- 1. Use an FTP program to retrieve a file from a remote site.
- a. If the server does not provide statistics, estimate the transfer rate for a large file. If the server does provide statistics, use the provide statistics to state the transfer rate.

Status: Starting download of /media/Bloodborne/Bloodborne/01 Omen.mp3 Status: File transfer successful, transferred 5,077,252 bytes in 2 seconds

- b. Is the rate higher or lower than you expected? Higher.
- c. Why do you think it this was the case? The FTP Server has fast download speeds even though it is setup for media storage.
- d. Why is the transfer rate important to the developer of the application? Specifications are important to know what the target system is capable of during development. You wouldn't want to develop for a bitrate that is not possible to achieve during production or on that particular server! This is an example of requirements gathering.
- 2. Are the following standard application protocols connectionless or connection-oriented?
  - a. Telnet connection oriented
  - b. FTP connection-oriented
  - c. SMTP connection-oriented
- d. NFS (Network File System) can be either connectionless or connection-oriented
  - e. HTTP connection-oriented