

# *FME and Deegree Data Transformation and OGC Services*



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**Ken Bragg**  
FME Server Product Manager



FME

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Desktop



Server

# Who we are...

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- Private company (1993)
- Vancouver, BC, Canada
- 100+ employees
- 50 value-added resellers and system integrators
- 80+ FME Certified Professionals and Trainers around the globe
- 7500+ users in 116 countries

What we do...

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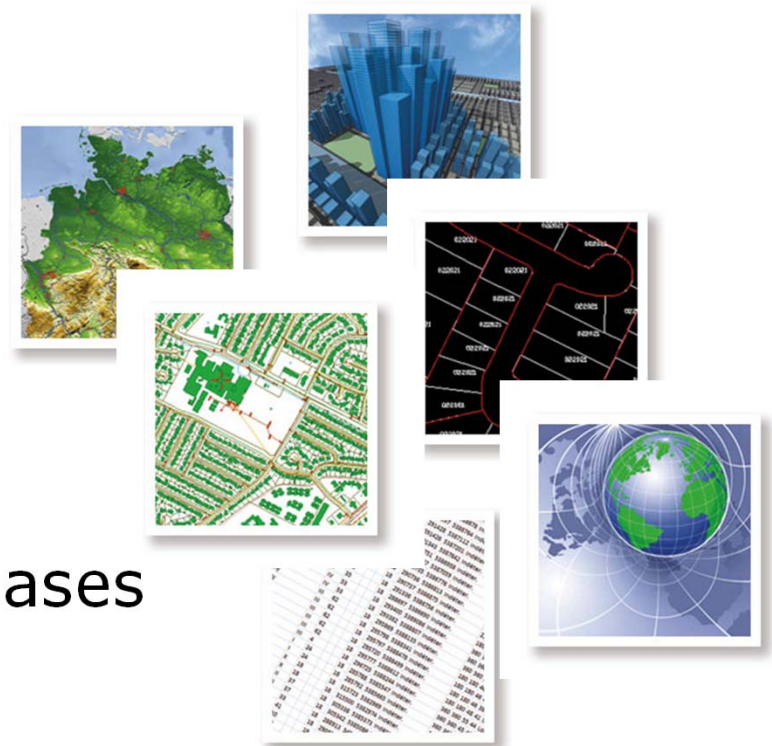


## ***Achieve total spatial data mastery***

- *Transform spatial and non-spatial data to use and share*
- *Solve more data interoperability headaches more easily with FME*



- Use and share data in more than 250 spatial and non-spatial formats
  - CAD
  - BIM & 3D
  - Raster
  - Vector
  - GeoWeb & Web
  - Statistics
  - Corporate & Spatial Databases



# It is all about Transformation

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- Access data precisely the way you need it
- Graphical authoring environment

Features Read Summary

Feature Type	Count
LOTPOLY	40
ROADS	2661
<b>Total Features Read</b>	<b>2701</b>



- Supporting, Using and Contributing to FOSS development:

- GDAL(OGR)



- GEOS



- CS-Map (now MetaCRS)

- libLAS





Bridging the gap:

FOSS formats supported by FME:





## Bridging the gap: Supporting Open Standards





FME is a perfect fit for Inspire related ETL challenges:

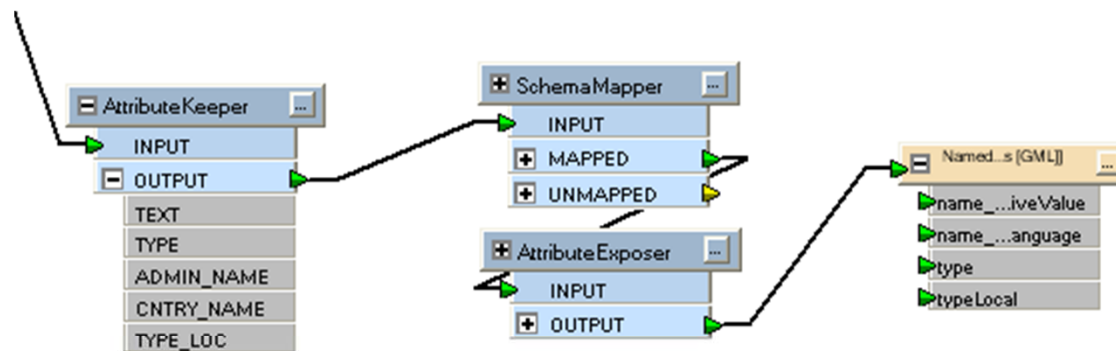
- Format translation (supporting all flavours of GML)
- Schema Mapping

