



FLOOD REFLECTOR DRAFT UPDATE

DRAFT-PRZYGIENDA-LSR-FLOOD-REFLECTION

JUNIPER
NETWORKS | Engineering
Simplicity

JUNIPER
NETWORKS

CHANGES

- DRAFT PROGRESSED TO -01 BASED ON DISCUSSIONS AND IMPLEMENTATION EXPERIENCE
- THANKS TO LES & PETER FOR EXTENSIVE REVIEW AND DISCUSSIONS
- LOTS OF READABILITY IMPROVEMENTS
- MULTIPLE SECTIONS CHANGED, CLARIFIED, ADDED

DETAILED CHANGES

- OPERATION WITHOUT L1 TUNNELS
 - DRAFT ADDED SHORT DESCRIPTION OF OPERATION WITHOUT L1 TUNNEL MESH
- IMPLICATIONS OF LEAKING OF L2 PREFIXES INTO L1 IN REFLECTOR SCENARIOS
- CLIENT OPERATION FORCES NOW ROUTER TO ADVERTISE CLIENT BIT ON ALL INTERFACES PARTICIPATING IN REFLECTION
 - CONSISTENT WITH THE ARCHITECTURE OF ROUTER BEING STRICTLY EITHER CLIENT _OR_ REFLECTOR SINGLETON AND DISALLOWING LINKS BETWEEN REFLECTORS
 - A CLIENT CANNOT PARTICIPATE IN MULTIPLE CLUSTERS, NEW CLAUSE FORBIDDING MULTIPLE SUB-TLVs ON TLV 242

DETAILED CHANGES

- CLUSTER ID: LONG DISCUSSIONS WHETHER THIS SHOULD BE COUPLED TO OTHER IDS LIKE AREA ID
 - ULTIMATE DECISION WAS THAT THIS IS ORTHOGONAL TO EVERYTHING ELSE
 - ADDED THAT CLUSTER ID MUST BE UNIQUE ACROSS THE NETWORK
 - A SINGLE L1 AREA CAN HAVE ONLY ONE CLUSTER INSIDE (MISCONFIGURATION CAN BE DETECTED LOOKING @ L1 DATABASE) BUT OBVIOUSLY MULTIPLE REFLECTORS
- LEAKING L2 PREFIXES INTO L1
 - WHEN LEAKING, ALL LEAVES MUST BE REFLECTOR CLIENTS
 - LEAF CAN LEAK L2 INTRA AREA INTO L1 ONLY WHEN IT HAS ADJACENCY TO REFLECTOR
- COMPUTATION
 - CLARIFIED HOW COMPUTATION IS RUN
 - DUE TO RESTRICTIONS ON CLIENT BEING IN ONE CLUSTER ONLY COMPUTATION IS VERY SIMPLE