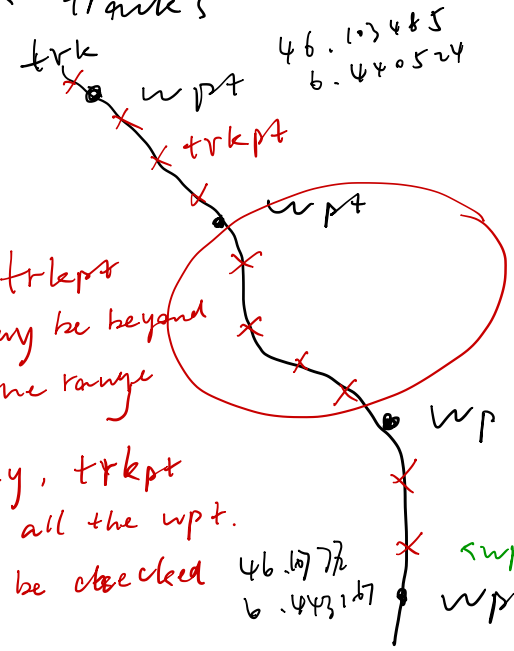
GPX tracks



* basically, trkpt includes all the wpt. need to be checked

<metadata>
<name> </name>
<link> <text> </text> </link>
</metadata>

: le môle a : GPXtrack

: le môle : has wpt : wpt, : wpt', ...

: le môle : has trkpt : trkpt, : trkpt', ...

: wpt : has location : lat, : lon
<wpt lat lon> : has ele : ele
<ele> </ele>
<time> </time> : has time : time
<name> </name> : has name : name
</wpt>

<trk> : trkpt : has location : lat, : lon
<name> </name> : has ele : ele
<trkseg> : has time : time
<trkpt lat lon>
<ele> </ele>
<time> </time>
</trkseg>

OSM

Say wpt 6.443167 46.10772

query 6.44, 46.10 6.441, 46.11

floor

* nodes limit is 5000

when query step 1. find lonmin, latmin, lonmax, latmax among the {wpt} ∪ {trkpt}

step 2. try to query, if the area is too large, slice it

step 3. query.

Goal : to know about the surroundings of the track.

<bounds minlat minlon maxlat maxlon >

<node id visibe version changeset timestamp, user uid lat lon >

<node ---- >
<tag k v >
</node>

key & value

<way id visible version -- --- >
<nd ref >
<tag k v >
</way>

: the whole area a OSM

:OSM : has bounds : minlat
: minlon
: maxlat
: maxlon

: has ways : way, :way' ...

:way : has id : id
: has nodes : nd nd ref

:has tag : k : v

:nd : has id : id nd id
: has timestap : timestap
: has locations : lat : lon

(if there's no tags to pass: k : v
: on the way : way)

1、either node or way, from the tags, check the key, if it is the element in the "dictionary" we are interested in

say, we define "dic" as { "addr:*" ---- }

(if there are no elements we are interested in, pass)

2, link the GPX track to the OSM.

* zip them as a property, location

: trkpt(lat. lon:) : is intersting node : nd

: nd : on the way : way

: has id : id
: has timestamp : timstap
: has locations : lat : lon
: has tag : k : v

: way : has nodes : nd

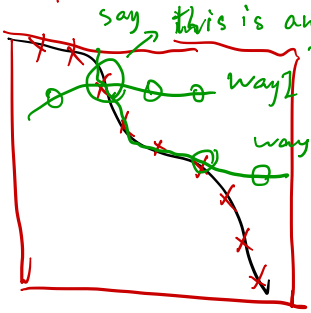
link the trkpt nd. way together

but ---

① overlap

② here, "surrounding" defined in a narrow way

map.



it seems fine