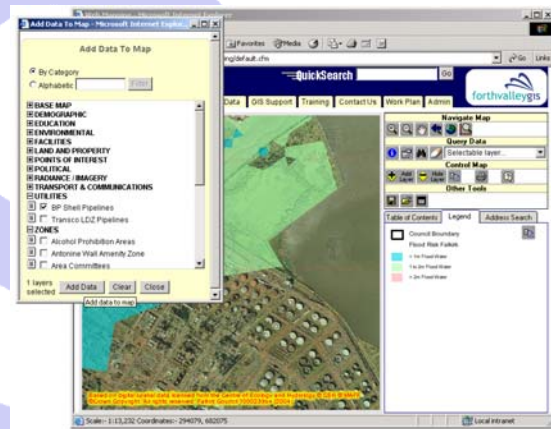


Intranet GIS

“GeoLink ” - A Geographic Information Portal for Clackmannanshire, Falkirk & Stirling Councils



integrated on-line helpdesk and news section. Furthermore, GeoLink was required to be generic and user friendly enough for a novice but also provide rich functionality to suit those familiar with desktop GIS software.



Introduction

Forth Valley GIS began developing web based GIS solutions for Falkirk, Stirling and Clackmannanshire councils in 1999. Since then advances in technology and data management have emerged and in 2003 a decision was made to re-develop all sites to create a single regionally hosted web service. This involved the major task of consolidating GIS infrastructures for the 3 councils into a single application and data framework, called GeoLink .

Requirements

The GeoLink project required a scalable solution from the outset to suit the varied requirements of extranet delivery to other organisations, internet web services, integration with business systems and integration with other GIS technologies. GeoLink was also to be more than just a GIS acting as a knowledge base for metadata, FAQ & Support, technical documentation, project documents, downloads, training programme booking as well as an

Solution

GeoLink is developed on industry standard web and database technologies. The data is stored in Oracle® and the application is developed mainly with ESRI ArcIMS®, Macromedia ColdFusion® and Flash® components. This has ensured that the volume and diversity of GIS business data is delivered through a functionally rich, yet easy-to-use interface.

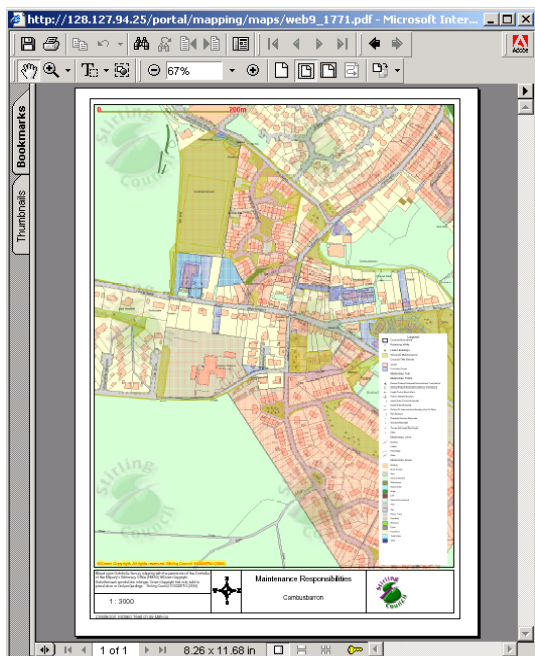
Metadata is fully integrated, ensuring the data is understood and used appropriately. Furthermore, GeoLink is dynamically configurable to the specific needs of each Council, department, user and individual dataset. All of the mapping and the dynamic content of the site is managed using a suite of on-line administration tools developed by Forth Valley GIS.

To serve the requirement for high quality, scaled printing a new approach was required, and a wizard driven interface was developed to generate PDF print layouts on the server for the user to download and print locally.

Route-finding functionality was built into Geolink allowing users to find the shortest route from A to B. Routes are calculated using the OS ITN[®] data.

The Geolink framework makes it easy to create further business specific mapping applications through the same interface. Applications have been developed for calculating safe routes to schools (STEMS) and for planning refuse collection routes.

Geolink is fully integrated with the Oracle[®]-based centralised spatial data warehouse, GeoStore, which contains regional data coverage of over 300 datasets for the partner Councils. An address search tool uses the Corporate Address Gazetteer to provide quick access to the required area. More information can be added to the map using the 'Add Data' tool, which uses metadata links to help the user quickly find and select the data they require.



The Portal also acts as a general GIS information resource. There are facilities for logging helpdesk calls, booking training courses, and submitting data updates on-line.

Benefits

GeoLink was an instant success achieving very high levels of usage from the nearly 10,000 council staff with access. To ensure staff optimise use of GeoLink, Forth Valley GIS have also established a short training course to complement the suite of GIS training courses available to all Council staff through a short course programme. The business benefits that GeoLink offers are:

- Central management of web GIS for all three councils reducing duplication of effort for the maintenance of data and intranet sites.
- Reduced overheads for intranet GIS development and support.
- Reduction in the number of installations of desktop GIS reducing licensing and support costs.
- Common data and support information made available through the portal, reducing the number of support calls.
- On-line submission of support calls, data requests and mapping requests reducing support overheads.
- Widened access, more intuitive design and improved performance make it quicker for users to find the information they need from the system, resulting in improved efficiency and therefore cost savings.
- It provides a single point of access to a centrally managed, current and quality assured data resource. This is increasing user confidence and contributing to more informed business decisions across the three councils
- Integrated and searchable Metadata is increasing the visibility and use of the Councils' considerable (and valuable) GIS data resource as well as ensuring that the data is understood and used appropriately
- It provides easy access to the Corporate Address Gazetteer for all staff, strengthening its role as the definitive source of address information in the 3 councils

- A structured, organised well documented framework that forms a robust basis for future web-GIS development
- Increased availability and sharing of information will lead to improvements in knowledge-based decision making which will increase efficiency in operational and strategic planning.

Future Developments

GeoLink, in combination with the GeoStore database, provides Forth Valley GIS with the framework to continue improving the quality, accessibility and usability of geographic information. This reflects its growing importance for planning and delivering effective public services.

It also provides a secure regional platform for sharing geographic information with the Councils' Community Planning partners. These include Central Scotland Police, who are already starting to use the site on a trial basis. The Police are able to view their own version of GeoLink accessing the same data from GeoStore but from a customised interface designed for them.

We have also developed Web Services that provide mapping and geographic functionality using the Geolink infrastructure. We are continuing to make better use of these to integrate geographic functionality with other business systems and council websites (see separate case study).

The planning that has gone into establishing the GeoLink platform has enabled new Intranet GIS sites

to be rolled out in a fraction of the time it has previously taken. GeoLink is generic, yet customisable enough to satisfy its varied public sector audience and will continue to evolve to meet their demands – each time benefiting everyone with access to the site.

Project type:	Application development, Web GIS.
Software Platform:	ESRI ArcIMS® 9.1, Macromedia ColdFusion® MX, Oracle 9i®, Routeware NetServer.
Customers:	Clackmannanshire, Falkirk and Stirling Councils

For further information, visit our web site where you can fill in an on-line request for further information:

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