

QGIS meets MapProxy

Karten im Einsatz

Gliederung

- Vorstellung TopDeutschland
- QGIS portabel
- MapProxy
- Plugin Entwicklung
- Präsentation Plugin
- Konfigurationsdateien
- Plugin Fall Rechteck

TopDeutschland

- QGIS portabel
- keine Installation

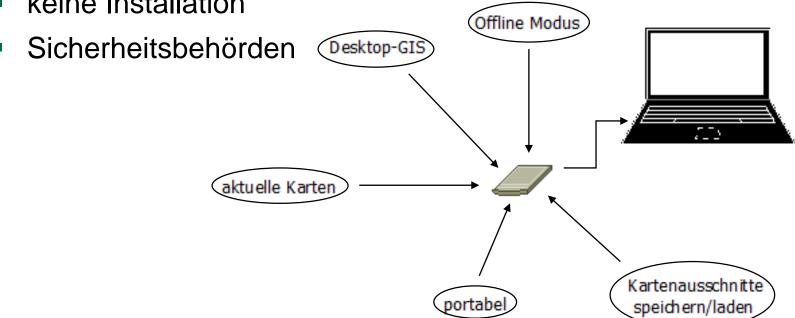
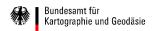


Abbildung: Funktionsübersicht TopDeutschland

QGIS portable

- QGIS Desktop 2.6 Windows
- C:\Users\xxxx\.qgis2\ -> Config Ordner
- qgis.bat
 - path %PATH%;%OSGEO4W_ROOT%\config\python\plugins\
 - start "Quantum GIS" /B %OSGEO4W_ROOT%\bin\qgis-bin.exe -configpath "%OSGEO4W_ROOT%"\config %*
- start.bat
 - call %DRV_LTR%\qgis\qgis.bat
- QGIS Upgrade 2.14
 - Python 2.7



Definition und Entwicklung

- MapProxy
 - Kartenkacheln lokal speichern
 - vorgenerierte Speicherung -> Offline Modus

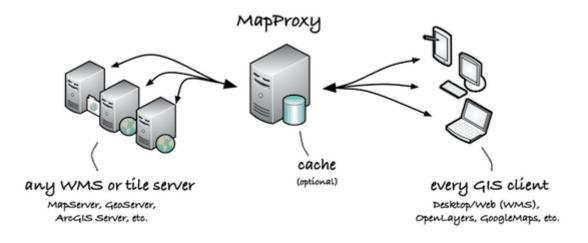


Abbildung 2: Funktionsweise MapProxy Copyright © 2015 Omniscale GmbH & Co. KG

Definition und Entwicklung

- Qgis Plugin
 - view cache and seed extent:
 - Github
 - https://github.com/tmizu23/mapproxy_plugin
 - Python Paket
 - https://pypi.python.org/pypi/MapProxy
 - Bereiche seeden:
 - wms_updater

wms_updater

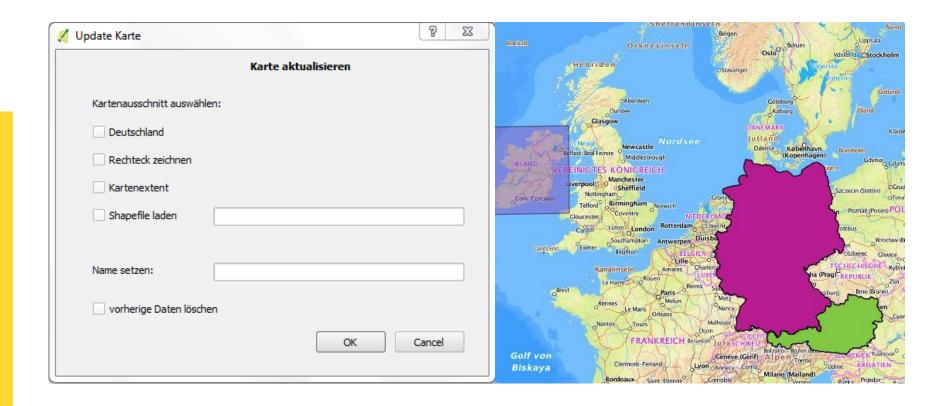


Abbildung 3: GUI wms_updater

Yaml (Yet Another Markup Language)

cache:

type: mbtiles

filename: K:\Karten\eigene_Karten\DOP_BRD_gecacht.sqlite

layers:

