

draft-Irssi-bess-evpn-group-policy-00.txt

W. Lin (Juniper), D. Rao (Cisco), M. Smith
(Cisco), A. Sajassi (Cisco), L. Kreeger
(Arcus)

IETF 119, March 2023

Brisbane

History

- This draft is a merge of the following two drafts:
 1. draft-smith-vxlan-group-policy-05.txt
 2. draft-wlin-bess-group-policy-id-extended-community
- (1) talks about VxLAN header extension for group policy (i.e., data-plane extension)
- (2) talks about EVPN extension for group policy (i.e., control-plane extension)
- Two drafts complement each other very much and thus the merge

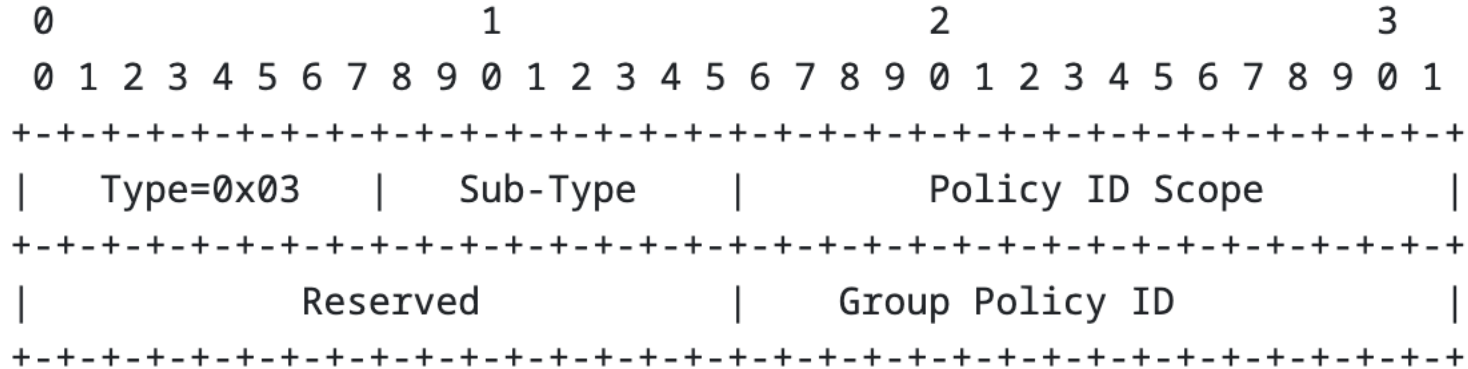
History – Cont.

- draft-smith-vxlan-group-policy-05.txt has been around since about 10 years (Nov 2014) !!
 - It has been implemented by multiple vendors
- draft-wlin-bess-group-policy-id-extended-community has been around for about 2 years (Oct 2022)
 - It has also been implemented and productized by multiple vendors
- So, although the merge draft is rev00, the contents of this draft has been around for many years at the IETF

VxLAN Header Extension – Cont.

- A Bit: Bit 12 of the initial word is defined as the A (Policy Applied) bit. This bit is only defined as the A bit when the G bit is set to 1
 - A = 1 indicates that the group policy has already been applied to this packet. Policies **MUST NOT** be applied by devices when the A bit is set.
 - A = 0 indicates that the group policy has not been applied to this packet. Group policies **MUST** be applied by devices when the A bit is set to 0 and the destination Group has been determined. Devices that apply the Group policy **MUST** set the A bit to 1 after the policy has been applied.
- Group Policy ID: 16 bit identifier that indicates the source TSI Group membership being encapsulated by VXLAN. The allocation of Group Policy ID values is outside the scope of this document.

EVPN Extension (control-plane extension)



- Policy ID Scope:** The Policy ID Scope field is 16-bit long and is an optional field.
- Group Policy ID (GPI):** The GPI field is 16-bit long and it encodes the value of a Group Policy ID.

Backward Compatibility

1. NVEs that don't support GBP in either data plane or control plane
2. NVEs that support GBP in data plane but not control plane
3. NVEs that support GBP in both data plane and control plane

Interconnecting Multiple EVPN VxLAN Domains

- Different domains can have different group policy ID assignments
- Need to translate group policy ID from among domains
- Scope ID facilitates such translation by identifying the allocation domain

Next Steps

- This rev00 is truly not a rev00
- Data-plane part has been around for 10 years, and control-plane part has been around for 2 years
- It has been implemented by multiple vendors
- Thus, the authors would like to ask for a WG adoption call

THANK YOU!