

A map is not
“always” necessary,
but it helps! – The
use and application
of FME for dealing
with non-spatial
data

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Agenda |

- Dotted Eyes and Safe Software
- Examples of Dotted Eyes and FME Non-Spatial Use
- Data Validation Demonstration

Dotted Eyes

- GIS Consultancy – West Midlands (Bromsgrove)
- 22 years experience (est. 1989)
- Complete solution provider
 - Digital Data
 - Professional Services
 - Technical Support
 - Software Development (Application and Web)
 - Training
- Expertise in spatial data management
- Supply customers in NHS, Central & Local Government, Insurance, Financial, Telecoms and commercial

DOTTED EYES™
Simplify. Automate. Integrate.

Dotted Eyes Customers



LONDON



Registered house builder

MASSEY FERGUSON

exactrak



DOTTED EYES®

DOTTED EYES™
Simplify. Automate. Integrate.

Dotted Eyes & Safe Software |

Ben Allan
Managing Director



Jamie Justham
Chairman & Founder

Don Murray
President & Co-founder



Dale Lutz
Vice President & Co-founder

Working in Partnership since 1994

DIGITAL MAPPING SOLUTIONS

Home | Web Mapping | Spatial Data Loading | Digital Maps | MapInfo & FME Software | Training & Consultancy | Sectors

Deliver
Delivering Location Intelligence...

Dotted Eyes launch Contractor Portal

We are delighted to launch **Contractor Portal**, which simplifies for local government organisations the distribution of OS and other spatial datasets to contractors. Contractor Portal reduces the workload for local authorities by managing paperwork, processing datasets, distributing data cutouts and ensuring compliance to strict contractual terms.

The first customers include Liverpool Direct Ltd. Brian Jones, Geodata Team Manager, explains: "We anticipate considerable savings being generated by the avoidance of contact with contractors. The lighter touch minimises the amount of resource required from my team, freeing us up to do a lot more business critical, internally driven GIS work."

More news: Our new **factsheet library** offers a swift business overview to key GIS issues, such as interoperability and effective data sharing.

Case Studies

- Phone companies plan their networks. **MOBILE**
- High-street banks get customer insight. **FINANCE**
- Fire services assess risks in planning. **PUBLIC**

Latest news

[World Class Commissioning webinar for NHS Digital Mapping Agreement Members](#)

www.dottedeyes.com

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The Spatial ETL Experts

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Working with spatial data?

Safe Software can help you access and use it where, when and how you need to.

FME is the world's only complete spatial ETL solution that enables GIS Professionals to quickly translate, transform, integrate and distribute spatial data.

- Convert and integrate data in 225+ formats
- Manipulate data into the exact data model you need
- Share spatial data and ETL tasks over the web

Free FME Evaluation Download

Solve 10 Common Data Challenges with FME

- CAD to GIS data exchange
- Spatial database loading and migration
- Data model restructuring
- Spatial and non-spatial data integration

Access Data in 225+ Formats

Learn more

- Remove your data access roadblocks. Manipulate spatial data any way you want with FME.
- Read an overview of FME and how it can help you
- Visit our demo center to see FME in action
- Find out how FME works with key GIS and CAD applications

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Our Solutions

FME is at the centre
of our strategy to
'Unify the Spatial
Environment'



