

Taginfo

**The New Tag Information System
for OpenStreetMap**



Jochen Topf

OSM Objects

Nodes

1200 million

Ways

100 million

Relations

1 million

94%
without tags

Tags

key = value

highway = residential

amenity = post_box

27.000 different keys

60 mil. different tags

600 mil. key combinations

Questions

Which tag should I use for x?

What does tag x mean?

Which tags should I use on my map?

How does tag x look on my map?

Is tag x or tag y used more often?

Which important tags are not documented?

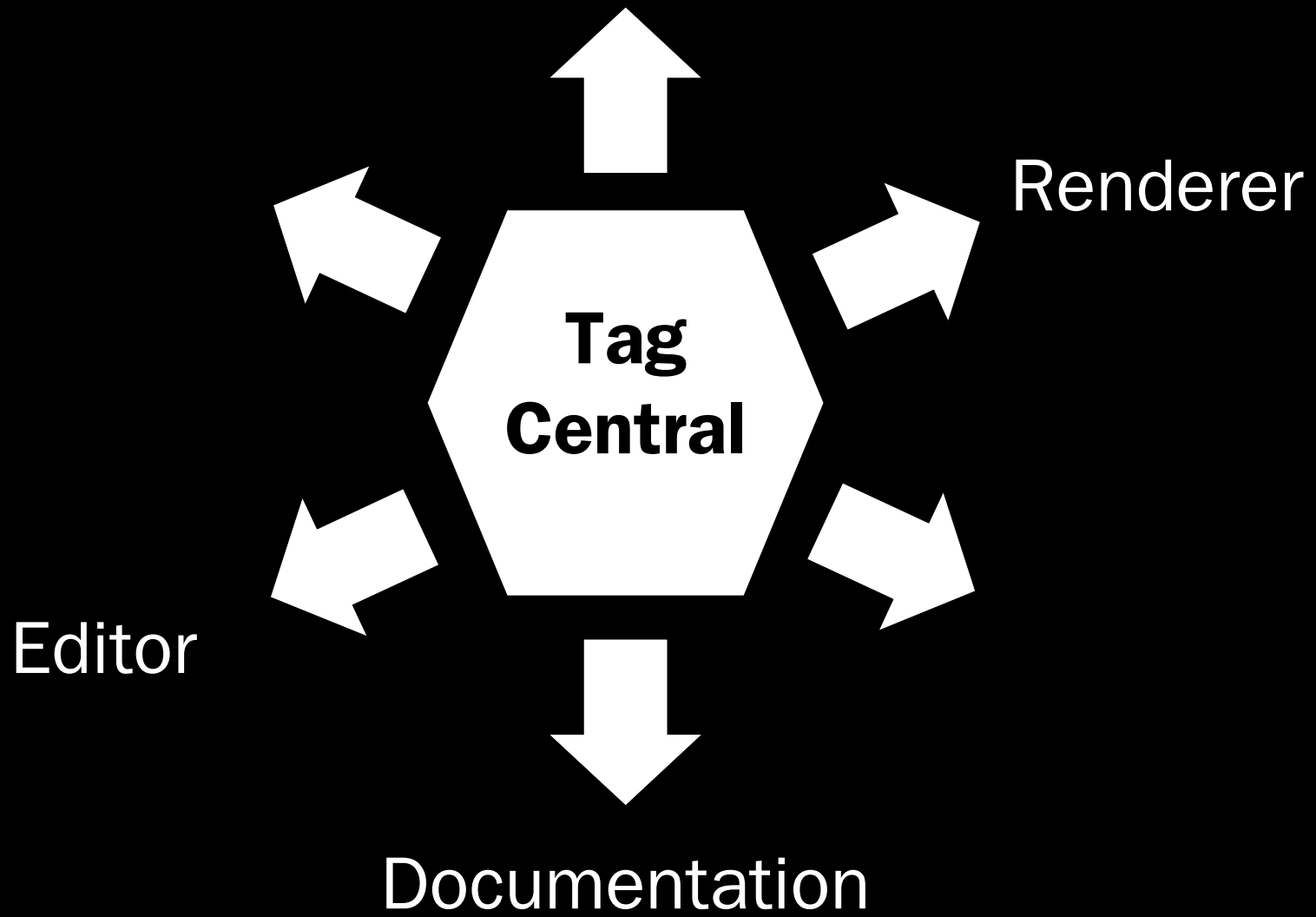
amenity	arts_centre	• 	an arts centre		
amenity	atm	• 	an ATM or cash point		
amenity	baby_hatch	• 	a place where you can drop a baby anonymously for adoption		
amenity	bank	• 	a bank (for a bank that also has an ATM, use amenity=bank and at=yes)		
amenity	bbq	• 	A public grill for cooking meat or vegetables, most typically to eat outdoors. You may want to include a "fuel=wood/gas/electric" key		
amenity	bench	• 	a bench to sit down and relax a bit		
amenity	bergaren	• 	Beer garden in Wikipedia		
amenity	bicycle_parking	• 	Facility for bicycles		
amenity	bicycle_rental	• 	Rent a bicycle		
amenity	bureau_de_change	• 	Bureau de change, Currency exchange, Wechsel, Cambio - a place to change foreign bank notes and travellers cheques		
amenity	bus_station	• 	Bus Station (this is a big station, a bus stop is highway=bus_stop)		
amenity	brothel	• 	a brothel		
amenity	cafe	• 	a cafe		
amenity	car_rental	• 	Rent a car		
