OSPF Stub Router Advertisement (draft-retana-ospf-rfc3137bis-00)

Alvaro Retana, Liem Nguyen, Russ White, Alex Zinin, Danny McPherson

{aretana, lhnguyen, russwh, azinin}@cisco.com, dmcpherson@verisign.com

What is RFC3137?

- **OSPF Stub Router Advertisement**
  - Category: Informational
  - Publication: June 2001
- Describes a backward-compatible technique that may be used by OSPF to advertise unavailability to forward transit traffic (rfc1247) or to lower the preference level for the paths (rfc1583) through such a router.
  - Solution: the costs of all non-stub links are set to LSInfinity

Update

- Explicitly added support for OSPFv3.
  - Generalized text to avoid OSPFv2-specific references.
  - …and refreshed references.

Text diff

Proposed Solution (rfc3137)

…router X announces its router-LSA to the neighbors as follows.

- costs of all non-stub links (links of the types other than 3) are set to LSInfinity (16-bit value 0xFFFF, rather than 24-bit value 0xFFFFFF used in summary and AS-external LSAs).

- costs of stub links (type 3) are set to the interface output cost. This addresses issues 1) and 2).

Proposed Solution (rfc3137bis)

…router X announces its router-LSA to the neighbors with the costs of all non-stub links (links of the types other than 3) set to LSInfinity (16-bit value 0xFFFF, rather than 24- bit value 0xFFFFFF used in summary and AS-external LSAs).

The solution above applies to both OSPFv2 [RFC2328] and OSPFv3 [RFC5340].

Next Steps

- Adopt this draft as a WG Document
  - Category: Informational
  - Quickly move to update RFC 3137.