Learning Guide Unit 7

Overview

Unit 7: The Transport Layer (TCP)

Topics

- TCP Header
- TCP Connection Establishment
- TCP state diagram
- Path MTU Discovery
- TCP Sliding Windows
- Nagle Algorithm
- Keep Alive
- TCP Timers
- Basics of TCP Congestion Management
- Slow Start

Learning Outcomes

- Describe the TCP states during and after simultaneous connection termination
- Explain the need for maximum TCP packet lifetime in a large network
- Identify one disadvantage of the TCP Nagle algorithm in a congested network
- Diagnose the causes for TCP connections lingering in FIN_WAIT_x states

Tasks

- Peer-assess Unit 6 Assignment
- Read through the Learning Guide and the Reading Assignment
- Complete the Discussion Assignment by posting in the Discussion Forum
- Respond to and rate three of your fellow classmates' posts in the Discussion Forum
- Complete and submit the Written Assignment
- Complete and submit the Learning Journal Task
- Take and submit the Self-Quiz