amenity	car_sharing	• 	Share a car		
amenity	cinema	• 	a cinema		
amenity	college	• 	a college campus or buildings		
amenity	courthouse	• 	a place where justice is dispensed		
amenity	crematorium	• 			
amenity	dentist	• 	A dental practice / surgery.		
amenity	doctors	• 	A doctors practice / surgery.		
amenity	drinking_water	• 	A source of drinking water		
amenity	embassy	• 	An embassy		
amenity	emergency_phone	• 	A telephone dedicated to emergency calls		
amenity	fast_food	• 	Fast Food Restaurant (see also amenity=restaurant). The kind of food served can be tagged with cuisine=*		
amenity	ferry_terminal	• 	Ferry terminal/stop. A place where people/cars/etc. can board and leave a ferry.		
amenity	fire_station	• 	A Fire station		
amenity	food_court	• 	An area with several different restaurant food counters and a shared eating area. Commonly found in malls, airports, etc.		
amenity	fountain	• 	A fountain for cultural / decorative / recreational purposes.		
amenity	fuel	• 	Petrol station; gas station; marine fuel; ... Streets to petrol stations are often tagged highway=service		
amenity	grave_yard	• 	A (smaller) place of burial. Often you'll find a church nearby. Large places should be landuse=cemetery instead.		
amenity	grill_bar	• 	A container that hold grill or a feature from soil and grill.		
amenity	hospital	• 	Often used in conjunction with emergency=yes to note whether or not the hospital has emergency facilities (A&E (brt.) or ER (com.))		
amenity	hunting_stand	• 	A hunting stand		

