Safe Software®

WV DOT GIS Day | AI in FME

Safe Software

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Customer Solutions Specialist

Agenda

Safe Software

1. Introduction
2. AI in FME
3. Resources
4. Discussion and Q&A

Introduction

Safe Software

bsi ISO/IEC 27001 Information Security Management CERTIFIED
IS 722991

A-LIGN SOC 2

Certified B Corporation

Safe Software

40K+
FME Community members

128
countries with FME customers

25K+
organizations worldwide

30+
years of solving data challenges

140+
global partners with FME services

200K+
users worldwide

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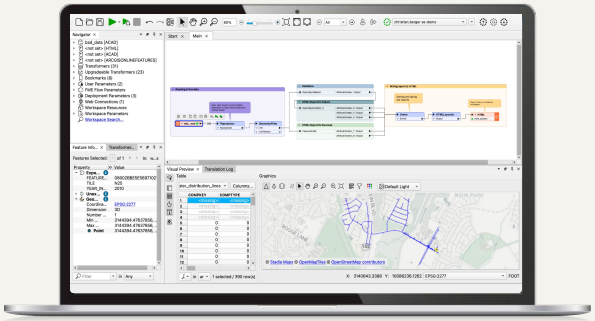
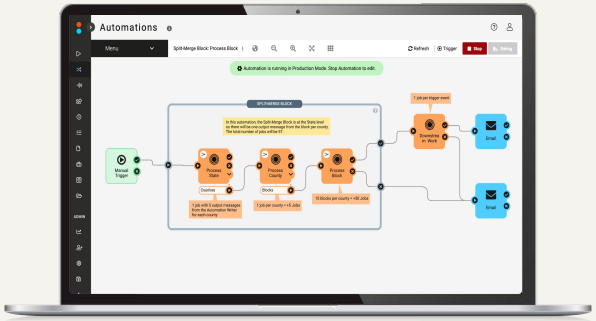
FME Enterprise Integration Platform

The only All-Data, Any-AI Platform.



FME Form

All Data *workflows* are built here.

