NetSets web application overview

- Web layout display options can be configured here.
- Edge lists corresponding to different networks can be pasted and assigned a distinct color here. Check buttons can be used to select/unselect networks.
- Node and Edge counts are graphically displayed here.
- A desired edge/node can be searched.
- A selected set from the Venn diagram can be viewed as an edge-list or network view here. The network can also be viewed in full screen.

Configurable web layout options

Graph properties for the selected network subset
Understanding the main layout

One or more networks can be selected to display their similarities and differences in terms of nodes and edges as a ‘Venn’ or ‘Edwards’ layout. Deselecting one/more networks automatically regenerates the plots.
Visualizing network sets as graphs

Clicking on the set number displayed in the Venn (or Euler) diagram automatically updates the corresponding displayed graph showing the corresponding edges. The color of the exclusive sets match to the corresponding networks. The node and font size of the displayed graph can be easily modified to suit user requirements. The generated networks can also be viewed in full screen as well as exported as images.
Selected graph properties namely degree (normalized), closeness and betweenness of the selected network set are automatically calculated and displayed in an interactive table. The respective values in the table can be sorted (by clicking on the network column header) and a desired node name can be searched using the ‘search’ option. In addition, the generated table can be exported as a ‘csv’ file.
Visualizing individual networks

Select the desired network using the option ‘Deselect all but this’

Click on the set number displayed in the Edge Venn diagram

The corresponding network is displayed in the right bottom panel
Connecting NetSets-Cyapp with Cytoscape

Go to: Tools -> Cytoscape web browser and paste the link
https://web.rniapps.net/netsets/cyapp.php

Keep the checkbox selected to open NetSets-Cyapp inside Cytoscape in the Results panel.
Importing networks into NetSets-Cyapp from Cytoscape
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Use the ‘Fetch network’ button in the NetSets-Cyapp panel in Cytoscape to display the Venn diagram plots and establish the link
Viewing network subsets selected from NetSets-Cyapp in Cytoscape.

Network list panel in Cytoscape can be used to view the individual networks and subsets.

Clicking on the intersection count in the Venn diagram shows the intersecting network subset in the Cytoscape canvas.
Scroll down the Netsets-Cyapp panel in Cytoscape and paste the edge-list corresponding to the desired network in a text box and press the button ‘Deselect all but this’
Sending networks from NetSets-Cyapp into Cytoscape

The network edge count will be displayed in a pie circle. Clicking in the edge count number inside the circle will send and display the network in Cytoscape.