

Telefonica

SOFTWARE

Red Hat® Enterprise® Linux

Red Hat
Enterprise Virtualization

Red Hat CloudForms

Red Hat Satellite

HARDWARE

HP Blade BL685 G6 servers

NetApp warehousing

Telefónica Global Solutions (TGSol) portfolio includes international voice services, Internet protocol (IP), capacity, broadband, satellites, mobility, and global solutions. TGSol needed to improve efficiency by automating and better controlling infrastructure deployments. TGSol's existing procedure was entirely manual. Performing IP research and various resource assignations by hand meant a lack of process efficiency. To gain the needed efficiency, an internal cloud platform was introduced using Red Hat solutions.





TELECOMMUNICATIONS

customer since 2007

"We chose Red Hat for our internal cloud roll-out because it's the only multi-platform cloud solution currently in the market which is genuinely multi-vendor. At Telefónica Global Solutions, we have an important virtualized infrastructure that we intend to continue using. Red Hat offers us a cloud solution that can be integrated with our previous infrastructure, without the need to demount what we already had in place to continue moving forward. This is a very significant feature for us and our aim to build a multi-platform cloud."

SARA ISABEL RUBIO

HEAD OF PLATFORMS TECHNOLOGY AND PLANNING, GLOBAL PLATFORMS
OPERATION AND SECURITY, TELEFÓNICA GLOBAL SOLUTIONS



facebook.com/redhatinc @redhatnews linkedin.com/company/red-hat

redhat.com



BACKGROUND

Telefónica Global Solutions (TGSol) manages Grupo Telefonica's multinational, wholesaler and roaming businesses. TGSol offers full telecommunications services, I.T. services for some of the main multinationals in the world, and global telecommunications services for landline and mobile phone networks, ISPs, and content providers. TGSol has an integrated and competitive portfolio of services for carriers and multinationals, including international voice services, IP, capacity, broadband, satellites, mobility, and global solutions.

Global Solutions is a multicultural organization with over 1,400 employees operating in over 15 different languages. TGSol services and solutions are used in more than 170 countries.

MANUAL MANAGEMENT HOLDS UP GROWTH AND EFFICIENCY

TGSol Global Platforms detected an increase in PC installations using different applications that covered specific needs of internal clients. These functions weren't important enough to be considered projects or services, which is why most of them escaped the control of the company's I.T. systems and security managers.

In order to manage this situation and keep these 'rogue' machines under a reliable and controlled environment, TGSol decided to implement a cloud-based Infrastructure-as-a-Service (IaaS) solution.

The company's initial platform used a virtualization infrastructure based on VMware ESXi 4.1, featuring NetAPP storage with HP Blade BL685 G6 servers. The problem that TGSol faced was that the platform was managed manually. I.T. staff had to create and modify virtual machines, assign network names and IP addresses, and assign and manage storage for the machines. In addition, staff had to allocate the new resources to users, calculate costs, and document service requests sent via email. Consequently, the production flow was manual resulting in undesirable provisioning times.

A FLEXIBLE, INTEROPERABLE, AND MULTI-PLATFORM CLOUD SOLUTION

TGSoI wanted to reinforce laaS and automate some of their manual production processes.

A private cloud using Red Hat technologies offers all the functionality that TGSoI required, including high availability, live migration, and power and load balancing. It also provides straightforward integration and automation via APIs and hooks, and gives TGSoI greater freedom of choice, thus avoiding vendor lock-in. Furthermore, it generated substantial cost savings when compared with the proprietary model currently deployed.

TGSol also needed a flexible, interoperable, and multi-platform solution that is compatible with the numerous legacy systems. One of the key benefits of Red Hat cloud solutions – which are based on Red Hat Enterprise Virtualization, Red Hat Enterprise Linux, Red Hat Satellite, and Red Hat CloudForms – is that they work with virtualization solutions from different manufacturers, including the one currently installed and in production in the TGSol datacenter.

TGSol has a high opinion of the framework offered by Red Hat for the management, provisioning, and self-service of virtual machines. Red Hat helped TGSol simply and efficiently implement a cloud solution. Moreover, the option of enterprise open source is more agile. Open source leaves room for future changes in technology, and enables connections with public clouds today.