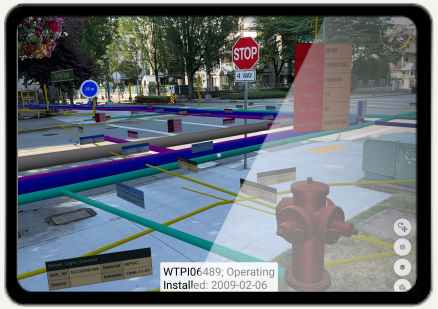


FME Flow

Brings life to FME Form *workflows*

FME Flow Hosted

SaaS version of FME Flow



FME Realize

Experience your data where it matters most. In context

fme.safe.com/platform

Only FME Supports All-Data

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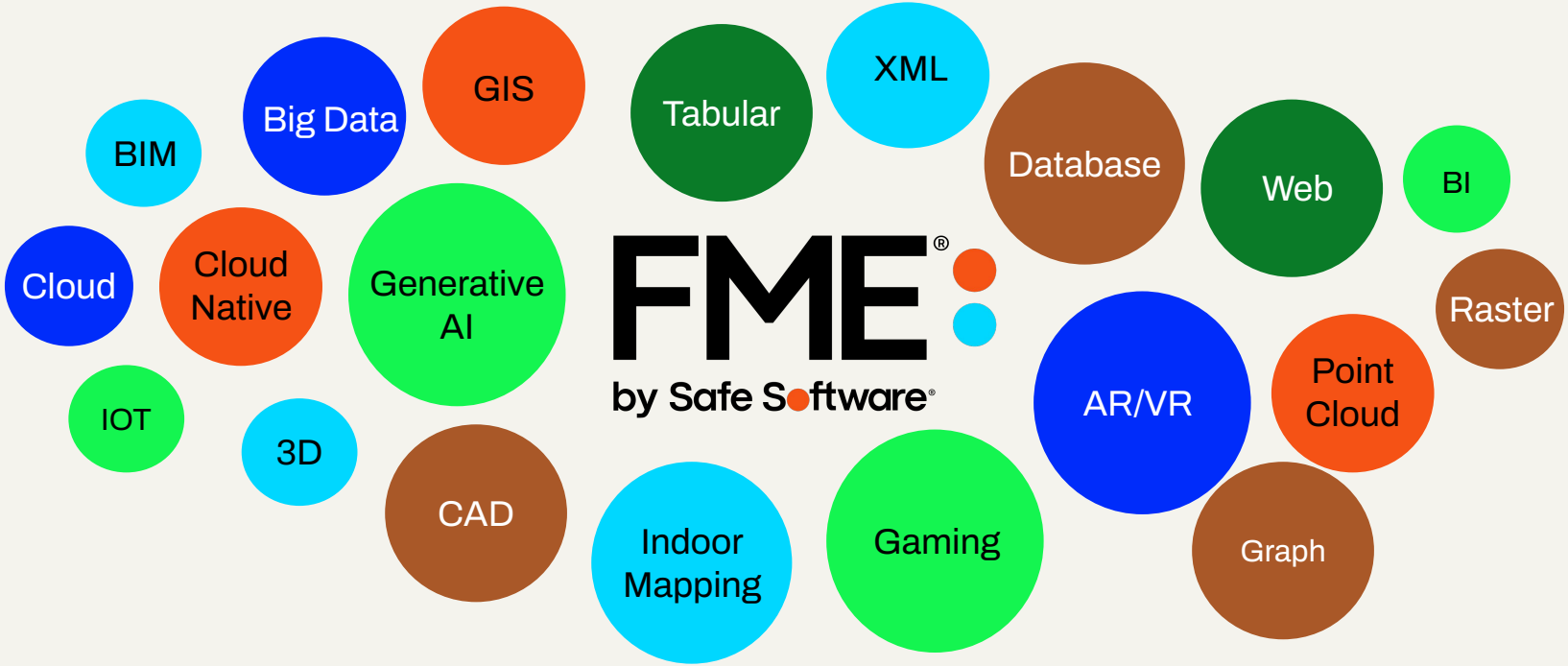
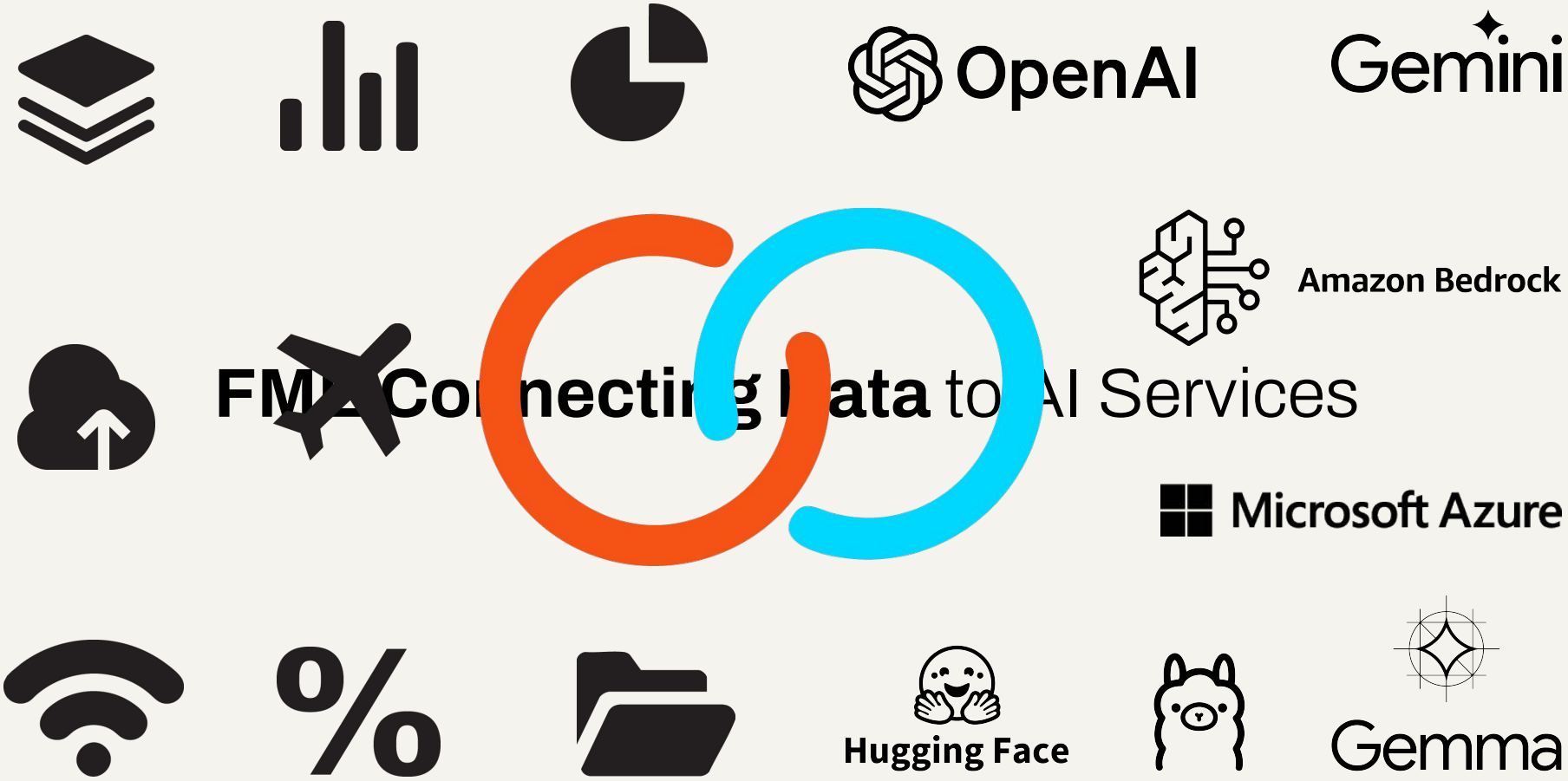
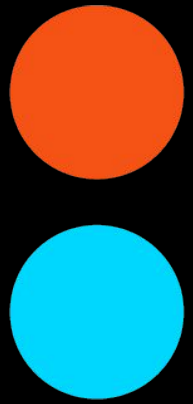
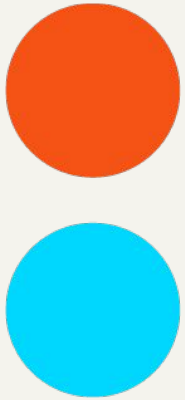



OpenAI
Gemini
Amazon Bedrock
FM - Connecting Data to AI Services
Microsoft Azure
Hugging Face
Gemma



Which AI should you use?



