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API:Page info i API Discussion results



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Search MediaWik



Use the MediaWiki API to provide more context searching for Wikipedia pages.

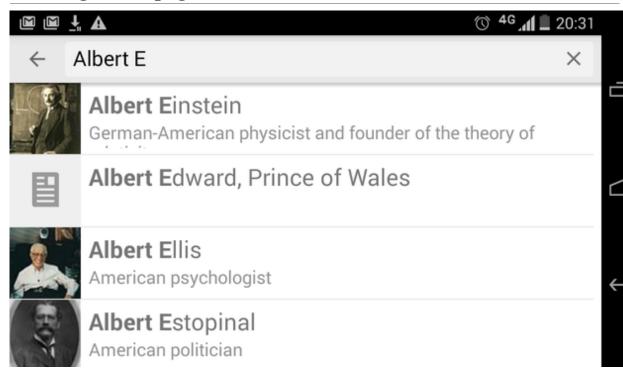
Contents [hide]

- 1 Introduction
- 2 Showing useful page information
- 3 How it works on Wikimedia wikis
 - 3.1 Querying query results in one request
 - 3.2 Further niceties
- 4 Going beyond
- 5 Alternatives
- 6 Next steps
- 7 See also

Introduction [edit]

This shows the API results that search results use to display additional information about articles, including a lead image and a description of the article's subject from Wikidata.

Showing useful page information [edit]



Main page Get MediaWiki Get extensions Tech blog Contribute

Support

User help FAQ

Technical manual

Support desk

Communication

Development

Bug tracker

Code repository

Code docs

Statistics

Wikimedia technology Wikimedia audiences

MediaWiki.org

Community portal Recent changes Translate content Random page

Current issues Sandbox

Print/export

Create a book

Download as PDF

Printable version

Tools

What links here Related changes Special pages Permanent link Page information Cite this page

In other languages

Add links

When you search in the Wikipedia mobile apps, as you type they show a drop-down list of matching pages. They also show the lead image for the article and a description of it.

The lead image comes from Extension:PageImages, which adds a page_image property to pages giving its guess as to an appropriate image for the page. The description comes from Wikidata, which maintains a localized description of the subject of each wiki page.

A slow way to do this would be to query for pages matching what the user types, then make an API action=query request for the pageimages property of the set of titles, and make another API query to wikidata.org requesting the Wikidata description. This works but involves multiple API queries.

How it works on Wikimedia wikis [edit]

Instead, WMF changed most wikis (but as of May 2015, not www.mediawiki.org) to load the Wikibase client extension for accessing Wikidata. This allows you to query for prop=pageterms along with prop=pageimages on the source wiki, instead of making a second request to www.wikidata.org.

Example: Simple query for pageimages and pageterms properties of Albert Einstein:

api.php ? action=query & formatversion=2 & prop=pageimageslpageterms &
titles=Albert%20Einstein [try in ApiSandbox]

Result [Expand]

Note: You should always use formatversion=2 in API requests if you are requesting results in JSON format. It returns results in a structure that is easier to process, and uses UTF8 encoding by default.}}

If you have a set of page titles, you can request their information all at once. Set pilimit to the number of titles you're querying, otherwise it will only return one thumbnail, from the first article in the set that has a plausible image. Also you should reduce the API response size by specifying only the properties you want the API modules to supply, in this case only the the thumbnail and Wikidata description. Finally, you may want the query to handle pages that are redirects.

Example: Query for pageterms and pageimage thumbnails of several pages

api.php ? action=query & formatversion=2 & prop=pageimageslpageterms & titles=Albert%20EinsteinIAlbert%20EllisIAlbert%20Estopinal & pilimit=3 & piprop=thumbnail & wbptterms=description & redirects= [try in ApiSandbox]

Result [Expand]

Querying query results in one request [edit]

The above example is incomplete, since the set of page titles whose properties we're querying – Albert EinsteinlAlbert EllislAlbert Estopinal – must have come from another query.

In many situations you can combine getting the page properties you want with the initial query for a set of pages, using the MediaWiki API's generator feature. The list of pages from the generator become the set of pages for the other part of the query, all in a single API request. The MediaWiki API's query module has a prefixsearch submodule that queries for a list of pages starting with the prefix you specify ("Albert Ei"), and list queries can act as a generator. The MobileFrontend extension and mobile apps do this, If you look at MobileFrontend's API query in SearchApi.js, you

can see it combines the generator=prefixsearch with a query for the pageimages property. We can do the same, asking for the Wikidata description as well with prop=pageimages pageterms.

Example: A query feeding a prefixsearch generator into useful property queries.

api.php ? action=query & formatversion=2 & generator=prefixsearch & gpssearch=Albert%20Ei&gpslimit=10 & prop=pageimageslpageterms & piprop=thumbnail&pithumbsize=50&pilimit=10 & redirects= & wbptterms=description [try in ApiSandbox]

The prefixsearch generator provides an index for each page in the pages array in the result; you can use this to sort the page titles, each with its thumbnail image and description, in the correct order.

Note: You used to have to append a separate list=prefixsearch query to get the titles in the correct order (phab:T98125).

Further niceties [edit]

If the set of articles that start with what the user types does not fill the search results list, the Wikimedia mobile apps go on to search for in-page matches that you would get from Special:Search. The Wikipedia Android and iOS mobile apps combines generator=prefixsearch with querying for the pageterms and pageimages properties and getting a list of search terms. From its implementation file,

```
@"action": @"query",
     @"generator": @"prefixsearch",
     @"gpssearch": self.searchTerm,
     @"gpsnamespace": @0,
     @"gpslimit": @(SEARCH MAX RESULTS),
     @"prop": @"pageterms | pageimages",
     @"piprop": @"thumbnail",
     @"wbptterms": @"description",
     @"pithumbsize" : @(SEARCH THUMBNAIL WIDTH),
     @"pilimit": @(SEARCH MAX RESULTS),
     // -- Parameters causing prefix search to efficiently return
suggestion.
     @"list": @"search",
     @"srsearch": self.searchTerm,
     @"srnamespace": @0,
     @"srwhat": @"text",
     @"srinfo": @"suggestion",
     @"srprop": @"",
     @"sroffset": @0,
     @"srlimit": @1,
```

Going beyond [edit]

The Wikipedia iOS mobile app uses face detection to detect the focal region of the image!

Alternatives [edit]

As an alternative, the Popups extension behind the Hovercards beta feature uses the extracts query submodule of the TextExtracts extension to show two sentences from the lead text of an article from the local wiki (together with its image, "last edited", etc.) when you hover over a link. This text from the local wiki is usually longer and less definitive than the Wikidata description. Its API request is in resources/ext.popups.renderer.article.js

Example: Sample Hovercards API request including textextracts properties of Albert Einstein:

api.php ? action=query & formatversion=2 & prop=extracts|pageimages|revisions & titles=Albert%20Einstein & redirects= & exintro=true&exsentences=2&explaintext=true & piprop=thumbnail&pithumbsize=300 & rvprop=timestamp [try in ApiSandbox]

Result [Expand]

The query returns an array of pages, if successful this will have one element, the single matching page. This also requests the last-changed timestamp (`prop=revisions&rvprop=timestamp`) to display "Edited *N* days/hours ago."

Next steps [edit]

Try these API requests in the Special:ApiSandbox page, then make the same API requests from your own applications.

See also [edit]

Introducing lead images to Wikipedia's Android beta app — a blog post on lead images

Category: Web APIs hub

This page was last edited on 21 September 2017, at 11:39.

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