

Case study

Korea Local Information Research & Development Institute (KLID)

To improve performance, system availability and total cost of ownership, KLID replaced legacy systems with the latest Fujitsu M10 SPARC Servers. Reliability and high performance features of Fujitsu M10 provide the best solutions for complex government IT organizations.



The customer

KLID is an administrative agency that develops, distributes and manages information systems for districts, cities and county governments.

The challenge

In 2004, KLID installed over 200 Fujitsu PRIMEPOWER SPARC servers to run their central monitoring management system. Over the past five years, with growing data and compute demands, performance and system availability became a concern for KLID. In addition, maintenance costs were steadily climbing for the aging server infrastructure. To support their customers and critical operations, a new robust and cost-saving server solution was needed.

The solution

KLID has been using SPARC/Solaris servers for over a decade, but they also had IBM and HP x86 systems in many other areas of their business. When they began investigating server replacement options, they considered adopting x86 for their central monitoring management system to reduce their capital and operational expenses. However, after re-designing their central monitoring management system, they found that they could achieve their increased performance and availability goals at a *lower* cost level with Fujitsu M10 systems.

Fujitsu M10 systems offer strong and unique features compared to other competitive systems from IBM, HP and other UNIX server vendors, such as dense multi-core processors, core-level Capacity on Demand, unsurpassed reliability and a high performance, compact system architecture. To protect the significant investments made in the central monitoring system development and ensure the continuity of critical operations, easy and low-risk migration and implementation procedures were required. Oracle Solaris is the only operating system to offer 100% application compatibility over generations of software and hardware.

The customer

Country: Korea

Industry: Government

Founded: Originally Established in 2003 as Korea Association of Local Informatization. Changed the name to KLID in 2008

Website: www.klid.or.kr/eng



The challenge

KLID provides reliable, high-quality services without interruption through its standardized operation and maintenance of common information systems for local e-government services. To deliver critical information systems and services to government organizations, the performance and availability of the legacy infrastructure had to be improved. Also, the requirements for a lower Total Cost of Ownership (TCO) needed to be met without compromising either performance or availability.

The solution

KLID decided to replace their entire legacy server infrastructure with the Fujitsu M10 platform instead of x86 systems because of the high performance architecture and the availability features built into Fujitsu M10 servers. KLID is now benefitting from lower TCO through the use of Capacity on Demand (COD), Oracle VM for SPARC features and improved price-performance delivered with Oracle Database running on Fujitsu M10 servers.

Legacy Monitoring System Infrastructure **New Monitoring System Infrastructure**

- Hardware
 - Main systems: 8 Fujitsu PRIMEPOWER 650 servers
 - City systems: 11 Fujitsu PRIMEPOWER 650 servers
 - County/Districts systems: 207 Fujitsu PRIMEPOWER 250 servers
 - Main Storage: Fujitsu Storage ETERNUS 3000
- Software
 - Operating System: Oracle Solaris 8
 - DBMS: Oracle Database 9i
 - Monitoring Solution: EMS Software

- Hardware
 - Main systems: 2 Fujitsu M10-4 servers
 - City systems: 11 Fujitsu M10-1 servers
 - County/Districts systems: 207 Fujitsu M10-1 servers
 - Main Storage: Fujitsu Storage ETERNUS DX100 S3 (10TB)
- Software
 - Operating System: Oracle Solaris 10
 - Virtualization: Oracle VM Server for SPARC
 - DBMS: Oracle Database 9i
 - Monitoring Solution: EMS Software

The benefit

By adopting mission critical and high-performance Fujitsu M10 systems, KLID increased server availability and performance levels significantly while drastically reducing the total cost of ownership.

For the main system infrastructure, KLID was able to consolidate 8 legacy servers into 2 Fujitsu M10-4 systems with Oracle VM for SPARC server virtualization. Oracle VM Server for SPARC is an integrated virtualization technology and highly effective consolidation solution included with Fujitsu M10 servers. In addition to the compute refresh, I/O throughput was greatly increased through the implementation of the latest generation Fujitsu ETERNUS DX100 S3 storage. Oracle Database licenses were reused and the databases were migrated safely from the legacy infrastructure to the newly re-designed infrastructure.

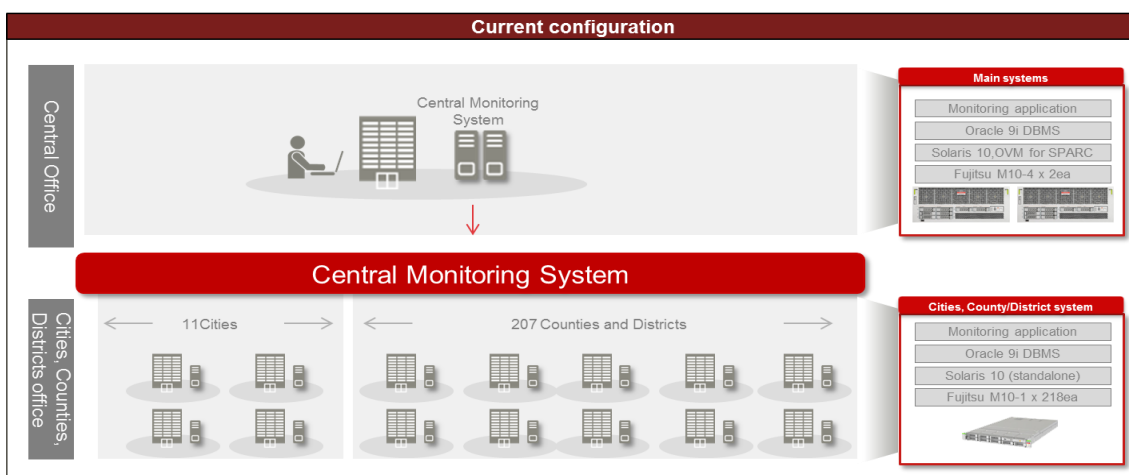
For the central monitoring system infrastructure dispersed throughout the many cities, counties and districts, 218 Fujitsu M10-1 servers were deployed.

The entry-level Fujitsu M10-1 delivers mainframe-class reliability and high performance in a compact 1RU form factor that is perfect for KLID's nation-wide infrastructure.

Furthermore, all Fujitsu M10 models provide a consistent and impressive set of features, such as Capacity on Demand, Oracle VM for SPARC, Software on Chip (SWoC), multi-core and multi-thread CPU architecture, high performance and high reliability. The high performance Fujitsu M10 SPARC processors deliver up to 5 times faster database performance with Oracle Database than the legacy systems they replaced.

Conclusion

Fujitsu M10 servers provide the best database infrastructure solution for high performance, high availability, and lowest TCO for the growing demands of KLID and their customers. When establishing reliable infrastructures and providing high quality services, the feature-rich Fujitsu M10 servers are in class of their own compared to other vendors' UNIX and x86 server offerings.



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