TRANSFORM YOUR BUSINESS PROCESSES WITH HIGH SPEED DATA ANALYSIS:
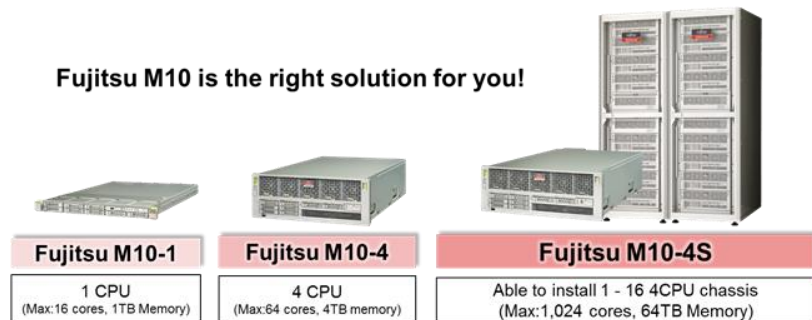
SAS® ANALYTICS PRO + UNIX SERVER FUJITSU M10

Fujitsu M10 server is a flexible and scalable system that delivers high performance and high availability for mission-critical enterprise applications. It is the ideal platform to grow with expanding business requirements.

UNMATCHED SCALABILITY, MAINFRAME RELIABILITY, AND INDUSTRY-LEADING VIRTUALIZATION

KEY FEATURES

- This enterprise server has up to 64 processors (up to 1,024 cores) and huge memory capacity (up to 64 TB) for superior enterprise application performance.

- The new SPARC64 X+ processor up to 3.7 GHz and 3.0 GHz SPARC64 X processor, with supercomputer technology, provides the highest level of performance for resource intensive enterprise workloads such as OLTP, ERP, BIDW, SCM, and CRM.

- The CPU core activation feature economically and rapidly delivers on capacity requirements along with increases in throughput, making it possible to have gradual increases in performance.

- With Fujitsu M10-4S, performance can be further enhanced by connecting multiple units together like building blocks. Furthermore, Fujitsu M10-4S supports mixed SPARC64 X unit and X+ unit in a single system.

- Software-on-chip instructions on the SPARC64 X and X+ processor accelerate key database functions.

- Flexible resource configuration using, physical partitioning, Oracle VM Server for SPARC and Solaris Zones virtualization technologies

Fujitsu M10 is the right solution for you!

Fujitsu M10-1	Fujitsu M10-4	Fujitsu M10-4S
1 CPU (Max:16 cores, 1TB Memory)	4 CPU (Max:64 cores, 4TB memory)	Able to install 1 - 16 4CPU chassis (Max:1,024 cores, 64TB Memory)

Accelerate decision-making

With the pace of business continuing to accelerate, enterprises are finding it difficult to deliver the right information at the right time to the right people. These dynamic business priorities place increasing pressure on underlying IT infrastructure that already struggles to meet user demands. For applications and services to deliver near-real-times access to information and results, systems must be fast and accurate. More specifically they must be capable of storing, accessing and processing massive amounts of data quickly and reliably to facilitate accelerated decision-making.

If the simulations with Bayesian analysis[*] take a long time to obtain the results or the accurate result is not derived from as it is not possible to deal with a various types of patterns, combining the Fujitsu M10 Unix server and SAS Analytics Pro can create a powerful analytic solution. The users can take advantage of the following functions;
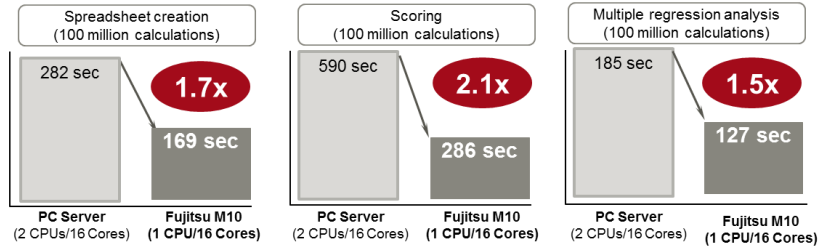
- High-speed CPU/memory significantly improves analysis speed and it realizes the analysis and predication of large volumes of data to be easily managed.
- Multi-core CPUs allow for the high speed parallel processing of a large number of patterns, delivering highly accurate results within a short time frame.
- A wider range of analysis and more advanced processing capabilities provides flexible performance enhancements and the ability to optimize investment through resource expansion.

