Map making workshop

from Wikidata to interactive off-Wiki maps in three steps

Conference, Location, Date

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KB nationale bibliotheek

CC BY SA

Learning objectives

Module 1, basic: Understand steps to make **basic flat and layered maps** in Wikidata, based on geo referenced (P625) items and SPARQL queries

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Learning objectives

Module 1, basic: Understand steps to make **basic flat and layered maps** in Wikidata, based on geo referenced items and SPARQL queries

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Module 3, advanced: Understand steps to create **Wikidata-based off-Wiki maps**

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Module 3, advanced: Understand steps to create **Wikidata-based off-Wiki maps**

Access to map making **resources**, SPARQL examples and Python code snippets **to build upon**

Workshop outline & notes

Workshop outline and notes

Last update: 12th August 2019

Module 1: Basic flat & layered maps

Prerequisites for this Module

- Wikimedia account
- Working knowledge of Wikidata
- Basic understanding of SPARQL and the Wikidata Query Service (WDQS)
- A Wikidata set of items with geo coordinates P625

If yo

1.
2.
3.
4. Volcanos
5. Airports around the equator (between -10 and +10 degrees latitude)

https://github.com/ookgezellig/WikidataMapMakingWorkshop/blob/master/OutlineAndNotes.md

Tips & tricks welcome!

I’m not a maps / Wikidata guru….

3 MODULES

1) Basic flat & layered maps
2) Embedded maps in Wikimedia projects
3) Interactive, layered off-Wiki maps driven by Wikidata

MODULE 1

Basic flat & layered maps

For this Module, you will need

- Wikimedia account
- Working knowledge of Wikidata…
- … and SPARQL
- A Wikidata set of items with geo coordinates (**P625**)….

coordinate location (P625)

geocoordinates of the subject. For Earth, please note that only WGS84 coordinating system is supported at the moment

edit

coordinates | co-ordinate location | co-ordinates | coords | co-ords | geographic coordinate | gps coordinate | gps co-ordinate | gps coordinates | gps co-ordinates | gps location | geotag | wgs 84 | wgs-84 | wgs84 | position | longitude | latitude | gps | coordinate location | geographical coordinates | geo | location | point on a map | point on the globe | point on earth | location on earth | geolocation | geocoordinates | Location on map

In more languages

Language	Label	Description	Also known as
English	coordinate location	geocoordinates of the subject. For Earth, please note that only WGS84 coordinating system is supported at the moment	coordinates co-ordinate location co-ordinates coords co-ords geographic coordinate gps coordinate gps co-ordinate gps coordinates gps co-ordinates gps location geotag wgs 84 wgs-84 wgs84 position longitude latitude gps coordinate location geographical coordinates geo location point on a map point on the globe point on earth location on earth geolocation geocoordinates Location on map
German	geographische Koordinaten	Koordinaten eines sich auf der Erde befindlichen Objekts, momentan werden nur	Koordinate geografische Koordinate

P625

https://www.wikidata.org/wiki/Property:P625

Stockholm

wd:Q1754

0 references

+ add value

coordinate location

P625

Point(18.0685,59.3269)

59°19'46"N, 18°4'7"E

1 reference

edit

+ add value

office held by head of government

mayor

0 references

edit

+ add reference

+ add value

head of government

Karin Wanngård

edit

If you don’t have a Wikidata P625 set

Public libraries in The Netherlands
https://w.wiki/6dx

Dutch national heritage sites
https://w.wiki/6dy

Big cities
https://w.wiki/6e3

If you don’t have a Wikidata P625 set

Volcanos of the world
https://w.wiki/6e9

Airports around equator
https://w.wiki/6eB

1.1) Basic flat map

Wikidata Query Service

Voorbeelden | Hulp | Meer hulpmiddelen

```
#All public library branches of the Netherlands

SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage  WHERE {
#Is Dutch public library branch
?dpl wdt:P31 wd:Q28564. #public library
?dpl wdt:P31 wd:Q11396180. #library branch
?dpl wdt:P17 wd:Q55. #in the Netherlands

?dpl wdt:P625 ?dplLoc. #Location of the dpl

OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl

SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
}

ORDER BY ?dplLabel
```

Public libraries in The Netherlands

https://w.wiki/6dx

Wikidata Query Service | Voorbeelden | Hulp | Meer hulpmiddelen

583 resultaten in 512 ms

dpl	dplLabel	dplDescription	dplLoc	dplIma
wd:Q61785962	's-Heerenberg public library	Public library in s-Heerenberg, municipality of Montferland, The Netherlands	Point(6.2454886 51.8731333)	comm
wd:Q63677419	't Harde public library service point	Public library in the village of 't Harde, The Netherlands	Point(5.877917 52.4172699)	
wd:Q61915721	Aalsmeer public library	Public library in Aalsmeer, The Netherlands	Point(4.7496987 52.2679063)	
wd:Q59772713	Aalst public library	Public library in Aalst, The Netherlands	Point(5.1259789 51.7841643)	
wd:Q60499424	Abbekerk public library	Public library in Abbekerk, municipality of Medemblik, The Netherlands	Point(5.0160659 52.7313345)	
wd:Q63385185	Achterveld public library	Public library in the village of Achterveld, municipality of Leusden, The Netherlands	Point(5.4973655 52.1365067)	
wd:Q60020855	Aduard public library	Public library in Aduard, province of Groningen, The Netherlands	Point(6.4570135 53.2599615)	
wd:Q63890044	Akersloot public library	Public library in Akersloot, The Netherlands	Point(4.7322704 52.5633782)	comm (518264
wd:Q59871315	Alblasserdam public library	Public library in Alblasserdam, The Netherlands	Point(4.65723 51.86473)	
wd:Q63890048	Alkmaar De Mare public library	Public library in Alkmaar De Mare, The Netherlands	Point(4.7588585 52.6535348)	
wd:Q63890041	Alkmaar Oudorp public library	Public library in the Oudorp neighbourhood in the city of Alkmaar , The Netherlands	Point(4.7657342 52.6340305)	

Wikidata Query Service | Voorbeelden | Hulp | Meer hulpmiddelen

583 resultaten in 512 ms

- Table
- Image grid
- Graph builder
- Map
- Line chart
- Bar chart
- Scatter chart
- Area chart
- Bubble chart
- Tree map
- Tree
- Timeline
- Dimensions
- Graph

	bel	dplDescription	dplLoc	dplIma
	erenberg public library	Public library in s-Heerenberg, municipality of Montferland, The Netherlands	Point(6.2454886 51.8731333)	comm
	le public library service point	Public library in the village of 't Harde, The Netherlands	Point(5.877917 52.4172699)	
	eer public library	Public library in Aalsmeer, The Netherlands	Point(4.7496987 52.2679063)	
	public library	Public library in Aalst, The Netherlands	Point(5.1259789 51.7841643)	
	kerk public library	Public library in Abbekerk, municipality of Medemblik, The Netherlands	Point(5.0160659 52.7313345)	
	rveld public library	Public library in the village of Achterveld, municipality of Leusden, The Netherlands	Point(5.4973655 52.1365067)	
wd:Q60020855	Aduard public library	Public library in Aduard, province of Groningen, The Netherlands	Point(6.4570135 53.2599615)	
wd:Q63890044	Akersloot public library	Public library in Akersloot, The Netherlands	Point(4.7322704 52.5633782)	comm (518264
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Bremerhaven
Leeuwarden
Oldenburg
Bremen
Assen
Emmen
Nederland
Osnabrück
Bielefeld
Münster
Paderborn
Hamm
Recklinghausen
Gelsen
Dortmund
Essen
Moers
Venlo
Krefeld
Hagen
Wuppertal
Düsseldorf
Solingen
Roermond
Leverkusen
Köln
Siegen
Bonn
Aachen
Liège
Koblenz
Middelburg
Brugge
Antwerpen
Gent
Dunkerque
Calais
Bruxelles - Leuven
Brussel
België -
Belgique -
Belgien
Lille
Mons
Charleroi
Namur

Default map view

Wikidata Query Service | Voorbeelden | Hulp | Meer hulpmiddelen

```
#All public library branches of the Netherlands

#defaultView:Map

SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage  WHERE {
#Is Dutch public library branch
?dpl wdt:P31 wd:Q28564. #public library
?dpl wdt:P31 wd:Q11396180. #library branch
?dpl wdt:P17 wd:Q55. #in the Netherlands

?dpl wdt:P625 ?dplLoc. #Location of the dpl

OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl

SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
}

ORDER BY ?dplLabel
```

https://w.wiki/6eq

Popup

Point(5.2206 52.3712)
Main visitor location and administration offices of De nieuwe bibliotheek, the organisation for the public libraries in the municipality of Almere, The Netherlands
Almere Stad public library
Oldenburg
Bremen
Emmen
Osnabrück
Bielefeld
Münster
Paderborn
Hamm
Recklinghausen
Gelsen
Dortmund
Essen
Moers
Venlo
Krefeld
Hagen
Wuppertal
Düsseldorf
Solingen
Roermond
Leverkusen
Köln
Siegen
Bonn
Koblenz
Aachen
Liège
Namur
Charleroi
Mons
Lille
Calais
Dunkerque
Gent
Brugge
Antwerpen
Bruxelles - Leuven
Brussel
België - Belgique - Belgien
Middelburg
Ede
Deventer
Apeldoorn
Enschede
Amersfoort
Arnhem
Nijmegen
Dordrecht
's-Hertogenbosch
Eindhoven

Relation between query and popup

Wikidata Query Service

Voorbeelden | Hulp | Meer hulpmiddelen

```
#All public library branches of the Netherlands

#defaultView:Map

SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage  WHERE {
#Is Dutch public library branch
?dpl wdt:P31 wd:Q28564. #public library
?dpl wdt:P31 wd:Q11396180. #library branch
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ORDER BY ?dplLabel
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https://w.wiki/6eq

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Wikidata Query Service | Voorbeelden | Hulp | Meer hulpmiddelen

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SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage  WHERE {
#Is Dutch public library branch
?dpl wdt:P31 wd:Q28564. #public library
?dpl wdt:P31 wd:Q11396180. #library branch
?dpl wdt:P17 wd:Q55. #in the Netherlands

?dpl wdt:P625 ?dplLoc. #Location of the dpl

OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl

SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
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ORDER BY ?dplLabel
```

https://w.wiki/6eq

Relation between query and popup

Wikidata Query Service | Voorbeelden | Help | Meer hulpmiddelen

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#All public library branches of the Netherlands

