Information on how to use the historical maps application

Candiamaps.iacm.forth.gr

In the current version of the pilot application there are 17 historical maps of Candia (present name Heraklion) and Crete, Greece. Each map is described using seven different resources. These resources are:

- Actor: person/ organization involved in the creation, publication, preservation of the historical map.
- Historical Document: a document associated to the historical map (e.g., a book of which a historical map is part of).
- Historical Event: a historical event associated to the historical map (e.g., a battle depicted on the historical map).
- Historical Map: a historical map
- Information Resource: the digital file of the historical map/ historical document.
- Map Collection: the map collection of which the historical map is part.
- Spatial Object: any geographic entity depicted in the historical map (e.g., a castle).

An .xls file (*Historical maps in the candiamaps application.xls*) with a brief description of the various historical maps can be downloaded from the application.

Users can select "Search" on the top of the page (Figure 1) and navigate in the "Search" interface of the application.

Figure 1. Search on Arches application

Users can <u>select a resource</u> from the list of the resources ("Resource Type") to see the extended report on it. In the present version of the pilot application, there are: 73 "Resources of any type". Of these 38 are associated to the "Actor" resource, 5 to the "Historical Document", 17 to the "Historical maps", 11 to the "Map Collections" and 2 "Spatial Objects".
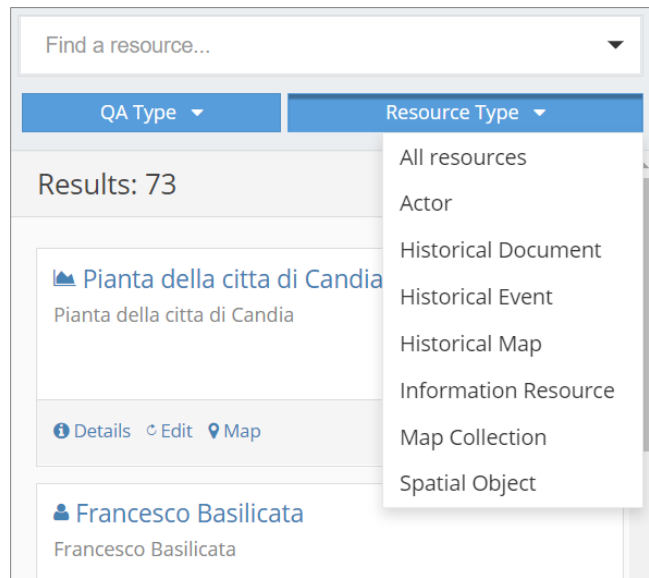
Figure 2. Resource Type list

By selecting a resource type (e.g., historical map/actor etc.) from the "Resource Type" list (Figure 2) and by typing keywords, the resources related to these keywords will be retrieved and will be shown on the screen. They will be also depicted on the base map on the window on the right of the screen.

