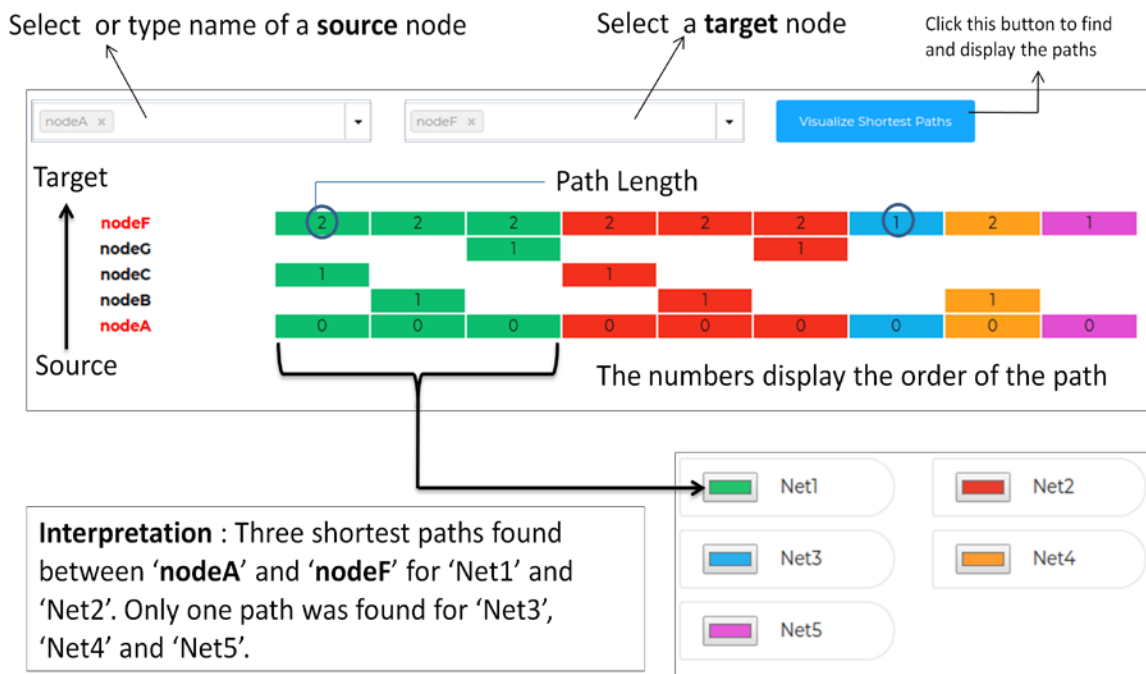# NetConfer Workflow 3

Compare Shortest Paths

Objective: This workflow allows performing a comparative analysis of shortest paths between a given pair of nodes across a selected set of networks. The output is presented graphically for identification of critical nodes in information flow.

Interpretation: Users can select a 'source' and 'target' node from the respective dropdowns (or by entering the names manually). After that, clicking the 'Visualize shortest path' button finds and graphically displays the shortest paths. The interpretation of the plot is presented below:

   Shortest path identification finds important application in network biology ranging from metabolic pathway analysis, alterations in protein-protein interaction networks, order of interaction cascades in transcription factor networks, etc. NetConfer not only allows comparing multiple shortest paths within a network but also across a selected set of networks in an easy and intuitive way. The outputs of an analysis can also be exported as text files for further analysis.