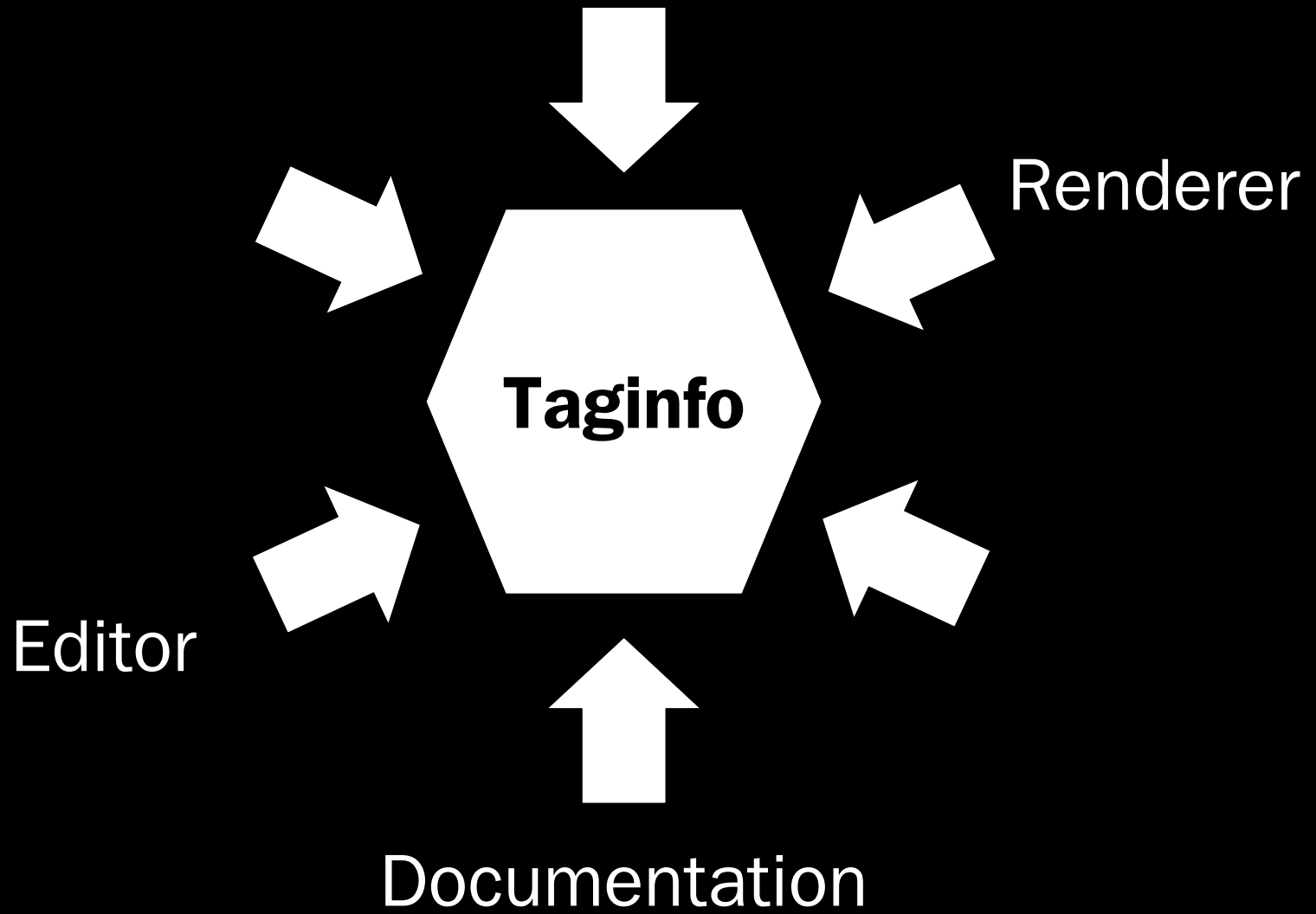
Why Not the Wiki?

