



DATA LEAGUE

from Inception to Insights

Data Warehouse Restoration





Intro

We served a leading utilities provider to undertake a comprehensive restoration project of their data warehouse. The primary goal was to replace the existing Oracle source with Microsoft Dynamics CRM while preserving the existing semantic and reporting layers. Leveraging the power of Business Intelligence Markup Language (BIML) and SQL Server Integration Services (SSIS), we aimed to streamline the migration process, automate package development, and minimize both time and costs for the client.

Challenges

- **Outdated Data Source:** The existing Oracle data source was becoming increasingly challenging to maintain, leading to data integrity issues and inefficiencies in data retrieval.
- **Manual Package Development:** Traditional manual development of SSIS packages was time-consuming, error-prone, and resource-intensive, hindering efficient data movement and transformation.
- **Semantic and Reporting Layer Preservation:** Ensuring a seamless transition while preserving the existing semantic and reporting layers was critical to maintaining business continuity and user familiarity.

Solution

Our team proposed a comprehensive solution to address the challenges and achieve the desired data warehouse restoration and migration:

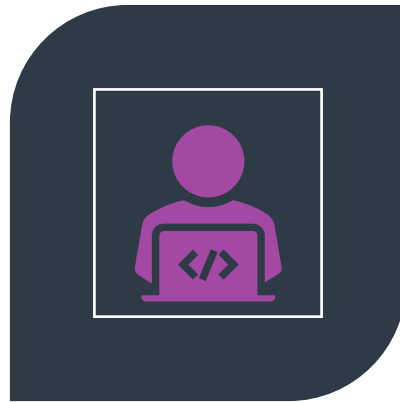
- 1. Oracle to Dynamics CRM Migration:** We meticulously mapped and transformed data from the Oracle data source to Microsoft Dynamics CRM, ensuring data integrity and compatibility.
- 2. BIML Automation:** Leveraging BIML, we automated the development of SSIS packages, significantly reducing manual effort, minimizing errors, and accelerating the migration process.
- 3. Semantic and Reporting Layer Restoration:** Our experts carefully restored the existing semantic and reporting layers, ensuring a seamless transition for end-users and preserving the functionality of critical reports.

Implementation

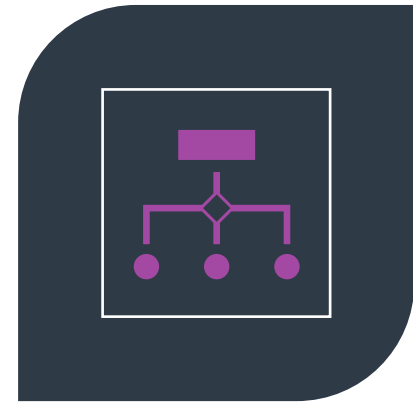
The restoration and migration process encompassed the following key steps:



