Advanced Network Communications H - Assessed Coursework Implementation Overview

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-- Overview

The application provides the ability to perform network simulation, with split horizon capability, in a textual interface, by providing a set of commands each with a different function.

In particular the user is able to:

1. Print the route between two nodes

2. Print the DVT for all nodes in the network

3. Compute and update the routing tables for all nodes, given a number of iterations, and enable/disable split horizon

4. Update a link between two nodes

5. Load in another network description file

-- Compile and Execute

Requirements

To be able to run the provided file, or compile from source you need to have Java (for the JRE) installed. I recommend having Java 11 installed. If Java is not already installed on your machine, find your OS specific file and install the appropriate dev kit to be able to run .jar files.

Execution

The submission folder contains an executable *netsim.jar* file. To run the file in the terminal, navigate to the directory the file is located and run `java -jar netsim.jar`.

Compiling from Source
Note: This step is not necessary as a runnable jar has been provided, however the instructions are provided to allow the user to build from source as indicated in the assessment document

The submission folder contains the source code for the application as well as an archive file. To compile the .jar file from the source code, download the Eclipse IDE and import the archive file provided via File > Import > General > Existing Projects into Workspace. Locate NetworkDVRSimulator.zip, select it and click "ANC Assessed Exercise" in the "Projects" section. Click finish to import.

Once the project is imported, click File > Export > Java > Runnable Jar File. Follow the wizard, setting the launch configuration to the project folder that has been imported. A jar file will be generated that can run as described above.