



WORLD TOUR
2019

Level 2: FME 2019 Scenarios

FME Desktop



AGENDA

Help the FME Lizard find a new office!

- Mission 1:
 - Find how many FME Users are in each city
- Mission 2:
 - Find which city is warm and dry
- Mission 3:
 - Find which city has the most vegetation
- Mission 4:
 - Find Zipster
- Choose the office Demo
- FME Highlights

START

The FME Lizard is on the Move!

But where should its next office be?

FME to the Rescue!

Let's build a workspace to help the FME Lizard find a new office. (Caveat: the FME Lizard is picky and has very specific needs.)



FME Lizard's New Office: Location Selection Criteria

1. FME Lizard likes FME users and wants them nearby.
2. Warm and dry.
3. Fresh supply of vegetation.
4. FME Zipster sightings.





May the best city win

- Generate index ranking all FME World Tour cities.
- You can game the system by assigning a weight to the indexes.
- Vote at fme.ly/wtvote now!

Index 0-1 for each World Tour city

Weight each index 0-100%, must add up to 100%

You vote on these! Try to improve your city's ranking by increasing the weight for criteria that fit your city.

FME users

*

Weight

=

Weighted

+

Warm and dry

*

Weight

=

Weighted

+

Vegetation

*

Weight

=

Weighted

+

Zipster sightings

*

Weight

=

Weighted

=

Final index

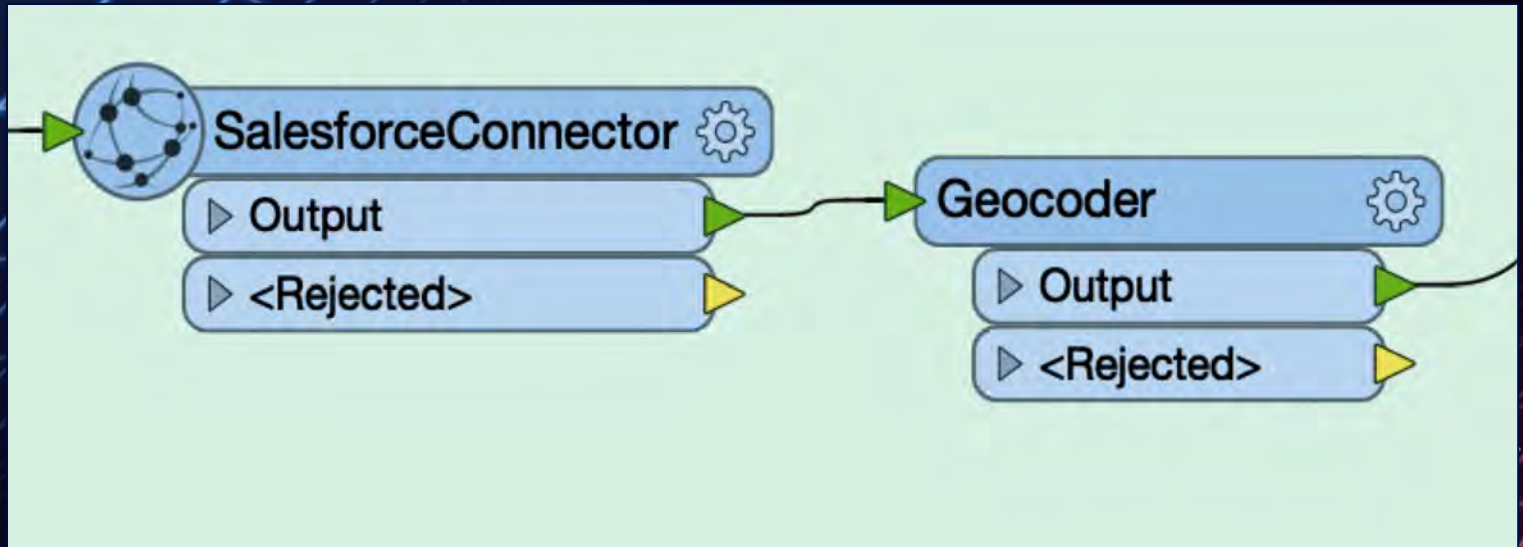


WT City	Ranking	Change
Vancouver	1	+3
Bonn	2	+1
...

