

# Discovering PREF64 in Router Advertisements

[draft-ietf-6man-ra-pref64-03](#)

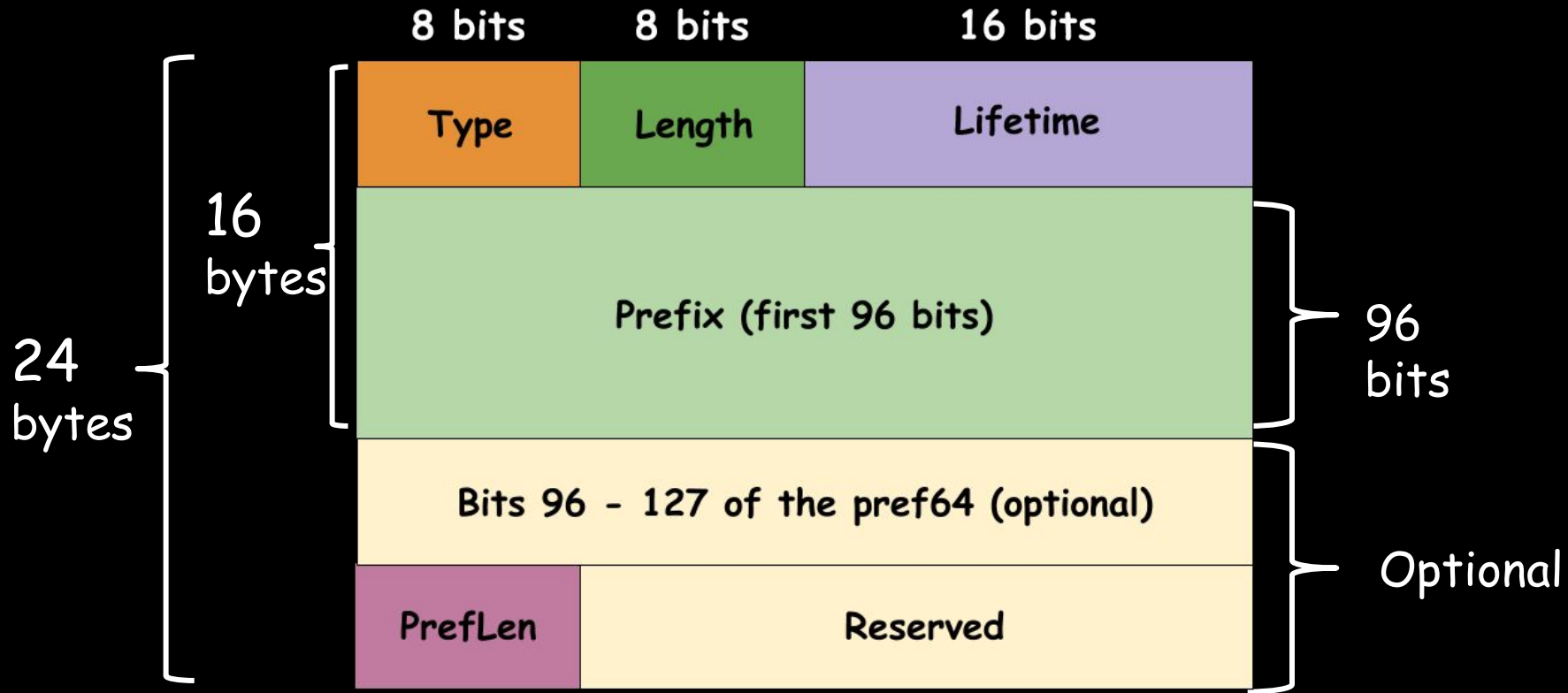
L. Colitti, [J. Linkova](#)

Changes Since IETF104

# Variable Prefix Length

- Option format updated to support non-/96 prefixes
  - /96 prefix: Length = 2
  - non-/96 prefix: Length = 3