#defaultView:Map

SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage  WHERE {
#Is Dutch public library branch
?dpl wdt:P31 wd:Q28564. #public library
?dpl wdt:P31 wd:Q11396180. #library branch
?dpl wdt:P17 wd:Q55. #in the Netherlands

?dpl wdt:P625 ?dplLoc. #Location of the dpl

OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl

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ORDER BY ?dplLabel
```

https://w.wiki/6eq

Relation between query and popup

Wikidata Query Service | Voorbeelden | Hulp | Meer hulpmiddelen

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#All public library branches of the Netherlands

#defaultView:Map

SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage WHERE {
#Is Dutch public library branch
?dpl wdt:P31 wd:Q28564. #public library
?dpl wdt:P31 wd:Q11396180. #library branch
?dpl wdt:P17 wd:Q55. #in the Netherlands

?dpl wdt:P625 ?dplLoc. #Location of the dpl

OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl

SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
}

ORDER BY ?dplLabel
```

https://w.wiki/6eq

Hiding fields from popup

Hide image and coordinates

Wikidata Query Service | Voorbeelden | Hulp | Meer hulpmiddelen

```
#All public library branches of the Netherlands

#defaultView:Map

SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage  WHERE {
#Is Dutch public library branch
?dpl wdt:P31 wd:Q28564. #public library
?dpl wdt:P31 wd:Q11396180. #library branch
?dpl wdt:P17 wd:Q55. #in the Netherlands

?dpl wdt:P625 ?dplLoc. #Location of the dpl

OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl

SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
}

ORDER BY ?dplLabel
```

Hiding fields from popup

Point(5.2206 52.3712)
Main visitor location and administration offices of De nieuwe bibliotheek, the organisation for the public libraries in the municipality of Almere, The Netherlands
Almere Stad public library

Wikidata Query Service | Voorbeelden | Hulp | Meer hulpmiddelen

```
#All public library branches of the Netherlands

#defaultView:Map{"hide":["?dplLoc", "?dplImage"]}

SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage  WHERE {
#Is Dutch public library branch
?dpl wdt:P31 wd:Q28564. #public library
?dpl wdt:P31 wd:Q11396180. #library branch
?dpl wdt:P17 wd:Q55. #in the Netherlands

?dpl wdt:P625 ?dplLoc. #Location of the dpl

OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl

SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
}

ORDER BY ?dplLabel
```

https://w.wiki/6mU

Hiding fields from popup

Wikidata Query Service | Voorbeelden | Hulp | Meer hulpmiddelen

```
#All public library branches of the Netherlands

#defaultView:Map{"hide":["?dplLoc", "?dplImage"]}

SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage  WHERE {
#Is Dutch public library branch
?dpl wdt:P31 wd:Q28564. #public library
?dpl wdt:P31 wd:Q11396180. #library branch
?dpl wdt:P17 wd:Q55. #in the Netherlands

?dpl wdt:P625 ?dplLoc. #Location of the dpl

OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl

SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
}

ORDER BY ?dplLabel
```

https://w.wiki/6mU

1.2) Clustered flat map

Wikidata Query Service

Voorbeelden | Hulp | Meer hulpmiddelen

```
#All public library branches of the Netherlands

#defaultView:Map{"markercluster": {"maxClusterRadius": 30}}

SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage  WHERE {
#Is Dutch public library branch
?dpl wdt:P31 wd:Q28564. #public library
?dpl wdt:P31 wd:Q11396180. #library branch
?dpl wdt:P17 wd:Q55. #in the Netherlands

?dpl wdt:P625 ?dplLoc. #Location of the dpl

OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl

SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
}

ORDER BY ?dplLabel
```

https://w.wiki/6ew

1.3) Basic layered map

Libraries layered by province

Wikidata Query Service

Voorbeelden | Hulp | Meer hulpmiddelen

```
#All public library branches of the Netherlands, layered by province

#defaultView:Map{"hide":["?dplLoc"],"layer":"?provLabel"}

SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?muniLabel ?provLabel WHERE {
  ?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #public library branch in The Netherlands
  ?dpl wdt:P625 ?dplLoc. #Geo location of the dpl
  OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl}

  #--- Find the municipality the libraty is in
  ?dpl wdt:P131 ?muni. #municipality derived from library item, has one singl
  ?muni p:P31 [ps:P31 ?muniIsA].
  VALUES ?muniIsA {wd:Q2039348}
  #Instead of the the above line, you can also do: FILTER(?muniIsA = wd:Q203

  #-- Find the province the municipality is in
  ?muni wdt:P131 ?prov.  #find the province
  ?prov p:P31 [ps:P31 ?provIsA].
  VALUES ?provIsA {wd:Q134390} #Only: province of the Netherlands (Q134390)

SERVICE wikibase:label { bd:serviceParam wikibase:language "[AUTO_LANGUAGE],en".}

}
ORDER BY ?provLabel
```

Non-custom layer names = labels from WD-items

https://w.wiki/6gJ

Wikidata Query Service

Voorbeelden | Hulp | Meer hulpmiddelen

```
#All public library branches of the Netherlands, layered by province

#defaultView:Map{"hide":["?dplLoc"],"layer":"?provLabel"}

SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?muniLabel ?provLabel WHERE {
  ?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #public library branch in The Netherlands
  ?dpl wdt:P625 ?dplLoc. #Geo location of the dpl
  OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl}

  #--- Find the municipality the libraty is in
  ?dpl wdt:P131 ?muni. #municipality derived fr
  ?muni p:P31 [ps:P31 ?muniIsA].
  VALUES ?muniIsA {wd:Q2039348}
  #Instead of the the above line, you can also d

  #-- Find the province the municipality is in
  ?muni wdt:P131 ?prov.  #find the province
  ?prov p:P31 [ps:P31 ?provIsA].
  VALUES ?provIsA {wd:Q134390} #Only: province of the Netherlands (Q134390)

SERVICE wikibase:label { bd:service param wikibase:language "[AUTO_LANGUAGE],en".}

}
ORDER BY ?provLabel
```

Layer order

1.4) Layered map, custom layer names

Libraries layered by postal code zone

Amsterdam Public Library, OBA De Hallen (Q60290390)

Public library in De Hallen building in the Kinkerbuurt neighbourhood of Amsterdam, The Netherlands

edit

In more languages

Language	Label	Description	Also known as
English	Amsterdam Public Library, OBA De Hallen	Public library in De Hallen building in the Kinkerbuurt neighbourhood of Amsterdam, The Netherlands	
German	No label defined	öffentliche Bibliothek in den Niederlanden	
Spanish	No label defined	No description defined	
French	No label defined	No description defined	
Italian	No label defined	No descr	
Dutch	OBA De Hallen	Openbar in de Kin	

All entered languages

Postal code zone = 1000 - 1999

postal code	1053RT 1 reference	edit + add value
phone number	+31-20-616-3275 1 reference	edit + add value
e-mail address	mailto:dehallen@oba.nl 1 reference	edit + add value

P281

https://www.wikidata.org/wiki/Q60290390

Wikidata Query Service

Voorbeelden | Hulp | Meer hulpmiddelen

```
#Maps of public library branches The Netherlands, layered by postal codes zones (1000-1999, 2000-2999 etc)

#defaultView:Map{"layer":"?pczone"}

SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?postcode ?pcdigits ?pczone

WHERE {
  ?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #public library branch in The Netherlands
  ?dpl wdt:P625 ?dplLoc. #Geo location of the library

  ?dpl (p:P281/ps:P281) ?postcode. #postal code of the library, format = 4 digits + 2 letters , e.g. '1073RT'

  BIND(SUBSTR(str(?postcode), 1, 4)  as ?pcdigits). #get 4 first digits of posta

  # Create layer object (= ?pczone) with the postal code zones as layers
  BIND(
    IF(?pcdigits > "1000" && ?pcdigits <= "1999", "1000-1999",
    IF(?pcdigits > "2000" && ?pcdigits <= "2999", "2000-2999",
    IF(?pcdigits > "3000" && ?pcdigits <= "3999", "3000-3999",
    IF(?pcdigits > "4000" && ?pcdigits <= "4999", "4000-4999",
    IF(?pcdigits > "5000" && ?pcdigits <= "5999", "5000-5999",
    IF(?pcdigits > "6000" && ?pcdigits <= "6999", "6000-6999",
    IF(?pcdigits > "7000" && ?pcdigits <= "7999", "7000-7999",
    IF(?pcdigits > "8000" && ?pcdigits <= "8999", "8000-8999",
    IF(?pcdigits > "9000" && ?pcdigits <= "9999", "9000-9999",
    "REST")))))))))
    AS ?pczone).

SERVICE wikibase:label { bd:serviceParam wikibase:language "[AUTO_LANGUAGE],en".}
}
ORDER BY ?pczone #ascending order by postal code zone
```

Alle lagen
- 1000-1999
- 2000-2999
- 3000-3999
- 4000-4999
- 5000-5999
- 6000-6999
- 7000-7999
- 8000-8999
- 9000-9999

Do not click,
copy-paste in browser!

