

OpenStreetMap

Marco Minghini
Alessandro Sarretta

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Chi siamo



Marco Minghini

- Scientific Project Officer al JRC (EC)
- Esperto di GIS, SDI, VGI
- Contributore OpenStreetMap dal 2014
- Membro della comunità italiana OSM



Alessandro Sarretta

- Ricercatore al CNR-IRPI
- Esperto di SDI, MSP, GIS
- Contributore OpenStreetMap dal 2013
- Coordinatore nazionale OSM per WMI

Contenuti del workshop

- Agenda
 - Introduzione a OpenStreetMap
 - Il modello dati di OpenStreetMap
 - Modifiche in OpenStreetMap
 - Estrazione/download dei dati
 - Hands-on: inserire dati
 - Hands-on: usare i dati
 - Strumenti di controllo della qualità
- Interazioni con i partecipanti
 - durante le presentazioni: Q&A nella chat
 - al termine della presentazione: Q&A live

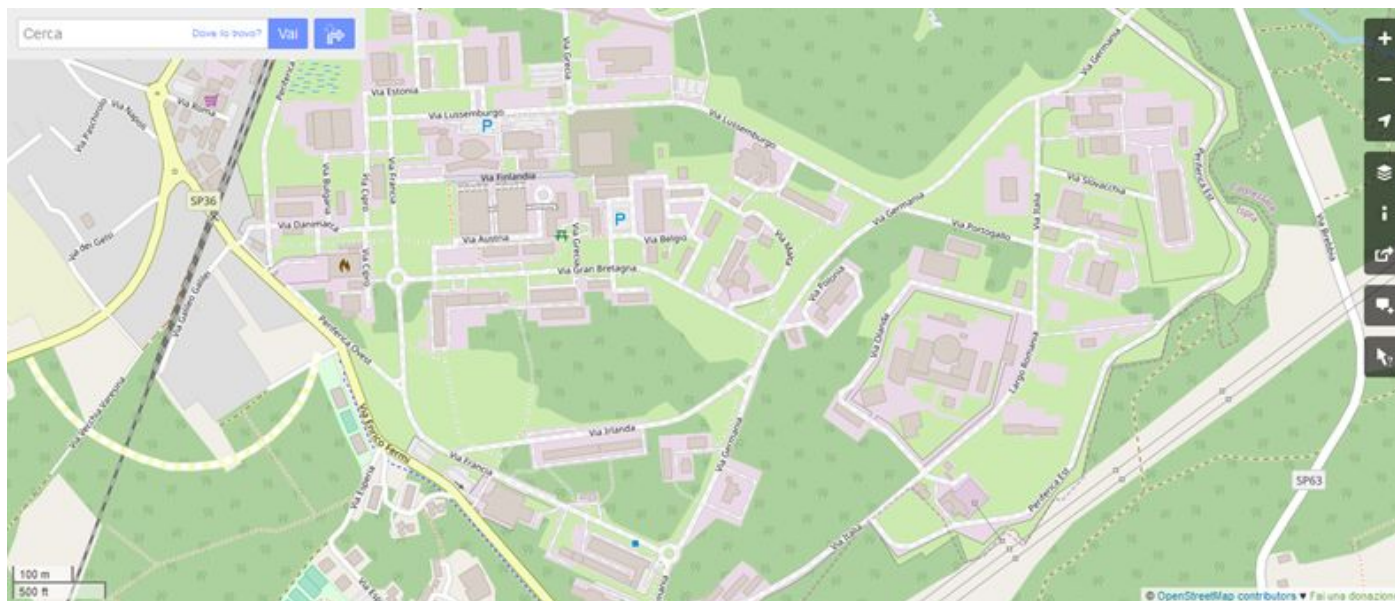
Introduzione a OpenStreetMap

OpenStreetMap (OSM)

<https://www.openstreetmap.org>



- OpenStreetMap (OSM) è il più noto progetto di **Informazione Geografica Volontaria (VGI)**
 - iniziato da **Steve Coast** in UK nel 2004



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 - il database geografico più **grande, vario, completo** ed **aggiornato** al mondo
 - la **Wikipedia delle mappe**



WIKIPEDIA
The Free Encyclopedia

OpenStreetMap (OSM)

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 - la **Wikipedia delle mappe**
 - OpenStreetMap **non è un'alternativa a Google Maps!**

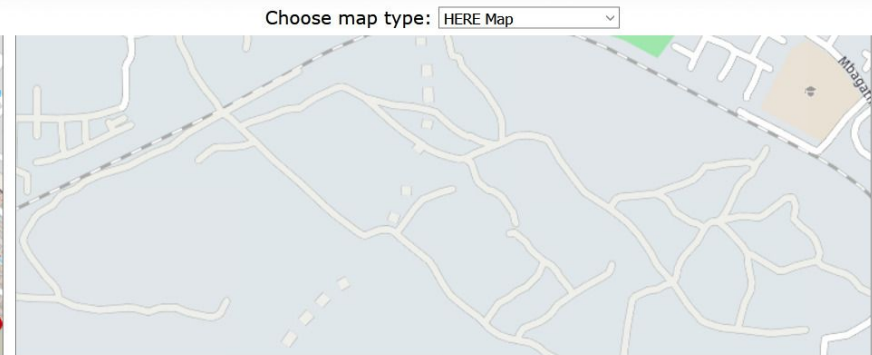
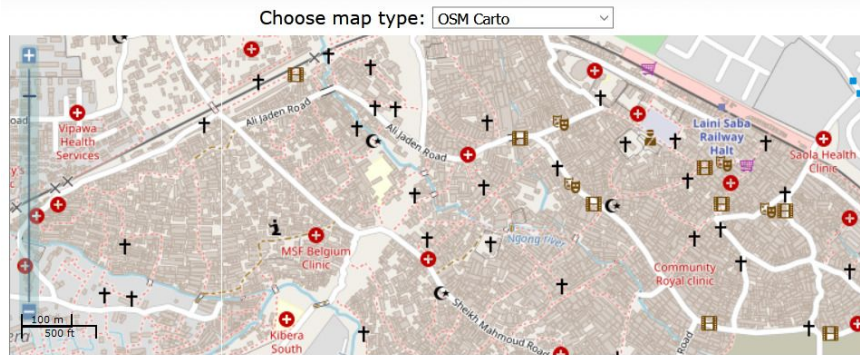


Perché OpenStreetMap?

- La crescita e il successo del progetto OSM sono dovuti a un insieme di fattori:
 - societari & economici:
 - mancanza di dati geografici ufficiali in molte parti del mondo
 - presenza di dati geografici a pagamento e/o con licenze di utilizzo restrittive
 - tecnologici:
 - diffusione di Internet e Web 2.0
 - disponibilità di dispositivi GPS a basso costo
 - disponibilità di immagini satellitari ad alta risoluzione
- 10 anni di OSM (video): <https://www.youtube.com/watch?v=7sC83j6vzjo>

OpenStreetMap vs. altri database geografici

- OpenStreetMap è spesso la sorgente di dati **più completa** (o **l'unica**) esistente!



OSM - Approccio e principi

- La filosofia di OpenStreetMap si basa sulla **conoscenza locale** dei contributori.
- Il progetto è guidato dalla **comunità** (approccio bottom-up):
 - coordinato (ma non controllato) dalla **OpenStreetMap Foundation** (OSMF)
 - entità legale del progetto OSM
 - gestione dell'infrastruttura tecnica
 - responsabile della sostenibilità economica
 - NON gestisce i progetti software
 - NON decide cosa si mappa/non si mappa



OpenStreetMap powers map data on thousands of web sites, mobile apps, and hardware devices

OpenStreetMap is built by a community of mappers that contribute and maintain data about roads, trails, cafés, railway stations, and much more, all over the world.

📍 Local Knowledge

OpenStreetMap emphasizes local knowledge. Contributors use aerial imagery, GPS devices, and low-tech field maps to verify that OSM is accurate and up to date.

👥 Community Driven

OpenStreetMap's community is diverse, passionate, and growing every day. Our contributors include enthusiast mappers, GIS professionals, engineers running the OSM servers, humanitarians mapping disaster-affected areas, and many more. To learn more about the community, see the [OpenStreetMap Blog](#), [user diaries](#), [community blogs](#), and the [OSM Foundation](#) website.

© Open Data

OpenStreetMap is *open data*: you are free to use it for any purpose as long as you credit OpenStreetMap and its contributors. If you alter or build upon the data in certain ways, you may distribute the result only under the same licence. See the [Copyright and License](#) page for details.

<https://wiki.osmfoundation.org/wiki>

La licenza dei dati OpenStreetMap

- Il database di OpenStreetMap è **aperto**, licenziato sotto la Open Data Commons **Open Database License (ODbL)** dalla OSMF.

You are free:

- *To Share*: To copy, distribute and use the database.
- *To Create*: To produce works from the database.
- *To Adapt*: To modify, transform and build upon the database.

As long as you:

- *Attribute*: You must attribute any public use of the database, or works produced from the database, in the manner specified in the ODbL. For any use or redistribution of the database, or works produced from it, you must make clear to others the license of the database and keep intact any notices on the original database.
- *Share-Alike*: If you publicly use any adapted version of this database, or works produced from an adapted database, you must also offer that adapted database under the ODbL.
- *Keep open*: If you redistribute the database, or an adapted version of it, then you may use technological measures that restrict the work (such as DRM) as long as you also redistribute a version without such measures.

<https://www.openstreetmap.org/copyright>

<https://opendatacommons.org/licenses/odbl/summary/index.html>

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How to credit OpenStreetMap

We require that you use the credit “© OpenStreetMap contributors”.

You must also make it clear that the data is available under the Open Database License, and if using our map tiles, that the cartography is licensed as CC BY-SA. You may do this by linking to [this copyright page](#). Alternatively, and as a requirement if you are distributing OSM in a data form, you can name and link directly to the license(s). In media where links are not possible (e.g. printed works), we suggest you direct your readers to [openstreetmap.org](#) (perhaps by expanding 'OpenStreetMap' to this full address), to [opendatacommons.org](#), and if relevant, to [creativecommons.org](#).

For a browsable electronic map, the credit should appear in the corner of the map. For example:

<https://www.openstreetmap.org/copyright>

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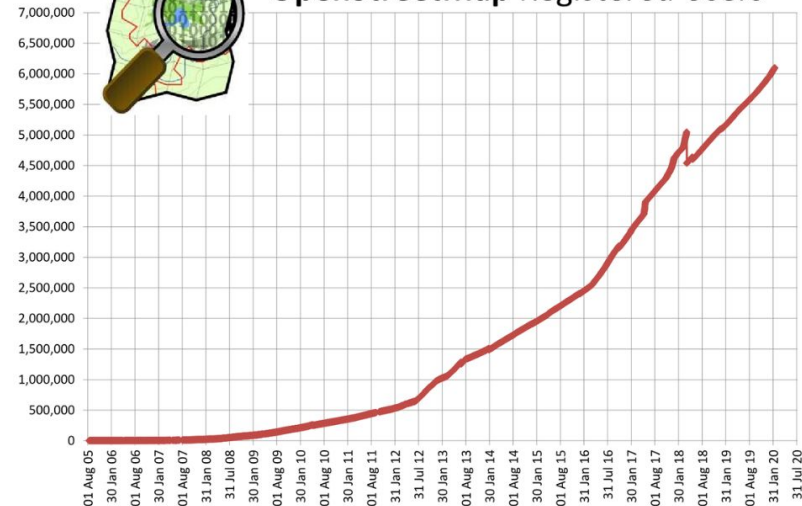
Quanti sono i contributori a OSM?

<https://wiki.openstreetmap.org/wiki/Stats>

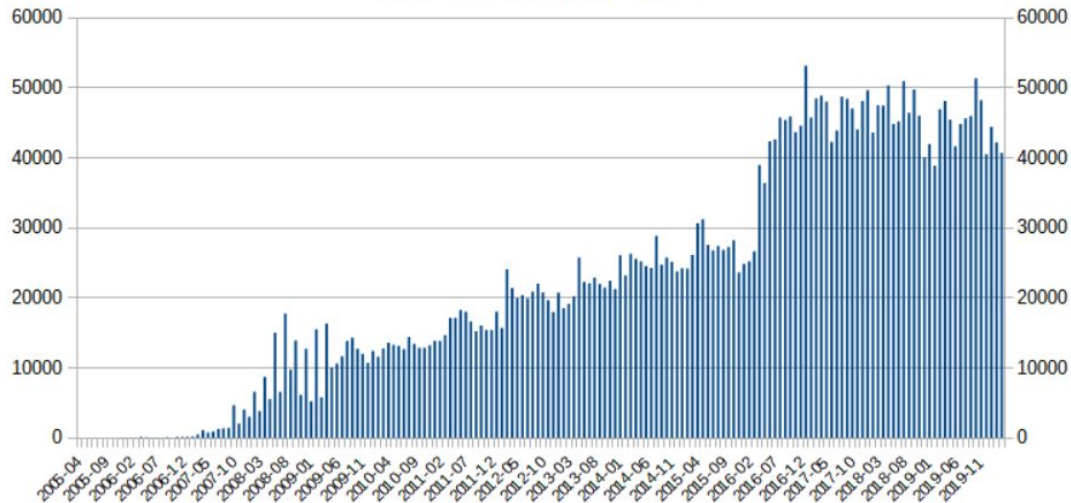
- La comunità di volontari è molto ampia e chiunque può contribuire!
 - oltre **6.5 milioni di utenti registrati** & **1.4 milioni di contributori attivi**
 - circa **40000 contributori attivi al mese** & circa **100 milioni di modifiche al mese**



OpenStreetMap Registered Users

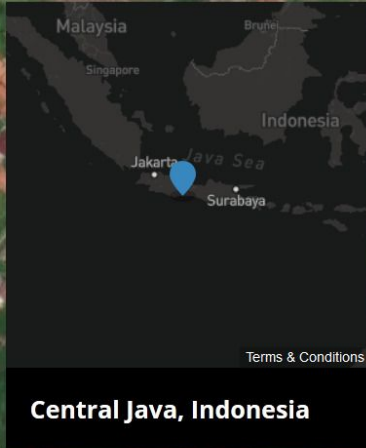


Active Contributors per Month



Contributi a OSM in tempo (quasi) reale

612



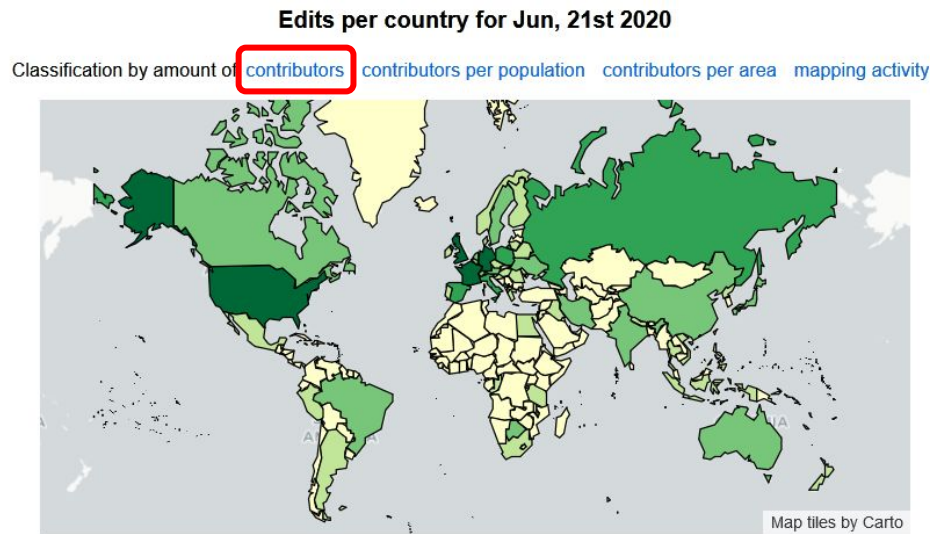
a minute ago ta_hawkins created building=yes

#hotsm-project-6920 #missingmaps #indonesia #redcross #msft #msftgive in iD 2.17.3

<http://osmlab.github.io/show-me-the-way>

Dove si contribuisce (di più) a OSM? <https://osmstats.neis-one.org/?item=countries>

- Esistono comunità nazionali particolarmente attive in OSM:
 - numero di contributori attivi su base giornaliera



Notice: The changeset's bbox center is utilized for counting. This can cause inaccuracies between ~2% and ~10%.

