

# Using FME to Integrate Local Government Information

Presented by  
Brooks E. Kelley – InfoGeographics, Inc.  
and  
Thomas Van Bruggen – Muskegon County  
At IMAGIN's 27<sup>th</sup> Annual Conference  
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# Using FME to Integrate Local Government Information

Please note that there were no PowerPoint slides presented at the conference. The entire presentation was live demo and/or discussion. These slides are provided to capture some of the screens and information that was presented.

# Using FME – Introduction

## by Brooks E. Kelley

Note: This slide was not shown during presentation

### FME is the Swiss army knife for your data

Take control of your data with FME's integration software. One tool to help you solve many problems.



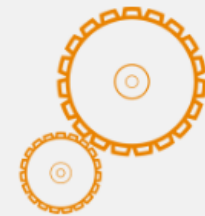
#### Connect Your Applications

Easily move information between 400+ data sources – without any need to code.



#### Transform Your Data

Save time restructuring and prepping data using FME's library of transformers.



#### Automate Your Workflows

Turn mindless data chores into scheduled, real-time, or self-serve processes.

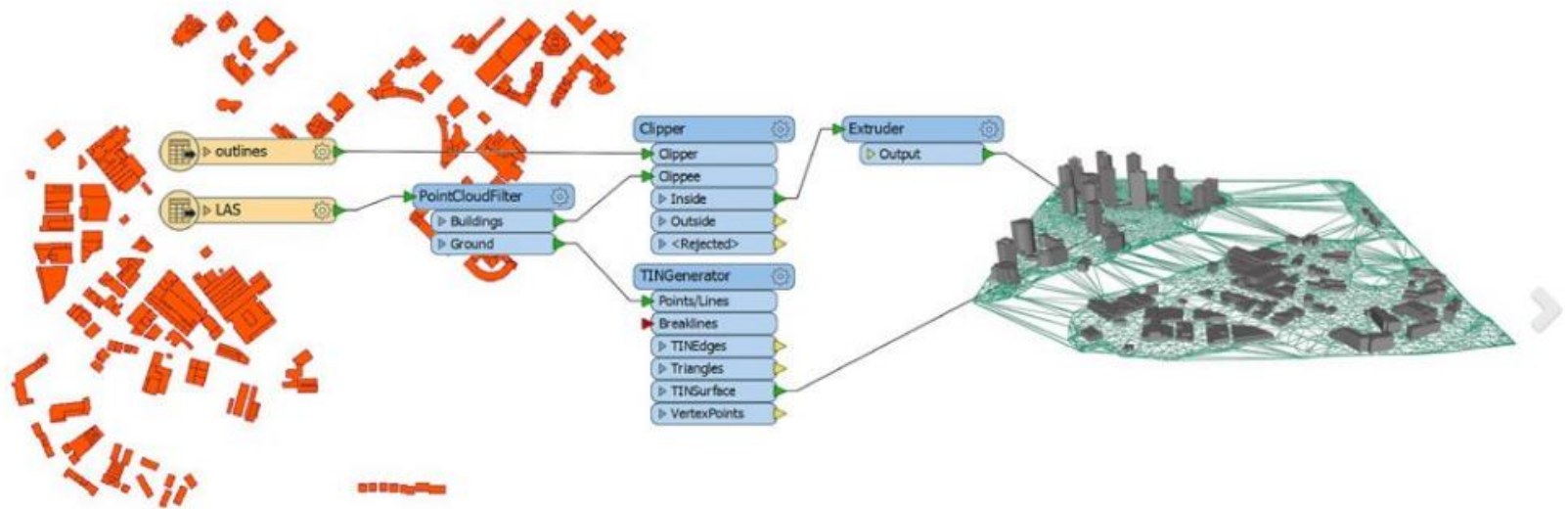
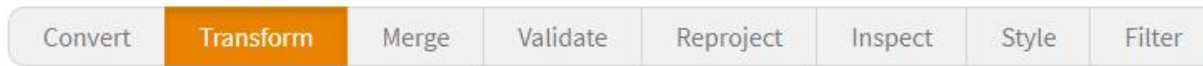
# Using FME – Introduction

