6MAN WG

Segment Routing IPv6

Authors and contributors:

Stefano Previdi (sprevidi@cisco.com)
Clarence Filfsils (cfilsfil@cisco.com)
Roberta Maglione (robmgl@cisco.com)
Eric Vyncke (evyncke@cisco.com)
Dave Barach (dbarach@cisco.com)
Mark Townsley (townsley@cisco.com)
Chris Martin (martincj@cisco.com)
Nagendra Kumar (naikumar@cisco.com)

Brian Field (Brian_Field@cable.comcast.com)
John Brzozowski (john_brzozowski@cable.comcast.com)
John Leddy (John_Leddy@cable.comcast.com)
Ida Leung (Ida.Leung@rci.rogers.com)

Jen Linkova (furry@google.com)
Ebben Aries (exa@fb.com)
Tomoya Kosugi (kosugi.tomoya@lab.ntt.co.jp)

David Lebrun (david.lebrun@uclouvain.be)
Aloys Augustin (aloys.augustin@polytechnique.org)
Pierre Francois (pierre.francois@imdea.org)
James Connolly (jconnolly@libertyglobal.com)

Segment Routing Header

draft-ietf-6man-segment-routing-header

- Version -01
- Simplified header format
  - Removed Policy List
  - Moved HMAC into an optional TLV
  - Defined other (new) optional TLVs
    - Ingress
    - Egress
    - Opaque
  - Added Flags

Segment Routing Header

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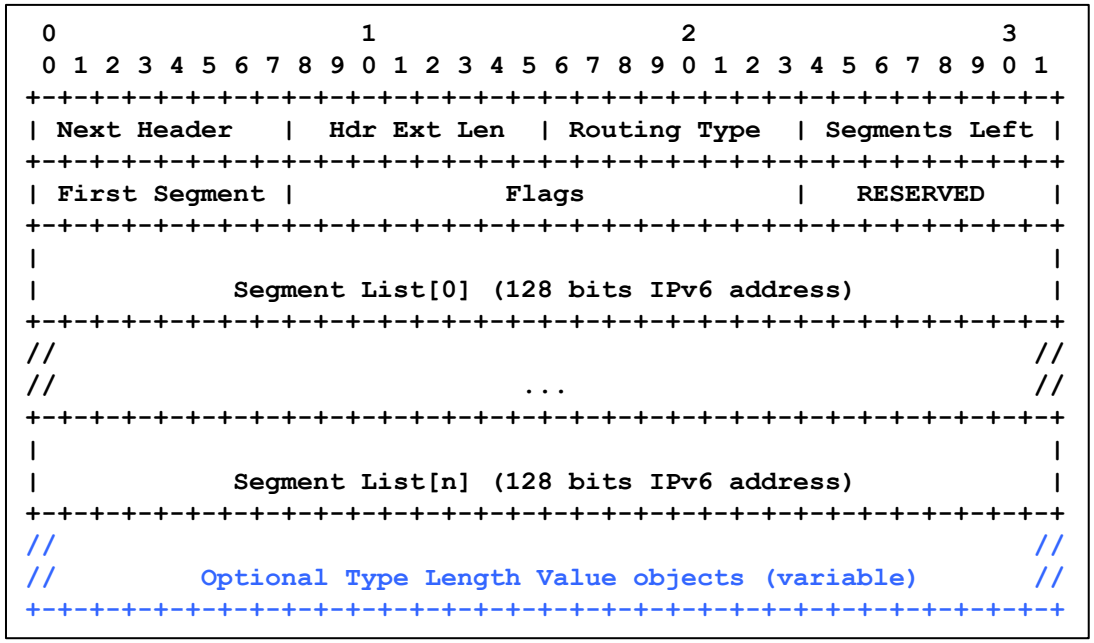
- Removal of Policy List
- Added optional TLVs
- Ease future extensions
- TLVs are optional and may be skipped if not known
- Routing is NOT based on TLVs



Segment Routing Header

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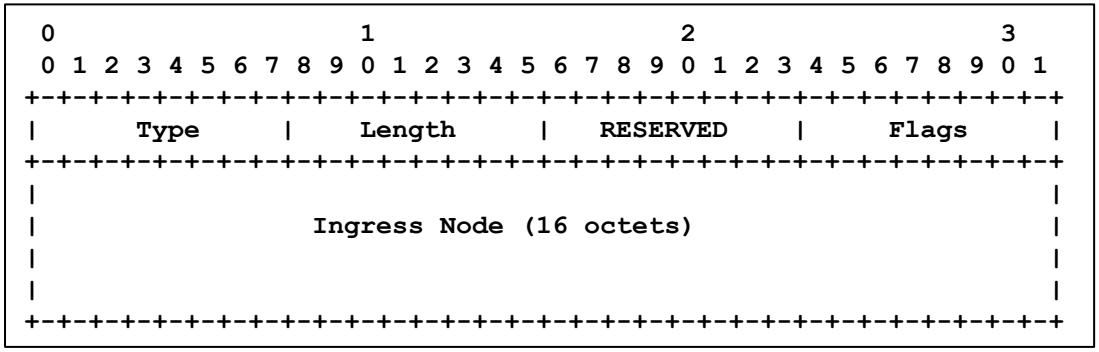
- Ingress Node TLV: identifies the node where the packet entered the SR domain