Data Load & Translation Solutions |

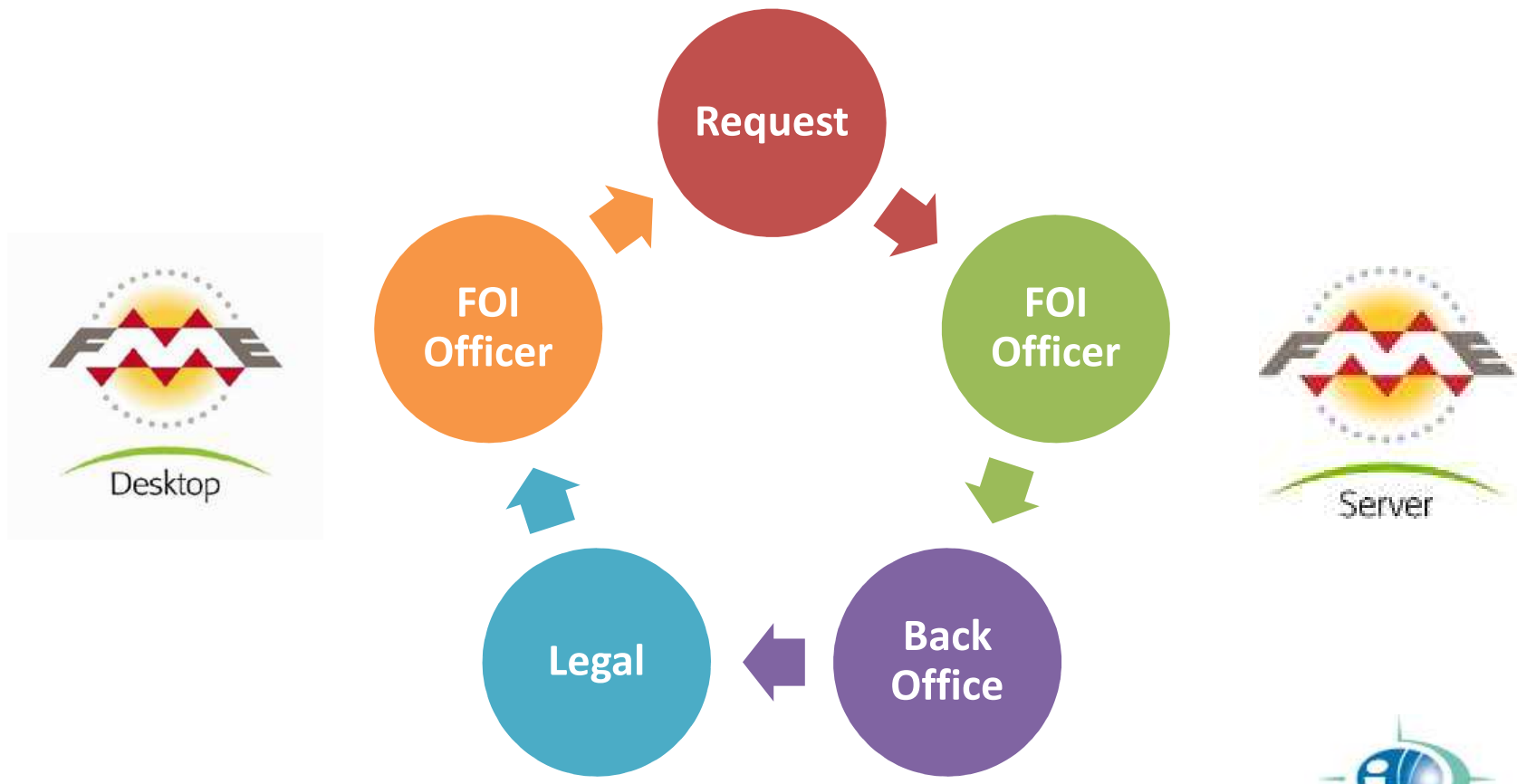


- Dotted Eyes building loading tools since 1995
- FME 'under the bonnet' of our translation solutions
- Over 200 customers of our 'pOSe software tools
- Management of OS data holding
- Self-load or utilise our Dotted Eyes bureau data services

