



Streamlining (literally) system integration at
Palmerston North City Council
Jan Roggisch





Jan Roggisch
GIS & System Integration
Consultant
Jan.Roggisch@locus.co.nz



Agenda

- Background
- The project
- WIIFY?

Mission

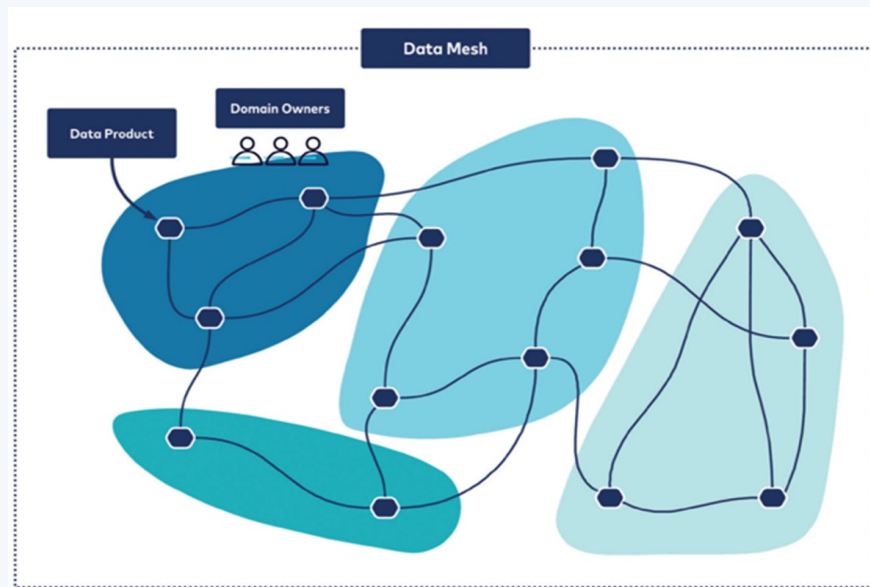


Make data accessible, shareable and actionable, for all stakeholders, with governance in place.

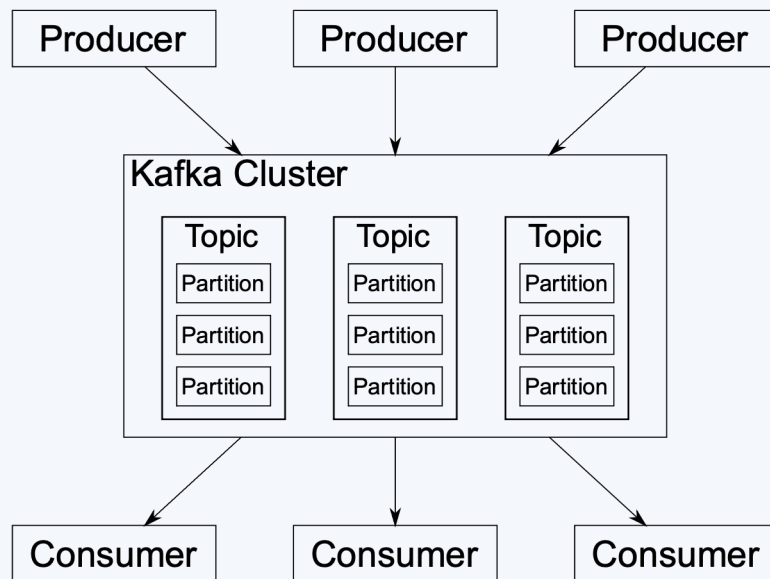
Data Integration Strategy Principles

- Event-driven
- Domain-driven design
- Right-sized services

The data mesh



Apache Kafka

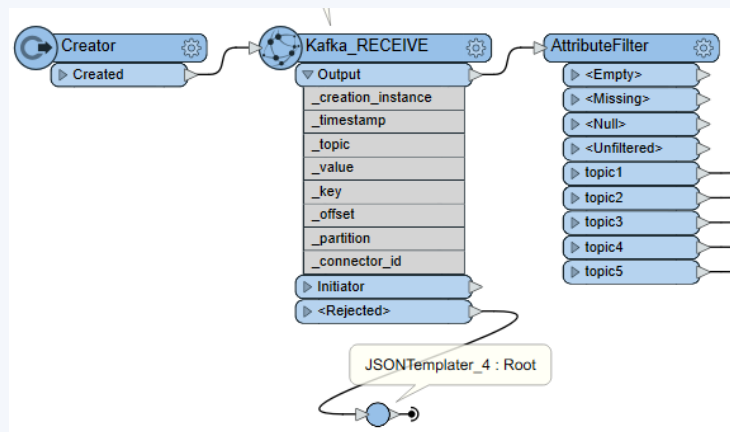


Requirements

ERP to GIS integration

1. Six topics initially, more to be added later
2. Write to ArcGIS hosted feature layers
3. No auto-commit
4. Monitor and report on failures
5. Consumer idempotency