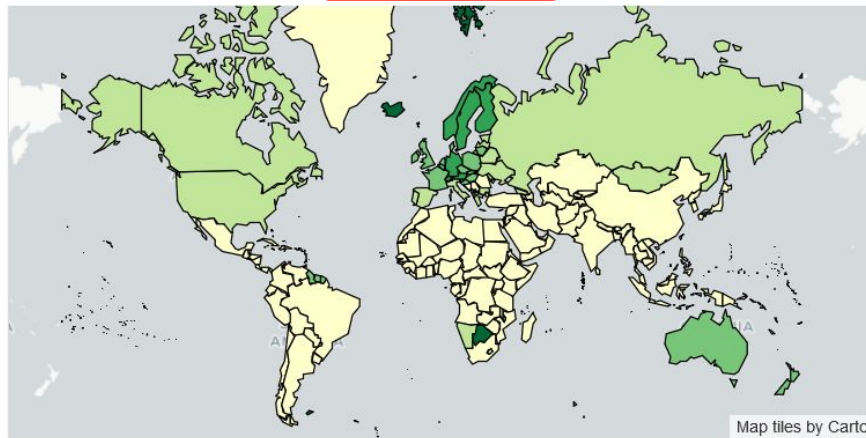
No.	Country	Contributors	Created elements	Modified elements	Deleted elements
1.	Germany	872	74702	48053	7750
2.	United States	399	231884	53980	24717
3.	France	336	50835	27224	6429
4.	United Kingdom	240	55716	13205	3348
5.	Russia	221	64281	18476	2514
6.	Italy	181	29212	8399	2560
7.	Poland	162	60439	17807	5867
8.	Spain	118	35114	6345	1333

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- Esistono comunità nazionali particolarmente attive in OSM:
 - frazione di contributori attivi sul totale della popolazione su base giornaliera

Edits per country for Jun, 21st 2020

Classification by amount of [contributors](#) [contributors per population](#) [contributors per area](#) [mapping activity](#)

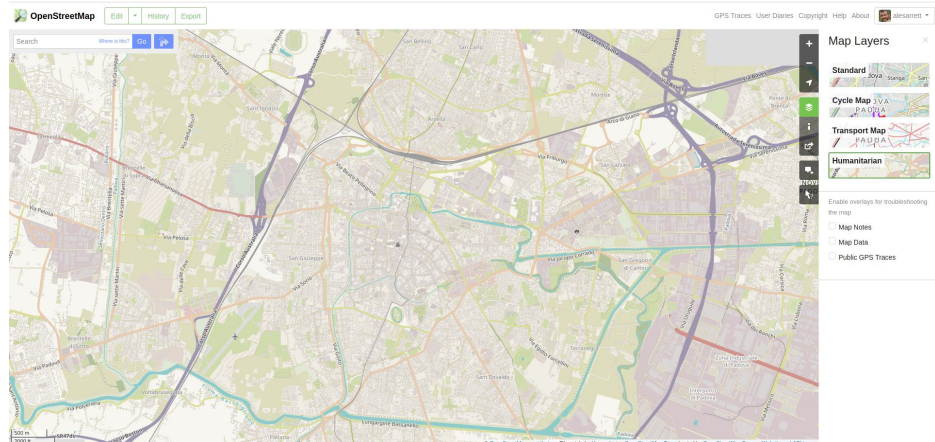
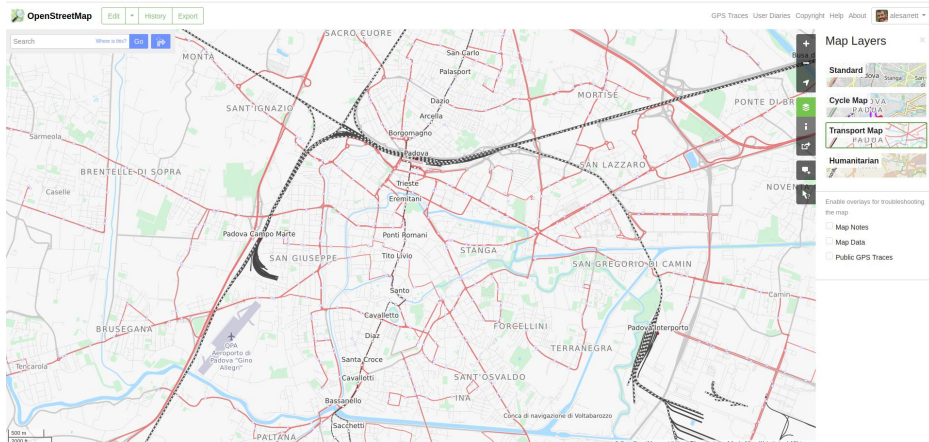
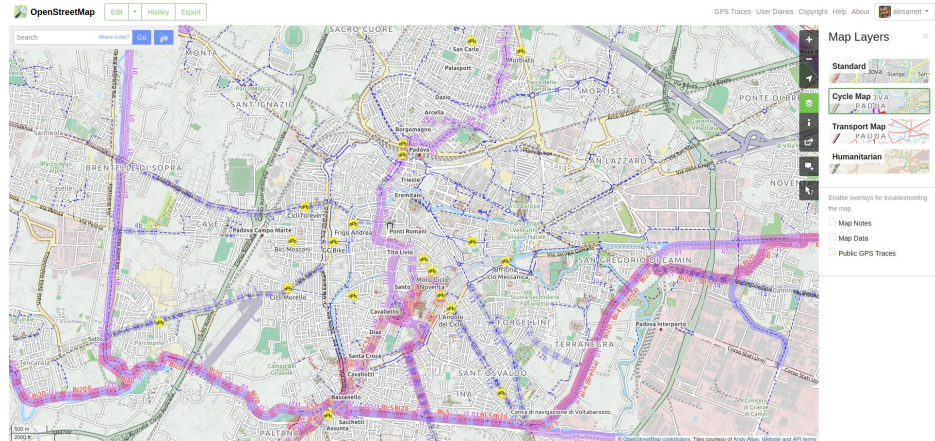
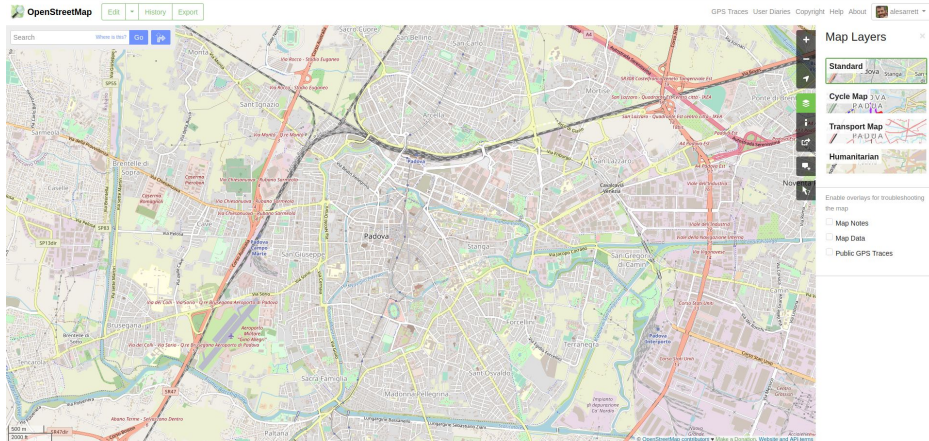


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Un database, tante mappe...

<https://www.openstreetmap.org>



Un database, tante mappe...

<http://hikebikemap.org>

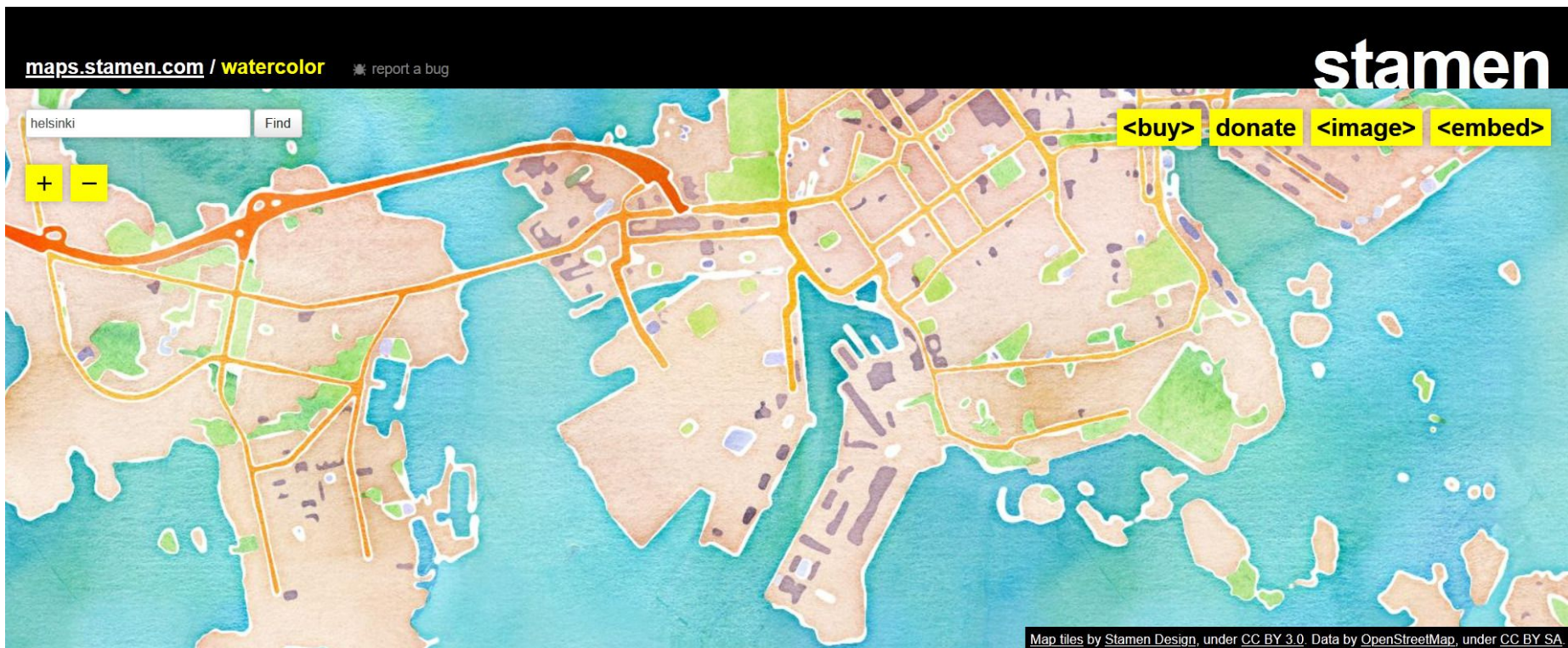
- Visualizzazione per hike & bike



Un database, tante mappe...

<http://maps.stamen.com/watercolor>

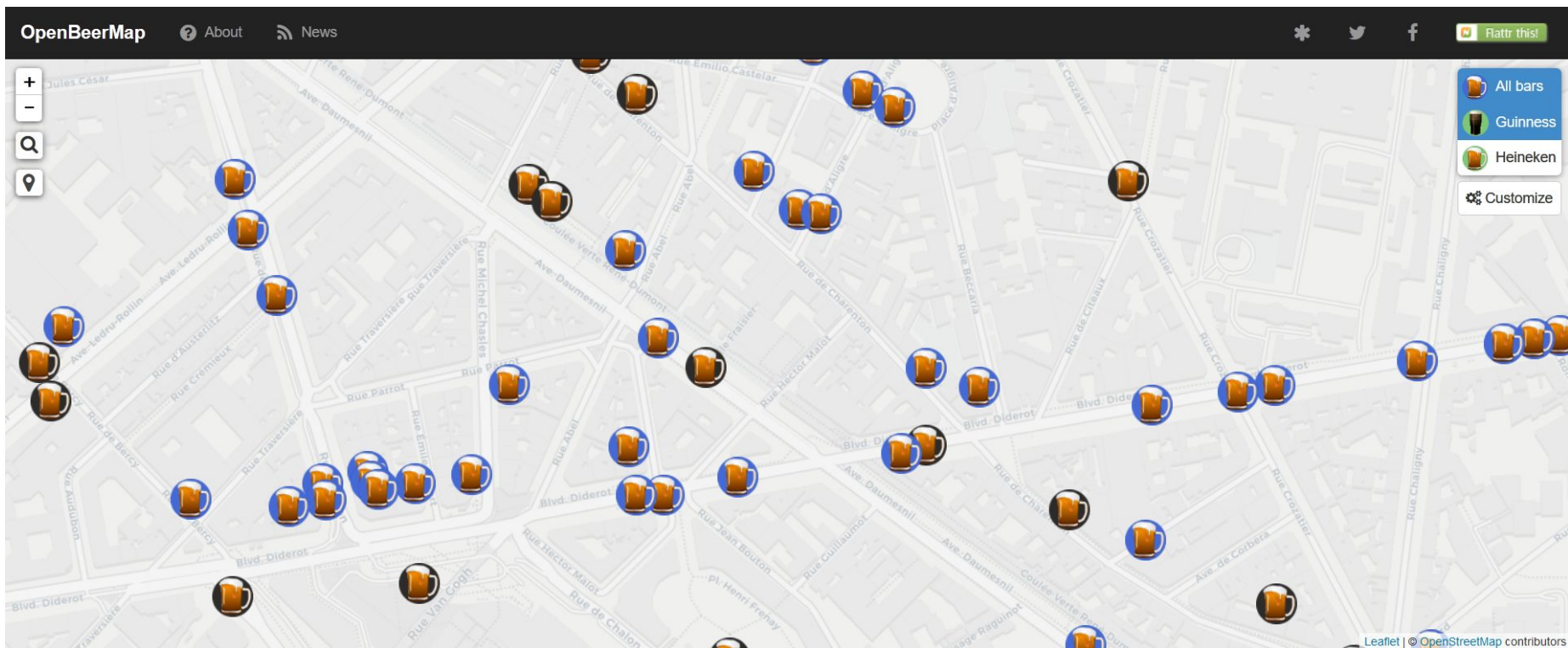
- Visualizzazione ad acquerelli



Un database, tante mappe...

<http://openbeermap.github.io>

- Visualizzazione dei bar e pub a seconda della birra disponibile



Un database, tante mappe...

<https://a.tiles.mapbox.com/v3/aj.Sketchy2.html>

- Visualizzazione in modalità 'mappa dei pirati'



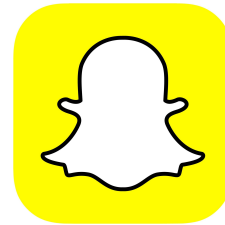
Un database, tante mappe...

<https://demo.f4map.com>

- Visualizzazione tridimensionale



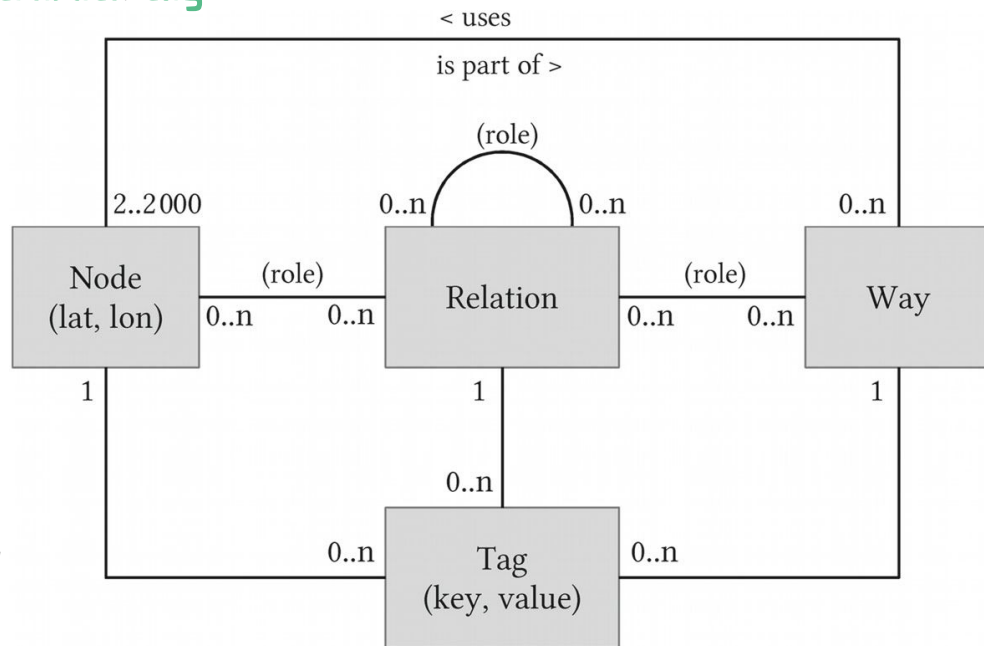
Chi altro usa OpenStreetMap?



