

Overpass_2_KML

Version and Licence

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Written by Hans Strassguetl - <https://gravelmaps.de>
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Author: Nicolas Mollet
<https://mapicons.mapsmarker.com>
- The last download of icons placed on motorradtouren.de is version 12/2023.
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About

This program pulls data from OpenStreetMap using the Overpass Turbo API. Pulled data is then converted to Waypoints in a KML format that Oruxmaps preferers. As an alternative, you can setup the query in a way the output can be used with Organic.maps.

For Organic.Maps with Android: There seems to be no need to change your query for Oruxmaps, as long as you accept **red pins** only.

18.02.2024: Beside all your configuration, by now the Organic.Maps icons are shown as a red pins only. Will be changed in my coding season 2024/2025. Now spring / summer starts and my life has different priorities.

Use

GPX_2_KML_4_Orux has no user interface. All parameters are set via command line parameters and a JSON file.

As a result, you receive

- converted KML(s) with the name {clear_name}-{country}
- all KML of a region are packed in one ZIP named {clear_name}-{region}
- all ZIP of a query will be packed into one ZIP named {clear_name}-ALL.zip

If there are any errors, you will be informed.

Using the JSON file

folder	If set to "true" all files will be stored in a folder structure on top to the ZIP files.
in_scope	Set which Geos you want to pull data from.
In_scope1	just to easily park another working in_scope. Will be ignored by code.
remark	Write some remarks. Will be ignored by code.
maps_geo	Define the Geographies and their countries you want to pull data. <i>Make sure you write everything in small letter, and have an appropriate ISO code defined!</i>
iso_code	Make sure all countries you define are reflected in this section. <i>Use uppercase letters!</i>
icon_path	see more in section " Queried Waypoints "
7z	to get everything packed 7z is used. 3. Make sure you have 7z installed and set the path to the executable.

```
1 {
2   "folder"      : true,
3   "in_scope1"   : ["my_special"],
4   "in_scope"    : ["central", "west", "nordics", "east", "uki", "southeast", "maghreb", "asia-west"],
5   "remark"      : "=====",
6   "remark1"     : "Do not touch anything further down here except my_special",
7   "remark2"     : "=====",
8   "maps_geo"    : {
9     "central"   : ["germany", "austria", "switzerland", "liechtenstein", "netherlands", "belgium", "luxembourg"],
10    "west"      : ["france", "spain", "portugal", "andorra"],
11    "nordics"   : ["denmark", "sweden", "norway", "finland", "estonia", "latvia", "lithuania", "iceland"],
12    "east"      : ["czechia", "slovakia", "poland", "belarus", "ukraine"],
13    "uki"       : ["uk", "ireland"],
14    "southeast" : ["liechtenstein", "italy", "albania", "bosnia", "bulgaria", "croatia", "greece", "hungary", "kosovo", "macedonia", "montenegro", "romania", "serbia", "slovenia"],
15    "maghreb"   : ["tunisia", "morocco"],
16    "asia-west" : ["turkey", "georgia", "armenia", "azerbaijan", "iran"],
17    "my_special" : ["austria", "switzerland", "liechtenstein"]
18  },
19  "iso_code"    : {
20    "albania"   : "AL",
21    "andorra"   : "AD",
22    "armenia"   : "AM",
23    "austria"   : "AT",
24    "azerbaijan" : "AZ",
25    "belarus"   : "BY",
26    "belgium"   : "BE",
27    "bosnia"    : "BA",
28    "bulgaria"  : "BG",
29    "croatia"   : "HR",
30    "czechia"   : "CZ",
31    "denmark"   : "DK",
32    "estonia"   : "EE",
33    "finland"   : "FI",
34    "france"    : "FR",
35    "germany"   : "DE",
36    "greece"    : "GR",
37    "hungary"   : "HU",
38    "iceland"   : "IS",
39    "ireland"   : "IE",
40    "italy"     : "IT",
41    "latvia"    : "LV",
42    "lithuania" : "LT",
43    "luxembourg" : "LU",
44    "macedonia" : "MK",
45    "malta"     : "MT",
46    "montenegro" : "ME",
47    "morocco"   : "MA",
48    "netherlands" : "NL",
49    "norway"    : "NO",
50    "poland"    : "PL",
51    "portugal"  : "PT",
52    "romania"   : "RO",
53    "serbia"    : "RS",
54    "slovakia"  : "SK",
55    "slovenia"  : "SI",
56    "spain"     : "ES",
57    "sweden"    : "SE",
58    "switzerland" : "CH",
59    "slovenia"  : "SI",
60    "tunisia"   : "TN",
61    "turkey"    : "TR",
62    "uk"        : "GB",
63    "ukraine"   : "UA",
64  },
65  "icon_path"    : "http://motorradtouren.de/pins/",
66  "7z_exe"       : "C:\\Program Files\\7-Zip\\7z.exe"
67 }
68
69 }
```

