OPNET

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**Overview**
- Original work at MIT, now maintained and marketed by OPNET Inc.
- Discrete event simulator
- OPNET Modeler
  - Hierarchical modeling that mimics real life architecture: Network, Node, and Process Layer modeling
  - At Process Layer, a finite state machine representation is used for modeling, where state behavior is dictated by C code
  - Canned process models are supplied (open code) for many popular communication protocols
  - Decent capabilities for animation, GUI, analysis, debugging, etc.
- OPNET IT Guru: Deals with only Network Layer; other layers are pre-canned and invisible

**Setup**
- Follow instructions supplied on an insert in the textbook to obtain the Experiments Manual from http://booksite.mkp.com/Aboelela/
- OPNET IT Guru Academic Edition is installed on the EECS instructional Windows machines
  - Can be accessed using your EECS Windows account
  - Can also be accessed by remote terminal service
    - Remote Desktop Connection in Windows XP
    - Will need to know the IP address of the host to access from an off-campus location
    - Class accounts are available from the instructors or see http://inst.eecs.berkeley.edu/

**Introduction and Tutorials**
- Required manual sections will be posted on the class website's syllabus link (available when an assignment is out)
- Go through the "Introduction" of the Experiments Manual to develop a good familiarity with the simulation tool
  - Should not have to change the OPNET preferences
  - Only answer the lab questions indicated for each assignment
- "Introduction" leads you to the following tutorials packaged with the software
  - Introduction
  - Small Internetworks

**Demonstration (Ethernet Lab)**
- Let's walk through the Ethernet lab (Lab 1 of the Manual):

  ![Diagram of Ethernet Lab](image)

- First OPNET assignment is the Ethernet lab (Lab 1 of the Manual) – Due back on Thursday, February 24