

IPv6 CPE readiness panel

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IPv6 mercenary

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John on Cisco IPv6 Strategy

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Google's June 2010 IPv6 developers conference



"...if we don't overcome the challenges of IPv4 (...) we will slow down the growth of the Internet and lose momentum as an industry"

"IPv6 is important to all of us (...) to everyone around the world, It is crucial to our ability to tie together everyone and every device."

"At Cisco we are committed architecturally to IPv6 across the board: All of our devices, all of our applications and all of our services".

Cisco IPv6 CPE Products Examples

Home Networking Business Unit:

E1200v2 E1500 E1440 E2500 E2700 E3200 E3200v2 E4200 E4200v2 E900

Small Business Technology Group:

Small Business RV Routers (RV110, RV180), NSS300, Cameras...

Telco Home Networking Business Unit:

TES301, 302, 303...

Cable Home Networking Business Unit:

DPC3825, DPC3925, DPC3010

Services Routing Technology Group

800 series routers, ISR series routers



Trends

1. Innovation and deployment in IPv4x, IPv4 residual technologies, standards, and products is off the MAP
2. Demands on CPEs increasing:
MAP (4rd-T,U,E, dIVI-PD, SA46T-AS, stateless 4over6)

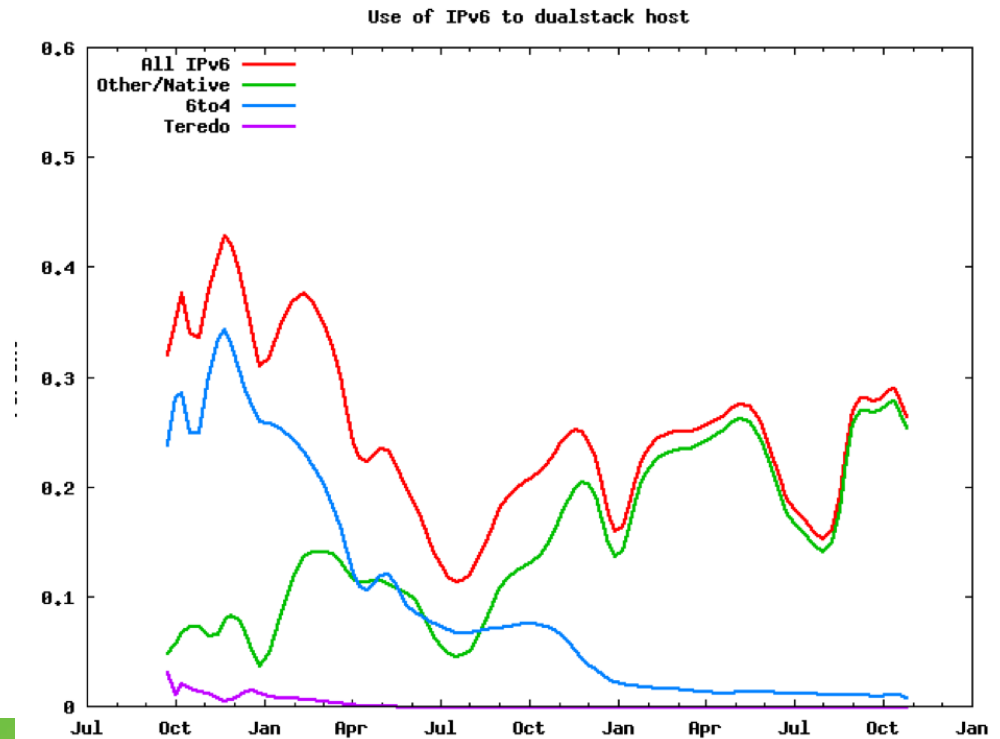
SD-NAT, NAT464

PCP/UPnP proxy

Bufferbloat

Homenet

3. IPv6 deployment trend?
Not quite what we'd hope for...



IPv6 CPE standardization:

Done:

RFC6204: CableLabs eRouter, BBF TR-124i2, IPv6 Ready CE logo

Ongoing:

RFC6204bis

PCP / UPnP proxy

Softwires / Behave: Stateless IPv4 over IPv6, Stateless CGN

Home networking WG:

Prefix Configuration and other configuration information

Routing (unicast / multicast)

Name Resolution

Service Discovery

Network Security

Challenges:

SP edge:

PE, BNGs, CMTSs are largely there

N:1 VLAN feature support are there or very soon

CPE:

IPv4x / Transition mechanisms are all over the MAP

Averaging a new proposal a week. μ

IPv4/IPv6 Feature parity (including performance)

IPv6 “only” operation with residual IPv4