

Wikidata

the free and open knowledge base

Wikimedia DC - Sunlight Foundation
Hackathon - April 2014

Katie Filbert - @filbertkm





Credits: Sasan Geranmehr (CC-BY 3.0)

What is Wikidata?

- repository of the world's knowledge
- database anyone can read and edit
- multi-lingual
- free and open source Software

supports Wikimedia projects (e.g. Wikipedia)



14,500,000+ Items

31,000,000+ Statements

Some points...

- Items are real things or concepts. eg. Berlin, Barack Obama, Helium and are identified using a unique ID e.g. Q76 or Q13813879
- Items have labels, descriptions, aliases, sitelinks and claims/statements
- Properties are used to label data e.g. Born in or Date of Death or Location

More points...

- Claims hold information, such as:
 - P47(shares border with) => Q64(Berlin)
 - P1128(employees) => 1,000+-100
- Claims also have qualifiers, to expand on the information
- Statements what you see on Wikidata item pages. They are a “subclass” of Claims. Statements also have references, telling you where the information was source from.

Example Item

www.wikidata.org/wiki/Q61

Washington, D.C.

Q61



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Community portal
Project chat
Create a new item
Item by title
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Donate

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Cite this page

Washington, D.C. (Q61)

[\[edit\]](#)

capital city of the United States

[\[edit\]](#)

Also known as:

Washington District of Columbia D.C. Washington DC Washington, DC
the District Washington, D.C. DC

[\[edit\]](#)

In other languages | Statements | Wikipedia pages linked to this item | Wikisource pages linked to this item | Wikivoyage pages linked to this item |
Wikimedia Commons page linked to this item

In other languages

русский	ВАШИНГТОН	[edit]
	город, столица Соединённых Штатов Америки	[edit]
العربية	واشنطن العاصمة	[edit]
	<input type="text" value="enter description in العربية"/> [save] [cancel] [?]	
Deutsch	Washington, D.C.	[edit]
	Hauptstadt der Vereinigten Staaten von Amerika	[edit]

Statements

head of government	<input type="checkbox"/> Vincent C. Gray	[edit]
	▼ 0 sources	[add source]
		[add]

country	<input type="checkbox"/> United States of America	[edit]
---------	---	------------------------



Item Discussion

LABEL

Washington, D.C. (Q61)

[edit]

capital city of the United States

[edit]

Also known as:

Washington

District of Columbia

D.C.

Washington DC

Washington, DC

[edit]

the District

Washington, D.C.

DC

[In other languages](#) | [Statements](#) | [Wikipedia pages linked to this item](#) | [Wikisource pages linked to this item](#) | [Wikivoyage pages linked to this item](#) | [Wikimedia Commons page linked to this item](#)

In other languages

русский

ВАШИНГТОН

[edit]

город, столица Соединённых Штатов Америки

[edit]

العربية

واشنطن العاصمة

[edit]

enter description in العربية

[save] [cancel] ?

Deutsch

Washington, D.C.

[edit]

Hauptstadt der Vereinigten Staaten von Amerika

[edit]

Statements

head of government

Vincent C. Gray

[edit]

▼ 0 sources

[add source]

[add]

country

United States of America

[edit]



Item Discussion

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Page information
Cite this page

Washington, D.C. (Q61)

capital city of the United States

DESCRIPTION

[edit]

[edit]

Also known as: Washington District of Columbia D.C. Washington DC Washington, DC [edit]
the District Washington, D.C. DC

In other languages | Statements | Wikipedia pages linked to this item | Wikisource pages linked to this item | Wikivoyage pages linked to this item |
Wikimedia Commons page linked to this item

In other languages

русский	ВАШИНГТОН город, столица Соединённых Штатов Америки	[edit] [edit]
العربية	واشنطن العاصمة [enter description in العربية]	[edit] [save] [cancel] [?
Deutsch	Washington, D.C. Hauptstadt der Vereinigten Staaten von Amerika	[edit] [edit]

Statements

head of government Vincent C. Gray [edit]

▼ 0 sources

[add source]

[add]

country United States of America [edit]



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Washington, D.C. (Q61)

capital city of the United States

ALIASES

[\[edit\]](#)[\[edit\]](#)[\[edit\]](#)

Also known as: [Washington](#) [District of Columbia](#) [D.C.](#) [Washington DC](#) [Washington, DC](#)
[the District](#) [Washington, D.C.](#) [DC](#)

[In other languages](#) | [Statements](#) | [Wikipedia pages linked to this item](#) | [Wikisource pages linked to this item](#) | [Wikivoyage pages linked to this item](#) | [Wikimedia Commons page linked to this item](#)

In other languages

русский	ВАШИНГТОН город, столица Соединённых Штатов Америки	[edit] [edit]
العربية	واشنطن العاصمة <input type="text" value="enter description in العربية"/> [save] [cancel] [?]	[edit]
Deutsch	Washington, D.C. Hauptstadt der Vereinigten Staaten von Amerika	[edit] [edit]

