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Declaring Support for HTTP/2 Priorities
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Abstract

HTTP/2 provides a prioritization scheme but experience has shown that implementation support varies. This document defines an HTTP/2 setting that endpoints can use as an affirmative signal to indicate their support for HTTP/2 Priorities.

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[1.](#) Introduction

The HTTP/2 specification defines a priority scheme in [\[RFC7540\]](#), [Section 5.3](#), which some implementers have opted not to fully support. The lack of signalling about the status of the implementation has caused several implementations to implement heuristics to detect when the clients they are connected to do not support priorities as defined and take steps to compensate for that. The intent of this draft is to provide an affirmative signalling mechanism for each client to communicate whether or not it supports and will use the priority scheme as defined in [\[RFC7540\]](#), [Section 5.3](#).

[2.](#) Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [BCP 14](#) [\[RFC2119\]](#) [\[RFC8174\]](#) when, and only when, they appear in all capitals, as shown here.

[3.](#) The SETTINGS_ENABLE_HTTP2_PRIORITIES SETTINGS Parameter

This document adds a new SETTINGS parameter to those defined by [\[RFC7540\]](#), [Section 6.5.2](#).

The new parameter name is SETTINGS_ENABLE_HTTP2_PRIORITIES. The value of the parameter MUST be 0 or 1 to indicate not supporting or supporting HTTP/2 priorities respectively. If either side sends the parameter with a value of 0, clients SHOULD NOT send priority frames and servers SHOULD NOT make any assumptions based on the presence or lack thereof of priority frames. If both sides send the parameter with a value of 1, then both parties MAY use HTTP/2 priorities as they see fit. A sender MUST NOT send the parameter with the value of

0 after previously sending a value of 1. If a client or server does not send the setting, the peer SHOULD NOT make any assumptions about its support for HTTP/2 priorities.

[4.](#) IANA Considerations

[4.1.](#) A New HTTP/2 Setting

This document registers an entry in the "HTTP/2 Settings" registry that was established by [Section 11.3 of \[RFC7540\]](#).

Name: SETTINGS_ENABLE_HTTP2_PRIORITIES

Code: 0xTBD

Initial Value: 1

Specification: This document

[5.](#) Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#), DOI 10.17487/RFC2119, March 1997, <<https://www.rfc-editor.org/info/rfc2119>>.
- [RFC7540] Belshe, M., Peon, R., and M. Thomson, Ed., "Hypertext Transfer Protocol Version 2 (HTTP/2)", [RFC 7540](#), DOI 10.17487/RFC7540, May 2015, <<https://www.rfc-editor.org/info/rfc7540>>.
- [RFC8174] Leiba, B., "Ambiguity of Uppercase vs Lowercase in [RFC 2119](#) Key Words", [BCP 14](#), [RFC 8174](#), DOI 10.17487/RFC8174, May 2017, <<https://www.rfc-editor.org/info/rfc8174>>.

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