

Addressing Addresses

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28th July 2018

State of the Map 2018
Milano

Introduction

Addresses



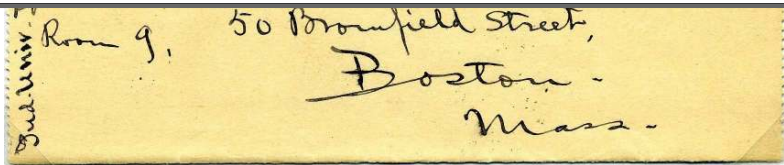
Addresses



Address

Place where a person can be communicated with.

(Marriam Webster)

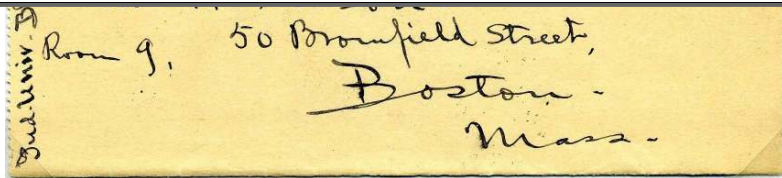


Addresses



Location description

Textual description of a geographic location.



Example: location of a fountain

OpenStreetMap

Way: 594133079

Bern: changed name=* to name:description:de=* for descriptive fountain names

Edited about 21 hours ago by SelfishSeahorse

Version #4 · Changeset #60914486

Tags

access	private
amenity	fountain
retailing:way	retailing:way
description:de:location	Auf der Westseite des Hopfgut Gebäudes Brunnenmattstrasse 50 in 3007 Bern.
description:name:de	Brunnen Hopfgut
drinking_water	no
image	https://upload.wikimedia.org/wikipedia/commons/thumb/4/4f/Brunnen_Hopfgut_01.jpg/800px-Brunnen_Hopfgut_01.jpg
note	Ausser Betrieb

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Background

The screenshot shows the OpenStreetMap website interface. At the top, the browser address bar displays the URL: `https://www.openstreetmap.org/search?query=politecnico%20di%20milano&map=15/45.4829/9.2314`. Below the browser, the OpenStreetMap logo is visible, along with buttons for 'Edit', 'History', and 'Export'. On the right side, there are buttons for 'Log In' and 'Sign Up'. The main search area on the left contains the search query 'politecnico di milano' and a list of search results. The map on the right shows the area around the Politecnico di Milano in Milan, Italy, with various streets and landmarks labeled. A red box highlights the search results panel.

OpenStreetMap

Search Results

Results from OpenStreetMap Nominatim

- University Politecnico di Milano, Sede Milano Leonardo, Via Edoardo Bassini, Città Studi, Milan, Lombardy, 20133, Italy
- Parking Politecnico di Milano, no, Città Studi, Milan, Lombardy, 20132, Italy
- University Politecnico di Milano, Via Edoardo Bassini, Città Studi, Milan, Lombardy, 20132, Italy
- Parking Entrance Politecnico di Milano, Via Gaetano Previati, Pescarenico, Lecco, LC, Lombardy, 23900, Italy
- University Politecnico di Milano - Polo Territoriale di Como, 42, Via Francesco Anzani, Garzola, Lombardy, 23046, Italy

300 m
1900 ft

OpenStreetMap contributors

Postal Addresses

Postal Addresses



- **made for human use** (aka offline)
- well-known points of reference
- hierarchic structure
- coverage

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OSM Tagging

Postal Addresses in OSM

Keyaddr - OpenStree... X

https://wiki.openstreetmap.org/wiki/Key:addr

English Create account Log in

Page Discussion Read View source View history Search OpenStreetMap Wiki

Key:addr

Available languages — Key:addr [purge](#) [Help](#)

- čeština • Deutsch • eesti • **English** • español • français • hrvatski • italiano • Nederlands • polski • portuguese • suomi • Tiếng Việt • русский • українська • 日本語

Other languages — Help us translate this wiki

The various **addr** keys are used to provide address information for buildings and facilities. See [Addresses](#) for more details on usage.

