HTTP Headers-Not-Recognized Header
<draft-yevstifeyev-http-headers-not-recognized-09>

Abstract

This document defines mechanism which allows HTTP servers to notify clients about not recognized or not proceed headers - 'Headers-Not-Recognized' HTTP header.

Status of this Memo

This Internet-Draft is submitted to IETF in full conformance with the provisions of BCP 78 and BCP 79.

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF), its areas, and its working groups. Note that other groups may also distribute working documents as Internet-Drafts.

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."

The list of current Internet-Drafts can be accessed at http://www.ietf.org/1id-abstracts.html

The list of Internet-Draft Shadow Directories can be accessed at http://www.ietf.org/shadow.html

Copyright and License Notice

Copyright (c) 2010 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 (http://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

1. Introduction ......................................................... 3
   1.1. Motivation .................................................... 3
   1.2. Conventions .................................................... 3
       1.2.1. Conformance Criteria .................................... 3
       1.2.2. Syntax Notation .......................................... 3
       1.2.3. Terminology .............................................. 3
2. Technical Overview .................................................. 4
   2.1 Model of Work .................................................. 4
   2.2 Syntax ......................................................... 4
3. IANA Considerations ................................................ 5
4. Security Considerations ............................................ 5
5. Normative References ............................................... 5
Author’s Addresses ..................................................... 5
1. Introduction

1.1. Motivation

HTTP is one of the most widely-used protocols in the Internet. One of the things which made it so popular is extensibility. One can easily add any header to the HTTP message. However, all hosts are not able to support all the HTTP headers. Generally, if a host does not recognize the header, it is simply ignored. The another side of exchange is not notified about not processed headers.

This document proposes mechanism which allows servers to notify HTTP hosts about not recognized headers.

The proposal is to send a response with definite header to the client if one or more headers of request were not processed. This document defines Headers-Not-Recognized HTTP header to be used in such occasion.

1.2. Conventions

HTTP refers to protocol, defined in RFC 2616 [RFC2616]

1.2.1. Conformance Criteria

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 RFC 2119 [RFC2119].

1.2.2. Syntax Notation

This specification uses the Augmented Backus-Naur Form (ABNF) notation of [RFC5234].

The construction <n>#<m>element is used as defined in RFC 2616 [RFC2616], Section 2.1.

1.2.3. Terminology

The terms user agent, client, server, proxy, and origin server have the same meaning as in the HTTP/1.1 specification ([RFC2616], Section 1.3).

The term host means client or server.
2. Technical Overview

2.1 Model of Work

If the HTTP host receives HTTP packet which contains some headers which are not supported by it, it is RECOMMENDED for it to include the Headers-Not-Recognized header in the response. Information about not supported headers is to be put in this header following the rules of Section 2.2 of this document. The Headers-Not-Recognized header MUST contain information only about not supported headers - i.e. headers which are not able to be processed anyway. It MUST NOT contain information about headers, which are partly supported, not intended to be used or whose entity cannot be processed while the header is supported at all etc.

When HTTP host receives HTTP packet with Headers-Not-Recognized header, it is RECOMMENDED that it avoids sending packets with headers with mentioned in it names or tries to change them so that it is able to recognize and process them.

Intermediate systems (also called middle-boxes), such as proxies, tunnels, gateways etc. MUST transfer the packets with Headers-Not-Recognized field to the destination host without changing the entity of this header if the unrecognized header had been present in the initial HTTP request (i.e. request which intermediate system received before transferring it to destination node), but SHOULD omit it if Headers-Not-Recognized header entity concerns to header added to initial request by middle-box. If the aforementioned header concerns added headers partly, middle-box SHOULD change the entity so that it concerns only initial request headers.

2.2 Syntax

‘Headers-Not-Recognized’ header field has the following format:

headers_not_recognized = 1#header_name
header_name            = 1*VCHAR
3. IANA Considerations

The permanent message header field registry should be updated with the following registration:

Header field name: Headers-Not-Recognized
Applicable protocol: http
Status: experimental
Specification document: RFC xxxx

[RFC Editor: replace xxxx with assigned RFC number]
[Note: This registration should take place at
http://www.iana.org/assignments/message-headers/perm-headers.html
This note is to be deleted upon publication.]

4. Security Considerations

This extension to HTTP is not believed to add any additional security concerns not already present in RFC 2616 [RFC2616].

5. Normative References


Author’s Addresses

Mykyta Yevstifeyev
8 Kuzovkov St., flat 25
Kotovsk, Ukraine

EMail: evnikita2@gmail.com