

Web Services

The W3C defines **web service** as: a software system designed to support interoperable machine-to-machine interaction over a network.



Why Do I Want One?

- ▶ Provide access for mobile devices (internet of things)
- ▶ Legacy integration
- ▶ Digital asset management system
- ▶ Partners who need/want your data - weather, MLS listing, etc.
- ▶ Social media



API

API stands for Application Programmer Interface

APIs specify how software components should interact with one another.



A standardized and documented way to access and interact with your application's content and features.

GET statuses/show/:id

[View](#) [What links here](#)

Updated on Thu, 2013-03-07 09:37 API version 1.1

Returns a single [Tweet](#), specified by the id parameter. The Tweet's author will also be embedded within the tweet.

See [Embeddable Timelines](#), [Embeddable Tweets](#), and [GET statuses/oembed](#) for tools to render Tweets according to [Display Requirements](#).

Resource URL

<https://api.twitter.com/1.1/statuses/show.json>

Parameters

id required	The numerical ID of the desired Tweet. Example Values: 123
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Resource Information

Rate Limited?	Yes
Requests per rate limit window	180/user 180/app
Authentication	Required
Response Formats	json
HTTP Methods	GET
Resource family	statuses

Services

The Services module allows Drupal to expose data and internal actions to other applications via a web services API.

Requests & Responses

You ask the API for some data or to perform an action and it responds either with the requested data or the result of the action.

The mechanics of the request/response vary depending on the service type.

Drupal's Data & Actions

Data

Nodes, users, comments, views, etc.

Actions

Authenticate a user, create a node, trigger a password reset email, etc.

Chunks vs. Blobs

It is easier for machines to understand structured content like JSON or XML than a giant blob of text.

Drupal already stores data in structured chunks (fields) making it an ideal backend for a data API.

Examples of APIs

- ▶ Twitter
- ▶ Yahoo Weather API
- ▶ Netflix
- ▶ Amazon (S3, EC2, etc.)