

HW Chap. 6

Message-passing Computing

1. What is the difference between the `count` parameter as used in `MPI_Recv()` vs. the `count` parameter as used in `MPI_Get_count()`?
2. Give a benefit and a challenge of using non-blocking communication.

Practical: conduct a performance evaluation of a message-passing system.

- Using the MPI message-passing library, devise and conduct an *interesting* performance evaluation that measures the communication costs to send messages between machines. For example, you might plot elapsed time (seconds) or plot bandwidth (bytes/second) as a function of message size. You might attempt to determine the "sweet spot" for communication efficiency, or conduct a comparison of collective (i.e. broadcast) vs. individual communications.