The Polis Center at IUPUI

Introduction to ArcGIS Data Interoperability Extension
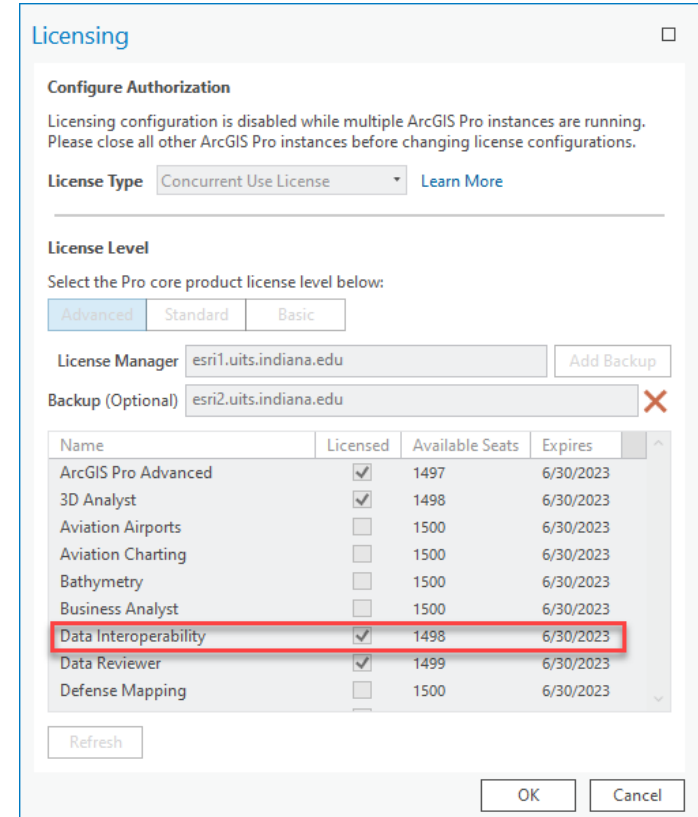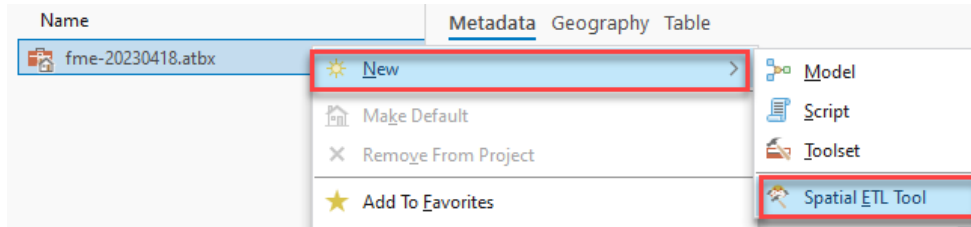
Basics

What is it?

- ETL tool based on FME software

- Like Modelbuilder on steroids.

- Use 3 types of objects to extract / transform / load data:
  - Reader
  - Transformer
  - Writer

Creating New Workbench

1. Enable the Data Interoperability Extension.
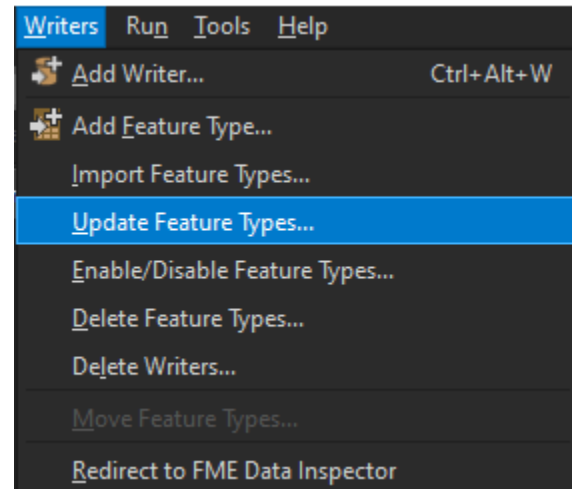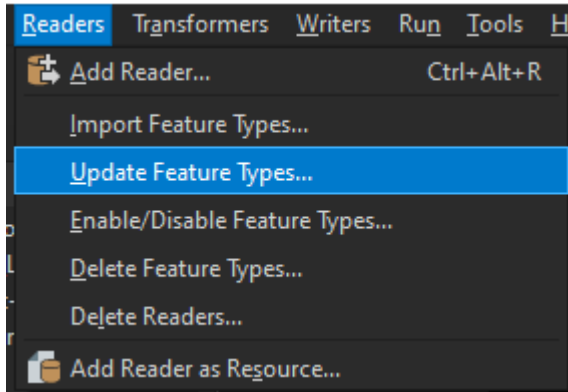
2. Create workbench.