For an advanced search, users can select the tab "Advanced" and then make queries using two or more criteria. Queries can be made using any field from one or more resources and the "Search Facets". The results are shown on the left panel (Figure 3). For example, users can search historical maps at a certain scale that use German as their text language (Figure 4) or for historical maps that are part of a certain book (Figure 5).
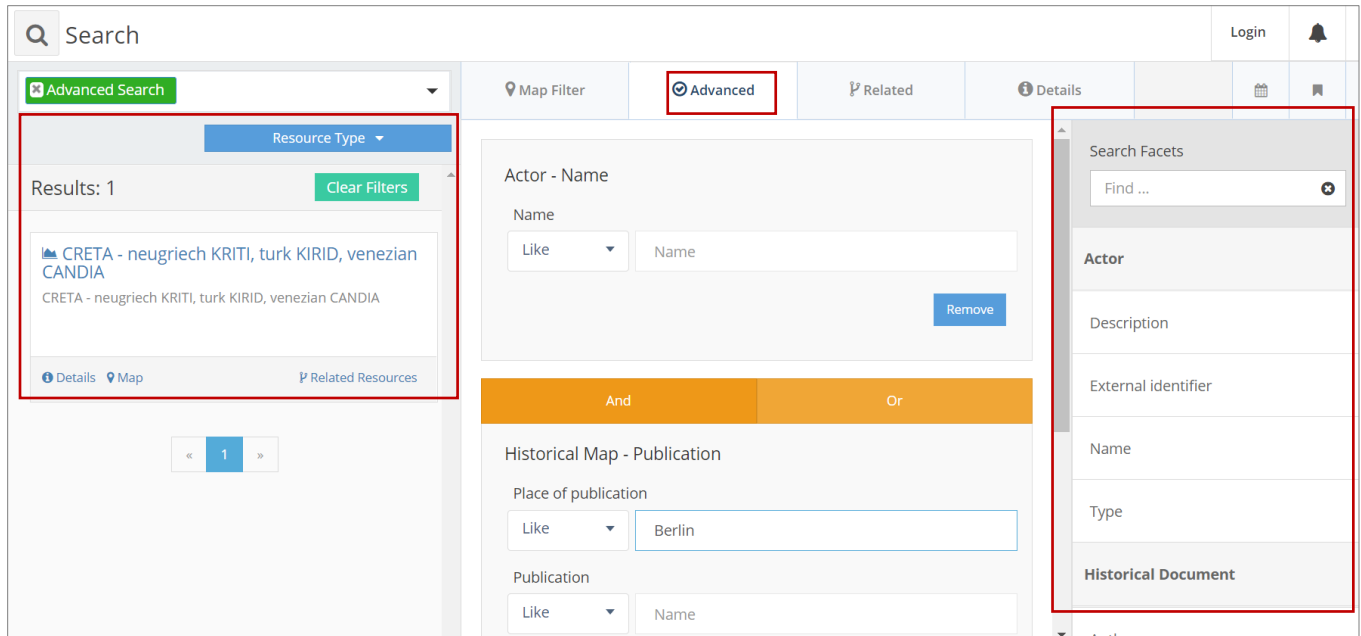
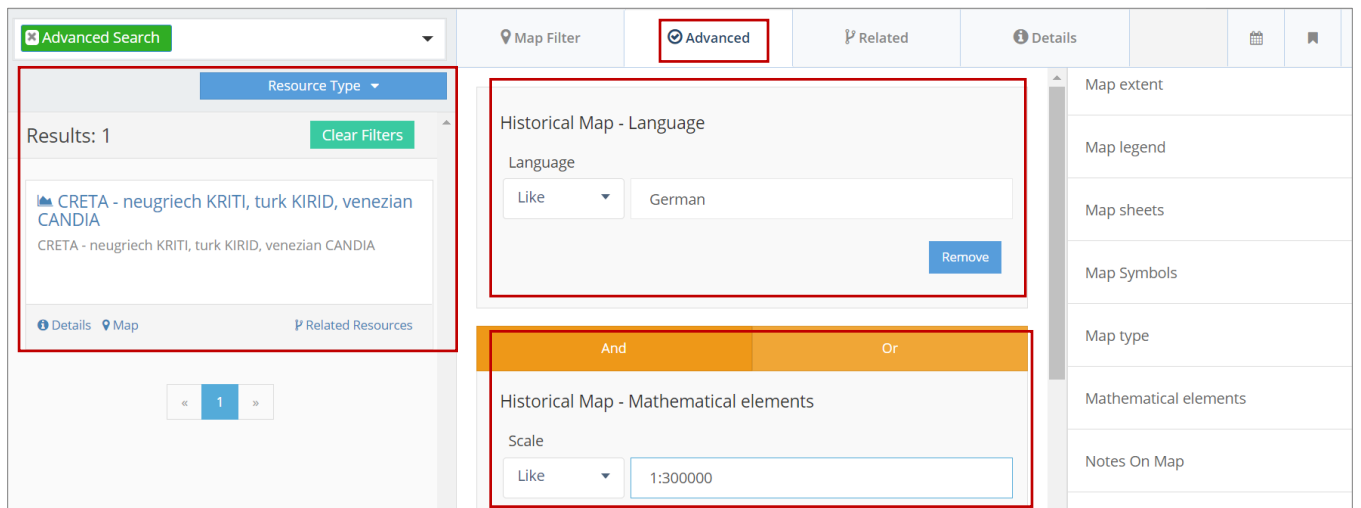Figure 3. The functionality of "Advanced" search