Statements

head of government	<input type="checkbox"/> Vincent C. Gray	[edit]
	▼ 0 sources	[add source]
		[add]

country [United States of America](#) [\[edit\]](#)



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Washington, D.C. (Q61)

[edit]

capital city of the United States

[edit]

Also known as: Washington District of Columbia D.C. Washington DC Washington, DC [edit]
the District Washington, D.C. DC

In other languages | Statements | Wikipedia pages linked to this item | Wikisource pages linked to this item | Wikivoyage pages linked to this item |
Wikimedia Commons page linked to this item

In other languages

LABELS and DESCRIPTIONS in other languages

русский

ВАШИНГТОН

[edit]

город, столица Соединённых Штатов Америки

[edit]

العربية

واشنطن العاصمة

[edit]

enter description in العربية

[save] [cancel] ?

Deutsch

Washington, D.C.

[edit]

Hauptstadt der Vereinigten Staaten von Amerika

[edit]

Statements

head of government

Vincent C. Gray

[edit]

▼ 0 sources

[add source]

[add]

country

United States of America

[edit]



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العربية	واشنطن العاصمة [enter description in العربية]	[edit] [save] [cancel] [?
Deutsch	Washington, D.C. Hauptstadt der Vereinigten Staaten von Amerika	[edit] [edit]

Statements

STATEMENTS

head of government Vincent C. Gray [edit]

▼ 0 sources

[add source]

[add]

country United States of America [edit]

Statements

[head of government](#)

PROPERTY

[Vincent C. Gray](#)

[edit]

start date January 2 2011

▼ 1 source

[edit]

stated in English Wikipedia

[add source]

[Adrian Fenty](#)

[edit]

start date January 2 2007

end date January 2 2011

▼ 0 sources

[add source]

[Anthony A. Williams](#)

[edit]

start date January 2 1999

end date January 2 2007

▼ 0 sources

[add source]

Statements

DATA VALUE (wikibase-item)

head of government	Vincent C. Gray	[edit]
	start date	January 2 2011
	▼ 1 source	[edit]
	stated in	English Wikipedia
		[add source]
	Adrian Fenty	[edit]
	start date	January 2 2007
	end date	January 2 2011
	▼ 0 sources	[add source]
	Anthony A. Williams	[edit]
	start date	January 2 1999
	end date	January 2 2007
	▼ 0 sources	[add source]

Statements

head of government	Vincent C. Gray	[edit]
SNAK		
start date	January 2 2011	
▼ 1 source		[edit]
stated in	English Wikipedia	[add source]
Adrian Fenty		[edit]
start date	January 2 2007	
end date	January 2 2011	
▼ 0 sources		[add source]
Anthony A. Williams		[edit]
start date	January 2 1999	
end date	January 2 2007	
▼ 0 sources		[add source]

Statements

head of government	Vincent C. Gray	QUALIFIER	[edit]
		start date	January 2 2011
		▼ 1 source	[edit]
		stated in	English Wikipedia
			[add source]
	Adrian Fenty		[edit]
		start date	January 2 2007
		end date	January 2 2011
		▼ 0 sources	[add source]
	Anthony A. Williams		[edit]
		start date	January 2 1999
		end date	January 2 2007
		▼ 0 sources	[add source]

Statements

head of government	Vincent C. Gray	[edit]
	start date	January 2 2011
	▼ 1 source	[edit]
<div style="border: 2px solid red; padding: 5px; display: inline-block;">stated in English Wikipedia</div>		
REFERENCE		
	[add source]	
Adrian Fenty	[edit]	
	start date	January 2 2007
	end date	January 2 2011
▼ 0 sources		[add source]
Anthony A. Williams	[edit]	
	start date	January 2 1999
	end date	January 2 2007
▼ 0 sources		[add source]

All available DataTypes

Datatypes are used in claims to represent data

- Item
- Commons media
- String
- Time
- Globe coordinate
- URL
- Quantity

See wikidata.org/wiki/Special>ListDatatypes

More about the data model

https://meta.wikimedia.org/wiki/Wikidata/Notes/Data_model_primer

Wikipedia pages linked to this item (181 entries)

SITE LINKS

Language	Code	Linked page	
Aceh	acewiki	Washington, D.C.	[edit]
Afrikaans	afwiki	Washington, D.C.	[edit]
Alemannisch	alswiki	Washington, D.C.	[edit]
አማርኛ	amwiki	አዲስአበባ, ዓ.ም.	[edit]
Ænglisc	angwiki	Hwæsingatūn, D.C.	[edit]
Aragonese	anwiki	Washington, DC	[edit]
ଓଡ଼ିଆ	arcwiki	(ଓଡ଼ିଆ) ଓଡ଼ିଶା,	[edit]
Arabic	arwiki	Washington, DC	[edit]
Egyptian	arzwiki	And Ashinton	[edit]
Asturianu	astwiki	Washington DC	[edit]
Accident	avwiki	Washington (DC)	[edit]
Aymar aru	aywiki	Washington, DC	[edit]
in Azerbaijani	azwiki	Washington (city)	[edit]
Boarisch	barwiki	Washington, D.C.	[edit]
žemaitėška	bat_smgwiki	Vašingtuons	[edit]
bashkortsa	bawiki	Washington DC (District of Columbia federal)	[edit]
Bikol Central	bclwiki	Washington, D.C.	[edit]
Belarus (tarashkevitsa)	be_x_oldwiki	Washington (DC)	[edit]
Belorussian	bewiki	City of Washington	[edit]
Bulgarian	bgwiki	Washington (District of Columbia)	[edit]
Bengali	bnwiki	Washington, DC	[edit]
ଓଡ଼ିଆ	bowiki	ଓଡ଼ିଶା	[edit]