Using the command line parameters

The command line parameters follow the python directory syntax. All key and tags need to follow the [OpenStreetMap syntax](#). Everything will be queried using the Overpass Turbo API.

Example 1:

```
overpass_2_kml.exe --dictionary '{"key':'amenity',  
'tag':'fuel', 'clear_name':'Gas_Station', 'icon':'placemark-yellow', 'brand':'false',  
'brand_name':'', 'second_key':'', 'second_tag':''}"
```

In this example we use key = amenity and its tag=fuel. So we query [gas-stations](#). The placemark icon is an icon used to handle the POIs for Organic.maps. The differences will be described later in this document. We do not query a brand nor do we use a secondary key. As a result you will receive ALL gas-station in the area you defined.

Example 2:

```
overpass_2_kml.exe --dictionary '{"key':'amenity', 'tag':'fuel',  
'clear_name':'LPG_Gas_Station', 'icon':'placemark-yellow', 'brand':'false',  
'brand_name':'', 'second_key':'fuel:lpg', 'second_tag':'yes' }"
```

In this example we use key = amenity and its tag=fuel. So, we query [gas-stations](#). BUT now we use a secondary key that filters the gas-stations to the ones who sell lpg gas.

Example 3:

```
overpass_2_kml.exe --dictionary '{"key':'shop', 'tag':'motorcycle', 'clear_name':'BMW-  
Dealer', 'icon':'placemark-deeporange', 'brand':'true', 'brand_name':'BMW',  
'second_key':'', 'second_tag':''}"
```

In this example we use key=shop and tag=motorcycle. This means we search for motorcycle dealer (or someone selling motorcycle equipment, gear...). Next, we filter with brand=true, so we want to find a specific brand, in this case BMW. Second key and tag will not be used. As a readable name on our smartphone, we want to identify these waypoints with the name BMW-Dealer. The result will be all BMW dealer per your region defined as a KML file with the name "area"-BMW-Dealer (e.g., Germany-BMW-Dealer).

More examples take from the example batch files applied to the ZIP file.

Dependencies

Make sure you have [7z](#) installed and set the path to the executable.

Queried Waypoints (Points of Interest)

Waypoints (POI) will be shown as icons. Based on how KML works, the icons need to come from somewhere in the web. By default, defined in the JSON, all icons used are addressed to my server <http://motorradtouren.de/pics> so they can be pulled from there.

If you want to change that, change the JSON. It's easy to find.

If you decide to setup your own icon host, here is where you can download the icons:

<https://mapicons.mapsmarker.com/wp-content/uploads/zip/mapiconscollection-markers.zip>

If you want to define icons and need more information: Download the package via the link above.

Find the icon you want and check if it works.