Mission 1

How many FME Users are in each city?





A map of North America showing the United States and Canada. Numerous blue circular markers are scattered across the landmass. A white popup window is open over Vancouver, Canada, displaying metadata for a specific location. On the left side of the map, there are three vertical buttons: a plus sign for zooming in, a minus sign for zooming out, and a button with the number '3' representing the current zoom level.

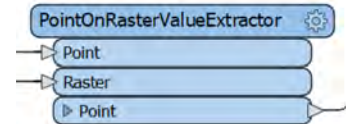
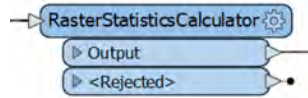
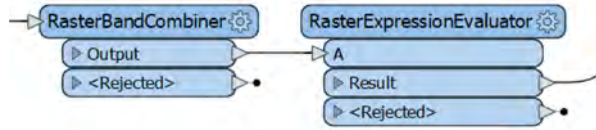
City: Vancouver
Country: Canada
Date: June 12, 2019
Host: Safe Software
Population: 600000
Users: 1026
PercentageOfFMERs: 0.17099999999999999
id: Cities10

Mission 2

Which city is warm and dry?



Fick, S. E., & Hijmans, R. J. (2017). WorldClim 2: new 1-km spatial resolution climate surfaces for global land areas. *International Journal of Climatology*, 37(12), 4302-4315.



average =



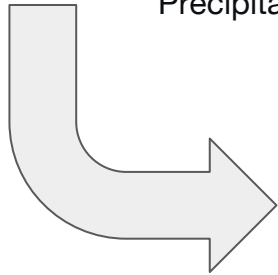
Annual average for each city



Precipitation raster



Temperature raster



Warm and dry index

Lizard_Habitat [CSV2] - CSV Columns...

	City	Country	Date	Host	Population	precip_norm	temp_norm	Habitat Index
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

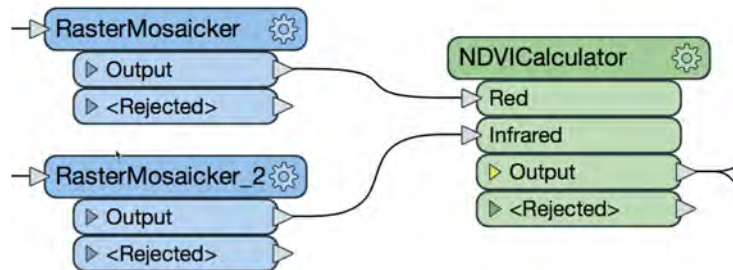
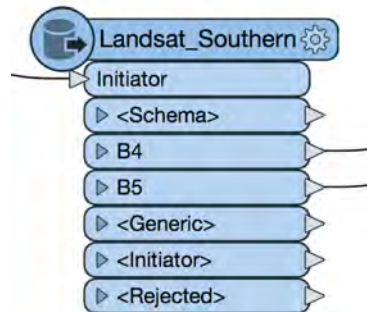
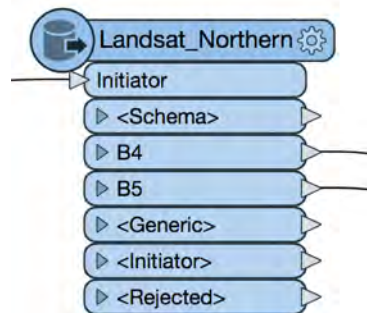
Q in any column 75 row(s)

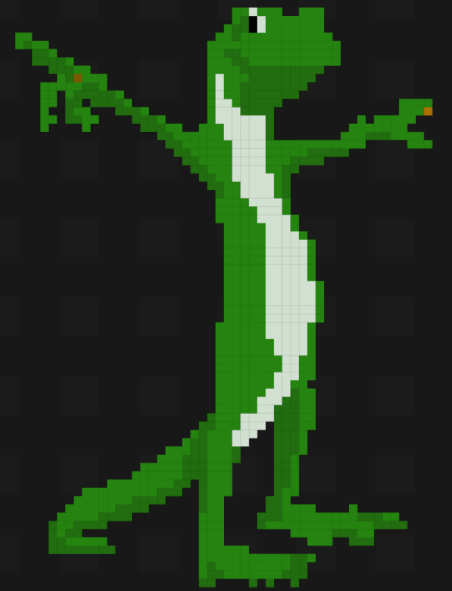


Mission 3

What city has lots of
vegetation?

