

Sample Performance Study

High Performance Computing Facility
University of Maryland, Baltimore County

Table 1: Wall clock time in seconds for problems of size N using 1, 2, 4, 8, 16, 32 compute nodes with 1, 2, 4, and 8 processes per node.

(a) $N = 1024$	1 node	2 nodes	4 nodes	8 nodes	16 nodes	32 nodes
1 process per node	00:17:04	00:08:32	00:04:16	00:02:08	00:01:04	00:00:32
2 processes per node	00:08:32	00:04:16	00:02:08	00:01:04	00:00:32	00:00:16
4 processes per node	00:04:16	00:02:08	00:01:04	00:00:32	00:00:16	00:00:08
8 processes per node	00:02:08	00:01:04	00:00:32	00:00:16	00:00:08	00:00:04
(b) $N = 2048$	1 node	2 nodes	4 nodes	8 nodes	16 nodes	32 nodes
1 process per node	00:34:08	00:17:04	00:08:32	00:04:16	00:02:08	00:01:04
2 processes per node	00:17:04	00:08:32	00:04:16	00:02:08	00:01:04	00:00:32
4 processes per node	00:08:32	00:04:16	00:02:08	00:01:04	00:00:32	00:00:16
8 processes per node	00:04:16	00:02:08	00:01:04	00:00:32	00:00:16	00:00:08
(c) $N = 4096$	1 node	2 nodes	4 nodes	8 nodes	16 nodes	32 nodes
1 process per node	01:08:16	00:34:08	00:17:04	00:08:32	00:04:16	00:02:08
2 processes per node	00:34:08	00:17:04	00:08:32	00:04:16	00:02:08	00:01:04
4 processes per node	00:17:04	00:08:32	00:04:16	00:02:08	00:01:04	00:00:32
8 processes per node	00:08:32	00:04:16	00:02:08	00:01:04	—	—