## by Brooks E. Kelley

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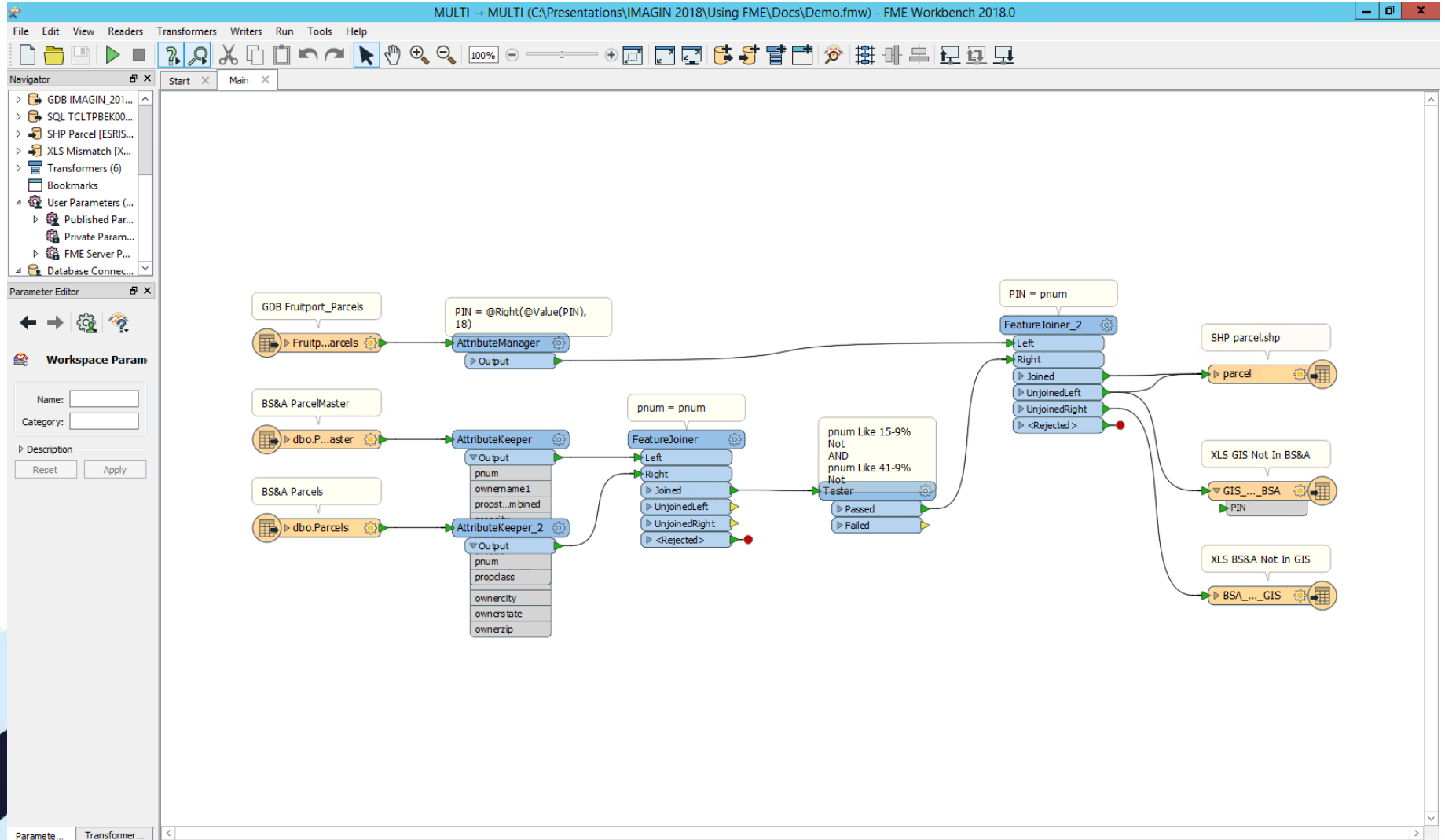
### What Can FME Desktop Do For You?

FME is like the Swiss army knife for your data with hundreds of **transformer tools** to get the job done. Here are just a handful of sample scenarios.



