Network Working Group Internet-Draft Expires: December 13, 2004

IMAP Configuration Option for DHCP draft-cadar-dhc-opt-imap-00.txt

Status of this Memo

This document is an Internet-Draft and is in full conformance with all provisions of <u>Section 10 of RFC2026</u>.

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF), its areas, and its working groups. Note that other groups may also distribute working documents as Internet-Drafts.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as "work in progress."

The list of current Internet-Drafts can be accessed at http://www.ietf.org/ietf/lid-abstracts.txt.

The list of Internet-Draft Shadow Directories can be accessed at http://www.ietf.org/shadow.html.

This Internet-Draft will expire on December 13, 2004.

Copyright Notice

Copyright (C) The Internet Society (2004). All Rights Reserved.

Abstract

This document describes a new option for Email related configuration information in Dynamic Host Configuration Protocol (DHCP), the option for Internet Message Access Protocol (IMAP) Server addresses for message retrieval from mailboxes on these servers. Table of Contents

<u>1</u> .	Introduction	<u>3</u>
<u>2</u> .	Requirements notation & Naming Conventions	<u>3</u>
<u>3</u> .	Terminology	<u>3</u>
<u>4</u> .	The Internet Message Access Protocol Server Option Format .	<u>3</u>
<u>5</u> .	Security Considerations	<u>3</u>
<u>6</u> .	IANA Considerations	<u>4</u>
<u>7</u> .	References	<u>4</u>
<u>7.1</u>	Normative References	<u>4</u>
<u>7.2</u>	Informative References	<u>4</u>
	Author's Address	<u>4</u>
	Intellectual Property and Copyright Statements	<u>5</u>

Expires December 13, 2004 [Page 2]

<u>1</u>. Introduction

This document describes a new option for email related configuration information in Dynamic Host Configuration Protocol [<u>RFC2131</u>].

2. Requirements notation & Naming Conventions

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 [<u>RFC2119</u>].

<u>3</u>. Terminology

This document uses terminology specific to DHCPv4 as defined in "Terminology" section of the DHCPv4 specification [<u>RFC2131</u>].

4. The Internet Message Access Protocol Server Option Format

The Internet Message Access Protocol (IMAP) Server Option provides a list of one or more IPv4 addresses of IMAP [<u>RFC2060</u>] servers available to the clients for message retrieval from mailboxes on these servers. The IMAP servers SHOULD be listed in the order of preference. The format of the IMAP Protocol Servers option is shown in Figure 1.

Code	Len			Add	ress 1		Add	ress 2	
++		- + -	+ -	+ -	+ -	+ -	+ -	+ -	-
TBD	n		a1	a2	a3	a4	a1	a2	
++		-+-	+ -	+ -	+ -	+ -	+ -	+ -	-

Figure 1: IMAP_SERVERS

Code: is TBD as per [RFC2939].

Len: Length n gives the total number of octets of ipv4 IMAP server addresses, it must be a multiple of 4.

5. Security Considerations

The IMAP server option may be used by an intruder DHCP server to cause DHCP clients to contact a rogue IMAP server, resulting in failure of email retrieval. Also a roque IMAP server may get the login name and password of the clients which attempt to contact the IMAP servers.

To avoid attacks through these option, the DHCP client SHOULD use authenticated DHCP (see "Authentication for DHCP messages"

specification [<u>RFC3118</u>]).

<u>6</u>. IANA Considerations

IANA is requested to assign a value for the IMAP option code in accordance with [RFC2939].

7. References

7.1 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.
- [RFC2131] Droms, R., "Dynamic Host Configuration Protocol", <u>RFC</u> 2131, March 1997.

7.2 Informative References

- [RFC2060] Crispin, M., "Internet Message Access Protocol Version 4rev1", <u>RFC 2060</u>, December 1996.
- [RFC2132] Alexander, S. and R. Droms, "DHCP Options and BOOTP Vendor Extensions", <u>RFC 2132</u>, March 1997.
- [RFC2939] Droms, R., "Procedures and IANA Guidelines for Definition of New DHCP Options and Message Types", <u>BCP 43</u>, <u>RFC 2939</u>, September 2000.
- [RFC3118] Droms, R. and W. Arbaugh, "Authentication for DHCP Messages", <u>RFC 3118</u>, June 2001.

Author's Address

Cristian Cadar NEC Europe Ltd. Kurfuersten-Anlage 36 Heidelberg 69115 Germany

EMail: cristian.cadar@netlab.nec.de URI: <u>http://www.netlab.nec.de</u>

Expires December 13, 2004 [Page 4]

Intellectual Property Statement

The IETF takes no position regarding the validity or scope of any intellectual property or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; neither does it represent that it has made any effort to identify any such rights. Information on the IETF's procedures with respect to rights in standards-track and standards-related documentation can be found in <u>BCP-11</u>. Copies of claims of rights made available for publication and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementors or users of this specification can be obtained from the IETF Secretariat.

The IETF invites any interested party to bring to its attention any copyrights, patents or patent applications, or other proprietary rights which may cover technology that may be required to practice this standard. Please address the information to the IETF Executive Director.

Full Copyright Statement

Copyright (C) The Internet Society (2004). All Rights Reserved.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this paragraph are included on all such copies and derivative works. However, this document itself may not be modified in any way, such as by removing the copyright notice or references to the Internet Society or other Internet organizations, except as needed for the purpose of developing Internet standards in which case the procedures for copyrights defined in the Internet Standards process must be followed, or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by the Internet Society or its successors or assignees.

This document and the information contained herein is provided on an "AS IS" basis and THE INTERNET SOCIETY AND THE INTERNET ENGINEERING TASK FORCE DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION

HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Acknowledgment

Funding for the RFC Editor function is currently provided by the Internet Society.