https://bit.ly/3368DPk

Wikidata Query Service
Voorbeelden
Hulp
Meer hulpmiddelen
#Maps of public library branches The Netherlands, layered by postal codes zones (1000-1999, 2000-2999 etc)
#defaultView:Map{"layer":"?pczone"}
SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?postcode ?pcdigits ?pczone
WHERE {
?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #public library branch in The Netherlands
?dpl wdt:P625 ?dplLoc. #Geo location of the library
?dpl (p:P281/ps:P281) ?postcode. #postal code of the library, format = 4 digits + 2 letters , e.g. '1073RT'
BIND(SUBSTR(str(?postcode), 1, 4) as ?pcdigits). #get 4 first digits of postal code
Create layer object (= ?pczone) with the postal code zones as layers
BIND(
IF(?pcdigits > "1000" && ?pcdigits <= "1999", "1000-1999",
IF(?pcdigits > "2000" && ?pcdigits <= "2999", "2000-2999",
IF(?pcdigits > "3000" && ?pcdigits <= "3999", "3000-3999",
IF(?pcdigits > "4000" && ?pcdigits <= "4999", "4000-4999",
IF(?pcdigits > "5000" && ?pcdigits <= "5999", "5000-5999",
IF(?pcdigits > "6000" && ?pcdigits <= "6999", "6000-6999",
IF(?pcdigits > "7000" && ?pcdigits <= "7999", "7000-7999",
IF(?pcdigits > "8000" && ?pcdigits <= "8999", "8000-8999",
IF(?pcdigits > "9000" && ?pcdigits <= "9999", "9000-9999",
"REST")))))))))
AS ?pczone).
SERVICE wikibase:label { bd:serviceParam wikibase:language "[AUTO_LANGUAGE],en".}
}
ORDER BY ?pczone #ascending order by postal code zone
Alle lagen
1000-1999
2000-2999
3000-3999
4000-4999
5000-5999
6000-6999
7000-7999
8000-8999
9000-9999
Leeuwarden
Groningen
Oldenburg
Bielefeld
Paderborn
https://bit.ly/3368DPk

Wikidata Query Service

Voorbeelden | Hulp | Meer hulpmiddelen

```
#Maps of public library branches The Netherlands, layered by postal codes zones (1000-1999, 2000-2999 etc)

#defaultView:Map{"layer":"?pczone"}

SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?postcode ?pcdigits ?pczone

WHERE {
  ?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #public library branch in The Netherlands
  ?dpl wdt:P625 ?dplLoc. #Geo location of the library

  ?dpl (p:P281/ps:P281) ?postcode. #postal code of the library, forma

  BIND(SUBSTR(str(?postcode), 1, 4)  as ?pcdigits). #get 4 first digi

  # Create layer object (= ?pczone) with the postal code zones as layers
  BIND(
    IF(?pcdigits > "1000" && ?pcdigits <= "1999", "1000-1999",
    IF(?pcdigits > "2000" && ?pcdigits <= "2999", "2000-2999",
    IF(?pcdigits > "3000" && ?pcdigits <= "3999", "3000-3999",
    IF(?pcdigits > "4000" && ?pcdigits <= "4999", "4000-4999",
    IF(?pcdigits > "5000" && ?pcdigits <= "5999", "5000-5999",
    IF(?pcdigits > "6000" && ?pcdigits <= "6999", "6000-6999",
    IF(?pcdigits > "7000" && ?pcdigits <= "7999", "7000-7999",
    IF(?pcdigits > "8000" && ?pcdigits <= "8999", "8000-8999",
    IF(?pcdigits > "9000" && ?pcdigits <= "9999", "9000-9999",
    "REST")))))))))
    AS ?pczone).

SERVICE wikibase:label { bd:serviceParam wikibase:language "[AUTO_LANGUAGE],en".}
}
ORDER BY ?pczone #ascending order by postal code zone
```

Layer names

Wikidata Query Service | Voorbeelden | Hulp | Meer hulpmiddelen

```
#Maps of public library branches The Netherlands, layered by postal codes zones (1000-1999, 2000-2999 etc)

#defaultView:Map{"layer":"?pczone"}

SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?postcode ?pcdigits ?pczone

WHERE {
  ?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #public library branch in The Netherlands
  ?dpl wdt:P625 ?dplLoc. #Geo location of the library

  ?dpl (p:P281/ps:P281)                                                    mat = 4 digits + 2 letters , e.g. '1073RT'

  BIND(SUBSTR(str(?posto                                                   igits of postal code

  # Create layer object (                                                  layers
  BIND(
    IF(?pcdigits > "1000" &                  s <= "1999", "1000-1999",
    IF(?pcdigits > "2000"                    igits <= "2999", "2000-2999",
    IF(?pcdigits > "300                      pcdigits <= "3999", "3000-3999",
    IF(?pcdigits > "4                        ?pcdigits <= "4999", "4000-4999",
    IF(?pcdigits > "                         && ?pcdigits <= "5999", "5000-5999",
    IF(?pcdigits >                           && ?pcdigits <= "6999", "6000-6999",
    IF(?pcdigits                             && ?pcdigits <= "7999", "7000-7999",
    IF(?pcdigi                               && ?pcdigits <= "8999", "8000-8999",
    IF(?pcdigits > "9000" && ?pcdigits <= "9999", "9000-9999",
    "REST")))))))))
    AS ?pczone).

SERVICE wikibase:label { bd:serviceParam wikibase:language "[AUTO_LANGUAGE],en".}
}
ORDER BY ?pczone #ascending order by postal code zone
```

‘Spill-over’ layer name

1.5) Other cool layered maps

Big cities, by population
https://w.wiki/3fx

1.5) Other cool layered maps

Disasters, by type
https://w.wiki/6gY

1.5) Other cool layered maps

Medieval churches, by century of construction
https://w.wiki/6ga

1.5) Other cool layered maps

Dutch municipalities, by number of public libraries
https://w.wiki/6gb

MODULE 2

Embedded maps in Wikimedia projects

For this Module, you will (also) need

- User page on Wikipedia, Commons, Wikidata
- With Sandbox

Nice to have: some knowledge about

- OpenStreetMap and
- GeoJSON

Extension:Kartographer

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Help:Extension:Kartographer

Translate this page

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The Kartographer extension powers interactive maps on Wikimedia wikis. This page shows techniques for creating dynamic maps by using the Kartographer tags `<mapframe>`, which embeds maps right in wiki pages, and `<maplink>`, which creates links to dynamic maps.

Contents [hide]

1 Getting started
2 <mapframe> usage
2.1 Frames
3 <maplink>
3.1 <maplink> and auto-counters
4 Markers
5 Groups
6 External data
6.1 GeoShapes via Wikidata Query
6.2 Map data from Commons
6.3 Combining multiple data
7 Styling
7.1 Styling Wikidata ID elements
7.2 Overlapping elements

https://www.mediawiki.org/wiki/Help:Extension:Kartographer

Basic embedded map, no data

(in my Sandbox on Dutch Wikipedia)

WIKIPEDIA
De vrije encyclopedie

Gebruiker | Overleg

Gebruiker:OlafJanssen/Klad

< Gebruiker:OlafJanssen

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Vind een artikel
Vandaag
Etalage
Categorieën
Recente wijzigingen
Nieuwe artikelen
Willekeurige pagina

Informatie
Gebruikersportaal
Snelcursus
Hulp en contact
Donaties

Hulpmiddelen
Koppelingen vanaf deze pagina
Links naar deze pagina
Verwante wijzigingen
Gebruikersbijdragen
Logboeken
Deze gebruiker e-mailen
Gebruikersgroepen weergeven
Bestand uploaden
Speciale pagina's
Permanente koppeling
Paginagegevens

Afdrukken/exporteren
Boek maken
Downloaden als PDF
Printvriendelijke versie

Talen

Embedded maps in Dutch Wikipedia [bewerken | brontekst bewerken]

Basic embedded map of The Netherlands [bewerken | brontekst bewerken]

Basic embedded map of The Netherlands

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

Gebruiker Overleg Lezen Bewer

Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

< Gebruiker:OlafJanssen

Embedded maps in Dutch Wikipedia [bewerken | brontekst bewerken]

Basic embedded map of The Netherlands [bewerken | brontekst bewerken]

```
== Basic embedded map of The Netherlands ==

<mapframe width=600 height=700 zoom=7 latitude=52.20
longitude=5.179627565 text="Basic embedded map of
[[w:The_Netherlands|The Netherlands]]" align=left/>
```

Basic embedded map of The Netherlands

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

2.1) Single location, hard-coded

One public library in Amsterdam, geo coordinates hard coded

One public library in Amsterdam, geo coordinates hard coded

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

One public library in Amsterdam, geo coordinates hard coded

```
== One public library in Amsterdam, geo coordinates hard-coded ==

<mapframe text="One public library in Amsterdam, geo coordinates hard-coded" width=700 height=700 zoom=14
latitude=52.3693887 longitude=4.8502319 align=left>
{
  "type": "Feature",
  "geometry": { "type": "Point", "coordinates": [4.8502319, 52.3693887] },
  "properties": {
    "title": "[https://www.oba.nl/vestigingen/oba-mercatorplein.html OBA Mercatorplein]",
    "description": "[[File:Mercatorplein west.JPG|300px]]",
    "marker-symbol": "library",
    "marker-size": "large",
    "marker-color": "ea9809"
  }
}
</mapframe>
```

One public library in Amsterdam, geo coordinates hard coded

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

One public library in Amsterdam, geo coordinates hard coded

```
== One public library in Amsterdam, geo coordinates hard-coded ==

<mapframe text="One public library in Amsterdam, geo coordinates hard-coded" width=700 height=700 zoom=14
latitude=52.3693887 longitude=4.8502319 align=left>
{
  "type": "Feature",
  "geometry": { "type": "Point", "coordinates": [4.8502319, 52.3693887] },
  "properties": {
    "title": "[https://www.oba.nl/vestigingen/oba-mercatorplein.html OBA Mercatorplein]",
    "description": "[[File:Mercatorplein west.JPG|300px]]",
    "marker-symbol": "library",
    "marker-size": "large",
    "marker-color": "ea9809"
  }
}
</mapframe>
```

Styling of markers

- https://github.com/mapbox/simplestyle-spec/tree/master/1.1.0#3-client-behavior
- https://www.mediawiki.org/wiki/Help:Extension:Kartographer