Il modello dati di OpenStreetMap






Struttura dei dati

- Il modello dati di OSM prevede **4 data type** e ogni oggetto è caratterizzato da 2 di essi:
 - 3 data type descrivono la **geometria: nodo, way, relazione**
 - il quarto data type descrive gli **attributi: tag**

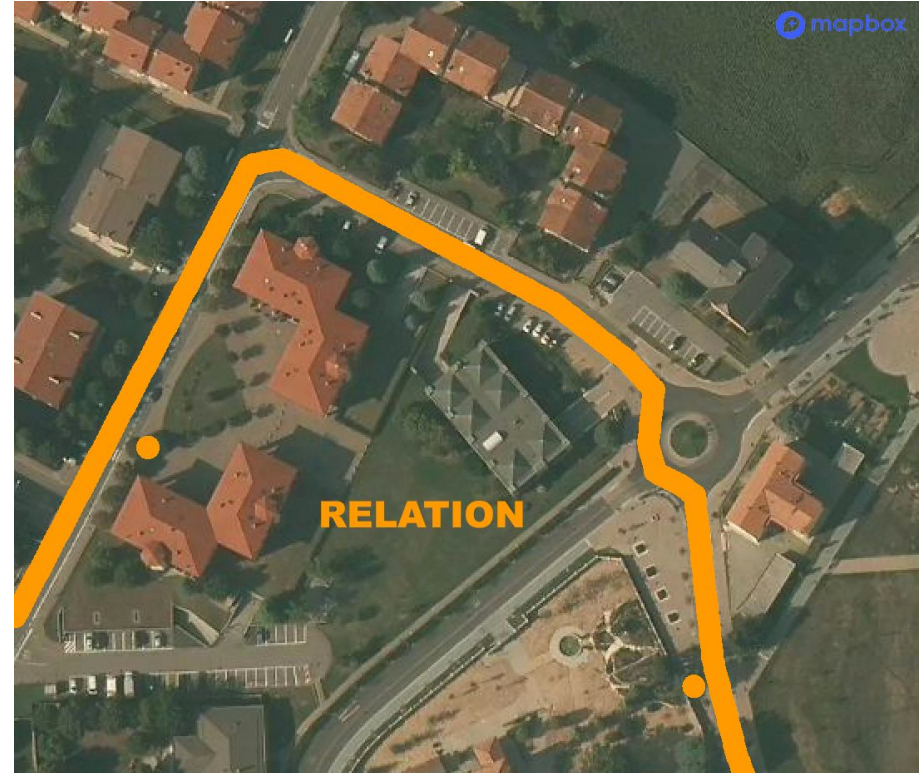
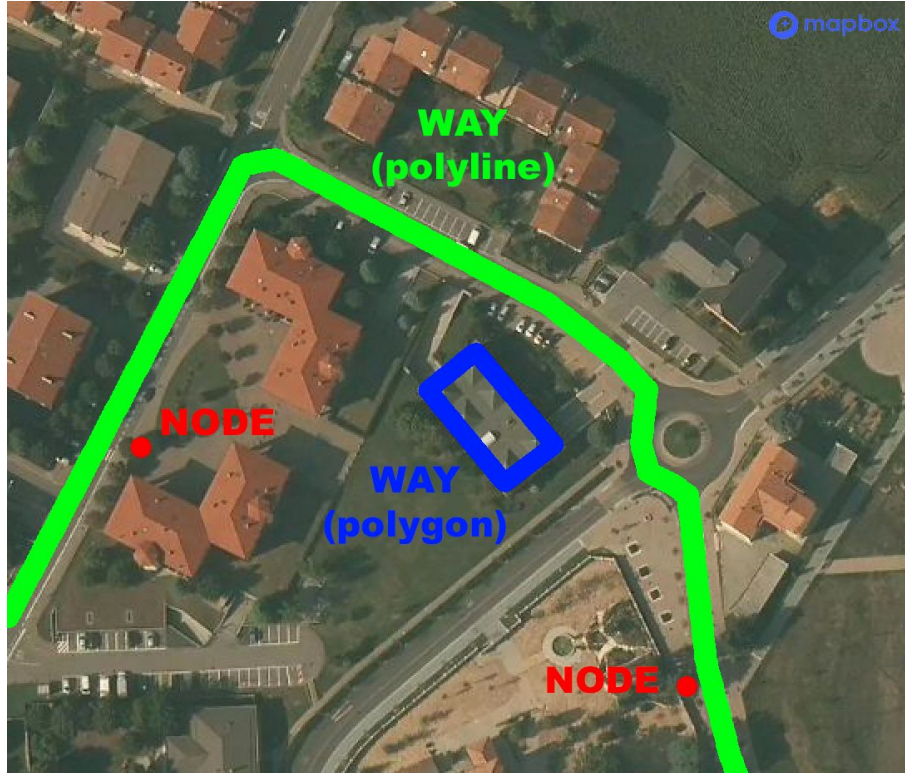


Fonte: Ramm F, Topf J, Chilton S. (2010) *OpenStreetMap: Using and Enhancing the Free Map of the World*. Cambridge: UIT.

Struttura dei dati - Geometria

- **Nodo**: un singolo punto, identificato da (lat, lon) 
 - oggetti puntuali: albero, panchina, cancello, cestino, ecc.
- **Way**: una lista ordinata da 2 a 2000 nodi   
 - oggetti lineari: strada, fiume, muro, siepe, ecc.
 - oggetti areali: edificio, lago, uso del suolo, ecc.
- **Relazione**: una lista ordinata di oltre 2000 nodi o una lista ordinata di nodi e/o way e/o altre relazioni 
 - specifiche strutture di dati: linee di trasporto, multipoligoni, ecc.

Struttura dei dati - Geometria



Struttura dei dati - Tag

- Ogni **tag** consiste di due componenti: **chiave** e **valore**
- Il tagging in OpenStreetMap è flessibile:
 - ogni oggetto deve avere **almeno un tag**
 - **non c'è un limite** al numero di tag
 - tutti i tag esistenti sono mantenuti e aggiornati dalla comunità OSM in una pagina wiki: https://wiki.openstreetmap.org/wiki/Map_Features
 - ogni tag deve essere **verificabile**: <https://wiki.openstreetmap.org/wiki/Verifiability>
 - utenti indipendenti che osservano lo stesso oggetto devono poter verificare la geometria e i tag
 - in OpenStreetMap **si mappano soltanto oggetti statici** (no osservazioni spazio-temporali, no raster)













Struttura dei dati - Tag

- Elenco completo dei tag: https://wiki.openstreetmap.org/wiki/Map_Features

- 1 Primary features
 - 1.1 Aerialway
 - 1.2 Aeroway
 - 1.3 Amenity
 - 1.3.1 Sustenance
 - 1.3.2 Education
 - 1.3.3 Transportation
 - 1.3.4 Financial
 - 1.3.5 Healthcare
 - 1.3.6 Entertainment, Arts & Culture
 - 1.3.7 Others
 - 1.4 Barrier
 - 1.4.1 Linear barriers
 - 1.4.2 Access control on highways
 - 1.5 Boundary
 - 1.5.1 Attributes
 - 1.6 Building
 - 1.6.1 Accommodation
 - 1.6.2 Commercial
 - 1.6.3 Religious
 - 1.6.4 Civic/Amenity
 - 1.6.5 Agricultural/Plant production
 - 1.6.6 Sports
 - 1.6.7 Storage
 - 1.6.8 Cars
 - 1.6.9 Power/Technical buildings
 - 1.6.10 Other Buildings
 - 1.6.11 Additional Attributes
 - 1.7 Craft
 - 1.8 Emergency
 - 1.8.1 Medical Rescue
 - 1.8.2 Firefighters
 - 1.8.3 Lifeguards
 - 1.8.4 Assembly point
 - 1.8.5 Other Structure
 - 1.9 Geological
 - 1.10 Highway
 - 1.10.1 Roads
 - 1.10.2 Link roads
 - 1.10.3 Special road types
 - 1.10.4 Paths
 - 1.10.5 Lifecycle
 - 1.10.6 Attributes
 - 1.10.7 Other highway features
 - 1.11 Historic
 - 1.12 Landuse
 - 1.12.1 Common Landuse Key Values - Develop
 - 1.12.2 Common Landuse Key Values - Rural a

Building

This is used to identify individual buildings or groups of connected buildings. See the page **Buildings** for further details on the usage of this tag and **man_made=*** for tagging of various other structures.

Key	Value	Element	Comment	Photo
Accommodation				
building	apartments		A building arranged into individual dwellings, often on separate floors. May also have retail outlets on the ground floor.	
building	bungalow		A single-storey detached small house, Dacha.	
building	cabin		A cabin is a small, roughly built house usually with a wood exterior and typically found in rural areas.	
building	detached		A detached house, a free-standing residential building usually housing a single family.	
building	dormitory		For a shared building, as used by college/university students (not a share room for multiple occupants as implied by the term in British English). Alternatively, use building=residential plus residential=university .	
building	farm		A residential building on a farm (farmhouse). For other buildings see below building=farm_auxiliary , building=barn , ... if in your country farmhouse looks same as general residential house then you can tag as building=house as well. See also landuse=farmyard for the surrounding area	

Struttura dei dati - Tag

- Statistiche di utilizzo/diffusione dei tag: <https://taginfo.openstreetmap.org>

 **taginfo** English Data from: 2020-06-09 23:58 UTC

KEYS · TAGS · RELATIONS · PROJECTS · REPORTS · ABOUT

landuse

For describing the primary use of areas of land.

Comparison list (0 items) Filter: No filter

XAPI JOSM Level0 Editor Overpass turbo

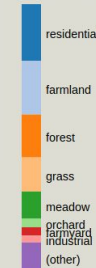
Overview Values Combinations Similar Map Wiki Projects

Overview

Type	Number of objects		Number of values
All	29 220 142	0.43%	2 602
Node	138 113	0.09%	381
Way	27 735 382	4.13%	2 303
Relation	1 346 647	17.09%	318



Distribution of values



Objects with this key were last edited by 209 240 different users.

Overview Values Combinations Similar Map Wiki Projects

Values used with this key

Page 1 of 217 JSON Displaying 1 to 12 of 2602 items

Value	Count	Wiki Description
residential	6 140 603 21.01%	✓ Predominantly houses or apartment buildings.
farmland	5 827 473 19.94%	✓ Area of farmland used mainly for tillage.
forest	4 635 920 15.87%	✓ Forest or woodland, sometimes considered to be restricted to managed woodlands or tre
grass	3 698 464 12.66%	✓ A smaller area of grass, usually mown and managed.
meadow	2 943 228 10.07%	✓ An area of meadow or pasture: land primarily vegetated by grass and other non-woody p
orchard	926 228 3.17%	✓ Used to mark intentional planting of trees or shrubs maintained for food production
farmyard	897 790 3.07%	✓ Area of land with farm buildings (farmhouse, sheds, stables, barns, etc.)
industrial	756 031 2.59%	✓ Predominantly workshops, factories or warehouses
vineyard	415 377 1.42%	✓ Used to tag vineyards, a piece of land where grapes are grown.
reservoir	393 123 1.35%	✓ An artificial lake which may be used to store water.

Struttura dei dati - Tag

- Statistiche di utilizzo/diffusione dei tag: <https://taginfo.openstreetmap.org>
- Discussioni continue (e accese!) sulle mailing list

taginfo English Data from: 2020-06-09 23:58 UTC

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Distribution of values

- residential
- farmland
- forest
- grass
- meadow
- orchard
- farmyard
- industrial
- (other)

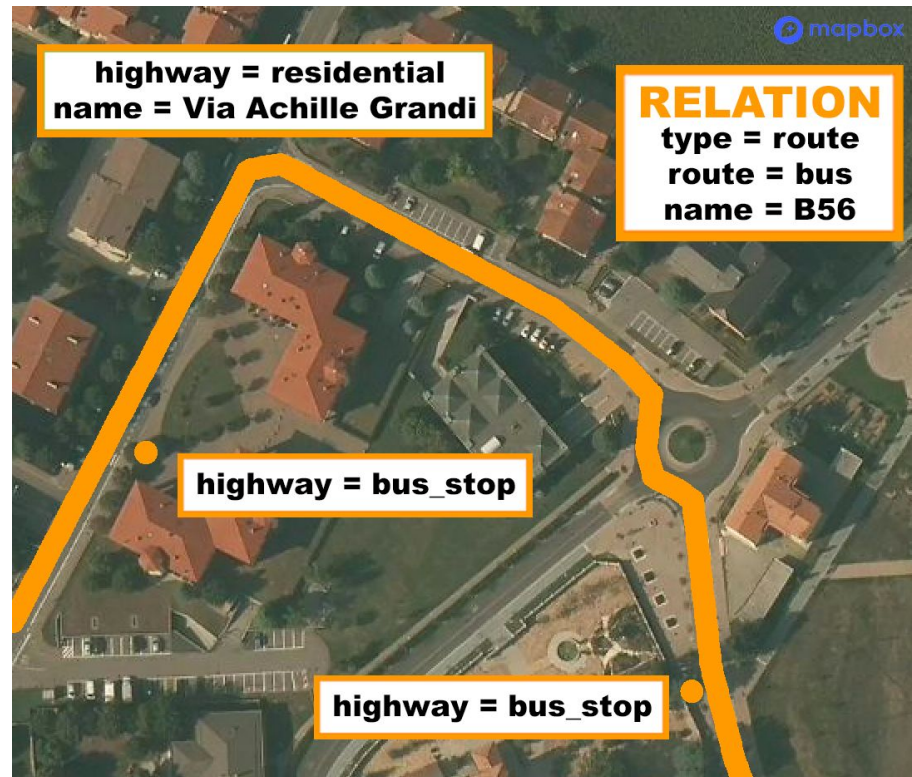
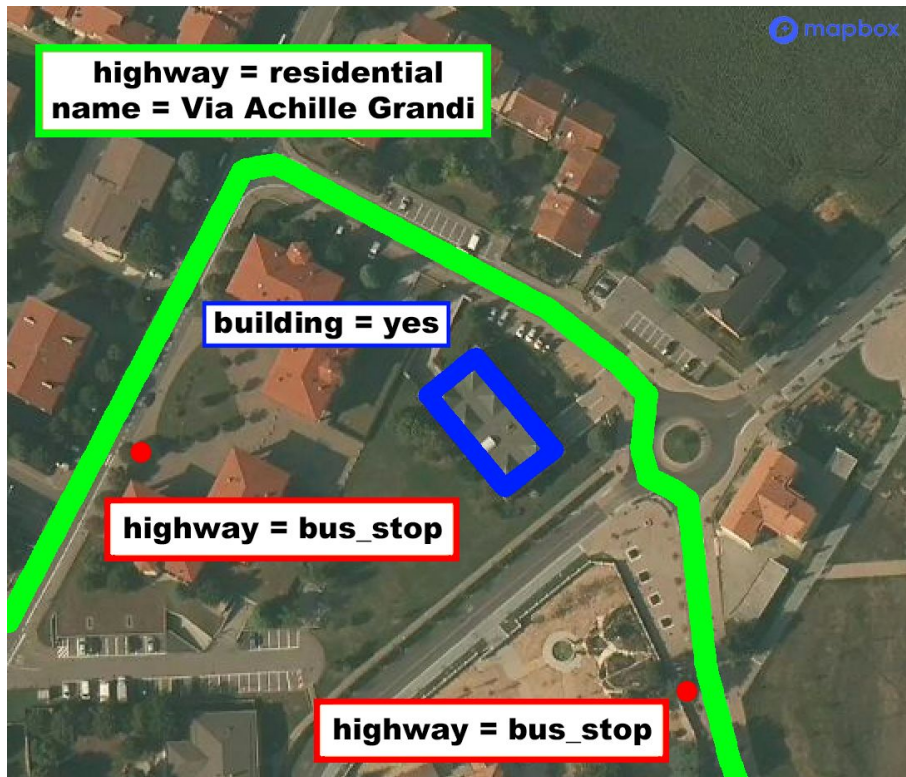
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Struttura dei dati - Tag



Come si contribuisce a OpenStreetMap?

- **Mappatura sul campo** (*field mapping*): si basa sull'osservazione diretta del mondo reale
- **Mappatura da remoto** (*armchair mapping*): consiste nella digitalizzazione di oggetti (edifici, strade, ecc.) su immagini aeree/satellitari disponibili con licenza aperta
- **Import** (*bulk import*): consiste nell'upload diretto in OpenStreetMap di dataset disponibili sotto una licenza compatibile con la ODbL
 - l'import è un'operazione molto delicata e potenzialmente **pericolosa**
 - è riservata ad utenti esperti e **deve sempre essere documentata e discussa** in anticipo con la comunità: <https://wiki.openstreetmap.org/wiki/Import>
- Qualsiasi sia la modalità di contribuzione prescelta, per l'inserimento 'concreto' dei dati in OpenStreetMap occorre un editor.

Import - Esempio

- Open data della Provincia di Biella:

https://wiki.openstreetmap.org/wiki/Import/Catalogue/Provincia_di_Biella

About

This page talks about importing open data provided by the Province of Biella (Italy).

The import has been discussed on the Italian OSM mailing list[📧]. This wiki page is the result of consensus there.

There are specific pages about importing: [toponym](#), [road](#), [building](#) and [address data](#).

Import Plan Outline

Goals

This import goal is to use the high-quality dataset provided by the Province of Biella in order to steadily improve the data available in OSM.

It will not be a blind import, all data will be edited by a local mappers.

The Province of Biella supports our effort and will be involved in the import phase.

Schedule

At the beginning of November 2016, the Province of Biella updated the source data. This update was a requirement to start the import. We aim to start the import phase by the end of the year 2016.

Legal

Data source site: <http://cartografia.provincia.biella.it/on-line/Home/articolo3007402.html>[📧]

With every dataset, a PDF document is shipped with the following statement: "La titolarità piena ed esclusiva del dato <DATASET_NAME> è della Provincia di Biella (ai sensi della L. 633/41 e s.m.i.)."