Receive data



Request

Action:

Topics

Topics:

Receive Behavior

Mode:

Receive Options

Consumer Group ID:

Starting Offset:

Partition:

Offset:

Auto Commit:

Output Attributes

Attributes to Add:

Help Presets OK Cancel

Process data (by topic)

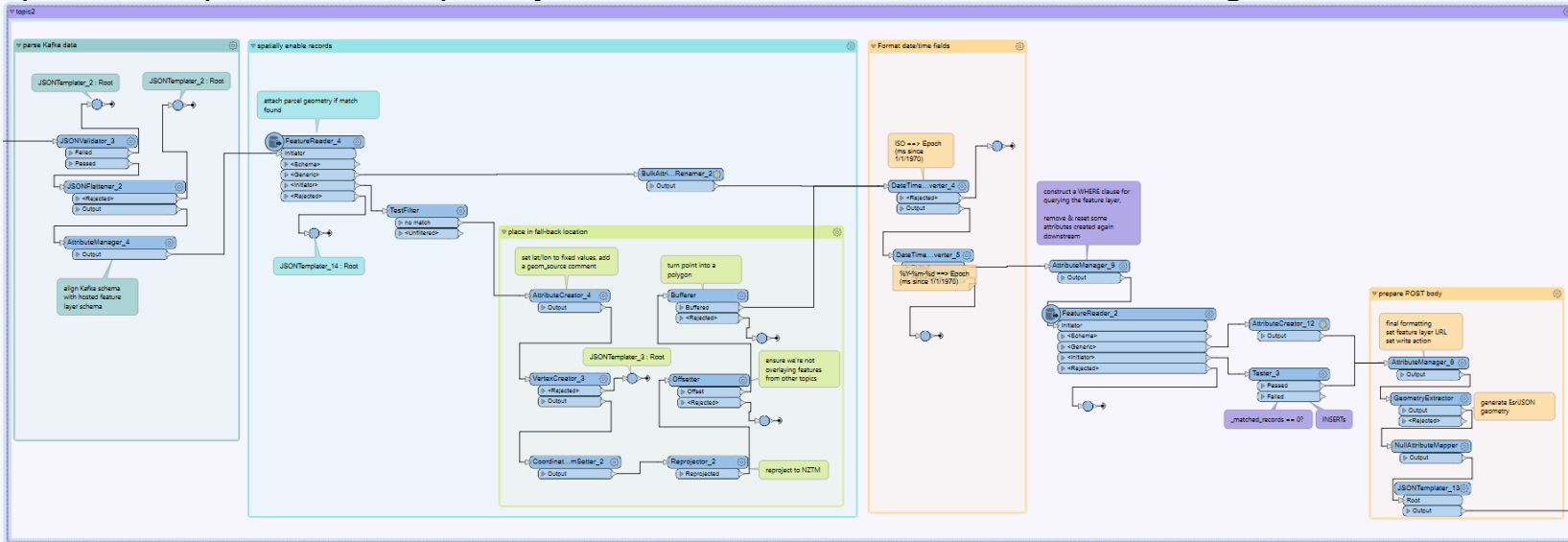
parse & map

spatially enable

dates

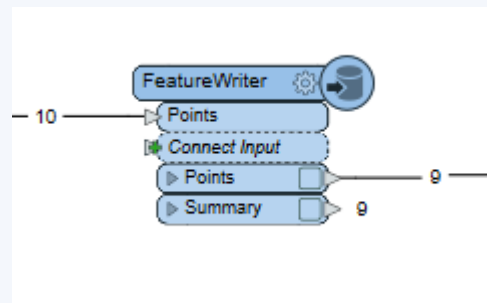
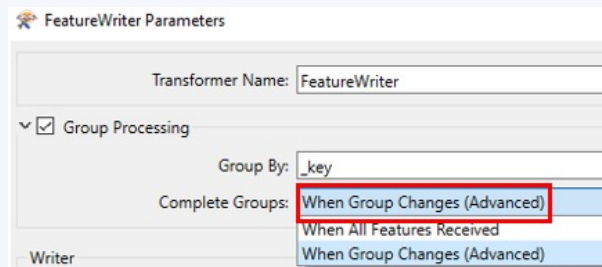
check target

