

# Sharing maps: the GIS Cloud

Summer School on Digital Humanities

Course material available at

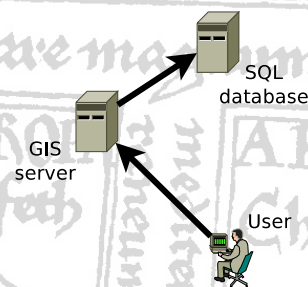
[https://bitbucket.org/augusto\\_ciuffoletti/digitalmaps4ssdh](https://bitbucket.org/augusto_ciuffoletti/digitalmaps4ssdh)

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## Sharing maps: the GIS Cloud

- You cannot add new layers to OpenStreetMaps
  - OSM does not provide an infrastructure for proprietary data
- With resident applications (like qGis) you can use OSM data and add your layer
- Other services provide an infrastructure for sharing map layers



- Here the server is an intermediary between the user and the storage
- It is easier to implement sharing restrictions



## The uMap service

- Recent project, dated 2014
- OpenSource code (can be installed on a private server)
- Uses OpenStreetMaps data as raster layer
- Users can:
  - import and view vector layers in various standard formats
  - connect to external databases
  - create new layers hosted in uMap infrastructure
- Can add *pop up* notes
  - showing text, images, web links
- The generated map can be shared in a restricted group of users
- Registration is appropriate but not essential




## A uMap tour (sect. 5 in the booklet)

- In your browser go to URL <http://umap.openstreetmap.fr>
- Access using the OpenStreetMaps credentials (or even Twitter, Bitbucket or Github, if you have one ...)
  - It is also possible to play **without** credentials, with limited capabilities
- Select "Create a map"
  - One of the OpenStreetMap rasters appears

## Editing your own (shared) map

- Upon access you are in **Edit mode**
  - To exit *edit mode* click on blue **Save** button and next **Disable editing**
  - To reenter *edit mode* click on the pencil button, top right on the screen
- On the right two sets of tools:
  - Upper box: editing
  - Lower box: management
  - On the left side, hit  and search a town ("Pisa")
- If you do not like French names for Italian towns, choose another raster
- press  and select "OpenStreetMap "

## Add a feature

- Select which kind of feature to create (keys on the right)
  -  a point
  -  a line
  -  an area
- Select a symbol with a click and move to the map
  - A single click creates a point
  - A series of clicks are consecutive points of a line or area
  - A double click terminates the line or closes the area
- When the feature is complete a form appears:
  - the *name* and *description* of the feature
  - play with other menus
- To update a feature click on it and select the pencil
  - the question mark near the word *Description* provides useful hints

## Special contents in the **description**

Various active items can be added in the description:

(Notice: they are shown only after **Save** and **Disable editing**)

- an image, including the link to the image between two braces:  
`{{http://gardenersnet.com/flower/pics/daffodil04.jpg}}`
- a link, between two brackets:  
`[[http://www.google.com]]`
- an embedded resource, such as a YouTube video, between three braces:

`{{{https://player.vimeo.com/video/56810854}}}`

## Creating a Slideshow


- A slideshow automatically moves through the map visualizing the features you recorded
  - In the order in which they have been recorded
- After marking the features on your map click the *wheel* icon and select *Slideshow*
  - Enable the *Slideshow* mode
  - Define the time interval between slides
  - Enable automatic slideshow upon map loading (if you like so)
  - Save
- The familiar icons "play", "pause", "forward", "backward" appears in the bottom right corner
- If you enabled automatic starts the slideshow starts when reloading the map
- No way to re-order your features, but you can export features to qGis, reorder, reimport in uMap!

## How to share, embed, export

To share your map with others (or everyone)

- Press  on the right
- Update the editors list and visibility restrictions)

To embed your map in a web page

- Press  on the left
- Instructions for embedding the map in a web page (*iframe* tag)
- "Short url" for simplicity (try it on your smartphone)
- Export your features using various formats
  - geojson - Javascript format
  - kmz - Google Maps format
  - gpx - GPS format (widely portable)

Download the **geojson** format, and look inside...