

# HTTP Response Status Codes

HTTP response status codes indicate whether a specific HTTP request has been successfully completed. Responses are grouped in five classes:

1. Informational Responses (100 - 199) - the request was received, continuing processing
2. Successful Responses (200 - 299) - the request was successfully received, understood and accepted
3. Redirection Messages (300 - 399) - further action needs to be taken in order to complete the request
4. Client error responses (400 - 499) - the request contains bad syntax or can not be fulfilled
5. Server error responses (500 - 599) - the server failed to fulfill an apparently valid request

If you receive a response not in this list, it is a non-standard response, possibly custom to the server's software.

## 1. Informational Responses

### 100 Continue

This interim response indicates that the client should continue the request or ignore the response if the request is already finished.

### 101 Switching Protocols

This code is sent in response to an Upgrade request header from the client and indicates the protocol the server is switching to.

### 102 Processing

This code indicates that the server has received and is processing the request, but no response is available yet.

### 103 Early Hints

Used to return some response headers before the final HTTP message.

## **2. Successful Responses**

### **200 OK**

The request succeeded. The result meaning of "success" depends on the HTTP method:

- GET: The resource has been fetched and transmitted in the message body
- Head: The representation layers are included in the response without any message body
- PUT or POST: The resource describing the result of the action is transmitted in the message body
- TRACE: The message body contains the request message as received by the server

### **201 Created**

The request succeeded, and a new resource was created as a result. This is typically the response sent after POST requests, or some PUT requests.

### **202 Accepted**

The request has been accepted for processing, but the processing has not been completed. The request might or might not be eventually acted upon, and may be disallowed when processing occurs.

### **203 Non-Authoritative Information**

The server is a transforming proxy (e.g. a Web accelerator) that received a 200 OK from its origin, but is returning a modified version of the origin's response.

### **204 No Content**

The server successfully processed the request, and is not returning any content.

### **205 Reset Content**

The server successfully processed the request, asks that the requester reset its document view, and is not returning any content.

### **206 Partial Content**

This response code is used when the Range header is sent from the client to request only part of a resource.

### **207 Multi-Status**

Conveys information about multiple resources, for situations where multiple status codes might be appropriate.

### **208 Already Reported**

The members of a DAV binding have already been enumerated in a preceding part of the (multistatus) response, and are not being included again.

### **226 IM Used**

The server has fulfilled a GET request for the resource, and the response is a representation of the result of one or more instance-manipulations applied to the current instance.

## **3. Redirection Messages**

### **300 Multiple Choices**

The request has more than one possible response. The user agent or user should choose one of them. (There is no standardized way of choosing one of the responses, but HTML links to the possibilities are recommended so the user can pick.)

### **301 Moved Permanently**

The URL of the requested resource has been changed permanently. The new URL is given in the response.

### **302 Found**

This response code means that the URL of requested resource has been changed temporarily. Further changes in the URL might be made in the future. Therefore, this same URL should be used by the client in future requests.

### **303 See Other**

The server sent this response to direct the client to get the requested resource at another URL with a GET request.

### **304 Not Modified**

This is used for caching purposes. It tells the client that the response has not been modified, so the client can continue to use the same cached version of the response.

### **305 Use Proxy**

The requested resource is available only through a proxy, the address for which is provided in the response. For security reasons, many HTTP clients (such as Mozilla Firefox and Internet Explorer) do not obey this status code.

### **306 Unused**

This response code is no longer used, it is just reserved.

### **307 Temporary Redirect**

In this case, the request should be repeated with another URI; however, future requests should still use the original URI. In contrast to how 302 was historically implemented, the request method is not allowed to be changed when reissuing the original request. For example, a POST request should be repeated using another POST request.

### **308 Permanent Redirect**

This and all future requests should be directed to the given URI. 308 parallel the behavior of 301, but does not allow the HTTP method to change. So, for example, submitting a form to a permanently redirected resource may continue smoothly.

## **4. Client Error Responses**

### **400 Bad Request**

The server can not or will not process the request due to something that is perceived to be a client error (e.g malformed request syntax, invalid request message framing, or deceptive request routing).

#### **401 Unauthorized**

Although the HTTP standard specifies “unauthorized”, semantically this response means “unauthenticated”. That is the client must authenticate itself to get the requested response.

#### **402 Payment Required**

This response code is reserved for future use. The initial aim for creating this code was using it for digital payment systems, however this status code is used very rarely and no standard convention exists.