It depends on the problem you are trying to solve.

AI Customer Stories

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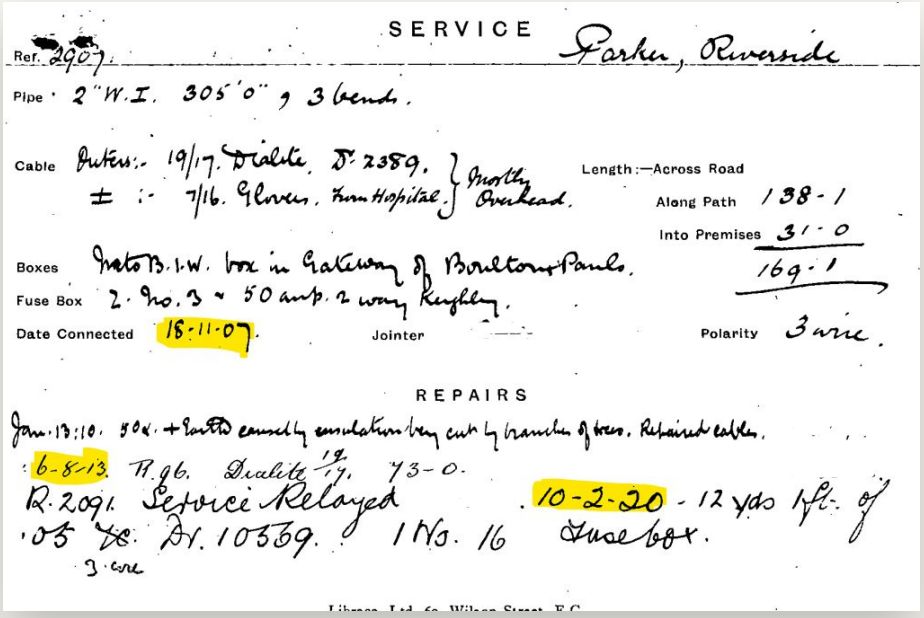
Real World Story #1

UK Power Networks uses AI to extract data from Scanned Documents.

Century-old Handwritten Service Record Cards



SERVICE

Ref. 2907. Parker, Riverside

Pipe · 2" W.I. 305'0", 3 bends.

Cable Outers:- 19/17. Dialite. D. 2389. } Mostly Overhead.
± :- 7/16. Glovers. From Hospital.

Length:—Across Road
Along Path 138-1
Into Premises 31-0
169-1

Boxes Into B.I.W. box in Gateway of Boulton & Paul's.

Fuse Box 2. No. 3 & 50 amp. 2 way Keighley.

Date Connected 18-11-07. Jointer Polarity 3 wire.

REPAIRS

Jan. 13:10. 50 ∝. + Earth caused by insulation being cut by branches of trees. Repaired cables.
6-8-13. R. 96. Dialite 19/17. 73-0.
R. 2091. Service Relayed. 10-2-20 - 12 yds 1 ft. of
.05 ~~Tc~~ Dr. 10569. 1 No. 16 Fuse box.
3 core

Libraco Ltd. 60 Wilson Street, E.C.

Extract Dates from Service Record Cards

Identify cards older than 1938

(Total of 2.6 million cards)

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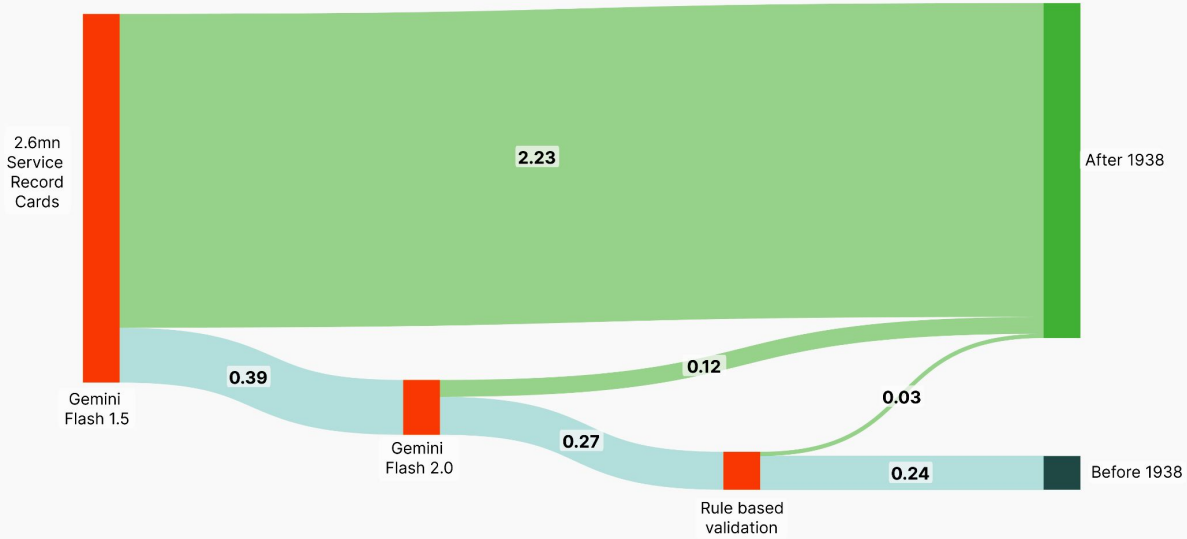
Using the Right AI models