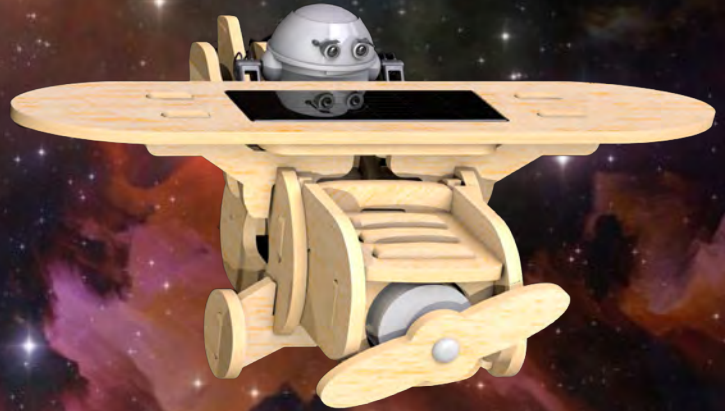


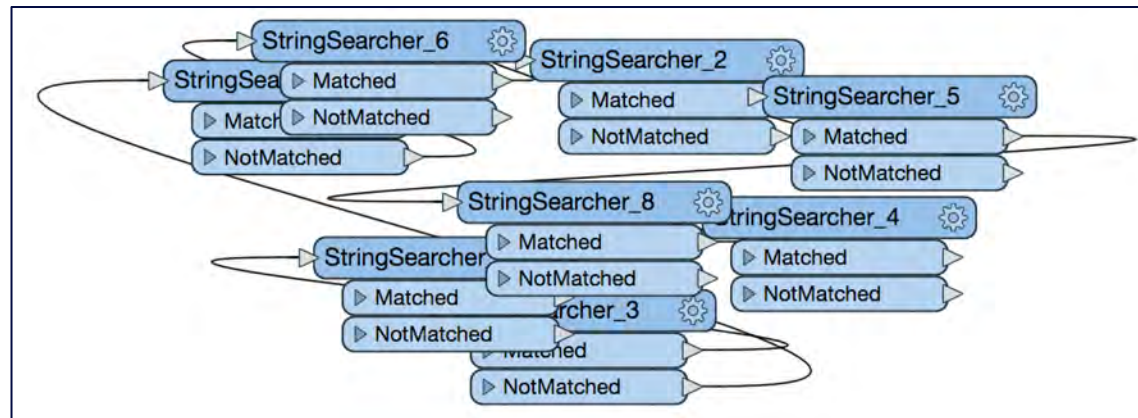
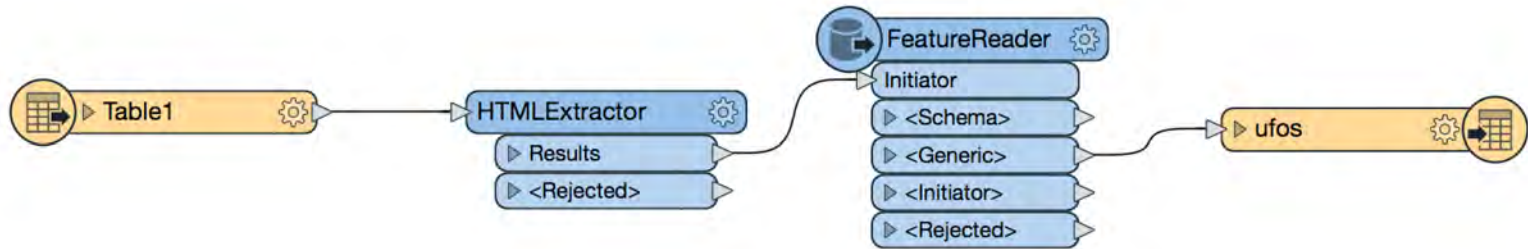




Mission 4

Where is Zipster?