- name: '0'

sources: [cache_DOP_sqlite_25832]

title: DOP Deutschland

DOP_grid_25832:

srs: 'EPSG:25832'

bbox: [228121.057496, 5201997.75773, 1016511.43706,

6135486.33096]

Yaml (Yet Another Markup Language)

sources: DOP_wms: coverage: datasource: 'Deutschland.shp' srs: **EPSG:4326** req: layers: 'rgb' transparent: true url: http://sg.geodatenzentrum.de/wms_dop__XXXXXXX supported_srs: ['EPSG:25832'] type: wms

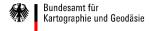
seed

seeds:
myseed1:
caches: [cache_DOP_sqlite_25832]
grids: [DOP_grid_25832]
levels:
from: 2
to: 2

mapproxy-seed –f wms_dop_sqlite_shape.yaml –s
wms_dop_seed_sqlite_shape.yaml

wms_updater (Fall Rechteck)

```
def handleMouseDown(self, point, button):
   if button == Qt.LeftButton:
        self.rubberBand.addPoint(QgsPoint(float(point.x()),float(point.y())))
        if self.count_point == 4:
                 self.bbox = str("[" + str(round(self.min_x,2)) + "," +
                 str(round(self.min_y,2)) + "," + str(round(self.max_x,2)) + "," +
                 str(round(self.max_y,2)) + "]")
   canvas = qgis.utils.iface.mapCanvas()
   layers = canvas.layers()
   for layer in layers:
       if 'TopPlus' in layer.name():
          kartenhintergrund = 't'
```

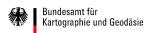


wms_updater (Fall Rechteck)

```
if kartenhintergrund == 't':
    yaml = open(str(path_ini +
    '\qgis\config\python\plugins\mapproxy_plugin\project\wms_topplus_sq
    lite_rechteck_selbst.yaml'), 'r')
filedaten = yaml.read()
ianfang = filedaten.index('title: ')
iende = filedaten.index('services:')
for i in range(ianfang,iende-1):
   old += filedaten[i]
newdata = filedaten.replace(old, str('title: '+name_yaml.encode('utf-
8')))
anfang_coverage = newdata.index('coverage:') + 22
ende_coverage = newdata.index('srs: EPSG:25832') -8
```

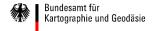
wms_updater (Fall Rechteck)

```
for I in range(anfang_coverage,ende_coverage+1):
    old_coverage += newdata[l]
newdata_coverage = newdata.replace(old_coverage, self.bbox)
k = open(str(path_ini +
'\qgis\config\python\plugins\mapproxy_plugin\project\wms_topplus_
sqlite_rechteck_selbst.yaml'), 'w')
k.write(newdata_coverage)
massstab = canvas.scale()
-> zoomlevel (seed.yaml)
Laden der Kartenkacheln
-> massstab
```



Ausblick

- Auswahl der Zoomlevel (mehrere)
- Seeden beschleunigen (-c)
- Formen transparent
- automatisches Ableiten EPSG Code (Shapefile laden)
- automatische Anpassung der Zoomlevel an Moinitorgröße



Vielen Dank für Ihre Aufmerksamkeit!

Kontakt

Bundesamt für Kartographie und Geodäsie Referat GI2 Richard-Strauss-Allee 11 60598 Frankfurt

Ansprechpartner Sara Biesel sara.biesel@bkg.bund.de www.bkg.bund.de Tel. +49 (0) 69 6333-260

