FME™ WORLD TOUR 2018

Headless Chickens or Organised Nerd Herd

Paul Goodhue & Kyle Dow

Christchurch City Council

What you'll hear from us

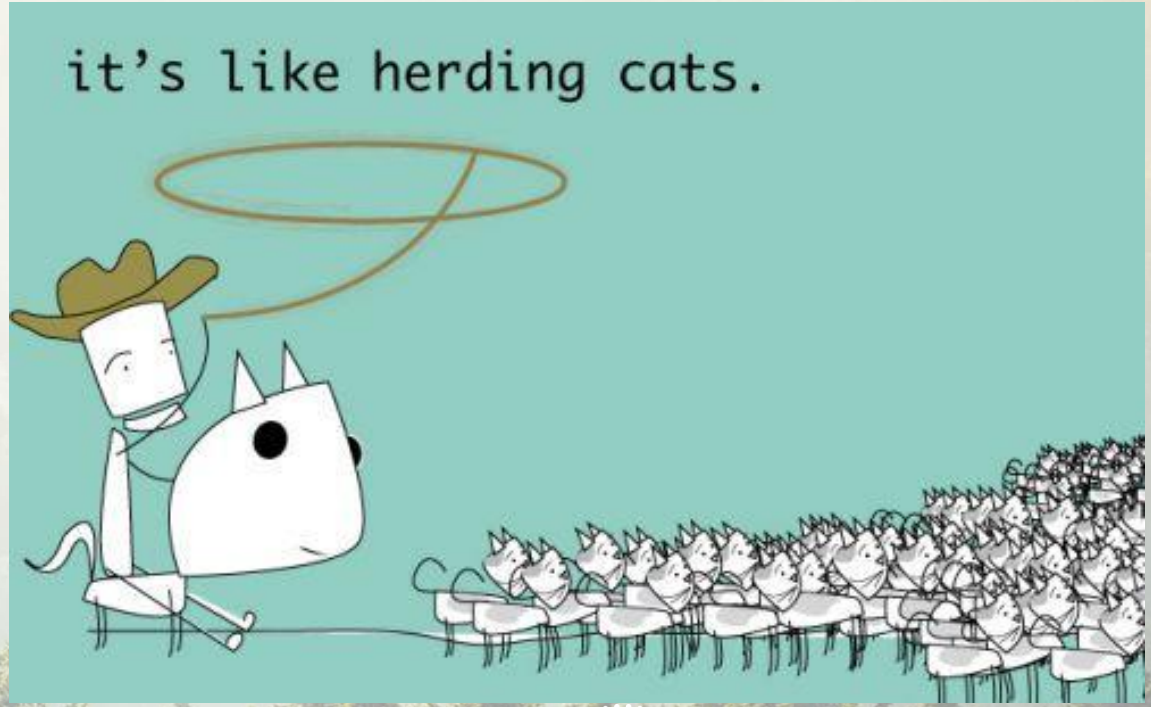
- Where we started
- What we developed
- How it looks
- How it works
- Where to from here

Where we started

Christchurch City Council

FME @ CCC

- 6+ Teams
  - IT
  - Asset Management
  - Monitoring and Research
  - Capital Delivery
- 30 Users
- 3 Servers (8 Engines)



Christchurch City Council

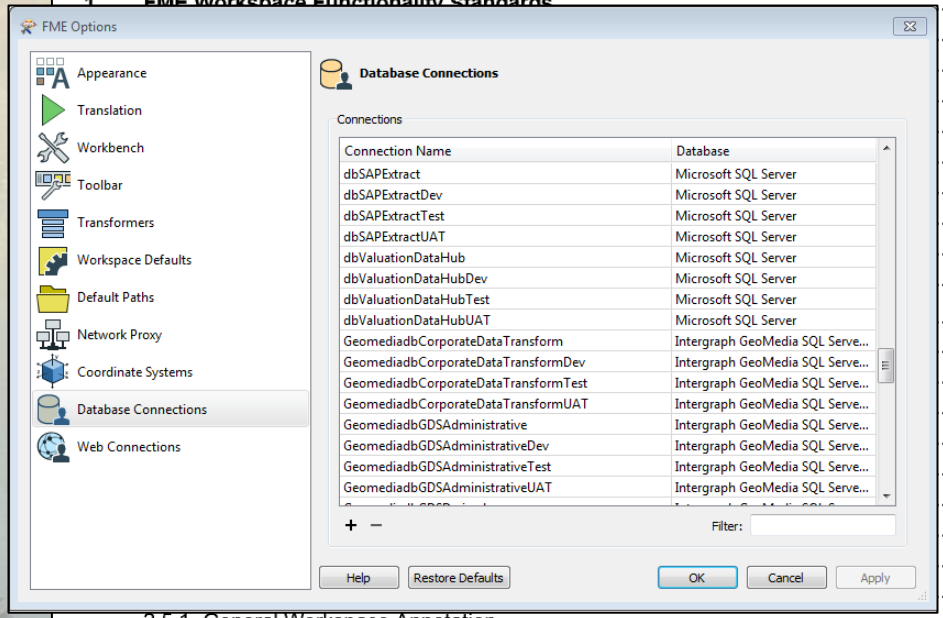
Lets have a User group!

