

# Offline Maps on Android

OpenStreetMap offline maps?

Yes, there are reasons

- Roaming charges
- Coverage problems

# No Coverage in Desert Areas...



...in difficult terrain  
e.g. in canyons



...on water...



# No Coverage in Airplanes

- Uh! No OSM navigation for pilots???



# First Idea: file:// - bad idea!

- Some scripting functionality is blocked
- Restrictions are imposed by browser
- Security concerns
- Mobile phone needs maximum security
- => Don't restrict restrictions!

# http:// - Thin Server, Fat Client

- Run simple http server App
- Serving map tiles and scripts using HTTP GET
- e.g. OpenLayers, Leaflet...
- Proof of concept running already
- Modern JavaScript VMs are fast
- => Rendering, enriching, routing in browser, GPS location, vector tiles

# http: - Rich Server

- Use SL4A, Python, and BasicHttpServer.py
- Also provides HTTP POST
- Can collect and store tiles (Python or JS)
- Allows for Python server applications  
e.g. name search
- Might reduce inter process communication
- Simplifies file handling by ZIP, SQLite