



Case Study
Intel® Xeon® Serie 5500
Processor

Locaweb prepares for the future with servers based on Intel® Xeon® 5500 Series processors

Locaweb, founded in 1998, is a pioneer and leader in IT services in Brazil. The company has over 196 thousand clients and 442 thousand hosted domains, apart from partnerships with over 14 thousand developers.

Locaweb's services deal with the common user up to big corporations, through three business verticals: **INTERNET**, that offers hosting services, domain registrations, reseller hosting, outsourcing solutions for email, e-commerce and infrastructure for audio and video streaming; **DATA CENTER**, offers solutions on cloud computing, dedicated servers and vault room, as well as specialized IT outsourcing services. The department counts on over 3 thousand clients, of companies of all sizes; **COMMUNICATION**, which is turned to VoIP telephone services through virtual PABX services, and a virtual call center, currently having over 2.9 thousand extension lines installed.



“Now, with the Intel® Xeon® 5500 Series processor, we freed up not only physical space and processing capacity, but we also guaranteed the continuity and expansion of the business, improving energy consumption.”

Scenario

Before expanding their business strongly, Locaweb had a smaller physical environment and a computer area that was heterogeneous and legacy. “In 2004 we worked with Pentium® 4 and today we are using the Intel® Xeon® 5520 Low Voltage processor, part of the Intel® Xeon® 5500 Series. Each year we are up-to-date with Intel's innovations, updating our servers in order to always have the newest technology and offer what is best for our clients. It cannot be any different in our business. We are always ahead”, states André Tellini, Locaweb Dedicated Services Manager.

Aside from that, there was a limitation of energy consumption in the old building. “We noticed that, for the new demands, it was necessary to place more clients on one computer, so we arrived to the concept of virtualization; all of this is being related to performance and accomplishment”, tells Tellini.

In the corporate sector, the company counts on an outsourcing division. This unit responds to big clients and many times counts on servers with greater capacity and processing power, in customized projects. “It was born out of our strategy to expand our business into this segment. The initiative had already predicted the future growth for the corporate market”, declares Guilherme Mazzola, Locaweb Brand Development Manager.

Given the circumstances, Locaweb caught a glimpse of growth necessities for Corporate Services as well as for retail. While being an Intel user, the company – always at the forefront – was the first national company in its segment to adopt the Intel® Xeon® 5500 Series processor. The new processors also have functions based on energy efficiency, one of the main concerns of the company.

Better performance without increasing the energy consumption and operational efficiency. That was Locaweb's choice. Looking forward, the company is a pioneer in its segment, in the acquisition of Intel® Xeon® 5500 processors.

Locaweb, a pioneer and leader in IT host services in Brazil, inaugurated the first module of its new Data Center in August, which will have the capacity to hold up to 25,000 servers when it is finished, based on one of the Intel® Xeon® 5500 Series processors. With the virtualization in the environment, Locaweb is preparing for the future, searching for the safety and necessary accomplishments required for continuous growth.

"The decision was made in June of 2009, when we bought 160 blades, passing over 240 blades and recently acquiring 280 rack servers. In total, there will be over 500 machines in the new Data Center", says Tellini.

Locaweb chose the Intel® Xeon® 5500 Series processor for its cost-benefit relationship and for its commitment to bring the best technology to its clients. For the business, the initiative will benefit in the cost efficiency increase, allowing the allocation of more resources for investments in new products and Research and Development.

"Now with the Intel® Xeon® 5500 Series processors we can consolidate two servers in just one. For the client there is the possibility of consolidation, which is a benefit. For us, we are not just freeing up physical space and processing capacity, but also improving energy consumption", says Tellini.

With the first module of its new Data Center, Locaweb becomes the first large Brazilian company in the segment to widely adopt a platform based on Intel® Xeon® 5500 architecture. This represents superior performance and offers great energy efficiency for the reduction of costs with electricity, helping conserve the environment and build a better future. Also, Locaweb chose Intel® Xeon® 5520 Low Voltage processor, which allows more energy use, reducing the consumption rates.

"That is one of our missions, because we believe that the future will be all about green IT. Normally, in the IT industry, what happens in the United States is an anticipation of what will happen in other countries. I mean, we will be on the same path soon and consumption will most likely be limited in Brazil as well", says Mazzola.

The pressure over the CIO will always exist in the sense of obtaining the best possible and sustainable results. "Since this is a global matter, we are trying to do our part, anticipating ourselves so that the problem becomes smaller when it exists here", he concludes.

Technical Description:

Intel® Xeon® 5520 Low Voltage – optimized for low energy consumption due to the use of various technologies, such as: Processors with manufacture technology of 32 nm and Intel Intelligent Power Technology.

The new Intel® Xeon® 5500 Processors, based on the Nehalem micro architecture, contain innumerable innovative technologies that:

- Increase the accomplishments;
- Reduce energy consumption;
- Optimize the virtualization environment.

Technologies such as: Intel® Turbo Boost Technology, Intel® Hyper-Threading Technology, Intel® Intelligent Power Technology, Intel® Virtualization Technology (VT) with support to extended page tables, allow the system to adapt to a wide range of workload.

Benefits:

Green IT – Footprint reduction

For the Data Center business sector:

- Improve relationship between accomplishment and cost, mainly thanks to Intel® QuickPath technology, which means lower operational costs for corporate clients

For the retail sector:

- Less energy consumption (Intel® Intelligent Power Technology)
- Greater server density by Data Center, improving operational efficiency

Performance:

Virtualization: reduce space – from 20 machines to one – and increase the possibility of new contracts

The improvement in cost efficiency allows the allocation of more resources to invest in new products