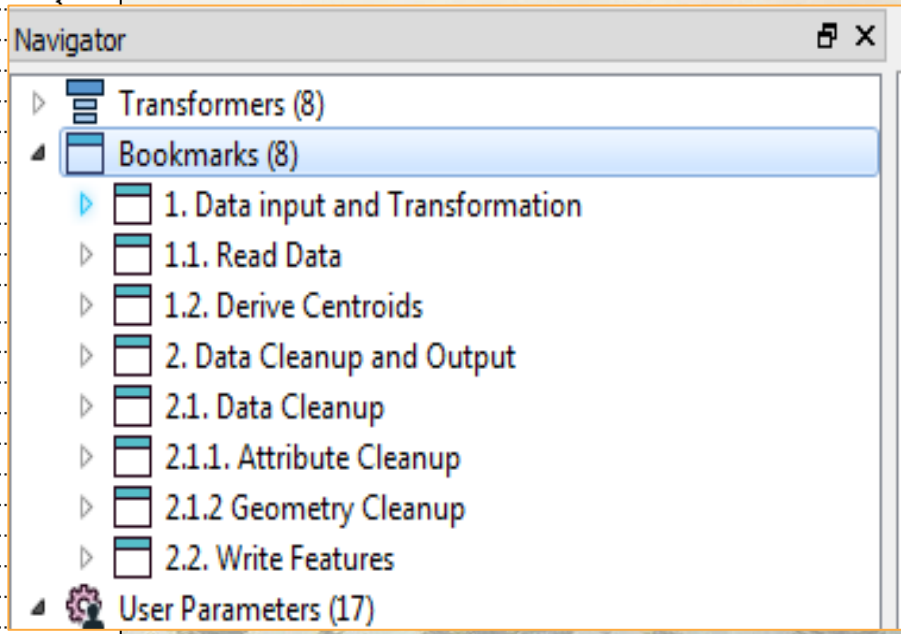
Christchurch City Council

What the User Group came up with

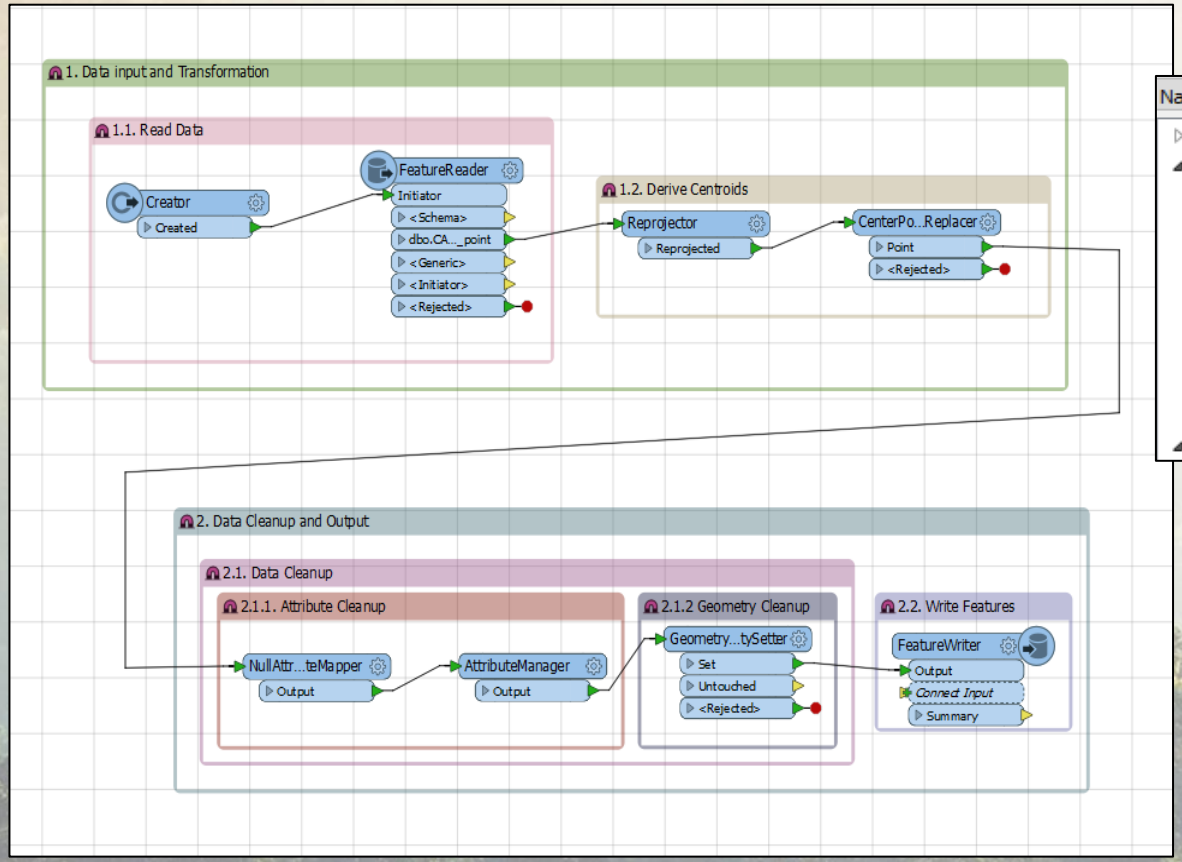
Contents

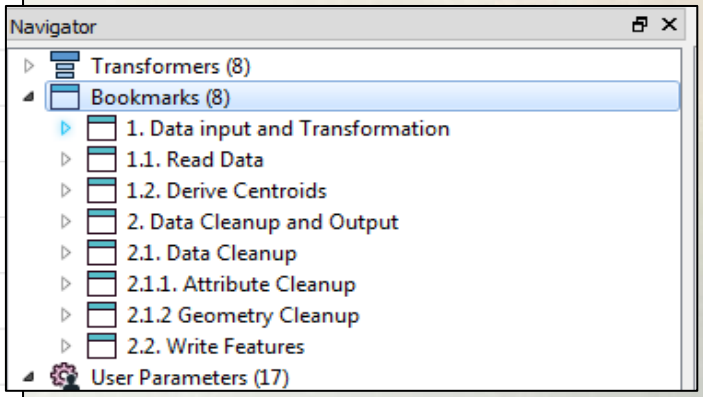
2.5.1. General Workspace Annotation 13
2.5.2. Annotations Within the Workflow 13
2.5.3. Annotations for Transformers Containing Custom Code 14





What does it look like?

