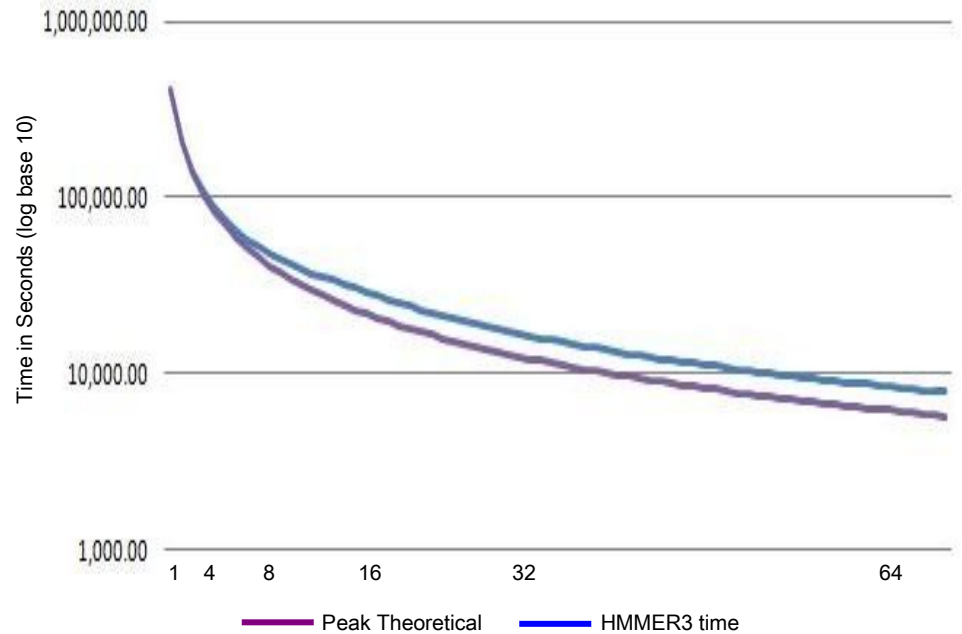



Trio™ Departmental SuperComputer

HMMER3 Performance

HMMER3 Test Results on Trio



Note: Data presented is interpolated.

The protein sequence analysis program commonly used for profile Hidden Markov Model database searches, HMMER3, was executed on a Trio™ Departmental Supercomputer.

A protein set of 1,609,132 sequences was used against a database of 25,000 hmms resulting in 40.23 billion searches per run.

Speed-up performance was calculated at 47 times for 64-cores and 53 times for 72 cores (73% efficient); at a rate of 5.14 million searched per second. It took approximately 2 hours to finish a single run with 72 cores versus 4 days, 18 hours on a single core.

Trio™ Test System Configuration

Processors: 72 2.6 GHz AMD Opteron™ Cores
 Memory: 384 GB 667 MHz DDR2 (8 GB DIMMs)
 (Global Shared Memory of 300 GB)
 Node Interconnect: 40 Gbps InfiniBand

Trio™ Departmental Supercomputers are now available with 96 2.4 GHz AMD Opteron™ cores and 384 GB, 768 GB or 1.54 TB DDR3 memory.

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