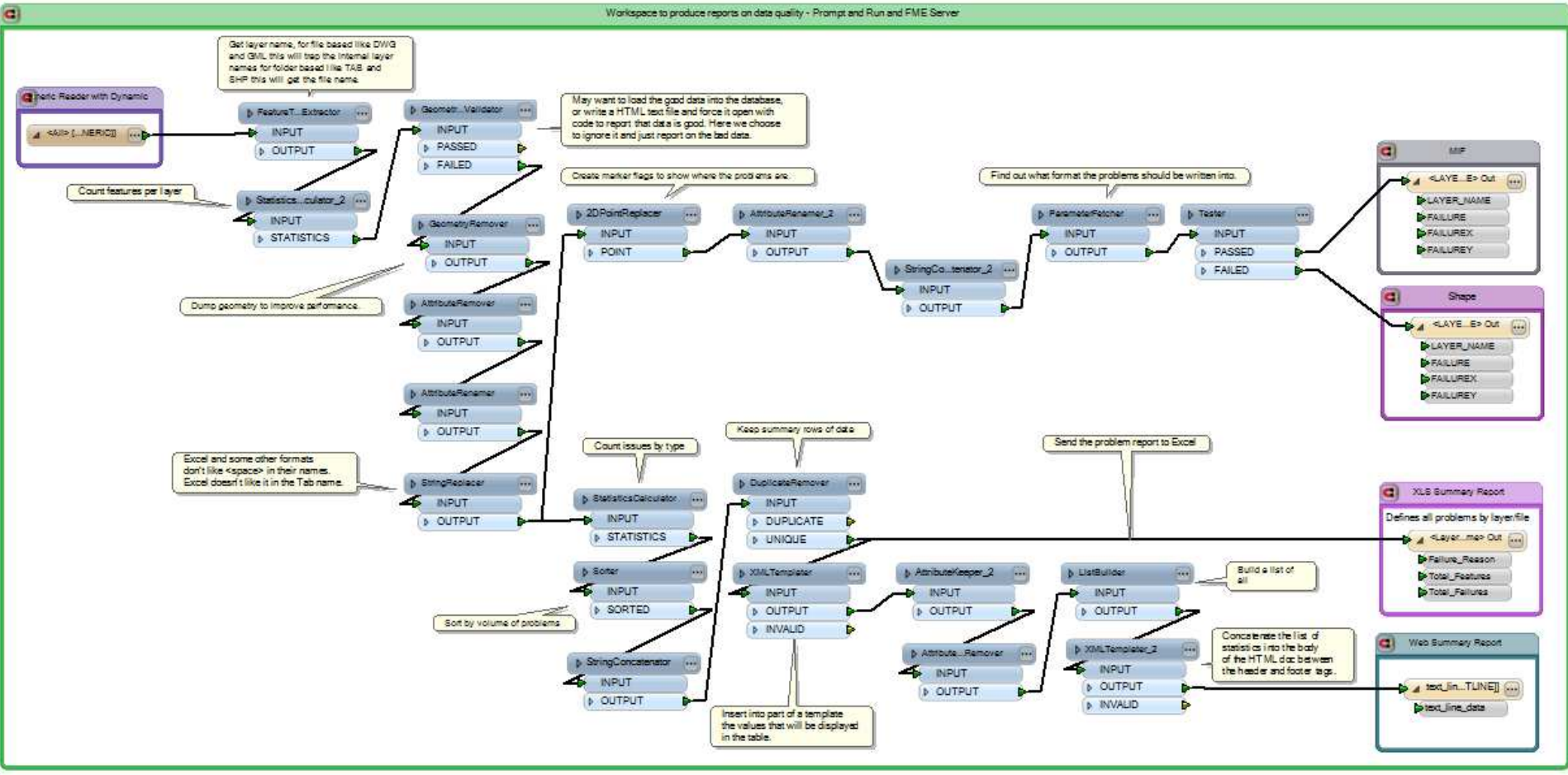
| Examples of Non-Spatial FME Use |

- Processing of Internal Time Sheets
- Migrating Data for CRM
- Inspire MetaCrawler
- LLPG Data Cleansing
- Data Validation
- Optimising Local Government Internal Processes

