Private Cloud Solution Delivers Flexibility and Agility

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Overview

Customer: Paul Smith

Website: www.paulsmith.co.uk

Number of Employees: Approx 1200

Country or Region: Global
(Head Office, Nottingham, United Kingdom)

Industry: Retail

Customer Profile:
Nottingham-based designer Paul Smith showed his first menswear collection in Paris under the Paul Smith label in 1976. Today, there are 14 different collections—produced in England and Italy—under the Paul Smith brand. In addition to the company’s 17 shops in England, Paul Smith shops are found in fashion capitals around the world, including 200 locations in Japan.

Paul Smith, famed British fashion designer, started with a boutique outlet in Nottingham over 40 years ago; they now wholesale collections to 66 countries, with the UK leading the way with 17 retail stores. The IT infrastructure consists of a three tier topology with two three datacentres, located in Nottingham and London with numerous Tier 2 branch office locations throughout Europe and the US. Each Tier 3 store globally has an EPOS terminal and Back office services which connects to the centralised IT infrastructure in the UK.
Leading British fashion designer Paul Smith, based in Nottingham and London, has a global network of retail outlets and supplies to 66 countries on a wholesale basis. Paul Smith embraced the Microsoft cloud operating system vision and built an agile, responsive global IT infrastructure, managed by a small IT team, providing efficient services to ensure that the business continues to play a leading role in the fashion industry—while keeping costs down.

Paul Smith opens three new stores a year on average and the demand for Always on IT services from the business is growing. Employees expect IT to work all the time and to have ubiquitous access to information. The consumption of IT services is also dictated by the fashion industry’s seasonal activities: spring and fall collections and holiday retail sales. To address this challenge, Paul Smith began defining a new approach to building its infrastructure and providing IT services to the business, while reducing server and data centre costs. It wanted to provide global services from a central location, simplify data centre administration, and automate manual tasks, in particular the provision of test and development environments. Paul Smith also needed to find less expensive and time-consuming ways to accommodate fluctuating demands in compute and storage requirements than simply adding more servers. To reduce unnecessary ‘midstream’ expenditures, the company wanted a better understanding of usage and improved capacity planning.

Business continuity and disaster recovery (DR) planning was another issue. While Paul Smith had processes in place to achieve its Service Level Agreements, they were complex and manual. The company conducted one planned DR drill a year. Limited testing reduced the business’s level of assurance that services would be restored on time during a real crisis. The test itself required weeks of planning and took six people a whole day to complete, and there was always a possibility of service outages. “We could fail over the entire data centre between our Tier 1 sites, but the process wasn’t granular enough to give us the ability to define automated processes for individual applications,” says Lee Bingham, Head of IT, Paul Smith. “We wanted to classify our applications according to their relative importance to the business, and design our failover plans accordingly and working with risual has helped us achieve this and more.”

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In order to achieve its IT strategy, Paul Smith aligned itself with Microsoft, working with them and risual, a Microsoft Gold Partner, over the past nine years to take advantage of the latest virtualisation, cloud computing, and datacentre management solutions. Together, the companies are building an IT infrastructure that delivers ongoing business value.

“The benefits of virtualisation - reduced operational costs and increased agility in provisioning and migrating virtual machines to respond to the business—continue to evolve as Paul Smith updates to new versions of Windows Server,” says Richard Proud, a Director at risual. “By the time it deployed Windows Server 2012, Paul Smith had made significant headway in virtualising high-performance workloads, such as Microsoft SQL Server and Cognos.”

The journey to the cloud started when Paul Smith deployed Windows Server 2008, it consolidated its data centres and began to deliver more centralised IT services. After upgrading to the Windows Server 2008 R2 operating system and Hyper-V virtualisation technology, the company significantly reduced its server count, decreased its carbon footprint, and lowered data centre costs.

Paul Smith also used Windows Server 2012 to build private clouds and deployed Microsoft System Center 2012 datacentre management tools to manage them. The company used these technologies to build dynamic datacentre and cloud infrastructures with more flexible workloads and automated processes. IT staff used features in Hyper-V that promote virtual machine mobility, such as simultaneous live migration to speed up server maintenance and reduce downtime.

