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ALTSVC Frame in HTTP/QUIC
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Abstract

[RFC7838] defines the ALTSVC frame for HTTP/2 [[RFC7540](#)]. This frame is equally applicable to HTTP/QUIC ([[I-D.ietf-quic-http](#)]), but needs to be separately registered. This document describes the ALTSVC frame for HTTP/QUIC.

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Table of Contents

1.	Introduction	2
2.	The ALTSVC HTTP/QUIC Frame	2
3.	Security Considerations	2
4.	IANA Considerations	3
5.	References	3
5.1.	Normative References	3
5.2.	Informative References	3
	Author's Address	3

[1.](#) Introduction

[RFC7838] defines HTTP Alternative Services, which allow an origin's resources to be authoritatively available at a separate network location, possibly accessed with a different protocol configuration. It defines two mechanisms for transporting such information, an HTTP response header and an HTTP/2 frame type.

[I-D.ietf-quic-http] describes the required updates for HTTP/2 frames to be used with HTTP/QUIC. Only a few modifications are required for the ALTSVC frame. No modifications are required for the "Alt-Svc" header field.

[2.](#) The ALTSVC HTTP/QUIC Frame

The ALTSVC HTTP/QUIC frame advertises the availability of an alternative service to an HTTP/QUIC client.

An ALTSVC frame from a server to a client on stream 1 (not 0, as in HTTP/2) indicates that the conveyed alternative service is associated with the origin contained in the Origin field of the frame.

An ALTSVC frame from a server to a client on a stream other than stream 1 indicates that the conveyed alternative service is associated with the origin of that stream.

The layout and semantics of the frame are identical to those of the HTTP/2 frame defined in [[RFC7838](#)]. The ALTSVC frame type is 0xa (decimal 10), as in HTTP/2.

[3.](#) Security Considerations

This document introduces no new security considerations beyond those discussed in [[RFC7838](#)] and [[I-D.ietf-quic-http](#)].

Bishop

Expires January 25, 2018

[Page 2]

4. IANA Considerations

This document registers the ALTSVC frame type in the "HTTP/QUIC Frame Type" registry ([[I-D.ietf-quic-http](#)]).

Frame Type: ALTSVC

Code: 0xa

Specification: This document

5. References

5.1. Normative References

[I-D.ietf-quic-http]
Bishop, M., "Hypertext Transfer Protocol (HTTP) over QUIC", [draft-ietf-quic-http-04](#) (work in progress), June 2017.

[RFC7838] Nottingham, M., McManus, P., and J. Reschke, "HTTP Alternative Services", [RFC 7838](#), DOI 10.17487/RFC7838, April 2016, <<http://www.rfc-editor.org/info/rfc7838>>.

5.2. Informative References

[RFC7540] Belshe, M., Peon, R., and M. Thomson, Ed., "Hypertext Transfer Protocol Version 2 (HTTP/2)", [RFC 7540](#), DOI 10.17487/RFC7540, May 2015, <<http://www.rfc-editor.org/info/rfc7540>>.

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