Problem Statement for Renumbering IPv6 Hosts with Static Addresses

draft-carpenter-6renum-static-problem-02

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Updates - March 2012
Defined what we mean

- A static address can be defined as an IP address intended by the network manager to remain constant over a long period of time, possibly many years, regardless of system restarts or any other unpredictable events.

- Static addressing is not the same thing as manual addressing. Static addresses may be configured automatically...the database from which the static address is derived may itself have been created automatically, or configured manually.

- If a host's address is configured manually by the host's administrator, it is by definition static.
Reminder - Analysis Topics

- Static Addresses Imply Static Prefixes
- Other hosts sometimes need to be configured with a literal numeric address for the host.
- Address lifetime issues for servers
- Static Virtual Machine Addresses
- Asset Management and Security Tracing
- Software licensing
- Network Elements
Expanded analysis (1)

- Mention Multicast DNS and SLP for finding local servers.
- Added text on software licensing via static addresses.
- Mentioned possible ULA use for network elements.
- Mentioned that renumbering network elements may cause temporary “destination unreachable” situations.
Added section on management aspects:

- If static addresses cannot be avoided, they should be assigned automatically from a central database using a suitable protocol, probably stateful DHCPv6.
- If possible, even static addresses kept in the central database should be assigned automatically.
- Avoid local manual configuration.
Questions?

- Any major topics missed?
- Does 6renum want to adopt this document?