

Introduction to Programming with MPI

Parallel and Distributed Computing

2017/2018

Throughout this class you should consult the documentation about MPI routines at <https://www.open-mpi.org/doc/v1.10/>.

1. Start by creating a program that writes

```
Process <id> sends greetings from machine <node-name>!
```

2. Download the file `sendRcv.c`.

- (a) Examine the code to determine its functionality.
- (b) Compile and execute this program, using different values for the input parameter.
- (c) Interpret the results obtained.

3. Modify the program `sendRcv.c` to obtain experimentally the message latency and bandwidth for the network.
4. Write a program that allows the performance comparison between the broadcast of a large array to all the nodes, and sending the array through messages sent individually to each node.