Contents [hide]

- How to map
 - If it is a point of interest
 - If the address applies to an area (e.g. often detached houses, terraced house, buildings including or without associated open areas)
 - If the address applies to a point (e.g. entrance, gate)
 - If you don't know the extent of the address
- Commonly used subkeys
 - Tags for individual houses
 - For countries using hamlet, subdistrict, district,

addr v · d · e

Description

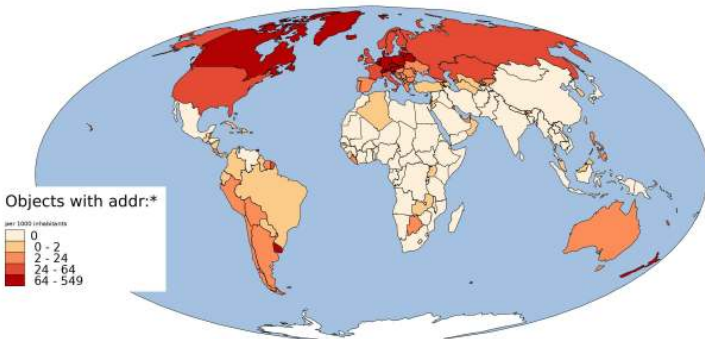
The addr tag is the prefix for several addr:* keys to describe addresses

Group: Address

Main Page
 The map
 Map Features
 Contributors
 Help
 Blogs
 Shop
 Donations
 Recent changes

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

Objects with addr:* tags per country



ca. 84 million objects

Address base

addr:housenumber



80 million

addr:housename



340.000

- `addr:conscription_number`, `addr:street_number`, `addr:provisional_number`
- `addr:interpolation`
- `addr:flat`, `addr:unit`

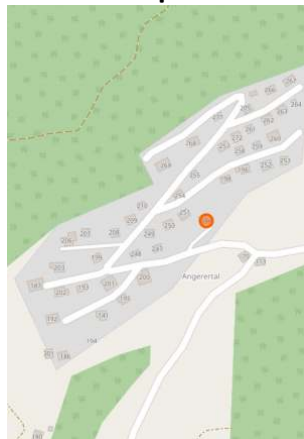
Number point of reference

addr:street



70 million

addr:place



7.4 million

Japanese Addresses

JA:住所 - Open

Secure | <https://wiki.openstreetmap.org/wiki/JA:住所>

以下の図は、“千葉県 千葉市 中央区 松波一丁目”の区画を表しています。この区域は19の街区(block)に分けられており、それぞれに番号が付与されています。これにより、“一丁目”の中に存在しているそれぞれの区画の街区番号が確定します。



“1-Chome” is divided into 19 blocks

lower neighborhood = 1 Chome

それぞれの街区の中には、家屋などの建物が存在します。それぞれの建物や敷地を1単位として、一意の番号が付与されます。この番号を住居番号(House number)と呼びます。この際、住居番号は家屋の向きなどで欠番になっていることもあります。

以下は、“千葉県 千葉市 中央区 松波一丁目”の街区番号“12”における住居番号の例です。

それぞれの家屋・敷地に対して、7つの住居番号が割り振られています。



There are 7 odd house numbers in this 12th block.

12th block
1 Chome 12 lowen neighbourhood

Administrative boundaries

boundary = administrative v · d · e



Description
An administrative boundary

Group: Boundaries

Used on these elements



Useful combination

- name=*
- admin_level=*

Status: de facto

taginfo [More...]

