



Scottish Screen Archive

# National Library of Scotland Case Study

IT's Personal

## Viglen Storage Group Brings Hundreds of Years of the Written Word Online for the National Library of Scotland

Scotland's official deposit library for all publications issued in Great Britain needed to make its data accessible to the public and develop a digital repository to keep its extensive archive safe for posterity. It therefore developed the Trusted Digital Repository (TDR) and chose a solution from Viglen Storage Group powered by Hitachi storage hardware and software. The advanced scalability and reliability of the solution means that documents ranging from historical manuscripts to online magazines are now available to users across the globe, 24 hours a day.

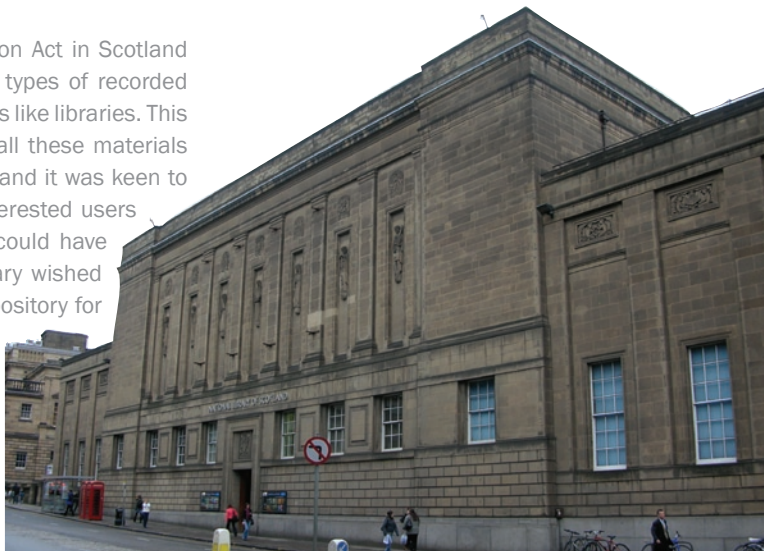
## HITACHI Inspire the Next

Founded in 1689 as the Faculty of Advocates, the National Library of Scotland (NLS) holds almost 400 years' worth of the country's written history and culture. As the legal deposit library for Scotland, it is entitled to claim a copy of every publication released in Great Britain, amounting to 5,000 items a week. It now has over 8 million books, 1.6 million printed maps and 100,000 journal, magazine and newspaper titles. Its manuscripts fill nearly 5 miles of shelving alone.

In 2002, the Freedom of Information Act in Scotland gave general right of access to all types of recorded information held by public authorities like libraries. This means the NLS must ensure that all these materials are easily accessible to the public, and it was keen to develop a mechanism by which interested users both within and outside Scotland could have access. At the same time, the library wished to create a secure and scalable repository for all its existing records and texts as well as future ones to protect the country's priceless literary resources for posterity. It therefore decided to invest in an online resource known as the Trusted Digital Repository (TDR).

### The Challenges

"The TDR is intended to be the primary repository for the nation's cultural and literary heritage, so losing any of the data is absolutely not an option," NLS IT Director David Dinham explains. "We needed a fully reliable and scalable storage solution to keep safe the records we have now, and grow as we acquire more."



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## NATIONAL LIBRARY OF SCOTLAND CASE STUDY

As part of its strategy to ensure the safety and integrity of the data stored on the TDR, the NLS needed its storage solution to enable remote replication and backup capabilities for up to 100TB of data. It was keen to ensure these requirements were met with the highest quality products and services, at a competitive price. It was also determined to minimise technicians' time and costs spent on administering the storage system.

Despite having no previous relationship with the NLS, IT solutions provider Viglen, proposed a storage solution based on a combination of Hitachi storage hardware and duplication software with an OnStor Network Attached Storage (NAS) Gateway. **"The NLS wanted to be sure that the high levels of service and capacity we offered in the proposal were realistic,"** explains Bordan Tkachuk, Chief Executive, Viglen.

### The Solution

The Viglen solution consisted of two Hitachi Adaptable Modular Storage 1000 systems, each with 120TB of capacity. An additional 2TB is available on each for snapshots, which are taken using Hitachi replication in-system software. Data is replicated in line with strict service level agreements (SLAs) between the primary and secondary sites based in Edinburgh and Glasgow. The complete solution was deployed within two months of the acceptance of the proposal, demonstrating Viglen's ability to deliver first class, complex storage solutions in a timely, professional manner.

Most of the NLS's digital repository is stored in the Edinburgh site. The Glasgow site is used mainly for data replication and backup, as well as supporting the library's essential corporate operations like its finance and human resources departments. Due to the paramount importance of both types of data stored on the Adaptable Modular Storage systems, an SLA of 99.9% availability was put into place from the outset.

### The Results

The solution that Viglen Storage Group delivered to the NLS enables centralised storage of data and fast replication to ensure data integrity. **"With this cohesive storage platform, we don't need to keep buying extra boxes and adding them on every time we need to digitise a new piece of content,"** says Dinham. **"We can now rely on the system to store important content safely, and I know that our cultural heritage is being backed up securely, too, and that helps me sleep at night!"**

In addition to fast and easy scalability, which will enable the TDR to continue growing as more content is published, the system has met its reliability demand, with 100% uptime since deployment. This means that not only can customers access the information they need at any time, but staff at the library are also able to stay productive with constant access to key business applications.

The National Library of Scotland is currently finalising the migration of its existing digital assets onto the new system. The capacity it now has available means that the repository can be opened up in the future to include all electronic content created within the UK, not just Scotland. The team at NLS also plans to offer hosting services for small organisations in Scotland to store their digital content in a safe and reliable environment.

The library's key aim of giving the Scottish public wider access to its rich cultural heritage has already been met. Some of its most fascinating historical documents, such as Mary Queen of Scots's last letters and a copy of the Gutenberg Bible, are now available to be viewed online.

Bordan Tkachuk, Viglen Chief Executive says, **"This solution has given them resilience, scalability and security to meet their target of digitising Scotland's literary archive. They can now offer citizens access to publications through this pioneering tool, and look forward to expanding the resource further over time."**

### About Viglen Storage Group

Over the last three decades, Viglen has developed a reputation for excellence in IT innovation, delivery and service. Working hand-in-hand with some of the world's leading companies, like Hitachi Data Systems, Viglen delivers leading edge hardware systems and networks, software and storage solutions combined with the highest levels of customer service and support.

A major solution supplier to the education and public sectors, Viglen supplies IT solutions and support to two thirds of Britain's universities. Viglen has achieved Hitachi Data Systems Platinum Partner status, designed for premier solution providers that offer the highest service levels and technical capabilities as well as custom development and consultancy services. This attainment demonstrates Viglen Storage Group's thorough understanding and professional approach in offering bespoke and end-to-end dedicated storage and backup systems.