

Instructions for JNW2 Project WAN1 – Creating Network Topology Matrices

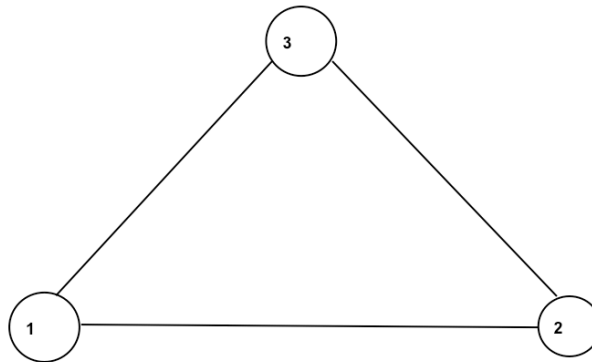
JNW2 has a graphic user input (GUI) that will allow you to draw a network and will automatically generate the configuration file for that network and then invoke the simulation. The purpose of this assignment is for you to learn what the GUI is doing and use it to input a network to be used in future assignments. The process is similar to generating the topology matrix as described in chapter 2 of *Understanding Internet Protocols*. However, the matrix you will generate for JNW2 is somewhat different.

Your assignment has two parts:

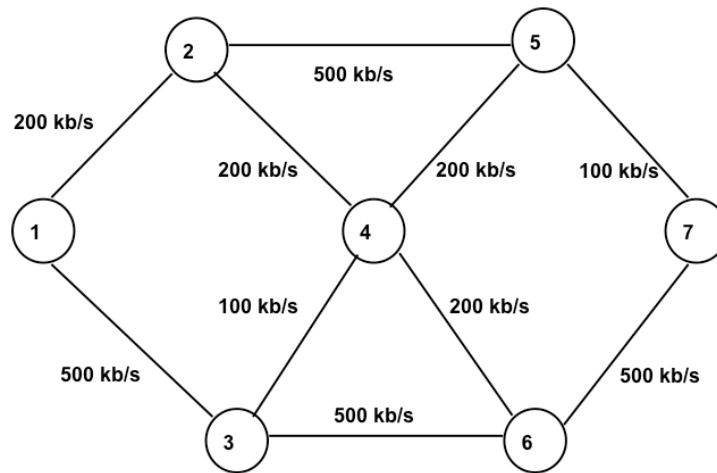
1. a. This part is intended to make you familiar with the network matrices used by JNW2. Copy the ReliableDLC.txt configuration file in the “config” directory of JNW2 to “EditedReliableDLC.txt” and edit the network matrices in the configuration file to describe the network diagram below. The matrices are described in the configuration file. Use data rate 512 kb/s for all links and, for each node, a router plus 100 Mb/s contention LAN.

b. In NetBeans, right-click on Properties for JNW2, select “Run” and make the Main Class JNW2.gui.GuiController.

c. Do Clean and Build and then Run in NetBeans. This will bring up the GUI; under File select Load Config File and load your EditedReliableDLC.txt. This will display your network, which should match the one shown below. You may need to move the nodes around for a nicer diagram; just select them and drag. You should be able to run the simulation and get the same result you did for DLC3.



2. In this part you use the GUI to enter a new network. Read the JNW2 Graphic Network Builder User Manual and then enter the network below. You will need to add subnets and links, and enter the parameters for them. Each node is to be a router plus a 100 MB/s contention LAN with two hosts. Name the configuration file WAN.txt. You will use this network in future assignments. The Routing Matrix will not be completed yet, since that is the subject of another assignment.



Submit the two configuration files you have generated.