

Introduction to FME for Petroleum

Course Length: 2 days

FME Version: 2016.x

App: ArcMap, FME Desktop

Overview

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 scripts. With hands-on projects, this course will cover many commonly used workflows for the oil and gas industry. Once you complete this course, you will know how to use FME to process data from a variety of sources including SDE layers, 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 have some knowledge of scripting tools such as Esri Model Builder and python. They should also be familiar with the basic use of ArcGIS; including the topics covered in either the **Fundamentals of ArcGIS** or **ArcGIS Desktop I** classes.