Car rental firm builds platform for unified communications after consolidating servers by 46 per cent with virtualization

Benefits
- Major project designed and implemented in just nine months
- Improved IT performance with around 46 per cent fewer servers
- Customer gains platform ready for unified communications
- End-users gain access to new servers in 45 minutes with virtualization
- Easier management increases IT productivity by around 85 per cent

“Working with Dell was a highly collaborative and informative process. Dell consultants worked hard to understand our environment and our challenges.”

Shaun Phillips, General Manager – IT Operations and Infrastructure, Europcar South Africa

Customer profile
Company: Europcar South Africa
Industry: Travel, Hospitality & Tourism
Country: South Africa
Employees: 900 (7,500 globally)
Website: www.europcar.co.za

Business need
Europcar South Africa wanted to drive growth while reducing costs so it looked to create a virtualized IT infrastructure that could support unified communications.

Solution
The company worked closely with Dell Consulting Services, which helped implement virtualized Dell servers and storage and created a foundation for unifying communications.
The company reviewed performance across all operations, including IT, as part of a drive to increase growth and reduce overheads. Europcar South Africa felt that the Microsoft-based IT infrastructure could support the business more effectively, and so it embarked on a major project to deliver better IT services through enterprise efficiency. Shaun Phillips, General Manager – IT Operations and Infrastructure, Europcar South Africa, says: “Key goals included bringing the physical IT infrastructure back in-house – which meant building a new datacentre – and virtualizing both servers and storage. Furthermore, we wanted to establish a platform for unified communications so that we could enable real-time communication in the future.”

**Technology at work**

**Services**
- Dell Consulting Services
- Dell ProSupport – Mission Critical option

**Hardware**
- Dell™ PowerEdge™ R710 and R610 servers with Intel® Xeon® Processors E5540
- Dell EqualLogic PS6500E and PS6000XV storage area networks (SAN)

**Software**
- Windows Server® 2008 R2 with Hyper-V
- Microsoft® Exchange Server 2010
- Dell™ OpenManage™ systems management software
- Microsoft System Center Virtual Machine Manager 2008
- Microsoft System Center Operations Manager 2007 R2
- Microsoft System Centre Configuration Manager 2007 R2
- Dell EqualLogic Auto-Replication

**Customer gains end-to-end solution to help drive growth**

Based on past experience, Phillips went to Dell. “We needed to work with an IT solutions provider with plenty of experience in delivering virtualization projects. I’ve worked with Dell before and knew that Dell Consulting Services had the experience to successfully deliver this type of solution,” he says.

In working with Dell Consulting Services, Europcar South Africa could holistically review their environment to determine how to map the proposed changes back to their overall IT goals. An initial meeting refined the project’s objects and drivers and identified key roles and responsibilities during engagement. Next, the Dell consultants prepared detailed plans for the following seven areas of the Europcar South Africa infrastructure:

- **Active Directory**
- **Messaging and collaboration**
- **Anti-malware, anti-virus and firewall protection**
- **Data security**
- **Systems management**
- **Virtualization**
- **Physical environment**

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**Europcar South Africa was able to simplify the deployment of Microsoft Exchange Server 2010 by working with Dell consultants, who used their experience to optimize the synergies between the new features in 2010 and the virtualized Dell servers.”**

Shaun Phillips, General Manager – IT Operations and Infrastructure, Europcar South Africa

**Europcar gains complete, virtualized datacentre in nine months**

Europcar South Africa successfully transferred operations to the new datacentre in just nine months, thanks to its work with Dell. The Dell consultants not only brought their project management skills to the project, but also their specific knowledge of how to optimise Europcar South Africa’s infrastructure. Phillips says: “This was a major project and it went incredibly smoothly thanks to the skills and experience of our team of Dell consultants. The project management was also faultless – we had the convenience of dealing with a single point of contact throughout the entire implementation.”
Deployment was also divided into phases, with each phase checked and signed off by Phillips before consultants moved on to the next piece of work. Throughout the implementation, IT personnel shadowed the consultants as part of a skills transfer strategy. Says Phillips: “The phased deployment by Dell Consulting Services was based on its highly successful methodologies and helped us avoid any significant challenges. Furthermore, because of the knowledge transfer programme, we were able to maximise the performance of our new solution from the beginning.”

