

Presentation Abstract

CAD Maps and a Geodatabase Can Peacefully Co-Exist in the Same Project: Automatic Export of CAD Data from a Geodatabase

Brent Mainzinger
The Sidwell Company

Over the past few years we have migrated over 100 GIS projects into the ESRI Geodatabase format. In doing so, we have realized that not all users of mapping data are ESRI centric. Many important users, especially within the engineering community, need to have access to current mapping data in a format suitable for use in AutoCAD or MicroStation. Too often the needs of the CAD user community are dismissed by the GIS user community. In many mapping projects, CAD does have a place because it is used to perform critical tasks with proven workflows. Third party software that requires CAD data is common and important. Instead of working against the CAD users, it is often more productive to work with them.

The challenge has been to establish workflows that provide CAD users with the data they need, without impeding the workflows of the GIS users or introducing additional steps to the daily workflow. Using the ESRI Interoperability Extension in combination with ModelBuilder, we have successfully implemented a workflow which generates CAD files from the parent geodatabase on a nightly basis. These CAD files are written to a common folder which is accessible through direct connections on the local network, or from a web page for remote download by the CAD users on an as-needed basis. CAD users then reference these current base map layers behind their project specific CAD files as they perform their tasks.

As this approach is implemented, the structure and tiling scheme for the target CAD files must be designed around what the CAD users need, not the convenience of the GIS data custodians. Layer structures and symbologies are configured as part of the export model so that the data has a familiar look and feel to the CAD user community.

By demonstrating to CAD users that they will still have access to the data that they need, in a format that they want, support for migrating base map data into a geodatabase becomes easier to attain.

In the presentation we will demonstrate how to create and run a model that performs these tasks.