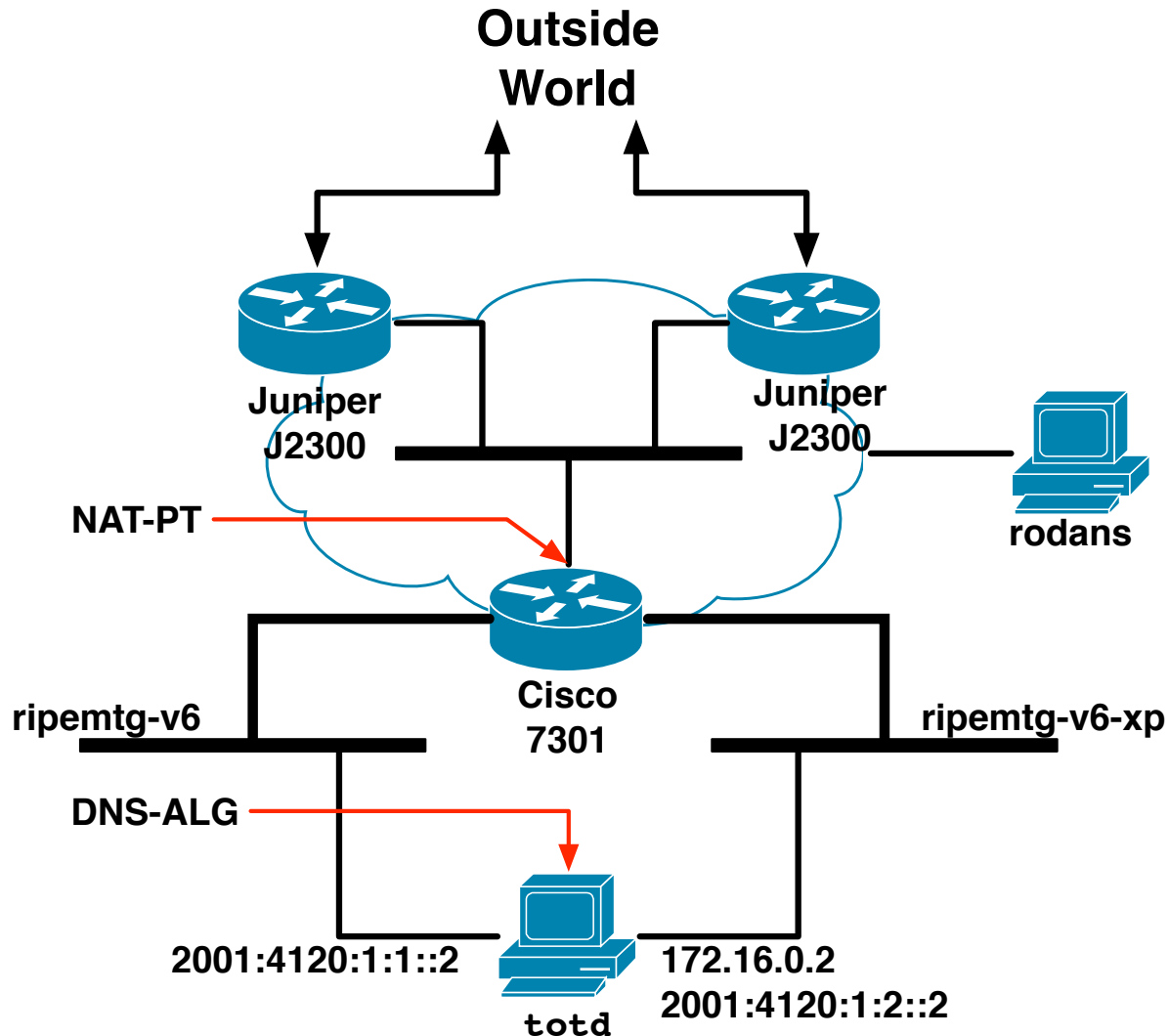
- NAT-PT

- Network Address Translation - Protocol Translation
- RFC2766
- Cisco IOS 12.4(15)T5 “Advanced IP Services”
 - this version is from 1 May 2008 but 12.4(15)T3 or later “Should Also Work”.
- IPv4 sites will see all traffic originating from 193.0.29.3