Not even 800 keys are documented! <3%

Undocumented keys that are
used millions of times!

Documentation often out of date and insufficient.





Goals

All data (planet)

As many additional sources as possible

Updated at least daily

Can run on normal hardware

Fast and easy-to-use UI

Predecessors

Tagwatch

Tagstat

OSMdoc

Data Sources



Database



Wiki



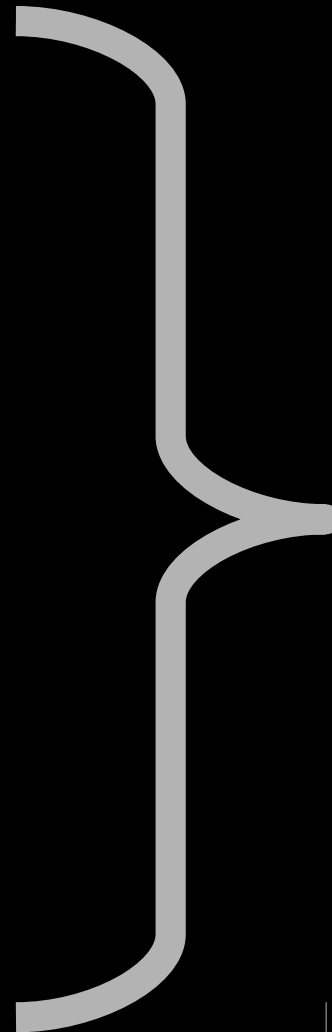
JOSM



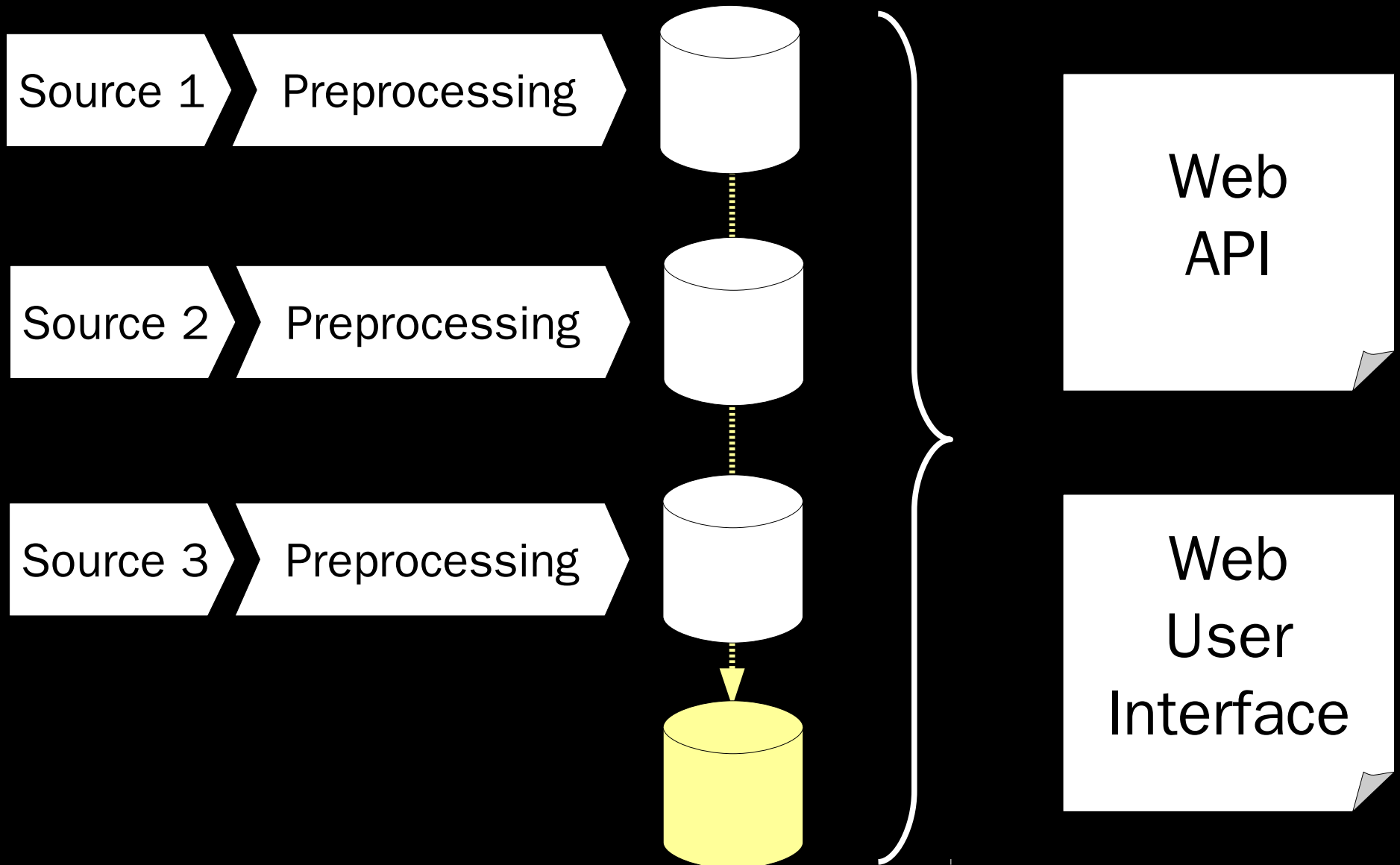
Potlatch 2



Merkaartor



Architecture



Technologies

Statistics: C++ (Osmium)

Data collection and preprocessing: Ruby, sh, SQL

Data storage: Sqlite

Web interface: Sinatra (Ruby)

Web pages: jQuery, flexigrid, Protovis (SVG)

Server

One of the servers sponsored by STRATO

Nightly update

1h to update planet, 1h for statistics

Needs about 3.5 GB RAM

Databases: about 9.5 GB

Tag cloud

AND_nosr_r FIXME abutters **access** addr:city addr:housenumber addr:postcode addr:street admin_level aerialway aeroway agricultural alt_name
amenity area asb atm attribution backrest **barrier** bench **bicycle** board_type boat border_type boundary brand bridge **building** bus cables
capacity collection_times color colour comment construction converted_by covered craft **created_by** crossing crossing_ref cuisine cutting cycleway
denomination description direction dispensing distance disused ele electrified email **embankment** emergency fax fee fenced fireplace **fixme** **foot** footway
