Enterprise IPv6, Affecting Positive Change

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Oracle Fact Sheet 9/2013 - http://www.oracle.com/us/corporate/oracle-fact-sheet-079219.pdf

Affecting Positive Change
Lessons Learned

- Enlist champions and advocates.

- Publicize Wins.

- Identify new opportunities.

- Small steps, achievable milestones.

- Build on successes, recycle and reuse.

- Overcome IPv4 thinking, design for the network.

Remember there is a safety net…

Affecting Positive Change – Cont.
Lessons Learned

- Require IPv6 from your vendors
  - Not all IPv6 is created equal.
  - "Supports" doesn't mean it works in your environment.
  - Formalize requirements and drive delivery.
  - Be cautious of middle layers lagging support of IPv6.
  - Verify IPv6 Support, take the Missouri approach "Show Me!"
  - Document and track bug and enhancement id's.
  - Share with your vendors your requirements and strategy.
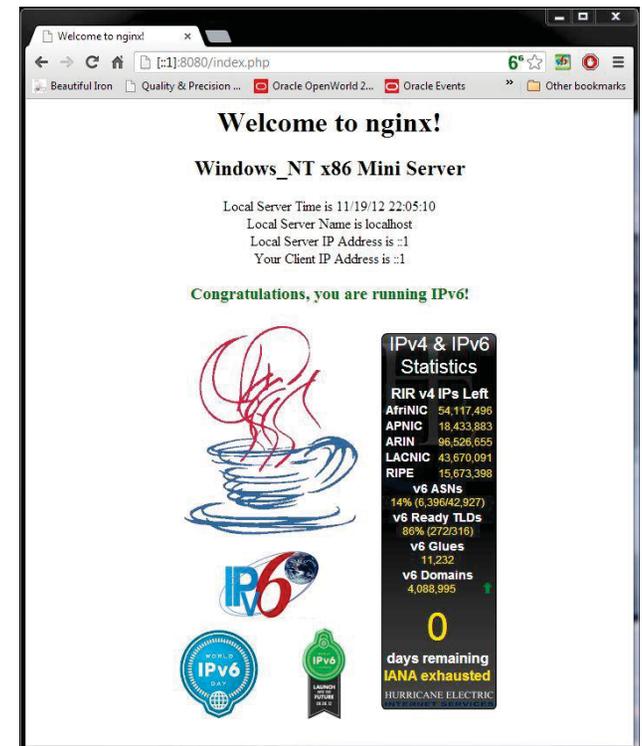 - Engage vendors to help improve IPv6 solution.

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Affecting Positive Change – Cont.

Lessons Learned

- Supporting IPv6 internally.
  - Program / Project Manager is essential.
  - Help teams get past the "deer in headlights" moment ASAP.
    - Storming, Swarming, Performing
  - Don't propagate poor IPv4 legacy designs.
    - We can consolidate 4 IPv4 subnets into a single IPv6 /64.
    - We can assign a single IPv6 /64 to our VPN users.
  - Re-Orgs can be beneficial.
  - Become an IPv6 solution master.

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Remove IPv6 Obstacles

1. Define an IPv6 Adoption Policy.

2. Create a target for IPv6 connections.

3. Centralize training and documentation.

4. Try it on the Network and Virtualize

5. Enable IPv6 by using IPv4 transport.

6. Adopt IPv6 for existing environments.

7. Make IPv6 your default, and IPv4 the exception.

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What we've see so far…
The good, the bad, and what were they thinking…

1. Scanning Host *2001:0db8:beef:café:0123:4567:89ab:cdef* but log shows *2001:0db8:beef:café:0123:4567:89ab:cd*

2. IPv6 Address Config

3. What's address 2001:db8:: 😲

4. Identity Crisis, 4 IP Addesses

5. I see you have a /32, let's scan it…

What we've see so far…

6. Beware of IPv6 implemented in SW.

7. Router Memory

8. Why is IPv6 running?

9. Let's disable Multicast.

10. DHCP Relay / NTPv4

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What we've see so far…

11. Feature Parity Falsehood.
12. Remove IPv4 Dependencies.
13. Tunneling creates it's own problems.
14. My network address is 425407664112825928569039849516653826561
15. "You are the only customer asking for IPv6."

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Public IPv6 at Oracle

- www.oracle.com/us/technologies/ipv6/index.html

- blogs.oracle.com/ipv6

- www.ipv6.mysql.com

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