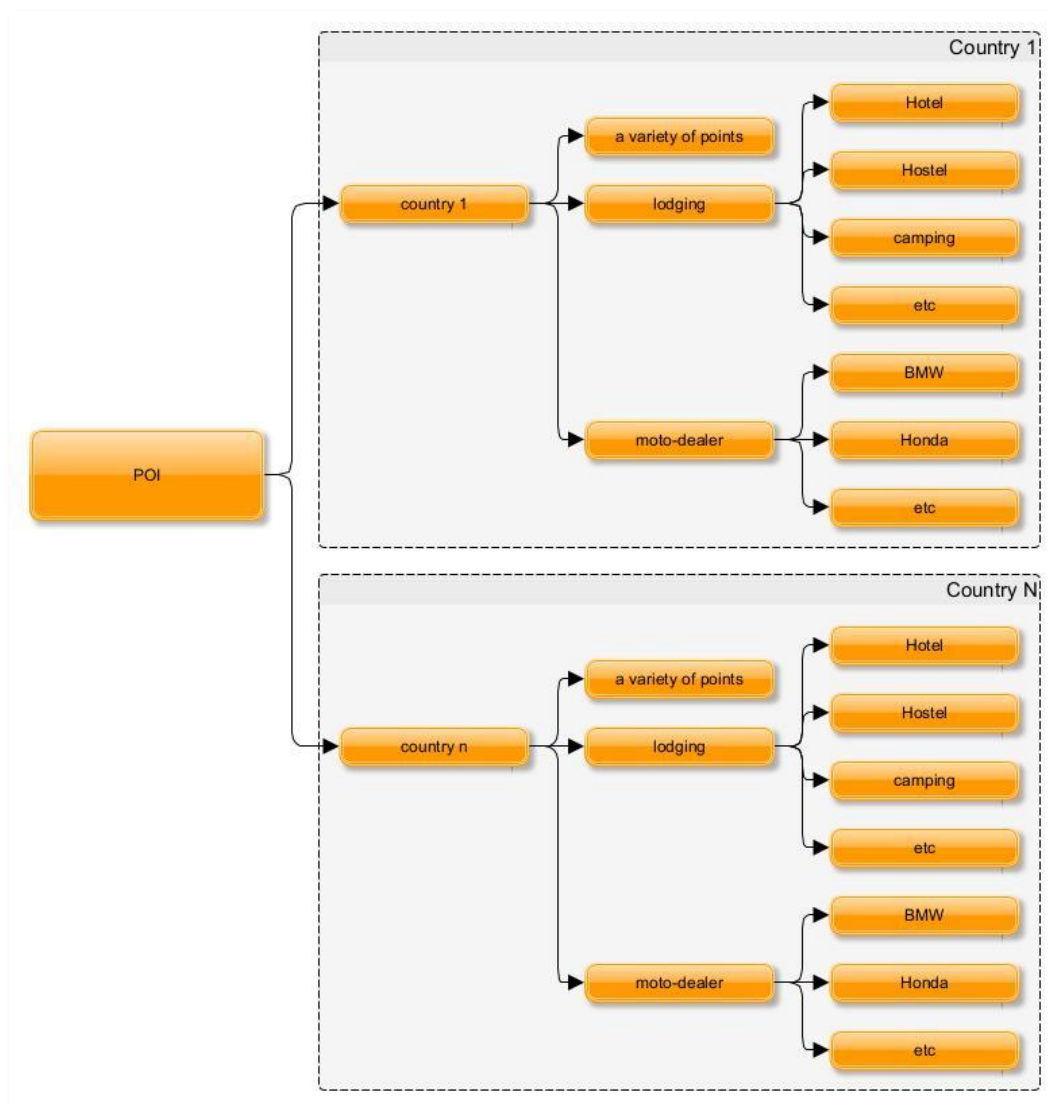
Differences Oruxmaps / Organic.Maps

For POI, the major difference is the presentation of the icons. While Oruxmaps is able to show real icons, OrganicMaps use their own "Pins". This means you need to change two things for your query:

1. The path to your server. For Oruxmaps I use the motorradtouren icon server, for Organic.Maps it MUST be:
`"icon_path" : "https://omaps.app/placemarks/",`
2. The icons. While for Oruxmaps you can use a variety of icons, Organic.Maps supports a defined range of Pins and colours.
3. The pathes. While OruxMaps can handle POI in pathes, OrganicMaps for Apple doesn't like that. One needs to take all KML files in a flat structure in a folder named bookmarks.