DESKTOP 2019

Checkpoint

Over to  Workbench



FASTER-EASIER-DARKER





Demo Recap

- Integrated multiple sources
- Transformation tips and tricks:
 - Feature Caching and Partial Runs
 - Visual Preview
 - Bookmarks and Annotations
 - Database and Web Connections
 - FeatureReader and FeatureWriter
- Displayed data in a friendly way

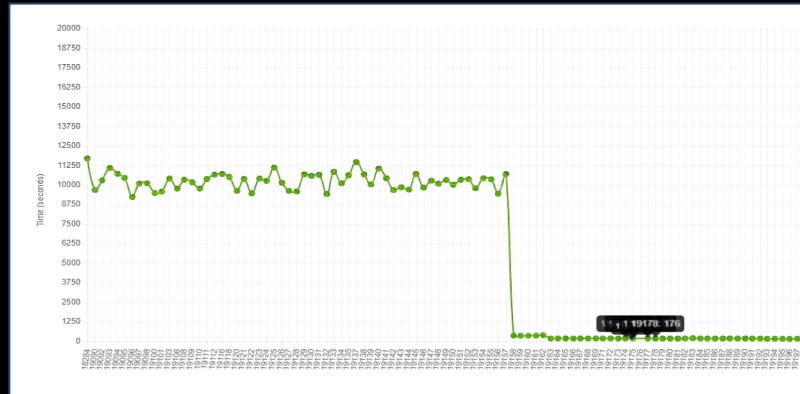


FME 2019 Highlights

Performance

“EVERY FME RELEASE WILL BE **FASTER THAN THE PREVIOUS** OR WE WON’T SHIP IT!”

Dale Lutz / Don Murray
2018+





FME 2019: The Interface

Dark Mode

The screenshot displays a GIS application interface in dark mode. At the top, a **FeatureTypeFilter** widget is visible, containing a list of filter options: **MONI...IONS**, **CCMRIVERS**, **<Blank>**, and **<Unfiltered>**. Below this, the **Visual Preview (beta)** section shows a **Table** with the following data:

	TNODE_	LENGTH	RIVERS_LIN	RIVERS_L_1	SHAPE_LEN	GID
1	36755	382.843	36668	1	382.84	0
2	36809	241.421	36669	2	241.419	0
3	36737	582.843	36678	3	582.841	0
4	36756	1365.68	36679	2	1365.68	0
5	36820	941.421	36680	2	941.421	0
6	36776	624.264	36681	2	624.263	0
7	36821	2389.95	36682	4	2389.95	0
8	36818	100	36690	2	100.003	0
9	36831	200	36691	1	199.998	0
10	36690	1521.27	36692	2	1521.27	0

Below the table, a search bar contains the text "in any column" and indicates "46584 row(s)". To the right, the **Graphics** panel shows a map of the region around Milan, Italy, with a red shaded area and numerous black dots representing filtered features. The map includes labels for "FRANCE", "MILANO", "MASSANDRIA", and "AVEYRON". Attribution text at the bottom of the map reads "Map Data by Stamen Design CC BY 3.0 OpenStreetMap". The graphics panel also includes a toolbar with icons for 2D, 3D, Slideshow, Orbit, Select, Pan, Zoom In, Zoom Out, and Zoom Selected. At the bottom of the graphics panel, the coordinates are displayed as "X: -14.1637 Y: 45.5529 _LL-WGS84_0" and the unit is "DEGREE".



Visual Preview

The screenshot displays a QGIS processing toolchain workflow. The main canvas shows the following steps:

