Request to Move RFC 2754 to Historic Status

Abstract

   RFC 2754 requested that each time IANA made an address assignment, it
   was to create appropriate inetnum and as-block objects and digitally
   sign them. The purpose was to distribute the IANA-held public key in
   software implementations of the Distributed Routing Policy System.
   In practice, this was never done on the public Internet. This
   document requests that RFC 2754 be moved to Historic status.

Status of This Memo

   This document is not an Internet Standards Track specification; it is
   published for informational purposes.

   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). Not all documents
   approved by the IESG are a candidate for any level of Internet
   Standard; see 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/rfc6254.

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1. Introduction

    The Internet Assigned Numbers Authority (IANA) (www.iana.org) is
    charged with allocating parameter values for fields in protocols that
    have been designed, created, or are maintained by the Internet
    Engineering Task Force (IETF). RFC 2754 [RFC2754] requests that the
    IANA create a repository of Routing Policy Specification Language
    (RPSL) objects and digitally sign them. The RFC identifies the
    initial objects to be signed and also requests that each time IANA
    makes an address assignment it also create new objects as needed and
    sign them as well. In practice, this was never done in the public
    Internet. During a detailed review of IANA's protocol registration
    activities in support of the IETF, this request for IANA action was
    identified as one of those that had not been completed after
    publication of the RFC.

    This document obsoletes RFC 2754 [RFC2754], recommends that it be
    moved to Historic status, and directs IANA not to move forward with
    the IANA actions in that RFC.

2. Details

    RFC 2754 [RFC2754] requests that the IANA create a repository of RPSL
    objects and digitally sign them. The RFC identifies the initial
    objects to be signed and also requests that each time IANA makes an
    address assignment it also create new objects as needed and sign them
    as well.

    During a review of RFCs in 2009, it became apparent that the IANA
    actions requested in RFC 2754 were never done. In the intervening
    time, another technology appears to be taking the role once
    envisioned for Distributed RPSL. Both an architecture and
    infrastructure now exist for secure routing using Resource Public Key
    Infrastructure (RPKI) technologies. As an example, the semantics of
    a Route Origin Authorization (ROA) -- an application of the RPKI --
    to validate the origination of routes has been standardized by
    the IETF.

      Implementation of the IANA actions in RFC 2754 would now require
      significant implementation complexity. In the face of alternative
      technology, and given that the requested actions have not been
      implemented in the public Internet, it is proposed to reclassify
      RFC 2754 [RFC2754] as Historic and to direct the IANA not to pursue
      or implement the IANA requests in that document.

3. Terminology

   The word "allocation" designates a block of addresses managed by a
   registry for the purpose of making assignments and allocations. The
   word "assignment" designates a block of addresses, or a single
   address, registered to an end-user for use on a specific network, or
   set of networks.

4. IANA Considerations

   IANA is instructed not to pursue or implement the IANA actions
   requested in RFC 2754 [RFC2754].

5. Security Considerations

   The intended signature of inetnum and as-block objects never took
   place in the public Internet. Moving RFC 2754 [RFC2754] to Historic
   status would have no known impact on the security of the Internet.

6. Acknowledgments

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   Vegoda, Terry Manderson, Jari Arkko, Dan Romascanu, Michelle Cotton,
   and David Conrad for their constructive feedback and comments.

7. Informative Reference

   [RFC2754] Alaettinoglu, C., Villamizar, C., and R. Govindan, "RPS
              IANA Issues", RFC 2754, January 2000.

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