TELUS Mobility

Sun Success Story.

TELUS Chooses Sun to Consolidate Distributed Systems and Datacenters

Based in Toronto, Canada, TELUS Mobility, a business unit of TELUS Corporation, is one of the largest Canadian telecommunications companies, with revenues over 2 million Canadian dollars per year. TELUS Mobility is a national wireless telecommunication provider offering digital wireless voice, data and Internet services to business and consumer clients across Canada with two state-of-the-art digital wireless networks: TELUS Mobility PCS and Mike.

A few years ago TELUS acquired several smaller telecommunications companies to form the current TELUS Mobility. As a result, it found itself with four different customer care and billing systems and several datacenters. The infrastructure was responsible for tracking more than 2.5 million customers, making an average of 25 million phone calls per day. With business growth of 20 to 30 percent a year, TELUS Mobility knew it had to quickly consolidate to a single system architecture that could handle the workload reliably and cost-effectively.

"After an extensive analysis of Sun Microsystems, Inc. and Hewlett-Packard, we chose the Sun Fire[™] 15K server," says Kevin Salvadori, Executive Vice President and CIO at TELUS Mobility. "Most important to us was Sun's technological superiority. This was clearly shown in the Sun Fire 15K server's Dynamic System Domains (DSD), scalability and expandability. In addition, we found it was more cost-effective to upgrade to Sun than to keep with our current supplier."

Sun has vast experience in providing mainframe-class UNIX® availability products and services. With more than 1,800,000 UNIX systems installed worldwide, Sun is the recognized industry leader in providing RAS (Reliability, Availability, and Serviceability) in a UNIX environment (D.H. Brown, "2001 UNIX Function Review.").

Sun Fire 15K Server Runs Amdoc's Ensemble Billing System

One of Sun's leading strengths is minimizing 'server sprawl' by helping businesses consolidate applications onto a few large servers that offer scalability and more efficient management to drastically reduce the Total Costs Operation (TCO) of IT environments. At the heart of this consolidation is the Sun Fire 15K server.

Company: TELUS Mobility www.telusmobility.com

Industry/Market Telecommunications

Products/Services • Sun Fire[™] 15K server (Starcat)

- Sun Fire 6800 server
- Sun Fire 4800 server
- Sun Enterprise[™] 280R servers
- 15TB Sun StorEdge[™] 9960 storage arrays
- Solaris[™] 8 Operating Environment
- UltraSPARC[®] Processors

Key Business Solutions

- Sun Fire 15K server consolidates customer care and billing systems from five data centers onto one system in one data center, drastically reducing expenditures, technical support and maintenance
- Dynamic System Domains allow isolation of tasks, while applications run concurrently – improving performance
- Dramatic increase in server utilization saves approximately 30-40 percent in future capital expenditures
- Investment Protection allows new processors to be added for a smooth and simple future upgrade path.



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Sun delivers a massive size multi-processing machine providing scalability and expandability while protecting investments.

The Sun Fire 15K server is designed with server consolidation in mind. The system has up to 106 high-performance UltraSPARC® III 900-MHz processors in a symmetric multiprocessing architecture, and can easily add processors as required. Also common components, such as the uniboard (CPU/memory boards), are interchangeable among the Sun Fire 3800 – 6800 midframe and Sun Fire 15K servers, thereby helping to lower total cost of ownership.

In addition, the Sun Fire 15K servers Dynamic System Domains (DSD) technology was very important to TELUS Mobility. The Sun Fire 15K server can host up to 18 domains, which are fully reconfigurable while applications are running. These secure DSDs isolate applications from potential faults for near-continuous application availability. "For TELUS Mobility, Sun's domains allow us to run both the application that creates bills for our customers, while simultaneously running our online services for our 2.5 million customers," explains Salvadori. "Another benefit is that we can easily modify our environment. For example, we can add more testing and production applications to Quality Assurance when needed without interfering with other services."

"When consolidating TELUS Mobility's billing systems we chose to use Amdoc's Ensemble customer care and billing system," says Salvadori. Amdocs is known as a leading billing system provider to telecommunications companies worldwide. Its billing system rates all calls made, produces bills, and securely stores all of a client's information. "Sun and Amdocs worked very well together in providing an elegant solution," notes Salvadori.

Another advantage for TELUS Mobility, as Salvadori explains, is that Sun is a "very clientfocused company. Senior management at Sun are involved not only in making the deal happen, but also with follow through and customer support. All-in-all, Sun had the best ability to deliver a massive size multi-processing machine to help us now and with our future growth."



Storage Provides a Fast and Scalable Solution

The need to consolidate storage also led TELUS Mobility to deploy Sun's high-end storage partner, Hitachi Data Storage (HDS) storage arrays. A little later, fortuitously, Sun and Hitachi announced their agreement that Sun would act as Original Equipment Manufacturer (OEM) for HDS and remarket the HDS storage arrays as Sun StorEdge[®] 9960 storage arrays. "By working together, Sun and HDS provided a total solution for us," remarks Salvadori. This is nothing new, since Sun and HDS have worked together for several years and even provide a common resolution center for their customers, thereby ensuring the two fit together well.

The Sun StorEdge 9960 storage arrays provide the best of two leading storage vendors in one blindingly fast, extremely scalable, and continuously available storage system. Based on the Hitachi Freedom Storage Lightning 9900 family, the Sun StorEdge 9960 array is specifically designed for situations requiring heterogeneity, storage consolidation, and the highest availability levels. The storage arrays combine a revolutionary architecture design with sophisticated RAS features to provide truly non-disruptive performance and availability.

Get the details.

The Sun Fire 15K server's Dynamic System Domains, scalability, and computational power help TELUS Mobility in its drastic consolidation.

www.sun.com/servers/highend/Sunfire15K/

The Sun solution offers increased flexibility and huge savings with less maintenance, technical support, and capital expenditures.

Increases Server Utilization

"We were impressed with Sun as a whole because of its vision and management support of Sun's clients," adds Salvadori. Another big benefit is that TELUS Mobility is consolidating its four data centers to one data center. "This means huge savings because of less maintenance, technical support, and capital expenditures, while increasing flexibility," says Salvadori.

Another advantage is a dramatic increase in average system utilization, because the servers are running more applications concurrently. This translates to increased server usage efficiency now, and savings in future capital expenditures. "TELUS Mobility expects to save approximately 30 to 40 percent in future capital expenditures," explains Salvadori. When Information Technology purchases are millions of dollars per year, reducing future capital purchases translates to big dollars.

"All-in-all, Sun had the best capability in delivering a massive size multi-processing machine to help us now and with our future growth...TELUS Mobility saved approximately 30 to 40 percent in future capital expenditures."

Kevin Salvadori Executive Vice President and CIO TELUS Mobility

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