- DNS ALG

- DNS Application Layer Gateway
- Synthesises **AAAA** records for those DNS entries which have only **A** records
- totd software

The RIPE Meeting (IPv6) Network

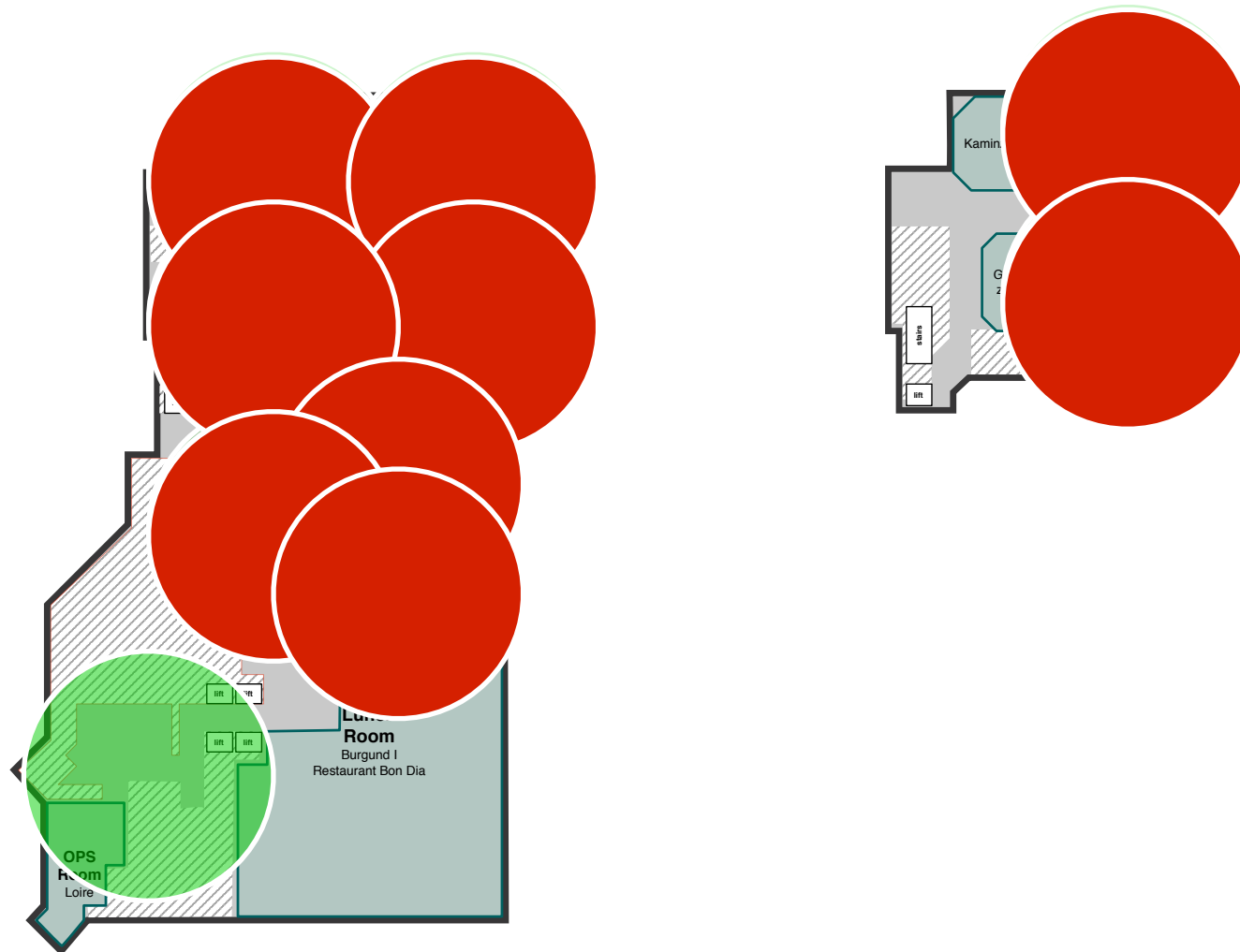




IPv6 Hour

- We will switch off the dual-stack wireless networks throughout the Meeting area except outside the Loire Room
 - **ripemtg**
 - **ripemtga**
- Wired connections in the Terminal Room will remain active
- If you use Windows XP then connect to
 - **ripemtg-v6-xp**
- Otherwise connect to
 - **ripemtg-v6**

