

Wikipedia API workshop

André Costa

@Lokal_Profil

FSCONS, Gothenburg

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.se

bit.ly/wikiApiGbg

Who we are – Wikimedia Sverige



- A non-profit organisation for the public good
- Local chapter for the Wikimedia Foundation
- Working for free knowledge both within the Wikimedia projects and outside

Overview

- Introduction to the Wikimedia APIs
 - with examples
- The API Sandbox
- Usage restrictions



Wikimedia (external) API

Endpoint:

en.wikipedia.org/w/api.php

commons.wikimedia.org/w/api.php

etc.

- Also automatic documentation
- More in-depth: mediawiki.org/wiki/API



Construct a url

- **Format:** `format=json`
 - **json** / **xml** / **php** et al.
- **Action:** `action=query`
 - **query** / **edit** / **login** / **upload** et al.
- **Action-specific parameters**
 - Further sub-modules for query
 - Multiple values separated by |
 - Parameters can also take empty values



An example (Ingress of API and Wikimedia articles)

action=query

prop=extracts

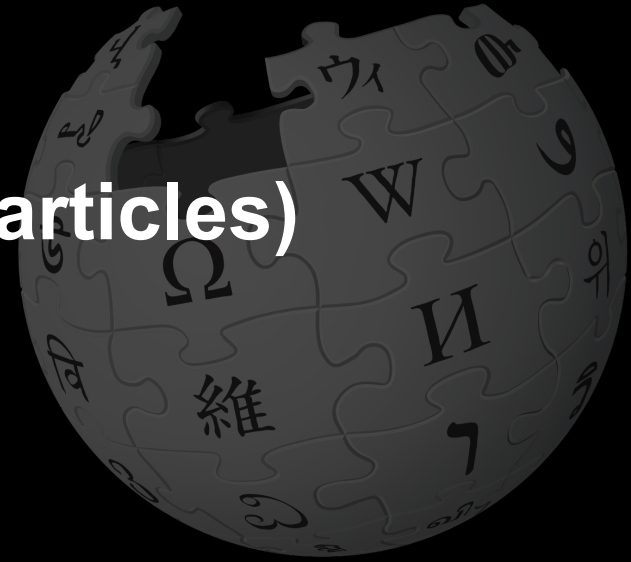
titles=API|Wikimedia

redirects=

exintro=

exlimit=10

</w/api.php?action=query&prop=extracts&exlimit=10&exintro=&titles=API|Wikimedia&redirects=>



Errors and warnings

Warnings - non-fatal / answers are still possible

- [Example](#)

Errors - fatal / no answer

- [Example](#)
- Error code and info
- HTTP header: MediaWiki-API-Error



More results (for action=query)

Returned as a “query-continue” element

- [Example](#)

Get the next set of results by including the value from the previous query:

- [Example](#)



Give me...



- ...all articles within 500 m of our position

- `/w/api.php?action=query&list=geosearch&gscoord=57.694870|11.984788&gsradius=500&gslimit=10&gsnamespace=0`

- ...all images for the word FSCONS

- `/w/api.php?action=query&list=search&srsearch=FSCONS&srnamespace=6&srinfo=totalhits&srlimit=10`

- ...all articles in the category Open content

- `/w/api.php?action=query&list=categorymembers&cmtitle=Category:Open_content&cmlimit=10`

Generators

A query can be used as a basis for a second query:

- [ingress for all articles in a category](#)
- `/w/api.php?
action=query&prop=extracts&exlimit=10&exintro=&gene
rator=categorymembers&gcmtitle=Category:
Open_content&gcmllimit=10`

Note that all parameters get a “g” prefix



Editing

- Tokens are needed for any API calls which “edit” or require special permissions
- Different tokens for different types of edits
- Requested via `action=query&meta=tokens`



API Sandbox

At <Special:ApiSandbox> there is a composition/testing environment for API queries

It's live! So test on own sub-pages or in your own MediaWiki installation if you are editing



Usage restrictions

Wikimedia Terms of Use

wikimediafoundation.org/wiki/Terms_of_Use

Copyright

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API etiquette

mediawiki.org/wiki/API:Etiquette



API etiquette (summary)

- Combine your requests
- Don't query too frequently
- Use the `maxlag`-parameter if possible
- Use a descriptive `User-Agent` header
 - The name of the application
 - Contact details
 - meta.wikimedia.org/wiki/User-Agent_policy



Useful links

- mediawiki.org/wiki/API
- mediawiki.org/wiki/API:FAQ
- mediawiki.org/wiki/API:Etiquette
- mediawiki.org/wiki/API:Errors_and_warnings
- mediawiki.org/wiki/API:Data_formats
- mediawiki.org/wiki/API:Cross-site_requests
- en.wikipedia.org/wiki/Special:ApiSandbox



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