# Using FME – Brooks E. Kelley Demonstration

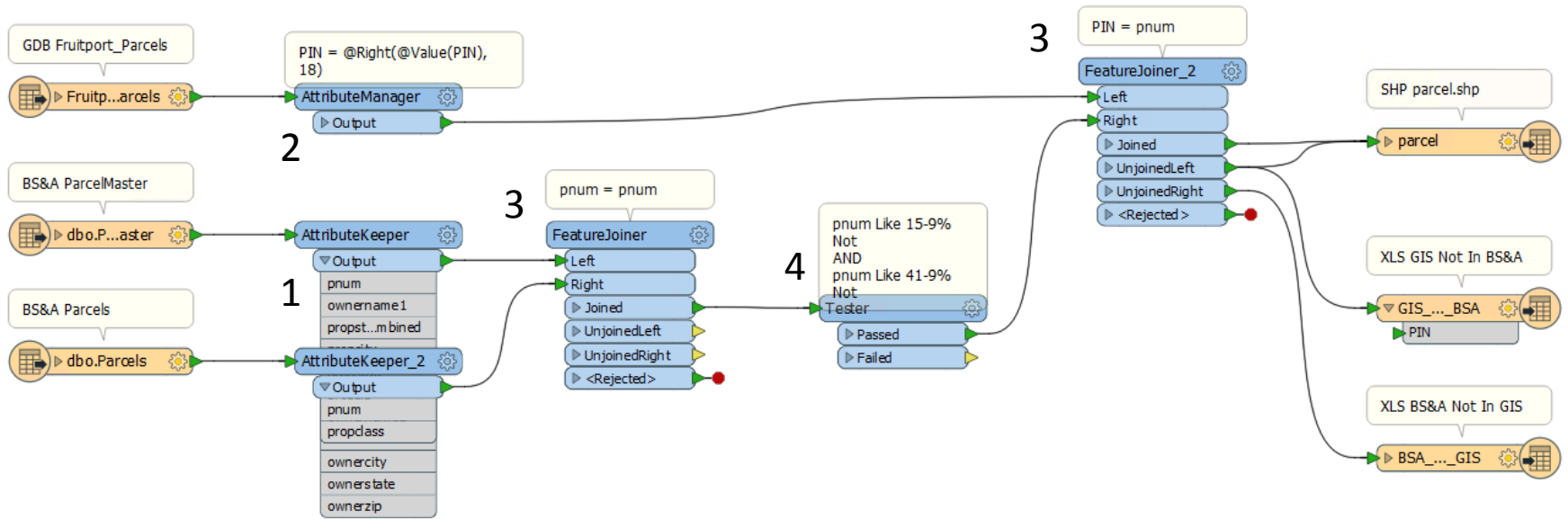
## FME Desktop Workspace





# Using FME – Brooks E. Kelley Demonstration

## FME Desktop Workspace - Detail



Demonstration showed how to connect to BS&A Assessing databases, pulling data from the Parcels and ParcelMaster tables, and join data to parcel polygons that were housed in a Esri File Geodatabase. Transformers (in blue) 1) reduced the number of attributes being used, 2) alter attributes, 3) join data and 4) filter data. An excel spreadsheet with two worksheets listing unmatched records is also created.

# Using FME – Brooks E. Kelley Demonstration

## FME Desktop Workspace - Detail

The screenshot displays the FME Desktop interface with a workspace titled 'MULTI - M'. The workspace is a complex flowchart of transformers. On the left, the 'Navigator' pane shows the project structure, including 'GDB IMAGIN\_2018\_FME\_Data.gdb', 'SQL TCLTPBEK002\_SQLXPRESS [MSSQL\_ADO]', 'SHP Parcel [ESRISHAPE]', 'XLS Mismatch [XLSXW]', 'Transformers (6)', 'Bookmarks', 'User Parameters (21)', 'Published Parameters (4)', 'Private Parameters', and 'FME Server Parameters (17)'. The 'Parameter Editor' pane is open, showing 'Workspace Parameters' with fields for Name and Category, and a Description field. The main workspace area shows a flow starting with 'GDB Frutport\_Parcel' (6,304 records) and 'BS&A ParcelMaster' (7,221 records) feeding into 'AttributeManager' and 'AttributeKeeper' transformers. These feed into 'FeatureJoiner' and 'FeatureJoiner\_2' transformers. A 'Tester' transformer is also present, with a note: 'pnum Like 15-9% Not AND pnum Like 41-9% Not'. The 'Tester' has 658 records in the 'Failed' output. The 'FeatureJoiner\_2' transformer has 6,563 records in the 'Rejected' output. The final outputs are 'SHP parcel.shp' (6,304 records), 'GIS\_...\_BSA' (310 records), and 'BSA\_...\_GIS' (310 records). The 'Translation Log' at the bottom shows 0 errors and 13 warnings. The log text includes: 'Feature caches have been recorded at every stage of the translation. To inspect the recorded features, click the feature cache icons next to the ports.' and 'Translation was SUCCESSFUL with 9 warning(s) (2 feature(s) output)'. The session duration is 39.7 seconds, with CPU usage of 30.5s user and 3.6s system. The process ID is 11420, and peak process memory usage is 957716 kB.