frequency from gauge goods height hgv **highway** hiking historic history horse iata icao import import_uuid incline information int_name int_ref
internet_access is_in junction key **landuse** lanes layer lcn **leisure** level line lit living_street loc_name man_made map_size map_type material maxheight
maxlength maxspeed maxweight maxwidth military minspeed motor_vehicle motorboat motorcar motorcycle motorroad mountain_pass
mtb **name** name_1 nat_ref **natural** ncn_ref network noexit note office old_name old_railway_operator old_ref **oneway** onkz opening_hours operator
park_ride **parking** passing_places phone **place** place_name population postal_code **power** power_source psv public_transport railway rcn_ref ref
religion restriction route route_ref ruins **sac_scale** seats segregated **service** shelter **shop** ski smoking smoothness snowmobile **source** source_ref
sport stars step_count **surface** symbol tactile_paving tiger:cfcc tiger:county tiger:reviewed tiger:source tiger:tlid to toll **tourism** tracks **tracktype**
traffic_calming traffic_sign trail_visibility **tunnel** type uic_ref uploaded_by url usage vehicle vending voltage wall **waterway** website wetland wheelchair
width wikipedia wires wood



OSM

Keys

Deutsch

Daten vom: 2011-04-02 22:00 UTC

[Datenquellen](#)[Download](#)[Über Taginfo](#)[Wiki](#)