Segment Routing Header

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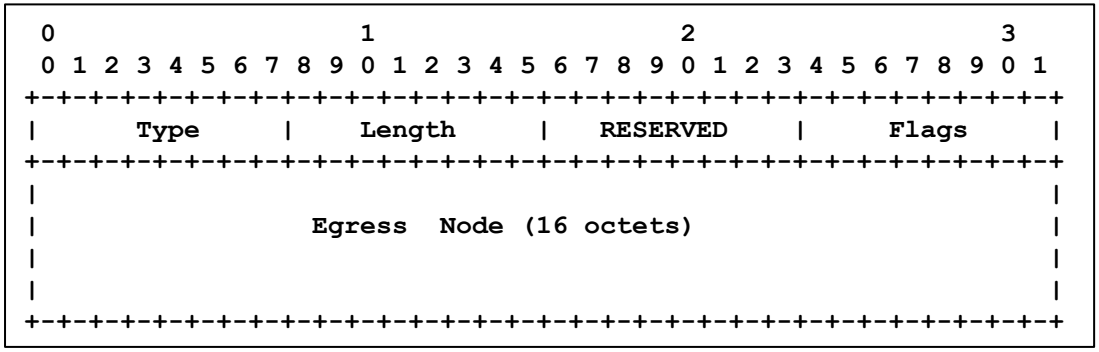
- Egress Node TLV: identifies the node where the packet should exit the SR domain



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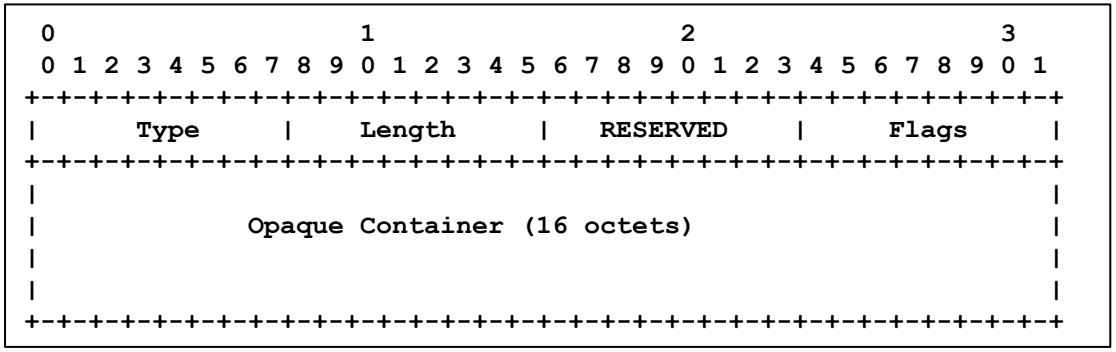
- Opaque Container TLV: experimental use



Segment Routing Header

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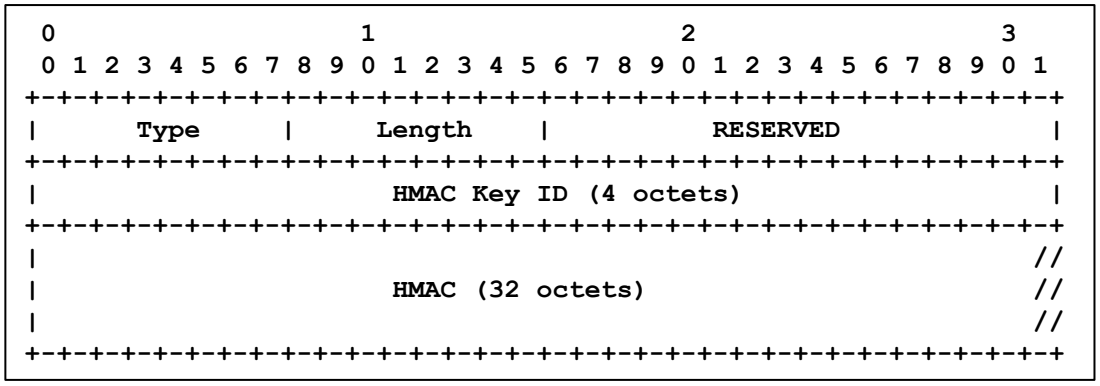
- HMAC TLV: contains HMAC Key ID and HMAC
- As all other TLVs, HMAC TLV is optional
- If present, it MUST be encoded as the last TLV of the SRH
  - Access to HMAC TLV is done by reading last 36 SRH octets