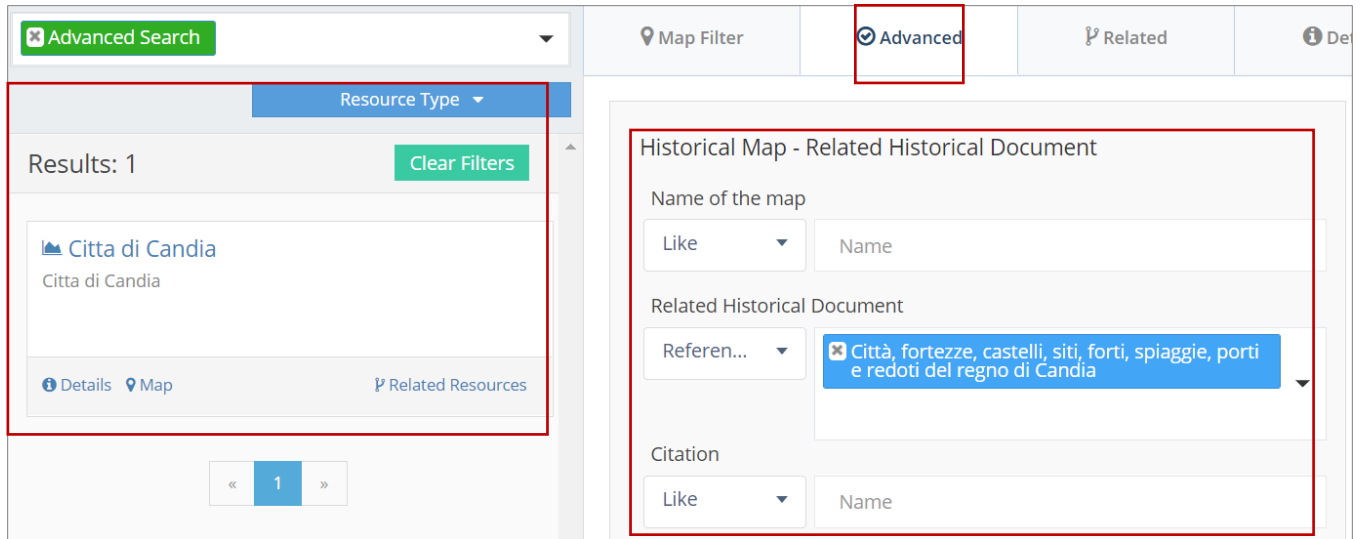Figure 4. Searching for a map of scale 1:300.000 in German language

Figure 5. Searching for maps included in the book "Città, fortezze, castelli, siti, forti, spiaggie, porti e redoti del regno di Candia" of Francesco Basilicata