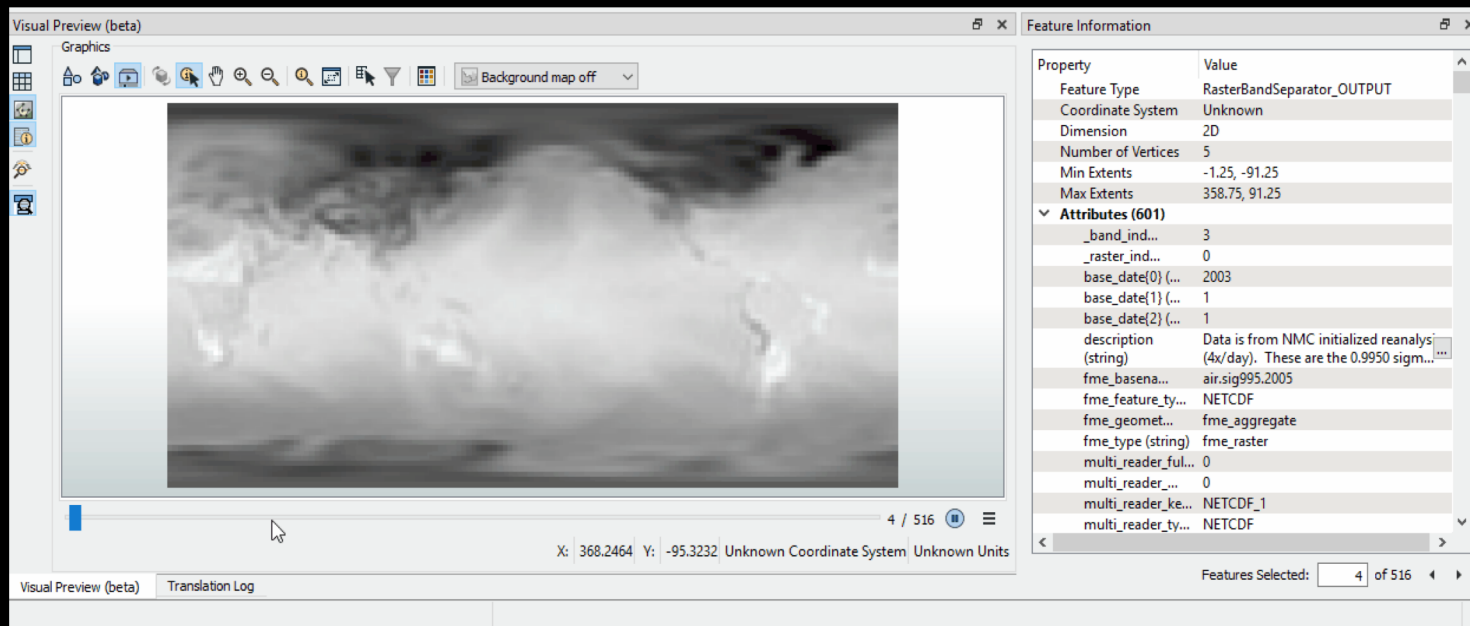
- Streets** (Source) outputs 3,735 features to the **FeatureJoiner**.
- Snowfall** (Source) outputs 3,994 features to the **FeatureJoiner**.
- FeatureJoiner** has four outputs: **Left** (3,735), **Right** (3,735), **Joined** (3,735), and **UnjoinedLeft** (260).
- Bufferer** takes the **Left** output and produces **Buffered** (3,710) and **<Rejected>** (25).
- StatisticsCalculator** takes the **Joined** output and produces **Summary** (1), **Complete** (3,735), and **Cumulative** (3,735).
- Extruder** takes the **Buffered** output and produces **Extruded** (3,710) and **<Rejected>**.

The bottom panel, titled "Visual Preview", contains the following instructions:

To view data:

- Run with caching enabled and select a node
- Click to view source data
- Drag-n-drop files here

