



Case Study

Surrey Heath Borough Council

Surrey Heath, UK

Sterling Geo

Loughborough, UK



Key Facts:

Industry: Local Government

Problem: Siloed data in cloud services and legacy systems is potentially harmful to productivity.

Solutions: FME® Desktop & FME Cloud

Results: Automated data integration between cloud services and on-premises systems across the enterprise that ensures up to date data is accessible by those who need it, when, where and how they need it.

Summary

Adopting more cloud services would provide the Surrey Heath Borough Council (Surrey Heath) with operational benefits, but they wanted to ensure they could integrate with legacy on-premises databases when necessary. They also wished to automatically synchronize systems across the organization. Through automated data transformation workflows, FME enabled Surrey Heath to integrate applications and provide access to up to date data to its stakeholders.

The Organization

Surrey Heath Borough Council

Located in Southeast England, the Surrey Heath Borough Council's mandate is to provide its community with public services and infrastructure that ensure that it is a great place to live, work and visit. The office is located in the Borough's main town of Camberley.

Sterling Geo

Sterling Geo (Sterling) is an engineering geographers that specializes in transforming a wide range of geographical data into actionable information for their clients. Sterling has been helping Surrey Heath Borough Council implement systems for processing data so that it can be used effectively in meeting their objectives.

The Situation

Recently Surrey Heath has adopted more cloud-based services like Salesforce, Amazon Web Services (AWS), and CARTO into operations. Besides faster performance and cost-efficient pricing models, their availability ensures that stakeholders in different departments and different locations can access the data and services they need, when and where they need them. They also had legacy databases that warehoused years' worth of data and were deeply ingrained in functions across the organization.

The Challenge

While enthusiastic about moving to the cloud, they knew there were hurdles to overcome. For one thing, they didn't want their legacy on-premises database systems siloed by lack of integration with the newer systems. Secondly, they wanted to connect cloud-based services and automatically synchronize them.

As always with disparate systems, the main roadblocks to integration were different formats and data models. Legacy Oracle and MS SQL Server databases output data as flat files like CSV, KML, HTML and Excel. The cloud-based API environments mainly move data around as JSON and GeoJSON. They needed an integration solution that not only supported a wide range of formats and data transformation functionality, but that could connect to APIs and automate data migration workflows.

The Solution

Working with Sterling, they employed FME Desktop and FME Cloud as an enterprise data integration layer between their on-premises and cloud systems. FME technology provides the format support, API connectivity and data transformation capabilities necessary to build the desired integration workflows. Furthermore, FME Cloud possesses automation capabilities that would keep data in systems across the organization in sync.

Surrey Heath have successfully used FME technology to implement several key integrations.

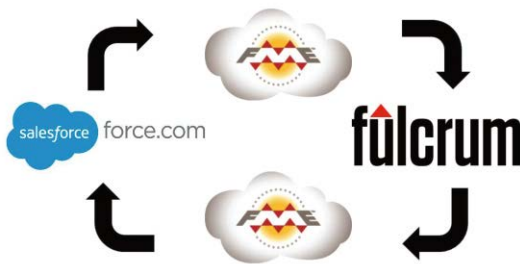
Scenario 1 - Integration with Legacy Databases

FME Desktop helps ship data from legacy systems up to the cloud. Using FME's support for Oracle and MS SQL Server, and its database query tools, they created workflows that extract data and transform it into JSON for delivery to cloud-based applications.

Scenario 2 - Near Real-Time Synchronization Between Fulcrum & Salesforce Force.com

Two services Surrey Heath employ are Fulcrum and Salesforce Force.com. With Fulcrum they create customized, GPS-enabled forms that are used by inspectors in the field. Force.com allows them to create web applications tailored specifically to administrators' needs. To enable more efficient communication of data between the field and the office they wished to implement real-time synchronization between these two services.

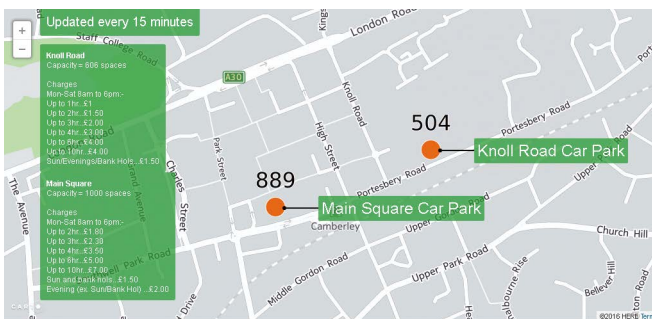
Using several tools in FME, they created two workflows to replicate data between Fulcrum and Force.com. The tools included the Salesforce reader and writer, the HTTPCaller that accesses cloud services via their APIs, and several that read, write and manipulate JSON. Through FME Cloud, a change in one service triggers a workflow that reflects the change in the other, keeping them synchronized in near real-time.



Scenario 3 - Streaming RSS Feed to CARTO & AWS RDS

Surrey Heath wanted to display live RSS feed car parking data for the two main lots in Camberley on a CARTO – powered map. They also wished to log this data in real-time in a PostgreSQL database hosted in the cloud using AWS RDS.

To accomplish this they created workflows that read the RSS data feed then transform and load it to both CARTO and PostgreSQL on RDS through built-in writers. Once again, by deploying these workflows with FME Cloud, they automated the flow of data to both destinations, ensuring both are up to date.



Live car parking data for the two lots in Camberley displayed in a CARTO-powered map.

Scenario 4 - Scheduled Data Validation and Loading of Results to AWS S3

To ensure tax accounts are associated with the correct address, they run a monthly data validation workflow. The workflow retrieves account data from the Council Tax system and checks whether key fields such as the property reference number, UPRN, and Postcode are the correct length and pattern. The property reference number is the only unique reference point between the Billing Authority (Surrey Heath) and the Valuation Office, so it is essential that it is accurate. Equally, the UPRN ensures that the property has the correct address, which is allocated from the Local Land and Property Gazetteer (LLPG). The results are reported as HTML and loaded into Amazon S3, in effect automatically creating web pages that can be accessed by stakeholders from anywhere.

The Benefits

FME technology facilitated Surrey Heath's transition to the cloud by enabling the integration of systems, both on-premises and in the cloud. By breaking down data silos, and ensuring data is up to date across the enterprise, Surrey Heath can focus on analysis and planning that provide better services more efficiently to the community.

What They're Saying

"Not only does FME enable us to provide unprecedented access to our data, both to staff and the public, but it also gives us the ability to automate data processing tasks releasing time to focus on developing ways to use data effectively," says David McDermott of Surrey Heath Borough Council.

Learn More

To find out how FME technology can help you address your data interoperability and distribution challenges, or to download a free evaluation copy of FME, visit www.safe.com.



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