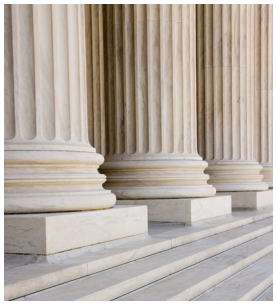
SAFE SOFTWARE

Case Study:
Clayton County Water Authority



Key Facts:

Industry: Government
Problem: Unsustainable paper-laden process for incorporation information into new GIS database
Solution: FME
Results: Streamlined data conversion process leads to significant time savings
Location: Georgia, USA

"Safe Software's FME is an essential time-saving component of Clayton County Water Authority's award-winning GIS."

The Organization

CCWA is a past recipient of the Urban and Regional Information Systems Association's prestigious award for Exemplary Systems in Government. The award recognizes the CCWA's implementation of a GIS that provides significant improvements in services and benefits to citizens, and also greatly reduces costs.

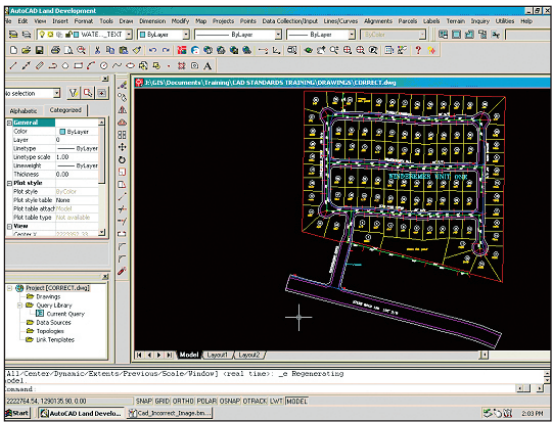
CCWA's GIS was developed in response to a need for accurate and timely facility and maintenance information at all levels of the organization. The legacy paper maps were updated infrequently (every 3-5 years), and the process for capturing changes to the system frequently broke down. In addition, key staff were nearing retirement, and CCWA needed for a system to capture and "institutionalize" this critical knowledge. Since Clayton County's government did not have a GIS program, CCWA had to build not only the datasets specific to water and wastewater, but also a significant portion of the base-map, including streets, edge-of-pavement, building footprints, political boundaries, orthophotos, and parcels (a partial dataset only).

The Challenge

CCWA needed a more efficient system for incorporating information into the new GIS database, to replace the laborious paper-based process. In the past, developers submitted paper As-Built drawings. (Engineering drawings showing how a development was actually built). These As-Built drawings were then hand-drawn and later digitized in CAD. Updates were distributed in map books every 3-5 years. Converting drawings to CAD files and their subsequent verification required a minimum of six hours of internal staff time, in addition to the time spent by the developer, and involved multiple redundant, error-prone steps.

The Solution

Two key components of the solution were the file conversion functionality provided by Safe Software's FME, and the mandating of rigorous standards for new data that became the responsibility of the contractors, surveyors, and field crews. In order to get final approval on a construction project, contractors are now required to submit their As-Built drawings in one of several computer-aided design (CAD) formats, exactly in compliance with CCWA's As-Built CAD standards. These standards specify the format of the entire drawing, from file name to layers and layer names, and topology and coordinate system. Once accepted, the drawings are converted to GIS format with no further modification. Using FME, topology is verified, attributes are created, and layers are mapped to the proper ESRI feature classes with no manual intervention.



As-built drawing digitized in CAD

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The Results

With FME, new information can be introduced into the GIS in 15 seconds and reviewed by staff in 30 minutes, whereas in the past this process took approximately 6 hours.

Users now have the equivalent of the entire engineering section data (literally an entire filing room) on a laptop computer. This has greatly reduced the time required to research information. Existing data, such as sewer connection information, previously took up to an hour to locate and several staff members were involved. This same operation now takes seconds.

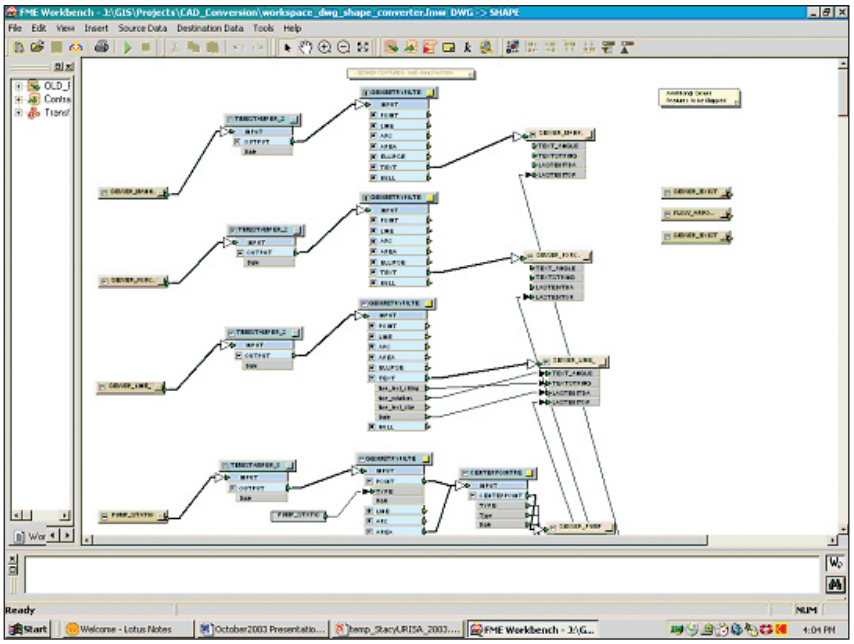
The end result is that data that was submitted and approved one day is processed, verified and incorporated in the central geodatabase and accessed by all end users the next day (or instantly if the user is accessing the central geodatabase directly).

Learn More

To find out how FME can help address your data interoperability challenge, or to download a free evaluation copy of FME, visit *www.safe.com*.

"FME is one of the cornerstones of our GIS operations. It has allowed us to streamline our data conversion process, reduce costs, and focus on serving our customers. We are continually amazed at the array of functions and flexibility it provides."

- Terry Moy, Manager, Program Management and Engineering Clayton County Water Authority



FME Workbench screenshot

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