Data used on Wikipedia

and Wikimedia sister projects (e.g. Wikivoyage)

- Language links
- Property parser function
- Lua

Interstate 805

From Wikipedia, the free encyclopedia

Route map: Google / Bing

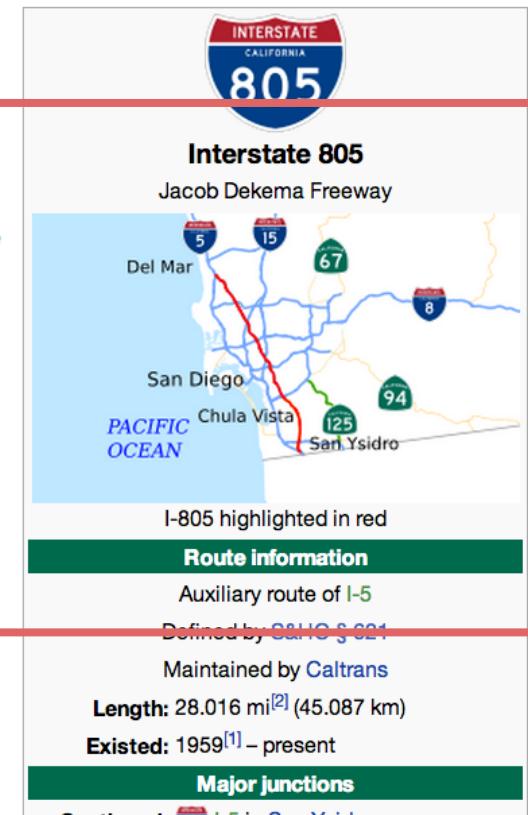
Interstate 805 (I-805) is a major north-south Interstate Highway in Southern California. It is a bypass of I-5, running along the eastern areas of the [Greater San Diego region](#) from [San Ysidro](#) (part of the city of [San Diego](#)) near the Mexico–U.S. border to near [Del Mar](#). The southern terminus of I-805 at I-5 in San Ysidro is less than a mile north of the Mexican border. I-805 then traverses through the cities of [Chula Vista](#) and [National City](#) before reentering San Diego. The freeway passes through the San Diego neighborhoods of [North Park](#), [Mission Valley](#), [Clairemont](#), and [University City](#) before terminating at I-5 in the [Sorrento Valley](#) neighborhood near the Del Mar city limit.

Planning for I-805 began in 1956, and the route was officially designated in 1959 before it was renumbered in the [1964 state highway renumbering](#). Starting in 1967, the freeway was built in phases, with the northern part of the freeway finished before the southern part. I-805 was completed and open to traffic in 1975. Named the [Jacob Dekema Freeway](#) after the longtime head of the regional division of the [California Department of Transportation](#) (Caltrans), I-805 has been frequently cited for its complex engineering and architecture, including near I-8 on the [Mission Valley Viaduct](#). Since then, several construction projects have taken place, including the construction of local and express lanes at the northern interchange with I-5. [High-occupancy toll lanes](#) are under construction on both the northern and southern portions of the route.

Contents [hide]

- 1 Route description
- 2 History
 - 2.1 Construction
 - 2.2 Recognition, artwork, and architecture
 - 2.3 Expansion
- 3 Exit list
- 4 References
- 5 External links

MAP IMAGE



Module:Infobox road/map

From Wikipedia, the free encyclopedia

< Module:Infobox road

{{!}} Module documentation [create]

You might want to [create](#) a documentation page for this Scribunto module.

Editors can experiment in this module's sandbox ([create](#) | [mirror](#)) and testcases ([create](#)) pages.