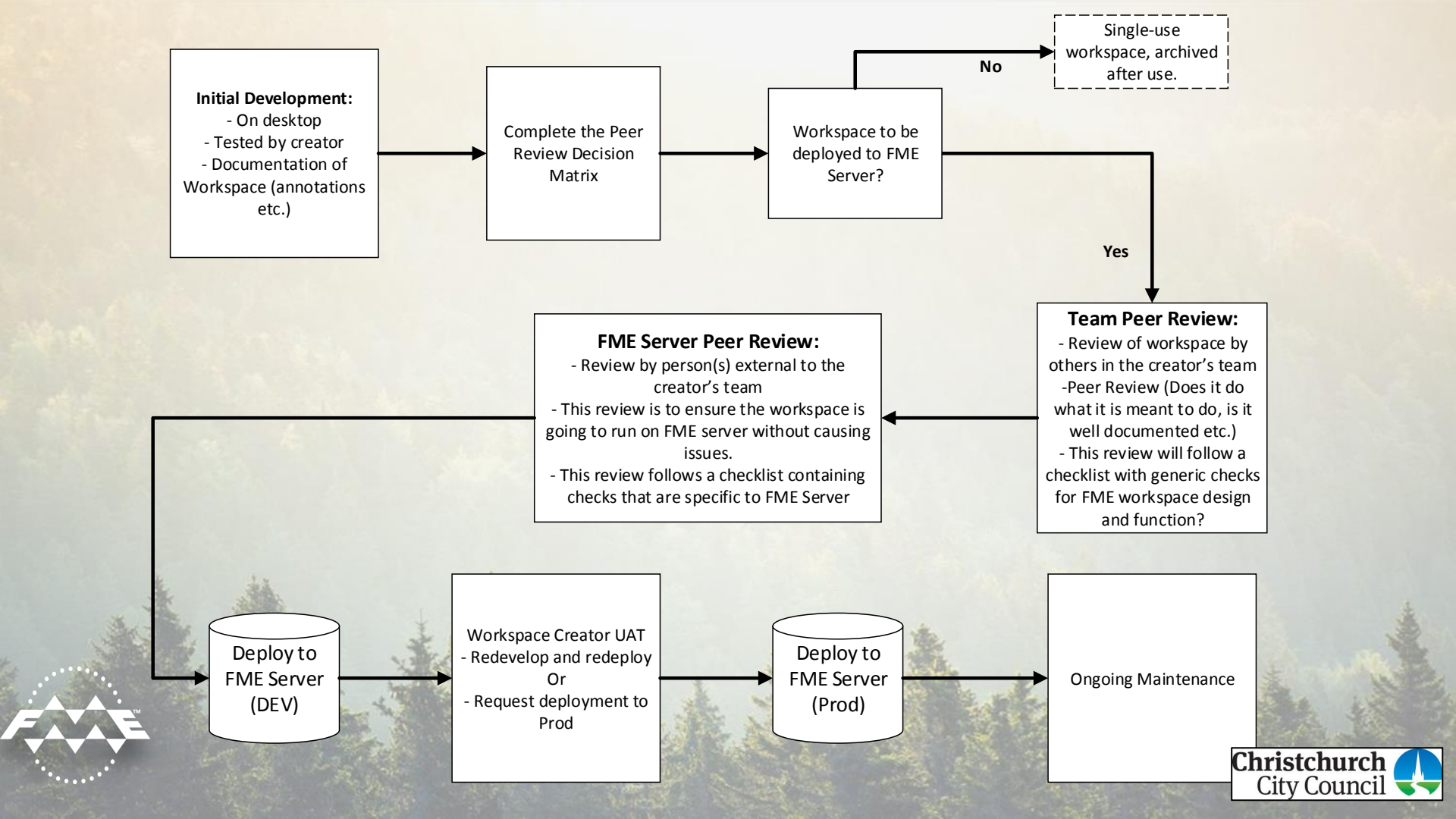


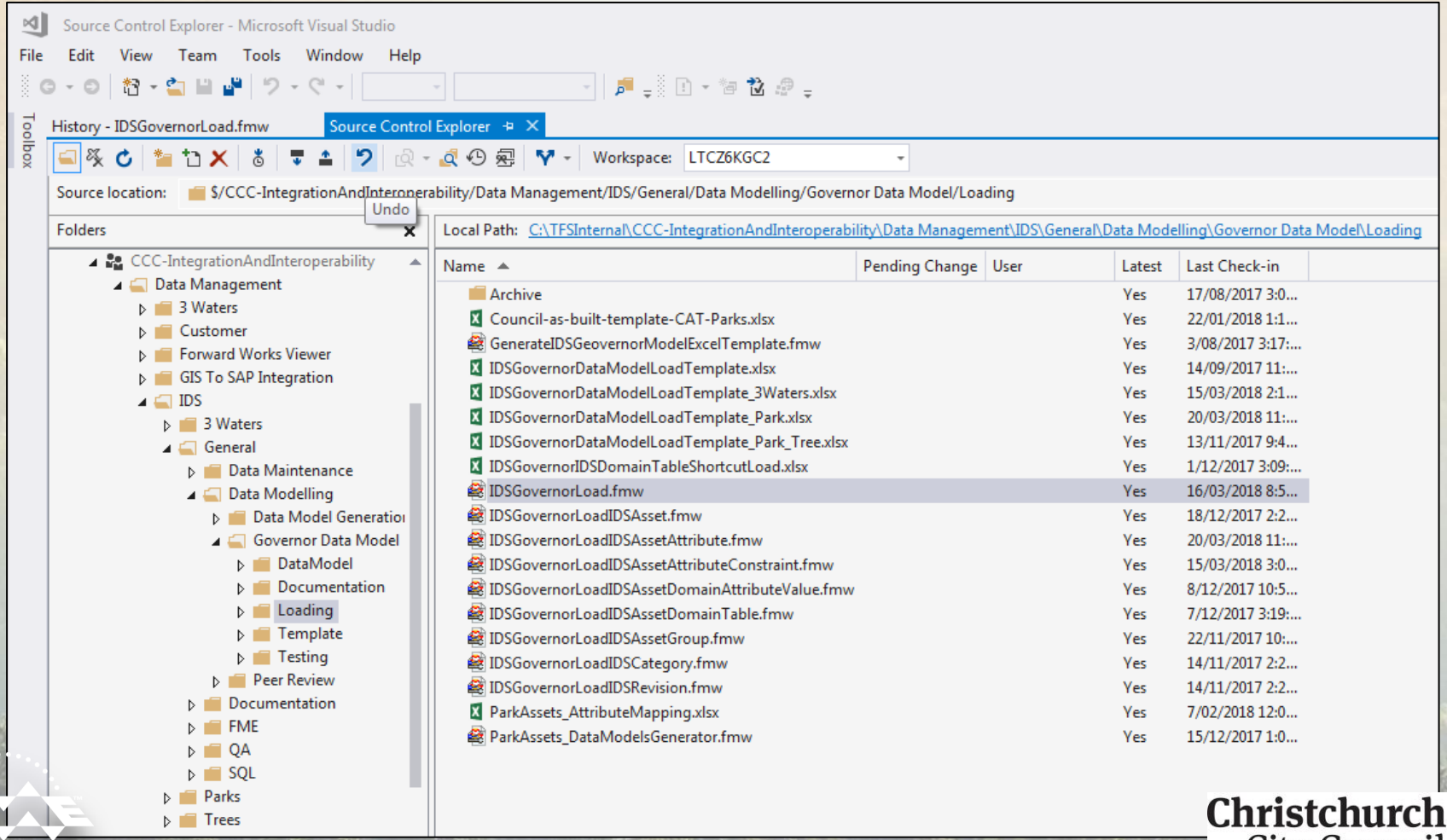


Christchurch City Council

FME

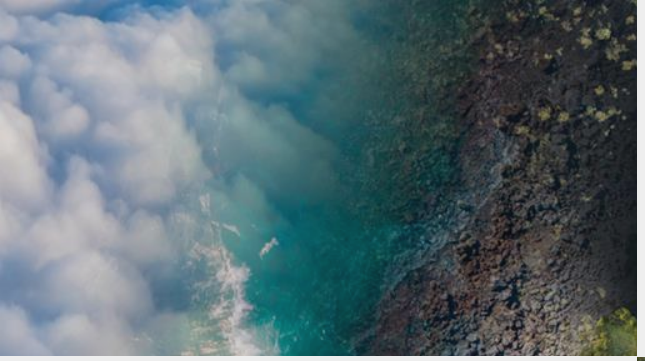
Christchurch City Council


Initial Development:
- On desktop
- Tested by creator
- Documentation of Workspace (annotations etc.)
Complete the Peer Review Decision Matrix
Workspace to be deployed to FME Server?
No
Single-use workspace, archived after use.
Yes
Team Peer Review:
- Review of workspace by others in the creator's team
-Peer Review (Does it do what it is meant to do, is it well documented etc.)
- This review will follow a checklist with generic checks for FME workspace design and function?
FME Server Peer Review:
- Review by person(s) external to the creator's team
- This review is to ensure the workspace is going to run on FME server without causing issues.
- This review follows a checklist containing checks that are specific to FME Server
Deploy to FME Server (DEV)
Workspace Creator UAT
- Redevelop and redeploy
Or
- Request deployment to Prod
Deploy to FME Server (Prod)
Ongoing Maintenance
Christchurch City Council



