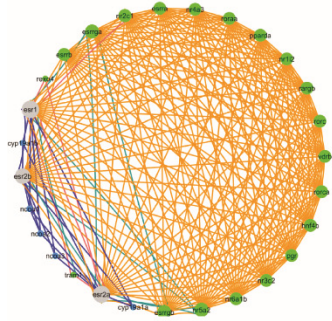
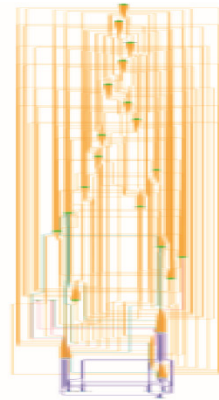


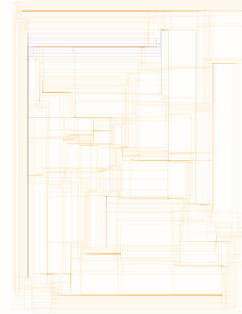
**Figure S4:**



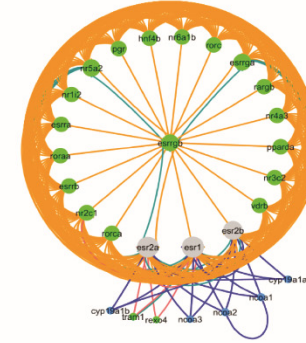
The Circular layout algorithm organises the nodes into partitions by analysing the network structure connectivity.



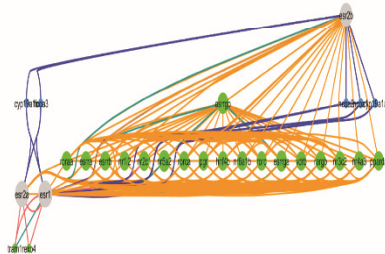
The Hierarchic layout algorithm emphasises direction or flows within the directed network. However, this layout algorithm is not suitable for this type of network since it is an indirect network.



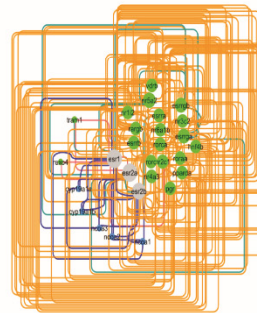
Although the Orthogonal layout algorithm is a multi-purpose layout style for undirected networks, it is not suited for this network since this layout algorithm is suitable for medium-sized and sparse networks.



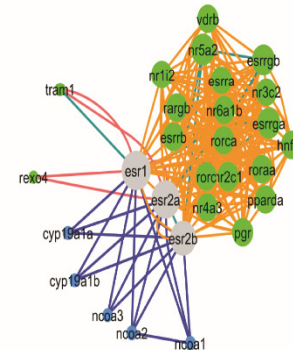
The Radial layout algorithm is not suitable for this type of network since it highlights the tree structures.



The Tree layout algorithm is only suitable for a tree or a collection of trees input networks.



The Orthogonal Edge Router layout algorithm organises the edges of a network using vertical and horizontal edge segments without changing the positions of the nodes.



The Organic Edge Router layout algorithm organises the edges organically to ensure the overlapping edges on the nodes are absent.

**Figure S4:** ERs network with different layouts generated by the app of yFiles Layout Algorithm.