Gemini 1.5 Flash to screen records

Gemini 2.0 Flash for more accurate extraction

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Result:

22 Years of effort completed in 60 hours

FME & Gemini

- 2.6mn records in 2.5 days
- Gemini cost ~ £320
- Oldest card discovered: 9th January 1907

Manually

- 1 min per record, 8 hrs per day, 240 working days per year
- ~22 years of work

22 years of Manual work -> £320 (US $432)

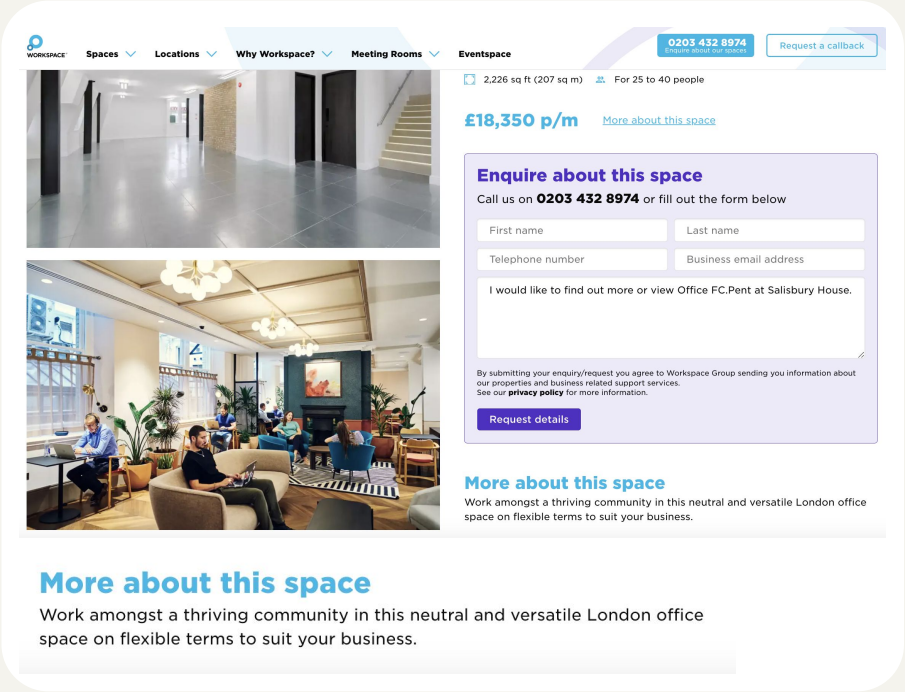
Real World Story #2

Workspace Group uses Multi-Modal AI to market its properties.

- Leading provider of flexible office spaces in London since 1987
- FTSE 250 listed
- 77 properties in London
- Home to 4,000+ diverse businesses

Before AI

- Unit descriptions were short and generic
- No detail was provided;
  - Style
  - Views
  - Flooring
  - Windows/doors
  - Amenities eg. AC
  - Natural light
  - Specifications
  - Size
- Occasionally written by copywriter ‘as-and-when’ units need a boost



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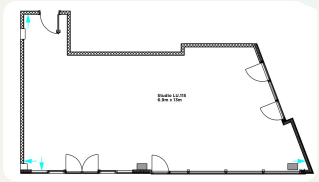
Multimodal AI Processing

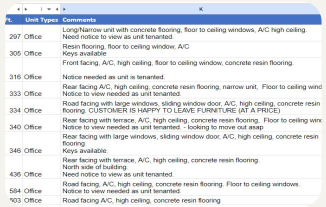
CAD Floorplans



Interior Images

Exterior Images

Descriptions



	Unit Types	Comments
297	Office	Long/Narrow unit with concrete flooring, floor to ceiling windows, A/C high ceiling. Need notice to view as unit tenanted.
305	Office	Resin flooring, floor to ceiling window, A/C Keys available
316	Office	Front facing, A/C, high ceiling, floor to ceiling window, concrete resin flooring. Notice needed as unit is tenanted.
333	Office	Rear facing A/C, high ceiling, concrete resin flooring, narrow unit, Floor to ceiling wind Notice to view needed as unit tenanted.
334	Office	Road facing with large windows, sliding window door, A/C, high ceiling, concrete resin flooring. CUSTOMER IS HAPPY TO LEAVE FURNITURE (AT A PRICE)
340	Office	Rear facing with terrace, A/C, high ceiling, concrete resin flooring, Floor to ceiling win Notice to view needed as unit tenanted - looking to move out asap
346	Office	Rear facing with large windows, sliding window door, A/C, high ceiling, concrete resin flooring Keys available
436	Office	Rear facing with terrace, A/C, high ceiling, concrete resin flooring. North side of building. Need notice to view as unit tenanted.
584	Office	Road facing, A/C, high ceiling, concrete resin flooring. Floor to ceiling windows. Notice to view needed as unit tenanted.
903	Office	Road facing A/C, high ceiling, concrete resin flooring

