SID as source address in SRv6

draft-yang-spring-sid-as-source-address-10

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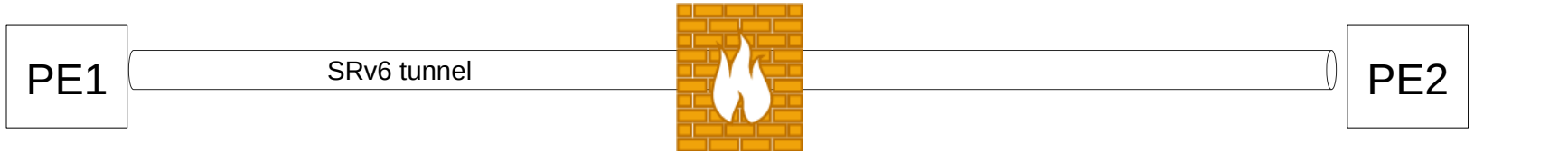
IETF 125

History

- This draft, presented at the IETF 116 in SPRING WG.
  - 1. mechanism for legitimate SRv6 traffic passing thru firewall.
  - 2. mechanism for preventing falsified VPN SID.
- In IETF 123, comments are mainly on preventing falsified VPN SID.
  - People thought the scenario for this mechanism is theoretical
- In this version, update the draft per comments from IETF 123
  - remove “mechanism for preventing falsified VPN SID” from the draft.
  - Keep only mechanism for legitimate SRv6 traffic passing thru firewall

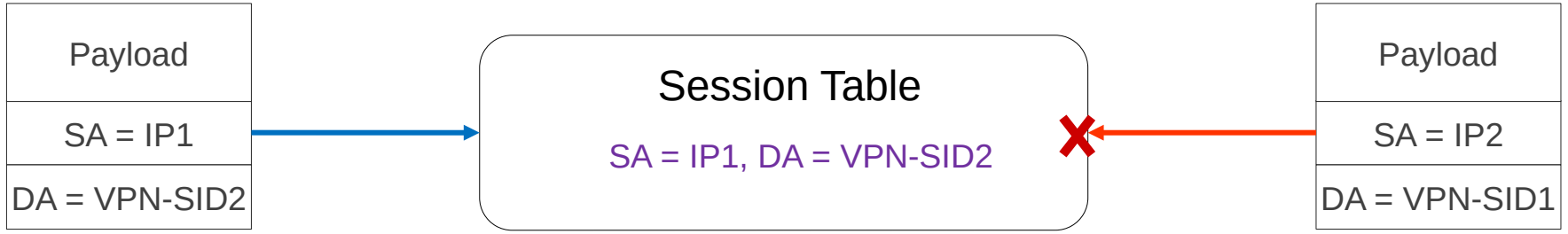
Problem & Solution Recap

Topology



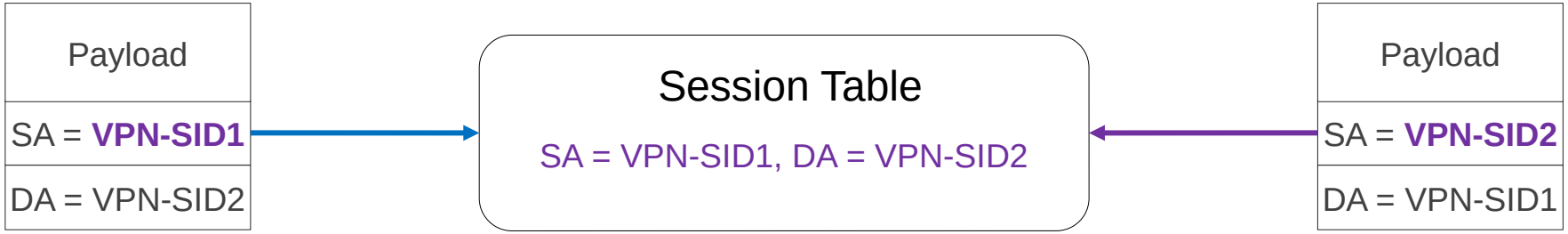
Problem

Traffic in reverse way will be discarded



Solution

Using SID as source address, zero overhead, hardware compatible



Technical Update

- Update 1. describe when to use SID as source address.

```
2.  Using SRv6 SID as Source Address

   Only unicast traffics are eligible for using SID as source address.
   There are a bunch of SRv6 services specified in [RFC8986], and those
   End.DT* and End.DX* SIDs are locally allocated and associated SRv6
   tunnel operation.  All those End.DX* and End.DT* SIDs except End.DT2M
   SHOULD be used for source address.  Put it simple, it SHOULD consider
   using SID as source address for IPinIP, L3VPN, VPWS, VPLS and EVPN
   services.
```

- Update 2. Replace 2.1.1 ~ 2.1.3 with the following description on how SID can be determined

```
2.1.  User Traffic

   AC is associated with an SRv6 service, and the SID of that SRv6
   service is locally allocated by the PE.  Therefore, the traffic
   received from an AC can always be u Technical Update ssociated with a
   specific local SRv6 service SID.  In other words, the SRv6 service
   SID to be populated as source address can be naturally determined
   during the forwarding process.
```

- Update 3. remove “mechanism for preventing falsified VPN SID” , section 3, section 4.2

Next Step

- Would like to have WG adoption call as informational, if no objection.