Customer Spotlight

Combis and T-Hrvatski Telekom

Combis develops desktop virtualization solution for Croatian telecom provider

Combis, in cooperation with Croatia's largest telecommunications operator T-Hrvatski Telekom, has developed an innovative cloud solution that provisions virtual desktop services via a public cloud, providing end-users with a series of advanced services at very affordable prices.

T-Hrvatski Telekom (T-HT) is Croatia's largest provider of telecommunications services and the market leader in all segments of its business. The company serves more than 1.2 million fixed network users, 2.3 million mobile network subscribers and provides TV services to over 340,000 users. T-HT is also the leading provider of information and communication technology (ICT) services in Croatia, and a leader in the provision of mobile and landline telephone service and data services. During the past two years, T-HT has achieved a very good position in the provisioning of cloud solutions and services such as Infrastructure as a Service (IaaS), Desktops as a Service (DaaS), and Software as a Service (SaaS).

Industry:
Telecommunications

Key Benefits:
- Service delivery to any device, any user
- Support large number of operating systems and peripheral devices

Citrix Products:
- Citrix XenDesktop
- Citrix XenServer
- Citrix Netscaler

The challenge: develop virtual desktop solutions from public cloud
Considering the strong competition and the effort to maintain the leading position in introducing services to the market, T-HT set a business goal to deliver its wide range of ICT services (e.g. server co-location, equipment lease, hosted fax2mail, hosted Exchange, hosted SharePoint) from a public cloud. Market research was conducted and showed the need for specific solutions at affordable prices. T-HT decided to offer an entirely new type of service, completely tailored to the needs of small to medium business. Using Citrix® technology, Combis developed a complete cloud solution for the provisioning of virtual desktops via a public cloud that enables users to use advanced functionalities at very affordable rates.

T-HT's requirements for the desired solution were very clear and defined: maximum compatibility with equipment and devices, compatibility with various operating systems, operation over reduced bandwidth networks and wide support for peripheral devices. Also, the solution was expected to be simple to use, to integrate with HT operational support systems (OSS) and business support systems (BSS) and to have the capability of real-time charges for use. After a detailed analysis of the received bids, T-HT selected Combis as its partner for platform implementation.

The solution: Desktops as a Service platform

The selected Combis solution, ComCloud, is an integrated combination of various products from Citrix, NetApp, Cisco and other manufacturers, completed with its own original solutions for automatic provisioning and user portals. The solution provides various services from the public cloud: server, desktop and application store virtualization. The solution was designed as a scalable, manageable and deliverable system, independent of the device, operating system and bandwidth. For that reason it was decided to use a proven desktop virtualization platform - Citrix XenDesktop®.

"The research and market requirements showed us that we have to offer to our users something comparable to a Swiss Army knife: we needed a solution that could provide various services from a cloud, in a modular manner and at an acceptable price," said Goran Car, director of the Professional Services Division, Combis. The overall solution is a combination of XenDesktop, Citrix XenServer® and Citrix NetScaler® and the associated components from other manufacturers such as Cisco UCS servers, NetApp data storage systems, VASCO SMS system for one-time passwords for authentication and others.

The designed solution was adapted to the market, to be acceptable for small and medium users, scalable and easy to adjust to the requirements, to ensure user-friendly implementation and maintenance. Compared to classical solutions and investments in hardware, software, electrical energy and utilization of the resources, the cost benefits are significant.

Citrix technology facilitates optimised delivery and encrypted protocol and provides support for the largest number of devices and operating systems. "Citrix technology ensures that our solutions are delivered in a quick, affordable and efficient manner to a large number of users simultaneously," claims Tomislav Kosanović, director of ICT Business Solutions Sector, T-HT.

Such an integrated solution enables instantaneous service provisioning for several thousand users of mainly medium and large systems. The virtual desktop platform is managed by Combis and it supports the T-HT service from the cloud. The platform alone supports 7,000 users and is designed for an easy enhancement to at least 17,000 users, without making any changes in the system design.

"Citrix technology has enabled several key functionalities for the ComCloud solution: safe and efficient delivery of the virtual desktop to the end-user, excellent support for a wide range of user devices and operating systems and currently the largest list of supported peripheral devices, without the need to use additional control programs as compared to all other manufacturers," comments Car.

Business benefits

The Citrix protocols with integrated encryption enable data sharing and guarantee fully secure and optimised data transfer. After transfer, the data remains completely protected and redundant and can easily be restored from backup copies using the NetApp data storage system.

Citrix ensures fast, efficient and economical cloud service and for that reason was selected among the products currently offered on the market. The solution is optimised for the minimal cost of platform operation. The user interface is easy to use and among the features, the user can restore lost data from a backup copy.

For the service provider, Citrix is the most efficient solution since it provides unique and complete cloud solution for all services offered from the public cloud. The service provides substantial business savings during the creation of the system, its use and maintenance. The costs can be shown as operative costs and the company can claim them as such for taxation purposes.

Availability from any place and from any device is ensured thanks to the hardware compatibility of the XenDesktop and optimisation of NetScaler. The interface is adapted to the user and is simple to use, enabling the addition of new users, applications or disk space with a simple mouse click. Users can select the required applications, some of which are available free of charge, and a monthly charges apply for others. Users can virtualize their own applications and use them on the computer. Expansion of the application is planned, and in addition to products from other vendors, will include products from T-HT's own portfolio, such as Cloud Financials and Accounting, Cloud Human Resources and Cloud Vehicle Supervision.

*"*Thanks to the Citrix technology we can offer to users our mobile services, at any place and any time. An advantage of Citrix is also the special data compression technology that ensures good operation of the service even over 3G mobile networks*,"* states Kosanović. With such a complete service, T-HT is becoming an indispensable partner that provides its users solutions they can afford, allowing them to fully concentrate on their own products and to become more competitive. *"*This principle enables us to offer various services to small and medium business users that were previously available only to large users*,"* says Kosanović.

Future plans
As the only public cloud services provider in Croatia and the regional leader, T-HT aims to respond to the market needs, and will continue provisioning ICT services based on Citrix technology. *"*The idea is to become a one-stop shop for all services that a company might need, regardless of its size*,"* says Kosanović.
T-HT also plans to offer its own wholesale model to the regional market with hosting in Croatia, which will certainly strengthen its position in the broader telecommunications market.

About Citrix
Citrix (NASDAQ:CTXS) is the company transforming how people, businesses and IT work and collaborate in the cloud era. With market-leading cloud, collaboration, networking and virtualization technologies, Citrix powers mobile workstyles and cloud services, making complex enterprise IT simpler and more accessible for 260,000 enterprises. Citrix touches 75 percent of Internet users each day and partners with more than 10,000 companies in 100 countries. Annual revenue in 2011 was $2.21 billion. Learn more at www.citrix.com.