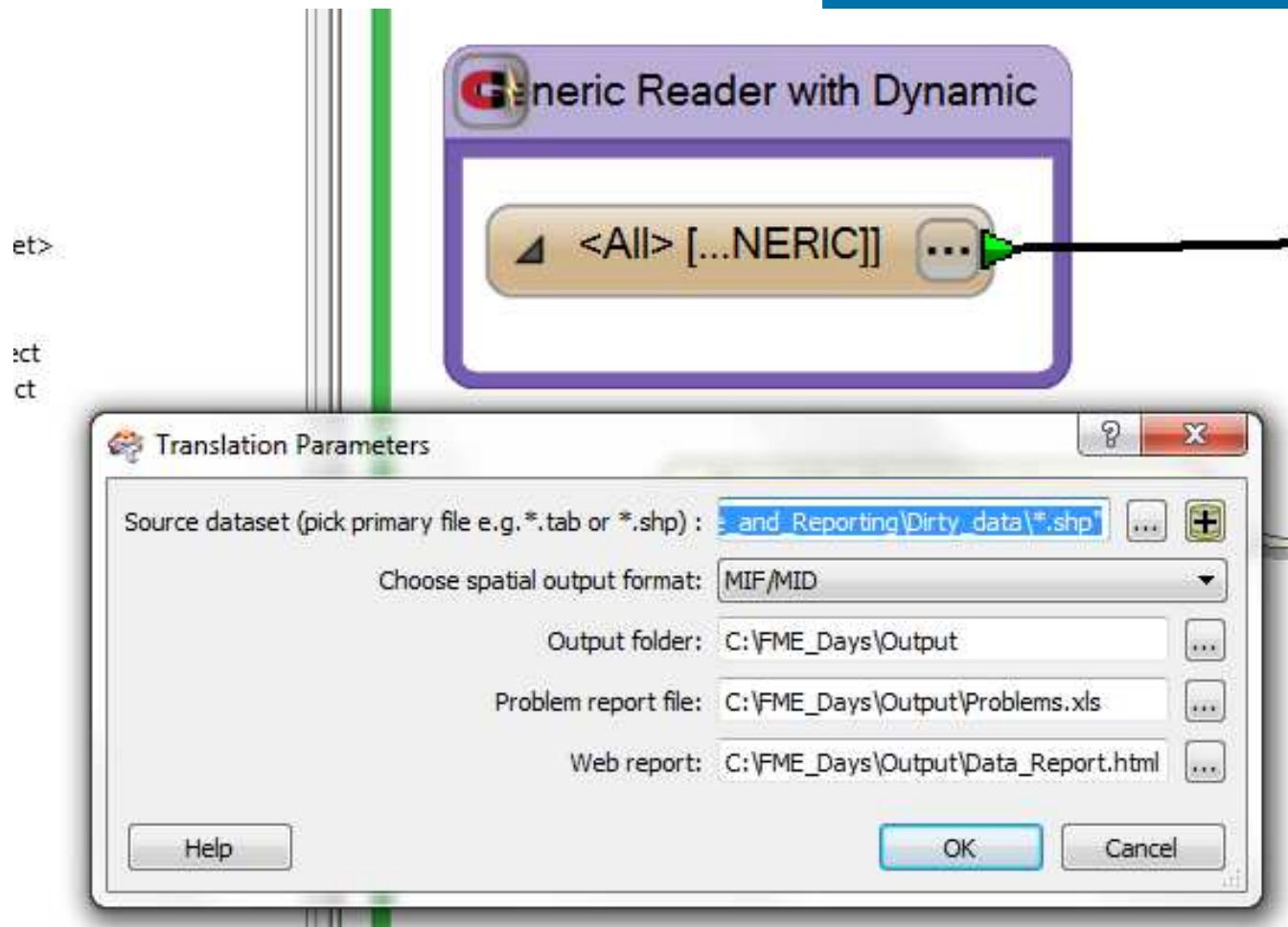
Typical Local Government Process



Demonstration – Data Validation



Source Data with Generic Reader



Total Features Per Layer Calculated

Get layer name, for file based like DWG and GML this will trap the internal layer names for folder based like TAB and SHP this will get the file name.

Transformer

Transformer Name:

Group By:

Parameters

Attribute To Analyze:

Pass Through Features:

Minimum Attribute (Optional):

Maximum Attribute (Optional):

Median Attribute (Optional):

Total Count Attribute (Optional):

Numeric Count Attribute (Optional):

Sum Attribute (Optional):