	394	2.90 %
	1 071 854	89.80 %
	489 890	89.99 %



admin_level v · d · e



Description
Indicates the level of an administrative boundary

Group: Boundaries

Used on these elements



Documented values: 1

Useful combination

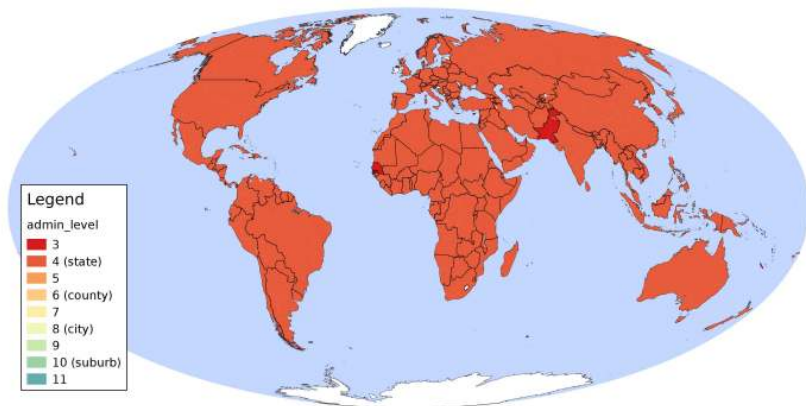
- boundary=administrative

Status: de facto

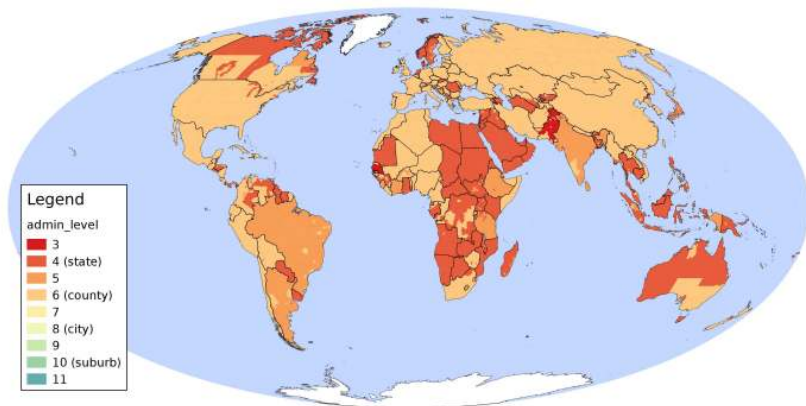
taginfo [More...]