#### **403 Forbidden**

The client does not have access rights to this content. That is, unauthorized, so the server is refusing to give the requested resource. Unlike 401 unauthorized, the client’s identity is known to the server.

#### **404 Not Found**

The server cannot find the requested resource. In the browser this means the URL is not recognized. In an API this can also mean the endpoint is valid but the resource itself does not exist.

#### **405 Method Not Allowed**

This request method is known by the server but is not supported by the target resource. For example, an API may not allow calling DELETE to remove a resource.

#### **406 Not Acceptable**

This response is sent when the web server, after performing server-driven content negotiation, doesn't find any content that conforms to the criteria given by the user agent.

#### **407 Proxy Authentication Required**

This is similar to 401 Unauthorized but authentication is required to be done by a proxy.

#### **408 Request Timeout**

The server timed out waiting for the request. According to HTTP specifications: "The client did not produce a request within the time that the server was prepared to wait. The client MAY repeat the request without modifications at any later time."

#### **409 Conflict**

This response is sent when a request conflicts with the current state of the server.

#### **410 Gone**

This response is sent when the requested content has been permanently deleted from the server, with no forwarding address. Clients are expected to remove their caches and links to the resource. The HTTP specification intends this status code to be used for "limited-time, promotional services". APIs should not feel compelled to indicate resources that have been deleted with this status code.

#### **411 Length Required**

The request did not specify the length of its content, which is required by the requested resource.

#### **412 Precondition Failed**

The client has indicated preconditions in the header which the server did not meet.

#### **413 Payload Too Large**

The request is larger than the server is willing or able to process.

#### **414 URI Too Long**

The URI requested by the client is longer than the server is willing to interpret.

#### **415 Unsupported Media Type**

The media format of the requested data is not supported by the server, so the server is rejecting the request.

#### **416 Range Not Satisfiable**

The range specified by the Range header field in the request can not be fulfilled. It's possible that the range is outside of the target's URI's data.

#### **417 Expectation Failed**

This response code indicates that the expectation indicated by the Expect request header field cannot be met by the server.

#### **418 I'm a teapot**

The server refuses the attempt to brew coffee with a teapot.

#### **421 Misdirected Request**

The request was directed at a server that is not able to produce a response.

#### **422 Unprocessable Entity**

The request was well-formed but was unable to be followed due to semantic errors.

#### **423 Locked**

The resource that is being accessed is locked.

#### **424 Failed Dependency**

The request failed due to failure of a previous request.

#### **425 Too Early**

Indicates that the server is unwilling to risk processing a request that might be replayed.

#### **426 Upgrade Required**

The server refuses to perform the request using the current protocol but might be willing to do so after the client upgrades to a different protocol. The server sends an Upgrade header in a 426 response to indicate the required protocol(s).

### **428 Precondition Required**

The origin server requires the request to be conditional. This response is intended to prevent the 'lost update' problem, where a client GETs a resource's state, modifies it and PUTs it back to the server, when meanwhile a third party has modified the state on the server, leading to a conflict.

### **429 Too Many Requests**

The user has sent too many requests in a given amount of time ("rate limiting")

### **431 Request Header Fields Too Large**

The server is unwilling to process the request because its header fields are too large. The request may be resubmitted after reducing the size of the request header fields.

### **451 Unavailable For Legal Reasons**

The user agent requested a resource that cannot legally be provided, such as a web page censored by a government.

## **5. Server Error Responses**

### **500 Internal Server Error**

The server has encountered a situation it does not know how to handle

### **501 Not Implemented**

The request method is not supported by the server and cannot be handled.

### **502 Bad Gateway**

This error response means that the server, while working as a gateway to get a response needed to handle the request, got an invalid response.

### **503 Service Unavailable**

The server cannot handle the request (because it is overloaded or down for maintenance). Generally, this is a temporary state.



**504 Gateway Timeout**

This error is given when a server is acting as a gateway and cannot get a response in time.

**505 HTTP Version Not Supported**

The HTTP version used in the request is not supported by the server.

**506 Variant Also Negotiable**

The server has an internal configuration error: the chosen variant resource is configured to engage in transparent content negotiation itself, and is therefore not a proper end point in the negotiation process.

**507 Insufficient Storage**

The method could not be performed on the resource because the server is unable to store the representation needed to successfully complete the request.

**508 Loop Detected**

The server detected an infinite loop while processing the request.

**510 Not Extended**

Further extensions to the request are required for the server to fulfill it.

**511 Network Authentication Required**

Indicates that the client needs to authenticate to gain network access.