Sunset4 WG

IETF 85, Atlanta, GA, USA

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Administrativia

- Blue Sheet: please sign. This helps get us a properly- sized room and timeslot.
- Call for volunteers for scribing on the etherpad, jabber
- Meeting notes (Etherpad):
 - http://tools.ietf.org/wg/sunset4/minutes
- WG charter: http://datatracker.ietf.org/wg/sunset4/charter/
- Mailing list: sunset4@ietf.org
- Jabber room: sunset4@jabber.ietf.org

Agenda

- Administrativia
- New Charter revision
 - http://www.ietf.org/mail-archive/web/sunset4/current/msg00094.html
- Gap Analysis for IPv4 Sunset
 - http://tools.ietf.org/id/draft-ietf-sunset4-gapanalysis
- Turning off IPv4 Using DHCPv6
 - http://tools.ietf.org/id/draft-perreault-sunset4-noipv4
- Weakening Aggregated Traffic of DHCP Discover Messages
 - http://tools.ietf.org/id/draft-yang-sunset4-weaken-dhcp
- Graceful IPv4 Sunset with Traffic Migration
 - http://tools.ietf.org/id/draft-chen-sunset4-traffic-migration
- Managed Objects for Carrier Grade NAT (CGN)
 - http://tools.ietf.org/id/draft-perreault-sunset4-cgn-mib
- Stateless IPv4 Network Address Translation
 - http://tools.ietf.org/id/draft-tsou-stateless-nat44

New Version of the Charter

- IETF Vancouver: new version of charter was discussed. Many comments.
- Followup with the people and came to a new version.
- Posted to mailing list. Oct 22nd.
- Not yet reviewed by IESG.

- Global IPv4 addresses, once freely available, are an increasingly scarce resource for many who wish to connect to the Internet today. IPv6 provides an abundance of freely available addresses, and while deployment alongside IPv4 has begun in earnest, much work remains.
- In order to fully transition the Internet to IPv6, individual applications, hosts, and networks that have enabled IPv6 must also be able to operate fully in the absence of IPv4. The Working Group will point out specific areas of concern, provide recommendations, and standardize protocols that facilitate the graceful "sunsetting" of the IPv4 Internet in areas where IPv6 has been deployed. This includes the act of shutting down IPv4 itself, as well as the ability of IPv6-only portions of the Internet to continue to connect with portions of the Internet that remain IPv4-only.

- While this work obviously spans multiple IETF areas including Internet, Operations, Transport, Applications, and Routing, this working group provides a single venue for the consideration of IPv4 sunsetting. Work in this group shall never impede the deployment of IPv6, will not duplicate functions and capabilities already available in existing technologies, and should demonstrate widespread operational need. Cross-area coordination and support is essential.
- Disabling IPv4 in applications, hosts, and networks is new territory for much of the Internet today, and it is expected that problems will be uncovered including those related to basic IPv4 functionality, interoperability, as well as potential security concerns. The working group will report on common issues, provide recommendations, and, when necessary, protocol extensions in order to facilitate disabling IPv4 in networks where IPv6 has been deployed.

 As a rule, deployment scenarios considered by the working group shall include IPv6-only nodes and networks. Work on technologies that involve increased sharing of global IPv4 addresses should be limited to what is necessary for communicating with endpoints or over networks that are IPv6only.

- The initial work items are:
 - Gap analysis of IPv4 features to facilitate IPv4 sunsetting
 - Provisioning methods to signal a dual-stack host to disable or depreference the use of IPv4
 - NAT64 port allocation and address sharing methods involving scenarios where an IPv6-only node is present (and NAT44, as it overlaps NAT64 address sharing and port use).

- Goals and Milestones:
 - Mar 2013 Submit gap analysis on IPv4 sunsetting to IESG for consideration as an Informational RFC
 - Jun 2013 Submit NAT64 port allocation and address sharing methods to IESG for consideration as an Informational RFC
 - Sep 2013 Submit provisioning methods to signal a dualstack host to disable the use of IPv4 to IESG for consideration as Proposed Standard