dnsop 0. Sury

Internet-Draft E. Hunt

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Deprecating obsolete DNS Resource Records Types draft-sury-deprecate-obsolete-resource-records-01

Abstract

This document deprecates Resource Records (RR) Types that are either not being used for anything meaningful or were been already made obsolete by other RFCs. This document updates [RFC1035], [RFC1035], [RFC4034].

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1. Introduction

[RFC1035] and other documents have defined some Resource Record (RR) Types that are no longer in common use, some of which have been rendered obsolete by subsequent standards, but have never been clearly deprecated in the context of the DNS. In some cases there have been interoperability problems between DNS implementations that support these types and those that do not - for example, because of DNS name compression in the wire format. Continued support for these RR Types imposes a complexity cost on new implementations for little benefit.

This document formally deprecates such RR Types, allowing implementations to drop specific support for them.

2. Deprecating MD, MF, MB, MG, MR, MINFO, MAILA, and MAILBRR Types

The MD, MF, MB, MG, MR, MINFO, MAILA, and MAILB RR Types aren't used in any existing standards, and this documents deprecates their usage. The MD, MF, MB, MG, MR, and MINFO RR Types RDATA contain a domain name that could be compressed in the RDATA section.

As an update to [RFC3597] and [RFC4034] this document specifies that for MD, MF, MB, MG, MR, and MINFO RR types, the canonical form is such that no downcasing of embedded domain names takes place, and is otherwise identical to the canonical form specified in [RFC4034] section 6.2.

3. IANA Considerations

This documents updates the IANA registry "Domain Name System (DNS) Parameters" ([DNS-IANA]).

+	+	+	+
•			Reference
+	,		
MD	3	DEPRECATED	This document
MF	4	DEPRECATED	This document
MB	7	DEPRECATED	This document
MG	8	DEPRECATED	This document
MR	9	DEPRECATED	This document
MINFO	14	DEPRECATED	This document
+	+		+

4. Implementation Considerations

Types will be flagged as obsolete/deprecated in the IANA registry, and the following guidance is given to DNS implementors in the handling of obsolete/deprecated RR types:

- Authoritative DNS Servers SHOULD issue a warning when loading zones that contain DEPRECATED RR Types;
- DNS Servers MUST NOT compress RDATA when rendering DEPRECATED RR Types to wire format;
- 3. Recursive DNS Servers MAY support legacy compression in DEPRECATED RR Types for received data for backward compatibility if desired, but SHOULD warn if such information is received. Compressed RDATA in DEPRECATED RR Types MUST be uncompressed before sending and they MUST NOT be re-transmitted;
- 4. DNS Clients which receive DEPRECATED RR Types MAY interpret them as unknown RR types ([RFC3597]), and MUST NOT interfere with their transmission;
- 5. DNSSEC Validators and Signers SHOULD treat RDATA for DEPRECATED RR Types as opaque with respect to canonical RR ordering and deduplication;
- 6. DEPRECATED RR Types MUST never be treated as a known-type with respect to the wire protocol.

5. Security Considerations

This document has no security considerations.

6. Operational Considerations

The varying states of implementation of MD, MF, MB, MG, MR, and MINFO RR Types has already caused operational problems between DNS implementations that do implement the aforementioned types and those that don't because of DNS compression on the wire. This document aims to rectify the situation by encouraging removal of support for all these RR types in DNS implementations. This should not cause signficant operational problems because these records are not in wide use on the Internet. [COMMENT: Some data?]

7. Acknowledgements

Peter van Dijk for poking me to write the draft. Daniel Salzman for reviewing the document. Evan Hunt and Michael Casadevall to write Implementation Considerations section.

8. References

8.1. Normative References

- [RFC3597] Gustafsson, A., "Handling of Unknown DNS Resource Record (RR) Types", <u>RFC 3597</u>, DOI 10.17487/RFC3597, September 2003, https://www.rfc-editor.org/info/rfc3597.

8.2. Informative References

[DNS-IANA]

"Domain Name System (DNS) Parameters", https://www.iana.org/assignments/dns-parameters/dns-parameters.xhtml.

Authors' Addresses

Ondrej Sury Internet Systems Consortium CZ

EMail: ondrej@isc.org

Evan Hunt Internet Systems Consortium US

EMail: each@isc.org