Lee Bingham comments, “Building private clouds means that IT staff can enable a more responsive, on-demand allocation of pooled IT resources - such as applications, networks, servers, storage, and services. The solution we have delivered with risual means we can be more agile in responding to increasingly sophisticated end-user requirements through self-service capabilities and automation, delivering IT services in a dynamic, proactive way that aligns with business needs.”
With Windows Server 2012, Paul Smith worked with risual to introduce global DR capabilities. The teams upgraded the hypervisors at Tier 2 sites to Windows Server 2012 and used Hyper-V Replica to replicate business-critical virtual machines back to its Tier 1 datacentres. Hyper-V Replica is a feature of Windows Server 2012 that provides a storage-agnostic and workload-agnostic solution that replicates virtual machines over IP-based networks.

Now, with the Windows Server 2012 R2 operating system and System Center 2012 R2, Paul Smith can focus on improving IT service delivery to the business. The company will use the Orchestrator and Service Manager components of System Center 2012 R2 to introduce a self-service portal for IT services, such as provisioning servers. System Center 2012 R2 will also be used to automate manual tasks such as starting, stopping, and monitoring systems using runbooks (which contain instructions for an automated task), and to streamline change management processes in the datacentre. Paul Smith will use Windows Server 2012 R2 and System Center 2012 R2 to introduce hybrid cloud computing to the business. A hybrid cloud combines private cloud computing with a public cloud located outside the enterprise datacentre. Hybrid cloud computing is also an integral factor in the new DR capabilities within Windows Server 2012 R2. The latest version of Hyper-V Replica offers flexible replication intervals for application workloads and adds the possibility of replicating virtual machines to a third site.

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Benefits

Optimises the Infrastructure
With Windows Server and Hyper-V virtualization technologies, risual architected an IT infrastructure that aligns better with the business. The company has all the virtual cores, virtual memory, and storage that it needs, even for its most intensive workloads, such as Cognos, which currently performs 10 percent faster compared to running on a physical server. Today, Paul Smith has virtualised 80 percent of its servers and it has room for more than 1,000 virtual machines. “We have future-proofed the data centre for the next three years,” says Lee Bingham. Paul Smith is also using Hyper-V to increase virtual machine density and derive more value from hardware by running more workloads faster. It has increased density by almost 200 percent, from 28 virtual machines per host server to 83 virtual machines per host server. Lee Bingham comments, “We have already identified 25 processes that we can automate using System Center. Looking back there are so many examples of how we have used Microsoft technologies to our advantage. In fact, I don’t think there’s been any request from the business that we haven’t been able to accomplish.”

Improves Business Agility, Service Predictability
Having a more focused consumption based approach and strategy coupled with hybrid cloud flexibility means Paul Smith is agile and cost considered, providing IT services when the business needs it. When it deployed Windows Server 2012, Paul Smith enabled business agility by virtualising its datacentres. With the capability of migrating hundreds of virtual machines at one time, the company can move more quickly to respond to business needs. Lee Bingham says, “We are saving approximately 24 hours if we need to migrate an entire set of virtual machines from one datacentre to another. Compared to the physical environment, when we virtualise our servers, we save four weeks in provisioning time.”

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Reduces Costs
Thanks to virtualisation and increased server density, Paul
Smith reduced hardware acquisition and maintenance costs
by £840,000 (US$1.4 million), according to figures compiled
for the first year it deployed Windows Server 2012. By em-
bracing the hybrid cloud computing model, the company
expects ongoing infrastructure savings. Purchasing com-
pute, storage, and networking resources in the cloud is less
expensive than building them on-premises, especially when
the resources are required on an intermittent basis.

Enhances Disaster Recovery Capabilities
When Paul Smith started using Windows Server and
Hyper-V as a foundation for its business continuity strat-
egy, it reduced its recovery time objective from 48 hours
to 5 minutes. “We don’t need to build high-availability
architecture at global branch sites; instead we can get the
same level of availability and maximize service quality by
using Hyper-V Replica at 50 percent of the cost,” says Lee
Bingham. The company will use Windows Server 2012 R2,
Hyper-V Replica, and Hyper-V Recovery Manager to ben-
efit even more from a cloud-integrated DR solution.

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For more information about this solution or the products and consulting
services that risual can offer, contact us on the following or visit our website:

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