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

2.2) Three locations, hard-coded

Library, museum and archive in Amsterdam, geo coordinates hard-coded

Library, museum and archive in Amsterdam, geo coordinates hard-coded

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

Library, museum and archive in Amsterdam, geo coordinates hard-coded

```
== Library, museum and archive in Amsterdam, geo coordinates hard-coded ==

<mapframe text="Library, museum and archive in Amsterdam, geo coordinates hard-coded" width=700 height=700 zoom=14 latitude=52.3693887 longitude=4.87
{
    "type": "FeatureCollection", "features":
  [
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8502319, 52.3693887] },
      "properties": {
         "title": "[https://www.oba.nl/vestigingen/oba-mercatorplein.html OBA Mercatorplein]",
         "description": "[[File:Mercatorplein west.JPG|300px]]",
         "marker-symbol": "library",
         "marker-size": "large",
         "marker-color": "ea9809" }
    },
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8846644, 52.3598658] },
      "properties": {
         "title": "[https://www.rijksmuseum.nl Rijksmuseum]",
         "description": "[[File:Rijksmuseum.Amsterdam.jpg|300px]]",
         "marker-symbol": "museum",
         "marker-size": "small",
         "marker-color": "f01080" }
    },
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8923905, 52.3645600] },
      "properties": {
         "title": "[https://www.amsterdam.nl/stadsarchief/ Stadarchief Amsterdam]",
         "description": "[[File:Gebouw de Bazel.jpg|300px]]",
         "marker-symbol": "-letter",
         "marker-size": "medium",
         "marker-color": "228b22" }
    }
  ]
}
</mapframe>
```

Library, museum and archive in Amsterdam, geo coordinates hard-coded

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

Library, museum and archive in Amsterdam, geo coordinates hard-coded

```
== Library, museum and archive in Amsterdam, geo coordinates hard-coded ==

<mapframe text="Library, museum and archive in Amsterdam, geo coordinates hard-coded" width=700 height=700 zoom=14 latitude=52.3693887 longitude=4.87
{
    "type": "FeatureCollection", "features":
  [
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8502319, 52.3693887] },
      "properties": {
         "title": "[https://www.oba.nl/vestigingen/oba-mercatorplein.html OBA Mercatorplein]",
         "description": "[[File:Mercatorplein west.JPG|300px]]",
         "marker-symbol": "library",
         "marker-size": "large",
         "marker-color": "ea9809" }
    },
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8846644, 52.3598658] },
      "properties": {
         "title": "[https://www.rijksmuseum.nl Rijksmuseum]",
         "description": "[[File:Rijksmuseum.Amsterdam.jpg|300px]]",
         "marker-symbol": "museum",
         "marker-size": "small",
         "marker-color": "f01080" }
    },
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8923905, 52.3645600] },
      "properties": {
         "title": "[https://www.amsterdam.nl/stadsarchief/ Stadarchief Amsterdam]",
         "description": "[[File:Gebouw de Bazel.jpg|300px]]",
         "marker-symbol": "-letter",
         "marker-size": "medium",
         "marker-color": "228b22" }
    }
  ]
}
</mapframe>
```

Library, museum and archive in Amsterdam, geo coordinates hard-coded

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

Library, museum and archive in Amsterdam, geo coordinates hard-coded

```
== Library, museum and archive in Amsterdam, geo coordinates hard-coded ==

<mapframe text="Library, museum and archive in Amsterdam, geo coordinates hard-coded" width=700 height=700 zoom=14 latitude=52.3693887 longitude=4.87
{
    "type": "FeatureCollection", "features":
  [
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8502319, 52.3693887] },
      "properties": {
         "title": "[https://www.oba.nl/vestigingen/oba-mercatorplein.html OBA Mercatorplein]",
         "description": "[[File:Mercatorplein west.JPG|300px]]",
         "marker-symbol": "library",
         "marker-size": "large",
         "marker-color": "ea9809" }
    },
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8846644, 52.3598658] },
      "properties": {
         "title": "[https://www.rijksmuseum.nl Rijksmuseum]",
         "description": "[[File:Rijksmuseum.Amsterdam.jpg|300px]]",
         "marker-symbol": "museum",
         "marker-size": "small",
         "marker-color": "f01080" }
    },
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8923905, 52.3645600] },
      "properties": {
         "title": "[https://www.amsterdam.nl/stadsarchief/ Stadarchief Amsterdam]",
         "description": "[[File:Gebouw de Bazel.jpg|300px]]",
         "marker-symbol": "-letter",
         "marker-size": "medium",
         "marker-color": "228b22" }
    }
  ]
}
</mapframe>
```

Library, museum and archive in Amsterdam, geo coordinates hard-coded

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

Outline (geoshape) of Amsterdam public library (main site), using Wikidata and Open Street Map

Outline (geoshape) of Amsterdam public library (main site), using Wikidata and Open Street Map

2.3) Outline (GeoShape) via Wikidata & OpenStreetMap

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

Outline (geoshape) of Amsterdam public library (main site), using Wikidata and Open Street Map

Outline (geoshape) of Amsterdam public library (main site), using Wikidata and Open Street Map

```
== Outline (geoshape) of Amsterdam public library (main site), using Wikidata and Open Street
Map ==

<mapframe width=700 height=700 zoom=15 latitude=52.3757964 longitude=4.9079461 text="Outline
(geoshape) of Amsterdam public library (main site), using Wikidata and Open Street Map"
align=left>
{
  "type": "ExternalData",
  "service": "geoshape",
  "ids": "Q50413436",
  "properties": {
    "fill": "#07c63e", "title": "Amsterdam public library, main site"  }
}
</mapframe>
```

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

Amsterdam Public Library, OBA Oosterdok (Centrale) (Q50413436)

Main visitor location and administration offices of the Amsterdam Public Library, The Netherlands

edit

OBA Oosterdok (Centrale)

https://www.wikidata.org/wiki/**Q50413436**

In more languages

Language	Label	Description	Also known as
English	Amsterdam Public Library, OBA Oosterdok (Centrale)	Main visitor location and administration offices of the Amsterdam Public Library, The Netherlands	OBA Oosterdok (Centrale)
German	No label defined	Bibliothek	
Spanish	No label defined	No description defined	
French	No label defined	bibliothèque	
Italian	No label defined	No description defined	
Dutch	OBA Oosterdok (Centrale)	Hoofdvestiging en administratief hoofdkantoor van de Openbare Bibliotheek Amsterdam	OBA Oosterdok (Centrale) Centrale OBA

All entered languages

Statements

instance of	public library 0 references	edit add reference
	library branch 0 references	edit add reference

OpenStreetMap | Bewerken | Geschiedenis | Exporteren | GPS-traces | Gebruikersdagbo

Zoeken | Waar is dit? | OK

https://www.openstreetmap.org/way/240467636#map=19/52.37605/4.90853

Weg: OBA Oosterdok (240467636)

De oude gegevens verwezen naar de Stichting Openbare Bibliotheken Amsterdam (Q2105660 op Wikidata), de nieuwe verwijzen naar Q50413436, de belangrijkste bezoekerslocatie en het hoofdkantoor van deze organisatie

25 minutes ago geleden bewerkt door OlafJanssen
Versie #12 · Wijzigingenset #72901147

Tags

addr:city	Amsterdam
addr:housenumber	143
addr:postcode	1011 DL
addr:street	Oosterdokskade
alt_name	Openbare Bibliotheek Amsterdam
amenity	library

website	https://www.oba.nl/vestigingen/centrale-oba.html
wheelchair	yes
wikidata	Q50413436

2.4) Many locations, GeoJSON .map file

Map of Dutch public libraries, work in progress, 21-5-2019 [bewerken | brontekst bewerken]

Map of Dutch public libraries, work in progress, 21-5-2019

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

Map of Dutch public libraries, work in progress, 21-5-2019 [bewerken | brontekst bewerken]

```
== Map of Dutch public libraries, work in progress, 21-5-2019 ==

<mapframe width=800 height=800 zoom=8 latitude=52.20 longitude=5.119627565 text="Map of Dutch public libraries, work in progress, 21-5-2019" align=left>
{
  "type": "ExternalData",
  "service": "page",
  "title": "DutchPublicLibraries.map",
}
</mapframe>
```

Map of Dutch public libraries, work in progress, 21-5-2019

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

Map of Dutch public libraries, work in progress, 21-5-2019 [bewerken | brontekst bewerken]

```
== Map of Dutch public libraries, work in progress, 21-5-2019 ==

<mapframe width=800 height=800 zoom=8 latitude=52.20 longitude=5.119627565 text="Map of Dutch
public libraries, work in progress, 21-5-2019" align=left>
{
  "type": "ExternalData",
  "service": "page",
  "title": "DutchPublicLibraries.map",
}
</mapframe>
```

Map of Dutch public libraries, work in progress, 21-5-2019

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

Nederlands OlafJanssen 23 26 Overleg Voorkeuren Beta Volgl

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Data

https://commons.wikimedia.org/wiki/Data:DutchPublicLibraries.map

Data:DutchPublicLibraries.map

Uit Wikimedia Commons

Map of Dutch public libraries, work in progress, 21-5-2019

Link to Wikidata item

[[d:Q61764050|Roermond public library]]

https://commons.wikimedia.org/wiki/Data:DutchPublicLibraries.map

Nederlands OlafJanssen

Data Overleg Lezen Bewerken Geschiedenis weergeven

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Subpagina's
Voor verwijdering nomineren

Bewerken van Data:DutchPublicLibraries.map

Note: When you edit this page, you agree to release your contribution under the CC0.

Edittools


```
{
    "license": "CC0-1.0",
    "description": {
        "en": "Map of Dutch public libraries, work in progress, 21-5-2019"
    },
    "sources": "",
    "zoom": 7,
    "latitude": 52.091656341,
    "longitude": 5.119627565,
    "data": {
        "type": "FeatureCollection",
        "features": [
            {
                "type": "Feature",
                "properties": {
                    "title": "[[d:Q59772713|Aalst public library]]",
                    "marker-size": "small",
                    "marker-color": "#ee7302",
                    "type": "Point"
                },
```


0 0 0

Standard [[[| {{ {{{ – — " ' « ‹ „ , ‚ • × ° € ← → § ~~~~

<pre>   [[Category: [[:File: [[Media: {{DEFAULTSORT: {{NAMESPACE}} {{PAGENAME}} #REDIRECT[[<galler

<noinclude> <onlyinclude> <translate> <tvar|> <languages/>

https://www.mediawiki.org/wiki/Help:Map_Data

Help:Map Data

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Map data allows users to store GeoJSON data on wiki, similar to images. Other wikis may use this data to draw on top of the maps, together with other map customizations.