Please add categories to the [/doc](#) subpage. Subpages of this module.

```
local p = {}

local mapsizes = {[ "DEU" ] = "200", [ "USA" ] = "290x172" }

function p.map(frame)
    local pframe = frame:getParent()
    local config = frame.args -- the arguments passed BY the template, in the wikitext of
    local args = pframe.args -- the arguments passed TO the template, in the wikitext tha

    local map_custom = args.map_custom or ''
    local map = args.map or ''
    if map_custom == "yes" then
        return '<span style="white-space:nowrap;">' .. map .. '</span>'
    end
    if map == '' then
        local entity = mw.wikibase.getEntity() or {}
        local claims = entity.claims or {}
        local mapProp = claims.p15
        if not mapProp then
            return ""
        end
        map = mapProp[0].mainsnak.datavalue.value
    end
    local filecode = "[[File:" .. map .. "|"

```

Example Applications

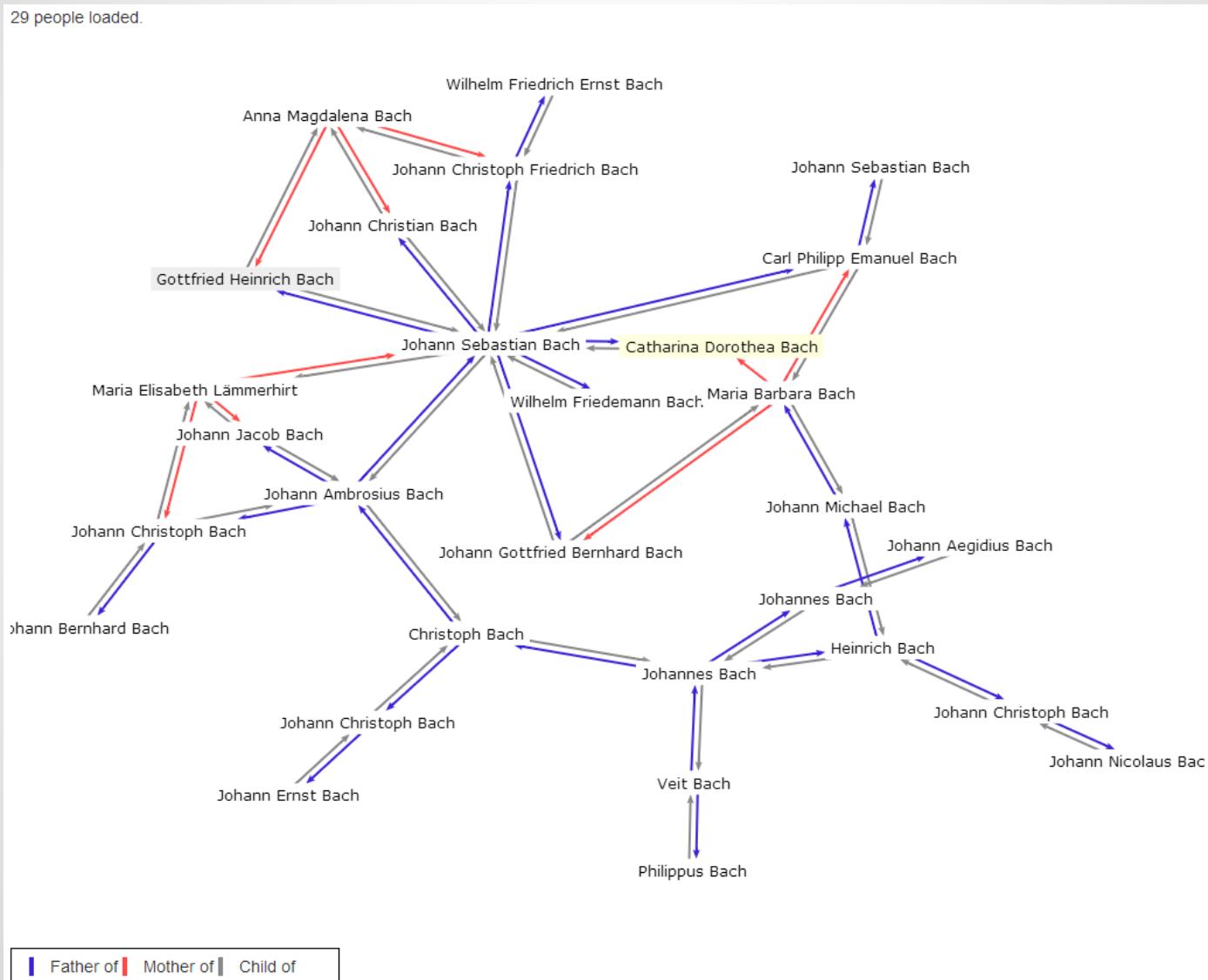
All generated using the data stored in
Wikidata

<https://www.wikidata.org/wiki/Wikidata:Tools>

GeneaWiki

toolserver.org/~magnus/ts2/geneawiki

29 people loaded.



