

METAFILE™

Capture
Organize
Index
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COLD • Imaging • Workflow • Internet • Report Distribution

Application Overview

No More Digging for Documents

City of Westerville Integrates Metafile Document Imaging with GIS

Tired of digging through drawers and searching flat files, the City of Westerville, Ohio, Engineering Department recently integrated a document imaging software solution with its existing GIS. Now, staff have citywide access to as-built construction documents using GIS as the interface. Not only that, but the staff accomplished this document integration at no cost.

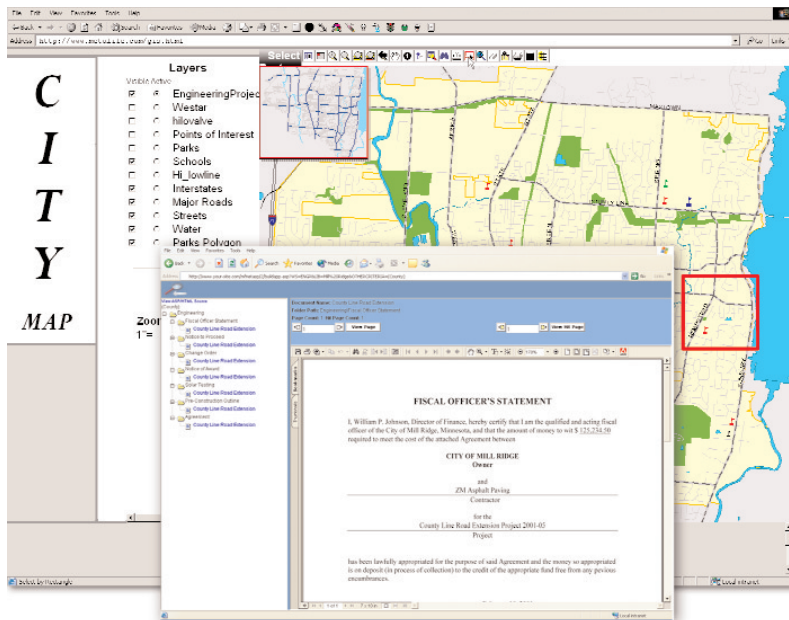
Throughout last winter and spring, we in the engineering department scanned and imported our existing images (plat maps and as-built construction plans), indexed them, and made them accessible via an intranet and local area network. We developed the application using Java script, HTML, Visual Basic script, and XML (extensible markup language). We used Active Server Pages (ASP) to generate forms for inputting data, displaying query results, and to customize the interface.

In the application, queries are sent to the database via ASP. Query results are shown in a separate window as an ASP-generated report. Project locations are represented as polygon features. Because adjacent property owners must be notified of all city-initiated projects, the polygons enable us to easily define project areas and generate mailing labels.

We developed a file structure that allows other departments to add project information to the system, making it available through the same interface. For instance, when the ordinances are added to the database, users will be able to search and retrieve the city ordinance associated with a given engineering document. Files such as these engineering plans are available as scanned images in PDF format. To enable users to view these documents, we embedded PDF reader.



To find the document of interest, a user now logs into Interactive City Mapping and chooses the Engineering layer. On a map display, he or she then clicks and drags a window around the area of interest. (For



example, all engineering projects performed on the intersection of Vine Street and Mossman Ave.) The GIS redirects that request via a variable derived from the project number stored in the shape file to the document management program. The program in turn searches the index database and sends the index criteria to the content database and returns all the associated content (regardless of source or format) to the user via the browser, where it can be viewed within seconds.

Any city employee with access to a computer can now search for documents with point-and-click functionality. They do not need to know or remember any of the indexed field criteria to locate the desired documents. Instead, they only need to know the approximate geographic location of the project and click that area on the map.

Susan Banbury, City Engineer and Todd Jackson, GIS Manager, City of Westerville, www.westerville.org
The City of Westerville used Metafile Information System's (www.metafile.com) MetaViewer Enterprise and MF.net solution to import and publish its engineering documents and is sharing them over an intranet using ESRI's (www.esri.com) ArcIMS. The department additionally embedded Adobe Acrobat Reader in the system for PDF display. The index database for the system is stored in Microsoft (www.microsoft.com) SQL Server 2000. The authors wish to thank Dan Hunstad with Metafile Information Systems and GIS Specialist Robert Streeter with the city's Information Systems Department.