



# Innovative platform rearchitecture ensures improved performance and regulatory compliance in the cloud

Industry case study: car, home and travel insurance

## Challenges

- Reliability issues with the storage solution causing critical failures and downtime
- Limited team productivity during platform downtime
- Frequent data load failures (up to 80% of occasions)
- Outdated, unsupported storage solution
- Stringent FCA and GDPR regulations with large financial penalties for non-compliance

## Solutions

- Rearchitected SAS Grid Platform with enhanced features and capabilities for increased resilience and maximised storage performance
- Current storage replaced with IBM Spectrum Scale storage on Linux hosted in the AWS cloud
- Amadeus' IBM Spectrum Scale expertise enabled full functionality from the latest software

## Benefits

- No load failures since solution implementation
- Increased stability and resilience of the new storage solution
- Significantly faster key processing
- Greater platform availability
- Key reports available up to seven hours earlier to inform essential decision making
- Reporting in-line with FCA standards and data managed in accordance with GDPR, avoiding potential financial penalties
- Increased storage totalling 20TB



The first project of its kind, Amadeus delivered a sophisticated platform rearchitecture to overcome platform downtime and storage stability issues to significantly improve the effectiveness of analytics.

## Background

Our customer is a leading name within the insurance industry, using its analytics platform to store and process vital personal and claims information for all areas of the business. With an enormous number of data sources containing information for existing and past clients and an ongoing need for access and insight, it's essential the analytics environment is functioning at maximum capacity.

## Business issue

The customer faced a range of major limitations due to its existing analytics platform. Significant stability issues were having a seriously detrimental impact on teams' productivity – with lasting effects that could roll over to the following day.

Meanwhile, slow batch jobs and frequent data load failures made it challenging to produce essential reports within deadlines and incorporating the latest data. Any potential failures in these areas risked large fines from regulators such as the FCA and the ICO

under General Data Protection Regulation (GDPR). All these factors restricted the customer's ability to maximise the benefits from its investment in data.

## Causes

The customer's existing system was unstable and outdated and its existing storage system was no longer supported. Over time, its processing speeds had reduced dramatically, and the teams struggled with regular periods of downtime. This culminated in a platform that was no longer fit for purpose and needed upgrading.

## Vision

The customer sought an approach that offered continuous platform availability to provide them with the certainty of being able to produce all analyses and associated reports to time and in compliance with regulatory standards.

Amadeus designed a solution which corresponded exactly with these requirements. Delivering such a sophisticated platform rearchitecture is complex, so the customer chose Amadeus to implement it on their behalf.

## Amadeus solution delivered

Amadeus identified that the best approach was to migrate to a brand-new, rearchitected SAS Grid Platform. This involved a cutting-edge combination of technologies, using IBM Spectrum Scale storage on Linux, hosted in the Amazon Web Services (AWS) cloud. This powerful solution allowed users to work concurrently on complex analytical processing without compromising the overall platform performance. The configuration of IBM Spectrum Scale with replication across two servers ensured increased storage resilience.

## Results

This project is the first reported case of its kind for a customer using SAS Grid Platform on AWS with IBM Spectrum Scale. This solution upgrade has delivered many key benefits for the customer:

- A significant uplift in platform availability with no further platform-caused failures.
- Greater storage capabilities, increasing stability and resilience in the face of potential infrastructure failure – a total of 20TB of shared storage available to the platform, offering 10TB of usable storage space and another 10TB for a concurrent data backup.
- Improved storage performance enabled faster and better processing. Following the upgrade, key reports were available up to seven hours earlier.
- The new platform ensured the reporting phase was planned, successful and executed on time every day, ensuring compliance with the industry's FCA regulation.
- Compliance with Europe's GDPR legislation, avoiding risk of fines of up to €20m or 4% of annual turnover.

This state-of-the-art analytics solution maximised users' productivity, minimised platform downtime and enhanced RoI from the customer's investment in data.

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## About Amadeus Software – trusted analytics experts

Founded in 1989, Amadeus has an impressive history of supporting its customers in maximising their Return on Investment from data through the application of data analytics and data science across its key business services.



**SAS Software | Consultancy | SAS Training | Managed Services | Graduate Placement**

Amadeus partners leading providers within the industry, including SAS, Microsoft and AWS, to ensure our customers receive the best solution to meet their challenges. These solutions can be across any main programming language, such as SAS, Python, R or SQL.