



BRITISH LIBRARY CHOOSES NCIPHER TO PROTECT DIGITAL ARCHIVE

As the national library of the United Kingdom, the British Library receives a copy of every printed publication produced in the UK and Ireland, and purchases materials extensively from around the world, contributing to a collection of 150 million items.

The British Library is now setting up a National Digital Library as an integral part of its more traditional services. This will include 'born-digital' items such as digital versions of research journals, books published on CD-ROM or DVD, published or specially recorded sound items, and archived UK websites. It will also include digitised versions of centuries-old books and manuscripts, ranging from the 15th Century Gutenberg Bible to 19th Century newspapers, as well as contemporary items. The aim is to preserve and store these indefinitely, and to offer a range of services to make best use of them.

"We see our job as storing and giving access to these items beyond the lifetime of anyone now living and into the unforeseeable future," says Roderic Parker, a Communications Officer for the National Digital Library.

The British Library is currently sourcing digitised materials from publishers and web archiving, as well as from its own collections of newspapers, audio items and cartographic data. The volume of material, and the need to keep it very securely, will increase significantly as the Legal Deposit Libraries Act 2003, which requires that electronic publications are deposited in the Library and saved as part of the national published archive, comes into effect.

The Library anticipates that it will amass up to 300TB (terabytes) of digital material over the next five years. Processes to take electronic material in and add it to a dedicated store have been developed. The Library will depend on the storage solution to ensure that no stored material is lost or altered. "People do take books and remove pages from them," Roderic explains. "Some people even substitute pages, or cross things out in books if they don't agree with what the original author was saying. But while it is inevitable that items on library shelves get altered, we have to make sure that the objects on our electronic library shelves remain unchanged."

To protect the integrity of its electronic library, the British Library has implemented two DSE 200s from nCipher. The nCipher solution works as a document signing engine, giving a timestamp and individual signature to every item stored in the Library. By calculating an abstract numerical value based on the information stored, the DSE 200 notifies the British Library every time an alteration is detected, enabling them to find and reinstate the unaltered earlier version of the document in each instance.

"The solution also uses an external link to an official timing authority," Roderic notes. "So, when the value calculated matches the one we originally entered, we can say categorically that the item we supply is the genuine article, that it is exactly as it was when it was put into our system, whether that was five minutes, five years, or even 500 years ago," Roderic adds.

Because the British Library's approach has to take account of the lower durability of digital materials and all the problems of technological obsolescence, the National Digital Library needed a scalable and resilient system that would allow long-term use and that would be suitable for different types of material.

So, although the British Library's approach was driven by a need for cost-effectiveness, the decision to use nCipher's solution was also very much a technical one, with the nCipher solution regarded as the best available on the market at the time. "The other products didn't offer the same close fit to our requirements," Roderic says. "nCipher strikes me as being a very technically oriented company. We have had both personal support and machine-level support," he notes. "And support from the United States when required, so it hasn't been an insular UK-only operation."