format

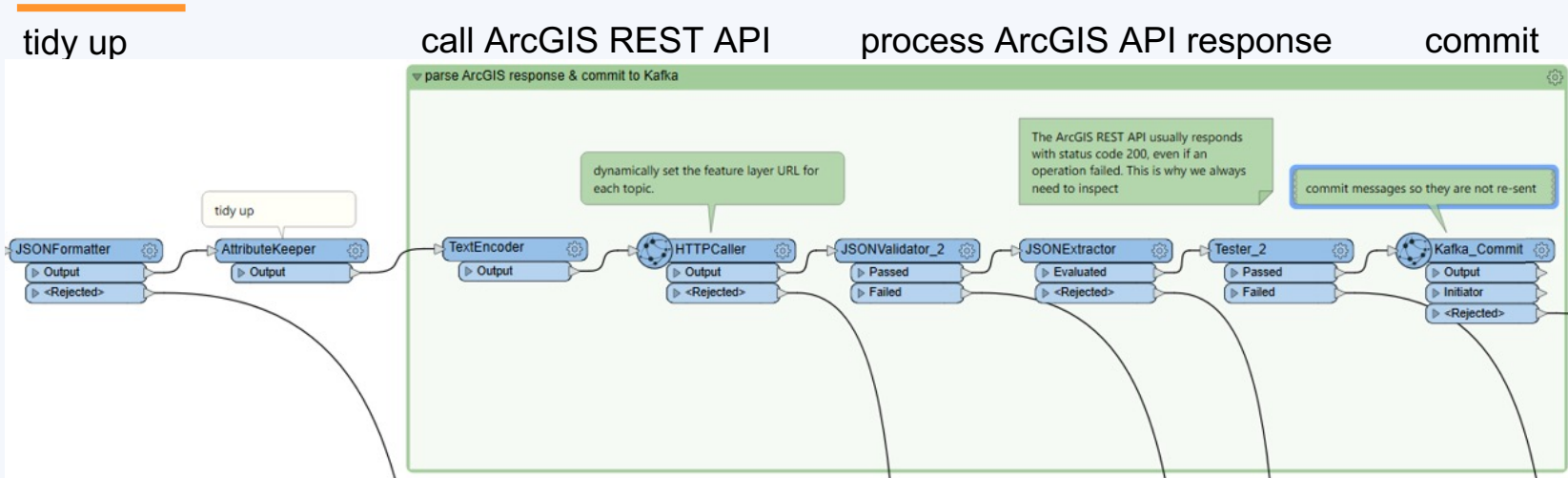


Write data – Feature Writer?

1. releases downstream after a new feature arrives
2. good for IoT scenarios (continuous streams)
3. not reliable enough for event-based scenarios (irregular streams)



