



Providing automation to enable customisable and scalable data transformation

About Waverley Council

Waverley Council is located within the inner-eastern suburbs of Sydney and manages a residential population of around 70,000 people. The council utilises a broad range of data including GIS, CAD, Raster, LiDAR and 3D models.



Overview

To cater for the multitude of formats, Waverley Council used Safe Software's FME Desktop product to automate dataset processing tasks as well as data conversion.

1Spatial's FME Certified Professional's assisted Waverley Council by creating a number of automation scripts, to enable customisable and scalable data transformation. Implementation of these scripts provided a solid foundation that aimed to substantially reduce human effort whilst increasing data accuracy and access to up-to-date data in desired formats.

Challenge

Waverley Council was looking to utilise a corporate database to store GIS data. As an interim measure to easily identify information per parcel, the council decided to amalgamate a specified list of GIS files into a single cadastre file. The specifications of this involved attaching a single field per GIS file onto the cadastre, whose value was either a Yes / No (e.g. Amenity = Yes) or a value from the GIS file (e.g. Zone = SP2). Due to the complexity of the workflow, advanced FME knowledge was required.

Previously Waverley Council had to manually translate GIS files to CAD and email the results to a different team. An automated process was performed every night with a configurable aspect so that GIS layers could be added / removed from the process easily.

Waverley Council utilised 3D modelling software which used 3D models. The previous process of 3D model generation costed a significant amount of consulting time. An automated, repeatable process was desired to cut future costs and update the models in a timely manner for accuracy reporting processes.

Case Study: Waverley Council

The solution

Waverley Council utilised 1Spatial's consultancy services to automate three tasks using FME Desktop 2013:

- GIS Amalgamation to Cadastre Joining of GIS information (e.g. suburb, park, zone) via GIS layers onto the cadastre.
- GIS to CAD A dynamic translation to convert a selection of MapInfo files to DWG.
- MapInfo to 3D Shape A dynamic translation to convert a selection of 2D MapInfo files to 3D Shape using LiDAR.

Usage:

For each solution, an Excel spreadsheet was provided containing all configurable values such as which files to process, the desired attribute name to be attached to the cadastre, etc. End users had only to keep the spreadsheet up-to-date and the workspace would refresh the data automatically via a batch script overnight.

Service Provision:

Overall, the following services were provided:

- FME expertise
- Best practices utilisation
- FME mentoring





Waverley Council's K2VI 3D Modelling Software Visit: http://bit.ly/1pZWz9g

Future

1Spatial is working with Waverley Council to perform RnD into the creation of an automated FME script to extract Building Footprints. Such a solution would utilise existing technology, be repeatable and be a more cost effective option than the currently utilised alternative.

Key benefits:

- Faster processes
- Fully automated tasks
- Reduced manual work
- Increased inhouse FME knowledge
- Freed staff up to work on other tasks
- Increased timeliness of data updates
- Expanded usage of corporate data within different software

Call us +61 2 9527 9592 Email us info@1spatial.com Visit us 1spatial.com

