DB Migration

Client: Anonymous
Business Size: Corporation
Industry: Insurance Company
Country: UK
Technology: PowerBuilder, Sybase ASA, SQL Server, Python

Objective: Upgrade Software

The Brief
Late in November 2024 OCS Consulting started the service establishment process for the customer's PowerBuilder application and Sybase ASA database, with the view to document and gain an understanding of this system in order to potentially support them in the future. The result of this was that OCS was contracted to upgrade the application to the latest version of PowerBuilder, as the version utilised is out of support and to migrate Sybase ASA to SQL Server.

Background
This Case study refers to the DB Migration.

Methodology
There is no existing tool to migrate Sybase ASA to MS SqlServer. My initial thought was to build a Sybase ASA model in SQLGlot, a python library, and use that to parse the reload.sql file provided and then use the in-built SQL Server Model to provide the SqlServer version. However, SQLGlot had issues parsing the Reload.sql file. As time was limited, I opted for a pure python solution.this would allow me to handle multiple upgrades as the Sybase DB was still active and being changed.

Solution and implementation
The technologies I used on this assignment were:

- Migration Tool: Python, Windows cmd script
- Databases: Sybase ASA & MS SqlServer

All database issue tracking was done on bugnet synched to the customer's bug tracking system. Which issues were prioritised was decided by discussing with the team. Various tools such as Visual Studio Code, MS SQLServer Management Studio and MS Teams were used.

Consultant Contribution
As a database developer, I was responsible for contributing to the migration of the ASA database to MS SqlServer. This included analysis, development, testing, and deployment phases.

Lessons learned
This was my first Sybase ASA to MS SqlServer migration so I a few new function mappings and how to convert some Sybase ASA constructs to MS SqlServer syntax.