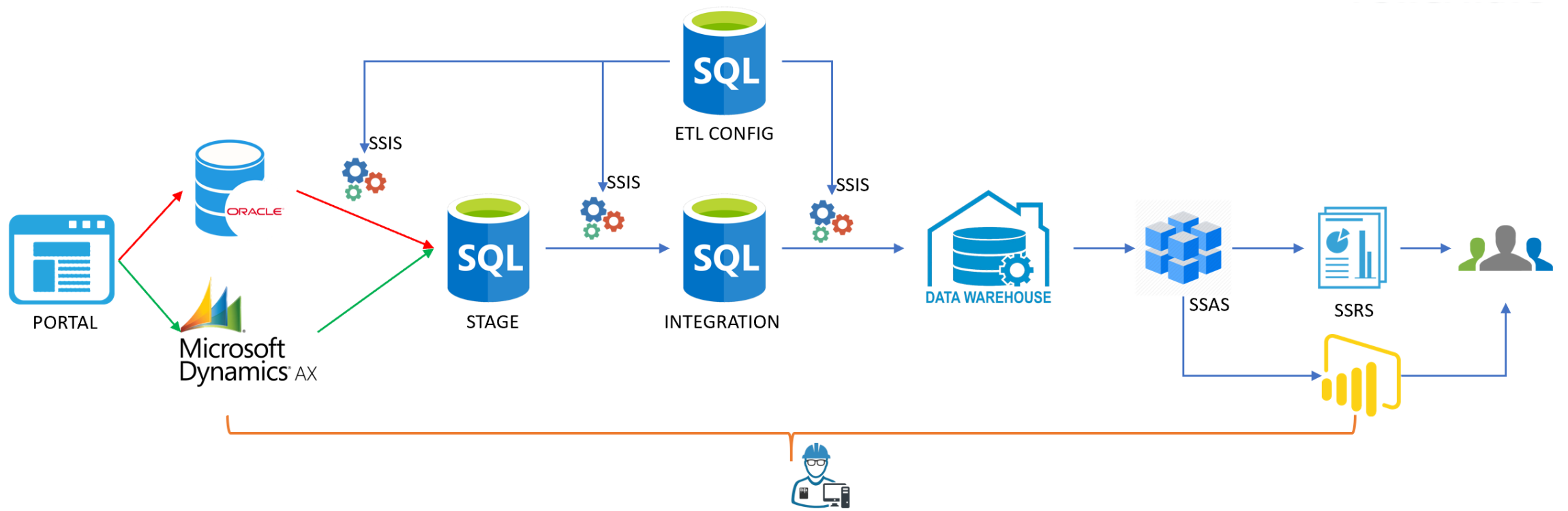
DATA MAPPING AND TRANSFORMATION: OUR TEAM METICULOUSLY MAPPED AND TRANSFORMED DATA ELEMENTS FROM THE ORACLE DATA SOURCE TO DYNAMICS CRM, ENSURING DATA ACCURACY AND COMPLETENESS.



BIML AUTOMATION: USING BIML, WE AUTOMATED THE CREATION OF SSIS PACKAGES FOR DATA EXTRACTION, TRANSFORMATION, AND LOADING (ETL), SIGNIFICANTLY REDUCING DEVELOPMENT TIME AND COSTS.



SEMANTIC AND REPORTING LAYER PRESERVATION: THE EXISTING SEMANTIC AND REPORTING LAYERS WERE CAREFULLY REVERSE-ENGINEERED AND INTEGRATED INTO THE NEW DYNAMICS CRM-BASED DATA WAREHOUSE ENVIRONMENT, GUARANTEEING A SMOOTH TRANSITION FOR END-USERS.

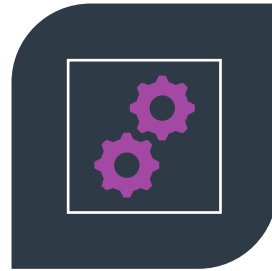


Results

The restoration and migration project yielded significant benefits for our utilities client:



ENHANCED DATA INTEGRITY: THE MIGRATION TO DYNAMICS CRM IMPROVED DATA INTEGRITY AND RELIABILITY, ENSURING CONSISTENT AND ACCURATE INFORMATION ACROSS THE ORGANIZATION.



EFFICIENT ETL PROCESS: BIML AUTOMATION STREAMLINED THE DEVELOPMENT OF SSIS PACKAGES, REDUCING MANUAL EFFORT, MINIMIZING ERRORS, AND ACCELERATING THE ETL PROCESS.



PRESERVED USER EXPERIENCE: THE SUCCESSFUL RESTORATION OF THE SEMANTIC AND REPORTING LAYERS PRESERVED THE USER EXPERIENCE, ENABLING SEAMLESS ACCESS TO CRITICAL REPORTS AND INSIGHTS.



COST AND TIME SAVINGS: THE AUTOMATION OF SSIS PACKAGE DEVELOPMENT THROUGH BIML RESULTED IN SUBSTANTIAL TIME AND COST SAVINGS FOR THE CLIENT



Through meticulous planning, BIML automation, and seamless migration, our consultants successfully restored and migrated the utilities client's data warehouse from an Oracle data source to Microsoft Dynamics CRM. This transformation not only enhanced data integrity and efficiency but also preserved the existing semantic and reporting layers, ensuring a seamless experience for end-users. Our expertise in data restoration, migration, and automation proved pivotal in achieving the client's objectives and driving operational excellence.

For more information on how our data consulting services can help your organization with similar data warehouse restoration and migration challenges, please contact us at info@dataleague.com.au.