"We chose Red Hat for our internal cloud roll-out because it's the only multi-platform cloud solution currently in the market which is genuinely multi-vendor. At Telefónica Global Solutions, we have an important virtualized infrastructure that we intend to continue using. Red Hat offers us a cloud solution that can be integrated with our previous infrastructure, without the need to demount what we already had in place to continue moving forward. This is a very significant feature for us and our aim to build a multi-platform cloud," said Sara Isabel Rubio, head of platforms technology and planning, global platforms operation and security, Telefónica Global Solutions.

AUTOMATING AND STANDARDIZING PROCESSES IN THE CLOUD

The new cloud platform's primary objective was to automate the jobs required to manage the cloud services offered and standardize the procedure needed to configure virtual systems. The aim was to speed up the provision of infrastructure services, reduce the time-to-market for new services, and improve the perception that internal clients have of the services offered by TGSol's I.T. department. The application of the cloud computing model led to reduced operating costs for infrastructure management, allowing the company to explore new areas of business.

"Thanks to the new platform, we have achieved significant improvements in the time and way in which we carry out deployments of virtual equipment. A process which used to be manual is now automated and internal clients use an easy-to-operate portal to submit their requirements for a virtual machine. This generates a template in a swift process. With the infrastructure provided by Red Hat, users can have access to a virtual machine less than 10 minutes after its approval—far less time than the several days which this process required previously," said Rubio.

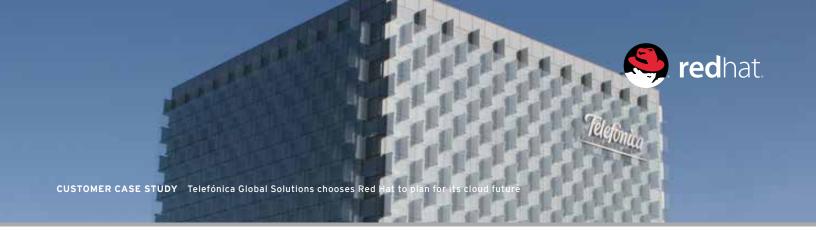
A LONG-TERM CLOUD VISION

"TGSol and Red Hat have worked together for five years, implementing platform and operating system solutions. The design and implementation of this latest project was carried out using Red Hat Services, which captured the ideas of TGSol's technicians and used them to create an infrastructure that specifically met our needs," said Rubio.

Red Hat Services customized several components of the product in order to adapt it perfectly to the needs of TGSol. At the same time, Red Hat Consulting developed the methodology for a standardized operating system, which promotes easier maintenance, faster future deployments, and efficiency.

Cloud technology is still an emerging field full of risks and challenges. The access to expert resources provided by Red Hat Consulting was decisive in the analysis, definition, and implementation of the solution. Red Hat Consulting worked alongside TGSol to create a medium- to long-term development strategy to prepare the company for future cloud technologies.

The project is currently in its initial phase, and TGSol is analyzing the results and evaluating the possibility of introducing the cloud platform throughout its infrastructure. In the short term, the platform is intended to be distributed through several of TGSol's points of presence so that internal users can deploy virtual machines with the features they need from whatever location they are in. "We're hoping to add cost-calculating functions too, so that the I.T. managers can immediately find out the costs associated with the service being offered to the user," said Rubio.







Red Hat is the world's leading provider of open source solutions, using a community-powered approach to provide reliable and high-performing cloud, virtualization, storage, Linux, and middleware technologies. Red Hat also offers award-winning support, training, and consulting services. Red Hat is an S&P company with more than 70 offices spanning the globe, empowering its customers' businesses.



facebook.com/redhatinc @redhatnews linkedin.com/company/red-hat NORTH AMERICA 1888 REDHAT1 EUROPE, MIDDLE EAST, AND AFRICA 00800 7334 2835 europe@redhat.com ASIA PACIFIC +65 6490 4200 apac@redhat.com LATIN AMERICA +54 11 4329 7300 info-latam@redhat.com