

CS8803 HPC - Homework 1
Due Monday Feb 25, 2007 3:05pm (via email or in class)

1. What are the requirements for a network interface (NIC) which has to enable operating system bypass in the fast-path and placement of data in application memory, i.e., what is the functionality which must be executed by the NIC hardware/firmware? For the requirements you described, what are the control-path operations which will have to be performed, and does the OS have to be involved (and why).

2. Why is TCP not adequate for applications with high performance requirements? Are TCP-offload-engines going to address these issues?