

Dynamic Flooding

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Changes since IETF 105

- None

Implementation report

- Arista Networks implementation complete
- Shipped on Nov. ??, 2019 as part of 4.23.1F
- All testing completed, all known bugs fixed
- Simulated up to 5000 nodes

Demo

ip20>show isis dynamic flooding nodes

IS-IS Instance: Amun VRF: default

Level 1 Nodes:

Index	Node ID
0	ip20.00
1	ip1.00
2	ip2.00
3	ip3.00
...	
13	ip16.00
14	ip17.00
15	ip18.00
16	ip19.00
17	ip7.00
18	ip4.00
19	ip5.00

ip20>show isis dynamic flooding paths

IS-IS Instance: Amun VRF: default

Level 1:

Path: 0 1 2 3 4 5 6 0

Path: 0 7 8 9 10 11 12 1

Path: 0 13 14 15 16 17 18 6

Path: 7 19 13

ip20>show isis dynamic flooding topology

IS-IS Instance: Amun VRF: default

Level 1:

Path: ip20.00 ip1.00 ip2.00 ip3.00 ip6.00 ip8.00 ip9.00 ip20.00

Path: ip20.00 ip10.00 ip11.00 ip12.00 ip13.00 ip14.00 ip15.00 ip1.00

Path: ip20.00 ip16.00 ip17.00 ip18.00 ip19.00 ip7.00 ip4.00 ip9.00

Path: ip10.00 ip5.00 ip16.00

ip20>show isis database detail level-1 ip20.00-00

IS-IS Instance: Amun VRF: default

IS-IS Level 1 Link State Database

LSPID	Seq Num	Cksum	Life	IS Flags
ip20.00-00	31	13363 813	L1	<>

...

Router Capabilities: Router Id: 10.0.189.20 Flags: []

Area leader priority: 250 algorithm: 0

Dynamic Flooding: Enabled

Dynamic Flooding Area Node IDs: 0-19

Dynamic Flooding Path: 7 19 13

Dynamic Flooding Path: 0 13 14 15 16 17 18 6

Dynamic Flooding Path: 0 7 8 9 10 11 12 1

Dynamic Flooding Path: 0 1 2 3 4 5 6 0

Hierarchical IS-IS

Changes since IETF 105

- WG adoption (thank you!)
- Draft name change: draft-ietf-lsr-isis-extended-hierarchy-00.txt

More changes

- Extended the Area Identifier TLV to allow
 - Multiple identifiers per area
 - Multiple areas per TLV
- Clarified adjacency formation rules
- Requesting new MAC addresses for LAN PDUs

Area ~~Abstraction~~

Proxy

Changes since IETF 105

- Layer 8 interrupt: collaboration precluded
- Architectural simplification:
 - Eliminated the need for tunneling
 - All 'inside' routers required to run L12
- Added a Router Capability for Area Proxy
- Expanded details
- Still seeking WG adoption