BRITISH FORCES BROADCASTING SERVICE

SUCCESS STORY

International television service relies on Neo Series™ tape library for storage, backup and disaster recovery

BACKGROUND

The British Forces Broadcasting Service (BFBS) went on air at the end of 1943. Since then, its two networks have broadcast from 20 countries and 67 radio stations to a total of 200 million listeners around the world.

In 1975, the BFBS began a television service where all programs were taped in London and then broadcast from Germany. By the early 1980s live news and sport were added, transmitted along the longest microwave link in Europe.

Today, BFBS Television broadcasts six stations around the clock via satellite, reaching audiences across Europe to Cyprus, Turkey and the Middle East, westwards to include bases in Canada and Belize, and south to the Ascension and Falkland Islands.

CHALLENGE

BFBS broadcasts more than 10,000 programs each year with the majority of this programming originating from its headquarters in Chalfont, Bucks. The hours of radio output are edited and transmitted using 30 advanced computer based workstations.

As a 24-hour-a-day service, BFBS has a highly fault-redundant system. Disaster recovery is a major requirement for the service.

"With audio moving across a data network, any type of glitch or problem is much more noticeable and we needed a complete solution that would prevent that from happening," explained Dave Gill, Senior Engineer for BFBS in the UK.

At the start of 2002, with the amount of content for broadcast rapidly growing, BFBS decided to upgrade its systems. The huge volume of data required by the system also needed a heavy-duty data storage system that would both reduce the time taken to backup the systems and in the event of a major problem, allow the restoration of core services in a matter of hours.

"We did have an extensive tendering process and we chose Phantasia as our solution provider because they had created the original system and we felt they had the best understanding of the requirement for broadcasting and our technical infrastructure," said Gill.

SOLUTION

The first key stage of deployment was a full pilot run internally by Phantasia. Daniel Thomas, Operational Director for Phantasia Ltd. explained, "The proof of
concept is a very important stage and we tested a Neo 2000 loaned to us by Overland as part of this process. The Neo 2000 exceeded our expectations. "We had looked at other vendors but the Neo 2000 offered both the level of performance and reliability that was needed for this deployment," Thomas said.

In October 2002, with the proof of concept complete, Phantasia upgraded the first part of the BFBS system over the course of a single night. The storage for the playout clients is presented via a high availability Novell NetWare 6 cluster. The two nodes run on Intel Xeon based PCIX servers that, in the event of a failure, can switch over in a matter of milliseconds. Data is delivered via the Gigabit Ethernet and fibre network by the Chaparral RAID subsystem.

The Neo 2000 is equipped with two SDLT drives and is linked to the fibre network providing a maximum of 4.2Tb (native) of internal tape storage. BFBS also uses a bar coding system to create a fully indexed library for addition media archiving.

RESULTS

As a result of the new system, BFBS has increased both its storage capacity and backup performance. The new system has reduced the backup window from 48 hours to less than four hours and now allows BFBS to run a nightly backup as opposed to the previous weekly schedule.

BFBS and Phantasia maintained the previous system for more than five years without any significant failure and the new system has future proofing at its very core. In the next stage of the project, BFBS will upgrade the rest of the workstations and servers.

"The modular nature of the Overland technology means that if in the future we decide to change tape format or add in a second drive, we don't have to start from scratch. This is both a technology and cost benefit for our customer," said Thomas.

"Many of our clients are finding that the data solutions which were fine five years ago are just not able to keep up with the almost exponential increase in data that is now created by media such as digital audio and graphics. We are pleased with the Overland Neo Series and we are currently evaluating it for use in several similar projects," he added.