# SchemaMapper Restructuring Rules: INSPIRE geographic names

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- Multiple rules at once
- Can map both object names and values – INSPIRE geographic names example:
  - TYPE\_LOC => typeLocal
  - If CNTRY\_NAME = Austria, name.GeographicalName\_language = German
- Easily maintained by domain experts in spreadsheet
- Can be applied to whole dataset or only to certain feature types



	A	B	C
1	Source	INSPIRE	
2	TEXT	name_GeographicalName_nativeValue	
3	TYPE	type	
4	TYPE_LOC	typeLocal	
5			

Schema.Fieldnames / Schema.Domains

***Name mapping***

	A	B	C	D
1	SourceFieldname	INSPIREfieldname	Country	Language
2	CNTRY_NAME	name_GeographicalName_language	Italy	Italian
3	CNTRY_NAME	name_GeographicalName_language	Austria	German
4	CNTRY_NAME	name_GeographicalName_language	Croatia	Croatian
5				

Schema.Domains

***Name & value mapping***

# FME and Deegree

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deegree



## Bridging the Gap

- **FME & Deegree CSW**  
Publish, Discover and Download Data
- **FME & Deegree WPS**  
Providing Transformation Processes for WPS

# Publishing to CSW

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The screenshot shows the FME Server web interface. At the top left is the FME Server logo. A navigation menu on the left includes links for Help, Home, fmejobsubmitter, and Demos. The main content area is titled 'Workspace - D010-PublishData.fmw (Job Submitter)' and shows a description of 'Unset'. Below this, it instructs to 'Run workspace with the following parameters'. There is a checkbox for 'Email results to:' followed by an empty text field. An 'Upload Files' section contains an 'Upload File:' label, a 'Choose File' button, the text 'No file chosen', and a 'Remove' button. Below this is an 'Upload Files' button. A table lists various parameters and their values:

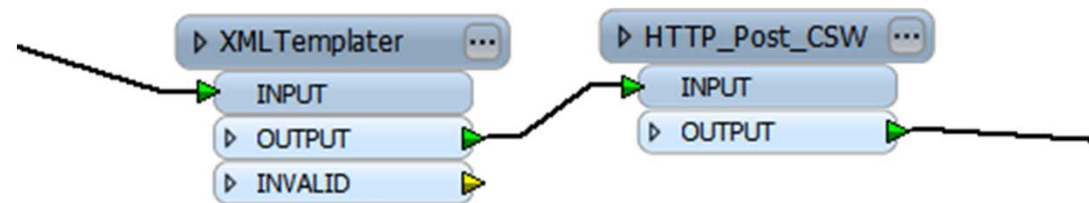
Parameter Prompt	Value
Source Dataset:	C:/apps/FMEserver/Server/SampleData/austin/environe <input type="button" value="Choose Uploaded Files"/>
Publisher:	Safe Software
Email Address:	unknown@someplace.com
Phone Number:	604 501-9985
Street:	Suite 2017 7445 132nd St
City:	Surrey
State or Province:	British Columbia
Country:	Canada
Postal Code:	V3W1J8
Abstract:	Quality or Purpose of Data is unknown use at your own r
Data Scale:	1:24,000
Purpose:	unknown
Coordinate System:	TX83-CF

At the bottom of the form are buttons for 'Show Console Command', 'Show Request', 'Reset Values', and 'Run'.



## ***FME Workspace:Key Transformers***

- ***XMLTemplater*** (takes template - replaces values)
- ***HTTPUploader*** (post a csw insert)



A Metadata template is used to provide metadata sections that are static. I.e. metadata that is required, but not dependent on information contained within the datasets themselves.

External metadata editors, available from 3rd-party vendors, greatly simplify the process of preparing the template files.