Segment Routing Header

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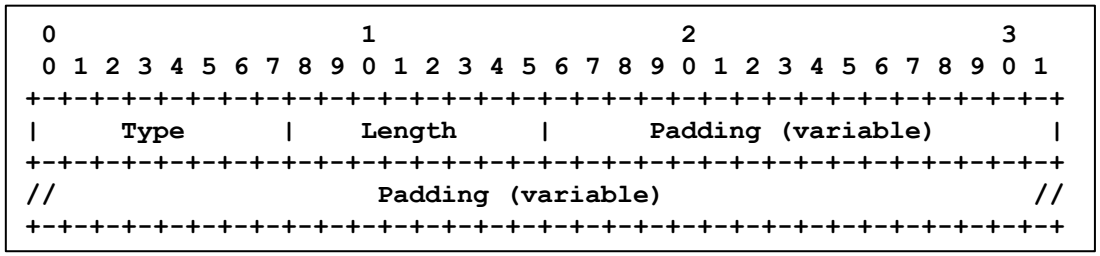
- Padding TLV: used in order to align the SRH on the 8 octet boundary
- Note: as of today it is not needed (all TLVs are 8 octet aligned)
- Allows future extensions other than 8 octet
- When present, the Padding TLV must be the last TLV but before HMAC TLV (if present)
- No need to inspect the padding TLV (length field is irrelevant)



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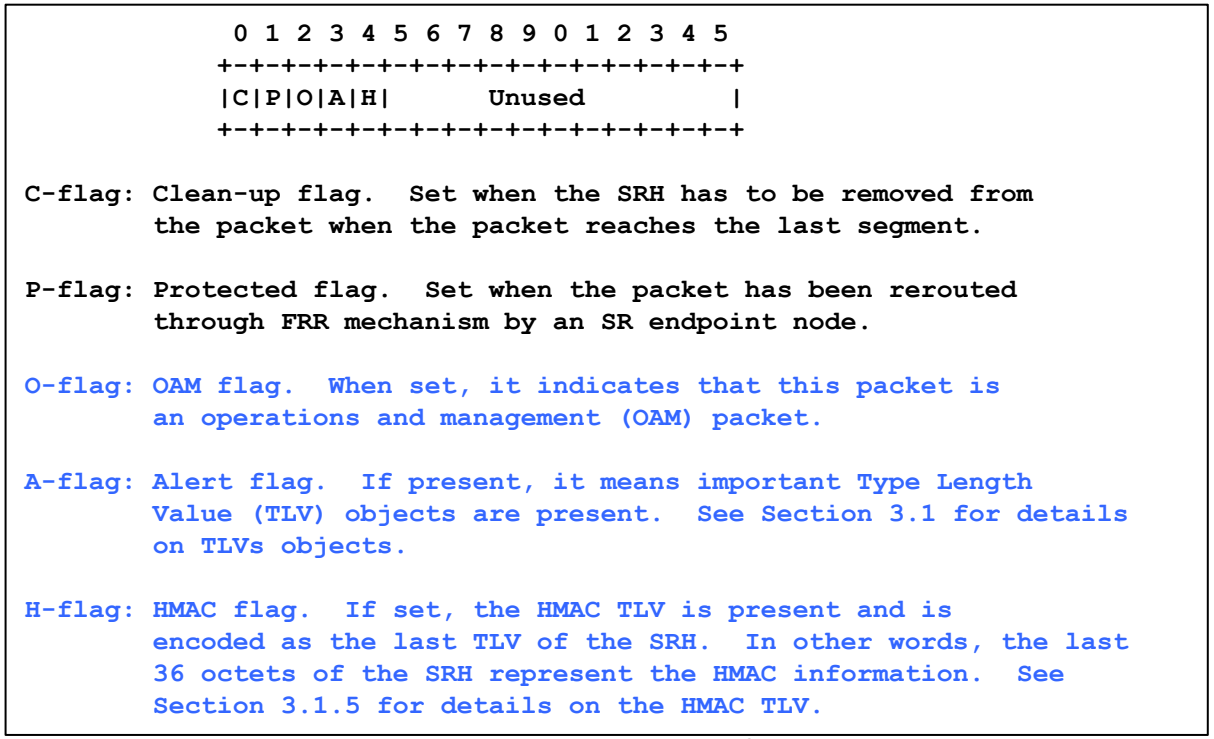
- New SRH flags



Questions?

Thanks!