

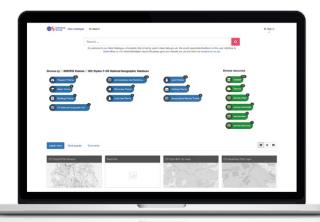


MAKING OS DATA EASIER TO FIND

Ordnance Survey (OS), the national mapping agency for Great Britain, carries out the official surveying of GB, providing the most accurate geographic data to government, businesses and individuals.

The OS National Geographic Database (NGD), maintained by Ordnance Survey, is one of the largest of its kind in the world. It has grown to contain more than 500 million geographic features. It's currently available to members of the Public Sector Geospatial Agreement (PSGA) and to others via OS Licensed Partners.

Each day, OS makes over 20,000 changes, with each update (e.g. new object or object removal) containing many data points and attributions.



OS needed to provide standard metadata for the NGD as part of the PSGA.

The challenge

The obvious choice of standard was GEMINI from the Association of Geographic Information (AGI). This is recommended by the Geospatial Commission (the UK government's lead on the PSGA) and the central government Data Standards Authority.

However, the method OS had used to manage GEMINI records for the previous ten years would not scale to the demands of the NGD, i.e. daily updates and fine-grained data.

Key requirements

OS wanted to upgrade its metadata management infrastructure towards the best practices identified during the Geospatial Commission's Data Discoverability projects.

The OS team was especially keen to find a way to make the best use of GeoNetwork, an open source cataloguing application for spatially referenced resources. The team also wanted to harness expert advice on how to integrate GeoNetwork with other OS processes.

Our solution

The OS team approached us to help it set up and make best use of GeoNetwork software, including configuration to allow ease of maintenance for GEMINI 2.3 records, plus some OS-specific configuration.

This evolved into us hosting and running the server on OS's behalf.

Expanding our role

We worked with OS to configure the server to OS's requirements and demonstrated how OS could become 'owner operators' over time. We also shared knowledge on configuring taxonomies, templates and minor extensions to the standard.

Technical overview

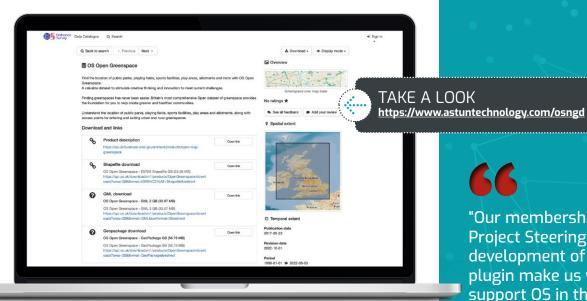
We set up a managed GeoNetwork 3.12 instance and associated managed services (PostgreSQL as a RDS and AWS Open Search) running fully containerised on Amazon Web Servers (AWS). We use AWS for hosting because of its reliability and Amazon's shared commitment to minimising its carbon footprint.



"Per the O-FAIR principles, we want to make our data more findable.

The OS Data Catalogue achieves this by providing consistently highquality metadata over an open standard web interface. These are the same standards used by the Scottish Government Spatial Data Infrastructure and others."

Peter Parslow Data Standards, Ordnance Survey





"Our membership of the GeoNetwork **Project Steering Committee and** development of the Gemini 2.3 plugin make us well-placed to support OS in the future."

Jo Cook Data Discoverability Lead, Astun Technology

Results

OS now has a well configured GeoNetwork instance as the OS Data Catalogue. This went live in June 2021 with GEMINI records describing existing OS products. It has since been publicised more with the launch of the NGD in September 2022.

Support from Astun enabled OS to bulk load records they had created externally so the metadata could go live at the same time as the NGD product.

The new NGD product was also discoverable at Data.gov. uk from launch thanks to the OGC standard Catalogue Service for the Web (CSW) interface.

Next steps

OS now has this structured metadata well managed, alongside detailed technical metadata on GitBooks and summarised metadata on the OS Data Hub. Now, the OS team needs to work out how to manage metadata across platforms to give the same consistent message. The team also plans to integrate updating the metadata with its data management systems.