Keys

Key	* Total		* Nodes		* Ways		* Relation		U
source	78 391 755	6.97% ■	35 736 217	51.95% ■	42 277 234	47.82% ■	378 304	40.15% ■	
highway	39 038 195	3.47% ■	1 846 264	2.68% ■	37 188 328	42.07% ■	3 603	0.38%	
created_by	33 571 501	2.98% ■	29 268 042	42.55% ■	4 264 833	4.82% ■	38 626	4.10% ■	
building	32 817 241	2.92% ■	245 213	0.36%	32 539 948	36.81% ■	32 080	3.40% ■	
name	24 969 312	2.22% ■	5 370 569	7.81% ■	19 157 176	21.67% ■	441 567	46.86% ■	
tiger:source	13 745 938	1.22% ■	2	0.00%	13 745 934	15.55% ■	2	0.00%	
tiger:tlid	13 743 516	1.22% ■	946	0.00%	13 742 568	15.54% ■	2	0.00%	
tiger:cfcc	13 679 342	1.22% ■	37	0.00%	13 679 303	15.47% ■	2	0.00%	
tiger:county	13 387 070	1.19% ■	935	0.00%	13 386 133	15.14% ■	2	0.00%	
tiger:reviewed	13 383 958	1.19% ■	46	0.00%	13 381 870	15.14% ■	2 042	0.22%	
tiger:separated	11 394 618	1.01% ■	0	0.00%	11 394 616	12.89% ■	2	0.00%	
tiger:upload_uuid	11 272 588	1.00% ■	934	0.00%	11 271 652	12.75% ■	2	0.00%	
addr:housenumber	10 003 798	0.89% ■	7 938 280	11.54% ■	2 058 639	2.33% ■	6 879	0.73% ■	
addr:street	9 182 819	0.82% ■	7 170 974	10.42% ■	2 003 415	2.27% ■	8 430	0.89% ■	
attribution	8 732 989	0.78% ■	5 234 128	7.61% ■	3 472 111	3.93% ■	26 750	2.84% ■	



15



Seite 1

von 1655



Eintrag 1 bis 15 von 24819



highway

The highway tag is the primary tag used for any kind of street or way.

[XAPI](#)[JOSM](#)Filter:

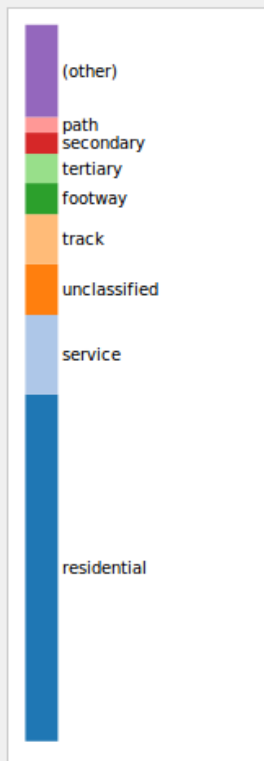
Number of objects

Values

*	39 038 195	3.47%	1 402
*	1 846 264	2.68%	548
*	37 188 328	42.07%	970
*	3 603	0.38%	37

[Values](#)[Kombinationen](#)[Karte](#)[Wiki](#)[JOSM](#)

Values used with this key



Count	Value
18 896 008 48.40%	residential
4 333 762 11.10%	service
2 755 165 7.06%	unclassified
2 732 407 7.00%	track
1 694 997 4.34%	footway
1 597 952 4.09%	tertiary
1 149 714 2.95%	secondary
851 001 2.18%	path
717 377 1.84%	bus_stop
698 729 1.79%	primary
446 569 1.14%	road
401 395 1.03%	cycleway
388 212 0.99%	turning_circle
308 348 0.79%	motorway_link
297 039 0.76%	motorway



15



Seite 1

von 94



Eintrag 1 bis 15 von 1402

Looking for translators!

I18N

 Deutsch | ▾

Daten vom: 2011-04-01 22:00 UTC [Datenquellen](#) [Download](#) [Über Taginfo](#) [Wiki](#)

 English | ▾

Data from: 2011-04-01 22:00 UTC [Sources](#) [Download](#) [About Taginfo](#) [Wiki](#)

 Italiano | ▾

Dati da: 2011-04-01 22:00 UTC [Fonti](#) [Download](#) [Riguardo a Taginfo](#) [Wiki](#)

