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Domain Suffix Option for DHCPv6 <<u>draft-ietf-dhc-dhcpv6-opt-dnsdomain-01.txt</u>>

February 6, 2006

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Abstract

This document specifies a new DHCPv6 (DHCP for IPv6) option which is passed from a DHCPv6 server to a DHCPv6 client to specify the domain suffix name.

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1. Introduction

This document describes a new option for DHCPv6 [RFC3315] that provides a mechanism for the transfer of a domain name suffix. Using this option, the DHCPv6 server can specify the domain name suffix to the DHCPv6 client.

1.1 Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC2119].

This document should be read in conjunction with the DHCPv6 specification, [RFC3315]. Definitions for terms and acronyms used in this document are defined in RFC3315.

2. Domain Suffix Option

The domain suffix option for DHCPv6 is used by the DHCPv6 server to tell the DHCPv6 client the domain suffix that the DHCPv6 server administrator has specified for that DHCPv6 client.

The format of the domain suffix option is:

0 2 3 1 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 Length Type Domain suffix ~ ~

Type: 16-bits identifier of the type of option (TBD).

Length: Length of the "domain suffix" field in octets.

Domain suffix: The specification of a domain suffix.

The domain suffix in the 'domain suffix' field MUST include only one item, and MUST be encoded as specified in the section of RFC3315 titled "Representation and use of domain names".

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2.1 Usage

A DHCPv6 server may provide different values for the domain suffix option to different clients. The mechanism for choosing which suffix to assign to which client is a matter of implementation and administrative policy, and is therefore not specified in this document.

<u>3</u>. Security Considerations

Security considerations in DHCP are described in $\frac{\text{section } 23}{\text{Security Considerations" of } RFC3315}$.

<u>4</u>. IANA Considerations

IANA is requested to assign a DHCPv6 option code for the Domain Suffix Option.

5. Acknowledgements

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6. References

6.1 Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", <u>BCP 14</u>, <u>RFC 2119</u>, March 1997.
- [RFC3315] Bound, J., Carney, M., Perkins, C., Lemon, T., Volz, B. and R. Droms (ed.), "Dynamic Host Configuration Protocol for IPv6 (DHCPv6)", <u>RFC 3315</u>, May 2003.

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