Users can also search for a resource using spatial criteria. All historical maps are georeferenced and users can search the map database to find the historical maps that meet user defined geographic criteria. By selecting "Filter" on the right, the "Map Search" functionality is enabled. Users can type a buffer distance (within which any resource type will be retrieved as an answer) or o select a spatial "Filter". The spatial "filter" can be a marker (point), a polyline, a polygon or a pre-defined map extent already stored in the system (Figure 6). The resources retrieved meet the geographic constraints defined by the spatial filter (e.g., within the map's extent or polygon/ or the marker or polyline are inside the map's cartographic area). The results are shown on the left list and on the base map.
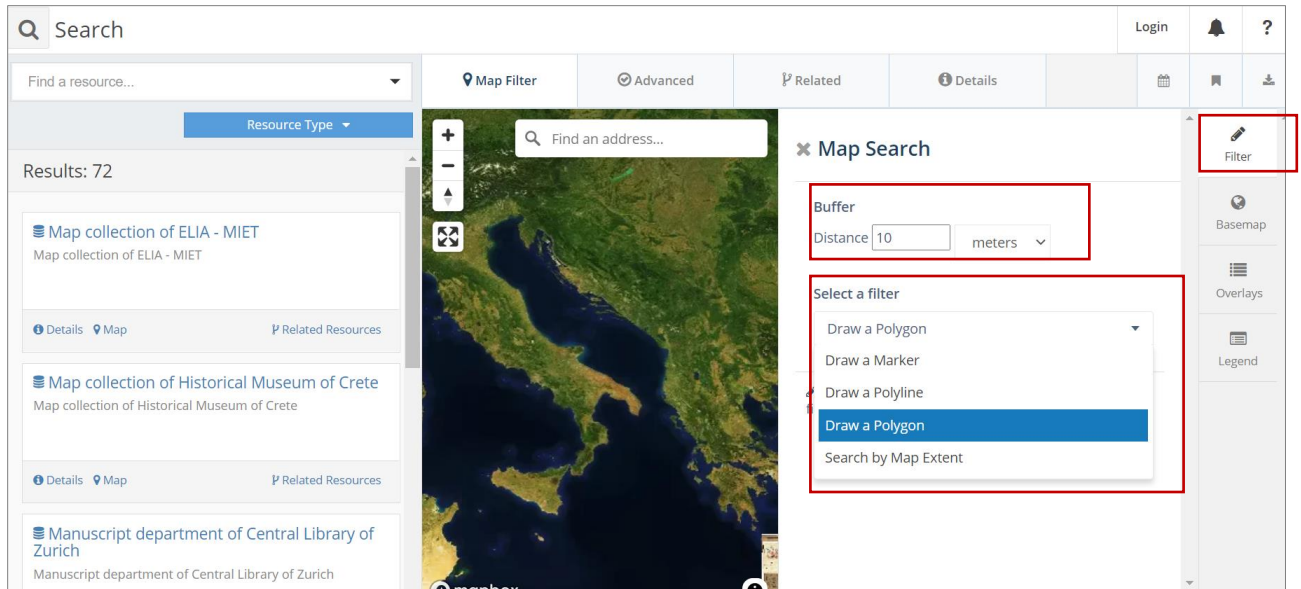
Figure 6. Searching on the map

Users can select a street view or satellite image basemap (Figure 7).
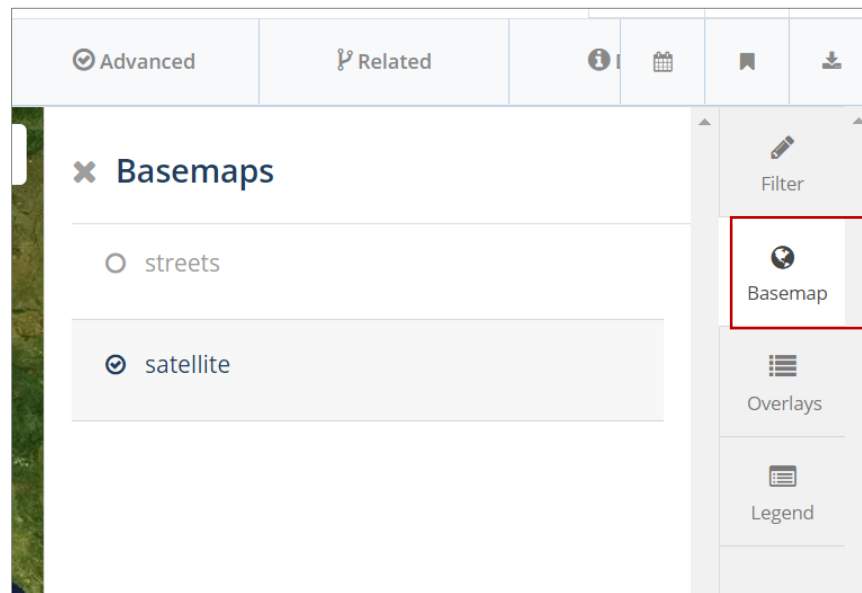

Figure 7. Basemap selection

The georeferenced images of the 17 historical maps in the pilot application can be seen in the tab "Overlays". Users can turn on/off any historical map image or adjust its transparency (Figure 8). The results are shown on top of the basemap. Any other spatial information (e.g., the map's extent, the place of publication, the spatial objects depicted

