Security Reference Data Warehouse

Iris created a security reference data warehouse as a common repository for use by several fixed income applications and services to execute trades with better quality and accuracy.

Overview

Our client has a hub for Fixed Income (FI) applications and services which holistically serve the needs of the fixed income business. Over time, each of these FI applications had evolved with their own set of reference data. This had led to inconsistencies in actions and results produced off every trade cycle.

Iris designed and developed a common data repository to store security reference data by parsing various real time and end of day (EOD) feeds from multiple external and internal sources with each source having a varied data format.

The challenge

Our client provides a focused set of financial products and services to institutions, corporations, governments and high net worth clients around the world. As part of the overall Fixed Income strategy, our client wanted to create and maintain a common Security Reference Data repository to ensure that all applications get one true version of data at any point in time.

This had been a challenge because

- parsing data was cumbersome – data subscribed from different providers came in varied formats.
- ensuring availability of current and consistent real time data required a high performance application architecture.
- ensuring that referential links to the underlying securities and instruments such as Treasuries, CDS, Bonds were consistently and accurately maintained was tedious and prone to errors
- establishing one official price per product per region for use across desks for consistency and aggregation of risk and valuation was not possible
- processing millions of records to ensure data currency was time-consuming.

The solution

Iris built a scalable Marking and Reference Data Platform with the following components:

- Generic downloader that downloads data from various providers such as Bloomberg, Mark it, Reuters and TradeWeb.
- ETL architecture that loads this data to an OLAP database.
- Processors and Readers to read XML and process them based on custom business rules.
- Components and services to tag and query different data feeds – Intraday/ EOD IR curve snaps, CDS Index Level EOD, Bond Marking (GOV and Corporate), Issuers and Bonds Intraday, Bond Maturity, Global Call Schedules, EOD BBG.
- CDS Curve generator to auto generate intraday curves
- Rating Processor to process Intraday (S&P), Rating Intraday (Moody's), Client Channel Mappings.

The Iris advantage

Execution excellence: Scalable architecture enabled extension of the solution to other asset classes and markets thus reducing the cost of implementation and time to market.

Predictable paybacks: Iris deployed a cross-geographic development and implementation team to save the client over a million dollars from vision to realization of the goal.

Collaborative problem solving: Team work between Iris' cross-functional team and client's business and IT personnel helped realize an application that processes 3 million records in less than 5 minutes compared to prior processes that consumed 25 minutes to accomplish the same result.

About Iris

Iris (www.irissoftware.com) is a professional software services organization providing its customers with high-quality, cost-effective solutions and developing mutually beneficial relationships. Iris does this through comprehensive solution offerings with best-of-breed technologies, rapidly deployable solutions, flexible engagement models and proven methodologies. This allows customers to focus on their core competencies, and concentrate IT resources on projects that directly impact their bottom-line.