Demos

1. Basic Transformation of single feature class (county to county).

2. Advanced options in AttributeManager (building inventory to Hazus user-defined facilities).

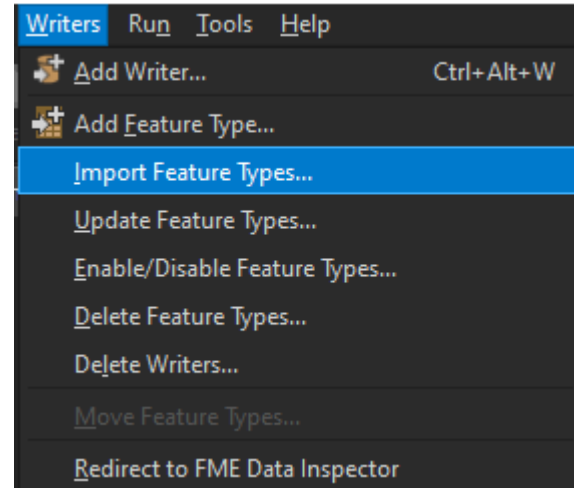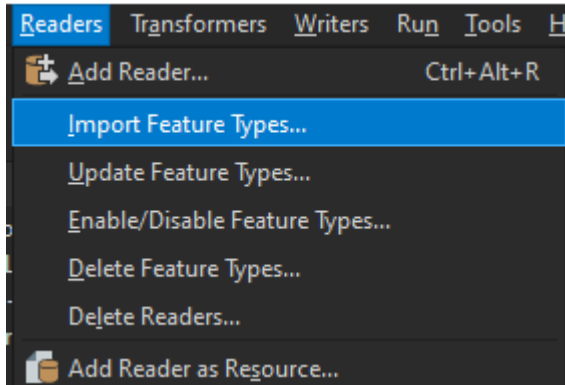3. More complex transformation (parcels + buildings = building inventory).
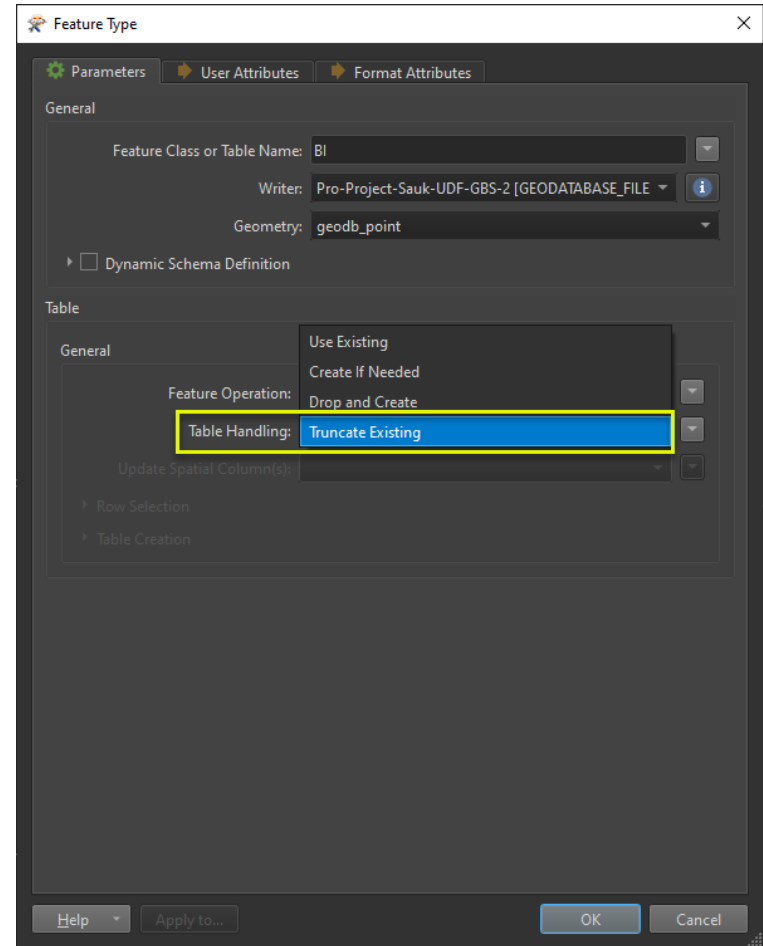
Good to Know

Updating Reader/Writer Schema

Add New Data to Existing Reader/Writer

Overwrite Output Data

Writer Types

» **Automatic**: Allows Workbench to define attributes and update them automatically based on which readers are connected in the workspace. The Feature Type dialog prompts you to set the Feature Type Name, Geometry (for some formats), and expose any format Attributes. Alternatively, right-click on the background of the workspace and select **Insert Writer Feature Type**. On the User Attributes tab, click **Automatic**.

» **Manual**: Allows you to create a new feature type manually. The Feature Type dialog prompts you set the Feature Type Name, Geometry (for some formats), and User attributes, as well as expose any format attributes. Alternatively, right-click on the background of the workspace and select **Insert Writer Feature Type**. On the User Attributes tab, click **Manual**.

» **Copy from Reader**: This option is available if the workspace already contains at least one reader. You are prompted to select one or more existing feature types. The new writer inherits the schema of the specified reader feature type(s).

» **Import from Dataset**: Imports the schema definitions of an external data source, which you are prompted to specify. You can then adjust the imported feature types so that they more closely reflect your dataset.

» **Dynamic**: Allows Workbench to determine schema definition at translation time, based on reader feature types. For more information, see About Dynamic Workspaces.

» **None**: Schema is ignored, and no feature types are added.

Online Resources

1. FME Transformer Reference Guide:
   http://cdn.safe.com/resources/fme/FME-Transformer-Reference-Guide.pdf

2. List of Transformers:
   https://docs.safe.com/fme/html/FME_Desktop_Documentation/FME_Transformers/transformer-index.htm