Translation: "Full and exclusive ownership of the data <DATASET_NAME> belongs to the Province of Biella (according to Italian law 633/41 and subsequent modifications and integrations)". Law 633/41 is the Italian copyright law.

Data license: <https://creativecommons.org/licenses/by/3.0/it/legalcode>[📧]

Type of license: CC-BY-3.0 IT

Additional statement by the Province of Biella: https://github.com/musuruan/osm_imports/blob/master/prov_bi/sita_biella_cc_by_3.txt[📧]

The data owner states that being listed in the OpenStreetMap [Contributors](#) page fulfils the attribution required by their license.

OSM attribution: [Contributors#Biella_28BI.29](#)

ODbL Compliance verified: yes.

Attribution in the [Contributors](#) page is fine for data owner as stated above. It will be enough to add the following statement in the Contributors page: "Contains data provided by [Sistema Informativo Territoriale Ambientale - Provincia di Biella](#)[📧] released under [CC-BY-3.0 IT license](#)[📧]."

Import Type

The dataset will be imported as a single changeset for each source data and for every Municipality. The City of Biella address data will not be imported.

The dataset will be loaded in JOSM and it will be merge with existing OpenStreetMap data manually and prior to the upload.

IMPORTANT! Data MUST be imported in the following order: toponyms, roads (depending on current level of mapping), buildings, addresses.

Please refer to specific import pages for details.

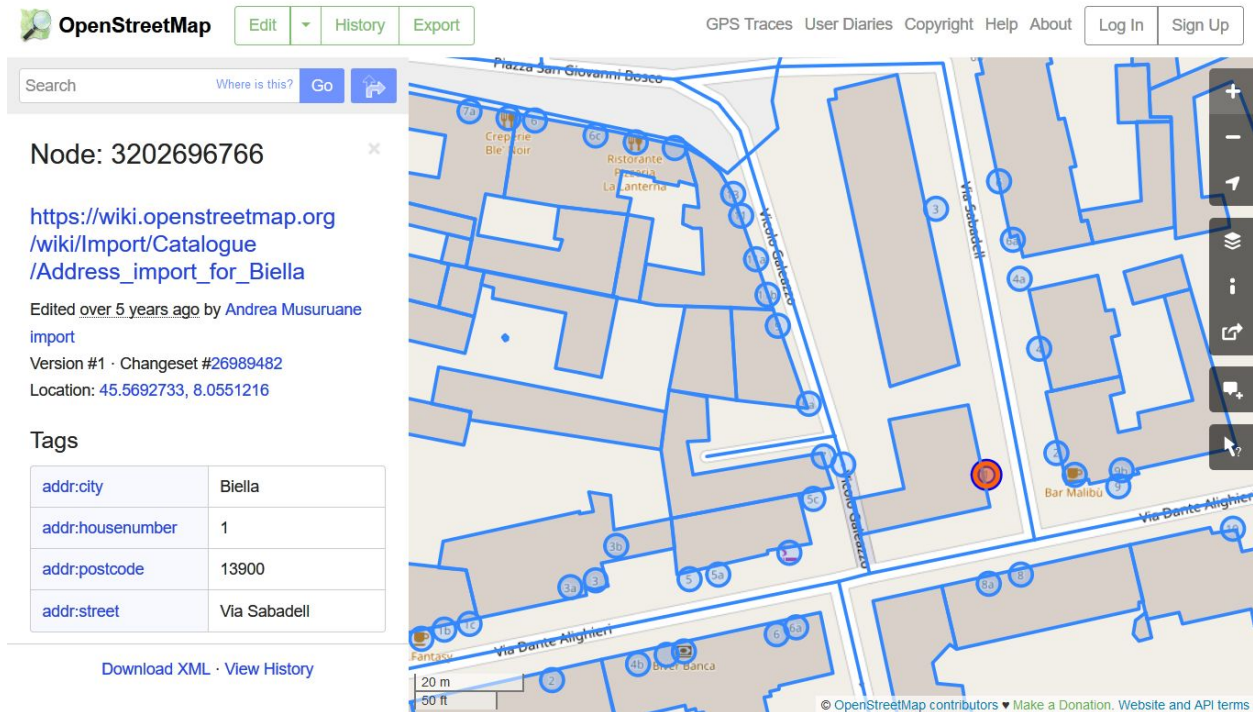
Changeset Tags

Changeset will be tagged with:

- source=Province of Biella Open Data
- source:license=CC-BY
- type=import
- url=https://wiki.openstreetmap.org/wiki/Import/Catalogue/Provincia_di_Biella

Import - Esempio

- Open data della Provincia di Biella:
https://wiki.openstreetmap.org/wiki/Import/Catalogue/Provincia_di_Biella



OpenStreetMap Edit History Export GPS Traces User Diaries Copyright Help About Log In Sign Up

Search Where is this? Go

Node: 3202696766

https://wiki.openstreetmap.org/wiki/Import/Catalogue/Address_import_for_Biella

Edited over 5 years ago by Andrea Musuruane import

Version #1 · Changeset #26989482

Location: 45.5692733, 8.0551216

Tags

addr:city	Biella
addr:housenumber	1
addr:postcode	13900
addr:street	Via Sabadell

Download XML · View History

© OpenStreetMap contributors Make a Donation, Website and API Terms

Import - Esempio

- Esercizi commerciali con consegna a domicilio durante l'emergenza Covid-19:

<https://dati.comune.milano.it/dataset/ds959-esercizi-di-vicinato-in-sede-fissa-consegna-a-domicilio>

Esercizi di vicinato in sede fissa con consegna a domicilio

Il dataset contiene l'elenco degli esercizi di vicinato in sede fissa con consegna a domicilio.

Per superficie di vendita si intende l'area destinata alla vendita, compresa quella occupata da banchi, scaffalature, vetrine; non costituisce superficie di vendita quella destinata a magazzini, depositi, uffici, servizi.

L'attività di vendita può riguardare i prodotti del settore non alimentare, i prodotti del settore alimentare (limitatamente all'alimentazione umana) o entrambi.

Addendum alla licenza CC BY 2.5 IT in relazione ai set di dati seguenti.

In caso di riuso del dataset da parte di OpenStreetMap, l'attribuzione da parte di OpenStreetMap e dei suoi utenti attraverso <http://wiki.openstreetmap.org/wiki/Contributors> è sufficiente per riconoscere al Comune di Milano "una menzione adeguata rispetto al mezzo di comunicazione o supporto che utilizzi" in conformità con la Sezione 4 (b) della licenza CC BY 2.5 IT. In caso di riuso del dataset da parte di OpenStreetMap, il metodo di OpenStreetMap per fornire riferimenti al set di dati originale ed ai termini della licenza originale attraverso <http://wiki.openstreetmap.org/wiki/Contributors> soddisfa i requisiti della Sezione 4 (b) della licenza CC BY 2.5 IT.

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Data e Risorse



ds959_esercizi_vicinato_sede_fissa_ordini_tel_...

Esplora ▾



ds959_esercizi_vicinato_sede_fissa_ordini_tel_...

Esplora ▾



ds959_esercizi_vicinato_sede_fissa_ordini_tel_...

Esplora ▾

Modifiche in OpenStreetMap

Desktop editor: iD

<https://wiki.openstreetmap.org/wiki/iD>

- Editor Web-based
- Integrato in openstreetmap.org
- Adatto per principianti (ma anche per editing avanzato)
- Utile guida interattiva per iniziare

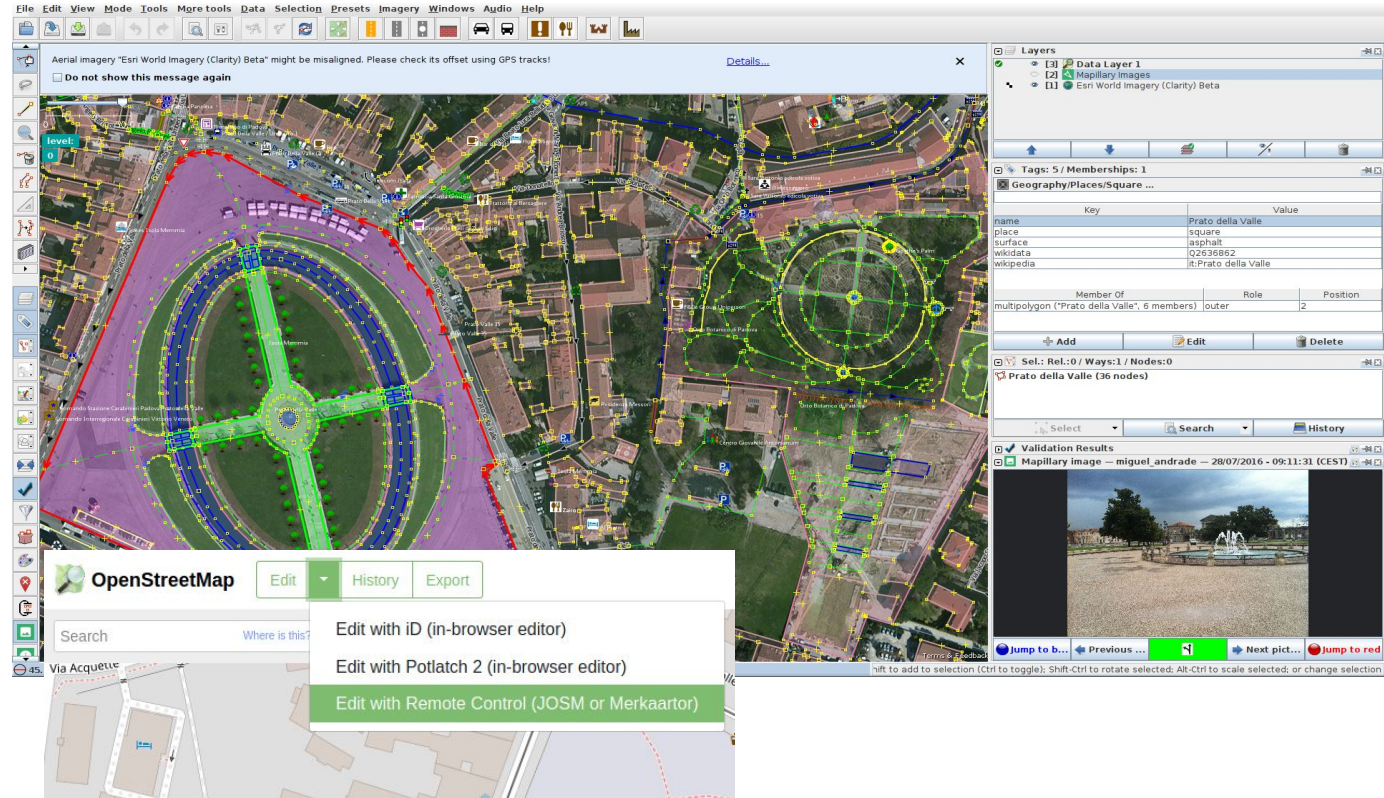
The screenshot displays the iD editor interface. The central map shows a satellite view of a stadium with various road and path features overlaid in different colors (red, green, blue). On the left, the 'Edit feature' sidebar is open, showing details for a 'Square' named 'Prato della Valle' in Padua, Italy, including its Wikidata and Wikipedia links. On the right, a 'Help' sidebar is visible, with a red box highlighting the 'Start the Walkthrough' button. The top navigation bar includes 'OpenStreetMap', 'Edit', 'History', 'Export', and user information.

Field	Value
Name	Prato della Valle
Wikidata	prato della Valle
Description	square in Padua, Italy
Identifier	Q2636862
Wikipedia	italiano
Tags (5)	name: Prato della Valle, place: square, surface: asphalt, wikidata: Q2636862, wikipedia: it:Prato della Valle

Desktop editor: JOSM

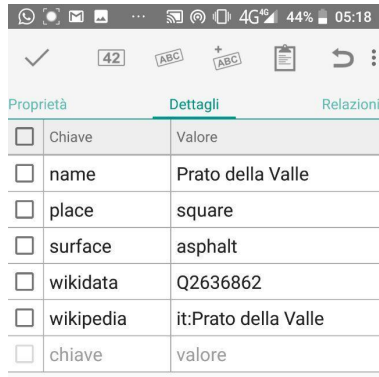
<https://josm.openstreetmap.de>

- Editor per desktop
- Per utenti più esperti (molti plugin e funzionalità avanzate)
- Si può lanciare anche da openstreetmap.org



Mobile editor: Vespucci [\(https://vespucci.io/\)](https://vespucci.io/)

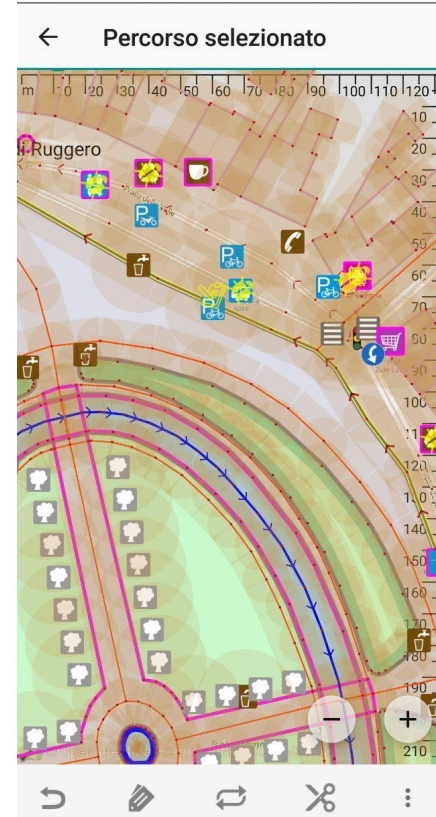
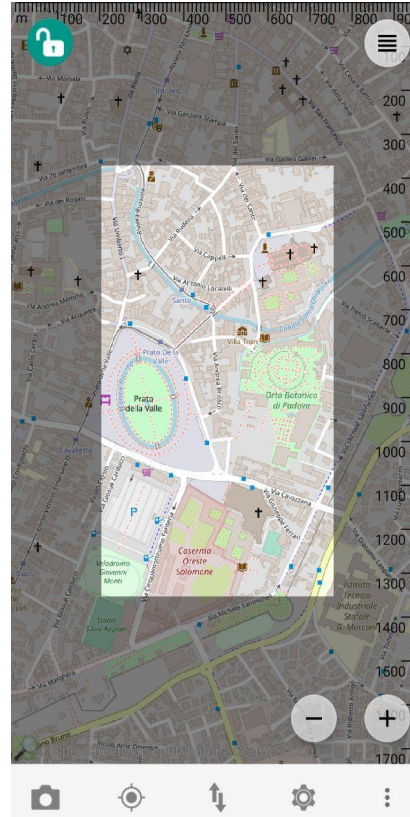
- App Android
- Editor avanzato (per esperti)
- Massima libertà di editing
- Preset
- Lavoro offline



Proprietà	Valore
<input type="checkbox"/> Chiave	Valore
<input type="checkbox"/> name	Prato della Valle
<input type="checkbox"/> place	square
<input type="checkbox"/> surface	asphalt
<input type="checkbox"/> wikidata	Q2636862
<input type="checkbox"/> wikipedia	it:Prato della Valle
<input type="checkbox"/> chiave	valore