on the map, etc.) are stored in different layers as overlays and can be also selected from the "Overlays" list to be visualized on top of the basemap (Figure 9).
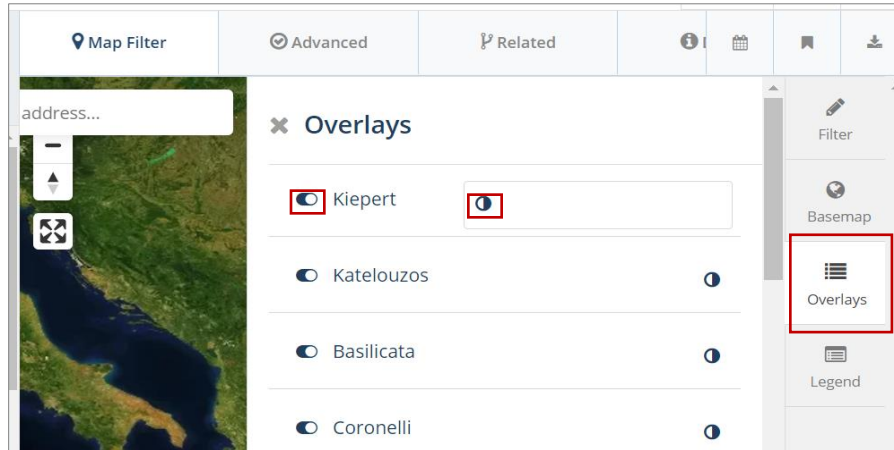

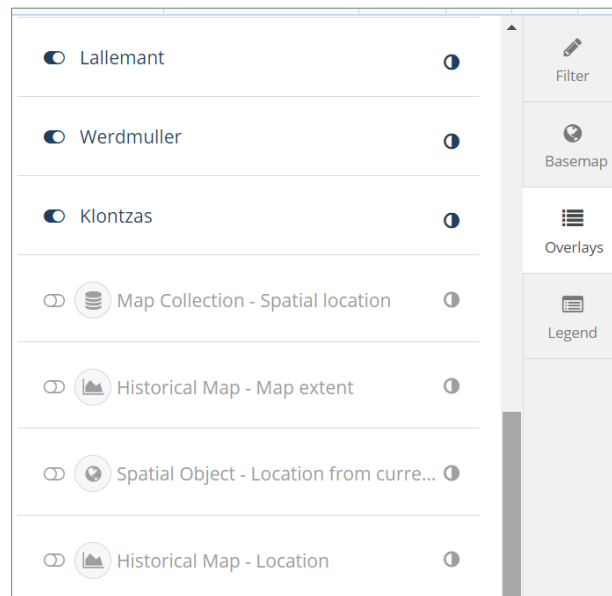
Figure 8. Overlays selection

Figure 9. List of spatial layers

Users can also <u>search for specific spatial objects</u> depicted in historical maps. In the pilot application two spatial objects have been defined, the "Koule" (the fortess at the port) and the "Fortification of Candia " (castle of Candia and its fortification). Searching for

the spatial object "Koule" the maps depicting "Koule" will be retrieved and visualized on the base map (Figure 10 and Figure 11).
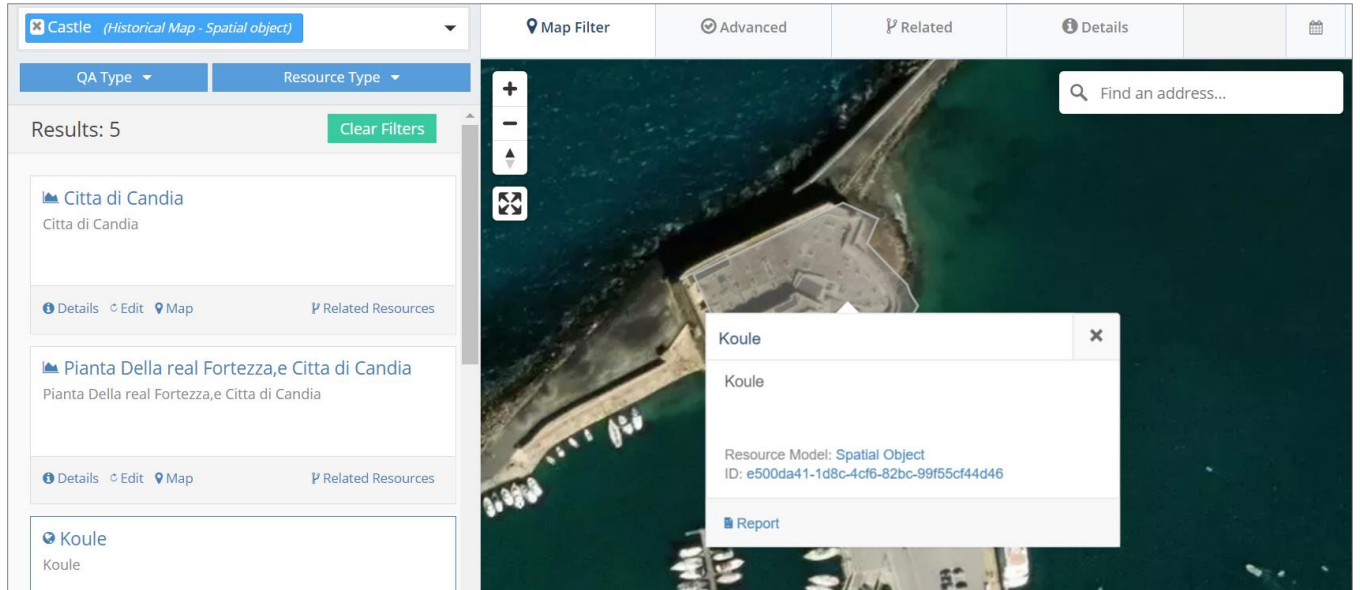

