

## Simulation of Networks

### Assignment 2

Due Date: 20 June 2003

*This project comprises 50% of the assessment for this subject.*

*Projects may be performed individually, or in groups of two.*

#### Submission requirements:

- *One submission per group, with names and student number of all group members.*
- *A description of the network that you have simulated (i.e. your project specification).*
- *A flowchart of the simulation.*
- *Simulation results, indicating the input parameters as well as the output parameters.*
- *Your tcl code, both a paper version and an electronic version.*
- *Your reference sources.*

#### Project Specification

This project is quite open-ended, in that you may write your own project specification. What is required is a working *ns* simulation of some communication network, carrying sensible amounts of data, with performance figures obtained from your simulation (i.e. just producing a *nam* animation is not enough). Obtaining performance figures will require some processing of output data/traces.

There are many *ns* resources on the Web, and you are welcome to use these, so long as you provide due reference to them.

Some possible simulation scenarios:

- TCP flows over a small network Compare the different flavours of TCP.
- Http traffic over a small network.
- MPEG traffic trace data over a small network.

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