



# The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

## Final Copy of Case Study

**LOCATION:**  
*Broomfield, CO, US*

**ORGANIZATION:**  
Swiss Medical Group

**YEAR:**  
*2011*

**ORGANIZATION URL:**  
[http://www.swissmedical.com.ar/smgportal\\_new/individuales/index.asp](http://www.swissmedical.com.ar/smgportal_new/individuales/index.asp)

**STATUS:**  
*Laureate*

**PROJECT NAME:**  
Managing Explosive Patient Data

**CATEGORY:**  
*Health*

### PROJECT OVERVIEW

Swiss Medical Group (SMG) is one of the top leaders in the Argentinean healthcare market. It belongs to an enterprise group whose essential objective is to improve the population's quality of life. Other business units of the group are Swiss Medical Sports and Swiss Medical Seguros, also linked by the same objective. At this time, Swiss Medical joins together Medicina Privada, Salud, Optar, Nubial, Medicien, Qualitas and Docthos, thus reaching 630,000 members. More than 50,000 professionals from all the specialties work at SMG and there are more than 5,000 providers of diagnosis and treatment to guarantee customer satisfaction. The explosive growth of information is the biggest challenge faced by the database administration team at Swiss Medical Group. The main problem was the low processing capacity. Additionally, the sector is characterized by seasonality: Demand falls off dramatically in the summer, but when faced with situations such as the H1N1 influenza, the quantity of information to process grows rapidly and significantly increases the number of queries. To accommodate this, says del Piano, "We had to manually manipulate the load on different servers. Now, with the new solution, it is practically automatic, and it is now possible to administer this storage capacity from a single console. Previously, to improve the processing capacity, we had to invest too much time fine tuning of SQL statements across all the applications to better take advantage of the infrastructure. Now this new architecture enables the applications to grow along with the evolution of the business." The implementation was developed through an interdisciplinary team made up of hardware specialists, the IT groups of Swiss Medical, and Sybase Professional Services. The project had a time frame of three months, in which the most outstanding milestones were the migration of the corporate data center to an external provider, a change to IBM Power System, and the migration of each of the databases to the new version of ASE 15 Cluster Edition. The migration plan centered on identifying the applications that would make use of the cluster, verifying their fault tolerance (failover and failback) within the framework of the new cluster architecture, and the specific administration tasks for tuning the database.



## **SOCIETAL BENEFITS**

Faced with the growth of patient information when dealing with situations such as the H1N1 influenza, SMG developed a solution to overcome slow processing, which was a roadblock to handling a significant increase in the number of patients. Becoming more efficient enables SMG to better serve the citizens of Argentina.

## **PROJECT BENEFIT EXAMPLE**

The main achievement of the implementation was the reduction of the costs of both the operation and the technical administration of the infrastructure, in addition to the increased speed of query responses. With the addition of three IBM Power Systems 570 Servers, the solution has also made it possible for the storage capacity to mirror the growth of the business. That is, that when faced with new needs and added hardware, there will be no sudden need for large investments. Upon increasing the processing capacity of the various applications, response times are dramatically reduced. This increases productivity and enables us to give better service to the prepaid customer. Looking back, SMG needed to make a technological investment every two or three years. The newly-implemented infrastructure will grow with the company for longer periods of time, making it possible for the organization to grow without frequent capacity investments. As a result, the growth in the processing capacity will increase along with the growth of the business.

## **IS THIS PROJECT AN INNOVATION, BEST PRACTICE?** Yes