Preserving the nation's digital map heritage

The British Library, together with the UK's five other Legal Deposit Libraries, is working with think-Where to preserve the nation's extensive catalogue of digital map datasets for future generations.

Legal Deposit has been part of English Law since 1662 and aims to ensure the preservation of the nation's published output for use by future generations. This legislation now includes digital mapping which can be searched by location and viewed at any of the UK's Legal Deposit Libraries, including the British Library. The British Library, together with the UK's five other Legal Deposit Libraries, is working with thinkWhere to preserve the nation's extensive catalogue of digital map datasets for future generations.

Challenge

In 2016, the UK's Legal Deposit legislation was expanded to include digital mapping, requiring the British Library and UK Legal Deposit Libraries (LDLs) to seek a secure solution capable of storing an ever-increasing catalogue of datasets from the full range of UK publishers. A map viewer was also required to allow visitors to the Reading Rooms to easily explore the available maps and metadata.

Solution

Building on original work to securely store and provide online access to some 4Tb of digital map data from Ordnance Survey (OS) and Ordnance Survey Northern Ireland (OSNI), thinkWhere was commissioned by the LDLs to redevelop the existing Map Viewer solution to support the deposit and preservation of non-print map data. The updated system, underpinned by theMapCloud platform, is available in the reading room of each LDLs and allows content to be searched via a zoomable map, gazetteer of place names or grid reference. Maps can be navigated with zoom and pan tools, distances can be measured and contour and grid lines turned on and off. Split-screen viewing also allows comparison of different epochs of map data to identify changes to the built and natural environment. Viewing and copyright restrictions are meet by making printing available for some, but not all, resources and limiting use to research for a non-commercial purpose or private study.

Benefits

Ability to store, consume and display datasets from across the globe

The system provides a flexible, stable, secure and highly scalable storage solution for hosting, sharing and publishing the extensive catalogue of UK digital map datasets. This published content is then made available to anyone who requests it via the Libraries' Reading Rooms. In addition to the intuitive web viewer, a bespoke metadata management module allows for the input, edit and export of metadata; data which is vital to understanding the source, currency, scale, and therefore appropriateness of the original map information.

Facilitates the future storage and data access requirements

Built from leading Open Source and Cloud technologies, the fully-managed platform and spatial data infrastructure offers Platform-as-a-Service, Data-as-a-Service and Software-as-a-Service capabilities. This inherent scalability facilitates the future storage and data access requirements of the LDLS as more and more data publishers deposit their data for preservation.

Provides long-term security and preservation of digital map assets

The solution developed by thinkWhere is supported through ongoing management of theMapCloud platform. Data from new publishers is added as part of a rolling programme and additional data snapshots continue to be made available on an annual basis. Service desk support is also provided to staff at each of the six LDL sites as required.

For more examples of how geography and geospatial data unlock value, visit the RGS-IBG website