Write data – HttpCaller

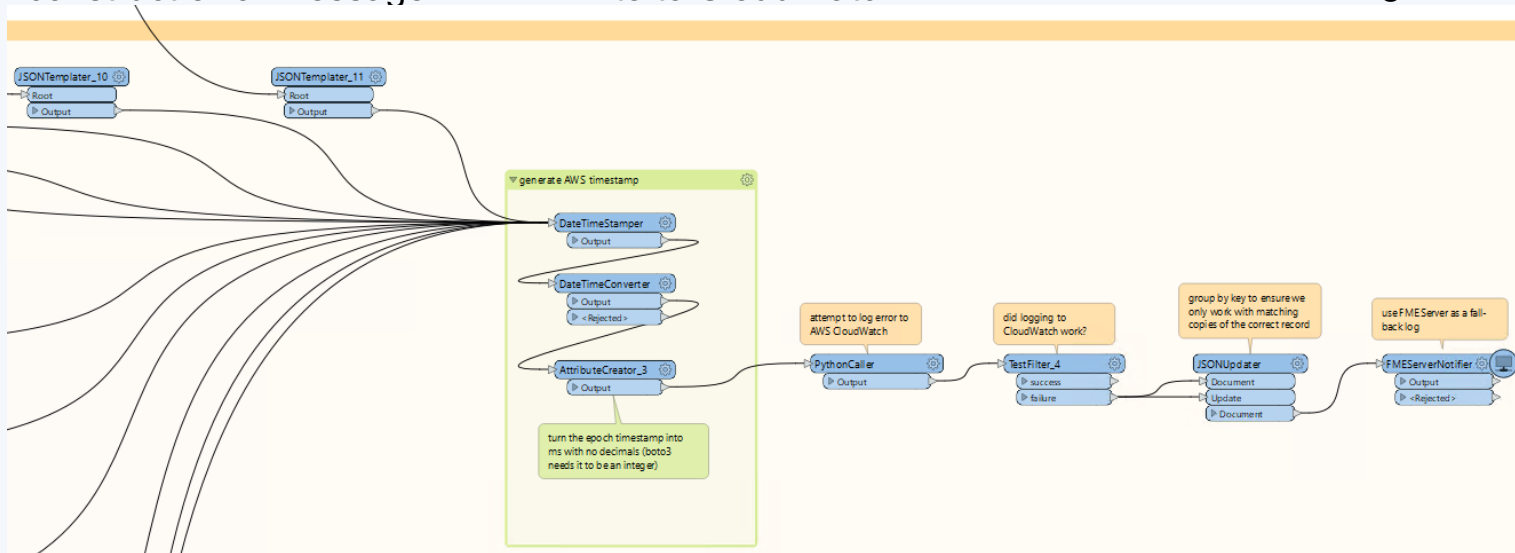


Error handling

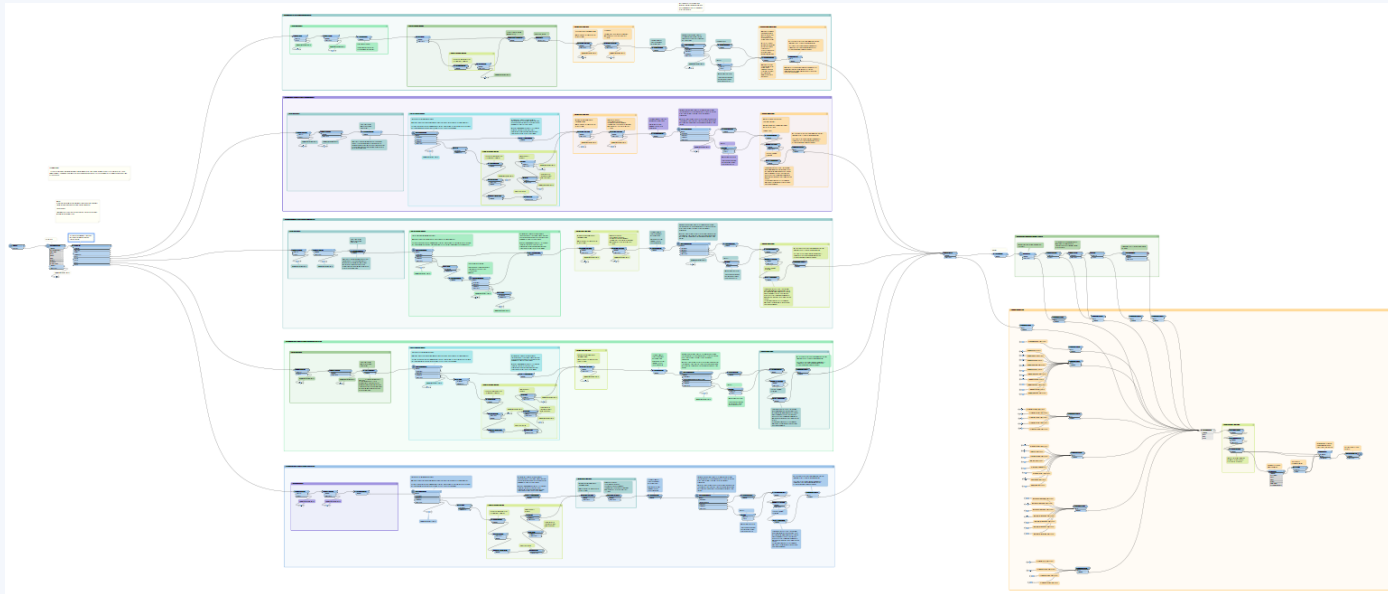
construct error message

write to CloudWatch

write to FME Server log



The full workspace



Takeaways

- Working with data streams is different
- Streaming done right is very powerful
- Get into it 😊

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FME: 

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Thank you!

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The Locus logo, featuring a stylized blue and orange icon to the left of the word 'LOCUS' in white capital letters.