Animate Mode



Visual Preview (beta) Graphics

Background map off

4 / 516

X: 368.2464 Y: -95.3232 Unknown Coordinate System Unknown Units

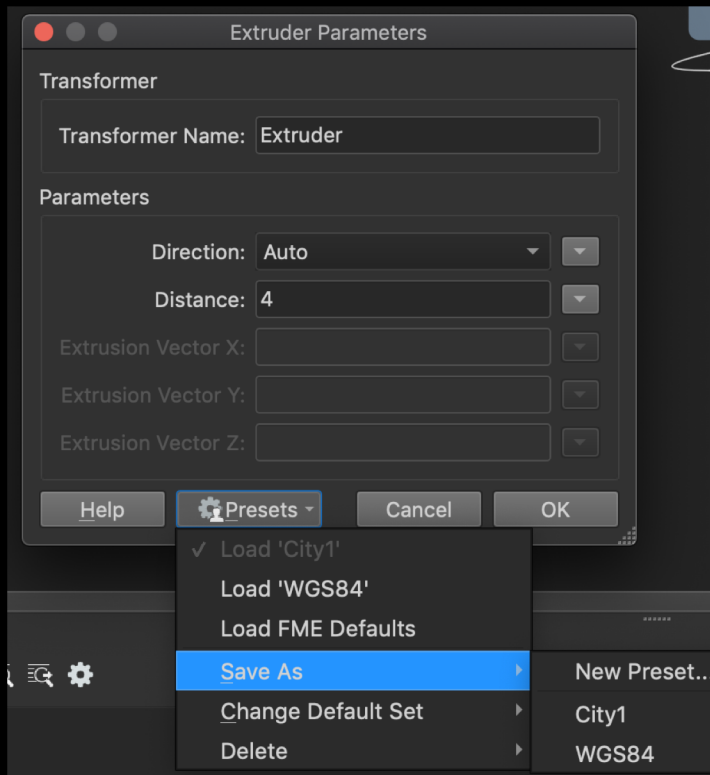
Visual Preview (beta) Translation Log

Feature Information

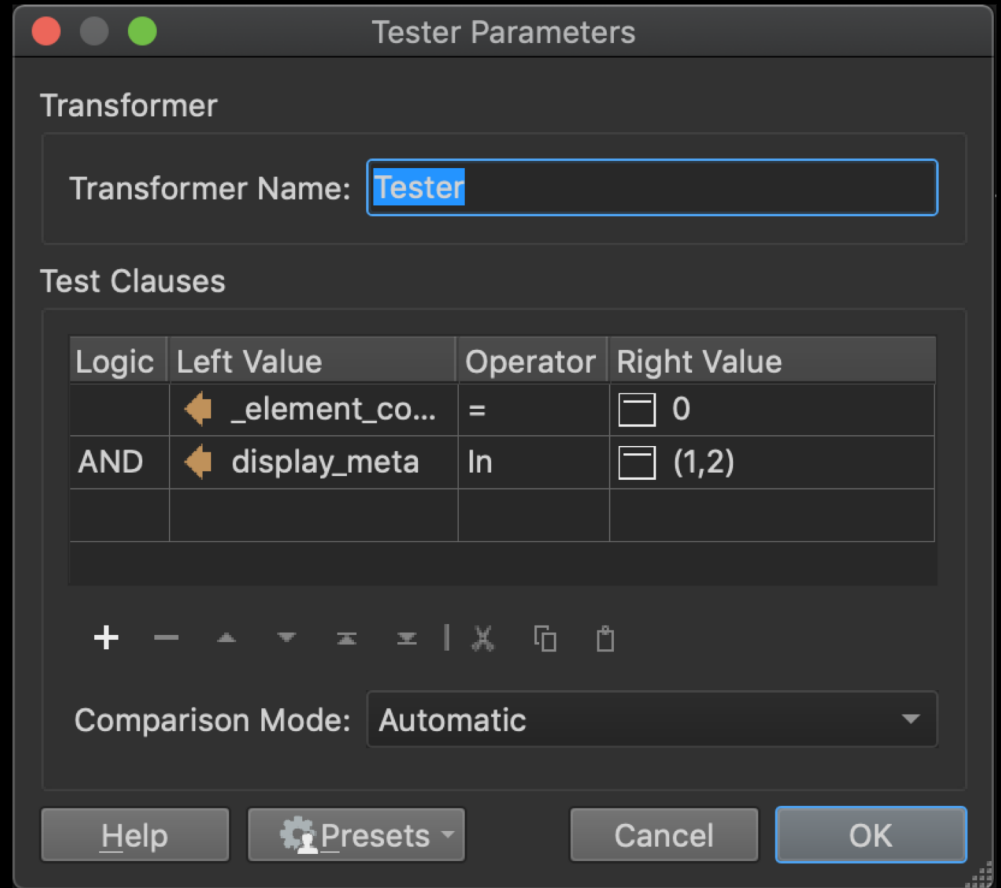
Property	Value
Feature Type	RasterBandSeparator_OUTPUT
Coordinate System	Unknown
Dimension	2D
Number of Vertices	5
Min Extents	-1.25, -91.25
Max Extents	358.75, 91.25
▼ Attributes (601)	
_band_ind...	3
_raster_ind...	0
base_date(0) (...	2003
base_date(1) (...	1
base_date(2) (...	1
description (string)	Data is from NMC initialized reanalysis (4x/day). These are the 0.9950 sigm...
fme_basena...	air.sig995.2005
fme_feature_ty...	NETCDF
fme_geomet...	fme_aggregate
fme_type (string)	fme_raster
multi_reader_ful...	0
multi_reader_...	0
multi_reader_ke...	NETCDF_1
multi_reader_ty...	NETCDF

