

Use Case Consolidate with Fujitsu M10 Servers

Optimize data center efficiency with the accelerated performance and massive scalability of Fuiitsu M10 servers



The situation

Server sprawl and complex data center landscapes result in insufficient performance and manageability and hinder IT's ability to respond to changing business needs. Consolidating workloads onto smaller numbers of more powerful servers improves operational efficiency and business agility and reduces initial and ongoing expenses.

The challenge

Many IT organizations run mission-critical applications on outdated UNIX systems to avoid the time and cost associated with migrating core business applications to new platforms. Costly post-warranty maintenance plans and poor performance and scalability impede operational efficiency and business agility.

The solution

The data-center-in-a-box approach of Fujitsu M10 servers provides a fast and affordable migration path to modern and efficient IT infrastructure.

The situation

As companies grow, IT organizations typically respond to increasing or changing demands for services by adding more servers to their environment, creating a heterogeneous and sprawling data center landscape. These complex IT infrastructures are difficult to manage and hinder application performance and business agility. Consolidating multiple workloads onto a smaller number of more powerful systems can simplify data center infrastructure, resulting in increased business agility and operational efficiency. Operational expenses are also reduced through lower acquisition costs and decreased floor space, power, and cooling requirements.

The challenge

Flat or declining budgets are forcing IT organizations to do more with less. Unfortunately, concern for the time and expense associated with migration projects forces IT organizations to keep systems in service well past their warranty expiration. As a result, many IT organizations continue to run on outdated technology that is expensive to maintain and impedes their ability to respond to new and changing business demands. The siloed, one-application-per-server approach, now supported on aging servers, limits scalability and hinders application performance, while costly post-warranty maintenance plans consume limited funds. IT needs a cost-effective way to move to a modern and efficient infrastructure that enables the business to keep its competitive edge and increase market share.

The solution

Fujitsu M10 servers can help businesses achieve data center efficiency. IT organizations can take advantage of an innovative, massively scalable, data-center-in-a-box design to consolidate and optimize infrastructure for accelerated IT and business performance.

- Innovative Software on Chip (SWoC) technology
- 16-core SPARC64® X processors with per-core activation
- Modular building block design with up to 64 processors and 32 TB of memory in a single, integrated system
- Oracle Solaris™ 8, 9, 10 and 11 support¹
- Mission-critical reliability, availability, and serviceability

The benefit

Greater consolidation for operational efficiency. The Software on Chip architecture of Fujitsu M10 servers enables each server to run workloads from multiple older-generation systems with headroom for growth. By consolidating onto fewer servers with greater compute power, capacity on demand capabilities, and large memory configurations, IT organizations can improve server utilization levels without sacrificing application and service scalability and performance. With fewer deployed systems, IT organizations can streamline management, reduce data center floor space, power, and cooling requirements, and lower operational costs.

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¹ All Fujitsu M10 servers run Oracle Solaris 10 or 11 natively, and can host Oracle Solaris 8 and 9 images in Oracle Solaris Legacy Containers.

The benefit

- Simple, fast migration without OS upgrade for Oracle Solaris 8, 9, 10, and 11 installations
- Accelerated performance using fewer servers
- Reduced acquisition costs and increased price/performance
- Reduced operational expenses with fewer, smaller systems and lower power needs
- Flexible, cost-effective expansion as business grows and needs change with per-core activation and modular building block design

Dynamic scalability to support increasing demand. When resources are shared, it is important to ensure each workload has access to the compute resources it needs to perform tasks. The modular building block design and per-core activation capabilities of Fujitsu M10 servers help IT organizations scale and manage resources to accommodate growing numbers of workloads. Costs can be kept in check by activating only the number of cores needed for current operations, saving both acquisition and per-core licensing expenses. As more users access existing applications, or more workloads are consolidated onto the system, additional cores can be activated.

Performance that accelerates applications and businesses. Some organizations delay consolidation initiatives because they worry systems will fail to support multiple workloads with overlapping peaks in demand. Based on the SPARC64 X processor, Fujitsu M10 servers feature up to twice the performance per core compared with our previous- generation SPARC® systems so IT organizations can run applications with headroom for growth.

Built-in virtualization for greater consolidation density. When consolidating applications onto fewer servers, mechanisms must be put in place to ensure workloads do not impact one another and security boundaries are maintained. Included with Fujitsu M10 servers at no additional charge, Oracle VM Server for SPARC provides the isolation required to allow larger numbers of consolidated workloads to share underlying hardware resources. Each virtual server is created, configured, managed, maintained, and retired independently of other virtual servers.

Compatibility that simplifies migration and delivers confidence. Migration does not have to be a time-consuming or disruptive effort. All Fujitsu M10 servers run Oracle Solaris 10 or 11 natively, and can host Oracle Solaris 8 and 9 images in Oracle Solaris Legacy Containers. IT organizations can move to a modern platform without upgrading the operating system, replacing expensive middleware solutions, or

The solution

- Fujitsu M10-4S servers
- Fujitsu M10-4 servers
- Fujitsu M10-1 servers

modifying business applications and processes. Existing systems can be migrated and consolidated onto Fujitsu M10 servers quickly and easily, allowing business operations to continue and protecting existing software investments. Because Oracle Solaris 10 patches are available through January 2021, enterprise can have confidence that the latest Oracle Solaris operating environment will continue to deliver the native support their core business applications require.

Conclusion

Fujitsu M10 servers are an excellent solution for IT organizations facing increasing demands and limited budgets. With world-record performance and cost-effective scalability, Fujitsu M10 servers can consolidate multiple business application workloads of any size. Simple, granular scalability allows IT organizations to purchase the capabilities they need now and add capacity as their business grows, reducing initial acquisition and ongoing operational expenses. Fujitsu M10 servers allow IT organizations to improve current application performance and confidently take on new projects, all while increasing their infrastructure efficiency and overall savings. To learn more about how Fujitsu M10 servers can help your business become more efficient and competitive, contact your Fujitsu sale representative or visit www.fujitsu.com/sparc.

About Fujitsu

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