

Network Working Group
Internet-Draft
Expires: April 19, 2007

P. Koch
DENIC eG
October 16, 2006

Moving MCAST.NET into the ARPA infrastructure top level domain
draft-koch-mboned-mcast-arpa-00

Status of this Memo

By submitting this Internet-Draft, each author represents that any applicable patent or other IPR claims of which he or she is aware have been or will be disclosed, and any of which he or she becomes aware will be disclosed, in accordance with [Section 6 of BCP 79](#).

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 April 19, 2007.

Copyright Notice

Copyright (C) The Internet Society (2006).

Abstract

This document proposes to migrate the MCAST.NET domain into the ARPA top level domain that is dedicated to infrastructure support. It also covers migration issues and caveats.

Internet-Draft

Rehoming MCAST.NET

October 2006

Table of Contents

1.	Introduction	3
1.1.	The ARPA top level domain	3
2.	Current Use	3
3.	Registration Policy	3
3.1.	Names and Addresses eligible for Registration in MCAST.ARPA	3
3.2.	Subdomains of MCAST.ARPA	3
4.	Migration Issues	3
4.1.	Migration Strategies	4
4.1.1.	Freeze	4
4.1.2.	Phase Out	4
4.1.3.	Continue	4
5.	Security Considerations	4
6.	IANA Considerations	5
7.	Acknowledgements	5
8.	References	5
8.1.	Normative References	5
8.2.	Informative References	5
Appendix A.	Document Revision History	6
A.1.	Initial Document	6
	Author's Address	7
	Intellectual Property and Copyright Statements	8

Internet-Draft

Rehoming MCAST.NET

October 2006

[1.](#) Introduction

Comments should be directed at the author or to the mboned working group.

{This is an early version and thus will not pass the ID nits test.}

[1.1.](#) The ARPA top level domain

[RFC3172] designates the ARPA top level domain as "Address and Routing Parameters Area" to be used for infrastructure applications.

The mcast.net second level domain fulfills the criteria layed out in [section 2.1 of \[RFC3172\]](#). However, there is no standards track document explicitly designating this domain to a multicast group name to multicast group address mapping.

[RFC3171] defines the multicast address assignment policy.

[2.](#) Current Use

Currently the zone MCAST.NET reflects the contents of the IANA multicast address registry. However, some names are missing from the DNS zone and some names used differ from the description that appears in the registry file.

[3.](#) Registration Policy

Names within MCAST.ARPA will consist of one additional label and will adhere to the hostname syntax requirements of [\[RFC1123\]](#). These names will own a single A RR, a single AAAA RR, or both. Addresses will be in the IPv4 or IPv6 multicast address space.

[3.1.](#) Names and Addresses eligible for Registration in MCAST.ARPA

Only IANA multicast address registrations are eligible for being listed in MCAST.ARPA.

[3.2.](#) Subdomains of MCAST.ARPA

There might be subdomains below MCAST.ARPA that serve special purposes.

[4.](#) Migration Issues

Koch

Expires April 19, 2007

[Page 3]

Internet-Draft

Rehoming MCAST.NET

October 2006

The current content of the MCAST.NET zone shall be brought in line with the multicast address registry.

Since legacy systems may use MCAST.NET for quite some time, there needs to be a mapping/forwarding solution to answer those queries in a useful manner without discouraging migration.

RFCs mentioning MCAST.NET are [[RFC3261](#)] and [[RFC3678](#)].

A proposal in [[I-D.ietf-mboned-addrdisc-problems](#)] mentions a subdomain of MCAST.NET.

[4.1.](#) Migration Strategies

After the move, several options are available for the future handling of MCAST.NET.

[4.1.1.](#) Freeze

The current MCAST.NET zone could be frozen, so that no additions, deletions or changes to the content (apart from those necessary for maintenance, e.g. SOA and NS RRs) would be performed. New registrations would only be available in MCAST.ARPA, so this could be an incentive for querying clients to alter their behavior as well.

[4.1.2.](#) Phase Out

MCAST.NET would only see deletions.

[4.1.3.](#) Continue

MCAST.NET could be further operated in parallel, either by operational habit or per DNAME RR.

