

Maximizing Automation through Robust Data Migration Framework

Customer Overview

The customer is one of the largest banks in Saudi Arabia, providing commercial services to domestic and international customers. With 3000+ employees and 45,000+ points of sale, they have been offering services in retail banking, corporate banking, and cash management for over 45 years.

The Context

The customer was in the process of implementing a Core Banking Solution (CBS) to simplify and enhance day-to-day operations. The project involved the creation of a huge number of processes for data migration. The creation of each process was tedious, time consuming, and involved multiple iterations for changes and rework. Hence, the customer was in immediate need of a technology partner who would help automate the complex processes of data migration and reduce the time and manual effort required.

Type of Service Provided

Application Development, Enhancement, Production Support

Technologies Used

Oracle PL/SQL, SAP BO, SAP BO SDK, VBA for Excel Macros, Java, RESTful Web Services

The Solution

GS Lab | GAVS created a robust Data Migration Framework to achieve maximum automation of activities across different phases that included:

- Swift and secure migration of data from the source systems (customer's applications) to the target system (CBS)
- Downstream data movement from the CBS to the data warehouse
- Reconciliation
- Development and enhancement of business intelligence reports

Challenges

- Complex data migration processes
- Multiple iterations for changes, rework over a large span of time
- Predominantly manual impact analysis and object analysis, run through several iterations
- Manual effort for frequent operations such as retrieving list of reports, changing data source for a group of reports, purging data in bulk, and retrieving queries within reports
- Lack of sufficient data to test the newly created PL/SQL procedures and reports

Solution Highlights

- Creation of a robust Data Migration Framework
- Automation of activities across phases such as data migration from source to target, data movement from CBS to DW, reconciliation, report development/enhancement
- Automation of specific activities such as object dependency analysis, table design, script generation, data/reports reconciliation, test data prep, code review, performance stats, etc.

Solution Impact

- Automation of 70% of the activities
- 25% time savings for resources, leading to better resource utilization and cost savings
- Elimination of manual errors through increased test coverage
- Improved quality, code consistency, resource efficiency due to reduced manual errors
- Pre-emptive identification and prevention of performance bottlenecks

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Some of the activities that were automated:

- ✓ Object dependency and report analysis
- ✓ Table design and DDL script generation
- ✓ Source specification and table comparison
- ✓ Technical data reconciliation
- ✓ Business reports reconciliation
- ✓ Preparation of test data
- ✓ Code review
- ✓ Performance statistics

Data Migration and Integration Framework

