

Web Design & Programming

Web API

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Definition

- A Web API is an Application Programming Interface (API) that can be used against a web application.
- This allows access to a service or to some data in an automated way, without human intervention. The benefit is get more dynamic content and processes.
- This can be used as a public access mechanism to a database or a non web-facing system.

Web API Access

- Some Web API may be in public access, other may require to register with the provider first.
- Once an access is created, it comes usually as a secure token that must be sent with each request.
- Depending on the provider and the service, there may be some limits set to that service (maximum number of requests per day for instance).

Web API Output

- Usually a Web API response will come in a JSON file or a XML file.
- Depending on the web application architecture, JavaScript or PHP (or other server-side language) can be used to process the results.

REST Interface

- Representational State Transfer (REST) is an architectural style that defines constraints to an API (statelessness, cacheability and layers for the most important ones).
- A system that follows this style will be called 'RESTful'.
- REST is not an official standard, it does rely on existing standards (HTTP, URI, JSON, XML).

Usage of the HTTP Protocol

HTTP method	Usage
GET	Retrieve information
POST	Send a request to be processed
PUT	Create or replace information
DELETE	Delete information