The Wiki Atlas

4thmain.github.io/projects/hacks/wiki-atlas.html

Try a language: en

Powered by d3 and wikidata ([source](#))

India - Administrative Divisions (Level1)



The Wiki Atlas

4thmain.github.io/projects/hacks/wiki-atlas.html

Try a language:

Powered by d3 and wikidata ([source](#))

India - Administrative Divisions (Level1)



Wikidata tempo-spatial display

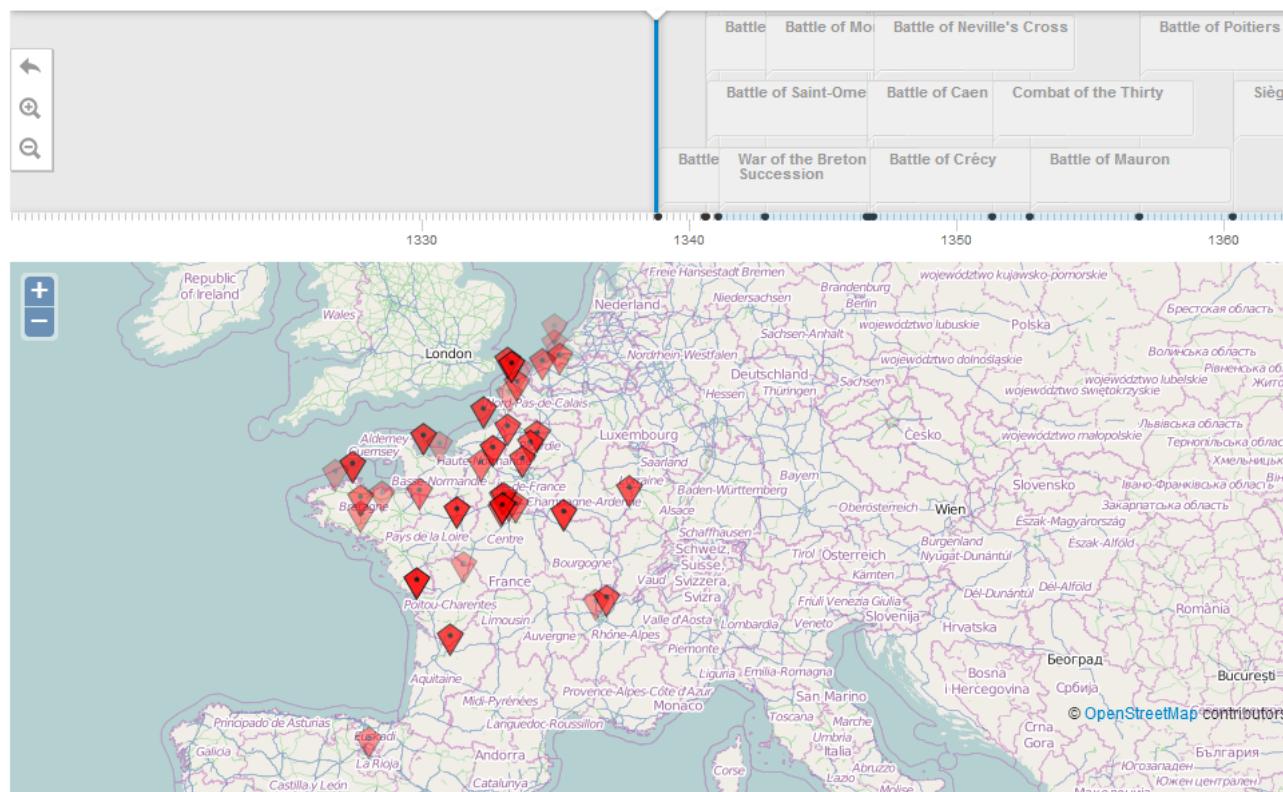
tools.wmflabs.org/wikidata-todo/tempo_spatial_display.html?q=Q12551

Hundred Years' War

series of conflicts waged from 1337 to 1453 between the Kingdom of England and the Kingdom of France