	27 850
	895 722
	490 733

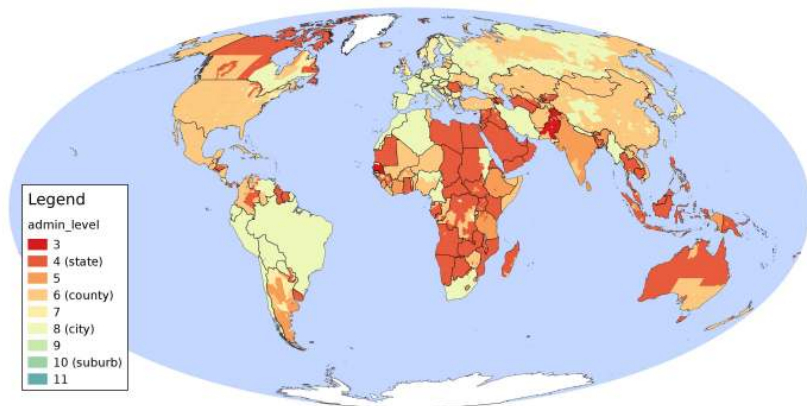
admin_level



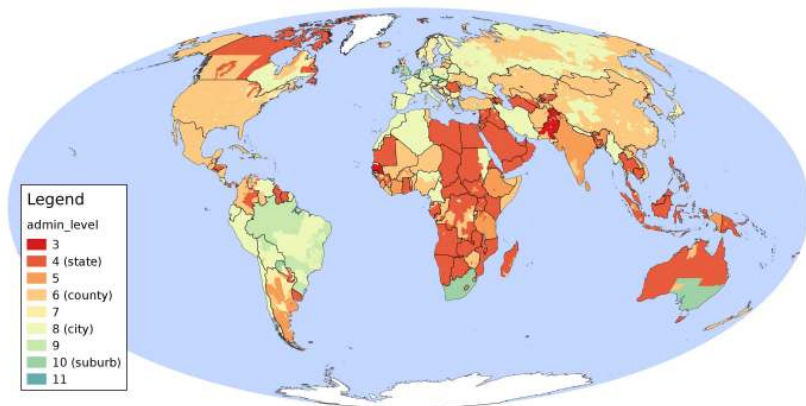
admin_level



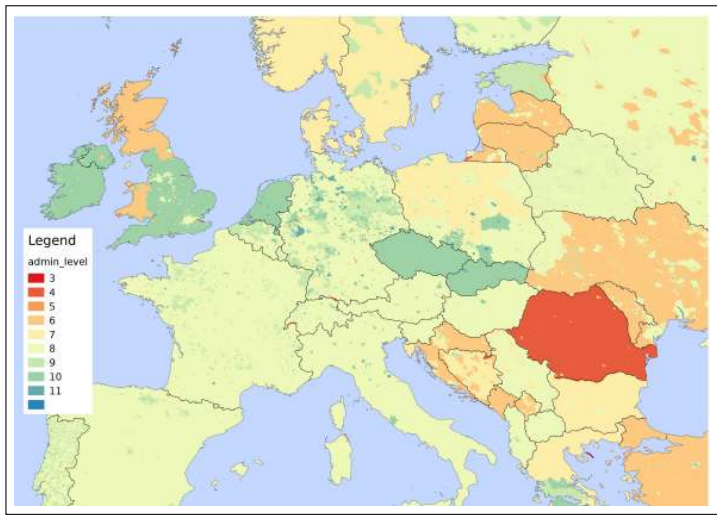
admin_level



admin_level



admin levels - Europe



Fun with Administrations: US

Relation: Rair

Secure <https://www.openstreetmap.org/relation/179052#map=11.215,37.53,78.8197>

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Search Where is that?

Relation: Raleigh (179052) ✕

Added lanes.

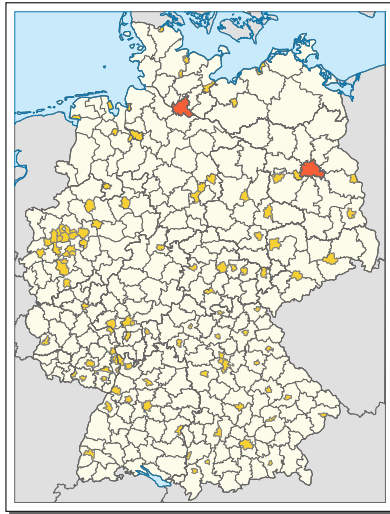
Edited about 1 month ago by [LeifRasmussen](#)
Version #28 · Changeset #59299111

Tags

admin_level	8
border_type	city
boundary	administrative
is_in	USA, North Carolina
is_in:country	USA
is_in:country_code	US
is_in:iso_3166_2	US:NC
is_in:state	North Carolina
is_in:state_code	NC

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Fun with Administrations: Germany



If it's worth doing...

Tag:boundary

Secure | https://wiki.openstreetmap.org/wiki/Tag:boundary%3Dadministrative

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	N/A	States (9)	Zones (68+2)	Woreda (550+6)	N/A	Kebelo
Finland (proposed by ikundj) (proposed by Boxerman , augmented by Skala)	Main areas (Pääalueet, NUTS 1); Manner-Suomi	Provinces (AVin toimialueet (ent. läänit), NUTS 2); Etelä-Suomi [¶]	N/A	Regions (Maakunnat, NUTS 3); Uusimaa [¶]	Sub-regions (Seutukunnat, LAU 1); Helsingin seutukunta [¶]	municipalities (Kunnat / Kaupungit, LAU 2, for ref= see Väestörekisterikeskus [¶] , kuntakuva [¶]); Helsingi [¶]
France (in use)	Territorial areas (not purely administrative: one for Metropolitan France including Corsica, and one for each overseas department) Overseas collectivities	Régions (note: 7 regions have replaced the 16 former régions still used by NUTS2 and ISO3166-2)	Circonscription départementale (replacing a splitted former department, for the prefecture of Rhône, still used by NUTS3 and ISO3166-2)	Départements (similar to NUTS3 and ISO3166-2), including the new department of Rhône (a sous-préfecture) The Métropole de Lyon (also a sous-préfecture)	Arrondissements (subdivisions of départements around a sous-préfecture (note: previously used for EPCI, which are now outside the admin_level scheme)	Communes (Use name=* to indicate the name of the commune, and ref:INSEE=* to indicate the unique identifier given by INSEE (COG).
French Polynesia	The overseas collectivity	N/A	N/A	Administrative divisions (archipelagos or sub-archipelagos)	N/A	Communes (ex. Mo'orea, Ma'ao, 'Arae, etc.)
Gabon (proposed by johannemlaason)	N/A	Provinces	N/A	Departments	N/A	N/A
Gambia (proposed by kai 7 May 2017)	N/A	Regions (Divisions)	LGAs	Districts	N/A	N/A
Georgia (see also Administrative Divisions of Georgia)	Disputed territories - partially recognized states (Abkhazia and South Ossetia)	regions (იბოიფი) including the Ajaran Autonomous Republic (ავტონომიური რეპუბლიკა)	N/A	districts (რაიონი)	N/A	N/A
Germany (see also Grenzen in Deutschland)	N/A	federal states (Bundesland) (NUTS 1)	state-district border (Regierungsbezirk) (NUTS 2)	county borders (Landkreis / Kreis / kreisfreie Stadt / Stadtkreis) (NUTS 3)	amt (Amtsgemeinde, Verwaltungsgemeinschaft) (LAU 1)	Towns, Municipalities / City-districts (Stadt, Gemeinde) (LAU 2)
Umgestellt Dez. 2008 / levels changed Dec. 2008 (siehe Diskussionsseite / see discussion page), see also the proposal with 11 values in next table						
Ghana (proposed)	N/A	Region	N/A	District	N/A	N/A
Guinea - Guinée (proposed / used)	N/A	Region	N/A	Prefectures	N/A	Sub-prefectures (Communes)