Christchurch City Council

Christchurch City Council

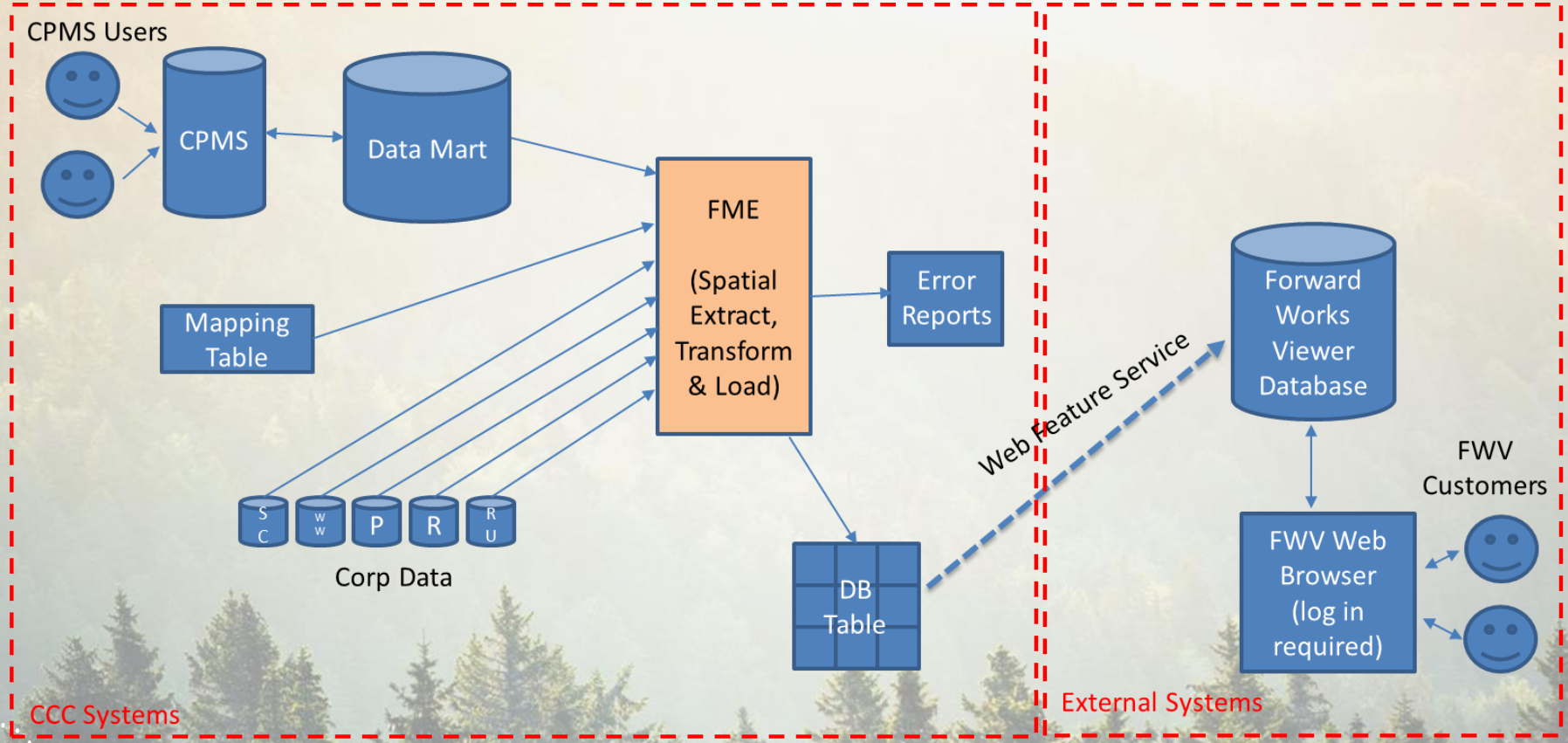


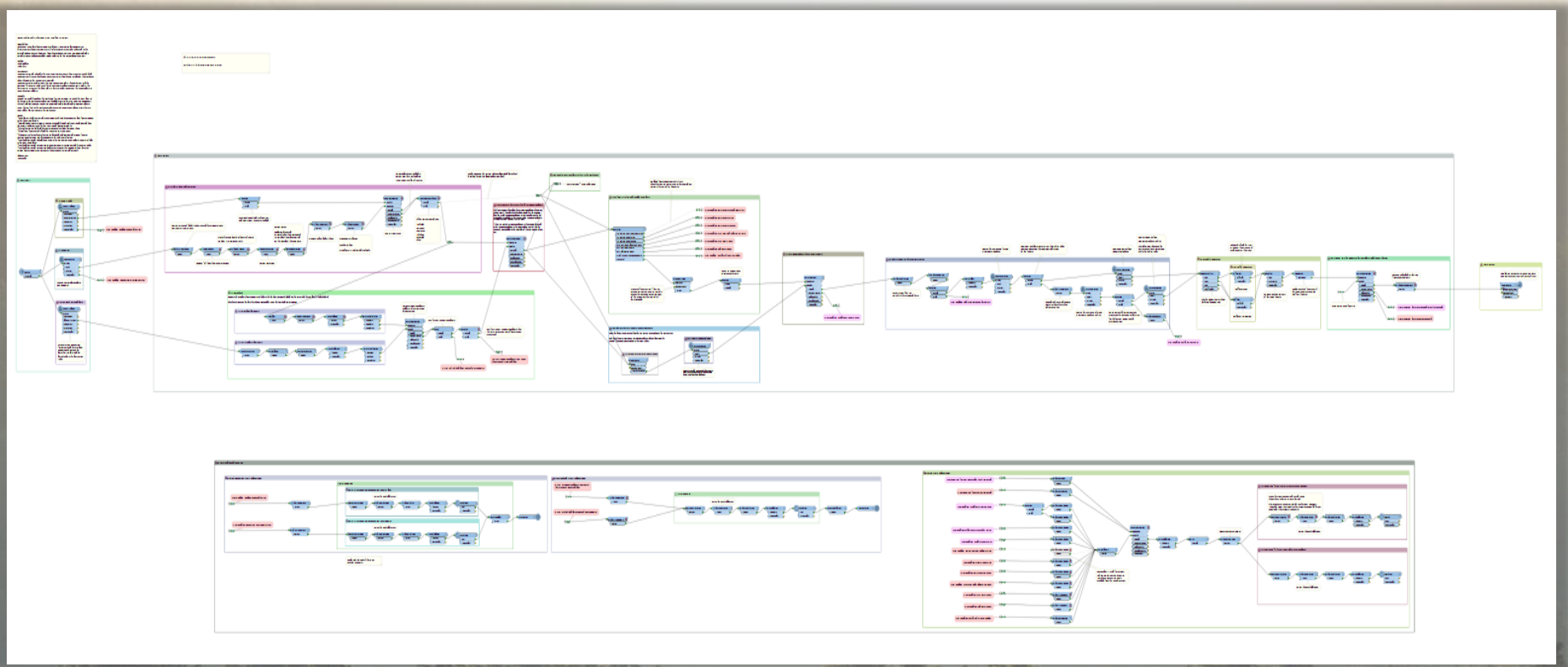
Spatial

Daily

Robust

Standardised


CPMS Users
CPMS
Data Mart
FME
(Spatial Extract, Transform & Load)
Error Reports
Mapping Table
S C
W W
P
R
R U
Corp Data
DB Table
Web Feature Service
Forward Works Viewer Database
FWV Customers
FWV Web Browser (log in required)
CCC Systems
External Systems



Christchurch City Council

Forward Works Viewer CCC Project Export

Description:
Takes input CPMS data from ParagonIQ and joins it to corporate data geometries (AssetStreetCatchment, RatingUnit etc.) to form project areas to be submitted to the Forward Works Viewer. The output from this workspace is written to GDSDerived and is served as a WFS and consumed by Jacobs and LINZ for the Forward Works Viewer.