Features Selected: 4 of 516

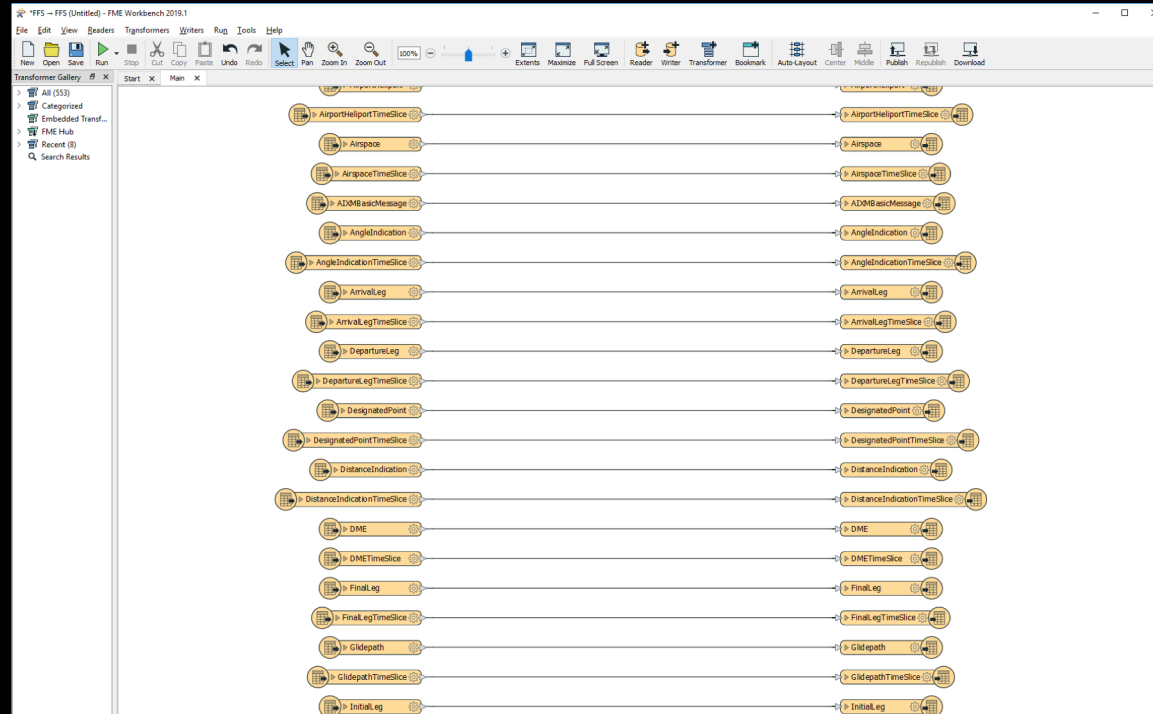
Save Parameter Presets



Tester transformer

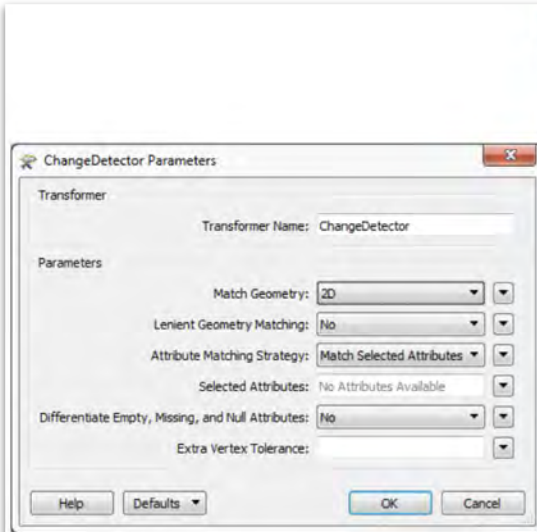


Auto-sized Transformers & Feature Types

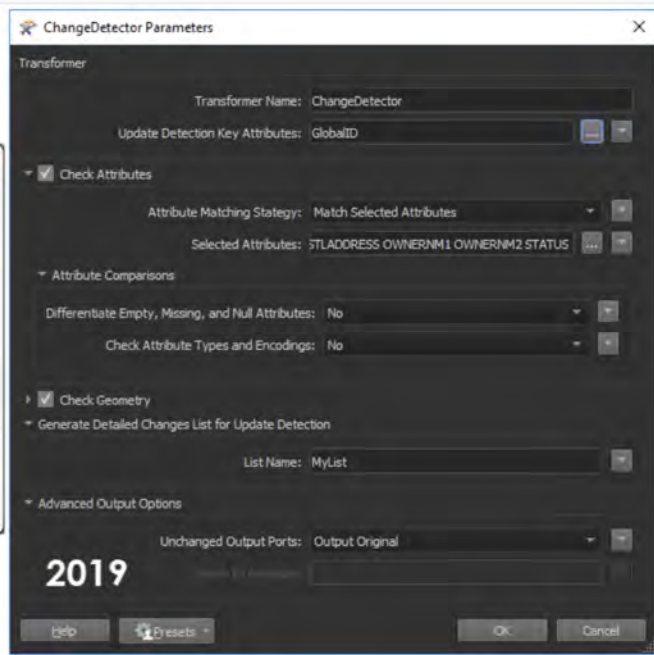


New in 2019

ChangeDetector



2018



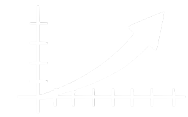
2019



Decompression



DGN Mesh Reading



TopoJSON

DWML (R)

Socrata
(New API)

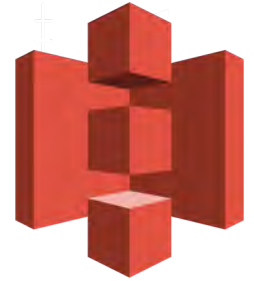
OGC WGS (R)

Garmin POI
Binary (R)

FME AR (R)

New Connectors

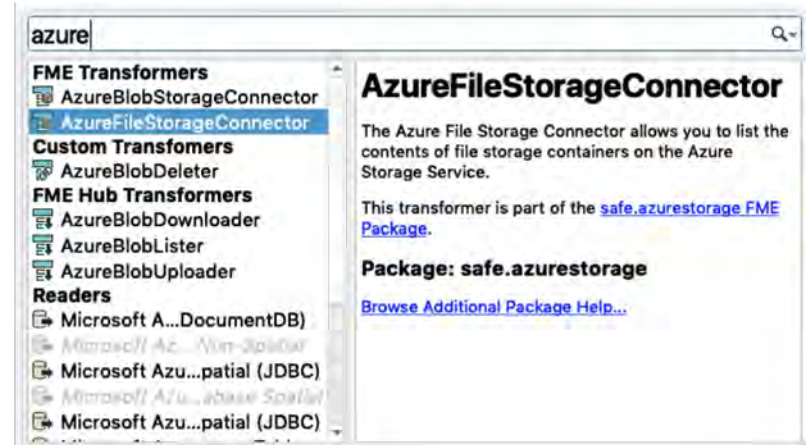
- AzureBlobStorageConnector
- AzureFileStorageConnector
- CesiumIonConnector
- CityworksConnector
- GoogleCloudStorageConnector
- S3Connector
- AzureQueueStorageConnector (*coming soon*)
- KafkaConnector (*coming soon*)
- TrelloConnector (*coming soon*)



FME Packages

Delivering transformers, reader/writers, and connections to you *faster*.

- Zipped *.fpkg* files available via [FME Hub](#).
- Get fixes and new features into your hands within hours, not months.
- Developers can contribute their own content to FME.
- Currently released as FME Packages:
 - S3Connector
 - CesiumIonConnector
 - RasterObjectDetector series
 - NLP series



THE END



Questions?

Now let's take a look at FME Server...