Folder structure

If you choose to set “folder” to true in the JSON, the output will be organised in folders that you can immediately copy to your mobile. The structure makes sure you find what you need at the place where you are. So, all points for e.g. Albania, are stored under \POI\albania. See more:



To maintain easy finding, moto-dealer are organized in their own subfolder as its true for all lodging options
(OSM “tag = motorcycle” and “tag= hotel” and others”.

Setting Examples

Simply copy & paste these sections to the JSON (change the existing lines)

Guesthouses:

```
"key"      : "tourism",  
"tag"      : "guest_house",  
"clear_name" : "Guesthouse",  
"icon"     : "guest_house.svg",
```

Apartment:

```
"key"      : "tourism",  
"tag"      : "apartment",  
"clear_name" : "Apartment",  
"icon"     : "Apartment.svg",
```

Hostel:

```
"key"      : "tourism",  
"tag"      : "hostel",  
"clear_name" : "Hostel",  
"icon"     : "Hostel-16.svg",
```

Hotels:

```
"key"      : "tourism",  
"tag"      : "hotel",  
"clear_name" : "Hotel",  
"icon"     : "Hotel-16.svg",
```

Motel:

```
"key"           : "tourism",  
"tag"           : "motel",  
"clear_name"    : "Motel",  
"icon"          : "Motel-16.svg",
```

Camping:

```
"key"           : "tourism",  
"tag"           : "camp_site",  
"clear_name"    : "Camping",  
"icon"          : "Camping-16.svg",
```

Alpine Hut:

```
"key"           : "tourism",  
"tag"           : "alpine_hut",  
"clear_name"    : "Alpine_Hut",  
"icon"          : "Alpinehut.svg",
```

Gas Stations:

```
"key"           : "amenity",  
"tag"           : "fuel",  
"clear_name"    : "Gas-Station",  
"icon"          : "Fuel.svg",
```

More:

<https://wiki.openstreetmap.org/wiki/DE:Tourismus>

Credits

- To build a running EXE from python source, I'm using the pyinstaller from <https://pyinstaller.org/en/stable/>
- Icons used are licensed under
Map Icons Collection
Creative Commons 3.0 BY-SA
Author: Nicolas Mollet
<https://mapicons.mapsmarker.com>

Data privacy

- By design XML structures as KML reach out for external servers.
- Using icons make the KML interpreter (as Oruxmaps) reaching out to my server via <http://motorradtouren.de/pics> (or wherever you decided to host the icons!)
- No access data is collected or stored for this service by this program or on the server motorradtouren.de.

