# **DHCPv6** Route Option

MIF WG IETF 85: Atlanta November 9, 2012 Margaret Wasserman mrw@painless-security.com

# DHCPv6 Route Option Draft

- <u>http://tools.ietf.org/html/draft-ietf-mif-dhcpv6-</u> route-option-05
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# **DHCPv6 Route Option Status**

- This document is a chartered WG work item
  - DHCPv6 routing configuration: a specification of DHCPv6 options allowing to provision client nodes with a small amount of static routing information (e.g. regarding first-hop selection)
- WG draft was adopted in November 2010
- Now dealing with issues raised in WGLC
- Issues are being tracked in the IETF issue tracker
  - 14 open issues to be discussed and resolved
- May need another WGLC iff issue resolution leads to substantive document changes
- We need WG consensus to make any changes to the document at this point

# Issue #16:

"DHCP Route Option does not belong in MIF WG"

• Argues that the DHCPv6 route option should be specified in 6man

 Ralph Droms (our AD) wrote to the list stating that this work is in our charter, we have a WG work item, and it is appropriate for us to continue work on this item.

-Just FYI – the WGLC was cc:ed to the 6man list

Proposed Resolution: Close issue with no document changes

### Issue #18:

"Vague problem statement and poorly document use cases"

 As documented in other tickets, many of the use cases listed in the draft are spurious, self-referential, poorly documented, or in contrast with IAB guidance.

•List Discussion: This issue is (as it states in the text) a duplicate of other open issues

 Proposed Resolution: Close as duplicate issue with no document changes

### Issue #15:

"Use case #1 does not justify standardization of this option"

• Argues that use case #1 can be solved by other means

•List Discussion: We are explicitly chartered to standardize a DHCPv6 route option, not to explore other solutions to the problem space. Justification for this work was discussed when we were chartered to do it.

Proposed Resolution: Close issue with no document changes

# Issue #17:

"Status of DHCP Route Option should be clarified"

Claims that we should have another WGLC before submitting this document to the IESG

•List Discussion: This issue does not propose any changes to the document. Normal practice is to issue another WGLC if there are substantive changes to a document resulting from a completed WGLC

Proposed resolution: Close issue with no document changes

## Issue #9:

"Violates RFC 5505 section 3.2.1 (fate sharing)"

 Claims that this document "violates" an informational RFC that defines various terms and concepts related to node configuration

•List Discussion: RFC 5505 contains not requirements that can be violated. It is true that the DHCPv6 Route Option (like all DHCP options) does not have the property of fate sharing, but there is no requirement to have that property.

 Proposed Resolution: Close this issue with no changes to the document

# Issues #10, #11 & #12

"Walled garden use cases #1, #5 & #7 are invalid"

 Claims that RFC 3002, which is an informational report from an invitation-only IAB workshop, recommends against considering "walled garden" use cases

•List Discussion: Discussion of why these are not necessarily walled garden use cases. Discussion that there is no requirement to comply with IAB workshop reports

 Proposed Resolution: Close these issues with no changes to the document

# Issue #14:

"Use case #6 is insufficient and should be removed"

Claims that use case #6 is weak and should be removed from the document

List Discussion: Agreement

Proposed Resolution: Remove this use case from the document

### Issues #13:

"Motivation use case #10 is self-referential"

- Claims that use case #10 is logically invalid and should be removed from the document
- List Discussion: Agreement

 Proposed Resolution: Remove this use case from the document

#### Issue #5

"Only one default route?"

Proposes that we should support more than one default router

•List/WG Dicussion: Mostly agreement that there is a need to specify a default router, not just a single default route

 Proposed Resolution: Update the draft to support a router list per prefix?

# Issue #6:

"Lifetime field should be 16 bits for ND compatibility"

 Proposal that the lifetime field should be shortened to 16 bits for compatibility with ND

List/WG Discussion: Some discussion, but no clear resolution

 Proposed Resolution: Reduce the length of the lifetime field to 16 bits?

### Issue **#7**:

"Separate specific routes from default routes"

- Proposes that default routes and more specific routes should be configured via separate DHCPv6 route options
- •List/WG Discussion: There has been some discussion of this issue with little support for this change

 Proposed Resolution: Close this issue with no changes to the document

## Issue #8:

"Absent MAC address of default route"

 Proposal that the MAC address of the default router should be included in the option

 List/WG Discussion: Various statements that this is not necessary, no recorded consensus call on this issue

 Proposed Resolution: Close this issue with no changes to the document

# **Next Steps**

- Confirm any consensus calls on the list
- Update the document to reflect consensus decisions
- Issue another WGLC?