

The Domain Search Option for DHCP
<[draft-ietf-dhc-domsrch-00.txt](#)>

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[1.0](#) Abstract

The Dynamic Host Configuration Protocol (DHCP) [1] provides a framework for passing configuration information to hosts on a TCP/IP network. This document defines a new option which is passed from the DHCP server to the DHCP Client to configure the domain search list which is used by the clients to resolve hostnames in the Domain Name System.

[2.0](#) Introduction

[RFC 2132](#) allows the Domain Name option (option 15) and the Domain Name Server (option 6) to be passed to the DHCP client. These options are usually used to configure `resolv.conf` file on most operating systems. This information is used to resolve names in the Domain Name System[]. This option allows a list of domain names in the order of preference to be passed to the DHCP client such that the search directive can be specified for name resolution.

[3.0](#) Definitions

INTERNET DRAFT

July 1997

Throughout this document, the words that are used to define the significance of the particular requirements are capitalized. These words are:

MUST

This word or the adjective "REQUIRED" means that the item is an absolute requirement of this specification.

MUST NOT

This phrase means the item is an absolute prohibition of this specification.

SHOULD

This word or the adjective "RECOMMENDED" means that there may exist valid reasons in particular circumstances to ignore this item, but the full implications should be understood and the case carefully weighed before choosing a different course.

SHOULD NOT

This phrase means that there may exist valid reasons in particular circumstances when the listed behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighted before implementing any behavior described with this label.

MAY

This word or the adjective "OPTIONAL" means that this item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because it enhances the product, for example, another vendor may omit the same item.

This document also uses the following terms:

- o "DHCP client"

DHCP client or "client" is an Internet host using DHCP to

obtain configuration parameters such as a network address.

o "DHCP server"

A DHCP server of "server" is an Internet host that returns

configuration parameters to DHCP clients.

[3.0](#) Domain Search Option Format

The code for this option is TBD, and its minimum length is 2 bytes.

Code	Len	Priority
TBD	n	d1 0 d2 0

where:

d1 & d2 are domain names

[4.0](#) DHCP Client Behavior

If a DHCP client is given both a Domain Name Option and a Domain Search Option, the Domain Search Option will take precedence.

[5.0](#) Security Considerations

DHCP currently provides no authentication or security mechanisms. Potential exposures to attack are discussed in [section 7](#) of the DHCP protocol specification [1].

[6.0](#) References

[RFC1533] S. Alexander, R. Droms, "DHCP Options and BOOTP Vendor Extensions"

[RFC1541] R. Droms, "Dynamic Host Configuration Protocol"

[7.0](#) Acknowledgments

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[draft-ietf-dhc-domsrch-00.txt](#)

[Page 3]

INTERNET DRAFT

July 1997

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