

# HTTP Status Codes Quick Reference

Status codes, headers, and common response patterns

## Informational 1xx

### 1xx Codes

<b>100</b>	Continue — server received headers, client should send body
<b>101</b>	Switching Protocols — upgrading to WebSocket or HTTP/2
<b>102</b>	Processing — server received request, still working (WebDAV)
<b>103</b>	Early Hints — preload resources before final response

### Usage Note

```
# 100 Continue: client sends Expect header, waits for 100
curl -H "Expect: 100-continue" -d @large.json URL
# 101: upgrade to WebSocket
Connection: Upgrade / Upgrade: websocket
```

## Success 2xx

### 2xx Codes

<b>200</b>	OK — standard success response
<b>201</b>	Created — resource successfully created (POST/PUT)
<b>202</b>	Accepted — request received, processing async
<b>203</b>	Non-Authoritative Info — transformed by proxy
<b>204</b>	No Content — success with no response body (DELETE)
<b>205</b>	Reset Content — success, client should reset form
<b>206</b>	Partial Content — range request fulfilled
<b>207</b>	Multi-Status — multiple status codes (WebDAV)

## REST API Usage

<b>GET → 200</b>	Return resource with body
<b>POST → 201</b>	Resource created, include Location header
<b>PUT → 200/204</b>	Updated resource (with/without body)
<b>DELETE → 204</b>	Deleted, no body returned
<b>PATCH → 200</b>	Partial update, return modified resource

## Redirection 3xx

### 3xx Codes

<b>300</b>	Multiple Choices — multiple representations available
<b>301</b>	Moved Permanently — resource moved, update bookmarks
<b>302</b>	Found — temporary redirect (often misused as 303)
<b>303</b>	See Other — redirect with GET after POST
<b>304</b>	Not Modified — use cached version (ETag/If-Modified)
<b>307</b>	Temporary Redirect — same method, temporary location
<b>308</b>	Permanent Redirect — same method, permanent location

## Redirect Behavior

<b>301/308</b>	Permanent — search engines update index
<b>302/307</b>	Temporary — original URL stays canonical
<b>301/302</b>	May change method to GET on redirect
<b>307/308</b>	Must preserve original HTTP method

## Client Error 4xx

### Common Client Errors

<b>400</b>	Bad Request — malformed syntax or invalid parameters
<b>401</b>	Unauthorized — authentication required or failed
<b>403</b>	Forbidden — authenticated but not permitted
<b>404</b>	Not Found — resource does not exist
<b>405</b>	Method Not Allowed — HTTP method not supported
<b>406</b>	Not Acceptable — can't satisfy Accept header
<b>408</b>	Request Timeout — client too slow to send request
<b>409</b>	Conflict — request conflicts with current state

## More Client Errors

<b>410</b>	Gone — resource permanently deleted (not just missing)
<b>411</b>	Length Required — Content-Length header missing
<b>412</b>	Precondition Failed — If-Match/If-Unmodified failed
<b>413</b>	Content Too Large — request body exceeds limit
<b>414</b>	URI Too Long — URL exceeds server limit
<b>415</b>	Unsupported Media Type — Content-Type not accepted
<b>422</b>	Unprocessable Content — valid syntax, semantic errors
<b>429</b>	Too Many Requests — rate limit exceeded

## Server Error 5xx

### 5xx Codes

<b>500</b>	Internal Server Error — unhandled exception on server
<b>501</b>	Not Implemented — server doesn't support the method
<b>502</b>	Bad Gateway — upstream server sent invalid response
<b>503</b>	Service Unavailable — overloaded or in maintenance
<b>504</b>	Gateway Timeout — upstream server didn't respond in time
<b>505</b>	HTTP Version Not Supported — version not handled
<b>507</b>	Insufficient Storage — server can't store request (WebDAV)
<b>511</b>	Network Auth Required — captive portal login needed

## Retry Strategy

<b>500</b>	Retry with backoff; may be transient
<b>502/504</b>	Retry — upstream issue may resolve
<b>503</b>	Check Retry-After header before retrying
<b>501/505</b>	Do not retry — fix client request

## Common Codes

### Most-Used Codes (at a glance)

<b>200</b>	OK — everything worked
<b>201</b>	Created — new resource made
<b>204</b>	No Content — success, empty body
<b>301</b>	Moved Permanently — update URL
<b>304</b>	Not Modified — use cache
<b>400</b>	Bad Request — fix your request
<b>401</b>	Unauthorized — log in first
<b>403</b>	Forbidden — insufficient permissions
<b>404</b>	Not Found — wrong URL or deleted
<b>422</b>	Unprocessable — validation errors
<b>429</b>	Too Many Requests — slow down
<b>500</b>	Server Error — not your fault
<b>502</b>	Bad Gateway — proxy/upstream failure
<b>503</b>	Unavailable — try again later

## Headers Reference

### Request Headers

<b>Accept</b>	Desired response media types (e.g. application/json)
<b>Authorization</b>	Credentials (Bearer token, Basic base64)
<b>Content-Type</b>	Media type of request body
<b>If-None-Match</b>	Conditional: ETag for cache validation
<b>If-Modified-Since</b>	Conditional: date for cache validation
<b>Cache-Control</b>	Caching directives (no-cache, max-age)
<b>User-Agent</b>	Client identification string

## Response Headers

<b>Content-Type</b>	Media type of response body
<b>Location</b>	Redirect target or created resource URL
<b>ETag</b>	Entity tag for cache validation
<b>Cache-Control</b>	Caching directives (max-age, no-store)
<b>Retry-After</b>	Wait time before retrying (429/503)
<b>WWW-Authenticate</b>	Auth scheme required (sent with 401)
<b>Set-Cookie</b>	Set cookie on client

## Common Patterns

### Caching Flow

```
# First request — server returns ETag
GET /api/data → 200, ETag: "abc123"
# Subsequent request — conditional
GET /api/data, If-None-Match: "abc123"
→ 304 Not Modified (use cache)
```

### Auth Flow

```
# Unauthenticated request
GET /api/secret → 401, WWW-Authenticate: Bearer
# With token
GET /api/secret, Authorization: Bearer <token>
→ 200 OK
```

### Rate Limiting

```
# Rate limited response
429 Too Many Requests
Retry-After: 60
X-RateLimit-Remaining: 0
X-RateLimit-Reset: 1700000000
```

### Content Negotiation

```
# Client prefers JSON, accepts XML
Accept: application/json, application/xml;q=0.9
# Server can't satisfy → 406 Not Acceptable
# Server returns best match → 200 + Content-Type
```