Hundred Years' War on Wikidata

OCTOBER 1338
Battle of
Arneviden
Q1523324

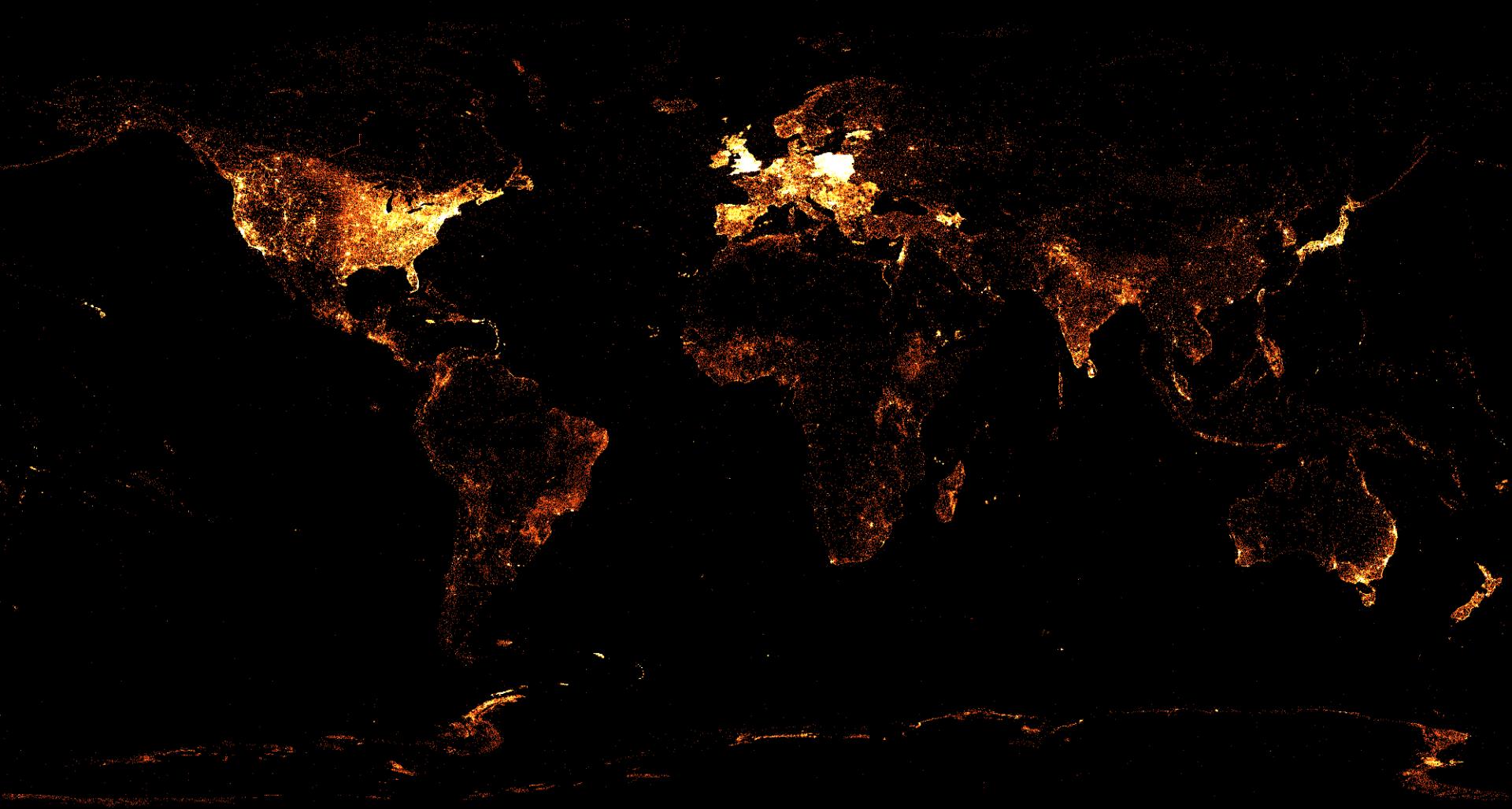


59 events. Markers on map are shaded according to time, with earlier events more transparent.

Item	Time	Location
Battle of Arnemuiden	1338-10-01	(51.645/3.373)
Battle of Sluys	1340-07-02	(51.309/3.388)
Battle of Saint-Omer	1340-08-03	Saint-Omer (50.746/2.262)
War of the Breton Succession	1341-01-01 — 1365-04-20	Brittany (48/-3)
Battle of Morlaix	1342-10-08	Morlaix (48.578/-3.827)

