                    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.

Table of Contents

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

        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

   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

        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>.

   [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>.

Author's Address

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

   Email: marka@isc.org