FME by Safe Software

ANTHROP\C

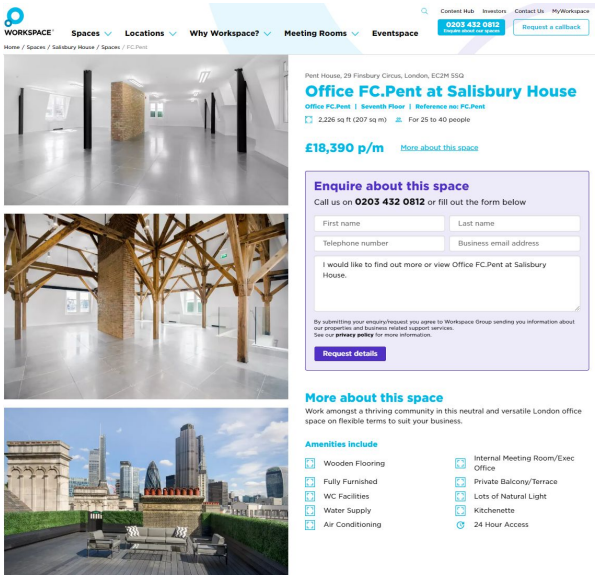
OpenAI

Gemini

Different AI for different types of data

Results:

- Unit descriptions are generated at scale, instead of reactively
- Now it is possible to have good detailed listings for every property.



This premium penthouse office space at Salisbury House offers a stunning blend of modern functionality and elegant design, perfectly suited for businesses seeking a sophisticated environment.

The standout feature of this space is the expansive private terrace, providing breathtaking views of London's iconic skyline. This outdoor area is not only ideal for breaks but also offers a unique setting for informal meetings or events, enhancing the overall work experience.....

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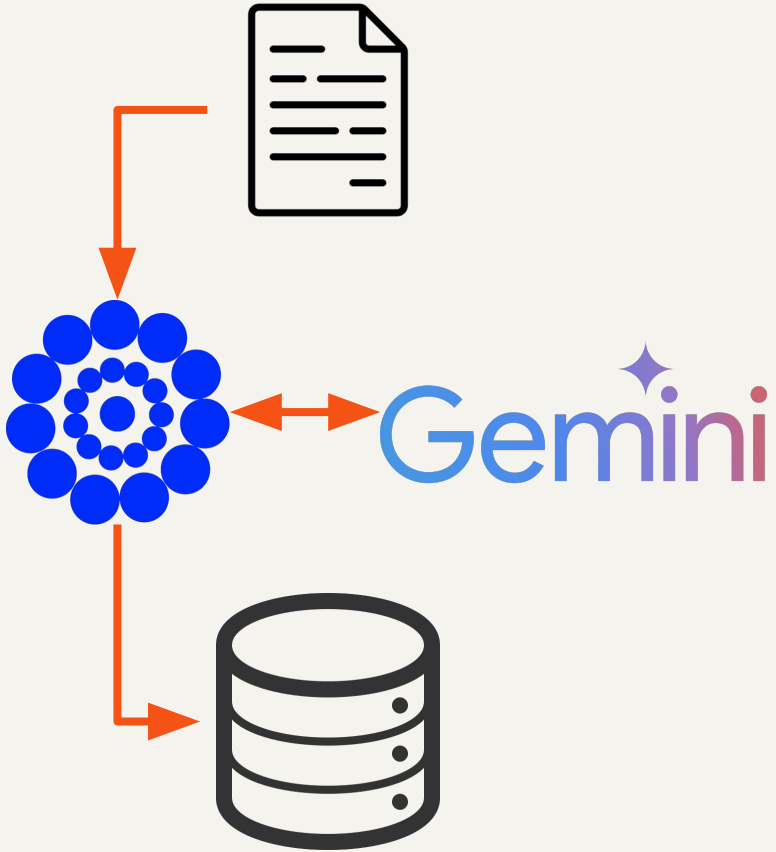
Real World Story #3

Agentic AI Schema Mapping with Google Gemini

Agentic Schema Mapping

- Leverage Google Gemini for intelligent parsing and structuring of highly variable address data.
- FME's dynamic workspace capabilities enable seamless integration.
- Outputs are standardized, ready for downstream use.



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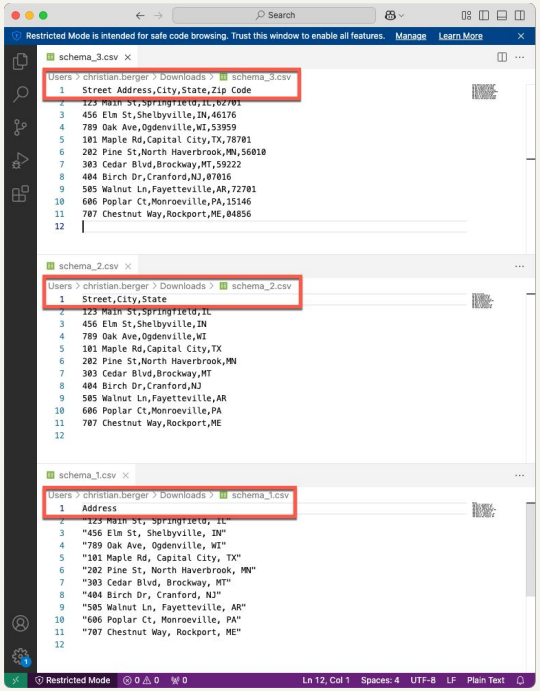
Schema Variability Challenge

- Data providers deliver address datasets with inconsistent schemas, data types, and in various data formats.
- Variability makes it difficult to integrate data into downstream processes.
- Manual efforts to standardize data are time-consuming and prone to errors.