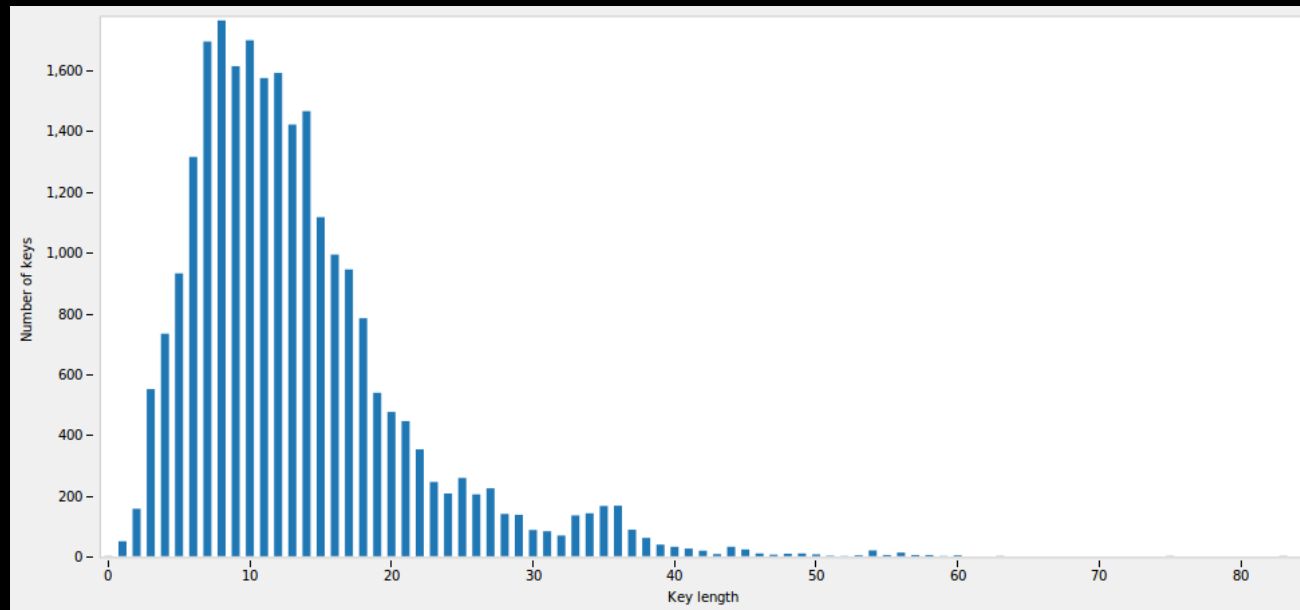
Search



- Search for: Keys, Values, Tags
- Autocomplete
- OpenSearch
- Uses Sqlite Full Text Search (FTS3) extension

Reports

- Usually combine data from different sources
- Show data from different perspectives
- Using tables and sometimes graphs



Existing Reports

- Characters in keys
- Frequently used keys without wiki page
- Key lengths
- Language comparison table for keys in the wiki
- Languages
- Wiki pages about non-existing keys

API

- RESTful Web API
- Everybody can use it
- Also used internally
- Request parameters in URL
- Result always JSON

```
/api/2/db/keys/values?  
  key=landuse&filter=all&  
  page=1&rp=15&  
  sortname=count&sortorder=desc
```

Wiki Integration

- On all key and tag pages
- Is included live
- Using templates
- Uses `iframe` und special Mediawiki plugin

 **highway**



Beschreibung
Highway ist das Haupt-Tag für Straßen und Wege aller Art.

Gruppe
Highway

Element [Hilfe](#)

Impliziert
• [access=yes](#)

 **Taginfo** [More...]

 1 841 396

 37 082 786

 3 586

Taginfo Sites

taginfo.openstreetmap.org - Planet

taginfo.openstreetmap.ch - Switzerland

taginfo.openstreetmap.ie - Ireland

taginfo.hanskalabs.net - Italy

(see wiki for info how to run your own)

The End

Any questions?

taginfo.openstreetmap.org
wiki.osm.org/wiki/Taginfo



Jochen Topf

jochen@topf.org