Worksheet for the Visone-Workshop June 2nd in conjunction with CREEN-Meeting at the University of Karlsruhe June 3rd and 4th 2005.

Exercise 1

1. Create a visone-graph for each of the following networks.

   ![Star Network](star.png)  ![Cycle Network](cycle.png)  ![Double Star Network](double-star.png)  ![Chain Network](chain.png)

   star    cycle    double star    chain

2. Determine degree, closeness and betweenness in each of the networks and interpret the results. (See page 4 of the article "visone - Analysis and Visualization of Social Networks" for a short overview of the above indices).

Exercise 2

Consider the following network:

![Complex Network](complex-network.png)

1. Load the network into visone.
2. Find a good visualization of the network.
3. Is there a clustering of the network?
4. Analyze the network with the indices of Exercise 1.
5. Is it possible to make small changes (e.g. by removing one edge) to the network, such that the centrality indices of the most important nodes change considerably?