To create a new map data, go to Wikimedia Commons, and create a new page in the **Data** namespace with the **.map** suffix, such as `Data:Sandbox/Name/Example.map`. F experiment by creating pages with the **Sandbox/<username>/** prefix. For now, page content can only be edited in the raw JSON format. Eventually, we hope there will be a p editor to simplify GeoJSON creation.

Data licensing [edit]

All data in the `Data:` namespace must licensed under one of the following licences:

- CC0-1.0
- CC-BY versions: CC-BY-1.0, CC-BY-2.0, CC-BY-2.5, CC-BY-3.0, CC-BY-4.0, CC-BY-4.0+
- CC-BY-SA versions: CC-BY-SA-1.0, CC-BY-SA-2.0, CC-BY-SA-2.5, CC-BY-SA-3.0, CC-BY-SA-4.0, CC-BY-SA-4.0+
- ODbL-1.0

The default license is empty string (e.g invalid license) and when a user tries to save page with invalid license, they will be notified of the allowed licenses.

Top-level fields [edit]

Map data has several required and optional top-level elements:

- The **required** `"license"` field must always be set to one of the allowed string values, e.g. `"CC0-1.0"` (see #Data licensing).
- The **optional** `"description"` field must be set to a localized string value - an object with at least one key-value, where the key is a language code (e.g. "en"), and the
- The **optional** `"sources"` field must be a Wiki markup string value that describes the source of the map data.
- The **optional** `"zoom"` field must be an integer between 0 and 18. This value is only used for displaying map on its own page, not when including it in the articles.
- The **optional** `"latitude"` and `"longitude"` fields specify the center of the map when displaying it on its own page, not when including it in the articles.
- The **required** `"data"` field must be set to the valid GeoJSON content. Per GeoJSON specification, `"properties"` field may be set for every Feature object. The map properties, such as `"title"`, `"description"`, `"fill"` (color), and others. Additionally, the `"title"` and `"description"` fields may be either strings or localize tabular data). This allows the same map data to appear differently depending on the user's language.

https://commons.wikimedia.org/wiki/Data:DutchPublicLibraries.map

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Geocoding Recent Changes
Geocoding Search
Geocoding Daily Log
Subpagina's
Voor verwijdering nomineren

Nederlands OlafJanssen

Data Overleg Lezen Bewerken Geschiedenis weerge

Bewerken van Data:DutchPublicLibraries.map

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```
1  {
2      "license": "CC0-1.0",
3      "description": {
4          "en": "Map of Dutch public libraries, work in
5      },
6      "sources": "",
7      "zoom": 7,
8      "latitude": 52.091656341,
9      "longitude": 5.119627565,
10     "data": {
11         "type": "FeatureCollection",
12         "features": [
13             {
14                 "type": "Feature",
15                 "properties": {
16                     "title": "[[d:Q59772713|Aalst public library]]",
17                     "marker-size": "small",
18                     "marker-color": "#ee7302",
19                     "type": "Point"
20                 },
```

0 0 0

Standard [[[| {{ {{{ – — " ' « ‹ „ , · • × ° € ← → § ~~~~

<pre>   [[Category: [[:File: [[Media: {{DEFAULTSORT: {{NAMESPACE}} {{PAGENAME}} #REDIRECT[[<galler

<noinclude> <onlyinclude> <translate> <tvar|> <languages/>

Data in **GeoJSON** format

https://en.wikipedia.org/wiki/GeoJSON

https://commons.wikimedia.org/wiki/Data:DutchPublicLibraries.map

Nederlands OlafJanssen

Data Overleg Lezen Bewerken Geschiedenis weergeven

Edittools

```
1  {
2      "license": "CC0-1.0",
3      "description": {
4          "en": "Your English title here"
5      },
6      "sources": "",
7      "zoom": 8,
8      "latitude": 52.091656341,
9      "longitude": 5.119627565,
10     "data":
11
12     INSERT YOUR GEOJSON DATA HERE (output of http://geojson.io)
13
14 }
15
```

Single “}”

<noinclude> <onlyinclude> <translate> <tvar|> <languages/>

Geojson.io

Open
Save
New
Share
Meta
unsaved
JSON
Table
Help
anon | login
{
"type": "FeatureCollection",
"features": []
}
Arctic Ocean
Greenland Sea
Barents Sea
Kara Sea
Baffin Bay
Norwegian Sea
North Atlantic Ocean
South Atlantic Ocean
Indian Ocean
Arabian Sea
Scotia Sea
Canada
United States
México
Venezuela
Colombia
Perú
Brasil
Bolivia
Argentina
Россия
Қазақстан
Монгол Улс
Türkiye
India
Malaysia
Indonesia
South Africa
3000 km
2000 mi
Mapbox
Satellite
OCM
OSM
Feedback | About | © Mapbox © OpenStreetMap Improve this map

Geojson.io

Open
Save
New
Share
Meta
unsaved
Arctic Ocean
Greenland Sea
Barents Sea
Kara Sea
GL
JSON
Table
Help
anon | login
{
"type": "FeatureCollection",
"features": []
}
Bestand uploaden
« KB › LOD-Wikidata › OBWikidataproject › GeoMappingStuff ›
Zoeken in GeoMappingStuff
Organiseren
Nieuwe map
Deze pc
3D-objecten
Afbeeldingen
Bureaublad
Documenten
Downloads
Muziek
Video's
OSDisk (C:)
Naam
Gewijzigd op
Type
GeocodingOSM
1-5-2019 12:13
Bestandsmap
LibraryMapInputData.tsv
22-5-2019 12:04
TSV-bestand
LibraryMapInputData_NoordHolland.csv
22-5-2019 12:59
CSV-bestand
Bestandsnaam:
LibraryMapInputData.tsv
Alle bestanden (*.*)
Openen
Annuleren
3000 km
2000 mi
Mapbox
Satellite
OCM
OSM
Feedback | About | © Mapbox © OpenStreetMap Improve this map

Geojson.io

LibraryMapInputData.tsv

```
title   marker-size marker-color    type    long    lat
[[d:Q59772713|Aalst public library]]    small   #ee7302 Point   5.1259789   51.7841643
[[d:Q59772714|Ammerzoden public library]]   small   #ee7302 Point   5.2201121   51.7506792
[[d:Q59772716|Asperen public library]]  small   #ee7302 Point   5.1045091   51.8806175
[[d:Q59772717|Beesd public library]]    small   #ee7302 Point   5.1930425   51.8868067
[[d:Q59772718|Beneden-Leeuwen public library]]  small   #ee7302 Point   5.516266    51.8777727
[[d:Q59772719|Culemborg public library]]    small   #ee7302 Point   5.223026    51.9574438
[[d:Q59772720|Dodewaard public library]]    small   #ee7302 Point   5.6607362   51.9090619
[[d:Q59772721|Dreumel public library]]  small   #ee7302 Point   5.4329593   51.846106
[[d:Q59772722|Druten public library]]   small   #ee7302 Point   5.6023973   51.8864962
[[d:Q59772723|Geldermalsen public library]] small   #ee7302 Point   5.28966 51.87324
[[d:Q59772724|Haaften public library]]  small   #ee7302 Point   5.209602    51.8222877
[[d:Q59772725|Herwijnen public library]]    small   #ee7302 Point   5.132461    51.8278308
[[d:Q59772726|Heukelum public library]] small   #ee7302 Point   5.075112    51.8717037
[[d:Q59772727|Kerkdriel public library]]    small   #ee7302 Point   5.3380551   51.7712143
[[d:Q59772729|Kesteren public library]] small   #ee7302 Point   5.5680087   51.9321838
[[d:Q59772731|Ochten public library]]   small   #ee7302 Point   5.5680429   51.9084892
[[d:Q59772732|Ophemert public library]] small   #ee7302 Point   5.3849607   51.8441046
[[d:Q59772733|Opheusden public library]]    small   #ee7302 Point   5.6276707   51.9319108
[[d:Q59772735|Zaltbommel public library]]   small   #ee7302 Point   5.2321253   51.8034576
[[d:Q59772736|Self-service library point Boven-Leeuwen]]    small   #ee7302 Point   5.5459884   51.8853943
[[d:Q59772737|Self-service library point Brakel]]   small   #ee7302 Point   5.0926245   51.8141786
[[d:Q59772738|Self-service library point Deest]]    small   #ee7302 Point   5.6643959   51.8902209
[[d:Q59772739|Self-service library point Deil]] small   #ee7302 Point   5.2459089   51.8840328
[[d:Q59772740|Self-service library point Horssen]]  small   #ee7302 Point   5.6090658   51.8547778
[[d:Q59772741|Self-service library point Lek en Linge]] small   #ee7302 Point   5.2348588   51.9457687
[[d:Q59772742|Self-service library point Maasbommel]]   small   #ee7302 Point   5.5353727   51.8199371
[[d:Q59772743|Self-service library point Nederhemert]]  small   #ee7302 Point   5.1667443   51.7636824
[[d:Q59772745|Self-service library point Vuren]]    small   #ee7302 Point   5.0489027   51.8248737
[[d:Q59772808|Tiel public library]] small   #ee7302 Point   5.4366236   51.8845787
```

Geojson.io

JSON | Table | Help | anon | login


```
{
  "type": "FeatureCollection",
  "features": [
    {
      "type": "Feature",
      "properties": {
        "title": "[[d:Q59772713|Aalst public library]]",
        "marker-size": "small",
        "marker-color": "#ee7302",
        "type": "Point"
      },
      "geometry": {
        "type": "Point",
        "coordinates": [
          5.1259789,
          51.7841643
        ]
      }
    },
    {
      "type": "Feature",
      "properties": {
        "title": "[[d:Q59772714|Ammerzoden public library]]",
        "marker-size": "small",
        "marker-color": "#ee7302",
        "type": "Point"
      },
      "geometry": {
        "type": "Point",
        "coordinates": [
          5.2201121,
          51.7506792
        ]
      }
    },
    {
      "type": "Feature",
```

https://commons.wikimedia.org/wiki/Data:DutchPublicLibraries.map

Edittools

