OGC in Use â€“ Projects and Experiences from Germany

M.O.S.S. Computer Grafik Systeme GmbH, Munich, Germany, a seventy-employee company, has developed and sold GIS, surveying, cartography and utilities software solutions for over fifteen years. M.O.S.S. participates in the Round Table GIS e.V. Munich (www.runder-tisch-gis.de). This association brings together government administrators, economic development agencies, industry, and research organisations with the aim of increasing efficiency of utilisation of GIS and geodata and to provide training. Another important Round Table activity is the testing and promotion of interoperable solutions in German-speaking countries.

Three different projects have been realised in a test-bed organised by the Round Table: a test of interoperability between different data producers, a national real estate application and an utilities network information system. The goal was to test the implementation of OGC standards in products from different GIS vendors.

The M.O.S.S. product WEGA Geoserver (Web Enabled Graphics Architecture) is involved in the first project as an implementation of the OpenGIS Web Map Service (WMS) next to WMS products from Intergraph, ESRI, Autodesk etc. In the second project, M.O.S.S. provides the client WEGA-MARS (www.wega-mars.de/) for displaying real-estate data. In the utilities network project implementations of the OpenGIS Web Feature Server (WFS) Specification from different producers were tested in utility scenarios. For this project M.O.S.S. provided a WFS which employs OGC standards in handling requests using ‘filter encoding’ and outputting data encoded in OGC Geography Markup Language (GML).

The geoprocessing software market in Germany is characterised by a very heterogeneous producer and product landscape. The test-bed demonstrated that GIS products from various producers are able to work together in co-operative applications. It showed that several Web-based applications could be constructed with the help of OpenGIS Web Services implemented in commercial software. These applications depend on a distributed network of existent geodata sources. Finally, the test-bed confirmed that this approach would seem to be just as applicable in German-speaking countries as it is in English-speaking ones.

The presentation of images from many different WMS data sources running software from differing vendors (e.g. M.O.S.S., AED-SICAD IMS, and ESRI ArcIMS with WMS connector) is no longer a theory but is being actively used by our customers. Our users have learned how the ‘interoperable solutions’ approach enables them to optimise their workflows, reduce time for data preparation and create new kinds of applications.

It is clear that purchasers working in public administrations will not realise their SDI (Spatial Data Infrastructure) projects without networking different kinds of GIS data sources, and OGC compliance is the only way to accomplish this.

M.O.S.S. will continue to make OGC standards a key part of its products and solutions. As in the evolution of most SDI projects, WMS comes first because it is so easy to implement; WFS and GML specifications play a bigger role as projects expand.