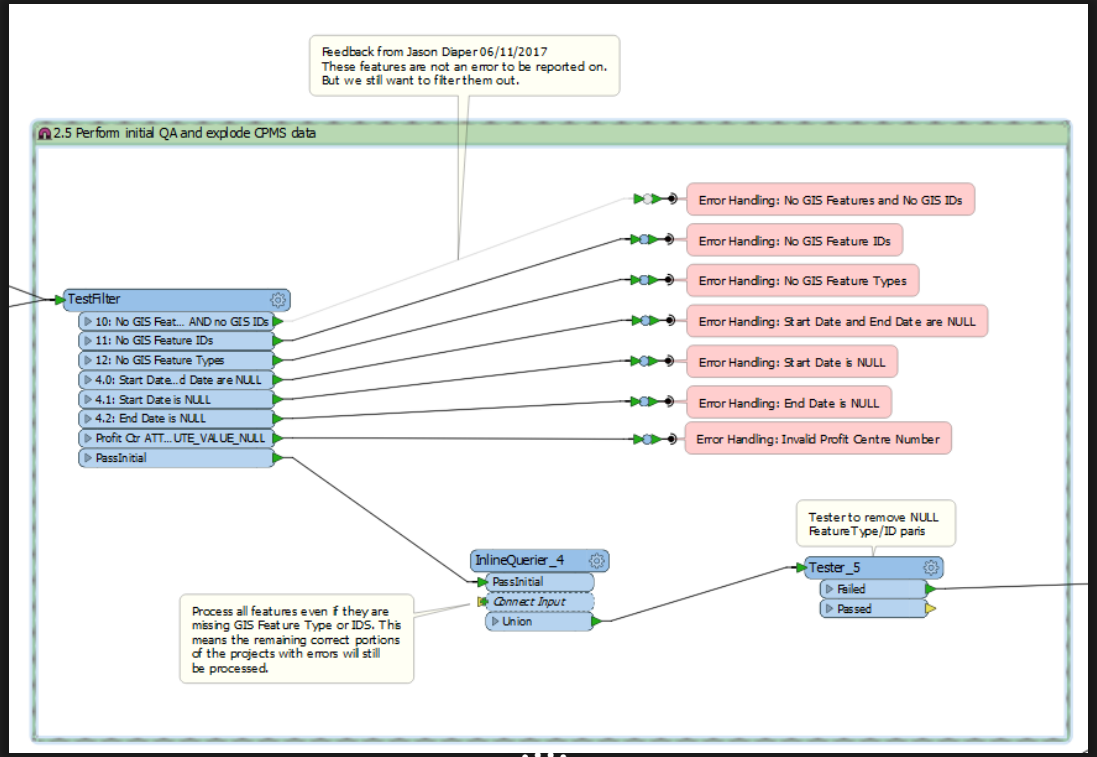
Author:
Paul Goodhue
26/04/2017

Parameters:
Parameters are used to handle the error reporting recipients. These are set up as published parameters so they can be changes on FME Server without having to redeploy the workspace when changes to the recipients are required.
Parameters are also used to select the SQL connection used in the Workspace, and the location of the CPMS Z Table Excel file. The parameterised SQL conneciton is used in the feature writer to output the data, and in a feature reader to compare the incoming data to previously exported data.

