CUSTOMER SUCCESS

Bridgend County Borough Council

Virtualising Critical Tier 1 Public Sector Applications with Confidence and Control

The county borough of Bridgend in South Wales is home to one of the U.K.'s most innovative and successful public sector virtualisation strategies, with the local council using Symantec ApplicationHA to deliver high availability, Tier 1 virtualised applications, with complete control, complete confidence, and low total cost of ownership. Deployed in two hours, ApplicationHA accelerates virtualisation adoption beyond non-critical applications by minimizing the risks associated with the council's VMware strategy for Tier 1 applications, which include a vitally important Tier 1 schools administration application. ApplicationHA also supports 99.99 per cent availability, and a recovery point objective (RPO) of 15 minutes. Crucially, by moving more applications to the virtual infrastructure, the council is lowering the cost of technology—a vital consideration at a time when local authority budgets are under severe scrutiny.

Beacon for high quality public sector services delivery in Wales

Bridgend County Borough Council has set itself the goal of being the best provider of public services in Wales. That's a bold statement to make, but when you look more closely at the leading-edge innovation taking place in the council, the claim comes close to reality. Especially when it comes to technology services.

One of the showcase technology success stories surrounds the council's virtualisation strategy. The Welsh local authority is partnering with best-of-breed suppliers to virtualise as many council services and applications as possible, as David Sutherland, Head of Technology, Property and Customer Services at Bridgend County Borough Council, explains. "Several years ago, we embarked on a program called 'the agile data centre' to improve the performance, cost-effectiveness, and green credentials of our data centre here in Bridgend. The program included a comprehensive VMware virtualisation strategy."

Within two years, Peter Richards, Group Manager for ICT and his team had virtualised a number of Tier 2 and Tier 3 services—important council services, but ones that didn't necessarily require

ORGANIZATION PROFILE

Website: www.bridgend.gov.uk
Industry: Public Sector
Headquarters: Bridgend, U.K.

SYMANTEC SOLUTIONS

Business Continuity
Storage

Why Symantec?

· Existing, highly satisfied customer of Symantec NetBackup

· Unique nature of ApplicationHA solution

· Symantec's leading, trusted position in data storage

a high availability, 24x7 resource. However, there were lingering concerns about virtualising critical Tier 1 services, such as revenue and benefits, social services, and schools environment. After all, issues such as scalability, performance, reliability, and security all needed to be addressed first.

"While the VMware knows the state of the virtual machine, it has no such visibility into the state of applications running on top of the guest. If one of our applications was to fail, there's nothing the virtual infrastructure can do about it. We couldn't take that risk with our most vital services.—people's lives sometimes depend on them and any downtime would be intolerable," says Richards.

Virtualise business-critical applications with confidence

Bridgend County Borough Council has been a long-term customer of Symantec, using an integrated suite of best-of-breed technologies to support data protection, disaster recovery, and archiving. Discussions with the Symantec Account Team led Richards to the door of Symantec ApplicationHA, a solution developed by Symantec in partnership with VMware to enable organizations to virtualise business-critical applications with confidence.

The first service to benefit from ApplicationHA is the council's schools service, which is responsible for administering more than 63 schools in the local area. The backbone of the schools' technology is a private cloud solution, based on the Capita School Information Management System (SIMS). It's a vital service, not only to support teachers in their day-to-day activities, but also to support the council's compliance commitments: electronic registration reporting is used to report back on pupil attendance and to combat truancy. The service operates on virtual servers across a Fujitsu blade infrastructure. ApplicationHA enables Richards' team to virtualise the service with confidence, minimizing the risks associated with application downtime by monitoring the VMs.

SOLUTIONS AT A GLANCE

Key Challenges

- Virtualise critical Tier 1 applications without fear of failure
- Support uninterrupted provision of key local authority services—cost effectively
- Integrate HA solution with existing VM environment, including DRS and SRM

Symantec Product

- Symantec™ ApplicationHA

Technology Environment

- End users: 2,500
- Operating Systems: Microsoft Windows
- Storage: EMC CX and VNX Series
- Servers: Fujitsu blades
- Virtualisation: VMware vSphere 5 Update 1
- Applications: Microsoft Exchange, among others

BUSINESS VALUE AND TECHNICAL BENEFITS

- Underpinned Tier 1 critical schools administration application
- Minimized risks associated with application downtime by monitoring VMs as well as Tier 1 application
- Lowered costs by virtualising greater number of critical applications
- Reduced energy demands on data centre and helped meet Government green IT targets
- Streamlined and accelerated availability monitoring and reporting back to the business
- Coordinated with VM to restart applications elsewhere on another VM, either in data centre or nearby failover facility
- Ensured comprehensive visibility and management using Veritas Operations Manager
- Supported up to 99.99%
- Enabled Tier I application RPO of 15 minutes
- Deployed ApplicationHA in 2 hours

"The overriding benefit of ApplicationHA is application visibility and control," says Richards. "If there is a failure, ApplicationHA coordinates with the VM to restart the application on another VM, within in the data centre here in Bridgend. The Symantec solution gives us the reassurance that however diverse the application environment, we can create a highly efficient availability and clustering framework."

Comprehensive visibility is provided by Veritas Operations Manager from Symantec (although the council also has the flexibility to use the fully integrated VMware vCenter). This unified interface allows Bridgend to monitor the application's status, explore the current health of the application, manage storage utilization, and immediately detect any failures. "The council has always enjoyed high availability of its services, but the addition of ApplicationHA brings that availability up to 99.99 per cent and our recovery point objective is 15 minutes," says Richards.

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Peter Richards
Group Manager – ICT
Bridgend County Borough Council

Deployed in two hours; more Tier 1 applications to follow

The installation of this best-in-class high availability solution for VMware only took two hours, and once the team had gained confidence with the initial schools deployment, they quickly drew up a list of other critical Tier 1 applications that could now safely be moved to the more efficient virtual infrastructure. The council's critical Microsoft Dynamics customer relationship management (CRM) solution, which underpins so many citizen services, is next in line to be moved to the VMware infrastructure, followed by other finance-related services.

Costs are coming down too, which is a major consideration at a time when public sector budgets are under more scrutiny than ever before. Without ApplicationHA managing the schools environment, for example, the council could be forced to use physical servers, in a more complex cluster configuration, at significantly greater costs than the current virtualised environment. "Using ApplicationHA, we can leverage the existing virtual infrastructure, rather than procuring additional kit to support the high availability needs of the solution. This improves the return on investment," says Richards.

Costs are coming down through improved efficiency too, as the team can monitor report back more quickly and easily to the business units on the performance and availability of their services.

The benefits of Bridgend's ApplicationHA solution don't stop at visibility, control, and lower costs. By moving more applications to the virtual infrastructure, the council is reducing the energy demands on the data centre and meeting demanding Government targets for environmental IT provision. Moreover, change control procedures are far easier too: with greater visibility into the applications themselves, patches, upgrades and other application changes can all be synchronized and better managed. And the solution is future-proof: should the council decide to later deploy another hypervisor, they can do so, safe in the knowledge that ApplicationHA will support it.

"We have been live for six months now on ApplicationHA, and since then we have never looked back," says Sutherland. "We look forward to implementing more Tier 1 critical applications to VMware, safe in the knowledge they will enjoy the equivalent to level of availability as the applications in the physical or existing virtual environment."

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