“An Internet Transition Plan”
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Problem

- Worldwide highly decentralized transition
- Many different states of individual site's IPv6 readiness:
  - Planning
  - Experimentation
  - Trial / Preproduction
  - Production
- No standard method to represent readiness
- High potential for mismatched expectations

Problem (cont)

- No entity has the ability to establish global transition schedule
- Informally, transition timeline requirements can be extrapolated from IPv4 utilization trends and forecast
- Possible need to achieve consensus on schedule of IPv6 Internet-wide expectations

An Internet Transition Plan

- Three Phase Approach
  - Preparation
  - Transition
  - Post-Transition
- Establish expectations for each phase
- Completely voluntary compliance

Preparation Phase

- Service Providers SHOULD offer pilot IPv6-based Internet Service to their Internet customers.
- Organizations SHOULD arrange for IPv6-based Internet connectivity for any Internet-facing servers (e.g. web, email, and domain name servers).
- Organizations MAY provide IPv6-based Internet connectivity to internal user communities.

Transition Phase

Service Providers MUST offer IPv6-based Internet Service to their Internet customers.

Organizations MUST arrange for IPv6-based Internet connectivity for any Internet-facing servers (e.g. web, email, and domain name servers). Internet-facing IPv6 servers SHOULD be treated as production by the organization,and SHOULD be treated as production by other Internet organizations.

Organizations SHOULD provide IPv6-based Internet connectivity to their internal user communities, and provide IPv6 internal supporting servers (e.g. DNS, DHCP).

Post-Transition Phase

Service Providers MUST offer IPv6-based Internet Service to their Internet customers. IPv6-based Internet Service SHOULD be via native IPv6 network service.

Organizations MUST arrange for IPv6-based Internet connectivity for any Internet-facing servers (e.g. web, email, and domain name servers). Internet-facing IPv6 servers MUST be treated as production by the organization, and SHOULD be treated as production by other Internet organizations.

Organizations SHOULD provide IPv6-based Internet connectivity to internal user communities, and provide IPv6 internal supporting servers (e.g. DNS, DHCP)

Additional Details

- Each phase includes a proposed time period
  - Preparation — Till Jan 2010
  - Transition — Jan 2010 to Dec 2011
  - Post-Transition — Dec 2011 onward
- Each phase includes statements regarding use of transition mechanisms versus “native IPv6”

Questions?

- Thank you!