The Hypertext Transfer Protocol (HTTP) Status Code 308 (Permanent Redirect)
draft-reschke-http-status-308-00

Abstract

   This document specifies the additional HyperText Transfer Protocol
   (HTTP) Status Codes 308 (Permanent Redirect).

Editorial Note (To be removed by RFC Editor before publication)

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   work item of the HTTPbis Working Group, comments should be sent to
   the Hypertext Transfer Protocol (HTTP) mailing list at
   ietf-http-wg@w3.org [1], which may be joined by sending a message
   with subject "subscribe" to ietf-http-wg-request@w3.org [2].

   Discussions of the HTTPbis Working Group are archived at
   <http://lists.w3.org/Archives/Public/ietf-http-wg/>.

   XML versions and latest edits for this document are available from <h
   ttp://greenbytes.de/tech/webdav/#draft-reschke-http-status-code-308>.

Status of This Memo

   This Internet-Draft is submitted in full conformance with the
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1. Introduction

HTTP defines a set of status codes for the purpose of redirecting a
request to a different URI. The history of these status codes is
summarized in Section 7.3 of [draft-ietf-httpbis-p2-semantics], which
also classifies the existing status codes into four categories.

The first of these categories contains the status codes 301 (Moved
Permanently), 302 (Found), and 307 (Temporary Redirect), which can be
classified as below:

```
+---------------------------------------+-----------+-----------+
|                                       | Permanent | Temporary |
+---------------------------------------+-----------+-----------+
| Allows changing the request method from  | 301    | 302       |
| POST to GET                           |           |           |
| Does not allow changing the request   | -         | 307       |
| method from POST to GET               |           |           |
+---------------------------------------+-----------+-----------+
```

Section 7.3.8 of [draft-ietf-httpbis-p2-semantics] states that HTTP
does not define a permanent variant of status code 307; this
specification adds this status code (Section 3).

2. Notational Conventions

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT",
"SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this
document are to be interpreted as described in [RFC2119].

3. 308 Permanent Redirect

The target resource has been assigned a new permanent URI and any
future references to this resource SHOULD use one of the returned
URIs. Clients with link editing capabilities ought to automatically
re-link references to the effective request URI (Section 4.3 of
[draft-ietf-httpbis-p1-messaging]) to one or more of the new
references returned by the server, where possible.

The permanent URI SHOULD be given by the Location field in the
response. Unless the request method was HEAD, the representation of
the response SHOULD contain a short hypertext note with a hyperlink
to the new URI(s), since most user agents do not understand the 308
status code yet. Therefore, the note SHOULD contain the information
necessary for a user to repeat the original request on the new URI.

If the 308 status code is received in response to a request method
that is known to be "safe", as defined in Section 6.1.1 of

[draft-ietf-httpbis-p2-semantics], then the request MAY be
automatically redirected by the user agent without confirmation.
Otherwise, the user agent MUST NOT automatically redirect the request
unless it can be confirmed by the user, since this might change the
conditions under which the request was issued.

4. Deployment Considerations

Section 4 of [draft-ietf-httpbis-p2-semantics] requires recipients to
treat unknown 3xx status codes the same way as status code 300
Multiple Choices ([draft-ietf-httpbis-p2-semantics], Section 7.3.1).
Thus, servers will not be able to rely on automatic redirection
happening similar to status codes 301, 302, or 307.

Therefore, initial use of status code 308 will be restricted to cases
where the server has sufficient confidence in the clients
understanding the new code, or a fallback to the semantics of status
code 300 is not problematic.

5. Security Considerations

All security considerations that apply to HTTP redirects apply to the
308 status code as well (see Section 11 of
[draft-ietf-httpbis-p2-semantics]).

6. IANA Considerations

The registration below shall be added to the HTTP Status Code
Registry (defined in Section 4.2 of [draft-ietf-httpbis-p2-semantics]
and located at <http://www.iana.org/assignments/http-status-codes>):

```
+-------+--------------------+-----------+
| Value | Description        | Reference |
+-------+--------------------+-----------+
| 308   | Permanent Redirect | Section 3 |
+-------+--------------------+-----------+
```

7. Acknowledgements

The definition for the new status code 308 re-uses text from the
HTTP/1.1 definitions of status codes 301 and 307.

8. Normative References

[RFC2119]   Bradner, S., "Key words for use in
                                RFCs to Indicate Requirement
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   [draft-ietf-httpbis-p1-messaging] Fielding, R., Ed., Gettys, J.,
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                                      Connections, and Message Parsing",
                                      draft-ietf-httpbis-p1-messaging-17
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   [draft-ietf-httpbis-p2-semantics] Fielding, R., Ed., Gettys, J.,
                                      Mogul, J., Frystyk, H., Masinter,
                                      L., Leach, P., Berners-Lee, T.,
                                      Lafon, Y., Ed., and J. Reschke,
                                      Ed., "HTTP/1.1, part 2: Message
                                      Semantics",
                                      draft-ietf-httpbis-p2-semantics-17
                                      (work in progress), October 2011.

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