



The School of Technology

BSc (Hons) Computing Software Development (Batch 001 – October 2018)

MPI base password cracker

6CS005

Assignment

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**Time consumed to run encrypt-26-03 using 1, 2, 4, 8, 16 threads**

|  |  |
| --- | --- |
| Number of Threads | Time consumed |
| 1 | 1.40127s |
| 2 | 0.70511s |
| 4 | 0.37011s |
| 8 | 0.15497s |
| 16 | 1.40648s |

**Summarization**

A message passing library standard based on the consensus of the MPI Forum is the Message passing Interface (MPI). The Forum include 40 member organizations including suppliers, academics, developers and users of software libraries. It is the objective of the Message Passing Interface to create a compact, effective and scalable interface for transmitting messages which is commonly used for programming transmissions. MPI is the first mainstream message-passing library, independent of the seller. The benefits of developing software to pass messages through MPI correlate closely with portability, performance and flexibility design objectives. MPI is not a standard IEEE or ISO but has actually become an "Industry Standard" for the writing of HPC message transmission software.

We set up remote server to operate all of these servers and link them via MPI. It was not an easy task to do this. Luckily, however, within a given timeframe we can complete this task. We can see explicitly from the map above how time differentiates with the associated number of nodes. The remote node is that any time you add, or another period for the process. We've been searching for Remote Nodes 1, 2, 4 and 8. We discover how quickly MPI can be used to operate with a large data collection throughout this research and experience.