```
1  {
2      "license": "CC0-1.0",
3      "description": {
4          "en": "Your English title here"
5      },
6      "sources": "",
7      "zoom": 8,
8      "latitude": 52.091656341,
9      "longitude": 5.119627565,
10     "data":
11
12     INSERT YOUR GEOJSON DATA HERE (output of http://geojson.io)
13
14 }
15
```

.. to here

Geojson.io

Open
Save
New
Share
Meta
unsaved
JSON
Table
Help
anon | login
new column
title
marker-size
marker-color
type
delete
rename
Here you can tweak & style the markers...
.. and also in this popup
marker-symbol
title
[[d:Q59772726|Heukelum
marker-size
small
marker-color
type
Point
Add row
Show style properties
Properties
Info
Save
Cancel
Delete feature
Leeuwarden
Osnabrück
Dortmund
Köln
Brugge
Bruxelles — Brussel
Belgique
Naturpark Hohe Mark — Westmünsterland
Nationaal Park Oosterschelde
Terschellinger Wad
Waddenzee — Nederlands deel
Texel
Groningerwa
Siegen
30 km
20 mi

JSON | Table | Help | anon | login

+ new column

title (delete, rename)	marker-size (delete, rename)	marker-color (rename, delete)	type (delete, rename)
[[d:Q59772713|Aalst p	small	#ee7302	Point
[[d:Q59772714|Amme	small	#ee7302	Point
[[d:Q59772716|Asper	small	#ee7302	Point
[[d:Q59772717|Beesd	small	#ee7302	Point
[[d:Q59772718|Bened	small	#ee7302	Point
[[d:Q59772719|Culem	small	#ee7302	Point
[[d:Q59772720|Dodev	small	#ee7302	Point
[[d:Q59772721|Dreum	small	#ee7302	Point
[[d:Q59772722|Druter	small	#ee7302	Point
[[d:Q59772723|Gelder	small	#ee7302	Point
[[d:Q59772724|Haafte	small	#ee7302	Point
[[d:Q59772725|Herwij	small	#ee7302	Point
[[d:Q59772726|Heuke	large	#180ee2	Point
[[d:Q59772727|Kerkdr	small	#ee7302	Point
[[d:Q59772729|Kester	small	#ee7302	Point
[[d:Q59772731|Ochte	small	#ee7302	Point
[[d:Q59772732|Opher	small	#ee7302	Point
[[d:Q59772733|Ophe	small	#ee7302	Point
[[d:Q59772735|Zaltbo	small	#ee7302	Point
[[d:Q59772736|Self-s	small	#ee7302	Point
[[d:Q59772737|Self-s	small	#ee7302	Point
[[d:Q59772738|Self-s	small	#ee7302	Point
[[d:Q59772739|Self-s	small	#ee7302	Point
[[d:Q59772740|Self-s	small	#ee7302	Point

How do you make this TSV?

LibraryMapInputData.tsv

```
title	marker-size	marker-color	type	long	lat
[[d:Q59772713|Aalst public library]]	small	#ee7302	Point	5.1259789	51.7841643
[[d:Q59772714|Ammerzoden public library]]	small	#ee7302	Point	5.2201121	51.7506792
[[d:Q59772716|Asperen public library]]	small	#ee7302	Point	5.1045091	51.8806175
[[d:Q59772717|Beesd public library]]	small	#ee7302	Point	5.1930425	51.8868067
[[d:Q59772718|Beneden-Leeuwen public library]]	small	#ee7302	Point	5.516266	51.8777727
[[d:Q59772719|Culemborg public library]]	small	#ee7302	Point	5.223026	51.9574438
[[d:Q59772720|Dodewaard public library]]	small	#ee7302	Point	5.6607362	51.9090619
[[d:Q59772721|Dreumel public library]]	small	#ee7302	Point	5.4329593	51.846106
[[d:Q59772722|Druten public library]]	small	#ee7302	Point	5.6023973	51.8864962
[[d:Q59772723|Geldermalsen public library]]	small	#ee7302	Point	5.28966	51.87324
[[d:Q59772724|Haaften public library]]	small	#ee7302	Point	5.209602	51.8222877
[[d:Q59772725|Herwijnen public library]]	small	#ee7302	Point	5.132461	51.8278308
[[d:Q59772726|Heukelum public library]]	small	#ee7302	Point	5.075112	51.8717037
[[d:Q59772727|Kerkdriel public library]]	small	#ee7302	Point	5.3380551	51.7712143
[[d:Q59772729|Kesteren public library]]	small	#ee7302	Point	5.5680087	51.9321838
[[d:Q59772731|Ochten public library]]	small	#ee7302	Point	5.5680429	51.9084892
[[d:Q59772732|Ophemert public library]]	small	#ee7302	Point	5.3849607	51.8441046
[[d:Q59772733|Opheusden public library]]	small	#ee7302	Point	5.6276707	51.9319108
[[d:Q59772735|Zaltbommel public library]]	small	#ee7302	Point	5.2321253	51.8034576
[[d:Q59772736|Self-service library point Boven-Leeuwen]]	small	#ee7302	Point	5.5459884	51.8853943
[[d:Q59772737|Self-service library point Brakel]]	small	#ee7302	Point	5.0926245	51.8141786
[[d:Q59772738|Self-service library point Deest]]	small	#ee7302	Point	5.6643959	51.8902209
[[d:Q59772739|Self-service library point Deil]]	small	#ee7302	Point	5.2459089	51.8840328
[[d:Q59772740|Self-service library point Horssen]]	small	#ee7302	Point	5.6090658	51.8547778
[[d:Q59772741|Self-service library point Lek en Linge]]	small	#ee7302	Point	5.2348588	51.9457687
[[d:Q59772742|Self-service library point Maasbommel]]	small	#ee7302	Point	5.5353727	51.8199371
[[d:Q59772743|Self-service library point Nederhemert]]	small	#ee7302	Point	5.1667443	51.7636824
[[d:Q59772745|Self-service library point Vuren]]	small	#ee7302	Point	5.0489027	51.8248737
[[d:Q59772808|Tiel public library]]	small	#ee7302	Point	5.4366236	51.8845787
```

Adapt this query, save output as .tsv

Wikidata Query Service | Voorbeelden | Hulp | Meer hulpmiddelen

```
#Query used to make GeoJSON input for https://commons.wikimedia.org/wiki/Data:DutchPublicLibraries.map
#Steps involved
#1) Download and save query result as tsv file
#2) Rename headers (replace '_' with '-') in this tsv file :
#     marker_size -->  marker-size
#     marker_color --> marker-color
#     marker_symbol --> marker-symbol
#3) Upload this file to geojson.io (Open --> File)
#4) Copy-paste GeoJSON output (right pane) into Data:DutchPublicLibraries.map file (in the "data" field)

SELECT DISTINCT ?title ?marker_size ?marker_color ?type ?marker_symbol ?long ?lat  WHERE {
#Is Dutch public library branch
?dpl wdt:P31 wd:Q28564. #public library
?dpl wdt:P31 wd:Q11396180. #library branch
?dpl wdt:P17 wd:Q55. #in the Netherlands

?dpl wdt:P625 ?dplLoc. #Location of the dpl

# Get the English Wikidata label of the dpl
?dpl rdfs:label ?dplLabel.
FILTER (lang(?dplLabel) = 'en')

#Transform from 'http://www.wikidata.org/entity/Q63890044   Akersloot public library' to '[[d:Q63890044|Akersloot public library]]'
BIND(CONCAT('[[d:',STRAFTER(STR(?dpl),"http://www.wikidata.org/entity/"),'|',?dplLabel,']]') AS ?title)

# Set 4 default values
BIND("small" AS ?marker_size)
BIND("#ee7302" AS ?marker_color)
BIND("library" AS ?marker_symbol)
BIND("Point" AS ?type)

#Transform: 'Point(4.7322704 52.5633782)' (in 1 column) to  '4.7322704' , '52.5633782' ( i.e. 2 columns longitude + latitude)
BIND(STRBEFORE(STRAFTER(STR(?dplLoc), ' '), ')') AS ?lat)
BIND(STRBEFORE(STRAFTER(STR(?dplLoc), 'Point('), ' ') AS ?long)

}
ORDER BY ?title
```

https://bit.ly/2YG48aY

Copy-paste in browser!

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

2.5) Combining data types

GeoShape + .map

Combining geoshape (with geomask) and .map

Map of public libraries in the province of North-Holland, The Netherlands. Geomask is used

https://www.mediawiki.org/wiki/Help:Extension:Kartographer#Combining_multiple_data_types

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

Combining geoshape (with geomask) and .map

Map of public libraries in the province of North-Holland, The Netherlands. Geomask is used

```
<mapframe width=400 height=700 zoom=9 latitude=52.65 longitude=4.95 text="Map of public libraries in the province of North-Holland, The Netherlands. Geomask is used" align=left>
[
{
  "type": "ExternalData",
  "service": "geoshape",
  "service": "geomask",
  "ids": "Q701",
  "properties": {
    "fill": "#07c63e", "title": "Noord-Holland"
  }
},
{
  "type": "ExternalData",
  "service": "page",
  "title": "DutchPublicLibrariesNorthHolland.map"
}
]
</mapframe>
```

https://commons.wikimedia.org/wiki/Data:DutchPublicLibrariesNorthHolland.map

2.6) GeoShapes using SPARQL and OSM

https://www.openstreetmap.org/relation/192758#map=5/22.086/20.039

Maps with geoshapes based on SPARQL queries in Wikidata

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

https://www.mediawiki.org/wiki/Help:Extension:Kartographer#GeoShapes_via_Wikidata_Query

https://www.mediawiki.org/wiki/Help:Extension:Kartographer#GeoShapes_via_Wikidata_Query

```
== Maps with geoshapes based on SPARQL queries in Wikidata ==
https://www.mediawiki.org/wiki/Help:Extension:Kartographer#GeoShapes_via_Wikidata_Query

<mapframe width=900 height=900 zoom=4 latitude=0 longitude=12  text="Countries in Africa, color coded by land area" align=left>
{
  "type": "ExternalData",
  "service": "geoshape",
  "query": "