If it's worth doing...

Tag:boundary

Secure | https://wiki.openstreetmap.org/wiki/Tag:boundary%3Dadministrative

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Finland (proposed by ikund) <small>(proposed by Bozeman, augmented by Skala)</small>	N/A	Provinces (Pääalueet, NUTS 1); Manner-Suomi	N/A	Regions (Maakunnat, NUTS 2); Uusimaa@	Sub-regions (Seutukunnat, LAU 1); Helsinki seutukunta@	municipalities (Kunnat / Kaupungit, LAU 2, for ref: see HistoricalKaskus@ , kuntajuttel@ ; Helsinki@
France (in use)	Territorial areas (not purely administrative: one for Metropolitan France including Corsica, and one for each overseas department) Overseas collectivities	Regions (most 7 regions have replaced the 16 former regions still used by NUTS2 and ISO3166-2)	Circonscription départementale (replacing a splitted former department, for the prefecture of Rhône, still used by NUTS2 and ISO3166-2)	Départements (similar to NUTS2 and ISO3166-2), including the new department of Rhône (a sous-préfecture) The Métropole de Lyon (also a sous-préfecture)	Arrondissements (subdivisions of départements around a sous-préfecture) (note: previously used for EPCI, which are now outside the admin_level scheme)	Communes (user name=*1 to indicate the name of the commune, and ref:INSEE=* to indicate the unique identifier given by INSEE (COG))
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Gabon (proposed by jhanemliscan)	N/A	Provinces	N/A	Departments	N/A	N/A
Gambia (proposed by kati 7 May 2017)	N/A	Regions (Divisions)	LGA's	Districts	N/A	N/A
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If it's worth doing...

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Secure | https://wiki.openstreetmap.org/wiki/Tag:boundary%3Dadministrative

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Place nodes

 **place** v · e · o



Description

The place tag is used on a single node at the centre of a named settlement or on an area outlining it.

Group: Places

Used on these elements

Documented values: 27

Useful combination

- `name=*`
- `population=*`
- `wikidata=*/wikipedia=*`

Status: de facto




taginfo [More...]

	4 211 239
	612 690
	183 392

Places - Admin values

Values



Administratively declared places

Key	Value	Element	Description	Map rendering	Image	Count
place	country		A nation state or other high-level national political/administrative area.			222 
						0 
						3 
place	state	 	A large sub-national political/administrative area.			1 803 
						8 
						241 
place	region					2 756 
						68 
						405 
place	province					148 
						1 
						93 
place	district					172 
						41 
						1 172 
place	county					6 595 
						25 
						1 722 
place	municipality					909 
						24 
						1 833 