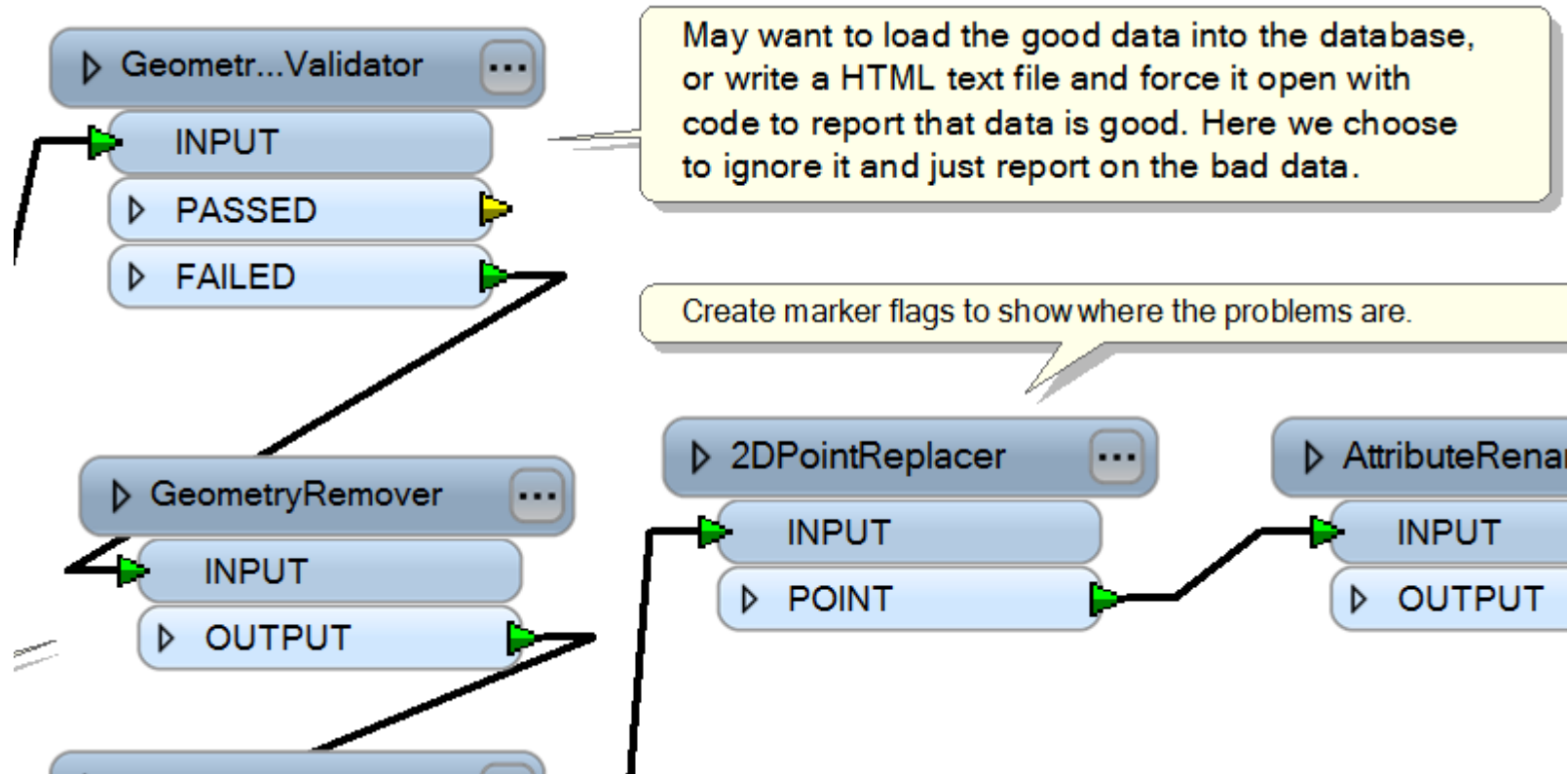
Range Attribute (Optional):

Mean Attribute (Optional):

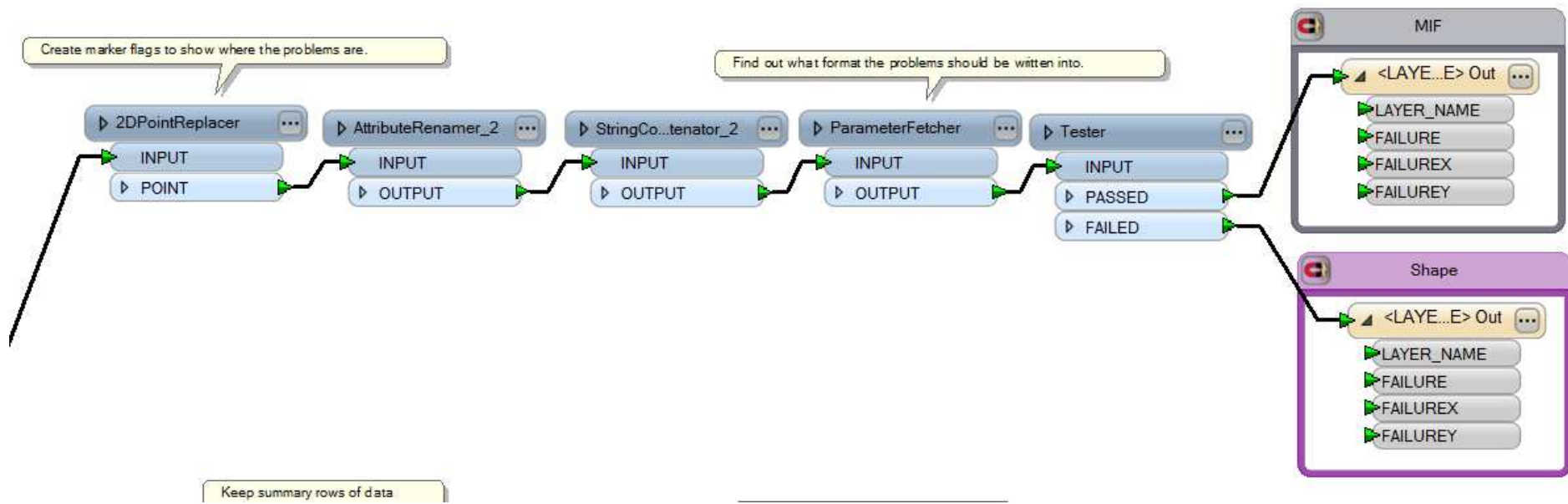
Standard Deviation Attribute (Optional):

