

Network Working Group  
Internet-Draft  
Updates: RFC [8499](#) (if approved)  
Intended status: Standards Track  
Expires: September 25, 2019

P. Hoffman  
ICANN  
March 24, 2019

## **Abbreviations for DNS Transports and Location draft-hoffman-dns-terminology-ter-00**

### Abstract

This document adds abbreviations to "DNS Terminology" ([RFC 8499](#)) that relate to DNS running over various transports, as well as 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 September 25, 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

<a href="#">1.</a>	<a href="#">New Abbreviations</a>	<a href="#">2</a>
<a href="#">2.</a>	<a href="#">Normative References</a>	<a href="#">3</a>
	<a href="#">Acknowledgments</a>	<a href="#">3</a>
	<a href="#">Author's Address</a>	<a href="#">3</a>

## [1.](#) New Abbreviations

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

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.

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

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

RDoT: RDoT specifically means DoT 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, The "R" in RDoT stands for "recursive", the endpoint.

ADoT: If DoT is later defined as the transport between recursive resolvers and authoritative servers, ADoT specifically means DoT for transport between recursive resolvers and authoritative servers. The "A" in ADoT stands for "authoritative", the endpoint.

DaT: DNS resolution between a stub resolver and the recursive resolver at the the traditional location configured in the operating system. The "T" stands for "traditional". DaT is typically configured by DHCP, IPv6 router advertisements, or an administrator editing a configuration file on a host. If [\[I-D.ietf-doh-resolver-associated-doh\]](#) becomes standardized, DoH to the DoH server associated with the traditional resolver would also be considered DaT.

Da0: DNS resolution between a stub resolver and a recursive resolver at other than the traditional location configured in the operating system. Da0 can be configured by a user changing the configuration on a host (such as editing /etc/resolv.conf), or an application



running RDoT or DoH to a resolver that is not the same as the traditional location configured in the operating system,

## 2. Normative References

- [I-D.ietf-doh-resolver-associated-doh]  
Hoffman, P., "Associating a DoH Server with a Resolver", [draft-ietf-doh-resolver-associated-doh-02](#) (work in progress), March 2019.
- [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.

## Author's Address

Paul Hoffman  
ICANN

Email: [paul.hoffman@icann.org](mailto:paul.hoffman@icann.org)