# HTTP request methods

HTTP defines a set of **request methods** to indicate the purpose of the request and what is expected if the request is successful. Although they can also be nouns, these request methods are sometimes referred to as *HTTP verbs*. Each request method has its own semantics, but some characteristics are shared across multiple methods, specifically request methods can be <u>safe</u>, <u>idempotent</u>, or <u>cacheable</u>.

#### **GET**

The GET method requests a representation of the specified resource. Requests using GET should only retrieve data and should not contain a request <u>content</u>.

#### **HEAD**

The HEAD method asks for a response identical to a GET request, but without a response body.

#### **POST**

The POST method submits an entity to the specified resource, often causing a change in state or side effects on the server.

### **PUT**

The PUT method replaces all current representations of the target resource with the request content.

### DELETE

The DELETE method deletes the specified resource.

#### **CONNECT**

The CONNECT method establishes a tunnel to the server identified by the target resource.

#### **OPTIONS**

The OPTIONS method describes the communication options for the target resource.

## **TRACE**

The TRACE method performs a message loop-back test along the path to the target resource.

#### **PATCH**

The PATCH method applies partial modifications to a resource.

# Safe, idempotent, and cacheable request methods

The following table lists HTTP request methods and their categorization in terms of safety, cacheability, and idempotency.

Method	Safe	Idempotent	Cacheable
GET	Yes	Yes	Yes
HEAD	Yes	Yes	Yes
<u>OPTIONS</u>	Yes	Yes	No
TRACE	Yes	Yes	No
PUT	No	Yes	No
DELETE	No	Yes	No
POST	No	No	Conditional*
PATCH	No	No	Conditional*
CONNECT	No	No	No

<sup>\*</sup> POST and PATCH are cacheable when responses explicitly include <u>freshness</u> information and a matching <u>Content-Location</u> header.

# **Specifications**

Specification	
HTTP Semantics # PUT	
HTTP Semantics # POST	
HTTP Semantics # HEAD	
HTTP Semantics # OPTIONS	
HTTP Semantics # DELETE	
HTTP Semantics # CONNECT	
HTTP Semantics # GET	