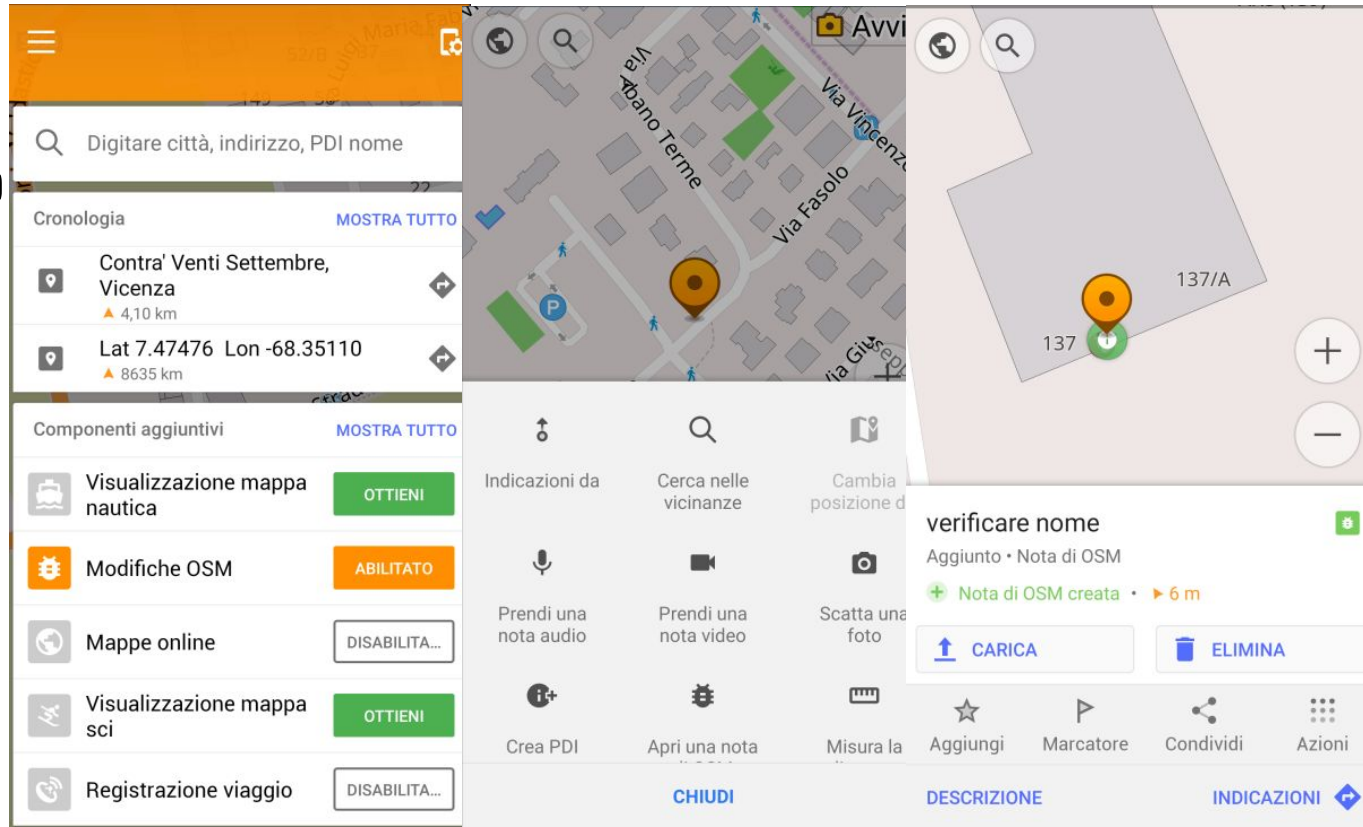


Predefiniti	Proprietà		
<input type="checkbox"/> Strade	Acqua	Trasporto	Strutture
<input type="checkbox"/> Sport	Edifici	Indoor elements	Fatto dall'uomo
<input type="checkbox"/> Historic Places & Objects	Negozi	Denaro	Geografia
<input type="checkbox"/> Utilizzo del terreno ed elementi naturali	Indirizzo e contatti	Annotatione	Crafts
<input type="checkbox"/> Uffici	Lifecycle		



Mobile editor: OsmAnd [\(https://osmand.net/\)](https://osmand.net/)

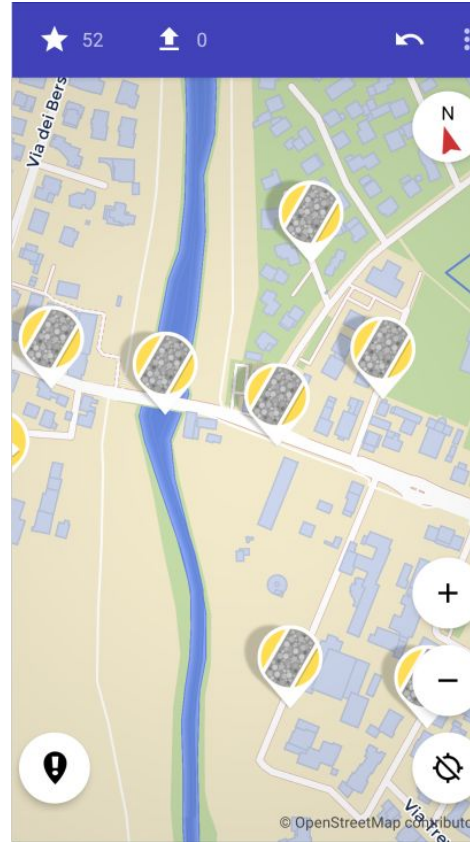
- App Android e iOS
- Editing intuitivo
- Modifiche/inserimento solo POI
- Note audio/video
- Lavoro offline
- Componenti aggiuntivi
- Anche routing, registrazione tracce, profili personalizzati, ...



Mobile editor: StreetComplete

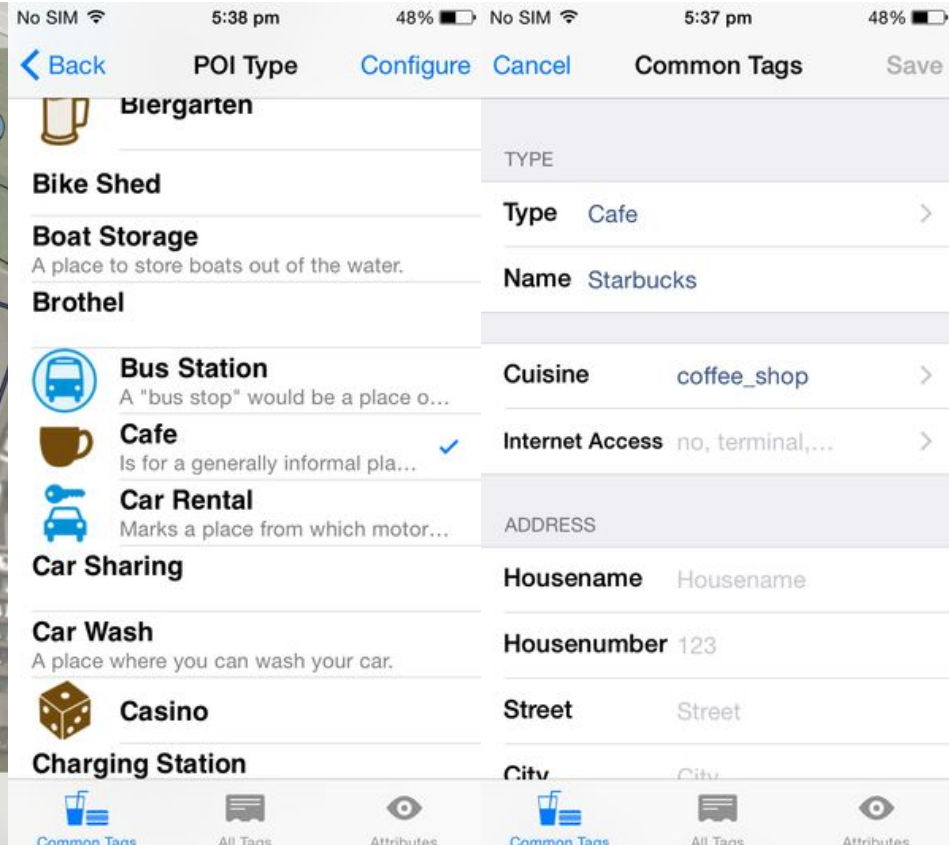
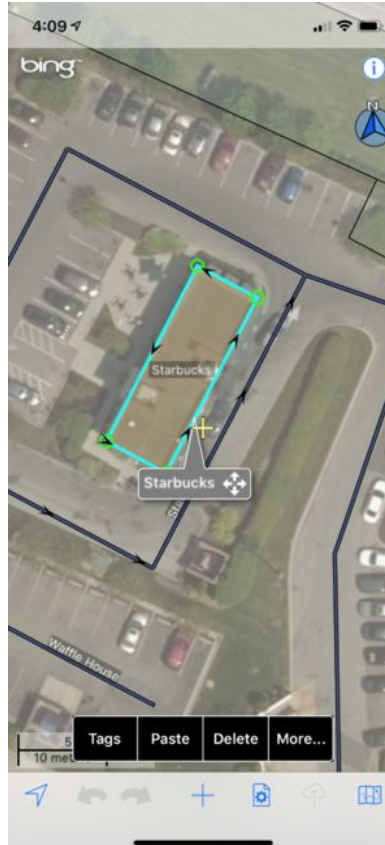
(<https://github.com/westnordost/StreetComplete>)

- App Android
- Editing guidato
- Solo modifica tag, no aggiunta nuovi elementi
- Facile ed immediato
- Download tasks nei dintorni
- Diversi tipi di compiti, anche a scopo sociale
- Richiede connessione











Mobile editor: Go Map!! (https://wiki.openstreetmap.org/wiki/Go_Map!!)

- App per iOS
- Aggiunta e modifica di nodi, linee e aree
- Creazione, upload e download tracce GPX
- Lavoro offline



Editors: <https://wiki.openstreetmap.org/wiki/Editors>

Name	Screenshot	Platform	Add POIs	Edit / Delete POIs	Edit arbitrary tags of existing OSM objects	Edit geometries	Support Imagery offset DB	Upload to OSM	Version
ArcGIS Editor for OSM [1]		Windows	yes	yes	yes	yes	?	yes	2019-06-11 10.7
Fireyak [2]		Android	yes	?	?	?	no	yes	2019-03-28 1.3.9
GNOME Maps [3]		Linux	yes	yes	no	no	no	yes	2019-06-17 3.33.3
Go Map!! [4]		iOS 7+	yes	yes	yes	yes	?	yes	2018-09-20 1.6.1
GPSMapEdit [5]		Windows	yes	yes	yes	yes	?	yes	2019-06-01 2.1 (78.10 FIX1)
iD [6]		Web-based (JavaScript)	yes	yes	yes	yes	no	yes	2020-04-24 2.17.3
ID-Indoor [7]		Web-based (JavaScript)	yes	yes	yes	yes	no	yes	2016-07-18 1.9.6
iD-strava [8]		Web-based (JavaScript)	yes	yes	yes	yes	no	yes	2017-11-07 1.8.5
JOSM [9]		Windows, Linux, macOS	yes	yes	yes	yes	yes	yes	2020-04-06 16239
Level0 [10]		Web	yes	yes	yes	yes	?	yes	2016-02-09 1.2



Estrazione/download dei dati

modalità diverse per tutti i gusti



Estrazione dal sito openstreetmap.org

Cliccare sul bottone “Esporta” verde in alto per attivare la funzione, poi sul bottone “Esporta” blu a sinistra per esportare i dati in formato *.osm* per l’area visibile.

Oppure cliccare sull’opzione “Seleziona manualmente un’area differente”

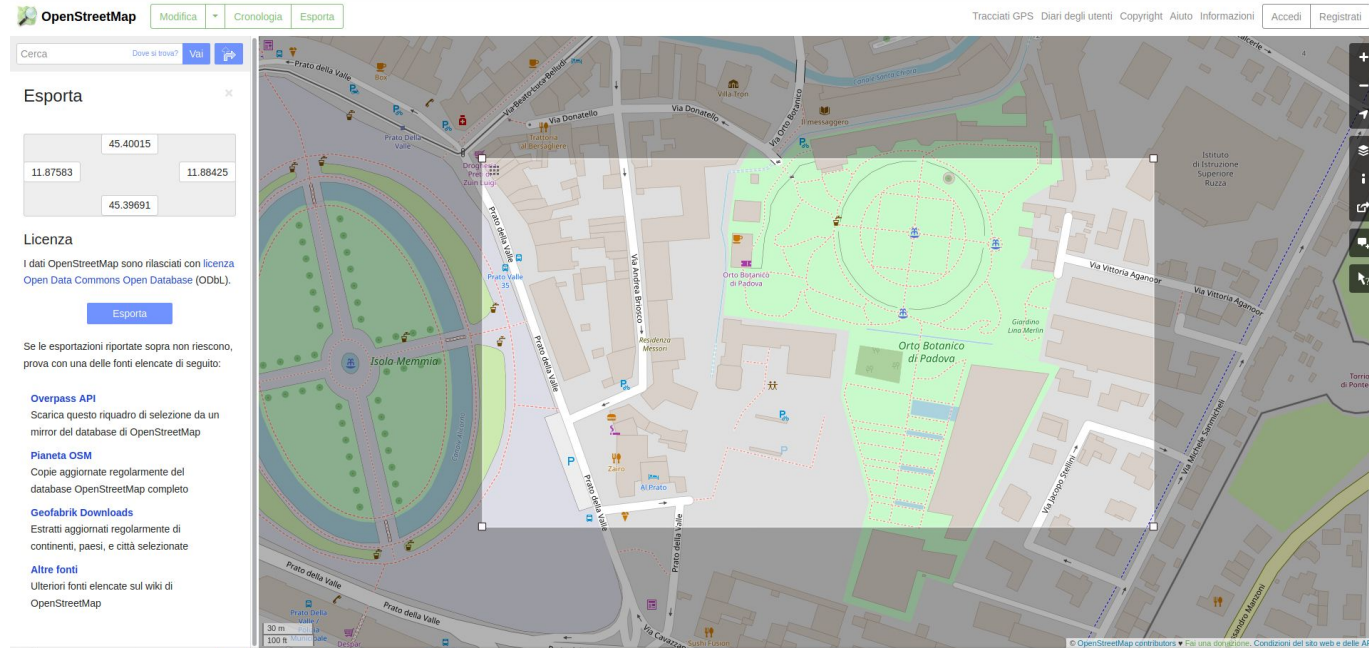
The screenshot shows the OpenStreetMap interface. At the top, the navigation bar includes 'OpenStreetMap', 'Modifica', 'Cronologia', and 'Esporta' (highlighted with a red box). Below the navigation bar, there is a search bar and a sidebar with the 'Esporta' section. In the sidebar, the 'Esporta' button is highlighted with a red box, and the text 'Seleziona manualmente un'area differente' is highlighted with a red box. The main map area shows a street view of Prato della Valle in Padua, with a green dashed outline indicating the selected area for export.

<https://www.openstreetmap.org/export>

Estrazione dal sito openstreetmap.org

Cliccare sul bottone “Esporta” verde in alto per attivare la funzione, poi sul bottone “Esporta” blu a sinistra per esportare i dati in formato *.osm* per l’area visibile.

Oppure cliccare sull’opzione “Seleziona manualmente un’area differente”



The screenshot displays the OpenStreetMap interface. At the top, there are navigation buttons: "OpenStreetMap", "Modifica", "Cronologia", and "Esporta". On the right side, there are links for "Tracciati GPS", "Diari degli utenti", "Copyright", "Aiuto", "Informazioni", "Accedi", and "Registrai".

On the left side, there is a search bar with the text "Cerca" and "Dove si trova?". Below it, there is a section titled "Esporta" with a close button. This section contains a table of coordinates:

45.40015	
11.87583	11.88425
45.39691	

Below the table, there is a "Licenza" section with the text: "I dati OpenStreetMap sono rilasciati con licenza Open Data Commons Open Database (ODbL)." and a blue "Esporta" button.

Below the "Esporta" button, there is a section titled "Se le esportazioni riportate sopra non riescono, prova con una delle fonti elencate di seguito:" followed by several links: "Overpass API", "Pianeta OSM", "Geofabrik Downloads", and "Altre fonti".

The main part of the screenshot is a map of Padua, Italy, showing the "Orto Botanico di Padova" (Botanical Garden of Padua) highlighted in green. A red dashed selection box is drawn around a portion of the map, including the botanical garden and surrounding streets. The map shows various landmarks, including the "Isola Memmia" and the "Orto Botanico di Padova".

<https://www.openstreetmap.org/export>

Planet OSM

Database completo a una certa data

<https://planet.openstreetmap.org/>



Planet OSM

The files found here are regularly-updated, complete copies of the OpenStreetMap.org database, and those published before the 12 September 2012 are distributed under a Creative Commons Attribution-ShareAlike 2.0 license, those published after are Open Data Commons Open Database License 1.0 licensed. For more

information, [see the project wiki](#).

Complete OSM Data

[Latest Weekly Planet XML File](#)

90 GB, created 4 days ago.

md5: 63dca0b99d150e4b61c3d630b5afab68.

[Latest Weekly Changesets](#)

3.4 GB, created 4 days ago.

md5: ec8f149e3337bfc6ad3306f1e22eb49a.

[Latest Weekly Planet PBF File](#)

52 GB, created 4 days ago.

md5: cc137b80b7195505750c5c80f915787e.

Name	Last modified	Size	Description
Parent Directory		-	
2020/	2020-06-18 21:51	-	
2019/	2020-02-03 02:47	-	
2018/	2019-02-04 03:46	-	
2017/	2018-04-23 10:05	-	
2016/	2017-01-17 22:49	-	
2015/	2016-04-11 10:54	-	
2014/	2016-04-11 10:37	-	
2013/	2013-02-08 18:20	-	
history-latest.osm.bz2.md5	2020-06-18 21:51	57	
history-latest.osm.bz2	2020-06-18 21:27	1376	

Database completo a una certa data + tutta la storia passata

<https://planet.openstreetmap.org/planet/full-history/>



Planet OSM

The files found here are complete copies of the OpenStreetMap.org database, including editing history. These are published under an Open Data Commons Open Database License 1.0 licensed. For more information, [see the project wiki](#).

Complete OSM Data History

[Latest Full History Planet XML File](#)

137 GB, created 4 days ago.

md5: 62430c0b678f6ac2f6b4e63cb9992df5.

[Latest Full History Planet PBF File](#)

85 GB, created 4 days ago.

md5: 0cdb9c8d65577287620d1fd761da55d.

The full history planet file contains the full editing history of the OpenStreetMap database in both XML and custom PBF formats.

Estratti: Geofabrik (<http://download.geofabrik.de>)

- Estratti predefiniti a livello nazionale o sub-nazionale
- Formati .osm e .shp

Italy

[\[one level up\]](#)

The OpenStreetMap data files provided on this server do **not** contain the user names, user IDs and changeset IDs of the OSM objects because these fields are assumed to contain personal information about the OpenStreetMap contributors and are therefore subject to data protection regulations in the European Union.

