LISP-GPE

draft-ietf-lisp-gpe-00
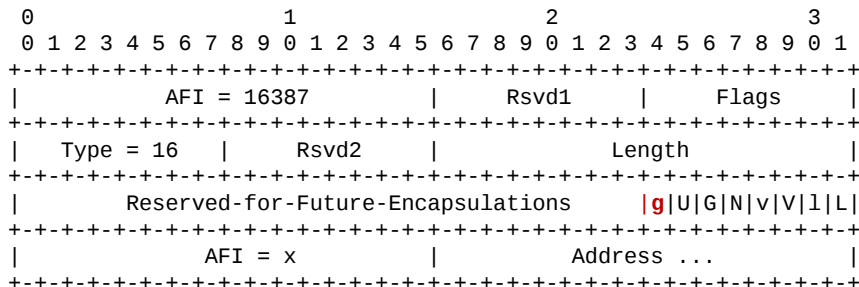
IETF 101 – London

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Status

- list of editorial changes sent by Luigi that are being addressed in -01
- 1 Technical comment open in section "4. Backward Compatibility"
  - PROPOSAL: address backward compatibility with the same logic used by RFC8061 (LISP Crypto)
- Currently there are two existing LISP-GPE open source implementations in FD.io and OOR (OpenOverlayRouter.org)

Backward Compatibility: PROPOSAL

- Address backward compatility for LISP-GPE with the same logic applied to RFC 8061 (LISP Crypto), that is:
  - A LISP packet with LISP-GPE extensions uses UDP port 4341
  - An ITR uses LISP–GPE extensions IF AND ONLY IF the ETR has explicitly acknowledged support for LISP-GPE
    - Using RFC 8060 "Multiple Data-Planes" LCAF Type

```
 0                   1                   2                   3
 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|          AFI = 16387          |     Rsvd1     |     Flags     |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|   Type = 16   |     Rsvd2     |             Length            |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|       Reserved-for-Future-Encapsulations      |g|U|G|N|v|V|l|L|
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|            AFI = x            |           Address ...         |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

g: The RLOCs listed in the AFI-encoded addresses in the next longword can accept LISP-GPE (Generic Protocol Extension) encapsulation using destination UDP port 4341.

Backward Compatibility (-00 text)

4. Backward Compatibility

LISP-GPE uses the same UDP destination port (4341) allocated to LISP.

A LISP-GPE router MUST not encapsulate non-IP packets to a LISP router. A method for determining the capabilities of a LISP router (GPE or "legacy") is out of the scope of this draft.

When encapsulating IP packets to a LISP "legacy" router the P bit MUST be set to 0.

Backward Compatibility (proposed -01 text)

4. Backward Compatibility

LISP-GPE uses the same UDP destination port (4341) allocated to LISP.

An ITR can use LISP-GPE data plane extensions only to encapsulate to those RLOCs for which the ETR has explicitly indicated in the Map-reply support for LISP-GPE using the "Multiple Data-Planes" LCAF Type (see IANA considerations).

Next Steps

- Allocate a new LISP-GPE "g" bit in the "Reserved-for-Future-Encapsulations field" of the "Multiple Data-Planes" LCAF Type
    - Using the IANA considerations section of the LISP-GPE draft
- Update Section 4 accordingly
- Address Luigi's editorial comments
- Publish -01
- Propose LISP-GPE for last call