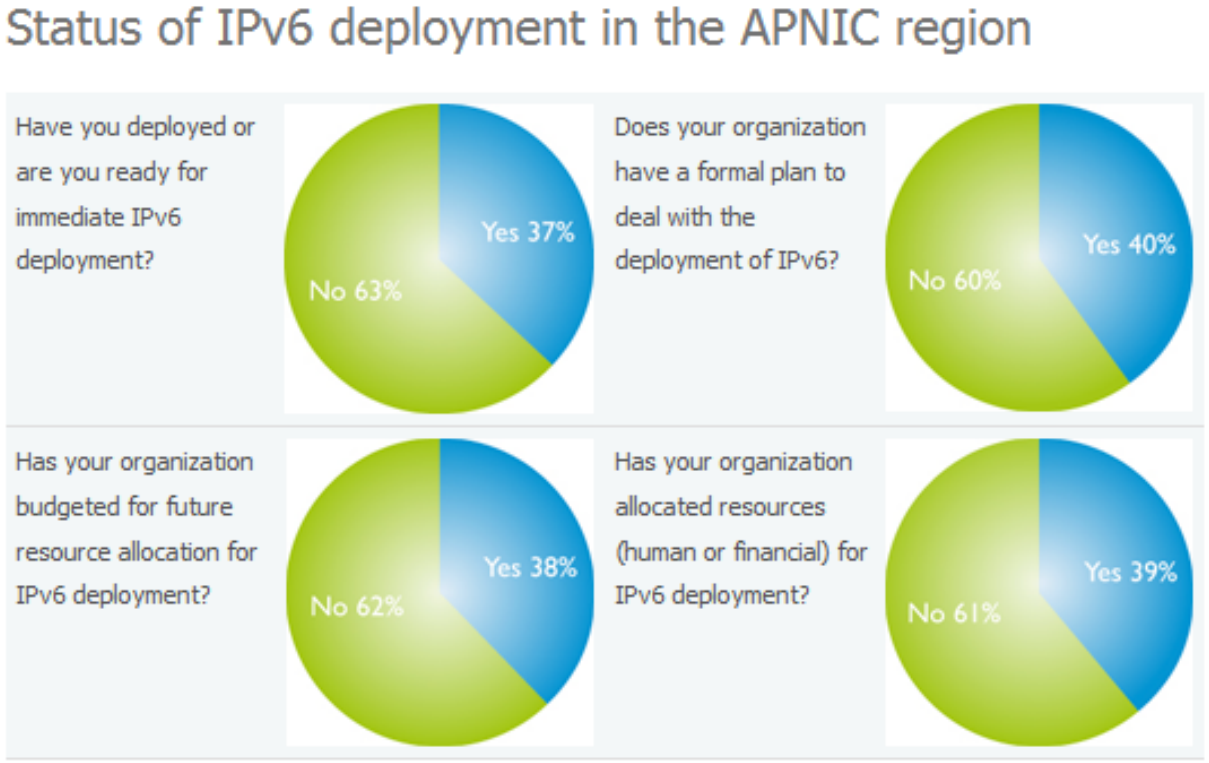
IPv6 Day Recap

Time to get moving

- Only 10.5% of networks are currently running IPv6 [1]
- Gartner estimates it will cost companies 6% of their annual IT budget to change their IT environment from IPv4 to IPv6 [2]
- Yet few companies are actually ready for IPv6

1. http://bgp.he.net/ipv6-progress-report.cgi
2. http://www.zdnet.co.uk/news/networking/2011/01/13/google-facebook-to-trial-ipv6-access-on-key-domains-40091424/