[Extracts with full metadata](#) are available to OpenStreetMap contributors only.

Commonly Used Formats

- [italy-latest.osm.pbf](#), suitable for Osmium, Osmosis, imposm, osm2pgsql, mkgmap, and others. This file was last modified 5 hours ago and contains all OSM data up to 2020-06-23T20:59:02Z. File size: 1.4 GB; MD5 sum: [93bc93db6478605598313386391e083b](#).
- [italy-latest-free.shp.zip](#) is not available for this region; try one of the sub-regions.

Other Formats and Auxiliary Files

- [italy-latest.osm.bz2](#), yields OSM XML when decompressed; use for programs that cannot process the .pbf format. This file was last modified 3 days ago. File size: 2.5 GB; MD5 sum: [a68c660444ca3c9cc497ca4ec2880ae](#).
- [italy-internal.osm.pbf](#) The history file contains personal data and is available on the [internal server](#) only. See notice above for further information.
- [poly file](#) that describes the extent of this region.
- [osm.gz files](#) that contain all changes in this region, suitable e.g. for Osmosis updates
- [raw directory index](#) allowing you to see and download older files

Sub Regions

Click on the region name to see the overview page for that region, or select one of the file extension links for quick access.

Sub Region	Quick Links		
	.osm.pbf	.shp.zip	.osm.bz2
Centro	[.osm.pbf] (243 MB)	[.shp.zip]	[.osm.bz2]
Isola	[.osm.pbf] (138 MB)	[.shp.zip]	[.osm.bz2]
Nord-Est	[.osm.pbf] (470 MB)	[.shp.zip]	[.osm.bz2]
Nord-Ovest	[.osm.pbf] (396 MB)	[.shp.zip]	[.osm.bz2]
Sud	[.osm.pbf] (231 MB)	[.shp.zip]	[.osm.bz2]

download.geofabrik.de/europe/italy/nord-est.html



🇩🇪 Not what you were looking for? Geofabrik is a consulting and software development firm based in Karlsruhe, Germany specializing in OpenStreetMap services. We're happy to help you with data preparation, processing, server setup and the like. [Check out our web site](#) and contact us if we can be of service.

🇩🇪 Nicht das Richtige dabei? Die Geofabrik ist ein auf OpenStreetMap spezialisiertes Beratungs- und Softwareentwicklungsunternehmen in Karlsruhe. Gem helfen wir Ihnen bei der Datenaufbereitung, Datenkonvertierung, Serverinstallation und ähnlichen Aufgaben. [Besuchen Sie unsere Webseite](#) und sprechen Sie mit uns, wenn wir Ihnen helfen

Estratti: OSMaXX (<https://osmaxx.hsr.ch/>)

- Estratti predefiniti o personalizzati
- Formati .osm, .shp, Geopackage, ...

OSMaXX / Existing excerpt / Country

Export Existing Excerpt

Excerpt

Filter by name: Italy

Filter by group: Show all

Existing excerpts

- Personal excerpts (alesarrett) [1]
- Public excerpts [13]
- EQ_Norcia_Italy
- Countries & administrative areas [234]
- Italy

Export options

GIS options (ignored for Garmin and PBF)

Coordinate system: WGS 84

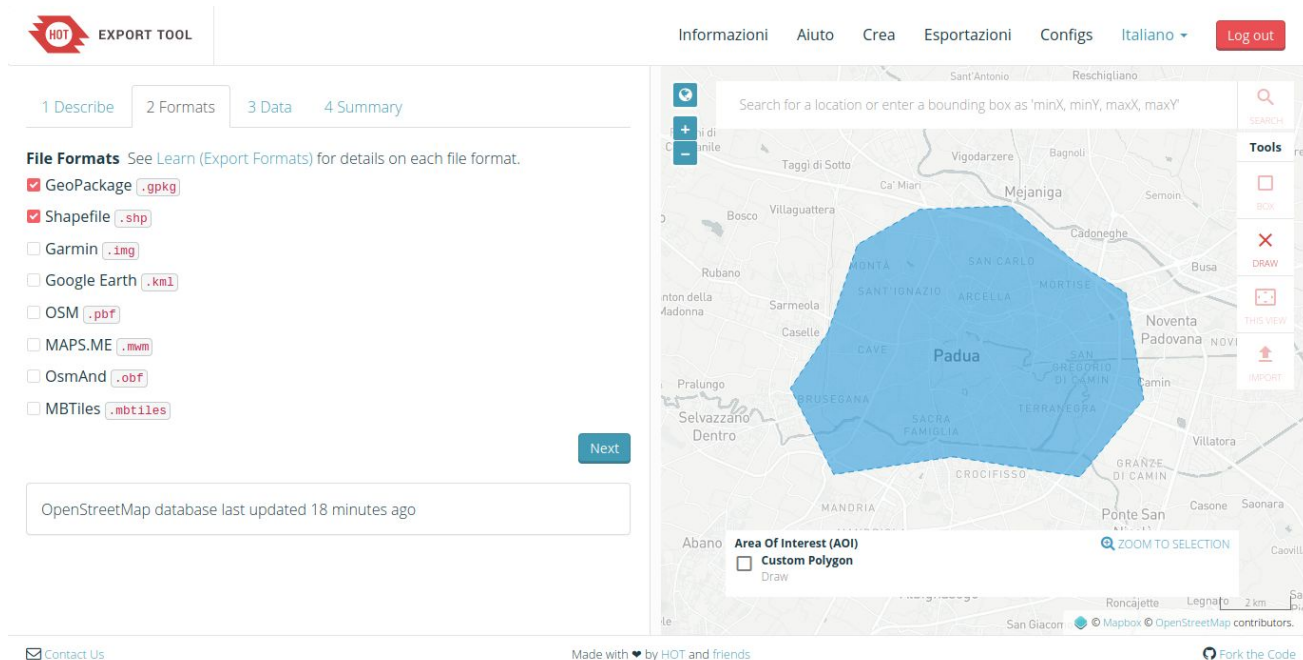
Detail level: Full detail

GIS export formats

- Esri File Geodatabase (~3 GB)
- Esri Shapefile (~40 GB)
- GeoPackage (~22 GB)
- SpatiaLite (~20 GB)
- Garmin navigation & map data (~2 GB)
- OSM Protocolbuffer Binary Format (~3 GB)

Estratti: HOT export tool (<https://export.hotosm.org/en/v3/exports>)

- Estratti predefiniti o personalizzati
- Formati .osm, .shp, Geopackage, ...



The screenshot displays the HOT Export Tool interface. On the left, the 'File Formats' section lists various output options:

- GeoPackage (.gpkg)
- Shapefile (.shp)
- Garmin (.img)
- Google Earth (.kml)
- OSM (.pbf)
- MAPS.ME (.mvm)
- OsmAnd (.obf)
- MBTiles (.mbtiles)

A 'Next' button is located below the list. Below the button, a status message reads: 'OpenStreetMap database last updated 18 minutes ago'.

The right side of the interface features a map of Padua, Italy, with a blue custom polygon drawn over it. The map includes a search bar at the top, navigation controls on the left, and a 'Tools' panel on the right with options like 'BOX', 'DRAW', 'THIS VIEW', and 'IMPORT'. A legend at the bottom of the map identifies the 'Area Of Interest (AOI)' as a 'Custom Polygon'.

At the bottom of the page, there is a 'Contact Us' link, the text 'Made with ❤️ by HOT and friends', and a 'Fork the Code' link.

Estratti: HOT export tool


- Estratti predefiniti o personalizzati
- Formati .osm, .shp, Geopackage, ...
- Selezione degli elementi da esportare

The screenshot shows the 'HOT EXPORT TOOL' interface. At the top, there are tabs for '1 Describe', '2 Formats', '3 Data', and '4 Summary'. Below these is a 'Tag Tree' section with sub-tabs for 'Tag Tree', 'Configs', and 'YAML'. A search bar is present with the text 'Search for a feature type...' and a 'Clear' button. The 'File Formats' section is expanded, showing a list of export formats with checkboxes: GeoPackage (.gpkg), Shapefile (.shp), Garmin (.img), Google Earth (.kml), OSM (.pbf), MAPS.ME (.mwm), OsmAnd (.obf), and MBTiles (.mbtiles). A text box below the list says 'OpenStreetMap database last update'. At the bottom, there is a 'Contact Us' link.

The screenshot shows the 'HOT EXPORT TOOL' interface. At the top, there are tabs for '1 Describe', '2 Formats', '3 Data', and '4 Summary'. Below these is a 'Tag Tree' section with sub-tabs for 'Tag Tree', 'Configs', and 'YAML'. A search bar is present with the text 'Search for a feature type...' and a 'Clear' button. The 'Tag Tree' section is expanded, showing a list of feature types with checkboxes: Buildings, Commercial, Communication, Education, Emergency, Financial, and Government. The 'Buildings' category is selected, and its sub-items are: Building Names and Geometries, Addresses, and Materials and Condition. The 'Communication' category is also selected, and its sub-items are: name, office, man_made, tower, operator, communication:mobile, and communication:radio. A 'Where' clause is displayed: 'office='telecommunication' OR "tower:type"='communication' OR man_made='communications_tower'.

OSM/Overpass API

- Estrazione totalmente personalizzata
- OSM API: accesso in lettura e scrittura al database OSM
- Overpass API: sola lettura
 - **Overpass Turbo**: potente e flessibile interfaccia



```
1 /*
2 This has been generated by the overpass-turbo wizard.
3 The original search was:
4 "highway=bus_stop OR railway=tram OR
5 bicycle=designated"
6 */
7 [out:json][timeout:25];
8 // gather results
9 (
10 // query part for: "highway=bus_stop"
11 node["highway"="bus_stop"]{((bbox))};
12 way["highway"="bus_stop"]{((bbox))};
13 relation["highway"="bus_stop"]{((bbox))};
14 // query part for: "railway=tram"
15 node["railway"="tram"]{((bbox))};
16 way["railway"="tram"]{((bbox))};
17 relation["railway"="tram"]{((bbox))};
18 // query part for: "bicycle=designated"
19 node["bicycle"="designated"]{((bbox))};
20 way["bicycle"="designated"]{((bbox))};
21 relation["bicycle"="designated"]{((bbox))};
22 );
23 // print results
24 out body;
25 out skel at;
```

- <https://wiki.openstreetmap.org/wiki/API>
- https://wiki.openstreetmap.org/wiki/Overpass_API
- <https://overpass-turbo.eu/>

QGIS: plugin QuickOSM [\(<https://github.com/3liz/QuickOSM>\)](https://github.com/3liz/QuickOSM)

- Plugin in QGIS per estrarre in modo mirato specifici dati.
- Usa Overpass API
- Disponibile nel processing modeler

The screenshot displays the QGIS interface with the QuickOSM plugin window open. The 'Layers' panel on the left shows three layers: 'footway_sidewalk_Padova' (yellow), 'footway_sidewalk_Padova' (white), and 'OSM Standard' (blue). The main map area shows a street grid in Padova, Italy, with brown circular markers indicating the extracted footway data. The QuickOSM window has a sidebar with 'Quick query', 'Query', 'OSM File', 'Parameters', and 'About'. The main area contains a 'Help with key/value' section with a 'Reset' button. Below this, there are input fields for 'Key' (footway), 'Value' (sidewalk), and 'In' (Padova). A message states: 'All OSM objects with the key 'footway'='sidewalk' in Padova are going to be downloaded.' At the bottom, there are 'Show query' and 'Run query' buttons, and a status bar indicating 'Successful query, 3 layer(s) has been loaded.' and '100%'.



Hands-on: usare i dati



Esercizio in QGIS

- installare il plugin QuickOSM
- installare QuickMap Services
- attivare sfondo OSM standard
- zoomare nell'area di interesse (non troppo estesa)

The image displays three sequential screenshots from the QGIS software interface, illustrating the process of installing and configuring plugins.

Top Screenshot: Shows the 'Plugins | Installed (12)' window. The search bar contains 'QuickOSM'. The 'QuickOSM' plugin is selected and checked. The main panel displays the plugin's description: 'Download OSM data thanks to the Overpass API. You can also open local OSM or PBF files. A special parser, on top of OGR, is used to let you see all OSM keys available.' It also shows a 5-star rating and 214 rating votes, and 49,245 downloads.

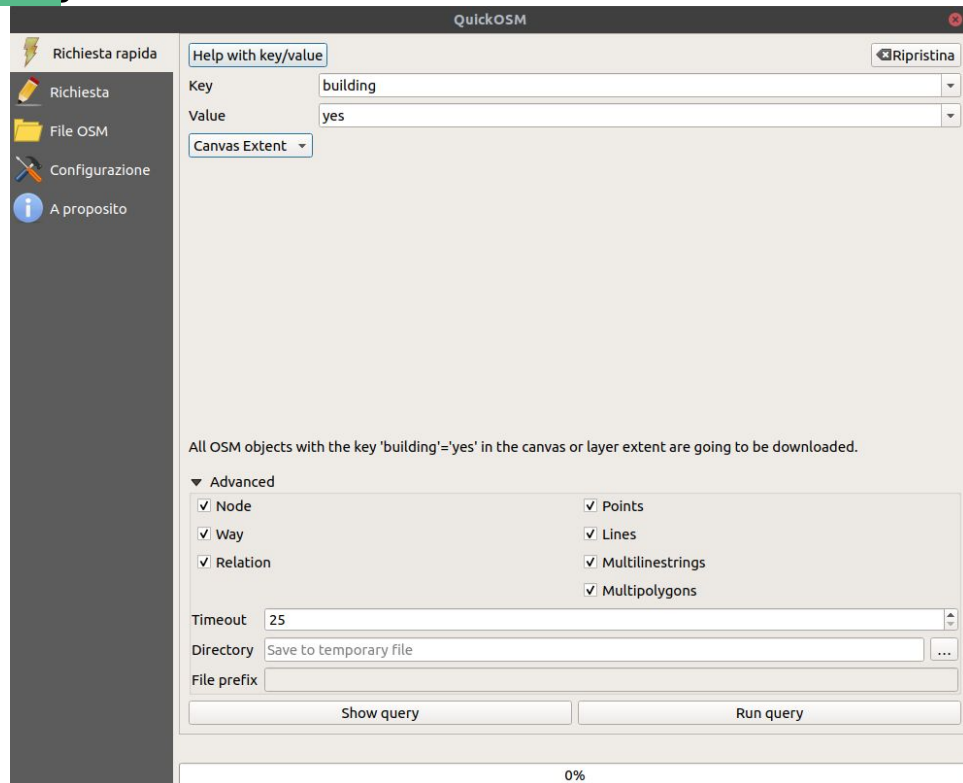
Middle Screenshot: Shows the 'Plugins | Installed (12)' window with the search bar containing 'quickmapservices'. The 'QuickMapServices' plugin is selected and checked. The main panel displays the 'Installed Plugins' section, which includes instructions: 'Here you only see plugins installed on your QGIS. Click on the name to see details. Click the checkbox or double-click the name to activate or deactivate the plugin. You can change the sorting via the context menu (right click).'

Bottom Screenshot: Shows the main QGIS interface with the 'Web' menu open. The 'QuickMapServices' option is selected, and a submenu is displayed. The 'OSM Standard' option is highlighted. Other options in the submenu include 'OSM Cycle map', 'OSM Humanitarian', 'OSM TF Landscape', 'OSM TF Outdoors', 'OSM TF Transport Dark', 'OSM Transportation', 'OSM Veloroad', 'OSM2World/3D (D,A,CH)', 'OpenStreetMap monochrome', 'OpenTopoMap', 'Openstreetmap tracks', 'Wikimedia Map', and 'Öpnvskarte'.

