

OPTIMIZED FILE TRANSFER PROTOCOL

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Abstract

FTP is file transfer protocol is basically to transfer for large volumes of data. Implementations of it can be widely deployed and can be used on well-connected network because of its ability to scale to network speeds. We propose the optimization technique to improve the performance of FTP[1], measured performance using the various profilers. This Profile data is valuable for identifying performance bottlenecks and guiding optimizations .The FTP ported on various hardware platforms such as P-III, P-IV with MMX, SIMD architecture based. We have use deoxygen/ system clock (gettime()) tool techniques for gathering and manipulating profile information at varying degrees of precision, particularly in the presence of various optimizations techniques such as inlining, c level optimization, loop unrolling, intrinsic, utilization of pipeline stage for processors with compiler level coding. We found that with various levels of optimization stages we achieve that data memory and program memory saving with effect of 60% of actual size not affect the actual performance. As FTP contains the compute intensive modules such as communicating protocol as ISO-OSI[2] layer to transfer data it affects the bandwidth and processing speed of CPU core. This method gives us performance nearer to GridFTP high performance computing model (Note: GridFTP used mostly HPC processor to measure its work[3]).The aim is to provide the benchmark for the further research in this diection ,so that it could be applicable to the mobile decives for efficient handling of data memory.The benchmark could be useful to acheive the space and speed optimization.

Keywords : Data transfer, small files, FTP, profilers, Secure data transfer, Parallel streams.