

Building TCP/IP packets

A look at the computation-steps
which need to be performed for
utilizing the TCP/IP protocol

NIC's 'offloading' capabilities

- An advanced feature of Intel's most recent PRO1000 gigabit ethernet controllers is an ability to perform many of the calculations associated with the processing of network packets which otherwise would have to be programmed by device-driver authors and then executed at runtime by a CPU that has much other vital work to attend to

How much work?

- To gain a concrete idea of the work that is required to set up a conventional network packet for transmission, and then to take it apart when it's received, we have created a character-mode Linux driver that shows us all of the essential calculation-steps, as it does not rely on the usual networking software included within Linux's kernel