#---- Begin SPARQL query // Make sure you only use single quotes (') in the query, otherwise you get a JSON parse error ---
SELECT DISTINCT
  ?id           #Wikidata Qid matching the geoshape on Open Street Map
  ?title        #Popup title when you click on the country
  ?description  #Description in the popup
  ?fill         #Color the geoshape is filled with
  ?stroke       #Color of the geoshape outline
WHERE {
  ?id wdt:P31 wd:Q6256; wdt:P30 wd:Q15. #Country in the continent of Africa
  ?id wdt:P2046 ?area. # Land area of the country

  ?id rdfs:label ?idLabel . FILTER(lang(?idLabel)='en') #only English labels

  BIND(?idLabel as ?title)
  BIND(CONCAT('This is a short description of ',STR(?title)) as ?description)

  # Fill & stroke colors depend on land area of country
  BIND(
    IF(?area < 5000, '#F0F8FF',
    IF(?area < 100000, '#B0E0E6',
    IF(?area < 300000, '#87CEEB',
    IF(?area < 800000, '#1E90FF',
    IF(?area < 1000000, '#4682B4',
    IF(?area < 1500000, '#6A5ACD',
    IF(?area < 2000000, '#8A2BE2',
    '#4B0082')))))))) AS ?color)
  BIND(?color as ?fill)
  BIND(?color as ?stroke)
}
#---------- End SPARQL query ----------------

"}
</mapframe>
```

https://bit.ly/2YBxV4t

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

```
== Maps with geoshapes based on SPARQL queries in Wikidata ==
https://www.mediawiki.org/wiki/Help:Extension:Kartographer#GeoShapes_via_Wikidata_Query

<mapframe width=900 height=900 zoom=4 latitude=0 longitude=12  text="Countries in Africa, color coded by land area" align=left>
```

52 resultaten in 102 ms Code Downloaden Koppeling

id	title	description	fill	stroke
wd:Q912	Mali	This is a short description of Mali	#6A5ACD	#6A5ACD
wd:Q916	Angola	This is a short description of Angola	#6A5ACD	#6A5ACD
wd:Q79	Egypt	This is a short description of Egypt	#6A5ACD	#6A5ACD
wd:Q114	Kenya	This is a short description of Kenya	#1E90FF	#1E90FF
wd:Q924	Tanzania	This is a short description of Tanzania	#4682B4	#4682B4
wd:Q115	Ethiopia	This is a short description of Ethiopia	#6A5ACD	#6A5ACD
wd:Q117	Ghana	This is a short description of Ghana	#87CEEB	#87CEEB
wd:Q929	Central African Republic	This is a short description of Central African Republic	#1E90FF	#1E90FF
wd:Q948	Tunisia	This is a short description of Tunisia	#87CEEB	#87CEEB
wd:Q262	Algeria	This is a short description of Algeria	#4B0082	#4B0082
wd:Q945	Togo	This is a short description of Togo	#B0E0E6	#B0E0E6
wd:Q953	Zambia	This is a short description of Zambia	#1E90FF	#1E90FF
wd:Q258	South Africa	This is a short description of South Africa	#6A5ACD	#6A5ACD
wd:Q657	Chad	This is a short description of Chad	#6A5ACD	#6A5ACD
wd:Q954	Zimbabwe	This is a short description of Zimbabwe		
wd:Q958	South Sudan	This is a short description of South Sudan		
wd:Q962	Benin	This is a short description of Benin	#87CEEB	#87CEEB

https://bit.ly/2YBxV4t

```
"}
</mapframe>
```

```
== Maps with geoshapes based on SPARQL queries in Wikidata ==
https://www.mediawiki.org/wiki/Help:Extension:Kartographer#GeoShapes_via_Wikidata_Query

<mapframe width=900 height=900 zoom=4 latitude=0 longitude=12  text="Countries in Africa, color coded by land area" align=left>
{
  "type": "ExternalData",
  "service": "geoshape",
  "query": "

#---- Begin SPARQL query // Make sure you only use single quotes (') in the query, otherwise you get a JSON parse error ---
SELECT DISTINCT
  ?id           #Wikidata Qid mat
  ?title        #Popup
  ?description  #Description in t
  ?fill         #Color the geosha
  ?stroke       #Color of the geo
WHERE {
  ?id wdt:P31 wd:Q6256; wdt:P30 wd:Q15. #Country in the continent of Africa
  ?id wdt:P2046 ?area. # Land area of the country

  ?id rdfs:label ?idLabel . FILTER(lang(?idLabel)='en') #only English labels

  BIND(?idLabel as ?title)
  BIND(CONCAT('This is a short description of ',STR(?idLabel)) as ?description)

  # Fill & stroke colors depend on land area of countr
  BIND(
    IF(?area < 5000, '#F0F8FF',
    IF(?area < 100000, '#B0E0E6',
    IF(?area < 300000, '#87CEEB',
    IF(?area < 800000, '#1E90FF',
    IF(?area < 1000000, '#4682B4',
    IF(?area < 1500000, '#6A5ACD',
    IF(?area < 2000000, '#8A2BE2',
    '#4B0082')))))))) AS ?color)
  BIND(?color as ?fill)
  BIND(?color as ?stroke)
}
#---------- End SPARQL query ----------------
```

Variables must have these names

Only use single quotes, otherwise you'll get a JSON parse error

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

2.7) Other cool embedded maps

Railway lines around Klang Valley, Malaysia [bewerken | brontekst bewerken]

Railway lines around Klang Valley, Malaysia

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019, from https://en.wikipedia.org/wiki/User:*angys*/sandbox

Railway lines around Klang Valley, Malaysia [bewerken | brontekst bewerken]

Geavanceerde functies | Speciale tekens | Hulp

```
= Railway lines around Klang Valley, Malaysia =
<mapframe text="Railway lines around [[:en:Klang Valley|Klang Valley]], Malaysia" width="800" height=
align=left>
[
{
  "type": "ExternalData",
  "service": "geoline",
  "ids": "Q4207166",
  "properties": {
    "stroke": "#1964b7",
    "stroke-width": 6 }
},
{
  "type": "ExternalData",
  "service": "geoline",
  "ids": "Q4873303",
  "properties": {
    "stroke": "#dc241f",
    "stroke-width": 6 }
},
```

Identifiers

OSM relation ID	8390976
	0 references

https://www.wikidata.org/wiki/Q4207166

Railway lines around Klang Valley, Malaysia

https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019, from https://en.wikipedia.org/wiki/User:*angys*/sandbox

Governors of US states with their party affiliation

https://www.mediawiki.org/wiki/Help:Extension:Kartographer#/map/4

GeoShapes [edit]

Commons: National Library of Wales.map, Wikimedia maps | Map data © Ope...

National Library of Wales collections

media Commons: Cardiff Castle.map, Wikimedia maps | Map data © OpenSt...

Cardiff Castle with library

counties of Wales/Denbighshire.map, Wikimedia maps | Map data © OpenStr...

Historic counties of Wales

Wikimedia maps | Map data © OpenStreetMap contributors

Anglesey and Pembrokeshire geomask

https://www.wikidata.org/wiki/User:Sic19#GeoShapes

MODULE 3

Interactive, layered off-Wiki maps driven by Wikidata

For this Module, it’s nice to have basic experience with

- Python
- PAWS / Jupyter Notebooks
- (Jupyter-Leaflet & Jupyter-widgets)

MediaWiki account + login

https://www.mediawiki.org

https://www.mediawiki.org/wiki/PAWS

English OlafJanssen 24 26 Talk Preferences Beta Watchlist Contributions Log out

MediaWiki

Page Discussion Read Edit View history More Search MediaWiki

PAWS

https://paws.wmflabs.org now redirects here (see m:Talk:Interwiki_map#PAWS).

To access your server go to https://paws.wmflabs.org/paws/hub

See also Manual:Pywikibot/PA nd wikitech:PAWS.

PAWS (**PAWS: A Web Shell**) is an online web-based int programming + publishing environment. It is an implementa popular Jupyter notebook environment for Pyth other programming tasks.

Contents [hide]

1 Why?
2 What?
2.1 Notebooks

Main page
Get MediaWiki
Get extensions
Tech blog
Contribute

Support
User help
FAQ
Technical manual
Support desk
Communication

Development
Bug tracker

PAWS

Start your PAWS server
https://paws.wmflabs.org/paws/hub

Starting your PAWS server

https://meta.wikimedia.org/w/index.php?title=Special:OAuth/authenticate&oauth_token=41edf591bf825bd48d3cc83

Wikipedia:GLAM/Koni... | StuffFromGent | Video Conferencing, ... | Codesnippets | Virustotal | OBSWikidata | LiterairePrijzen | Wikibase | Wikitools | PDdag2019

WIKIMEDIA
META-WIKI

Main page
Wikimedia News
Translations
Recent changes
Random page
Help
Babel

Community
Wikimedia Resource Center
Wikimedia Forum
Mailing lists
Requests
Babylon
Reports
Research
Planet Wikimedia

Beyond the Web
Meet Wikimedians
Events
Movement affiliates
Donate

Tools
Special pages
Printable version

Special page

OAuth

Allows usage of OAuth 1.0a for API authorization

Privacy policy | About Meta | Disclaimers | Developers | Cookie statement

You might see this screen...

Hi OlafJanssen,

In order to complete your request, **PAWS** needs permission to perform the following actions on your behalf on all projects of this site:

- **Perform high volume activity**
  High-volume editing
- **Interact with pages**
  Edit existing pages; Edit protected pages; Create, edit, and move pages; Patrol changes to pages
- **Interact with media**
  Upload new files; Upload, replace, and move files
- **Perform administrative actions**
  Rollback changes to pages
- **Interact with your watchlist**
  View your watchlist
- **Miscellaneous activity**
  Edit your watchlist

Privacy policy

Allow | Cancel

Starting your PAWS server

https://paws.wmflabs.org/paws/hub/user/USERNAME

Your PAWS server running

https://paws.wmflabs.org/paws/user/OlafJanssen/tree

rawgit example

Wikipedia:GLAM/Koni... | StuffFromGent | Video Conferencing, ... | Codesnippets | Virustotal | OBSWikidata | LiterairePrijzen | Wikibase | Wikitools | PDdag2019 | IIIF | Servers

PAWS

Quit | Logout | Control Panel

Files | Running | Clusters

Select items to perform actions on them.

0 /

node_modules		
Wikibase_Universal_Bot	een maand geleden	
DutchPublicLibraries_OpenStreetMap .ipynb	5 dagen geleden	442 kB
DutchPublicLibraries_GoogleMaps_Test.ipynb	5 dagen geleden	18.1 kB
UniversalBot.ipynb	één maand geleden	555 B
VariousTests.ipynb	2 maanden geleden	8.7 kB
WikidataMapMakingWorkshop.ipynb	Running 8 minuten geleden	37.4 kB
NetherlandsPublicLibrariesHeatmap.html		
nl_munis_with_public_libs.json		
popupstyle.css	2 maanden geleden	170 B

.ipynb =

interactive **py**thon **n**ote**b**ook

https://paws.wmflabs.org/paws/user/USERNAME/tree

- https://en.wikipedia.org/wiki/Project_Jupyter#Jupyter_Notebook
- https://realpython.com/jupyter-notebook-introduction

Starting your PAWS terminal

Your PAWS terminal(s) running

https://paws.wmflabs.org/paws/user/OlafJanssen/terminals/1

PAWS