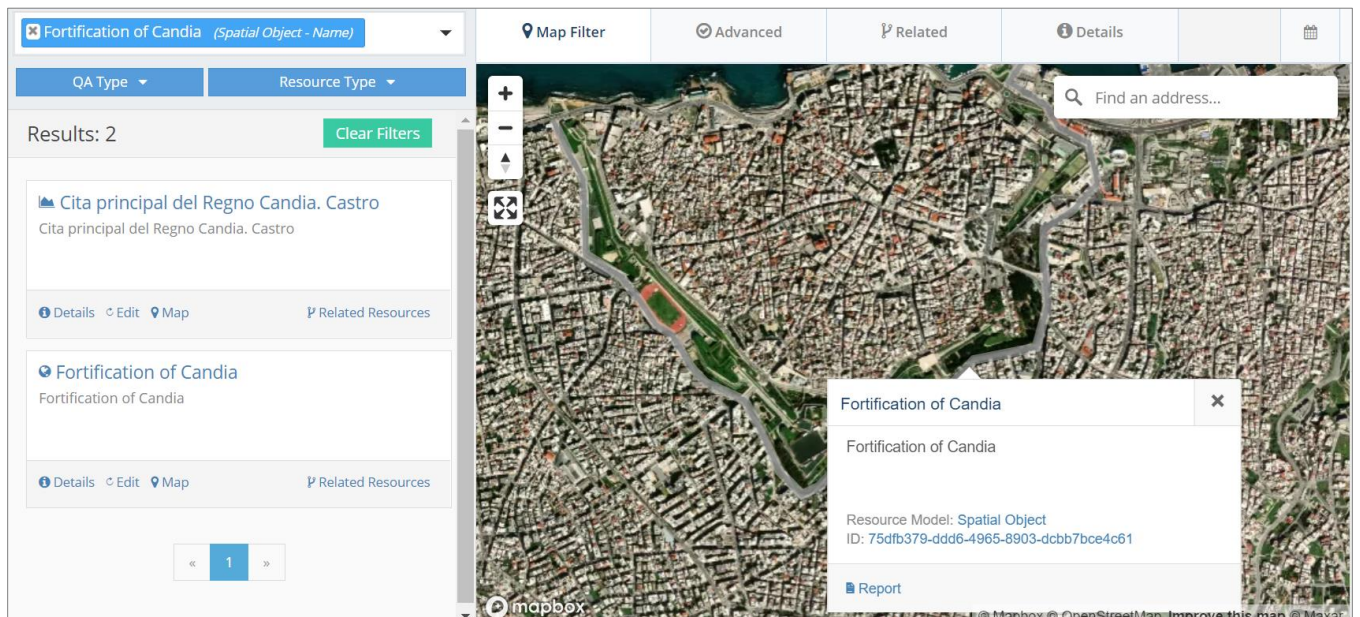Figure 10. The resources depicting the Castle at the port of Candia (Koule)

Figure 11. The resources depicting the fortification of Candia