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Extension of the ACE CoAP-DTLS Profile to TLS
draft-ietf-ace-extend-dtls-authorize-00

Abstract

This document updates the ACE CoAP-DTLS profile by specifying that the profile applies to TLS as well as DTLS.

Discussion Venues

This note is to be removed before publishing as an RFC.

Discussion of this document takes place on the Authentication and Authorization for Constrained Environments Working Group mailing list (ace@ietf.org), which is archived at <https://mailarchive.ietf.org/arch/browse/ace/>.

Source for this draft and an issue tracker can be found at <https://github.com/ace-wg/ace-extend-dtls-authorize>.

Status of This Memo

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CoAP-DTLS Extension

December 2021

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[1.](#) Introduction

[I-D.ietf-ace-dtls-authorize] only specifies use of DTLS [I-D.ietf-tls-dtls13] but works equally well for TLS. For many constrained implementations, CoAP over UDP [RFC7252] is the first choice, but when deploying ACE in networks controlled by other entities (such as the Internet), UDP might be blocked on the path between the client and the RS, and the client might have to fall back to CoAP over TCP [RFC8323] for NAT or firewall traversal. This feature is supported by the OSCORE profile [I-D.ietf-ace-oscore-profile] but is lacking from the DTLS profile.

This document updates [I-D.ietf-ace-dtls-authorize] by specifying that the profile applies to TLS as well as DTLS. The same access token is valid for both DTLS or TLS. The access rights do not depend on the transport layer security.

[2.](#) IANA Considerations

[3.](#) Security Considerations

The security consideration and requirements in TLS 1.3 [[RFC8446](#)] and [BCP 195](#) [[RFC7525](#)] [[RFC8996](#)] also apply to this document.

[4.](#) References

[4.1.](#) Normative References

[I-D.ietf-ace-dtls-authorize]

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[RFC8323] Bormann, C., Lemay, S., Tschofenig, H., Hartke, K., Silverajan, B., and B. Raymor, Ed., "CoAP (Constrained Application Protocol) over TCP, TLS, and WebSockets", [RFC 8323](#), DOI 10.17487/RFC8323, February 2018, <<https://www.rfc-editor.org/info/rfc8323>>.

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[4.2.](#) Informative References

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[RFC7525] Sheffer, Y., Holz, R., and P. Saint-Andre, "Recommendations for Secure Use of Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS)", [BCP 195](#), [RFC 7525](#), DOI 10.17487/RFC7525, May 2015, <<https://www.rfc-editor.org/info/rfc7525>>.

[RFC8996] Moriarty, K. and S. Farrell, "Deprecating TLS 1.0 and TLS 1.1", [BCP 195](#), [RFC 8996](#), DOI 10.17487/RFC8996, March 2021, <<https://www.rfc-editor.org/info/rfc8996>>.

Acknowledgments

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