Introduction to Internetworking

Elliot Schwartz
Student Information Processing Board

Approximate Schedule

- Tuesday
  - 7:00 Introduction to Internetworking - elliot
  - 8:10 The Internet Protocol (IP) - elliot
  - 9:00 IP Addressing and Routing - elliot
- Wednesday
  - 7:00 The Domain Name System (DNS) - jhawk
  - 7:50 The Transmission Control Protocol (TCP) - jhawk
  - 9:00 Applications: e-mail & the Web - elliot
- Thursday
  - 7:00 Hardware - elliot
  - 8:00 Internet Engineering - jhawk
  - 9:00 Technical Internet Tools - elliot
  - 9:30 IP Multicast & the Multicast Backbone (MBone) - jhawk

Who are we?

- course sponsored by the Student Information Processing Board (SIPB)
- Instructors
  - Elliot Schwartz `<elliot@mit.edu>`
  - John Hawkinson `<jhawk@mit.edu>`

Internetworking

- What is it?
- Abstraction through Layers
  - Why do you want it?
  - How do you create it?
  - How do you use it?

A Model

- ISO-OSI Networking Model
- History
- The Model
  - Application Layer
  - Presentation Layer
  - Session Layer
  - Transport Layer
  - Network Layer
  - Link Layer
  - Physical Layer

Internetworking and the Internet

- Correspondence to Internet Protocols
  - Link and physical often come in pairs
  - Link specific protocols bridge the gap to the IP (Network) layer
  - Network
  - Transport
  - Above transport is pretty muddy

Standards

- What are standards?
- Internet Standards are produced by the IETF
- Other organizations come into play as well

References

- http://cio.cisco.com/univercd/data/doc/cintrnet/75818.htm
- http://ana-www.lcs.mit.edu/projects/sdcr-net/report
- RFCs