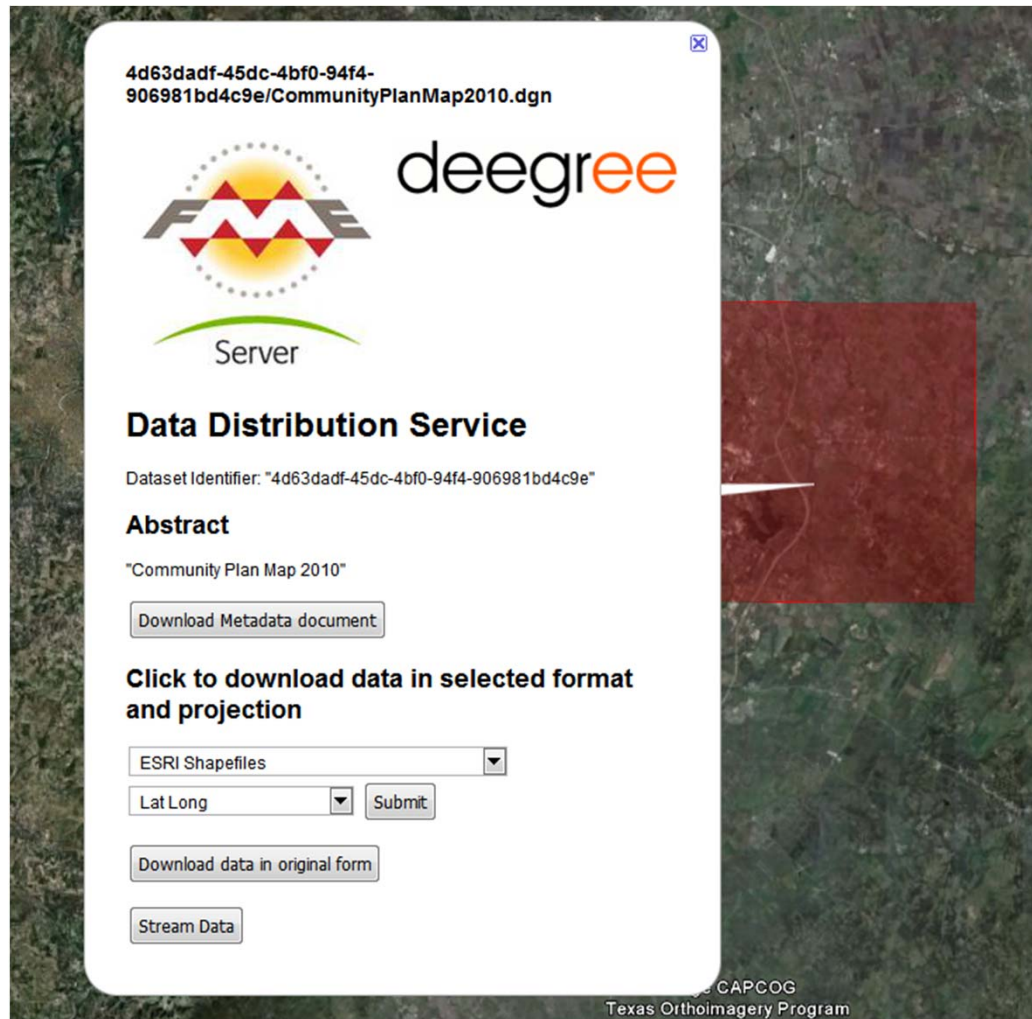
# Searching for Data?

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# Downloading – Meta Data and Data

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4d63dadf-45dc-4bf0-94f4-906981bd4c9e/CommunityPlanMap2010.dgn



Server

**deegree**

**Data Distribution Service**

Dataset Identifier: "4d63dadf-45dc-4bf0-94f4-906981bd4c9e"

**Abstract**

"Community Plan Map 2010"

[Download Metadata document](#)

**Click to download data in selected format and projection**

ESRI Shapefiles

Lat Long

[Download data in original form](#)

[Stream Data](#)