Most common icons I use for Oruxmaps

Here some common Waypoints as they are used by Basecamp (left column) and a possible conversion to KML.

```
"points": {
  "remark"      : "----- Section has no function other than acting as a
reference -----",
  "Default": "pin-export.png",
  "Airport": "airport.png",
  "ATV": "atv.png",
  "Bar": "bar.png",
  "Beach": "beach_icon.png",
  "Big Game": "deer.png",
  "Bike Trail": "cycling.png",
  "Building": "house.png",
  "Bunker": "bunker.png",
  "Campground": "campground.png",
  "Church": "church.png",
  "Circle, Green": "grass.png",
  "Circle with X": "comment-map-icon.png",
  "City (Small)": "star-3.png",
  "Controlled Area": "accesdenied.png",
  "Crossing": "junction.png",
  "Danger Area": "attention.png",
  "Department Store": "departmentstore.png",
  "Drinking Water": "drinkingwater.png",
  "Fast Food": "coffee.png",
  "Ferry": "cruiseship.png",
  "Flag, Blue": "flag-export.png",
  "Gas Station": "gas-station.png",
  "Heliport": "helicopter.png",
  "Information": "information.png",
  "Live Theater": "theater.png",
  "Lodge": "hotel_0star.png",
  "Lodging": "lodging.png",
  "Military": "military.png",
  "Museum": "museum_archeological.png",
  "Navaid, Black": "letter_n.png",
  "Navaid, Green": "grass.png",
  "Navaid, Orange": "symbol_excla.png",
  "Parking Area": "parkinggarage.png",
  "Police Station": "police.png",
  "Private Field": "world.png",
  "Puzzle Cache": "orienteering.png",
  "Railway": "train.png",
  "Residence": "home.png",
  "Restaurant": "restaurant.png",
  "RV Park": "campingcar.png",
  "Scenic Area": "panoramicview.png",
```

```
"Shopping Center": "conveniencestore.png",
"Skull and Crossbones": "skull.png",
"Soft Field": "smiley_happy.png",
"Summit": "hill.png",
"Swimming Area": "swimming.png",
"Toll Booth": "tollstation.png",
"TracBack Point": "footprint.png",
"Trail Head": "hiking.png",
"Tree Stand": "kanzeldach.png",
"Truck": "truck.png",
"Ultralight Area": "aircraftsmall.png",
"Wreck": "shipwreck.png"
}
```

More icons placed on motorradtouren.de

Lodging:

- Apartment.svg
- Camping-16.svg
- Hostel-16.svg
- Hotel-16.svg
- Motel-16.svg
- guest_house.svg
- Caravan-16.svg
- Alpinehut.svg

Others:

- Fuel.svg

Points / Pins for OrganicMaps

The Organic.Maps implementation of KML does not use graphics as available in Garmin. The following icons are the ones I am aware of:

Standards from Organic.Maps / Maps.Me:

- placemark-red
- placemark-blue
- placemark-purple
- placemark-yellow
- placemark-pink
- placemark-brown
- placemark-green
- placemark-orange
- placemark-deeppurple
- placemark-lightblue
- placemark-cyan
- placemark-teal
- placemark-lime
- placemark-deepporange
- placemark-gray
- placemark-bluegray

Garmin Waypoints

This are the waypoints I'm aware so far:

Airport	Contact, Cat	Marina	Ski Resort
Alert	Contact, Dog	Man Overboard	Skiing Area
Amusement Park	Contact, Dreadlocks	Medical Facility	Skull and Crossbones
Anchor	Contact, Female1	Mine	Small Game
Animal Tracks	Contact, Female2	Movie Theater	Snowmobile
ATV	Contact, Female3	Museum	Square, Yellow
Ball Park	Contact, Goatee	Navaid, Amber	Stadium
Bank	Contact, Kung-Fu	Navaid, Black	Stop Sign
Bar	Contact, Pig	Navaid, Blue	Street Intersection
Beach	Contact, Pirate	Navaid, Green	Summit
Bell	Contact, Ranger	Navaid, Orange	Swimming Area
Big Game	Contact, Smiley	Navaid, Red	Tall Tower
Bike Trail	Contact, Spike	Navaid, Violet	Telephone
Binoculars	Contact, Sumo	Navaid, White	Toll Booth
Blind	Contact, Female3	Number 1, Blue	Trail Head
Block, Blue	Controlled Area	Number, Blue	Tree
Block, Green	Convenience Store	Number, Blue	Tree Stand
Block, Red	Cover	Number 4, Blue	Treed Quarry
Blood Trail	Covey	Oil Field	Triangle, Blue
Boat Ramp	Crossing	Parachute Area	Triangle, Green
Bowling	Dam	Park	Triangle, Red
Bridge	Danger Area	Parking Area	Triangle, Yellow
Building	Department Store	Pharmacy	Truck
Buoy, White	Diver Down Flag	Picnic Area	Truck Stop
Campground	Drinking Water	Pin, Blue	Tunnel
Camp Fire	Fast Food	Pin, Green	Ultralight Area
Canoe	Fishing Area	Pin, Red	Upland Game
Car	Fishing Hot Spot	Pin, Yellow	Waterfowl
Car Rental	Facility	Pizza	Water Source
Car Repair	Fitness Center	Police Station	Wind Turbine
Cemetery	Flag, Blue	Post Office	Wrecker
Church	Flag, Green	Private Field	XSki
Circle with X	Flag, Red	Radio Beacon	Zoo
Circle, Blue	Food Source	Residence	
Circle, Green	Forest	Restaurant	
Circle, Red	Furbearer	Restricted Area	
City (Large)	Gas Station	Restroom	
City (Medium)	Glider Area	RV Park	
City (Small)	Golf Course	Scales	
Civil	Horse Trail	Scenic Area	
Contact, Afro	Hunting	School	
Contact, Alien	Kayak	Shelter	
Contact, Ball Cap	Letter A, Red	Shipwreck	
Contact, Big Ears	Letter B, Red	Shopping Center	
Contact, Biker	Letter C, Red	Short Tower	
Contact, Bug	Letter D, Red	Shower	
	Lighthouse		