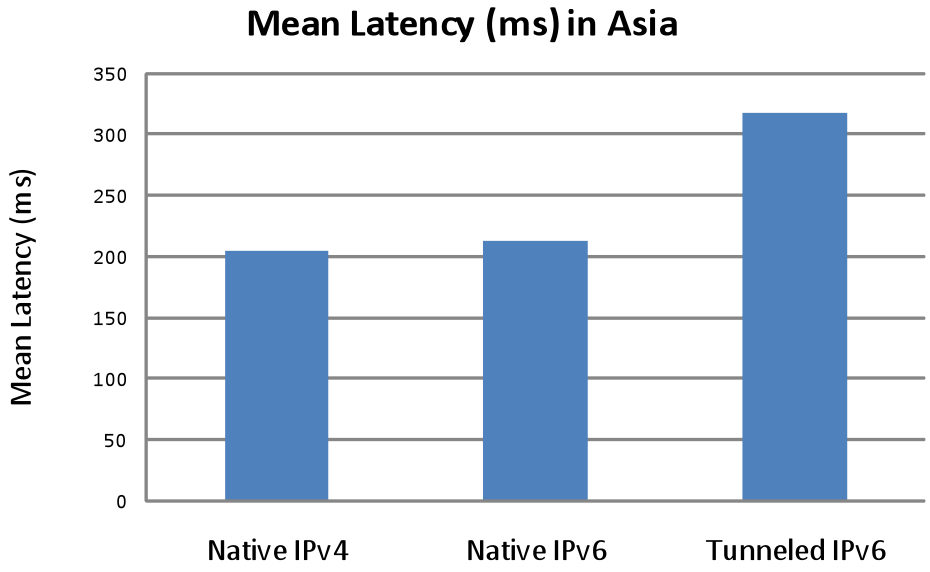
Local & Regional IPv6 Deployment



http://www.apnic.net/community/ipv6-program/apnic-and-ipv6

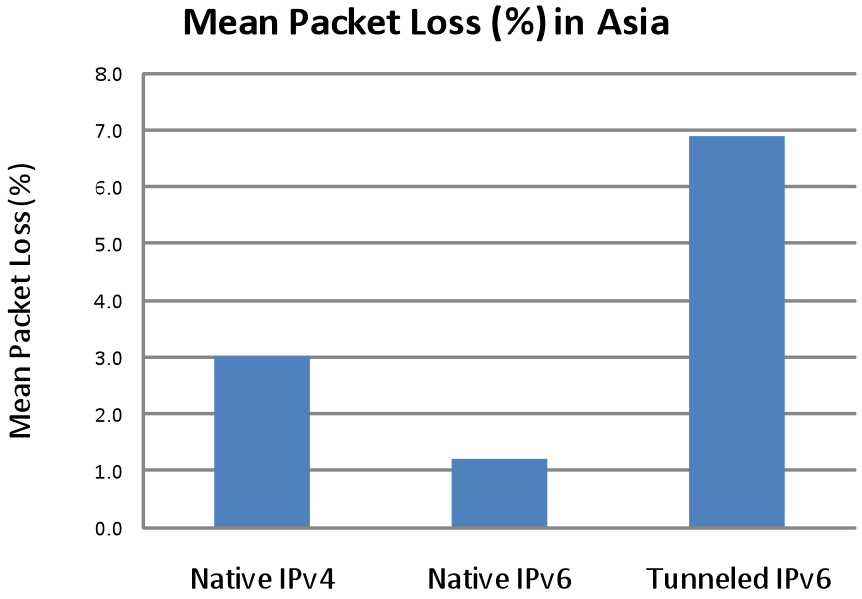
Comparing Latency Over IPv4 & IPv6

- Akamai pinged 6,800+ nameservers from three U.S. locations between 4/12/10-12/19/10.
- Mean latency over native IPv6 slightly higher than native IPv4
- Mean latency over tunneled IPv6 connections is much higher



Comparing Packet Loss Over IPv4 & IPv6

- Globally, measured packet loss over IPv4 is less than over IPv6.
- In Asia, mean packet loss is higher over native IPv4 to nameservers w/ native IPv6 interfaces.
- Mean packet loss over tunneled IPv6 connections is much higher.



Problems found, Future plans

- Problems
  - Essentially none – once things started
  - All problems were on prep, but everything got handled

- Future Plans
  - Essentially no change
  - IPv6 is major initiative in Akamai
  - Customers are on v6 today, we expect that to continue and grow

Obligatory Akamai Infrastructure Slide

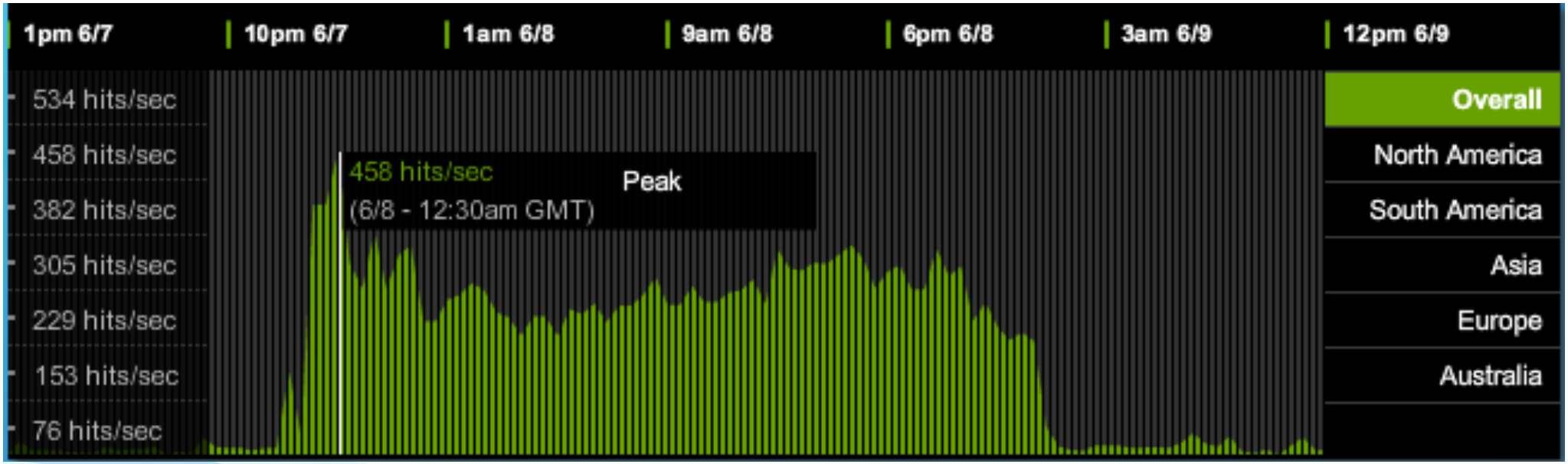
IPv6 On The Akamai Global Internet Platform

