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

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Abstract

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

Internet-Draft

Rehoming MCAST.NET

February 2007

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	4
4.	Migration Issues	4
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	6
	Intellectual Property and Copyright Statements	7

Internet-Draft

Rehoming MCAST.NET

February 2007

1. Introduction

This document describes a maintenance policy and migration strategy for the MCAST.NET (MCAST.ARPA) domain that contains names for a subset of the multicast groups assigned by the IANA.

Comments should be sent to the mboned working group.

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.

With few exceptions, only multicast group addresses from 224.0.0/24 and 224.0.1/24 are listed in MCAST.NET. Addresses outside 224/8 do not appear at all.

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.

Koch

Expires August 30, 2007

[Page 3]

Internet-Draft

Rehoming MCAST.NET

February 2007

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

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

[4.](#) Migration Issues

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](#)].

An updated multicast address assignment policy appears in [[I-D.ietf-mboned-addrarch](#)].

[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.

Koch

Expires August 30, 2007

[Page 4]

Internet-Draft

Rehoming MCAST.NET

February 2007

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

{This section needs more work.}

[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.
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- [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-addrarch]
Savola, P., "Overview of the Internet Multicast Addressing Architecture", [draft-ietf-mboned-addrarch-05](#) (work in progress), October 2006.
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Koch

Expires August 30, 2007

[Page 5]

Internet-Draft

Rehoming MCAST.NET

February 2007

- [BCP 37](#), [RFC 2780](#), March 2000.
- [RFC2908] Thaler, D., Handley, M., and D. Estrin, "The Internet Multicast Address Allocation Architecture", [RFC 2908](#), September 2000.
- [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, taking over with only little changes from [draft-koch-mboned-mcast-arpa-00.txt](#)

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Koch

Expires August 30, 2007

[Page 6]

Internet-Draft

Rehoming MCAST.NET

February 2007

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