Distributing Address Selection Policy using DHCPv6

IETF83, Paris
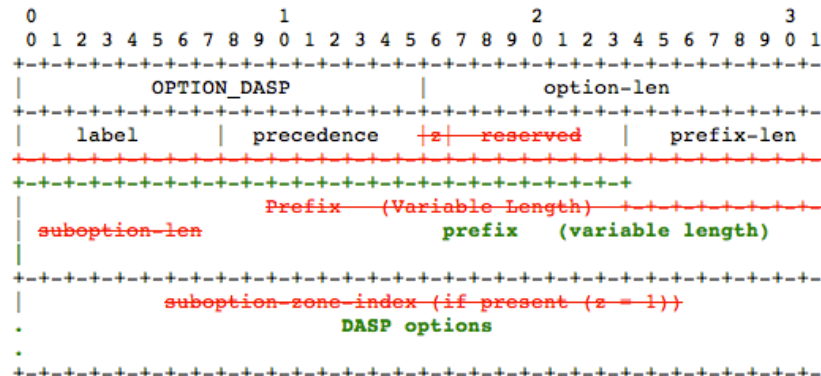
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draft-6man-addr-select-opt-03
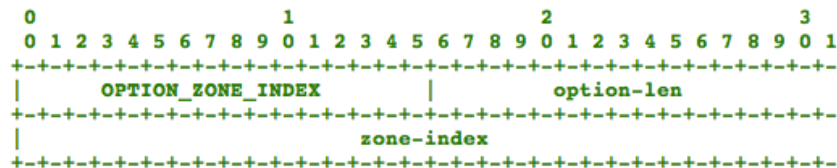
Current status

- A method to allow a default RFC3484 policy table to be overwritten by a preferred local policy

- Draft on hold while RFC3484bis finalised
  - See draft-ietf-6man-rfc3484bis-01
- Draft will then be processed in 6man
  - Looking for dhc WG blessing now
- Had some good reviews since IETF82 (thanks!)
  - Produced the -03 draft as a result

Changes in -03

- Stated multiple options mean one policy table
- z-bit removed and suboption length removed

```
 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
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|           OPTION_DASP         |            option-len         |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|    label     |   precedence   |z|  reserved   |   prefix-len  |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+                               |
|                              Prefix   (Variable Length) +-+-+-+-+-+-+-+
| suboption-len                              prefix   (variable length)
|                                                              |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|              suboption-zone-index (if present (z = 1))        |
.                             DASP options                     .
|                                                              |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

- New DASP option
  - Which may include zone index of the prefix

```
 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
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|        OPTION_ZONE_INDEX      |            option-len         |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|                            zone-index                         |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

Open issues in -03

- Address Selection Policy Option
  - Use fixed or variable length prefix? Currently variable
  - Suggestion to follow RFC3633 IA_PD style and use a fixed 16-octet address
  - A current policy table may have 10-15 entries, ish
- Adding some MIF references to 4.3?
  - Note policy table is host-wide, not per-interface
- We assume new text on stale option is OK
  - i.e. revert to default policy table

Next steps

- Would like to get dhc WG approval now
  - A WGLC was issued by Ted on March 9th
  - No comments as yet
- If text is OK, then we're ready to present in 6man as soon as 3484bis is done

- Comments?