QuickOSM: download edifici

(<https://wiki.openstreetmap.org/wiki/Key:building>)

- attivare il plugin QuickOSM e impostare i parametri:
 - key -> building
 - value -> yes
 - canvas extent
- verranno scaricati tutti gli edifici all'interno dell'area visualizzata



Visualizzazione edifici

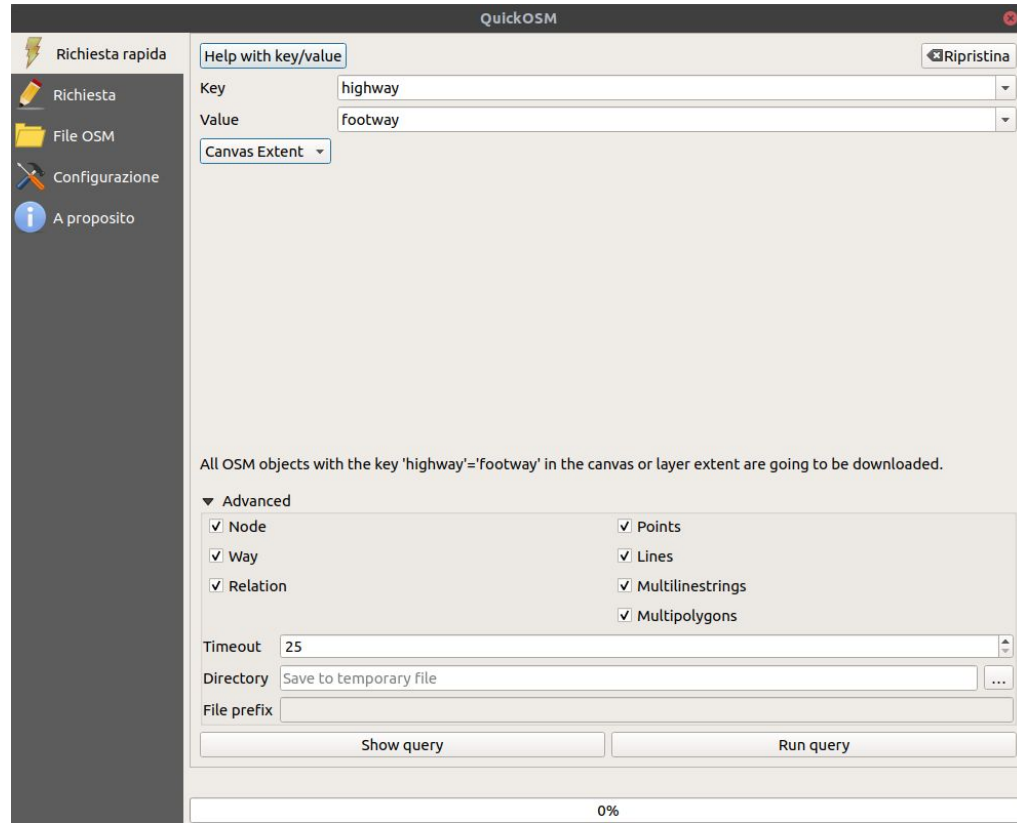
The screenshot displays a GIS application interface. On the left, a 'Layer' panel shows three checked layers: 'building_yes', 'building_yes', and 'OSM Standard'. The main map view shows a street grid and building footprints in yellow. A red dashed line outlines a specific building labeled 'Loggia Amulea'. An inset window provides a zoomed-in view of this building. On the right, an 'Informazioni Risultati' panel displays metadata for the selected building.

Elemento	Valore
building_yes	
alt_name	
(Derivato)	
(Azioni)	
full_id	w131997736
osm_id	131997736
osm_type	way
building	yes
type	
addr:street	
addr:housenumber	
alt_name	
architect	
historic	
manor:type	
name	Loggia Amulea
ref:IT:ICCD	
ref:IT:IRVV	
start_date	
tourism	attraction
addr:postcode	
wikidata	Q3257898
wikipedia	it:Loggia Amulea
leisure	

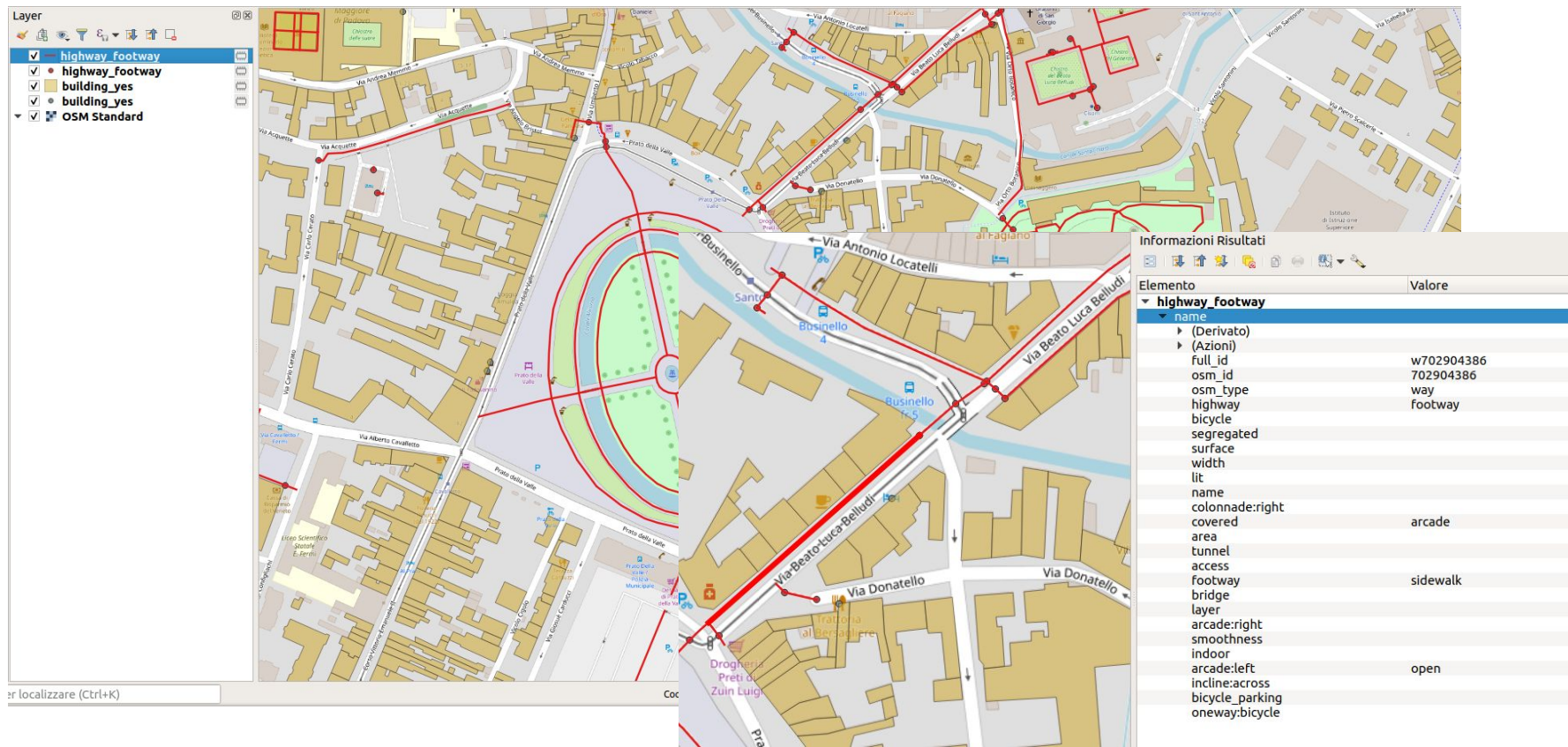
Download percorsi pedonali

(<https://wiki.openstreetmap.org/wiki/Tag:highway%3Dfootway>)

- In QuickOSM impostare i parametri:
 - key -> highway
 - value -> footway
 - canvas extent
- verranno scaricati tutti i percorsi pedonali all'interno dell'area visualizzata



Visualizzazione percorsi pedonali



Layer

- highway_footway
- highway_footway
- building_yes
- building_yes
- OSM Standard

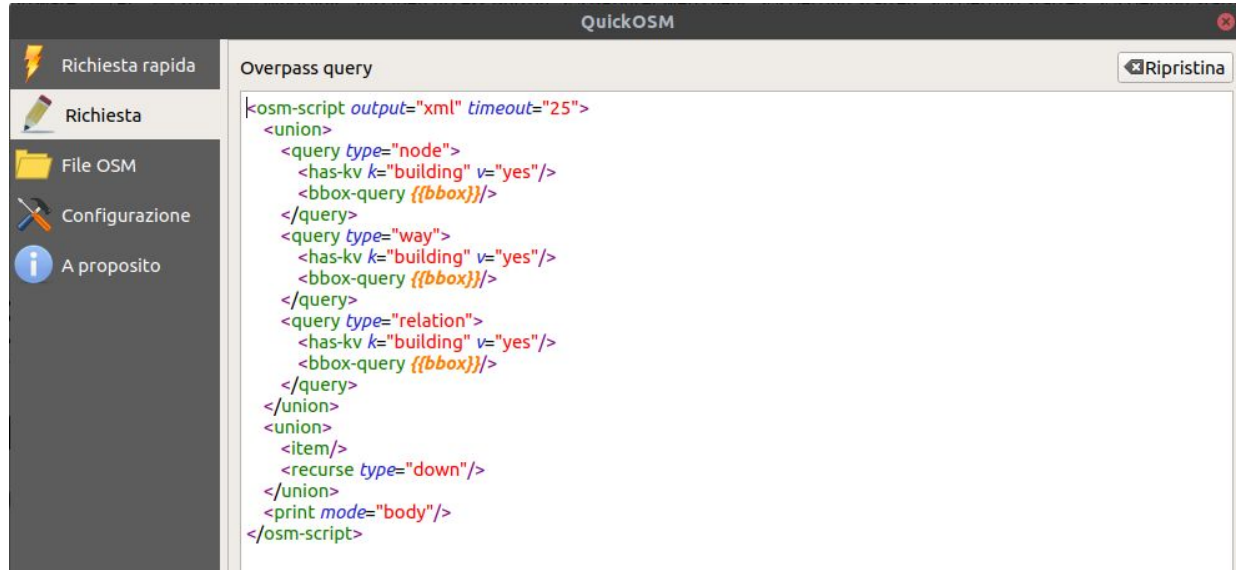
Informazioni Risultati

Elemento	Valore
highway_footway	
name	
(Derivato)	
(Azioni)	
full_id	w702904386
osm_id	702904386
osm_type	way
highway	footway
bicycle	
segregated	
surface	
width	
lit	
name	
colonnade:right	
covered	arcade
tunnel	
access	
footway	sidewalk
bridge	
layer	
arcade:right	
smoothness	
indoor	
arcade:left	open
incline:across	
bicycle_parking	
oneway:bicycle	

localizzare (Ctrl+K)

Limitazioni in QuickOSM

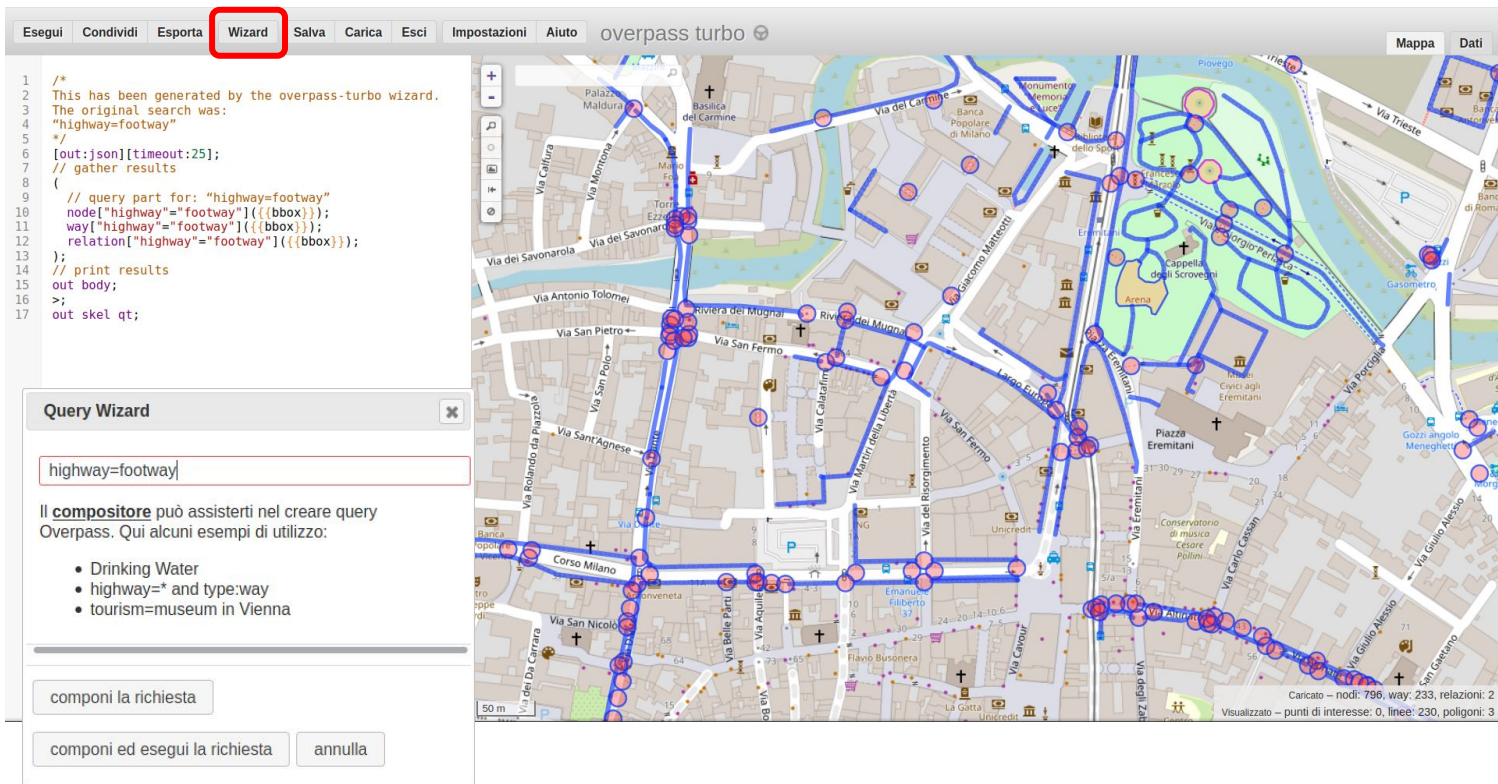
- Modalità “*Richiesta rapida*”: 1 solo tag (coppia key/value)
- Possibilità in “*Richiesta*” di scrivere query Overpass API
- Soluzione
 - Overpass turbo



Overpass Turbo [\(https://overpass-turbo.eu/\)](https://overpass-turbo.eu/)

Query
semplificate
attraverso il
“wizard”

Percorsi pedonali:
highway=footway



The screenshot shows the Overpass Turbo web interface. At the top, there is a menu with options like 'Esegui', 'Condividi', 'Esporta', 'Wizard' (highlighted with a red box), 'Salva', 'Carica', 'Esci', 'Impostazioni', and 'Aiuto'. Below the menu is a code editor with a query script:

```
1 /*
2 This has been generated by the overpass-turbo wizard.
3 The original search was:
4 "highway=footway"
5 */
6 [out:json][timeout:25];
7 // gather results
8 (
9
10 // query part for: "highway=footway"
11 node["highway"="footway"]{{{bbox}}};
12 way["highway"="footway"]{{{bbox}}};
13 );
14 // print results
15 out body;
16 >;
17 out skel qt;
```

Below the code editor is the 'Query Wizard' section. It contains a text input field with the query `highway=footway`. Below the input field, there is a paragraph of text: 'Il **compositore** può assisterti nel creare query Overpass. Qui alcuni esempi di utilizzo:'. This is followed by a bulleted list of examples:

- Drinking Water
- `highway=*` and `type:way`
- `tourism=museum` in Vienna

At the bottom of the wizard section, there are two buttons: 'componi la richiesta' and 'componi ed esegui la richiesta' (with an 'annulla' button next to it). The right side of the interface shows a map of Milan with a network of blue lines representing pedestrian routes. The map includes various landmarks and street names, such as 'Via del Corso', 'Via San Pietro', and 'Piazza Eremitani'. In the bottom right corner of the map, there is a status bar that reads: 'Caricato - nodi: 796, way: 233, relazioni: 2. Visualizzato - punti di interesse: 0, linee: 230, poligoni: 3'.

Overpass Turbo: tag multipli

Marciapiedi:

highway=footway

AND

footway=sidewalk

The screenshot shows the Overpass Turbo interface. At the top, there are menu items: Esegui, Condividi, Esporta, Wizard, Salva, Carica, Esci, Impostazioni, Aiuto, and overpass turbo. On the right, there are buttons for 'Mappa' and 'Dati'. The main area is a map of Milan, Italy, with a blue highlighted path that follows a route through the city, including areas like Corso Milano, Via San Pietro, and Via San Fermo. The path is marked with red circles at various points. On the left side, there is a 'Query Wizard' panel. It contains a text input field with the query: `highway=footway AND footway=sidewalk`. Below the input field, there is a paragraph of text: 'Il **compositore** può assisterti nel creare query Overpass. Qui alcuni esempi di utilizzo:'. This is followed by a list of examples:

- Drinking Water
- highway=* and type=way
- tourism=museum in Vienna

At the bottom of the wizard panel, there are two buttons: 'componi la richiesta' and 'componi ed esegui la richiesta', along with an 'annulla' button. In the bottom right corner of the map area, there is text: 'Caricato - nodi: 302, way: 102, relazioni: 0. Visualizzato - punti di interesse: 0, linee: 102, poligoni: 0'.

