

DNS OARC Workshop (Denver) Comcast DNSSEC and IPV6 Progress

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Overview

- Comcast DNS Statistics
- DNSSEC
- IPv6 Progress
- Questions



Comcast DNS Statistics

- 16.4 Million High Speed Internet Customers
- Caching DNS
- Authoritative DNS



DNSSEC

Caching

- DNSSEC deployed to all caching POPs
- Opt-in customer trial in progress

Authoritative

- DNSSEC deployed to all authoritative POPs
- All .ORG zones signed (650+)
- Participating in upcoming .NET trial

DNSSEC Challenges

- Upgraded all DNS and load balancer hardware in 2009
- Identified and fixed an EDNS0 bug in upstream network hardware
- Worked with vendors to develop tools and procedure for signing zones
- Performed numerous test signings of all production zones



IPv6 Progress

IPv6 DNS

- All authoritative and caching DNS servers enabled for IPv6
- Still waiting on upstream router upgrades for some POPs
- DNS ACLs much easier to manage (One prefix!)

• 6to4

- Deployed 6to4 relays across Comcast network
- Trial open to Comcast subscribers
- Updated DNS ACLs with 6to4 v6 space calculated from Comcast v4 space

IPv6 Rapid Deployment (6RD)

- Deployed 6RD Border Routers across Comcast network
- Updated Caching DNS ACLs with Comcast IPv6 prefix
- Trial available to all Comcast customers http://www.comcast6.net



Questions

Thank you!

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