CAPCOG  
Texas Orthoimagery Program



deegree

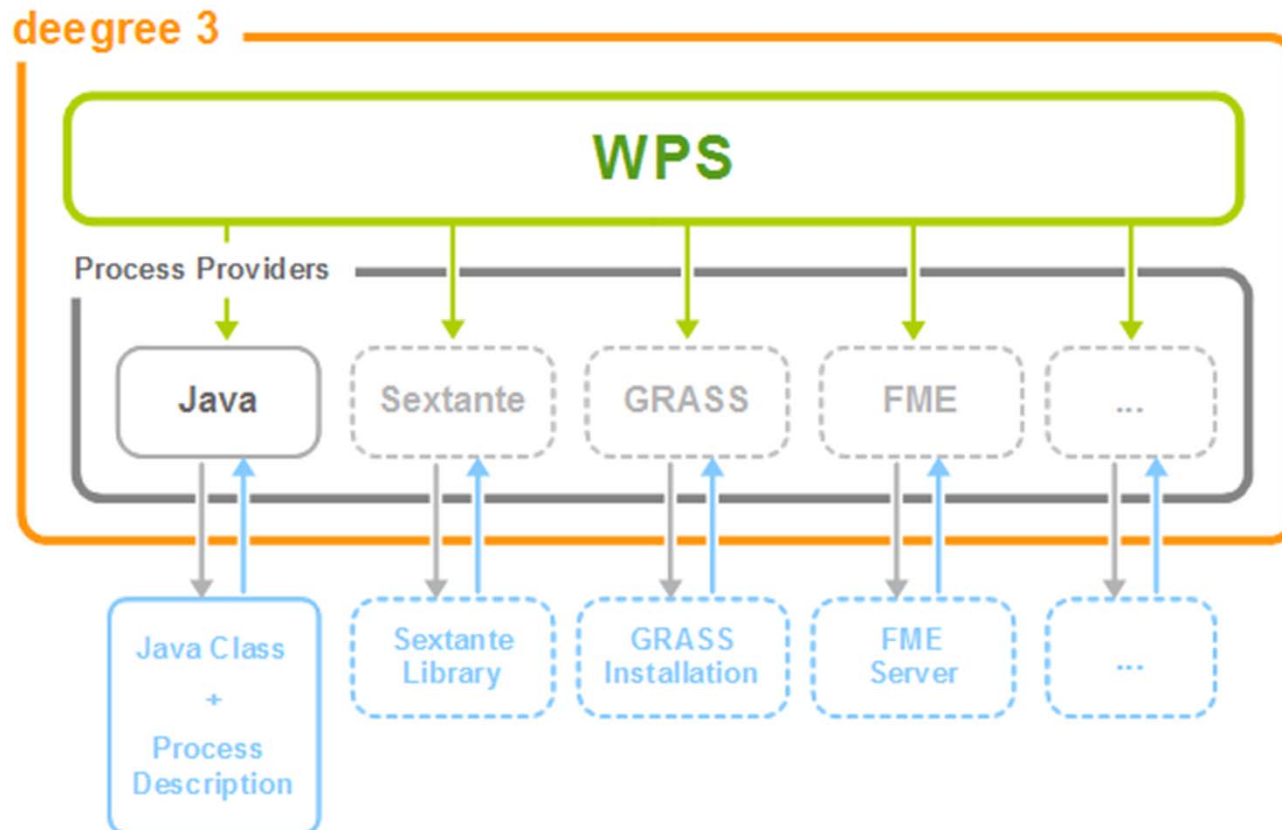
**Web Service**



**Processing**

# FME and Deegree WPS

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## In Development Now

### Challenges:

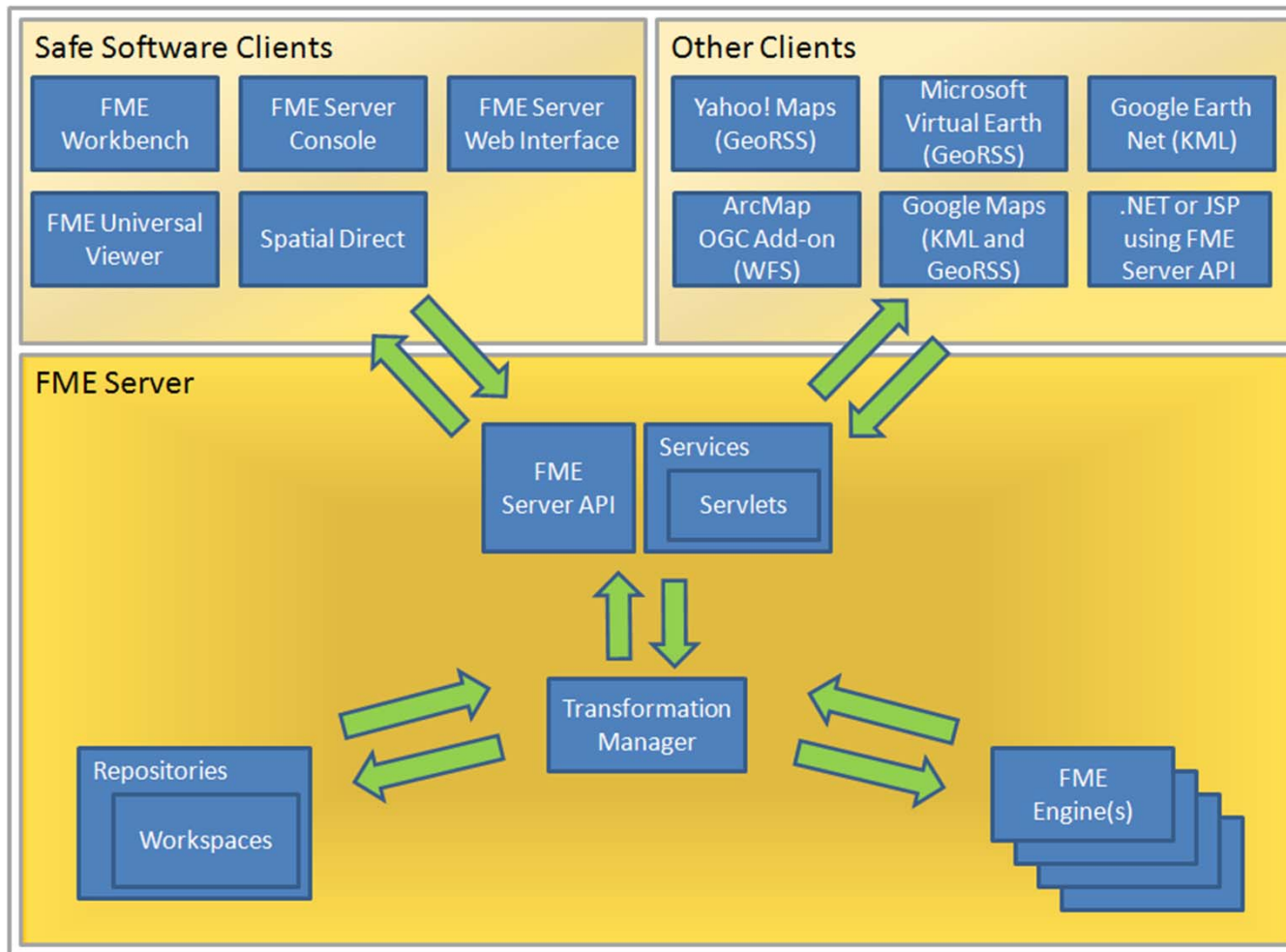
- Source Parameters and Data Types
- Destination Parameters and Data Types

### The Win

- Allow Deegree WPS access to full range of FME transformation capabilities

# FME and Deegree WPS

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- Website: [www.safe.com/fmeserver](http://www.safe.com/fmeserver)
  - Demos (movies including installer)
  - Case studies, Whitepapers
- fmePedia:
  - [http://fmepedia.com/index.php/Category:FME\\_Server](http://fmepedia.com/index.php/Category:FME_Server)
- Evaluate FME Server
  - Contact your local FME Partner



# User Central

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The Spatial ETL Experts

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FME User Central is an access point to technical resources for users of Safe Software's FME application. Be sure to bookmark this site to get direct access to all the information, tools and news you need to build your FME expertise.

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  - Training
  - Services
  - Support
  - AMC Information
  - Renew AMC

Columbus Link

Latest News & Bulletins

# Thank You!

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- Questions?
  
- For more information:
  - Ken Bragg (ken.bragg@safe.com)
  - Safe Software ([www.safe.com](http://www.safe.com))
  
  - FME User Central  
(<http://www.safe.com/fmeusercentral>)
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