Creation of a Risk Data Application

Client: Anonymous
Business Size: Corporation
Industry: Personal Mobility
Country: UK
Technology: Oracle, SQL Server, Amazon Web Services, Snowflake

Objective: Creation of a Risk Data Application for the Asset Risk Analysis Team

The Brief
To create an application to automate the generation of reports for risk and asset analysis, while providing analysts with the capability to adjust parameters for forecasting purposes.

Methodology
The project seamlessly integrated the Scrum framework, implementing a structured approach with two-week sprints, daily stand-up meetings, sprint planning, backlog refinement, sprint reviews, and retrospectives. Leveraging an array of powerful tools such as Oracle Data Integrator, Oracle Database, Oracle APEX, Oracle OAS, AWS S3, Snowflake, Oracle RDS, Oracle Golden Gate, SQL Server Manager, JIRA, Confluence, Bit Bucket (GIT), MS Teams, and Slack, the development of the software solution was meticulously executed. These tools not only facilitated the efficient utilization of existing code and expertise, but also catered to the specific operational requirements of the company's business management.

Challenges
The project's intricate architecture, and the vast volume of migration data it entailed, posed significant challenges to data load performance and the overall system. The project's design was improved, resulting in highly optimized performance. Integrating the Oracle database with Snowflake for hourly replication presented its own set of challenges. However, these obstacles were also overcome, ultimately ensuring the successful completion of the project.

Consultant Contribution

In the role of an ODI Developer, our consultant was deeply engaged in various ETL responsibilities, encompassing the creation of ODI mappings and packages. These components played a pivotal role in the extraction and transformation of both migration and Business-As-Usual (BAU) data. Furthermore, he played a central role in implementing ODI pipelines through Load Plans, automating the execution of data loads with options for serial, parallel, and conditional execution. Duties also included the application of performance tuning techniques for both ODI and the associated database. Additionally, data loads were seamlessly integrated with the Snowflake cloud and AWS S3, ensuring a comprehensive and efficient data management solution.

Lessons learned

The project served as a valuable lesson in the significance of efficient collaboration, clear communication, and adaptability, highlighting the benefits of code reviews and pair programming in achieving the successful delivery of a software solution.