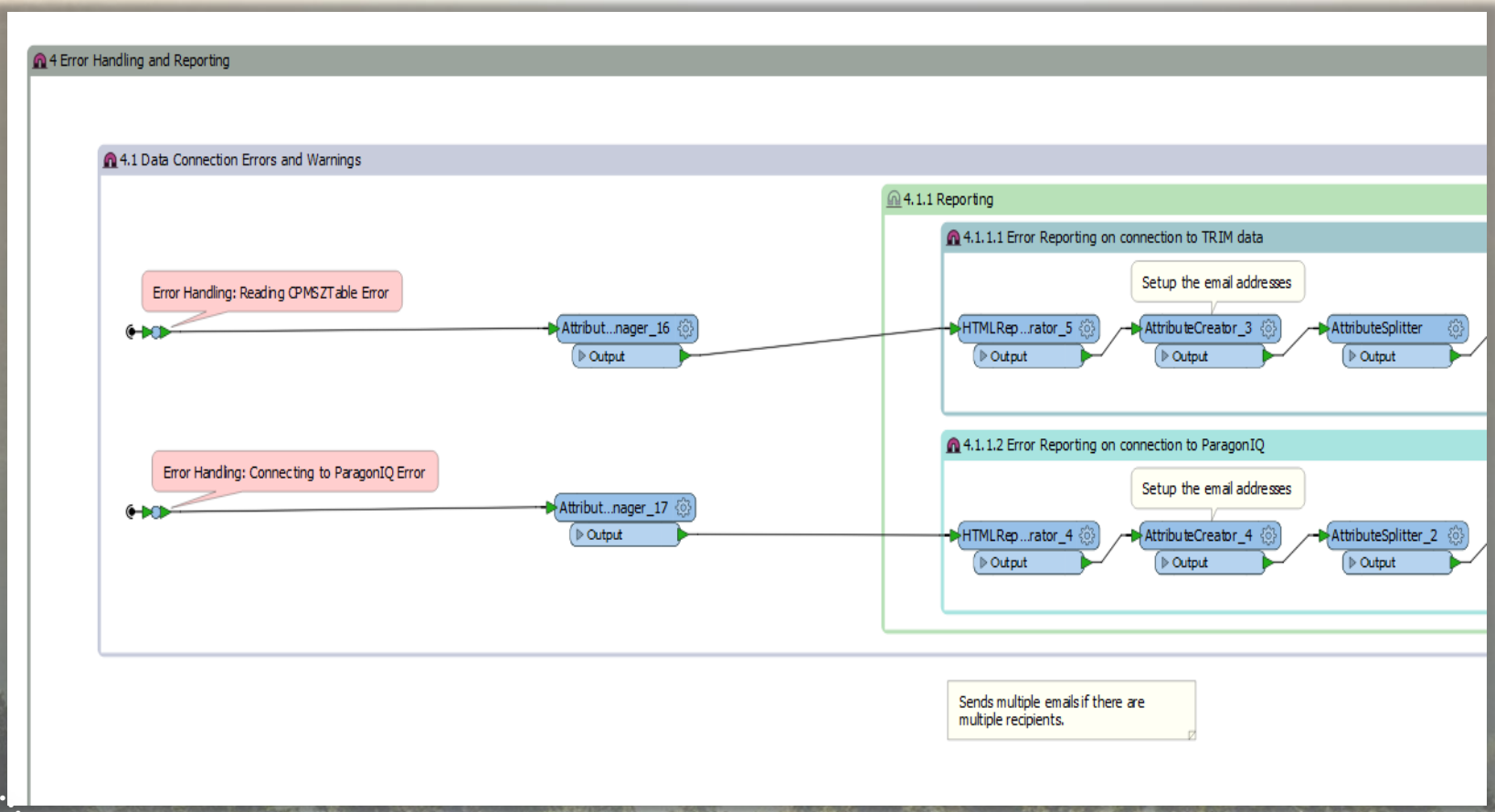
Tunnels:
Tunnels are used throughout the workspace for two purposes; to supply the input data to further on in the workspace, and to port handled errors to the error reporting component. All error handling/reporting tunnels are annotated and coloured. Red annotations indicate errors that are fatal to the workspace, whereas Purple annotations indicate errors that are reported but do not terminate the workspace.

Notes:
- CPMS data is already extracted into ParagonIQ. This workspace queries data from ParagonIQ rather than CPMS directly.
- Forward Works Viewer Project Types are mapped through profit centre and queried from the CPMS Z Table, an Excel file that is extracted from TRIM nightly.
- All area feature are buffered by 1cm to remove sliver holes between them.
- All non-area features are buffered by 10 metres to create areas.
- All geometries for each CPMS feature are dissolved and aggregated into one feature, creating a single area or multi-area geometry for each CPMS feature.
- Error handling is used to handle any erros in the GIS Feature Type and GIS Feature ID fields in the input CPMS data.
- Error handling is used to report on connection issues to ParagonIQ and the CPMS Z Table.
- Error handling is used to report on load/extract issues within ParagonIQ (e.g. features coming from ParagonIQ are not newer than previously extracted features).

Time to run:
14 Seconds



Christchurch City Council



Christchurch City Council

CCC FME Standards in Use

- Peer Review
- Testing
- Extra Development
- Deployment to Server

- Extra Development Effort
- Error Reporting
- Access to External Data Sources

Christchurch City Council

Where to from here

- Christchurch Meetup 2 (30/05/2018)
  - https://www.meetup.com/Christchurch-FME-Meetup/
- Continue to share knowledge
- Keeping standards current
  - FME software updates
  - Through our own learnings
  - Knowledge from others/the industry

Christchurch City Council

FAME WORLD TOUR 2018

THANK YOU!

Paul Goodhue
Kyle Dow

Photo Credit: Rodney Henderson-Fitzgerald

Christchurch City Council