Internet Engineering Task Force (IETF) Request for Comments: 7793 BCP: 163 Category: Best Current Practice ISSN: 2070-1721 M. Andrews ISC May 2016

Adding 100.64.0.0/10 Prefixes to the IPv4 Locally-Served DNS Zones Registry

## Abstract

RFC 6598 specifies that "Reverse DNS queries for Shared Address Space addresses [100.64.0.0/10] MUST NOT be forwarded to the global DNS infrastructure."

This document formally directs IANA to add the associated zones to the "IPv4 Locally-Served DNS Zones Registry" to prevent such queries from accidentally leaking to the global DNS infrastructure.

Status of This Memo

This memo documents an Internet Best Current Practice.

This document is a product of the Internet Engineering Task Force (IETF). It represents the consensus of the IETF community. It has received public review and has been approved for publication by the Internet Engineering Steering Group (IESG). Further information on BCPs is available in Section 2 of RFC 5741.

Information about the current status of this document, any errata, and how to provide feedback on it may be obtained at http://www.rfc-editor.org/info/rfc7793.

Copyright Notice

Copyright (c) 2016 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to BCP 78 and the IETF Trust's Legal Provisions Relating to IETF Documents (http://trustee.ietf.org/license-info) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Simplified BSD License text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as described in the Simplified BSD License.

Andrews

Best Current Practice

[Page 1]

Table of Contents

1. Introduction			•	2
2. Changes to the IPv4 Locally-Served DNS Zones Registry			•	2
2.1. RFC 6598 Zones		•	•	2
3. IANA Considerations			•	5
4. Security Considerations			•	5
5. Normative References			•	5
Acknowledgements				
Author's Address		•	•	б

## 1. Introduction

[RFC6598] specifies that "Reverse DNS queries for Shared Address Space addresses [100.64.0.0/10] MUST NOT be forwarded to the global DNS infrastructure." [RFC6303] provides guidance on handling such queries.

This document directs the IANA to add the IPv4 reverse zones corresponding to 100.64.0.0/10, a netblock reserved in [RFC6598], to the "IPv4 Locally-Served DNS Zone Registry" established in [RFC6303].

Unlike the addresses described in [RFC1918], which are not expected to be seen by other parties, the addresses defined by [RFC6598] are expected to be seen by parties other than those deploying the addresses. Therefore, it is more crucial that recursive nameservers default to serving these zones locally.

2. Changes to the IPv4 Locally-Served DNS Zones Registry

IANA has added the zones listed in "RFC 6598 Zones" (Section 2.1) to the "IPv4 Locally-Served DNS Zone Registry".

## 2.1. RFC 6598 Zones

- 64.100.IN-ADDR.ARPA
- 65.100.IN-ADDR.ARPA
- 66.100.IN-ADDR.ARPA
- 67.100.IN-ADDR.ARPA
- 68.100.IN-ADDR.ARPA
- 69.100.IN-ADDR.ARPA
- 70.100.IN-ADDR.ARPA

Andrews

Best Current Practice

[Page 2]

- 71.100.IN-ADDR.ARPA
- 72.100.IN-ADDR.ARPA
- 73.100.IN-ADDR.ARPA
- 74.100.IN-ADDR.ARPA
- 75.100.IN-ADDR.ARPA
- 76.100.IN-ADDR.ARPA
- 77.100.IN-ADDR.ARPA
- 78.100.IN-ADDR.ARPA
- 79.100.IN-ADDR.ARPA
- 80.100.IN-ADDR.ARPA
- 81.100.IN-ADDR.ARPA
- 82.100.IN-ADDR.ARPA
- 83.100.IN-ADDR.ARPA
- 84.100.IN-ADDR.ARPA
- 85.100.IN-ADDR.ARPA
- 86.100.IN-ADDR.ARPA
- 87.100.IN-ADDR.ARPA
- 88.100.IN-ADDR.ARPA
- 89.100.IN-ADDR.ARPA
- 90.100.IN-ADDR.ARPA
- 91.100.IN-ADDR.ARPA
- 92.100.IN-ADDR.ARPA
- 93.100.IN-ADDR.ARPA
- 94.100.IN-ADDR.ARPA

Andrews

Best Current Practice

[Page 3]

- 95.100.IN-ADDR.ARPA
- 96.100.IN-ADDR.ARPA
- 97.100.IN-ADDR.ARPA
- 98.100.IN-ADDR.ARPA
- 99.100.IN-ADDR.ARPA
- 100.100.IN-ADDR.ARPA
- 101.100.IN-ADDR.ARPA
- 102.100.IN-ADDR.ARPA
- 103.100.IN-ADDR.ARPA
- 104.100.IN-ADDR.ARPA
- 105.100.IN-ADDR.ARPA
- 106.100.IN-ADDR.ARPA
- 107.100.IN-ADDR.ARPA
- 108.100.IN-ADDR.ARPA
- 109.100.IN-ADDR.ARPA
- 110.100.IN-ADDR.ARPA
- 111.100.IN-ADDR.ARPA
- 112.100.IN-ADDR.ARPA
- 113.100.IN-ADDR.ARPA
- 114.100.IN-ADDR.ARPA
- 115.100.IN-ADDR.ARPA
- 116.100.IN-ADDR.ARPA
- 117.100.IN-ADDR.ARPA
- 118.100.IN-ADDR.ARPA

Andrews

Best Current Practice

[Page 4]

119.100.IN-ADDR.ARPA

120.100.IN-ADDR.ARPA

121.100.IN-ADDR.ARPA

122.100.IN-ADDR.ARPA

- 123.100.IN-ADDR.ARPA
- 124.100.IN-ADDR.ARPA
- 125.100.IN-ADDR.ARPA
- 126.100.IN-ADDR.ARPA
- 127.100.IN-ADDR.ARPA
- 3. IANA Considerations

Per this document, IANA has added the zones listed in "RFC 6598 Zones" (Section 2.1) to the "IPv4 Locally-Served DNS Zone Registry".

IANA is reminded that an insecure delegation for these zones is required for compliance with [RFC6303] to break the DNSSEC chain of trust.

4. Security Considerations

This document does not present additional security risks to the Internet than those described in [RFC6303] and [RFC6598].

- 5. Normative References
  - [RFC1918] Rekhter, Y., Moskowitz, B., Karrenberg, D., de Groot, G., and E. Lear, "Address Allocation for Private Internets", BCP 5, RFC 1918, DOI 10.17487/RFC1918, February 1996, <http://www.rfc-editor.org/info/rfc1918>.
  - [RFC6303] Andrews, M., "Locally Served DNS Zones", BCP 163, RFC 6303, DOI 10.17487/RFC6303, July 2011, <http://www.rfc-editor.org/info/rfc6303>.

Andrews

Best Current Practice

[Page 5]

[RFC6598] Weil, J., Kuarsingh, V., Donley, C., Liljenstolpe, C., and M. Azinger, "IANA-Reserved IPv4 Prefix for Shared Address Space", BCP 153, RFC 6598, DOI 10.17487/RFC6598, April 2012, <http://www.rfc-editor.org/info/rfc6598>.

## Acknowledgements

The author would like to thank Joe Abley for his review comments.

Author's Address

M. Andrews Internet Systems Consortium 950 Charter Street Redwood City, CA 94063 United States

Email: marka@isc.org

Best Current Practice