[5.](#) Security Considerations

The usual Security Considerations for the DNS apply.

There is no Security Problem associated with the migration itself.

MCAST.ARPA. should be signed with DNSSEC as soon as the ARPA domain is signed.

This section needs more work

Koch

Expires April 19, 2007

[Page 4]

Internet-Draft

Rehoming MCAST.NET

October 2006

[6.](#) IANA Considerations

This document makes a recommendation to IANA.

This section needs more work

[7.](#) Acknowledgements

The author would like to thank David Conrad for his input.

[8.](#) References

[8.1.](#) Normative References

[RFC1034] Mockapetris, P., "Domain names - concepts and facilities", STD 13, [RFC 1034](#), November 1987.

[RFC1035] Mockapetris, P., "Domain names - implementation and specification", STD 13, [RFC 1035](#), November 1987.

- [RFC1123] Braden, R., "Requirements for Internet Hosts - Application and Support", STD 3, [RFC 1123](#), October 1989.
- [RFC3171] Albanna, Z., Almeroth, K., Meyer, D., and M. Schipper, "IANA Guidelines for IPv4 Multicast Address Assignments", [BCP 51](#), [RFC 3171](#), August 2001.
- [RFC3172] Huston, G., "Management Guidelines & Operational Requirements for the Address and Routing Parameter Area Domain ("arpa")", [BCP 52](#), [RFC 3172](#), September 2001.

[8.2.](#) Informative References

- [I-D.ietf-mboned-addrdisc-problems]
Savola, P., "Lightweight Multicast Address Discovery Problem Space", [draft-ietf-mboned-addrdisc-problems-02](#) (work in progress), March 2006.
- [RFC2780] Bradner, S. and V. Paxson, "IANA Allocation Guidelines For Values In the Internet Protocol and Related Headers", [BCP 37](#), [RFC 2780](#), March 2000.
- [RFC2908] Thaler, D., Handley, M., and D. Estrin, "The Internet Multicast Address Allocation Architecture", [RFC 2908](#), September 2000.

Koch

Expires April 19, 2007

[Page 5]

Internet-Draft

Rehoming MCAST.NET

October 2006

- [RFC3261] Rosenberg, J., Schulzrinne, H., Camarillo, G., Johnston, A., Peterson, J., Sparks, R., Handley, M., and E. Schooler, "SIP: Session Initiation Protocol", [RFC 3261](#), June 2002.
- [RFC3678] Thaler, D., Fenner, B., and B. Quinn, "Socket Interface Extensions for Multicast Source Filters", [RFC 3678](#), January 2004.

[Appendix A.](#) Document Revision History

This section is to be removed should the draft be published.

[A.1.](#) Initial Document

First draft

Koch

Expires April 19, 2007

[Page 6]

Internet-Draft

Rehoming MCAST.NET

October 2006

Author's Address

Peter Koch
DENIC eG
Wiesenuettenplatz 26
Frankfurt 60329
DE

Phone: +49 69 27235 0
Email: pk@DENIC.DE

The IETF takes no position regarding the validity or scope of any Intellectual Property Rights 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; nor does it represent that it has made any independent effort to identify any such rights. Information on the procedures with respect to rights in RFC documents can be found in [BCP 78](#) and [BCP 79](#).

Copies of IPR disclosures made to the IETF Secretariat 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 implementers or users of this specification can be obtained from the IETF on-line IPR repository at <http://www.ietf.org/ipr>.

The IETF invites any interested party to bring to its attention any copyrights, patents or patent applications, or other proprietary rights that may cover technology that may be required to implement this standard. Please address the information to the IETF at ietf-ipr@ietf.org.

Disclaimer of Validity

This document and the information contained herein are provided on an "AS IS" basis and THE CONTRIBUTOR, THE ORGANIZATION HE/SHE REPRESENTS OR IS SPONSORED BY (IF ANY), THE INTERNET SOCIETY AND THE INTERNET ENGINEERING TASK FORCE DISCLAIM 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.

Copyright Statement

Copyright (C) The Internet Society (2006). This document is subject to the rights, licenses and restrictions contained in [BCP 78](#), and except as set forth therein, the authors retain all their rights.

Acknowledgment

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