**Improved IT performance after consolidating servers by around 46 per cent**

The company has simplified IT by creating a highly consolidated virtualized environment for its new datacentre. It features just seven Dell™ PowerEdge™ R710 and R610 servers with Intel® Xeon® Processors E5540, which form a highly redundant infrastructure of two clusters. “We have consolidated servers by around 46 per cent with Dell – creating a much simpler infrastructure,” says Phillips. The seven physical servers are running Windows Server® 2008 R2 with Hyper-V™ to deliver virtualization. “We use Microsoft software throughout our server stack, and the maturity of Hyper-V combined with our Microsoft licensing agreement made it the right choice for Europcar South Africa,” says Phillips.

**Scalable platform is ready to support Microsoft Unified Communications**

As a result of the new environment, Europcar South Africa now has the server capacity to deliver Microsoft Unified Communications. The Dell consultants helped the company deploy Microsoft® Exchange Server 2010 during the project, and Europcar South Africa plans to roll out Microsoft Office Communications Server 2007 to complete the communications stack in the future. Says Phillips: “Europcar South Africa was able to simplify the deployment of Microsoft Exchange Server 2010 by working with Dell consultants, who used their experience to optimise the synergies between the new features in 2010 and the virtualized Dell servers.”

**End users gain better services with new servers in 45 minutes**

Today, Europcar South Africa can deliver new services to personnel faster and more easily. This is because of the Dell solution’s use of Microsoft System Center Virtual Machine Manager 2008, which enables the IT team to centrally create and administer virtual machines. “We can provide a new server in just 45 minutes,” says Phillips. “In the past, it could take six weeks to procure and then configure physical servers. It means that employees gain access to new software solutions more quickly to increase their productivity.”

**IT can support a company-wide drive for reducing its carbon footprint**

With its new virtualized infrastructure, Europcar South Africa has significantly cut IT energy use. This is due to consolidation and the servers’ Dell Energy Smart technologies, which improve the servers’ thermal management and power efficiency. “We have reduced energy consumption by around 25 per cent, helping IT align with a company-wide policy to minimise the carbon footprint,” says Phillips.
Virtualized storage supports growth and ensures high availability

Besides virtualizing servers, Europcar South Africa also virtualized storage and created a highly scalable platform to support growth. It implemented two Dell EqualLogic storage area networks (SANs) – one for each server cluster – to protect data and ensure management simplicity. It deployed Dell EqualLogic PS6500E and PS6000XV SANs, which both come with fully redundant and hot swappable components to deliver maximum availability. The IT team uses Dell EqualLogic Auto-Replication across the two SANs, increasing data protection and eliminating the time spent on manual replication.

Furthermore, the SANs enable IT personnel to dynamically scale storage on demand to meet capacity. “The snapshot and replication features of our Dell EqualLogic SANs simplify storage administration and ensure high availability. Even in the event of a major incident, we can restore operations in less than three hours, which means service and revenue loss is minimised,” says Phillips.

Simplified management increases IT productivity by around 85 per cent

Apart from Microsoft System Center Virtual Machine Manager 2008, the IT team also gained additional management solutions to increase IT efficiency and productivity. To maximise the performance of the infrastructure’s solutions, it has Microsoft System Center Operations Manager 2007 R2, and to streamline updates, it has Microsoft System Centre Configuration Manager 2007 R2. “We have gained a greater level of control over our Microsoft infrastructure with the Dell virtualized solution,” comments Phillips. The team also used Dell™ OpenManage™ systems management software to administer servers proactively and maximise uptime.

“The different components of our management infrastructure were integrated easily and seamlessly by Dell and have proved to be easy to manage. We’ve increased IT productivity by around 85 per cent,” comments Phillips.

Easy access to expert support maximises solution performance

The IT team has continual access to Dell experts to help optimise the infrastructure’s performance, thanks to Dell ProSupport. Europcar South Africa chose Dell ProSupport with the Mission Critical four-hour on-site support option to protect its investment. In the past, the company had to send equipment offsite for repairs, which presented a security risk. What’s more, there was no minimum turnaround time. Dell ProSupport has improved both the stability and the speed of the process. Phillips says: “Dell ProSupport ensures that we maximise the value of our IT investment. If we have any queries regarding our infrastructure, we can reach out to Dell technicians straightaway.”

For more information go to: dell.com/casestudies/emea and dell.co.za/casestudies

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View all Dell case studies at: dell.com/casestudies