CSO IRELAND IMPLEMENTS ALTAIR SLC™

ALTAIR SLC HELPS THE CSO IRELAND POWER NEXT-GEN DATA ANALYTICS

About the Customer

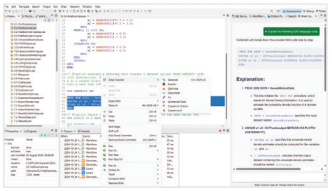
The Central Statistics Office (CSO) is Ireland's national statistical institute. It provides independent statistics on a range of topics, including the country's economy, society, and environment to support informed decision-making by government leaders and citizens alike. The CSO also manages Ireland's census, which is held every five years. The citizens of Ireland have trusted the CSO to gather, analyze, and publish independently produced statistics and insights for over 75 years.

Their Challenge

The CSO's long-term plan is to migrate its operations to R as its preferred programming language for statistical analysis. Currently, it relies on data transformation, statistical analysis, and machine learning models built in the SAS language.

The SAS language is often crucial for mission-critical applications in government that rely heavily on SAS language applications for ETL, data management, reporting, and advanced analytics. Altair SLC provides the opportunity to modernize applications by incorporating and mixing programming languages including SAS, Python, R, and SQL.

Following an open procurement competition, the CSO awarded a tender for licensing and consultancy services to Altair. Altair SLC™ compiles SAS language code and includes a complete development environment and deployment tool that supports the SAS language alongside other languages such as Python, SQL, and R. The CSO's challenge was to quickly establish and migrate to this new environment without impacting the organisation's timeliness or the quality of its statistics.



Altair's coding environment is ideal for developing models and programs written in the SAS language. With it, CSO developers can include Python, R, or SQL code in their SAS language programs. It also provides a drag-and-drop workflow so users can develop models and programs without needing to write any code.

Our Solution

The CSO is using the SAS language compiler built into Altair SLC to run programs written in SAS language syntax, which the CSO can use without needing to license any third-party products. They take advantage of Altair SLC's broad SAS language support, including core language, macros, and output support, graphs and charts, statistical analysis, time series analytics, and matrix manipulation to continue using their existing library of SAS language code and develop new SAS- and R-based modules as needed. The CSO can run Altair SLC on laptops, desktops, servers, and mainframes using the operating system(s) of their choice.

The CSO takes advantage of Altair SLC's ability to utilise R code inside a SAS language program as part of their migration process. They can write applications that mix syntax from different languages within a single program and build workflows that incorporate code blocks written in different programming languages.

Altair SLC brings the SAS language, Python, R, and other modern analytics technologies together into a coherent, future-proof platform that enables the CSO to:

- Optimise cloud, on-premises, or hybrid infrastructure.
- Simplify end-to-end analytics workflows from multiple siloed data processes.
- Streamline DevOps bottlenecks with assisted deployment through open web APIs.
- Run critical SAS language programs alongside open-source languages within a single framework.
- Reduce costs and benefit from Altair's flexible software licensing model.

Results

The documentation, training resources, and support provided by Altair allowed the CSO team to adapt quickly to using Altair SLC. Most notably, the CSO was able to replace their existing development and deployment infrastructure with Altair SLC within 60 days and migrated 40 years' worth of SAS language programs from their legacy environment to Altair SLC.

Today, the CSO has a complete analytics infrastructure that supports both the SAS and R languages. They can incorporate modules built in R into their existing SAS programs and build completely new modules in R, SAS, or a combination of the two. They also have the option of integrating Python into their processes if they choose to do so in the future.

The Altair SLC implementation helps the CSO provide the government and citizens of Ireland with accurate information they can use to make important decisions about the future of the country, draw from a larger pool of development talent, and more.

To learn more, please visit **altair.com/altair-slc**