UOL is a pioneer at using Intel® Trusted Execution Technology for cloud computing in the Brazilian market.

Intel® Trusted Execution Technology enhances the security of new offerings on UOL CLOUD and promotes UOL to be a leading provider in the country to use such technology in order to apply the concept of one-stop-shop.

UOL is a leader in its industry, providing robust solutions in IT Outsourcing for Infrastructure, Payment Services, Services for Applications, Security and Telecommunication Services, serving over 3,000 corporate customers of all sizes and areas of business.

Having about 1.5 thousand employees and 4 data centers connected through its network, UOL stands out in that it follows its customers' growing needs by offering top-notch products and services that have high technology, quality and are quickly delivered to the customer.

Always innovating, the UOL Group reveals its Cloud Computing platform to the market, being more robust with UOL CLOUD, bearing the utility computing concept and support from Intel® technology.

CHALLENGES

• Offer the highest performance and instant scalability;
• Simplify migration to cloud services;
• Deliver secure services on the cloud.

SOLUTION

• As of today, companies of all sizes and segments will have access to a robust platform, which is committed to providing resources that offer performance, security and demand for the effective use pursuant to each customer's needs.
• UOL has adopted Intel® Trusted Execution Technology, as part of Virtustream technology. Intel technology implements a security layer on the hardware, preventing attacks and insertion of malicious codes during server boot process.

IMPACT

• The use of Intel® Trusted Execution Technology had a strong impact on security. Today, UOL uses it when offering cloud computing, thus providing customers with a new security layer included in the hardware.

> "Our cloud will dawn on the market not only as the greatest, but also as a leading option for the Brazilian market in that we will have very high performance, instant scalability, customized security and a simplified and assisted migration".
>
> *– Gil Torquato,*
> *UOLDIVEO CEO*

A new frame for new services

UOL, a leading Brazilian hosting company in IT outsourcing – in the last 3 years*, is expanding its on-the-cloud service offer. Under UOL CLOUD, the enterprise announces its Cloud Computing platform, presenting a new concept present on the market. "Now UOL CLOUD places itself as a market option for the Brazilians who seek high performance, high scalability and payments through utility computing, where customers only pay for what they use", states Gil Torquato, UOLDIVEO CEO.

With this approach, UOL becomes a leading domestic service provider on the cloud to work under the one-stop-shop concept, using Intel® Trusted Execution Technology, offering services ranging from infrastructure to corporate apps. "The market gains the possibility to have security and simplicity when migrating any app – passed on, web scale or essentially corporate - to our services", says Torquato.

This simplicity is due to the new architecture adopted by UOL, thought to reach all enterprises that once avoided the cloud because of security reasons.

In a data center, for instance, Intel® Trusted Execution Technology helps detect a malicious code inserted in Hypervisor from entering all operating virtual machines.

According to Gil Torquato, UOLDIVEO CEO, the long-time partnership with Intel played an important role in this development, in that it enabled the building of a safe infrastructure in all aspects.

"We have been using Intel technology for a long time when offering our services.

We have been one of players around the world to use Intel Node Manager; it has brought us an outstanding economy of scale and energy", he recalls.

Now, behind the new cloud computing architecture is Intel® Trusted Execution Technology which, according to Torquato, allows UOL to offer the best options in safe cloud computing.

The new design also has Virtustream control software, which accounts for the control and automation of the software layer used in the service provider infrastructure.

Technology from the inside

Bruno Domingues, Intel's Chief Architect, explains that Intel® Trusted Execution Technology has been developed with focus on system integrity and safety as a whole.

Basically, it is a mechanism that has a safety root linked to a component called TPM (Trust Platform Model). Using this component, it is possible for all software elements to be validated by the hardware, as of the moment the system starts up.

"The main goal of Intel® Trusted Execution Technology is to validate all software components in the startup process, measuring that the equipment has been started under a trustful state", explains Domingues. In a data center, for instance, technology prevent an inserted malicious code in Hypervisor from infecting all virtual machines in operation, assuring that everything is under an accountable state not only regarding the integrity of the code, but also of the setting.

"Technology might as well be used to connect a virtual machine to the hardware, enabling the establishment of setup procedures coupled with the geographic

location, the so-called geo tag", he states. This allows for the establishment of policies such as determining that virtual machines only start under servers bearing Intel® Trusted Execution Technology, and that they are linked to a group inside a specific geography. Torquato explains that, owing to technology, it is possible to provide a number of assurances on integrity like the ones demanded by the PCI standards, which last year were introduced in the hardware; due to that, it was unlikely to work on virtual environments.

To add to the technology UOL established an exclusive partnership with Virtustream, an American company supported by Intel that uses their software and launching models. "With Virtustream and the Intel platform we have a software layer that ensures software automation and consolidation, making our processes easier", says Torquato. He also highlights that the way Virtustream solution fits Intel architecture has played an important role for the choice of the technology that is currently offered to customers. "The software has brought an efficient layer on automation and control. This has provided a simplified, cohesive and safe management", he states.

It was not by chance that the structure assembled by UOL for its offers has been granted the seal "Powered by Intel Cloud Technology", developed by Intel to stand out from other cloud service providers concerning the technology provided in their offers.

In order to provide the seal, Intel assesses many aspects of the data center, like processing speed, storage capacity, network speed, etc. When the customer hires the service, he/she will have access to this list and therefore, will be able to compare to other service providers using the same criteria.

"For us this seal means more than a good stamp on our website.

It means the conclusion of a program that has been followed for years by the proactive use of Intel Technology in our data centers", highlights Torquato.

About UOL

UOLDIVEO (www.uoldiveo.com.br) is a UOL GROUP enterprise, leader in providing services to corporations. It offers robust solutions in IT Outsourcing in the fields of Infrastructure, Telecommunications, Payments, Security, Application Services, among others, having the experience to deploy, integrate and manage solutions to enterprises of various sizes and segments. Having over 3,000 customers and over 1,500 employees, UOLDIVEO owns 4 data centers connected by its own backbone network; it stands out in that it constantly follows the growing demand from customers, by offering top-notch products and services that have high-technology, quality and is delivered quickly to the customer upon deployment.

New Ways

By using Intel® Trusted Execution Technology and Virtustream solutions, UOL places itself on the market as the one of the few players able to offer the one-stop-shop concept.

"Our cloud will emerge on the market, not only as the largest one, but also as the best option for the domestic market, because we have a very high performance level, instantaneous scalability, customized security and a simplified and assisted migration", says Torquato.

He believes that it would be impossible to implement the utility computing concept - with an exclusive demand for the use - if UOL did not rely on a structure that enabled optimization and control. "Our partnership with Intel with Virtustream and other companies results in bringing our customers a number of possibilities regarding flexibility and performance inside the cloud computing universe. These partnerships, along with UOL's ability to manage and control data centers, place us in a unique spot on the market", states Torquato.

(intel®)