Mode Attribute (Optional):

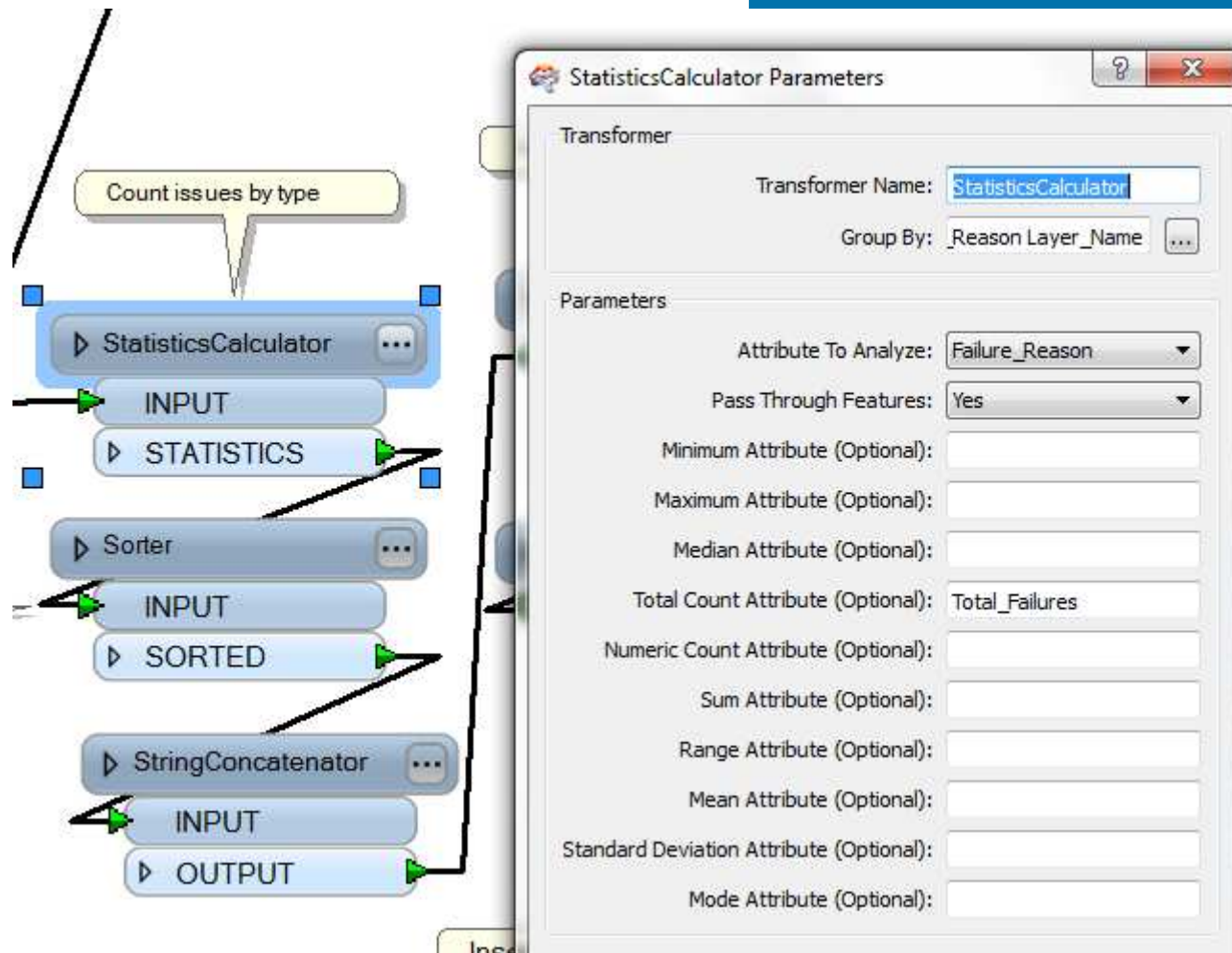
Geometry is Validated and Then Removed



Problems are Flagged and Written Out



Statistics on Geometry Failure Type are then gathered



Data is then prepared for XML-HTML

The image shows a data processing workflow with several components:

