IS-IS Spine-Leaf

IETF 103 Bangkok

LSR

draft-shen-isis-spine-leaf-ext-06

November 6, 2018

Naiming S., Les G., Sanjay T.

DC IS-IS Spine-Leaf

- Incremental protocol improvement
- Reuses well deployed protocol for DC fabric supporting large number of network routing entries and features
- Supports full routing in small/median DC and serves as a DC fabric for overlay routing
- Supports Auto-tier discovery and protocol configuration for Zero Touch Provisioning
- Minimizes IS-IS LSP flooding to leaf nodes in DC spine-leaf topology
- Handles link/node DOWN events in spine-leaf topology to avoid black holes
- Supports other mechanisms/proposals such as Openfabric and Dynamic Flooding

Changes From Ver-06

- Removed the 'B' bit in the Spine-Leaf Flags field which is meant for leaf-to-leaf routing
- Added text to clarify in negative routing cases, there can be multiple links or nodes "DOWN" simultaneously and the Info-Request may need to be sent to multiple Spine nodes
- Added text to clarify the negative routing case can be applied in other tiers, but mainly should be used between the tier 0 and 1 since the upper layers have more richer topology and connections

Next Steps

- Request LSR working group further review and comments
- Ask for WG adoption