Established in 1961, COTAS is the largest telecommunications services provider in Bolivia. With headquarters in Santa Cruz de la Sierra, the company started as a dedicated provider of basic local and long-distance telephony. Today, the company has grown to offer a wide range of telecommunications services—including internet, data, cable and satellite television, wireless telephony, long distance and public telephony.

Challenge

COTAS was founded with a vision of providing the best telephony, internet and television service in the Bolivian market. In order to deliver its growing base of subscribers with an outstanding customer experience, COTAS realized it needed to upgrade and refresh its current system hardware to support increased customer demand with headroom for the future. “Our customers are always demanding the latest content—movies, videos, podcasts—as well as faster access to content over the internet and mobile devices,” said German Galarza, Director of Engineering, COTAS. “We have over 120,000 customers today and we anticipate the company doubling in size within the next few years. With that type of growth, it’s absolutely critical for us to have the hardware infrastructure that meets the ever-increasing requirements to support our customers.”

“In selecting Supermicro, we were getting the highest performance servers available on the market and they could be easily configured to meet our specific requirements.”

—German Galarza, Director of Engineering, COTAS

During the current data center refresh cycle, COTAS realized their existing hardware was starting to show its limitations. “We were nearing capacity limits in our data center,” said Galarza. “Our data center already consists of over 300 servers and we realized continuing with the current architecture wasn’t going to be sustainable in the long run. It was clear we needed to fundamentally alter our thinking and not just continue adding another server or two.”
COTAS initially started looking for solutions that could co-exist with their existing data center rather than trying to make wholesale changes. Additionally, COTAS wanted equipment that could run at a higher performance level and at the same time improve capacity and be more efficient.

“We had already made a large investment in our data center, so it was important to find a vendor that could work with what we already have,” said Galarza “But at the same time, we were also looking to get a higher level of performance since our existing hardware was already maxed out.”

Solution

COTAS evaluated a series of infrastructure vendors and took particular interest in Supermicro’s high-performance blade servers, which offer a family of servers designed for the most demanding, low-latency applications running on ORACLE that require the highest level of performance, scalability, and reliability. COTAS settled on Supermicro’s SuperBlade—the industry’s highest performance server with advanced networking capabilities. “It was really an easy choice in selecting Supermicro,” said Galarza. “We were getting the highest performance servers available on the market and they could be easily configured to meet our specific requirements.”

Another key consideration for COTAS in selecting Supermicro was Supermicro’s ability to perform main-tenance and replication of its services live in its two data centers—the data center can continue running while routine maintenance takes place—without re-installing applications. “Our data centers continu-ously run 24x7. Because our databases support business-critical applications, it was imperative to find a solution that didn’t require any shutdowns. SuperBlade can easily perform hot backups ensuring our users always have access to their data and applications,” said Galarza.

Benefits

Since installing the Supermicro servers, COTAS has experienced numerous benefits in its data centers. SuperBlade is designed for network security and ensures seamless interconnectivity across multiple data centers. “We are spread out over several locations and we need smooth ethernet connections among our data centers. Supermicro simplifies our network topology while increasing network resiliency and scalability,” said Galarza.

SuperBlade systems provide the perfect foundation for a rack scale design data center solution. Super-Blade is designed to meet the needs of users with unmatched flexibility in CPUs, memory and I/O. “We really like having the option to select different components for each of our servers,” said Galarza. “This flexibility has two advantages—we can configure each server to the unique requirements for each application today; and we can scale for the future by replacing minor components rather than large, costly infrastructure changes.”

COTAS found that Supermicro offered the most advantageous hardware solution, and has since been a loyal customer. Given the challenge, COTAS came to one of Supermicro’s key system integrators, within the Bolivian region along with Supermicro’s direct partner in Bolivia. Combining cutting-edge and high-performance technologies from Supermicro, this provided the customer with the solution they needed to replicate data, improve performance and not have any down time when working in conjunction with other brand system hardware.

“We have been extremely pleased with the performance of Supermicro and look forward using additional Supermicro products as we continue to expand.”