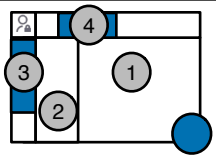
MINERVA quick reference guide

POINT AND CLICK

Annotations for elements and reactions - Map Navigation



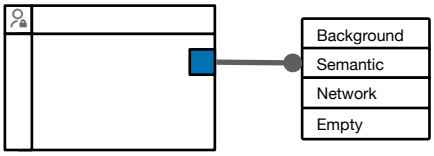
1. Left click on an **element** or **reaction**
2. **Annotation** is displayed in the left panel

Center icon to go to the center of map **Zoom** in and out

Overview of active functionalities

3. Buttons on the **left sidebar** are:
   Project info, API Doc, Plugins, Export, Legend
4. On the **top sidebar**:
   Submaps, Overlays

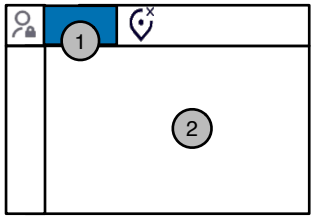
BACKGROUND



- '**Semantic**' is the default background which has the semantic zoom feature
- '**Network**' displays the structure of map as a colored network
- '**Empty**' removes all coloring and masking. recommended for data overlays

SEARCH

Set the scope of the search



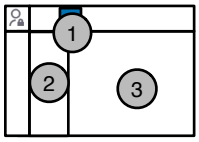
1. Search for specific elements, interactions or targets
   Use semicolon (;) to search for **multiple terms**, each term has a separate tab
   Clear button removes all search results from the map
2. Search results are marked by pins with different colors for different types
   (for Content, for Drug, Small molecule targets)

Search for map elements, drug or small molecules / interactions, by their name or synonym.
Selecting '**Perfect match**' makes 'Search' look for exact matches.
Also search is possible:
- **by reaction id**: put 'reaction:' before reaction id. e.g: 'reaction:re944'
- **by element id**: using identifier of an element. e.g: 'hgnc:14581'

Check out sources for **Drug**: drugbank.ca, ebi.ac.uk/chembl/ and **Chemical**: ctdbase.org

SUBMAPS

Access and use Submaps



1. Press **Submaps** button
2. In the list of shown submaps, click on the > to load the submap.
3. The submap will appear in a new tab
   (tabs are above submap's list)

Search in Submaps

Submap

- **Search** browses submap contents as well
- Search results are then highlighted by:
  Submap's name (**number of pins in that submap**)
- Click on to open the submap and see pins

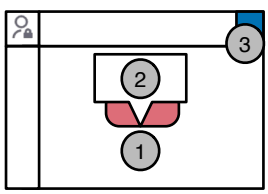
Use 'anchor elements' to open Submaps

Certain elements in the map and submaps, called **anchors**, are associated with a given submap

Anchors are annotated as '**Associated Submap:**'
Click on 'Open submap' to display the submap

COMMENT

Leave comment



1. Right click where you want to **comment**
2. Choose '**Add comment**'
   Fill out the form by entering your **email** and comment's **content**

Browse visible comments

3. Select **Show Comments** to display all comments
   Click on **pin icons** to display the comment details on the left panel

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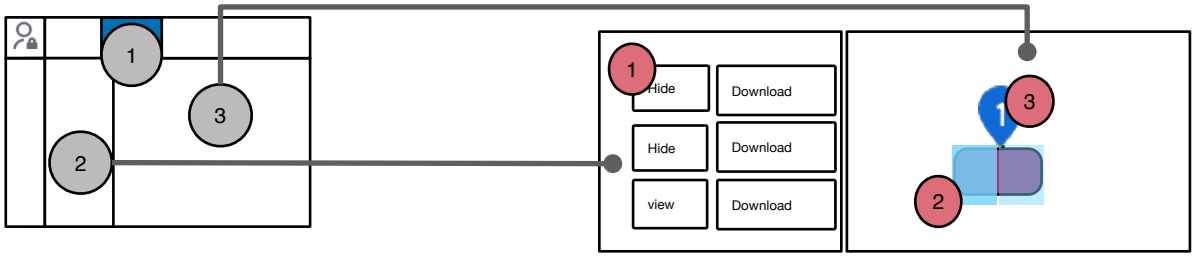
DATA OVERLAYS

Access and use General Overlays



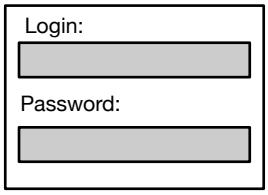
1. **Select** 'Overlays' tab
2. From **General overlays**, select **View** to display an overlay. To get the overlay data, click on **Download**
3. Colored elements by overlay will show on the map

1. Multiple overlays can be shown
2. Elements are colored by multiple overlays
3. Left click on the **partially colored element** to view the normalized values assigned to colors in the sidebar

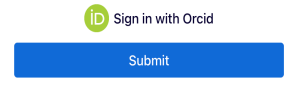
LOGIN

User login

Click on located at top left corner to log in:



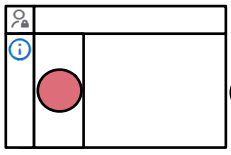
Enter the login and password provided to you by map admins.



Users also can log in using their **ORCID** account.

After logging in, you will be able to upload your data overlays.

PROJECT INFO



Select 'Project info'

Explore information about the map

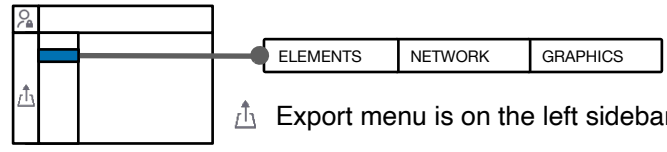
Available information

Name, **Version**

Data:

- The list of **Publications** supporting the map. Search for articles by e.g. the author's surname, title or PubMed id.
- MINERVA general **Manual**
- **Disease** type
- **Licence**
- **Organism** type
- Original **Source file** is downloadable

EXPORT



Export menu is on the left sidebar

Elements/Network export

Select **annotations** of elements and interactions

Select **included/excluded compartment/pathways** filters the elements by compartments/pathways

Graphics export

Choose the **submap** to be exported

Set the **image size**

Select the **image format** (PNG or SVG)

And press **Download**