Dual-stack network coverage





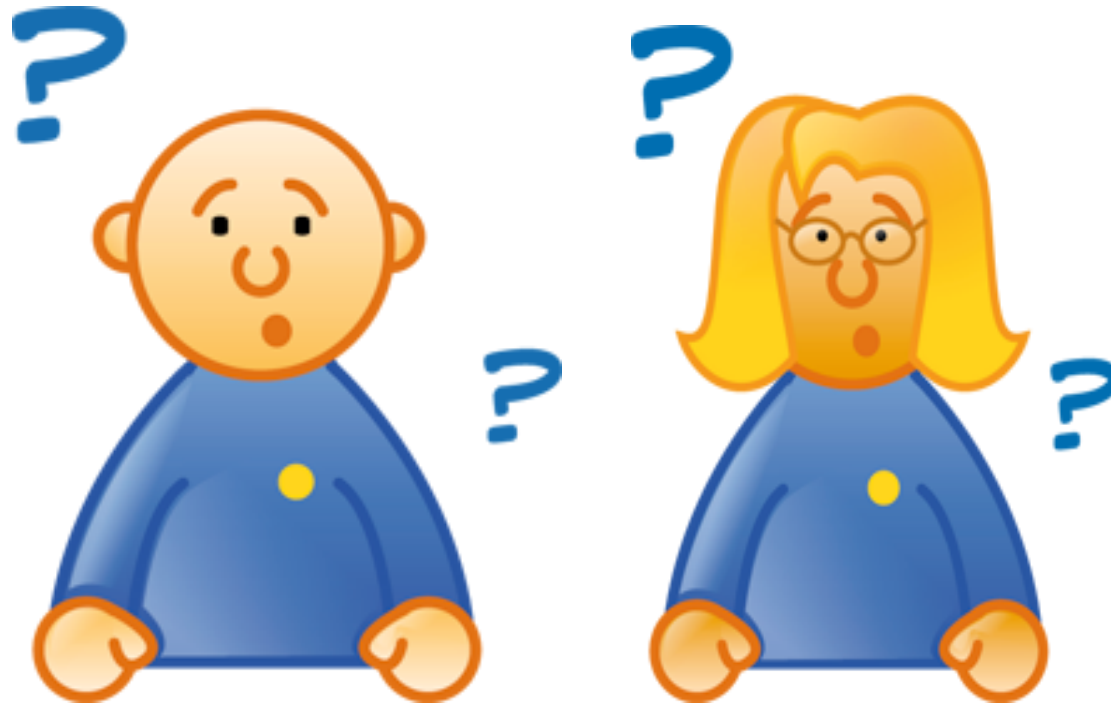
The IPv6 Hour

- Last chance to configure laptops and join one of the IPv6-only networks...
- Client configuration details for most operating systems can be found
 - at <http://rosie.ripe.net/ipv6help.php>
 - and on the orange sheets



Thanks to...

- Philip Smith, Cisco
 - For helping with the hours of entertainment debugging the IOS NAT-PT configuration on Monday evening and Tuesday morning
- Randy Bush, IJ
 - For providing various machines in the outside world to test against on Monday evening
- The RIPE NCC Staff
 - Including
 - Erik Romijn for configuring the wireless access points
 - Ruben van Staveren for building additional virtual servers and configuring totd



Questions?

<http://rosie.ripe.net/ipv6help.php>



IPv4 Switch-off

- The dual-stack wireless network will now be switched off.....
- We will switch the **ripemtg** and **ripemtga** networks back on at the end of the coffee break



Graphs...

- Traffic, Router CPU load, etc.
 - <http://rosie.ripe.net/mrtg/mtgrtr3/>
- Clients per SSID
 - <http://rosie.ripe.net/mrtg/ssids.html>





A link... and a chance to win a prize

<http://rosie.ripe.net/ipv6q1.php>