

CASE STUDY: SYNYEGA

The Brief

Synyega is a Warrington based award-winning independent software licensing advisory organisation that models the licensing implications for clients moving from on-premises datacentres to the cloud providing early insights into potential costs, helping organisations avoid common pitfalls and making best practice preparations for migration. For example, advising on a clear sequence of Oracle support cancellations and decommissioning schedule to ensure efficient removal of old licenses which could cost unnecessary budget.

Synyega's dynamic methodology powered by CHLOE (cloud licence optimisation engine) addresses the new reality of software estates in continual flux.

The Synyega CHLOE tool was developed in-house by one of the licensing consultants. It contains an extract, transform and load (ETL) component loading Excel source files into MS Access and SQL Server via a series of SQL scripts, plus an additional layer of SQL scripts and views for querying and reporting.

ETL is the process of turning raw data into actionable business information.

ETL consists of three stages:

- Extract: Reading/storage of data from disparate data sources
- Transform: Clean and remodel the data to ensure it is meaningful, accurate and quick to load in the target destination (e.g. reporting tool) Data transformation in order to meet the data model of enterprise repositories like data warehouses
- Load: transformed data passed into the target destination

CHLOE has been developed over time with increasing complexity, manual interventions and accompanying operational risks associated with support from a limited number of in-house experts.

As many of Synyega's clients' software licensing information is commercially sensitive any solution needed to be deployable and runnable entirely on-premises rather than in the cloud.

Many of Synyega's clients also have non-standard requirements, so whatever ETL process was proposed there was a need for it to be easy to modify and expand to meet clients' needs.

The Approach

Liverpool John Moores University's CW4.0 team commissioned Village Software Engineering to work with Synyega to research and devise an on-premises operable proof-of-concept set of ETL processes to replace the existing ETL steps within CHLOE.

An entity relationship diagram and the as-is processes were documented to inform the development of the solution that also focussed on ensuring that all database tasks are performed inside a single SQL

Server Express instance, rather than both an MS Access database and a SQL Server database. This makes the system easier to deploy, maintain and develop.

The open-source Talend Open Data Studio ETL was selected as it has a non-cloud option (meeting the on-premise requirements) and a low-code development environment (allowing a larger range

of Synyega employees to contribute to running, maintaining and expanding ETL processes).

Talend was utilised to create a Proof of Concept containing a number of ETL steps within the tool replacing those previously run by SQL scripts. Once installed and connected to the database, the ETL component of CHLOE can now be run at one click rather than requiring SQL scripts to be manually executed in a specific order.

The simpler execution reduces Synyega's dependence on the availability of a relatively small number of users with SQL knowledge. The proof of concept was demonstrated to the Synyega team at an online workshop accompanied by a documented 'how-to-guide' with advice on how to connect to the database, and how to undertake further adaptations to CHLOE to meet the need of different clients.

The Benefits

The open-source configurable tool provides Synyega with a solution that the licensing consultants team can utilise on clients' premises to give fast and accurate reports to aid business decision-making and resultant cost-saving opportunities.

The configurability and easy-to-use nature of the new tool has increased the number of Synyega employees empowered to run and develop the tool, reducing business risk.

"It was a pleasure to work with the Business Intelligence team at Village. The proof of concept that has been developed will be of significant benefit to our business and, in turn, our clients."

– Trevor Massey, Licensing Consultant for Synyega



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