

Introduction to FME

Course Length: 2 days

FME Version: 2016.x

App: ArcMap, FME Desktop

Overview

The FME software is a great tool for transforming data from and to GIS formats. This class shows you how to use FME Workbench and focuses on the three essential components of FME: Reader, Writers, and Transformers. Mastering these will allow you to quickly begin building your own transformations. With hands-on projects, this course will cover many commonly used workflows. Once you complete this course, you will know how to use FME to process data from a variety of sources including shapefiles, textfiles, and even spreadsheets.

Audience

This class is ideal for geotechs, GIS analysts, and spatial data managers.

Topics Covered

Day 1

- FME Interface – Become familiar with the basic components of the interface. (Setting FME Options; working with the toolbar; canvas; navigator pane; log window; history; and help.)
- Generating a simple Workspace – Create a basic translation workspace. (Add Reader; Add Writer; Transformer)
- Create Spatial Data from Datafiles – Use specialized transformers to generate spatial data from attributes in a spreadsheet or textfile. Learn to set coordinate systems. (Excel to Points; Excel to Lines; Excel to Polygon, Text to Polygon)
- Generate Text Data from Spatial Files – Use specialized transformers to extract spatial information from features. (CoordinateExtractor; StringConcatenator)
- Merging features and joining input files – Merge or join features from multiple inputs based on common key attributes. (FeatureMerger; SQLCreator/Executor; Joiner; Using a where clause)

Day 2

- Filtering and Parsing Data – Filter data based upon attribute values. Parse string values. (Tester; TestFilter; Conditional attributes; StringSearcher; StringFormatter; StringReplacer)
- Performing Spatial Operations – Apply spatial filters and tests against multiple spatial data inputs. (Reprojector; SpatialFilter)
- Data Manipulation and Transformation – Transform data using specialized transformers. (ExpressionEvaluator; StatisticsCalculator; Aggregator)

- Other Useful Transformers – Build a toolbox of useful transformers. (AttributeRemover/Keeper; AttributeCreator; AttributeRenamer; BulkAttributeRenamer; TimeStamper)
- Best Practices – Apply best practices to improve readability and maintainability of FME scripts. (Bookmarks; Naming conventions; setting projections; Logfiles; Renaming transformers; Custom transformers; Data organization)
- Troubleshooting Tips and Techniques – Utilize built-in tools to analyze scripts that are not creating proper output. (Disabling Readers/Writers; Transformers; and links; Using the Inspector; Writing error files; Common problems with SDE.)

Format

In-person instruction with hands-on practice and course materials you can keep.

Prerequisites and Recommendations

Attendees should be familiar with the basic use of ArcGIS including the topics covered in the **Fundamentals of ArcGIS** and the **Intermediate GIS Concepts** classes.