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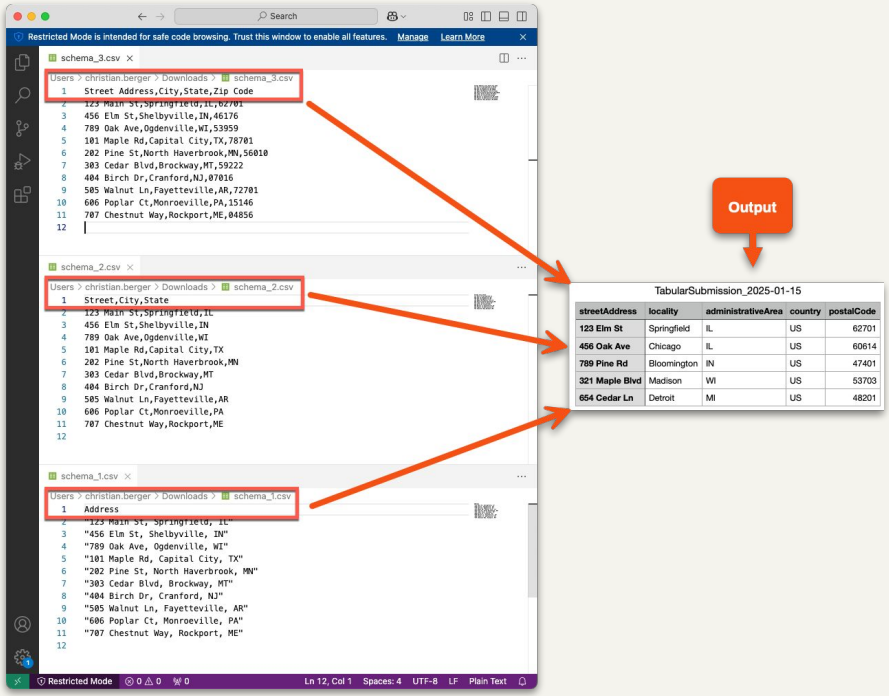
Schema Variability Solution

- **AI Processing:** Use Gemini to:
  - Identify key attributes (e.g., street name, number, postal code).
  - Concatenate or parse fields dynamically.
  - Resolve inconsistencies with Structured Outputs
- **Output:** Standardized attributes for seamless downstream use



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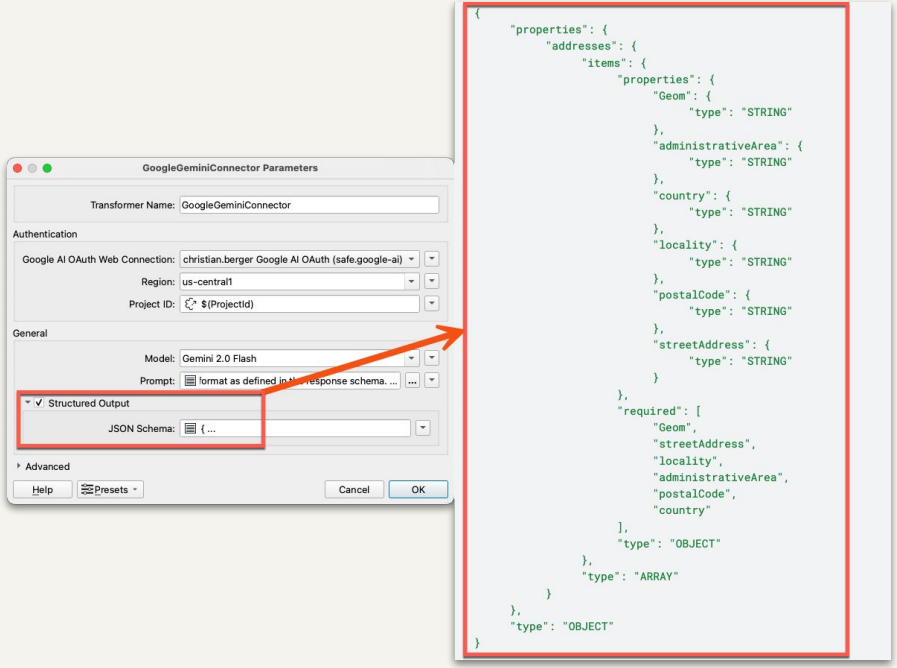
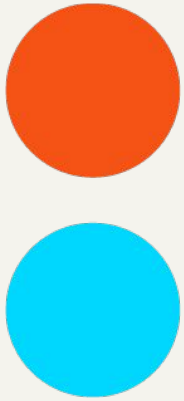




Choice of AI made these solutions possible.

