

EVPN First Hop Security

IETF 121, Nov 2024
Dublin

<https://datatracker.ietf.org/doc/html/draft-sajassi-bess-evpn-first-hop-security-03>

Ali Sajassi (Cisco),
Lukas Krattiger (Cisco),
Krishna Ananthamurthy (Cisco),
Jorge Rabadan (Nokia)
Wen Lin (Juniper)

Recap

- Presented in IETF-116, IETF-117 & IETF-119
- Background:
 - DHCP Snoop Database
 - Stores valid IPv4/IPv6 MAC bindings by snooping DHCP messages
 - First Hop Security (FHS)
 - ARP Inspection, ND Inspection and IPv4/IPv6 Source Guard make use of DHCP bindings
 - FHS is widely deployed on access switches without standard based multihoming and host mobility

What is EVPN First Hop Security

- DHCP snoop database **sync between ES peers** for multihomed hosts.
- DHCP snoop database distribution with EVPN peers for mobility.
- Defines DHCP Sync Route.
- Address both bridge and IRB services.

DHCP Snoop Route Format

RD (8 octets)
Ethernet Segment Identifier (10 octets)
Ethernet Tag ID (4 octets)
MAC Address Length (1 octet)
MAC Address (6 octets)
IP Address Length (1 octet)
IP Address (4 or 16 octets)
Create Time in sec (8 octets)
Lease Time in sec (4 octets)

Next Step

- Draft is stable from last few IETFs
- Requesting WG adoption.

Thank You!