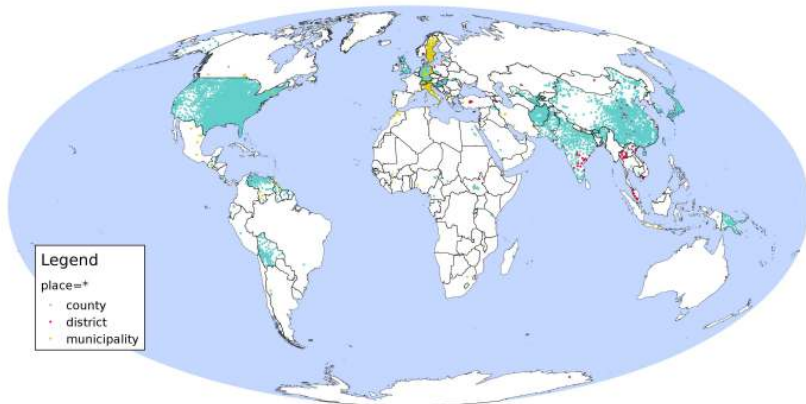
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place	state	 	A large sub-national political/administrative area.			1 803  8  241 
place	region					2 756  68  405 
place	province					148  1  93 
place	district					172  41  1 172 
place	county					6 595  25  1 722 
place	municipality					909  24  1 833 




























































Counties, districts, municipalities



Counties, districts, municipalities



Cities, towns, villages

Populated settlements, urban																															
Key	Value	Element	Description																												
place	city	 	Populated settlements, urban and rural <table border="1"> <thead> <tr> <th>Key</th> <th>Value</th> <th>Element</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>place</td> <td>town</td> <td>  </td> <td>An important urban centre, between a village and a city in size.</td> </tr> <tr> <td>place</td> <td>village</td> <td>  </td> <td>A smaller distinct settlement, smaller than a town with few facilities available with people traveling to nearby towns to access these.</td> </tr> <tr> <td>place</td> <td>hamlet</td> <td> </td> <td>A smaller rural community, typically with fewer than 100-200 inhabitants, and few infrastructure.</td> </tr> <tr> <td>place</td> <td>isolated_dwelling</td> <td>  </td> <td>The smallest kind of settlement (1-2 households).</td> </tr> <tr> <td>place</td> <td>farm</td> <td> </td> <td>An individually named farm.</td> </tr> <tr> <td>place</td> <td>allotments</td> <td> </td> <td>A separate settlement, which is located outside an officially inhabited locality and has its own addressing</td> </tr> </tbody> </table>	Key	Value	Element	Description	place	town	  	An important urban centre, between a village and a city in size.	place	village	  	A smaller distinct settlement, smaller than a town with few facilities available with people traveling to nearby towns to access these.	place	hamlet	 	A smaller rural community, typically with fewer than 100-200 inhabitants, and few infrastructure.	place	isolated_dwelling	  	The smallest kind of settlement (1-2 households).	place	farm	 	An individually named farm.	place	allotments	 	A separate settlement, which is located outside an officially inhabited locality and has its own addressing
Key	Value	Element		Description																											
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place	allotments	 		A separate settlement, which is located outside an officially inhabited locality and has its own addressing																											
place	borough	 																													
place	suburb	 																													
place	quarter	 																													
place	neighbourhood	 																													
place	city_block	 																													
place	plot	 																													

Making Sense of the Data

How to do an Address

1. `addr:*` tags

- sort appropriately

All expected parts there? Done!

2. Administrative boundaries

- sort by `admin_level`, remove less well-known levels
- assign type (country, state, county, ...)

All expected parts there? Done!

3. Nearby place nodes

- remove nodes already covered by boundaries
- sort remaining nodes by hierarchy and use closest node of each level

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Tagging addresses

Mandatory tagging

- `addr:housenumber`, `addr:housename`
- `addr:street` or `addr:place` (not both)

Optional tagging

- other address parts
- `addr:` is not `is_in`

Does not fit your local addresses? Invent and document.

Hierarchies, hierarchies, hierarchies

admin_levels

- well-known vs. governmental-only

Tag relationships

- admin_level
- place
- addr:*

Place types

- hierarchy

Per Country

Let's talk

lonvia@denofr.de

<https://nominatim.org>