The Future is exciting

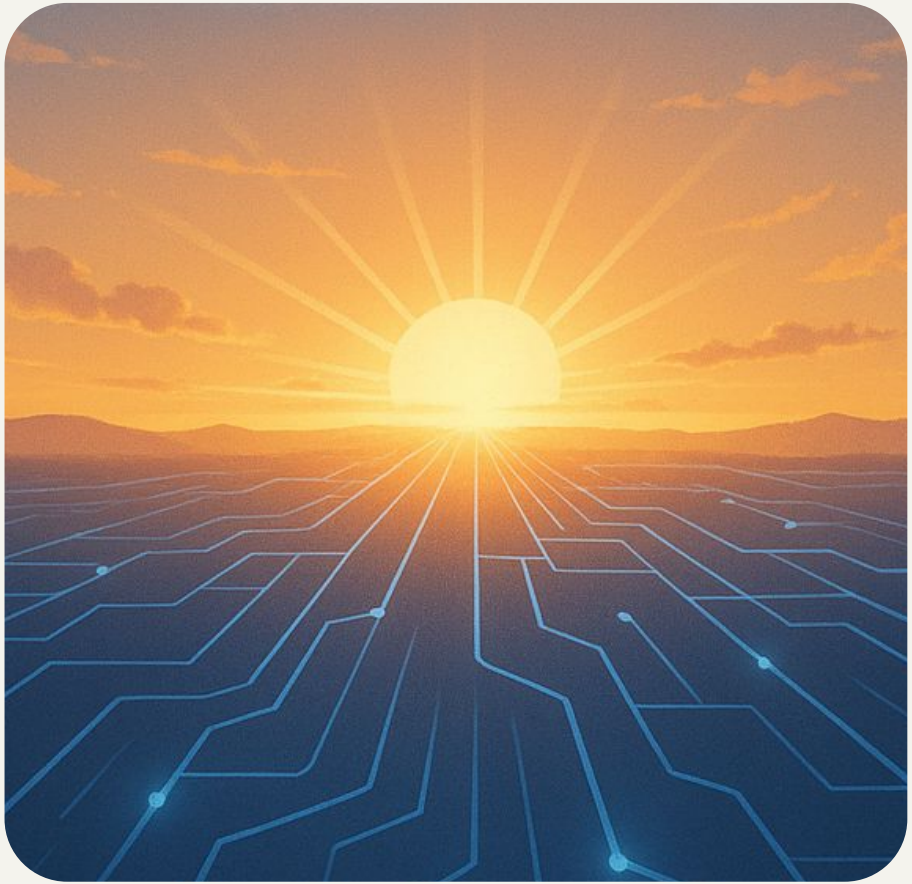
We are at the beginning of the beginning

Many breakthroughs and their impacts are ahead.

- Agentic AI, and A2A
- MCP
- Digital Twins (AR)
- Global-Scale Data Models are still ahead

Technology is moving faster than ever.

The future belongs to those who keep choice at the center of their strategy.



AI in FME

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AI Connectors

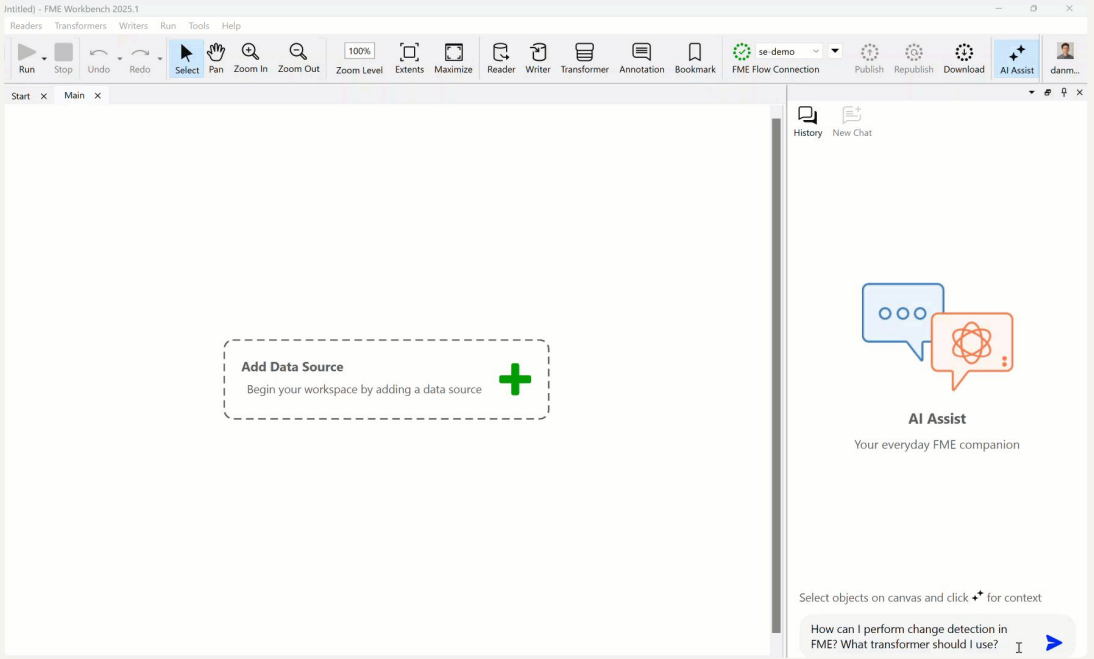
- OpenAIConnector
- AzureAIFoundryConnector
- GoogleGeminiConnector
- AmazonBedrockConnector
- and more . . .