- 727 nodes
- 125 cities in 43 countries
- 139 Networks
- 6 Continents

Akamai's Goals for IPv6 Support

- Service requests natively over IPv4 & IPv6
- Provide accelerated delivery despite fragmented IPv6 connectivity & carrier bottlenecks
- Provide IPv6 geolocation capabilities

Traffic on IPv6 Day



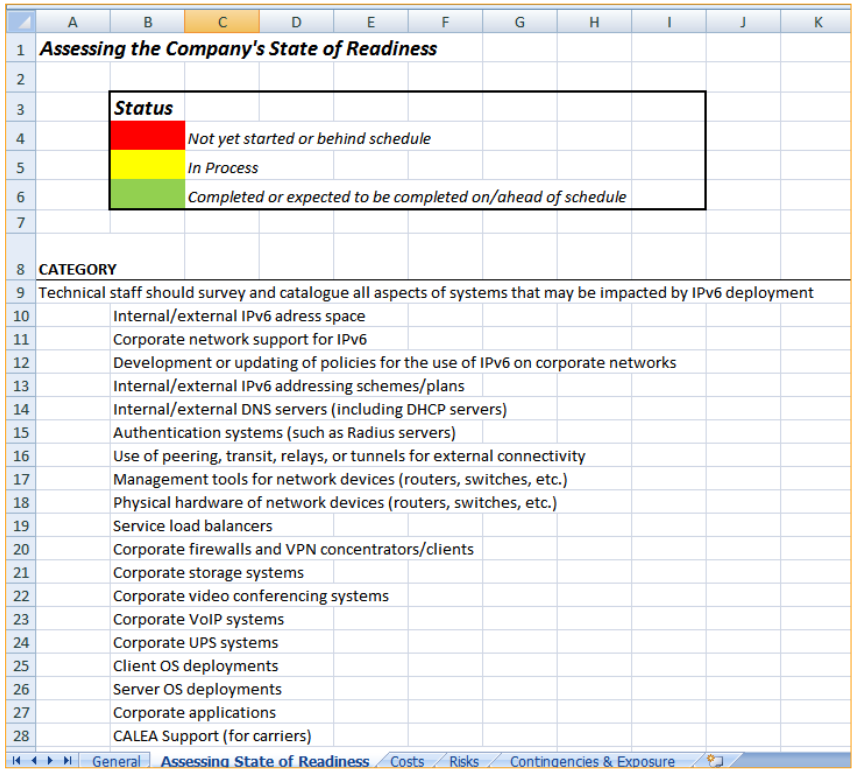
Preparing for the Transition

IPv6 “Readiness Template”

Intended to help companies assess & track readiness for IPv6 adoption across the organization

Co-developed by Akamai with other Internet industry leaders

http://www.ntia.doc.gov/advisory/IPv6/



	A	B	C	D	E	F	G	H	I	J	K
1	***Assessing the Company's State of Readiness***										
2											
3		***Status***									
4			*Not yet started or behind schedule*								
5			*In Process*								
6			*Completed or expected to be completed on/ahead of schedule*								
7											
8	**CATEGORY**										
9	Technical staff should survey and catalogue all aspects of systems that may be impacted by IPv6 deployment										
10		Internal/external IPv6 adress space									
11		Corporate network support for IPv6									
12		Development or updating of policies for the use of IPv6 on corporate networks									
13		Internal/external IPv6 addressing schemes/plans									
14		Internal/external DNS servers (including DHCP servers)									
15		Authentication systems (such as Radius servers)									
16		Use of peering, transit, relays, or tunnels for external connectivity									
17		Management tools for network devices (routers, switches, etc.)									
18		Physical hardware of network devices (routers, switches, etc.)									
19		Service load balancers									
20		Corporate firewalls and VPN concentrators/clients									
21		Corporate storage systems									
22		Corporate video conferencing systems									
23		Corporate VoIP systems									
24		Corporate UPS systems									
25		Client OS deployments									
26		Server OS deployments									
27		Corporate applications									
28		CALEA Support (for carriers)									

General | Assessing State of Readiness | Costs | Risks | Contingencies & Exposure