



A leading Bank capitalises on SOAMatrix's Service Oriented Architecture (SOA) suite of products for data enrichment

Customer Brief

A Leading Public Sector Bank

Business Challenge

Today banks are focusing on using new technologies for accuracy, efficiency and speed in operation of the processes involved and to provide better customer service.

A leading public sector bank consists of a system that comprises of different applications for providing different banking services and a Staging System where the data from multiple source systems is stored, enriched and sent to multiple target systems. The system needed a way to solve the following problems:

- ▶ Handling heterogeneous data sources
- ▶ Handling the null/impure data while performing data enrichment
- ▶ Rewriting of data enrichment scripts when source/target applications change due to new releases or upgrades
- ▶ Introducing new systems makes the data enrichment process more complex and difficult to maintain

Solution

SOAMatrix Software Private Limited (Company herein referred to as SOAMatrix) provided a Data Services Integration based solution using Extract-Transform-Validate-Load (ETVL) Integrator system. The system is designed to manage and orchestrate high-volume, high-performance data transformation and provides connectivity to a vast range of heterogeneous data sources.

Benefits

Following benefits were realized using the SOAMatrix ETVL Integrator:

- ▶ Stores all data transformation logic/rules in one place
- ▶ Makes maintenance easy with flexibility to change data mappings and rules quickly
- ▶ Reduces cost and effort associated with maintaining and rewriting data enrichment scripts
- ▶ Modelling ETVL processes using an intuitive graphical designer
- ▶ Robust error handling during ETVL process
- ▶ Support for processing of various data formats like File, XML and HTML
- ▶ Support for full refresh and incremental extraction
- ▶ Orchestrate Business Process where ETVL process can participate as partner (for example, scheduling, notifications, alerts and so on)

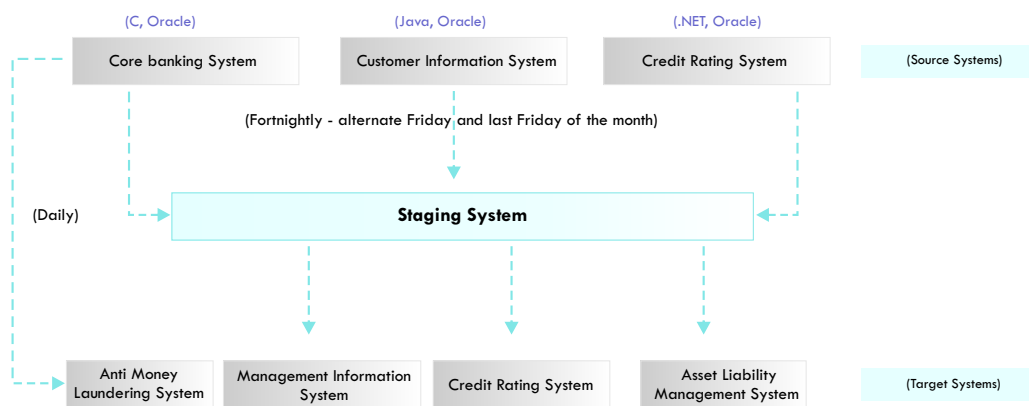
Current System Architecture

The current system consists of different applications for different banking services. For instance, the main source systems include:

- ▶ Core Banking System
- ▶ Customer Information System
- ▶ Credit Rating System

The target systems include:

- ▶ Management Information System
- ▶ Asset Liability Management System
- ▶ Anti Money Laundering System
- ▶ Credit Rating System



Current System Architecture

The system consists of different applications for providing different banking services and a Staging System where the data from multiple source systems is stored, enriched and sent to multiple target systems.

The data enrichment process involves writing and maintaining complex database scripts in performing the following tasks:

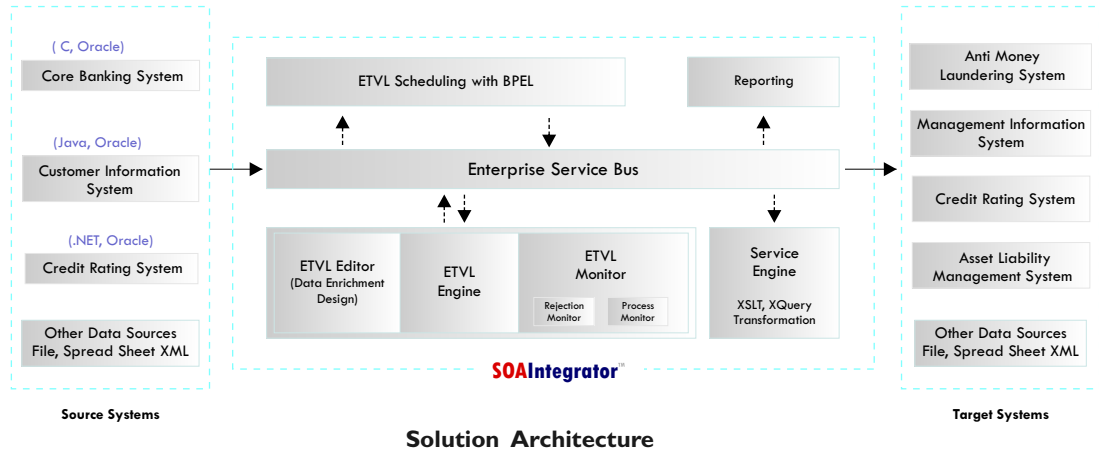
- ▶ Extract required data from different source systems into text files
- ▶ Load the extracted data into the Staging System
- ▶ Transform and validate to generate data in a format required by the target systems
- ▶ Load the enriched data into the target systems

About SOAMatrix Software Pvt. Ltd.

SOAMatrix™ is a fast-growing privately held company focused on SOA (Service Oriented Architecture) product development and associated solutions, with a vision for building innovative world-class enterprise products to meet new and emerging challenges in the SOA space.

Solution Architecture

The following architecture diagram shows how the different components of SOMatrix™ ETVL Integrator fits in the solution architecture.



Results

Following results were realized with data services integration based Extract-Transform-Validate- Load (ETVL) Integrator:

- ▶ Maintenance of complex database scripts for data extraction, transformation, validation and loading is eliminated
- ▶ Storing of data enrichment logic and rules at one place resulted in easy maintenance of integrated system
- ▶ Increased flexibility with support for visual modeling of Extract-Transform-Validate-Load process operations
- ▶ Flexible scheduling of Extract-Transform-Validate-Load process execution eliminated manual intervention
- ▶ Reporting engine with data monitors at Extract-Transform-Validate-Load process steps resulted in identifying and localizing the root cause of failure
- ▶ Real time alerts on the failure at any of Extract-Transform-Validate-Load process steps resulted in performing timely corrective actions