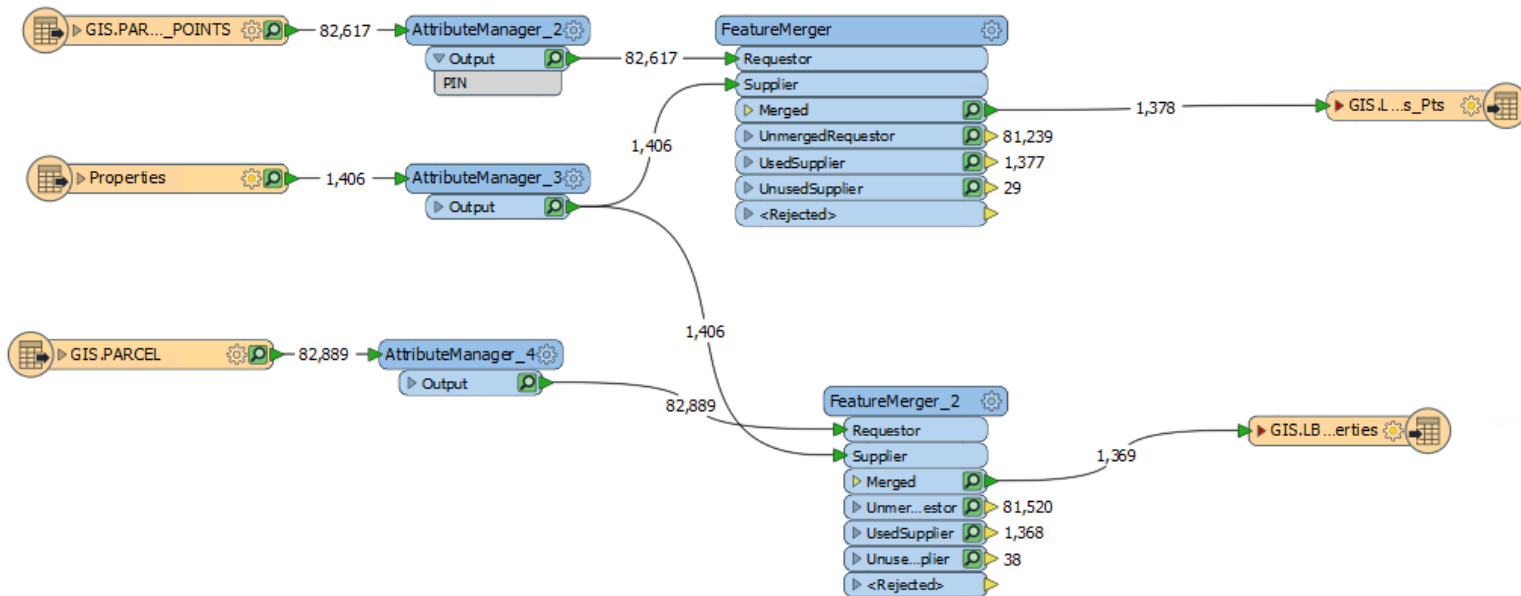
After the workspace is built and run, each process can be verified for data inputs and outputs by viewing the features reported on each leg of the process e.g. there are 310 records in BS&A not in GIS (these are written to the Excel spreadsheet – lower right).

# Using FME – Thomas Van Bruggen Demonstration

## FME Desktop Workspace - Detail

### Land\_Bank\_Update\_to\_SDE

This workspace pulls the Parcel polygon's and parcel points from SCGDB002/MCGIS\_DATA/BASEMAP, combines them with data from the access database scgfp019/EqualBackup/Names Updates/landbank.mdb and places new features classes into the scgdb010/MCE/Land\_Bank feature dataset as LB\_Properties and LB\_Properties\_Pts

