

West Lothian Council – OS MasterMap® Strategy

The move to OS MasterMap raises many difficult issues for a large council used to dealing with spatial information within a department-based data model. With comprehensive background knowledge of geospatial data storage and experience of working with local authorities, 1Spatial were able to assess West Lothian Council's (WLC) situation and highlight their generic requirements as a local authority, as well as their own, specific requirements as a unique organisation.

The Challenge

WLC had come to a crossroads with their Spatial data strategy. There were several different departments using Ordnance Survey data but employing different applications and systems to process it. A Spatial steering group was created within the council to consider how the organisation, as a whole, would migrate to the new OS MasterMap model. To help open up the debate within and between the different departments, 1Spatial was asked to produce a tailored report, present the findings, and then recommend a solution for the council to consider.

The Solution

1Spatial undertook an initial consultation process within the project team in order to identify the current storage solutions for OS Land-Line®, and council controlled Spatial information. This step was crucial, as the analysis allowed 1Spatial to tailor the discussion document to the exact requirements and technical level of steering group members.

After establishing the context within the council, 1Spatial produced a set of options open to them that would allow the return on any OS MasterMap investment to be maximised. The document emphasised three key requirements for any OS MasterMap solution to fulfil:

- OS MasterMap should be stored in a relational database
- The database should be held centrally
- The database should be held in an open, well-used format, i.e. non-proprietary

1Spatial also highlighted that the OS MasterMap solution could be a catalyst in a larger, long-term goal of creating a more centralised Spatial corporate strategy for council-controlled spatial information.

With the migration issues, options and recommendations pulled together in one document, the council had all the information to be able to select the appropriate relational database for their needs. The discussion also highlighted issues for each department to investigate, keeping the momentum moving towards an implementation.

Building on the report and recommendations, 1Spatial constructed a prototype of the solution by loading the existing OS data into an Oracle XE, database. The prototype demonstrated the lack of disruption to users as well as the relative ease with which it was achieved. 1Spatial also demonstrated that staff could view the centrally stored data through different applications, using MapInfo and GGP as examples. WLC subsequently implemented the recommendations of the original report, allowing 1Spatial to load OS MasterMap data into an Oracle production database environment.



Figure 1. Logical overview of a corporate GIS datastore incorporating MasterMap and departmental Spatial data

The Benefits

The integration of WLC's data into a single, central repository has enabled more streamlined management and administration of that data. Duplication of effort has also been removed from the process, leaving a net result of better use of staff time and overall time savings in the data management process. Decision makers within the council can have confidence that the data they are using is accurate and up-to-date as possible.

As well as providing an interface to add new data, 1Spatial have incorporated existing data and applications into this solution meaning that there is no loss of investment on previous data collection or software.

The Future

The key driver behind 1Spatial's work with WLC was to consolidate the data from across the different council departments into one corporate Spatial database to streamline the management and administration of that data. Following 1Spatial's successful demonstration of centrally-stored data being accessible through different applications, it is hoped that those departments who have not already migrated their data into the Oracle database will do so.