*Bayesian analysis is a statistical method of estimating the probability of an event occurring based on samples found by random sampling.

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Statistical Analysis Processing Performance Comparison with SAS

SAS analysis processing improves performance speeds by 1.5 - 2 times when compared to a typical PC server, without tuning.

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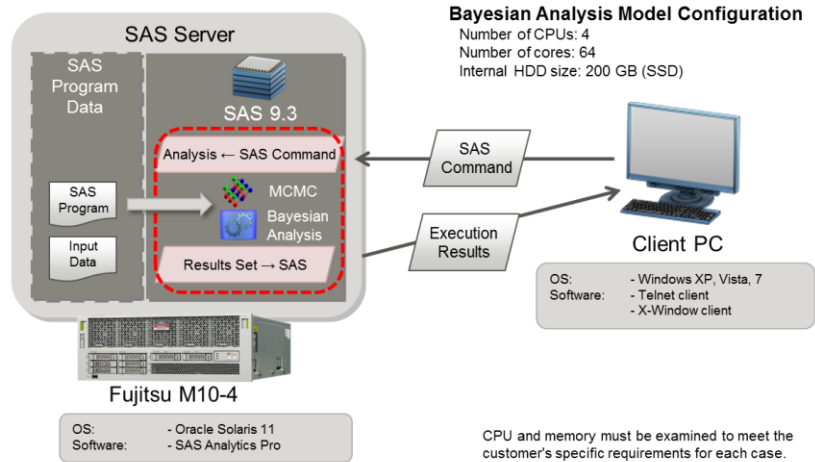
Spreadsheet creation (100 million calculations)	Scoring (100 million calculations)	Multiple regression analysis (100 million calculations)
282 sec — **1.7x** → **169 sec**	590 sec — **2.1x** → **286 sec**	185 sec — **1.5x** → **127 sec**
PC Server (2 CPUs/16 Cores) — **Fujitsu M10** (1 CPU/16 Cores)	**PC Server** (2 CPUs/16 Cores) — **Fujitsu M10** (1 CPU/16 Cores)	**PC Server** (2 CPUs/16 Cores) — **Fujitsu M10** (1 CPU/16 Cores)

Fujitsu Benchmark Comparison

For example, a process taking 5 hours can be shortened to approx. 3 hours

Application Example

A high-speed server is used to perform analysis, and the results are verified by a client PC. The data is used by multiple clients.

Bayesian Analysis Model Configuration
Number of CPUs: 4
Number of cores: 64
Internal HDD size: 200 GB (SSD)

SAS Server — SAS Program Data — SAS 9.3 — Analysis ← SAS Command — MCMC Bayesian Analysis — Results Set → SAS — SAS Program — Input Data

SAS Command / Execution Results

Client PC
OS: - Windows XP, Vista, 7
Software: - Telnet client
- X-Window client

Fujitsu M10-4
OS: - Oracle Solaris 11
Software: - SAS Analytics Pro

CPU and memory must be examined to meet the customer's specific requirements for each case.

Also…

(1) **Multi-core parallel processing for quicker results** — Desktop PC **vs.** **Fujitsu M10**

(2) **Tuning for even faster processing** — Tuning of SAS environment | Large memory | Tuning of OS environment | SSD

Contact Us

For more information about the Fujitsu M10 server, visit oracle.com/goto/SPARC or call +1.800.ORACLE1 to speak to an Oracle representative.

Hardware and Software, Engineered to Work Together

ORACLE®