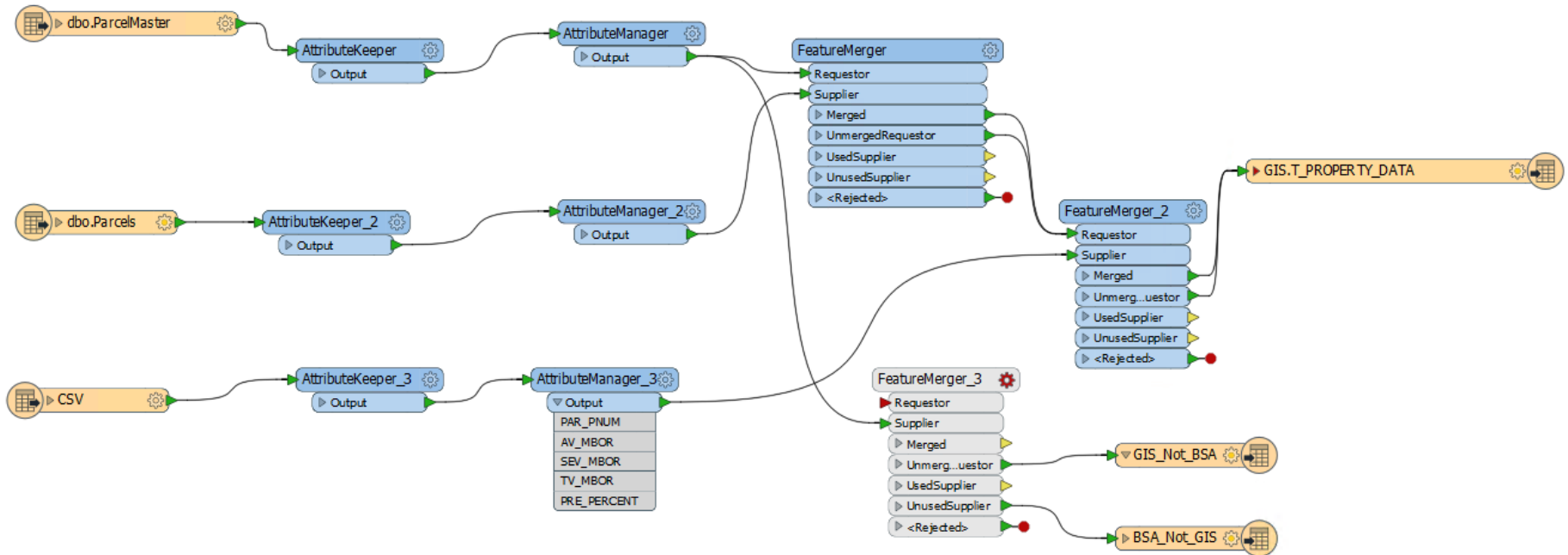


Demonstration and walk through of process to extract data from an Access database and join the data with parcel polygons and parcel points in SDE to create two new feature classes. It was noted that before FME this process was in three separate parts that process for about 29 minutes. After FME, it is one single process that runs in about 2 to 3 minutes.



# Using FME – Thomas Van Bruggen Demonstration

## FME Desktop Workspace - Detail



Demonstration and walk through of process to extract data from BS&A Assessing, select out the desired attributes, process those attributes, and export them into an SDE table. Additionally, unmatched records between BS&A and the parcel data are exported to an Excel table. This process before FME was 4 separate processes that took about 2-1/2 hours to run in total. After FME, this process in one task that takes approximately 12 to 13 minutes to run.

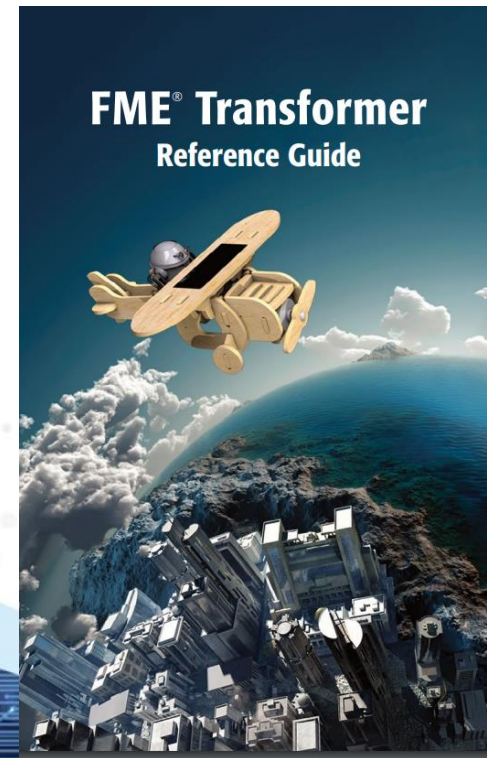
# Using FME – Resources and Help Files

FME / Safe Software Website - <https://www.safe.com/>

FME Transformer Guide - <https://cdn.safe.com/resources/fme/FME-Transformer-Reference-Guide.pdf>

FME support and training - <https://www.safe.com/webinars/>

FME YouTube Channel - <https://www.youtube.com/user/FMEchannel>



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