Airport	Contact, Big Ears	Kayak	RV Park
Alert	Contact, Biker	Letter A, Red	Scales
Amusement Park	Contact, Bug	Letter B, Red	Scenic Area
Anchor	Contact, Cat	Letter C, Red	School
Animal Tracks	Contact, Dog	Letter D, Red	Shelter
ATV	Contact, Dreadlocks	Lighthouse	Shipwreck
Ball Park	Contact, Female1	Marina	Shopping Center
Bank	Contact, Female2	Man Overboard	Short Tower
Bar	Contact, Female3	Medical Facility	Shower
Beach	Contact, Goatee	Mine	Ski Resort
Bell	Contact, Kung-Fu	Movie Theater	Skiing Area
Big Game	Contact, Pig	Museum	Skull and Crossbones
Bike Trail	Contact, Pirate	Navaid, Amber	Small Game
Binoculars	Contact, Ranger	Navaid, Black	Snowmobile
Blind	Contact, Smiley	Navaid, Blue	Square, Yellow
Block, Blue	Contact, Spike	Navaid, Green	Stadium
Block, Green	Contact, Sumo	Navaid, Orange	Stop Sign
Block, Red	Contact, Female3	Navaid, Red	Street Intersection
Blood Trail	Controlled Area	Navaid, Violet	Summit
Boat Ramp	Convenience Store	Navaid, White	Swimming Area
Bowling	Cover	Number 1, Blue	Tall Tower
Bridge	Covey	Number, Blue	Telephone
Building	Crossing	Number, Blue	Toll Booth
Buoy, White	Dam	Number 4, Blue	Trail Head
Campground	Danger Area	Oil Field	Tree
Camp Fire	Department Store	Parachute Area	Tree Stand
Canoe	Diver Down Flag	Park	Treed Quarry
Car	Drinking Water	Parking Area	Triangle, Blue
Car Rental	Fast Food	Pharmacy	Triangle, Green
Car Repair	Fishing Area	Picnic Area	Triangle, Red
Cemetery	Fishing Hot Spot Facility	Pin, Blue	Triangle, Yellow
Church	Fitness Center	Pin, Green	Truck
Circle with X	Flag, Blue	Pin, Red	Truck Stop
Circle, Blue	Flag, Green	Pin, Yellow	Tunnel
Circle, Green	Flag, Red	Pizza	Ultralight Area
Circle, Red	Food Source	Police Station	Upland Game
City (Large)	Forest	Post Office	Waterfowl
City (Medium)	Furbearer	Private Field	Water Source
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Contact, Alien	Horse Trail	Restricted Area	Zoo
Contact, Ball Cap	Hunting	Restroom	