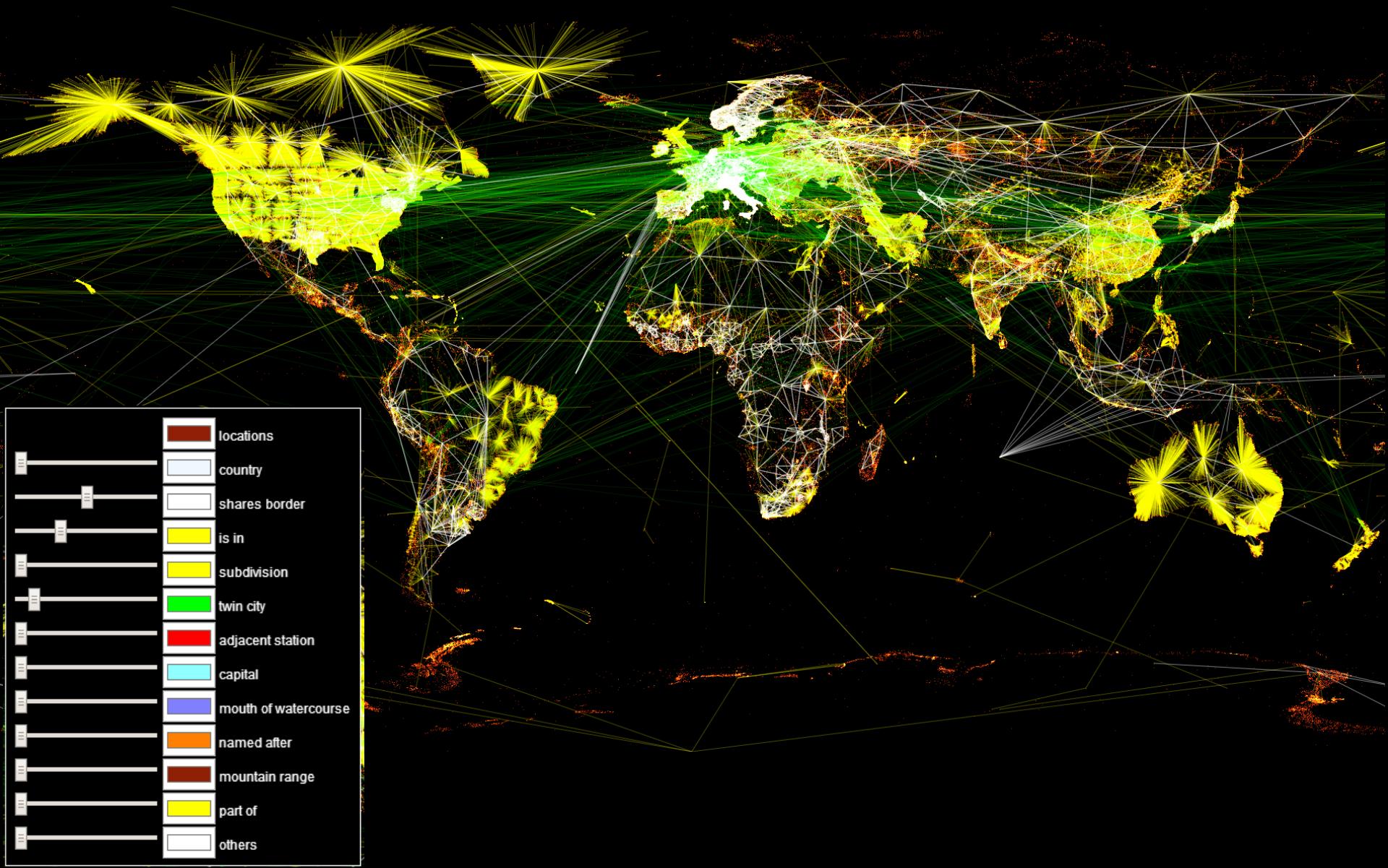
The Map

tools.wmflabs.org/wikidata-analysis/map/map.html



The Map

tools.wmflabs.org/wikidata-analysis/map/map.html



Barack Obama (Q76)

Barack Hussein Obama II | Barack Obama II | Barack Hussein Obama | Barry Obama | Obama | Абама | Barack Hussein Obama Jr. | 奥巴马 | 巴拉克·奥巴马 | Barack Hussein Obama, Jr. | Barack H. Obama | Barack H Obama | Barack Hussein Obama Jr | Barack Hussein Obama, Jr | Barack Obama Jr | Barack Obama, Jr. | Barack Obama Jr. | Barack Obama, Jr | Barack Obama Junior | 奥巴馬 | 歐巴馬 | 巴拉克 歐巴馬 | Μπάρακ Ομπάμα | Ομπάμα | バラック・オバマ | バラク・フセイン・オバマ |

44th President of the United States

Barack Obama is a US-American politician, lawyer, professor, and author.

He was born *Barack Hussein Obama II* on August 4, 1961 in Honolulu to Barack Obama, Sr. and Ann Dunham.

He studied at State Elementary School Menteng 01 from 1970 until 1971, Punahou School from 1971 until 1979, Occidental College from 1979 until 1981, Columbia University from 1981 until 1983, and Harvard Law School from 1988 until 1991. He was/is United States Senator from January 3, 2005 until November 16, 2008 and President of the United States of America from January 20, 2009. He worked for Sidley Austin, for Business International Corporation, for New York Public Interest Research Group, and for Gamaliel Foundation.

He married Michelle Obama on October 3, 1992. His children include Malia Obama and Sasha Obama.



pronunciation audio



External sites

official website

A handwritten signature of Barack Obama in black ink.

External sources

BNF 15591663c

CiNii DA1624368X

GND 132522136

IMDb nm1682433

ISNI 0000 0001 2133 1026

Relatives

See the full family tree: [inline](#)/[new page](#)

Parents

father ♂ [Barack Obama, Sr.](#)

mother ♀ [Ann Dunham](#)

Siblings

sister ♀ [Maya Soetoro-Ng](#)

Select language

Menú

Hamburguesa

Macarrón & C

Shawarma Car

T-Bone Steak

Papas Fritas

Batido Chocolate / Vainilla / Cereza \$3

[Back to main page](#)

