

Network Working Group
Internet-Draft
Updates: RFC [8499](#) (if approved)
Intended status: Standards Track
Expires: October 31, 2019

P. Hoffman
ICANN
April 29, 2019

Terminology for DNS Transports and Location
draft-hoffman-dns-terminology-ter-01

Abstract

This document adds terms and abbreviations to "DNS Terminology" ([RFC 8499](#)) that relate to DNS running over various transports, as well as terms and abbreviations for DNS resolution at traditional and non-traditional locations.

[[This is an early attempt at these terms. They will probably be improved over time.]]

Status of This Memo

This Internet-Draft is submitted in full conformance with the provisions of [BCP 78](#) and [BCP 79](#).

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF). Note that other groups may also distribute working documents as Internet-Drafts. The list of current Internet-Drafts is at <https://datatracker.ietf.org/drafts/current/>.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as "work in progress."

This Internet-Draft will expire on October 31, 2019.

Copyright Notice

Copyright (c) 2019 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 (<https://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.

Table of Contents

1.	New Terms and Abbreviations	2
2.	Normative References	3
	Acknowledgments	3
	Author's Address	3

[1.](#) New Terms and Abbreviations

The following terms and abbreviations are added to [Section 6 of \[RFC8499\]](#).

DNS-over-TLS (DoT): DNS over TLS as defined in [\[RFC7858\]](#) and its successors.

DNS-over-HTTPS (DoH): DNS over HTTPS as defined in [\[RFC8484\]](#) and its successors.

Do53: DNS over UDP or TCP as defined in [\[RFC1035\]](#) and its successors. Do53 applies to DNS communication between stub resolvers and recursive resolvers, and between recursive resolvers and authoritative servers.

Recursive DoT (RDoT): RDoT specifically means DNS-over-TLS for transport between stub resolvers and recursive resolvers. This term is necessary because it is expected that DNS-over-TLS will later be defined as a transport between recursive resolvers and authoritative servers,

Authoritative DoT (ADoT): If DNS-over-TLS is later defined as the transport between recursive resolvers and authoritative servers, ADoT specifically means DNS-over-TLS for transport between recursive resolvers and authoritative servers.

Applications Doing DNS (ADD): Applications that act as stub resolvers. This is in contrast to the way that applications traditionally have gotten DNS information, which is to use system calls to the operating system on the computer, and have the operating system act as the stub resolver. "Applications Doing DNS" is not limited to particular transports: it applies equally to DNS-over-TLS, DNS-over-HTTPS, Do53, and future DNS transports.

(Temporary note, to be removed before publication as an RFC:
there is a mailing list discussing Applications Doing DNS at
<https://www.ietf.org/mailman/listinfo/add>)

2. Normative References

- [RFC1035] Mockapetris, P., "Domain names - implementation and specification", STD 13, [RFC 1035](#), DOI 10.17487/RFC1035, November 1987, <<https://www.rfc-editor.org/info/rfc1035>>.
- [RFC7858] Hu, Z., Zhu, L., Heidemann, J., Mankin, A., Wessels, D., and P. Hoffman, "Specification for DNS over Transport Layer Security (TLS)", [RFC 7858](#), DOI 10.17487/RFC7858, May 2016, <<https://www.rfc-editor.org/info/rfc7858>>.
- [RFC8484] Hoffman, P. and P. McManus, "DNS Queries over HTTPS (DoH)", [RFC 8484](#), DOI 10.17487/RFC8484, October 2018, <<https://www.rfc-editor.org/info/rfc8484>>.
- [RFC8499] Hoffman, P., Sullivan, A., and K. Fujiwara, "DNS Terminology", [BCP 219](#), [RFC 8499](#), DOI 10.17487/RFC8499, January 2019, <<https://www.rfc-editor.org/info/rfc8499>>.

Acknowledgments

Sara Dickinson contributed ideas before the first draft was published. Warren Kumari contributed the idea for "Applications Doing DNS" as a term. Many people contributed the idea that it is better to define terms rather than just acronyms.

Author's Address

Paul Hoffman
ICANN

Email: paul.hoffman@icann.org