```
Welcome to PAWS!
Please behave responsibly
Getting Started: https://www.mediawiki.org/wiki/Manual:Pywikibot/PA
Questions? Need help? Find us on #wikimedia-cloud on IRC on freenode
File bugs at https://phabricator.wikimedia.org/maniphest/task/create
@PAWS:~$
```

/1
/2
/3
/4

https://paws.wmflabs.org/paws/user/USERNAME/terminals/1

Stopping your PAWS server

Stopping your PAWS server

https://paws.wmflabs.org/paws/hub/home

Your PAWS public folder (even when server is offline)

https://paws-public.wmflabs.org/paws-public/User 110% rawgit example

Wikipedia:GLAM/Koni... StuffFromGent Video Conferencing, ... Codesnippets Virustotal OBSWikidata LiterairePrijzen Wikibase

Index of /paws-public/19781798/

File Name ↓	File Size ↓
Parent directory/	–
Wikibase_Universal_Bot/	–
node_modules/	–
WikidataMapMakingWorkshop.ipynb	37433
NetherlandsPublicLibrariesHeatmap.html	4562743
nl_munis_with_public_libs.json	786926
DutchPublicLibraries_OpenStreetMap .ipynb	442444
DutchPublicLibraries_GoogleMaps_Test.ipynb	18132
UniversalBot.ipynb	555
VariousTests.ipynb	
popupstyle.css	170

https://**paws-public.**wmflabs.org/paws-public/User:USERNAME

PAWS alternative: local Notebook installation

ANACONDA.

Products | Why Anaconda? | Solutions | Resources | Company | **Download**

Anaconda Distribution

The World's Most Popular Python/R Data Science Platform **Download**

The open-source Anaconda Distribution is the easiest way to perform Python/R data science and machine learning on Linux, Windows, and Mac OS X. With over 15 million users worldwide, it is the industry standard for developing, testing, and training on a single machine, enabling *individual data scientists* to:

- Quickly download 1,500+ Python/R data science packages
- Manage libraries, dependencies, and environments with Conda
- Develop and train machine learning and deep learning models with scikit-learn, TensorFlow, and Theano
- Analyze data with scalability and performance with Dask, NumPy, pandas, and Numba
- Visualize results with Matplotlib, Bokeh, Datashader, and Holoviews

jupyter | spyder | NumPy | SciPy | Numba
pandas | DASK | Bokeh | HoloViews | Datashader
matplotlib | scikit learn | H_2O.ai | TensorFlow | CONDA

- https://jupyter.org/install
- https://www.anaconda.com/distribution/
- https://dataiseasy.com/2019/03/how-to-install-anaconda-and-jupyter-notebook

Go to public PAWS folder of **User:OlafJanssen**

https://paws-public.wmflabs.org/paws-public/User 110% rawgit example

Wikipedia:GLAM/Koni... StuffFromGent Video Conferencing, ... Codesnippets Virustotal OBSWikidata LiterairePrijzen Wikibase

Index of /paws-public/19781798/

File Name ↓	File Size ↓
Parent directory/	
Wikibase_Universal_Bot/	
node_modules/	
WikidataMapMakingWorkshop.ipynb	37433
NetherlandsPublicLibrariesHeatmap.html	4562743
nl_munis_with_public_libs.json	786926
DutchPublicLibraries_OpenStreetMap .ipynb	442444
DutchPublicLi	
UniversalBot.i	
VariousTests.i	
popupstyle.css	170

Example notebook we will use

https://paws-public.wmflabs.org/paws-public/User:OlafJanssen/WikidataMapMakingWorkshop.ipynb

This notebook in **raw format (json)**


```
{
 "cells": [
  {
   "cell_type": "markdown",
   "metadata": {},
   "source": [
    "# Building a stand-alone off-Wiki layered map using Wikidata & SPARQL\n",
    "\n",
    "This Jupyter notebook shows you step by step **how to make a Wikidata-driven layered map that can be used off-Wiki**.\n",
    "\n",
    "It is part of Module 3 of the map making workshop [From Wikidata to interactive off-Wiki maps in three steps](https://github.com/ookgezelli
/WikidataMapMakingWorkshop)\n",
    "\n",
    "See https://github.com/ookgezellig/WikidataMapMakingWorkshop/blob/master/OutlineAndNotes.md for the full layout of this workshop\n",
    "\n",
    "This notebook is publically available at\n",
    "* https://paws-public.wmflabs.org/paws-public/User:OlafJanssen/WikidataMapMakingWorkshop.ipynb (and in [raw format](https://paws-public.wmf
/paws-public/User:OlafJanssen/WikidataMapMakingWorkshop.ipynb?format=raw))\n",
    "* https://github.com/ookgezellig/WikidataMapMakingWorkshop/blob/master/module3stuff/WikidataMapMakingWorkshop.ipynb (and in [raw format]
(https://raw.githubusercontent.com/ookgezellig/WikidataMapMakingWorkshop/master/module3stuff/WikidataMapMakingWorkshop.ipynb)) \n"
   ]
  },
  {
   "cell_type": "markdown",
   "metadata": {},
   "source": [
    "For questions about this notebook, contact [Olaf Janssen](https://www.wikidata.org/wiki/User:OlafJanssen) on Wikidata // olaf.janssen@kb.nl
https://twitter.com/ookgezellig\n",
    "    \n",
    "************"
   ]
  },
  {
   "cell_type": "m
   "metadata": {},
   "source": [
    "## Start of t
   ]
  },
  {
   "cell_type": "markdown",
   "metadata": {},
   "source": [
    "To make the map we will use\n",
    "1. **PAWS** (Jupyter Notebooks as a cloud service) - https://www.mediawiki.org/wiki/PAWS\n",
    "2. **SPARQL queries** from Wikidata - https://www.wikidata.org + https://query.wikidata.org/\n",
```


https://paws-public.wmflabs.org/paws-public/User:OlafJanssen/WikidataMapMakingWorkshop.ipynb**?format=raw**

Save this **raw file** to your PC

https://paws-public.wmflabs.org/paws-public/User:OlafJanssen/WikidataMapMakingWorkshop.ipynb**?format=raw**

… and upload it to your PAWS server

https://paws.wmflabs.org/paws/user/USERNAME/tree

… and upload it to your PAWS server

… and upload it to your PAWS server

Notebook on your own PAWS server to play with

PAWS WikidataMapMakingWorkshop Last Checkpoint: 31 minuten geleden (autosaved)

Logout Control Panel

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3

Run Markdown Public Link **Memory:** 134 MB

Add tag

Building a stand-alone off-Wiki layered map using Wikidata & SPARQL

This Jupyter notebook shows you step by step **how to make a Wikidata-driven layered map that can be used off-Wiki**.

It is part of Module 3 of the map making workshop From Wikidata to interactive off-Wiki maps in three steps

See https://github.com/ookgezellig/WikidataMapMakingWorkshop/blob/master/OutlineAndNotes.md for the full layout of this workshop

This notebook is publically available at

- https://paws-public.wmflabs.org/paws-public/User:OlafJanssen/WikidataMapMakingWorkshop.ipynb (and in raw format)
- https://github.com/ookgezellig/WikidataMapMakingWorkshop/blob/master/module3stuff/WikidataMapMakingWorkshop.ipynb (and in raw format)

Add tag

For questions about this notebook, contact Olaf Janssen on Wikidata // olaf.janssen@kb.nl // https://twitter.com/ookgezellig

Add tag

Start of the workshop

Add tag

To make the map we will use

https://paws.wmflabs.org/paws/user/USERNAME/notebooks/WikidataMapMakingWorkshop.ipynb

/en/latest/

4. **ipywidgets** (or Jupyter-widgets) - https://github.com/jupyter-widgets/ipywidgets + https://ipywidgets.readthedocs.io/en/latest

Notebook on your own PAWS server to play with

The notebook should be self-explanatory, so

Adapt, play, understand,
get frustrated, learn

Make your own interactive, layered map

Exporting your map to stand-alone, off-Wiki HTML page

As a final step for this workshop, we want to export the map to a (stand-alone, off-Wiki) HTML page that can be viewed in a browser.

https://ipywidgets.readthedocs.io/en/latest/embedding.html#python-interface

The map above is available at http://ookgezellig.github.io/WikidataMapMakingWorkshop/NetherlandsPublicLibrariesHeatmap.html

In [ ]:

```
# Export the map to html file
# https://ipywidgets.readthedocs.io/en/latest/embedding.html#python-interface
# The addition of 'state=dependency_state([m])' keeps the html file growing too large

embed_minimal_html('NetherlandsPublicLibrariesHeatmap.html', views=[m], state=dependency_sta

# This map is available at http://ookgezellig.github.io/WikidataMapMakingWorkshop/Netherlan
```

This is the end of the workshop

Exporting your map to stand-alone, off-Wiki HTML page

Exporting your map to stand-alone, off-Wiki HTML page

file:///C:/Users/oja010/AppData/Local/Temp/NetherlandsPublicLibrariesHeatmap.html

THANKS!!!

Let me know your
feedback on this workshop

In person // User:OlafJanssen // olaf.janssen@kb.nl // @ookgezellig

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