- Workflow:** A sequence of steps: DuplicateRemover, INPUT, DUPLICATE, UNIQUE, XMLTemplater, INPUT, OUTPUT, and INVALID. A callout box labeled "Keep summary rows of data" points to the UNIQUE step.
- XMLTemplater Parameters Dialog:** Shows the configuration for the XMLTemplater transformer.
 - Transformer Name: XMLTemplater
 - Template Type: Expression
 - Template Expression: Total_Failures"}</td>\n </tr>
 - Template File: <Unused>
 - Template Attribute:
 - Validate Attribute Names: Yes
 - Result Attribute: text_line_data
- Template Expression Dialog:** Shows the resulting XML structure:

```
1 <tr>
2 <td>{fme:get-attribute("Layer_Name")}</td>
3 <td>{fme:get-attribute("Failure_Reason")}</td>
4 <td>{fme:get-attribute("Total_Features")}</td>
5 <td>{fme:get-attribute("Total_Failures")}</td>
6 </tr>
```
- Other Callouts:** "Export to Excel" points to the XMLTemplater step, and "Concatenate the list of statistics into the body of the HTML doc between the header and footer tags" points to the OUTPUT step.

The HTML Report is then Composed

The image shows two overlapping dialog boxes from a software application. The top dialog, titled "Template Expression", contains a text area with HTML code for a report. The code includes a header, a paragraph of text, and a table with four columns: "Layer Name", "Failure Reason", "Total Features", and "Total Failures". A table expression is used to populate the table with data from a field named "text_line_data". The code also includes a logo image and a closing HTML tag.

```
1 <html>
2 <p style="font-family: arial, helvetica, sans-serif; font-size: 26px;">
3 <strong>Dotted Eyes Ltd - Data Problem Report</strong>
4 </p>
5 <p style="font-family: arial, helvetica, sans-serif; font-size: 16px;">This report details a series of common problems that exist with your spatial data. Problems are listed by t
6 </p>
7
8 <table border="5" bordercolor="#3366FF" style="background-color:#CCFFCC;font-family: arial, helvetica, sans-serif; font-size: 13px;" width="800" cellpadding="3" cellspa
9
10 <tr>
11 <th>Layer Name</th>
12 <th>Failure Reason</th>
13 <th>Total Features</th>
14 <th>Total Failures</th>
15 </tr>
16
17 {fme:get-xml-list-attribute("_list{}.text_line_data")}
18
19 </table>
20 <br />
21 
22 </html>
```

The bottom dialog, titled "Template", shows configuration options for the template. The "Template Type" is set to "Expression". The "Template Expression" field contains the same HTML code as the top dialog. The "Template File" is set to "<Unused>". The "Template Attribute" is empty. The "Validate Attribute Names" option is set to "Yes". The "Result" section shows the "Result Attribute" is "text_line_data".

Background elements include a log window with the text "anslation was SUCCESSFUL" and a "Log" button. The "DOTTED EYES" logo is visible in the bottom right corner.

Composed HTML File

Dotted Eyes Ltd - Data Problem Report

This report details a series of common problems that exist with your spatial data. Problems are listed by type, per file supplied.

Layer Name	Failure Reason	Total Features	Total Failures
All_forPAI	Self Intersection	6986	269
Terrier_all_polygon	Self Intersection	1496	24
All_forPAI	Ring Self Intersection	6986	4
BLPU_Aug_05_inv	Ring Self Intersection	36524	3
Self_intersecting	Self Intersection	3	2
Terrier_all_polygon	Ring Self Intersection	1496	2
bad_donut	Self Intersection	1	1
Self_intersecting	Ring Self Intersection	3	1
Terrier_all_polygon	Too Few Points	1496	1

Thank You & Questions? |

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