eSapiens used server virtualization to boost capacity and reduce costs.

eSapiens migrated its popular social network website to a XenServer virtualization cluster hosted in iWeb’s Montreal data center, reducing costs by 60% while more than doubling capacity.

eSapiens runs a social network that is one of the top 20 most visited websites in Brazil. The site receives around 500,000 unique visitors per day and serves around 250,000,000 pageviews each month.

THE CHALLENGE

The growing popularity of their website had left eSapiens with a large dedicated server cluster consisting of 30 dedicated servers and some shared iSCSI storage volumes, hosted in a large US data center. The social networking nature of the website means high levels of concurrent users and intensive database IO. Interested in how virtualization could make their hosting infrastructure more efficient, eSapiens began working on a plan with the help of iWeb’s technical solutions architects.

"Keeping all our web servers and databases servers running well together was not an easy task," says Gustavo Nóbrega, Chief Operations Officer at eSapiens. "Although all services were very well configured and we were getting the optimal performance that a dedicated server could provide, we still thought this might not be the best solution we could get".

INDUSTRY

Social Media

CHALLENGE

Use virtualization to reduce data center costs while increasing website capacity, redundancy and scalability.

SOLUTION

• Dedicated Servers
• Server Virtualization
• Virtualization Cluster
• Virtual Private Rack
• Solutions Architecture
• Server Migration

RESULTS

• 60% lower data center costs
• 2-3x capacity increase
• End-to-end hardware redundancy
• Elastic infrastructure scalability
THE SOLUTION

With the help of iWeb’s technical solutions architects, eSapiens migrated from 30 legacy dedicated servers to just seven new iWeb dedicated servers running Citrix XenServer hypervisor, plus two storage servers and some firewall and VPN servers.

All hardware was connected in an iWeb Virtual Private Rack featuring redundant 10 Gbps connectivity, with automatic data replication between storage servers employed to increase both the redundancy and the capacity of the architecture. In addition to the underlying redundancy within iWeb’s data centers, this made for a true high-availability solution.

“This result was only made possible by the great prices offered by iWeb for equipment, and the great crew that helped us throughout the project.”

“Since we have a lot of simultaneous access, we built a PostgreSQL cluster with seven VMs, using one master node and six slaves nodes.” Says Gustavo. “To replicate data we used Streaming Replication, which is natively PostgreSQL and works very well, and to balance the requests we use pgPool. Our database VMs are the largest that XenServer support, each one has 128GB RAM and 16 vCPUs.”

“This solution design was a joint effort between teams from eSapiens and iWeb. We discussed the design with iWeb for several days before the project, as well as during the deployment of servers, and without the support of the iWeb team we would not have had the same success.”

THE RESULT

eSapiens’s new virtualization cluster reduced the company’s data center costs by 60%, while at the same time more than doubling the traffic capacity of its website. iWeb’s Virtual Private Rack technology, plus the scalable nature of the virtualization cluster, means that eSapiens can quickly and easily handle any future need to scale out their underlying infrastructure.

“This project reduced data center costs by 60%, even taking all XenServer and DssV7 licenses into account, and we estimate that our capacity to serve web pages has increased by at least 2x, maybe 3x that of the older dedicated structure,” says Gustavo.

“Today we have high availability at so many levels - storage server, xenserver, firewalls, switches - that any hardware failure will not stop us.”