

Use Case

British Gas Trading

While digitalization and transformation serve as the backbone for increasing operational efficiency on the one side Artificial Intelligence (AI) and Machine Learning (ML) represent the analytical accelerators for Energy companies wanting to increase their competitiveness while taking advantage of the increasing volume of data created by digitalization on the other side.

For this reason, in 2018 British Gas Trading began searching for a replacement for their outdated on-premises demand forecasting system. The goal was to identify a modern state-of-art Cloud-based solution that could readily fulfil their performance and prediction requirements with greater accuracy and flexibility at reduced operational costs.

As one UK's Big Six energy suppliers, British Gas (BG) required a solution able to quickly forecast each of their +500K meters for non-domestic I&C and SME electricity customers. The objective was to reduce the previous forecast runs of their legacy system to a fraction of the time needed whilst employing a new meter-based bottom-up calculation methodology for a forecast horizon of 5-years. Upon achieving this BG thereafter added three short-term top-down forecasts per day (intraday, day-ahead +14-day horizon) using the latest weather data updates. These short-term forecast results were needed foremost for BG's real-time market positions.


Metalogic met these stringent demands with its mP Cloud forecasting solution using Microsoft's Azure Cloud,

employing scalable Linux-based containers, Azure SQL Database, and blob store... just to name a few. These cloud resources combined with features for definable workflows, selective aggregations, rule-based forecasting, and expedient data handling enabled metalogic to meet the BG performance demands and achieve comparatively low operational cost levels. mP Cloud today runs fully automated and is managed by metalogic under the terms of its SaaS Agreement.

"In today's rapidly moving commodity environment, it was extremely important for us to get a robust solution that delivered fast and accurate demand forecasts. Working alongside Metalogic has helped us to significantly improve the automation of our forecasting processes. This was critical due to the variability and number of customer profiles. The high-quality forecasts have helped us achieve lower commodity costs and improve our competitive edge to support our customers."


British Gas

George Katsikaris
Director of Commercial Forecasting
British Gas Trading



mP Cloud

- Available as a SaaS or FaaS managed service
- Unmatched performance and throughput
- Fully scalable, highly cost effective

Use Case – British Gas Trading

Following several months of testing and integration, BG's former legacy forecasting system was replaced by mP Cloud at the end of 2019. It has proven to be highly reliable, flexible, and cost-effective, able to meet any BG energy forecast requirements, be it for extended demand forecasts for electricity or gas, or wind and solar generation output forecasts.

mP Cloud – Overview

- The performance of mP Cloud is fully scalable in conjunction with Linux-based containers to provide the processing power needed, whenever required.
- Kibana is used to explore, analyze, and visualize the data
- Efficient caching of the data is performed via Blob Store
- The existing mP Energy user enjoys a higher performance platform with notable reduced processing and response times.
- An availability of >99.5% of the Azure Cloud is guaranteed by Microsoft.
- mP Cloud is hosted in the Azure Cloud and fully monitored and managed by metalogic.

PREVIOUS: BG Legacy System	TODAY: metalogic/ mP Cloud
Comparatively long forecast processing times	Very short processing times per forecast run
Not flexible nor readily scalable/dependent upon own data centre hardware availability	Unlimited scalability, dynamic according to processing demand. 99.95% availability
Overall low performance and forecast accuracy	High performance & improved forecast accuracy
The system included bespoke features implemented especially for BG	All features based on metalogic's standard product philosophy – simplifies support
Comparatively long response time to tickets and change requests – dependent on IT department availability	Exceptionally short response times to tickets and change requests – managed entirely by metalogic – 24x7
High operational costs for comparatively low performance	Lower operational costs combined with high performance
Served its purpose but was cumbersome to run and maintain	Helped BG to save money, be more productive and competitive!

British Gas Trading is the UK's leading energy supplier, supporting around 400,000 businesses with everything from gas and electricity to boiler maintenance, energy efficiency and renewable energy. BG is dedicated to the needs of its business customers. Whether it's a small company looking for a great deal on their gas and electricity or a larger organisation seeking better ways to buy, use and generate energy - BG provides the expertise and support that businesses need.

metalogic, headquartered in Munich, Germany, is a market leader and innovative producer of prediction software and Azure Cloud-based managed forecasting services for the Energy industry. Since its foundation more than 15 years ago metalogic has concentrated solely on machine-learning based predictive analytics, for delivering high-quality forecast results to the energy and utility industry. Today we are perceived as a key player for providing demand, generation, and grid forecasts for electricity, gas, and district heating.

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