# Non-/96 PRef64 Support



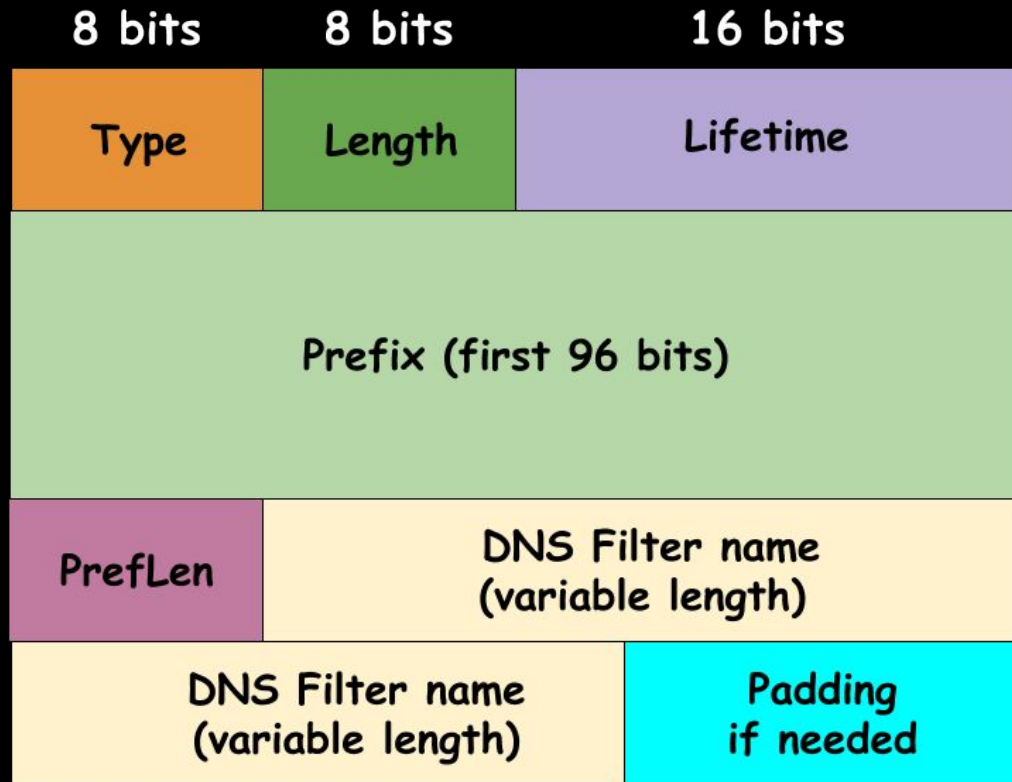
# Pref64 Consistency

*Section 6.2.7 of [RFC4861] recommends that routers inspect RAs sent by other routers to ensure that all routers onlink advertise the consistent information. Routers SHOULD inspect valid Pref64 options received on a given link and verify the consistency. Detected inconsistencies indicate that one or more routers might be misconfigured. Routers SHOULD log such cases to system or network management. Routers SHOULD check the following information:*

- *set of Pref64 with non-zero lifetime;*
- *set of Pref64 with zero lifetime.*

# DNS64 Exclusion Lists

# Request to add "Exclude-Set" APL



# Reasons to make APL a separate option

Not required on IPv6-only end hosts without IPv4

Such hosts should never skip AAAA synthesis

Simplifies the option format

Speeds up implementation & adoption

Exact semantics of record would need to be defined

Text in RFC 6147 likely not sufficient



# Reasons to make APL a separate option

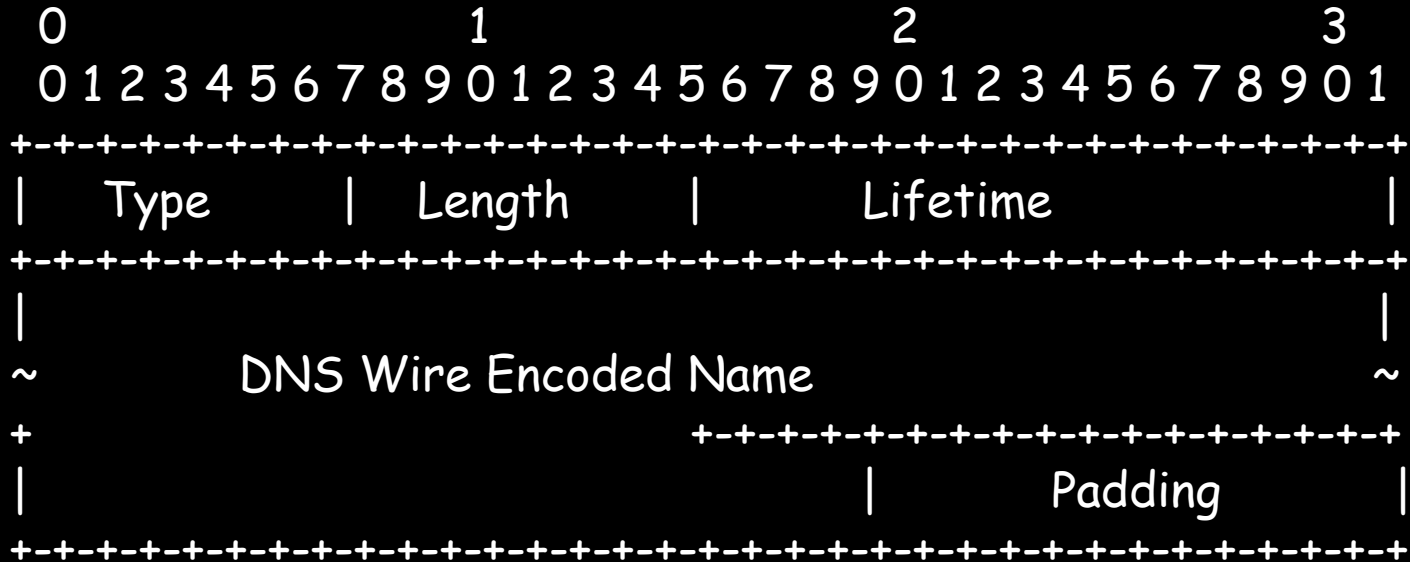
Does not increase RA size

Does not require downref to experimental RFC 3123

Allows systems which implement RFC7050 to use the APL option w/o even supporting Pref64 one

# Solution

## Draft-andrews-6man-dns64-exclude



Ready For WG Last Call?