<https://wiki.openstreetmap.org/wiki/Tag:footway%3Dsidewalk>

Overpass Turbo: tag multipli

Attraversamenti
pedonali:
highway=footway
AND
footway=crossing

<https://overpass-turbo.eu/s/VqW>

Esegui Condividi Esporta Wizard Salva Carica Esci Impostazioni Aiuto overpass turbo

```
1 /*  
2 This has been generated by the overpass-turbo wizard.  
3 The original search was:  
4 "highway=footway AND footway=crossing"  
5 */  
6 [out:json][timeout:25];  
7 // gather results  
8 (  
9 // query part for: "highway=footway and  
10 footway=crossing"  
11 node["highway"="footway"]["footway"="crossing"]  
12 {{bbox}};  
13 way["highway"="footway"]["footway"="crossing"]  
14 {{bbox}};  
15 relation["highway"="footway"]["footway"="crossing"]  
16 {{bbox}};  
17 );  
18 // print results  
19 out body;  
20 >;  
21 out skel qt;
```

Query Wizard

Il **compositore** può assisterti nel creare query Overpass. Qui alcuni esempi di utilizzo:

- Drinking Water
- highway=* and type:way
- tourism=museum in Vienna

Caricato - nodi: 143, way: 44, relazioni: 0
Visualizzato - punti di interesse: 0, linee: 44, poligoni: 0

<https://wiki.openstreetmap.org/wiki/Tag:highway%3Dcrossing>

Da Overpass Turbo a QGIS

Copio l'istruzione da Overpass Turbo all'interno del box "Ricerca" nel plugin QuickOSM ed eseguo la query.

QuickOSM

Overpass query

This has been generated by the overpass-turbo wizard.
The original search was:
"highway=footway AND footway=crossing"
*/
[out:json][timeout:25];
// gather results
(
// query part for: "highway=footway and footway=crossing"
node["highway"="footway"]["footway"="crossing"]{{{bbox}}};
way["highway"="footway"]["footway"="crossing"]{{{bbox}}};
relation["highway"="footway"]["footway"="crossing"]{{{bbox}}};
);
// print results
out body;
>;
out skel qt;

Advanced

Generate query

Overpass Turbo

Run query

Documentation

Successful query, 1 layer(s) has been loaded.

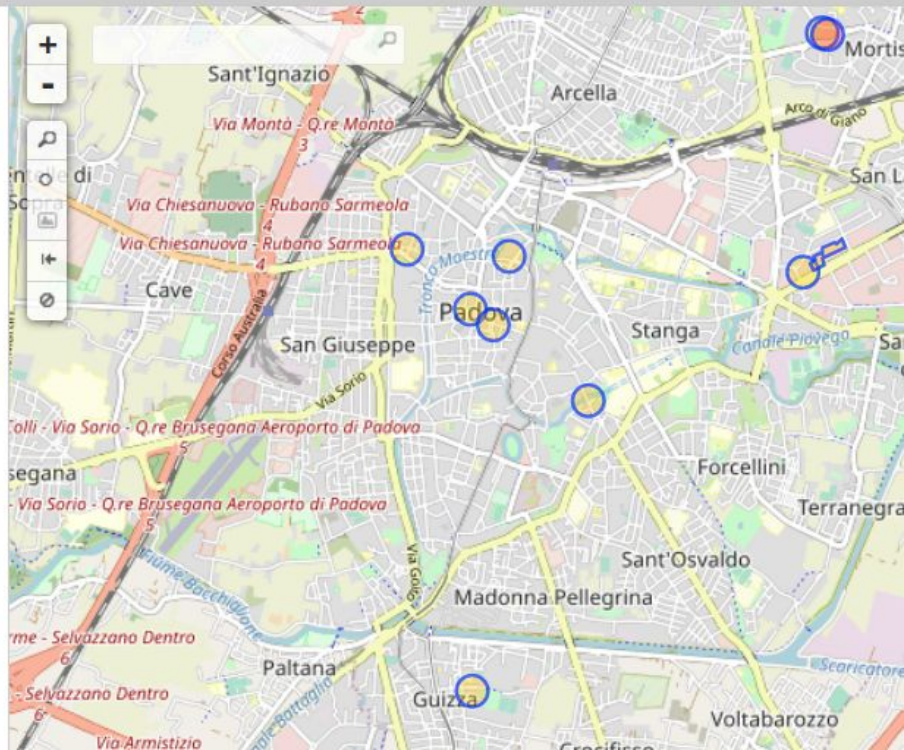
100%

Overpass Turbo: molto di più

Esegui Condividi Esporta Wizard Salva Carica Impostazioni Aiuto

overpass turbo

```
1 [out:json][timeout:25];
2 // cerco a Padova
3 {{geocodeArea:Padova}}->.searchArea;
4 // individuo tutti i parcheggi per disabili
5 nwr["amenity"="parking_space"]["disabled"="designated"]
6 (area.searchArea);
7 // trovo tutti i negozi accessibili alle carrozzine che sono a
8 meno di 50 metri dai parcheggi
9 nwr["shop"]["wheelchair"="yes"](around:50);
10 out body;
>;
out skel qt;
```



Estrarre i negozi che, a Padova, hanno parcheggi per disabili a meno di 50 m e che sono accessibili alle carrozzine.

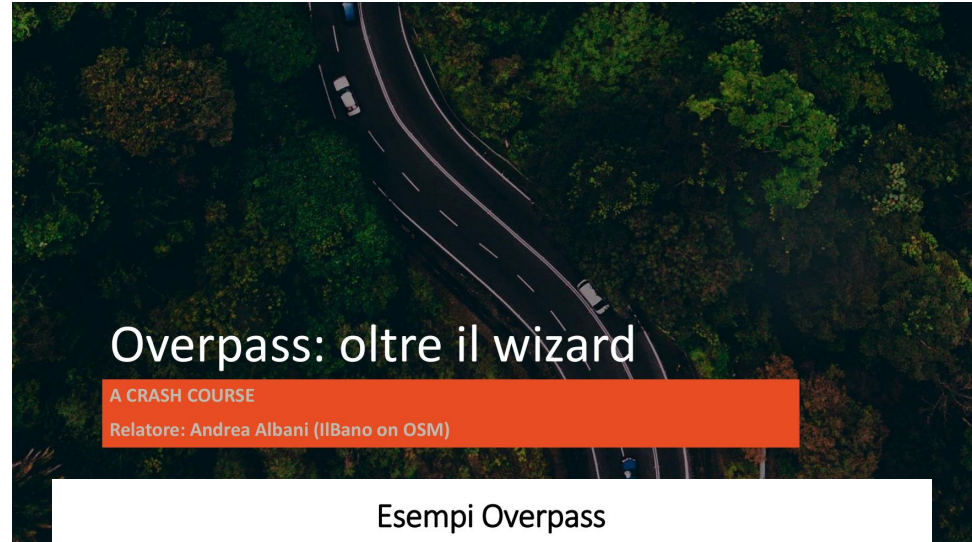
<https://overpass-turbo.eu/s/Vr3>

Overpass Turbo: per approfondire

Presentazione “Overpass Turbo: oltre il wizard”, di Andrea Albani (OSMit/FOSS4G-it 2020):

https://wiki.openstreetmap.org/wiki/Italy/Events/OSMit_2020

con moltissimi esempi dal semplice all’ultra complesso.



Overpass: oltre il wizard

A CRASH COURSE

Relatore: Andrea Albani (IBano on OSM)

Esempi Overpass

Contents

1. Farmacie a Palermo (uso di area, geocodearea e filtri di esistenza) 3
2. Parchi a Ravenna (uso di bbox, nwr e differenti tipi di out) 3
3. Via XXV Aprile a prescindere da come è scritta (uso di regexp) 3
4. Nodi con name:en o name:es (uso di regexp, velocità rispetto a filtro classico) 3
5. Nomi con parole che iniziano con minuscole (uso di regexp) 4
6. Tutti i luoghi di preghiera con il nome che include l'abbreviazione S. (uso di regexp) 4
7. CAP non corretti (uso di regexp)..... 4
8. Nodi (effetto di > e <)..... 4
9. Way (effetto di > e <) 5
10. Relazioni (effetto di >, <, >> e <<) 5



Strumenti di controllo della qualità



Strumenti di controllo della qualità

(https://wiki.openstreetmap.org/wiki/Quality_assurance)

Numerosi strumenti per fare controllo sui dati in OpenStreetMap:

- Bug reporting tools
- Error detection tools
- Visualization tools
- Monitoring tools
- Assistant tools
- Tag statistics

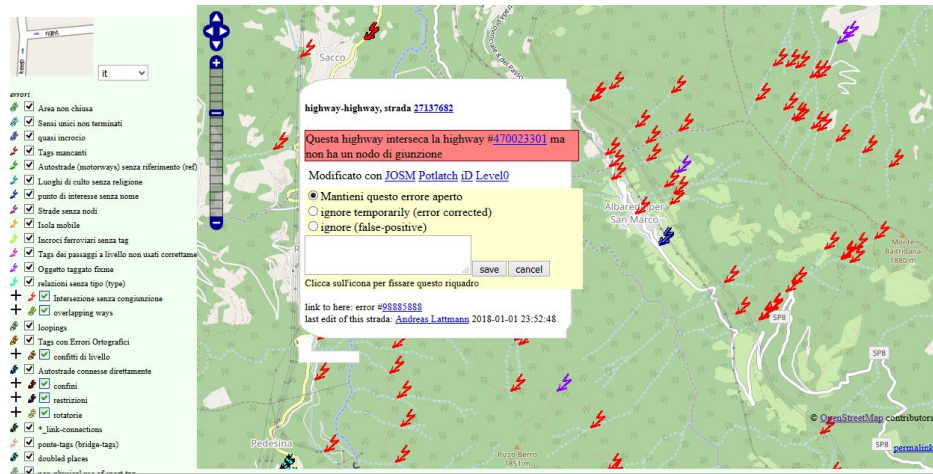
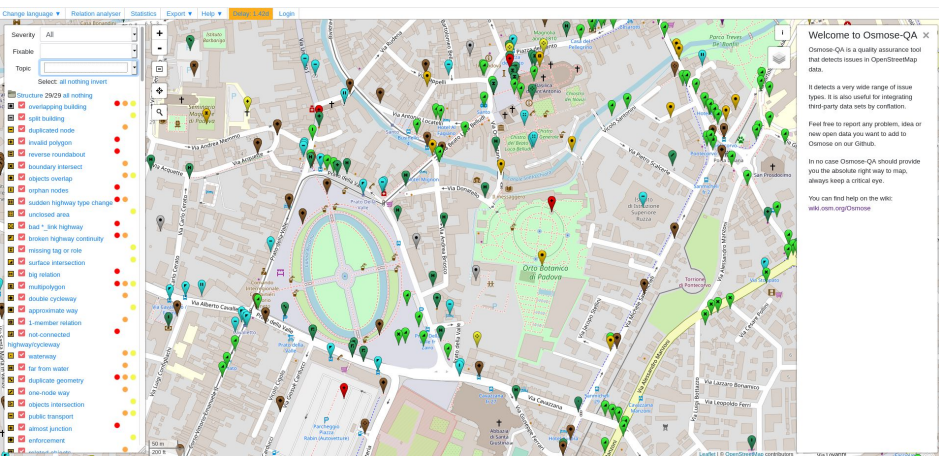
Segnalazione errori nei tag o nella geometria/topologia

Osmose

<http://osmose.openstreetmap.fr/en/map>

KeepRight

http://keepright.ipax.at/report_map.php



Analisi e verifica changesets

OSMCha (<https://osmcha.org/>)

The screenshot shows the OSMCha web interface. At the top, it says "OSMCha v0.66.3". Below that, there's a search bar and a "Filters" button. The main content is a list of changesets, each with a user name, a description, and a timestamp. The changesets listed are:

- svarkey** (5 minutes ago): Added a driveway. #MapWithAI & #https://wiki.openstreetmap.org/wiki/Facebook_AI-Assisted_Road_Tracing. **Unknown ID instance**. 6 11 1
- amzmkuma** (5 minutes ago): Modified Residential Road #MapWithAI & #https://wiki.openstreetmap.org/wiki/Facebook_AI-Assisted_Road_Tracing. **Unknown ID instance**. 0 14 3
- Realq8gma** (5 minutes ago): Outlined local park area as a Park. **New mapper! Park added by new user!**. 0 11 1
- VLD122** (6 minutes ago): Added and modified track_service and residential roads. 5 8 2
- srderang** (6 minutes ago): added service road. **Unknown ID instance**. 6 11 1
- cagefreecowboy** (6 minutes ago): **Unknown ID instance**. 6 11 1

OSMCha

Validation tool for OpenStreetMap



v0.66.3

● Guide | GitHub | * File an issue

Latest OpenStreetMap Edits per Tile

(<https://resultmaps.neis-one.org/osm-change-tiles>)

The screenshot shows the "Latest OpenStreetMap Edits per Tile" web interface. It features a map of a city area with a pop-up window displaying edit results for a specific tile. The pop-up window is titled "Map edits in this tile:" and lists several changesets with their details:

- 2020-06-22 by **youcho** (1247) N: 0 O: 0 W: 0 L: 0 R: 0 C: 0 Comment & OSMAZ. Tags: Highway, Name, Railway, Ref, Route, Surface.
- 2020-06-17 by **youcho** (1247) N: 0 O: 0 W: 0 L: 0 R: 0 C: 0 Comment & OSMAZ. Tags: Highway, Name.
- 2020-06-14 by **youcho** (1247) N: 1 L: 1 W: 0 F: 1 R: 0 O: 0 Comment & OSMAZ. Tags: Highway, Name, Natural, Surface.
- 2020-06-13 by **youcho** (1247) N: 30 S: 0 W: 3 R: 0 O: 0 Comment & OSMAZ. Tags: Barrier, Highway, Name, Surface.
- 2020-06-13 by **youcho** (1247) N: 0 S: 0 W: 0 R: 0 O: 0 Comment & OSMAZ. Tags: Barrier, Highway, Name, Surface.

Dove trovare informazioni e aiuto

- Learn OSM: <https://learnosm.org/it/>
- Mailing lists: <https://lists.openstreetmap.org/listinfo>
- Mailing list italiana (talk-it): <https://lists.openstreetmap.org/listinfo/talk-it>
- Gruppo Telegram: <https://telegram.me/OpenStreetMapItalia>
- Wiki OSM: https://wiki.openstreetmap.org/wiki/IT:Pagina_Principale

The screenshot shows the main page of the Italian OpenStreetMap Wiki. At the top, there is a navigation bar with 'Discussione', 'Leggi', 'Visualizza wikibesto', 'Cronologia', and a search box. The main heading is 'IT:Pagina Principale' with a sub-heading '(Reindirizzamento da IT:Main Page)'. Below this, there is a section for 'Main Page - Altre lingue' with a list of languages including Afrikaans, asturiano, azərbaycanca, Bahasa Indonesia, Bahasa Melayu, bosanski, brezhoneg, català, čeština, dansk, Deutsch, eesti, English, español, Esperanto, euskara, français, Frysk, galego, hrvatski, interlingua, isleńska, Italiano, kreyòl gèslofòpéyan, kurdî, latviešu, Lëtzebuergesch, lietuvių, magyar, Nederlands, norsk, occitan, polski, português, română, shqip, slovenčina, slovensčina, srpski (latinka), suomi, svenska, Tiếng Việt, Türkçe, Zazaki, and Էկհրեա. Below the language list, there is a section for 'Benvenuto su OpenStreetMap' and a paragraph describing the project. At the bottom, there are three main sections: 'Usare OpenStreetMap', 'Contribuisci con geodati liberi', and 'Sviluppa ed usa la Piattaforma'. Each section has a brief description and a list of links or actions.

IT Discussione Leggi Visualizza wikibesto Cronologia Cerca in OpenStreetMap Wiki

IT:Pagina Principale

(Reindirizzamento da IT:Main Page)

Main Page - Altre lingue

Afrikaans • asturiano • azərbaycanca • Bahasa Indonesia • Bahasa Melayu • bosanski • brezhoneg • català • čeština • dansk • Deutsch • eesti • English • español • Esperanto • euskara • français • Frysk • galego • hrvatski • interlingua • isleńska • Italiano • kreyòl gèslofòpéyan • kurdî • latviešu • Lëtzebuergesch • lietuvių • magyar • Nederlands • norsk • occitan • polski • português • română • shqip • slovenčina • slovensčina • srpski (latinka) • suomi • svenska • Tiếng Việt • Türkçe • Zazaki • Էկհրեա

Altre lingue · Traduci

Benvenuto su OpenStreetMap. Il progetto che crea e fornisce dati geografici liberi@ su base mondiale. Il progetto è stato avviato perché la maggior parte delle mappe che si credono liberamente utilizzabili, hanno invece restrizioni legali o tecniche al loro utilizzo e ciò ne impedisce l'uso per scopi produttivi, creativi o inattesi.

Maggiori informazioni su OpenStreetMap | Come contribuire | Dove trovare aiuto

Usare OpenStreetMap	Contribuisci con geodati liberi	Sviluppa ed usa la Piattaforma
<p>Usare OpenStreetMap</p> <ul style="list-style-type: none">• Naviga la nostra mappa mondiale@• Prova le nostre applicazioni pronte all'uso per i tuoi dispositivi mobili, il tuo computer o i servizi web• ...maggiori informazioni su come usare OpenStreetMap	<p>Guida per principianti</p> <ul style="list-style-type: none">• Naviga nella documentazione delle caratteristiche degli oggetti• Naviga tra i progetti di mappatura italiani (e quelli internazionali)• ...maggiori informazioni su come contribuire ai dati di mappa	<p>Sviluppa ed usa la Piattaforma</p> <ul style="list-style-type: none">• Usa OpenStreetMap per il tuo software• Contribuisci al software che usa OpenStreetMap

Grazie!



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@alesarrett