



"3"UK Stays
Mobile and
Connected
Using NetVault:
Replicator

FAST FACTS

Customer 3UK, www.three.co.uk Industry

Telecommunications

Challenge

Support for heterogeneous environment, able to accommodate high volumes of replicated data across multiple remote sites

Benefit

Seamlessly deploys into existing infrastructure and network architecture, delivering instantaneous data from primary data center to satellite data centers for real-time distribution and in the event of failure

Solution

BakBone NetVault: Replicator "BakBone's NetVault: Replicator is used by 3UK or "3" to move its multimedia content from the data center where content is ingested and processed into a handset ready format to our satellite data centers across the UK. This process is vital to our service offering as time-to-market and certified delivery of our content is critical. This is doubly so for time sensitive content that involves news stories and sport scores."

Philip Hoyle, Infrastructure Designer

The Company



3UK or "3" is the first video mobile network company in the UK. The company is ahead of its class in bringing the best of mobile telephony, Internet and media to create a new communications

experience to its UK wireless customers. "3" is the new medium and is the natural next step for those who have become accustomed to two massive lifestyle changes: the convenience of mobility and the convenience of the Internet. In 2003, "3" launched the UK's first video mobile network to bring new and better services to the mobile media market. Given third generation or "3G" wireless standard was a new technology, "3" undertook one of the fastest network rollouts in UK history and met their license regulatory requirements three years ahead of schedule. Today, "3" is the market leader in 3G. It provides national coverage for calls and texts, and has the best 3G coverage in the UK, with over 88% population coverage for video services including video calling, video messaging and the downloading of video clips. "3"'s services are available in over 8,800 retail outlets across the UK.

The Challenge

The new 3G wireless standard requires telecommunications companies to deliver high quality, media-rich content including audio and video to mobile handset. 3G allows customers to see and hear video clips and send and receive multimedia content and information from anywhere. With technology well ahead of its competition, keeping "3"'s first mover advantage by maintaining its reputation with customers for reliability is critical. However, with newer 3G mobile standards many times more demanding than current mobile networks, "3"'s IT team, headed by infrastructure

designer Philip Hoyle, was faced with needing to develop and maintain an IT infrastructure that could accommodate increasingly larger volumes of data. "3" needed to deliver live multimedia information, entertainment and communication to its customers on the move – when, where and how their customers wanted it.

In order to provide real-time updates to its customers, multimedia content from the data center is constantly digitized, processed into a handset ready format and distributed to the company's satellite data centers across the UK for distribution. To increase the reliability of its IT infrastructure, the team deployed clustered file systems with failover, helping to reduce planned and unplanned downtime.

At the time, the team relied on a competitive block-based replication product that ran on its Sun servers but found it lacked the resilience to reliably mirror changing multimedia data across wide area networks and required significant modifications to "3"'s existing infrastructure. Additionally, concerns around the vulnerability caused by the size of its backup window, which impacts the level of data protection, as well as the overall performance of its multimedia network and applications, prompted the company to examine the business impact of prolonged downtime in the event of catastrophic failure.

The Solution

IIn a country where the schedule revolves around the soccer game and up to the minute soccer scores, "3" couldn't just 'settle' on a data protection solution. Hoyle's team narrowed the search, which included BakBone's NetVault: Replicator. "We put NetVault: Replicator through an exhaustive set of tests in terms of functionality, volumes of data and how it co-existed in our very demanding environment."

It was critical that the proposed solution could seamlessly integrate into "3"'s existing IT infrastructure but also scale to reliably distribute live changing multimedia data to remote data centers as needed. "The choice of NetVault: Replicator was down to the best possible fit for both the architecture that already existed within the organization, and also the functionality that it offered," added Hoyle.

Heterogeneity was also a key consideration. The software needed to be able to replicate between all major hardware platforms, thereby eliminating vendor-specific storage limitations. The software also needed to work with "3"s clustered servers.

According to Hoyle, "we were after a near-real time software based replication product that would fit on a Unix environment that was using Veritas SANPoint Foundation Suite HA. To be more specific we

needed the replication product to support a Clustered File System, very fast recovery on failure and, to where possible, never lose data under any set of circumstances."

Following an extensive review, "3" finally turned to BakBone for its real-time data replication software. "NetVault: Replicator passed all of our tests with flying colors and was integrated into our production environment without an issue," commented Hoyle. With NetVault: Replicator, "3" could guarantee delivery of multimedia to its wireless customer's across the UK.

Using NetVault: Replicator, football video goal action, sport scores, news alerts, and audio bulletins captured at "3"'s data centre are processed into a handset ready format to the company's satellite data centers across the UK. "This process is vital to our service offering, as time to market and certified delivery of our content is critical. This is doubly so for time sensitive content that involves news stories and sport scores," said Hoyle.

Pleased with the NetVault: Replicator deployment, overall Hoyle's team has found BakBone has helped increase the reliability of its complex IT infrastructure, as well as accessibility to data. "After a project to replace an existing replication product that lasted nearly one year, "3" has found a reliable, cost effective product that fits very well onto our existing infrastructure and network architecture. "3" looks forward to many years of trouble-free data replication."



Corporate Headquarters

BakBone Software 9540 Towne Centre Drive Suite 100

San Diego, CA 92121 USA

P: +1-858-450-9009

P: +1-866-484-2663

F: +1-858-450-9929

info@bakbone.com www.bakbone.com

Pacific Rim Headquarters

BakBone Software K.K. Shinjuku Dai-ichi Seimei Bldg.11F 2-7-1 Nishi Shinjuku Shinjuku-ku

Tokyo 163-0711 Japan P: +81-3-5908-3511

F: +81-3-5908-3512

info@bakbone.co.jp

European Headquarters

BakBone Software Ltd. 1210 Parkview Arlington Business Park Theale, Reading RG7 4TY England

P: +44-870-351-8800 F: +44-870-351-8801

info@bakbone.co.uk

©2005 BakBone Software, Inc. BakBone Software, the BakBone logo and Net/Ault are the trademarks or registered trademarks of BakBone Software, Inc., in the United States and/or in other countries. All other names and trademarks are the property of their respective owners.

NVE 2001-524 1005