*Available on the FME Hub

FME
by Safe Software
AI-Assist

AI Assist

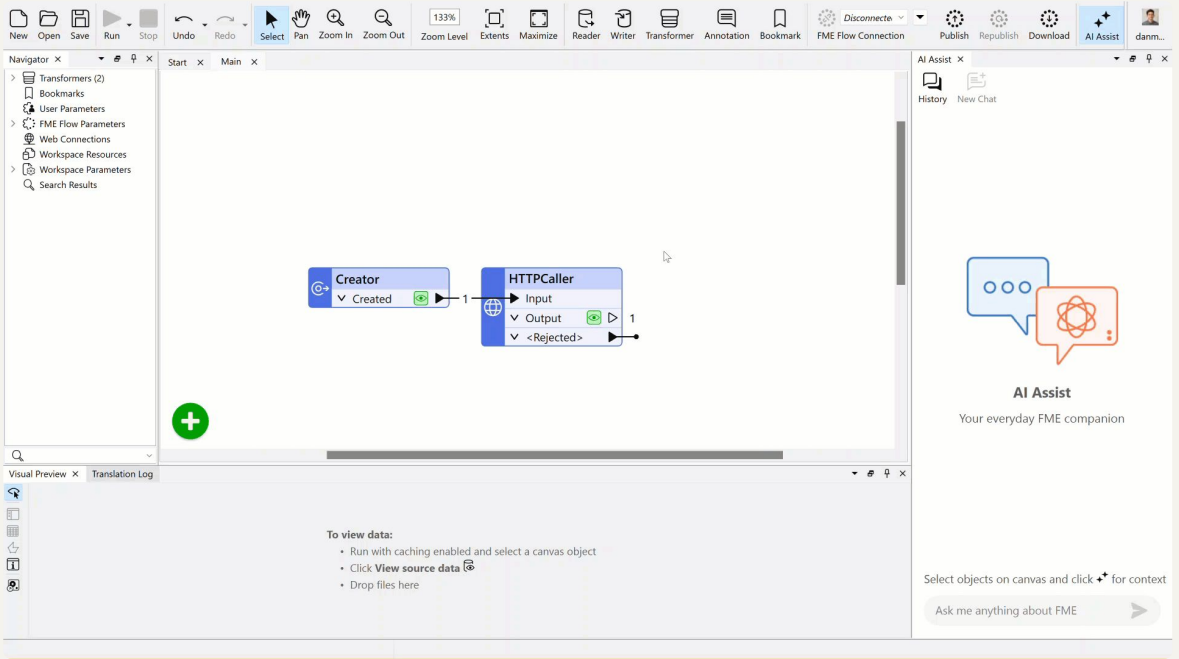
- High-quality FME Knowledge chat integrated within FME Form
- Enables users to ask questions about building workflows in FME
- Format & transformer suggestions
- Ask AI Assist how you can optimize your workspace



Available in FME 2025.1

AI Assist

- Select canvas objects to provide more context to AI Assist



Available in FME 2025.1

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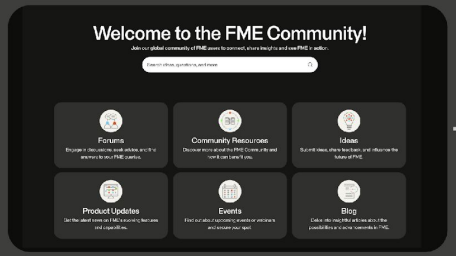
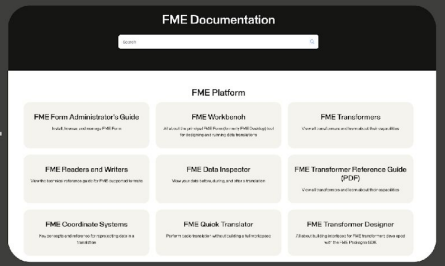
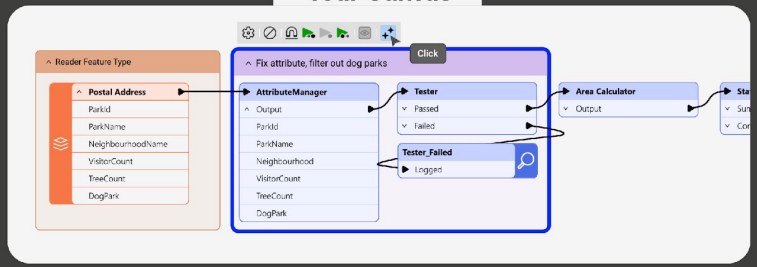
Knowledge Base

Explore our extensive collection of how-to guides and tutorials.





Your Canvas



Resources

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Resources

- Knowledge Base Article
  - Tutorial: Getting Started with Any AI in FME
- Webinars
  - 5 Things to Consider When Deploying AI in Your Enterprise
- Live Training
  - Getting Started with AI in FME
  - Dec 2 @ 9am PST

Q&A

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Thank You

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