Background image source: US Marines Corp, by Claudio A. Martinez

Font: Bad Script by Roman Shchyuk

Created by Denny Vrandecic, abril 2014

Select Language

Language search

Common languages

Deutsch

ру́сский

English

日本語

español

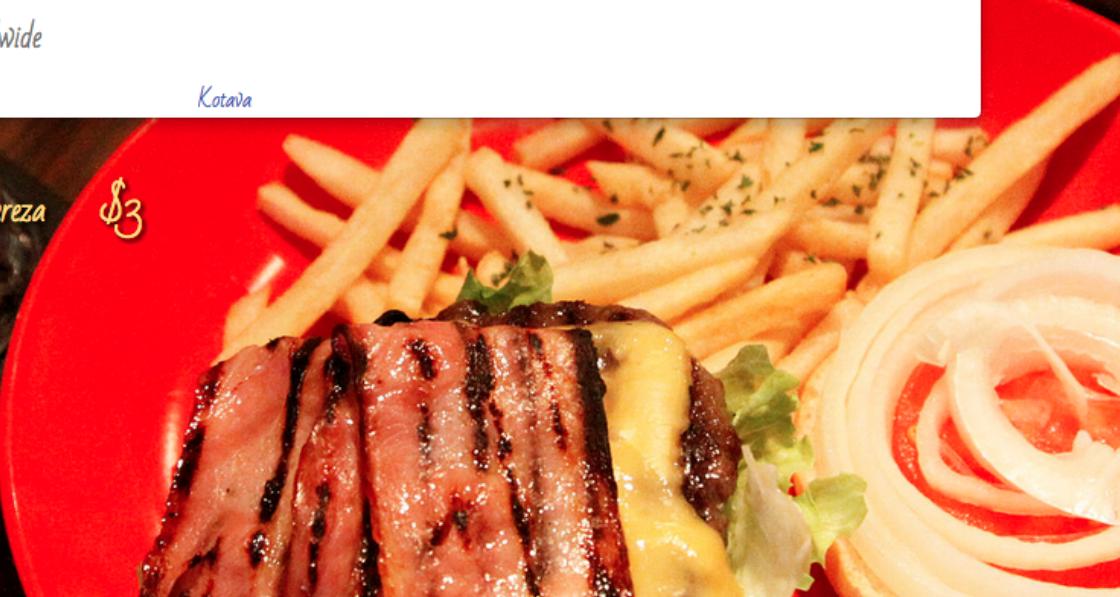
한국어

français

Worldwide

English

Kotava



Queries

WikiDataQuery

Main page



Build your Wikidata query (see [the API](#) for more details about queries).

Show me items that...



Claim have any of the following claims

Property

Item / Nested query

instance of

metro station



is in the administrative-territorial

P131

Washington, D.C.

Q61



Query: `claim[31:928830,131:61]` ([Permanent link](#))

Loading...

Examples: [Bridges in Germany](#) | [Taxonomy](#)

Washington, D.C. (Q61)
capital city of the United States

Washington, D.C. (Q7971591)

novel by River Gonzalez

Washington, D.C. airport (Q7971593)

Wikipedia disambiguation page

Washington, D.C. in four days (Q14238959)

Washington, D.C. mayoral election, 2006 (Q7971598)

Washington, D.C. mayoral election, 1994 (Q7971597)

<https://wdq.wmflabs.org>

The Api

wikidata.org/w/api.php

sandbox

wikidata.org/wiki/Special:ApiSandbox

docs

www.mediawiki.org/wiki/Extension:Wikibase/API

Example Item through Api

[https://www.wikidata.org/w/api.php
?action=wbgetentities
&ids=Q61
&format=jsonfm](https://www.wikidata.org/w/api.php?action=wbgetentities&ids=Q61&format=jsonfm)

Washington, D.C.

Q61

Wikibase Api Modules

- **wbgetentities**
- **wbeditentity**
- **wbsearchentities**
- **wbformatvalue**
- **wbparserule**
- **wbsetlabel**
- **wbsetdescription**
- **wbsetaliases**
- **wbsetsitelink**
- **wbsetclaim**
- **wblinktitles**
- **wbmergeitems**
- **wbgetclaims**
- **wbcreateclaim**
- **wbremoveclaims**
- **wbsetclaimvalue**
- **wbsetreference**
- **wbremovereferences**
- **wbremovequalifiers**
- **wbsetqualifier**

Bots

<https://www.wikidata.org/wiki/Wikidata:Bots>

<https://test.wikidata.org>

<https://www.mediawiki.org/wiki/Manual:Pywikibot/Wikidata>

<http://tools.wmflabs.org/>

(place to run tools & bots, with access to database
replication -- but not actual page or data content)

Many Wikibase components are reusable and independent of
MediaWiki

Wikibase components

<https://www.mediawiki.org/wiki/Wikibase/Components>

<https://git.wikimedia.org/summary/mediawiki%2Fextensions%2FWikibase>

<https://github.com/wmde>

<https://github.com/DataValues>

Contributing to Wikibase



https://www.mediawiki.org/wiki/Wikibase/Contribution_workflow

Q/A

wikidata.org

#wikidata on chat.freenode.net

wikidata-l@lists.wikimedia.org

https://www.wikidata.org/wiki/Wikidata:Status_updates

api @ [wikidata.org/w/api.php](https://www.wikidata.org/w/api.php)

docs @ www.mediawiki.org/wiki/Extension:Wikibase/API

sandbox @ [wikidata.org/wiki/Special:ApiSandbox](https://www.wikidata.org/wiki/Special:ApiSandbox)



Any questions, just ask!
Katie Filbert - @filbertkm katie.filbert@wikimedia.de

aude in #wikidata on chat.freenode.net

