

UPGRADED ORACLE INSURANCE POLICY ADMINISTRATION (OIPA) FOR A LEADING AMERICAN INSURER

BUSINESS GOALS

- Upgrade Oracle Insurance Policy Administration (OIPA) from Version 8 to Version 10, for full product support and faster turnaround of enhancements and remediation
- Take advantages of new features like expanded security, new palette, internationalization and funds maintenance at company level
- Ensure easier configuration by removing Java scripts and adding screen math capabilities
- Perform data conversion for all existing policies and static reference data
- Upgrade all systems that support the application, as well as non-core interfaces that read/write data to the OIPA database
- Improve performance of both online and batch processing, leveraging the PIT functionality
- Ensure all components function like-to-like between the existing and upgraded platform

BUSINESS BENEFITS

- Provided **greater than 85% coverage** for all test conditions across domains and transactions using automated data profiling utilities
- Created a robust **Automated Testing Framework** to execute the parallel test cases, compare test results and generate difference and summary reports
- **Reduced manual parallel execution and analysis effort by 90%**, delivering quick turnaround of parallel cycle
- Created utilities to scan the Activity XML data and gather specific information used for data conversion. This led to **extremely accurate and high quality post converted data**
- **Increased productivity** due to adoption of a phased approach for build and testing

CHALLENGES

- Base code was incompatible with the current design and the client's customized code
- Ensure no post-conversion data loss and high data quality
- Identify and fix existing non-standard data to ensure compatibility with the new platform
- Data conversion activities had to be optimized so the entire data conversion could be completed in one weekend
- Maintain and share all upgrade environments with timely retrofits due to ongoing BAU and Project changes

SOLUTION

Atos Syntel executed a first-of-its-kind project for OIPA, where the entire platform (core application, database, and all integrated components) were upgraded and moved to production at the same time. We deployed a skilled team of Subject Matter Experts with more than 7 years of in-depth OIPA experience, who led our efforts to:

- Conduct a **gap analysis** between the existing and new version, and develop a pilot POC to ensure feasibility
- Develop a **staggered build approach** with 60% configuration changes to one product followed by string test to identify early defects before expanding to all products, making the transition more manageable and productive
- **Manage mapping** for each conversion module by analyzing the data created in the previous version and comparing it with existing data
- Develop repeatable and highly concurrent automated data conversion framework with scripts written in **ETL (Informatica), Unix, SQL/ Stored Procs and Java**
- Ensure **robust control balancing** and **error handling** between source and target data to prevent data loss and ensure high data quality
- Develop a robust **test strategy** with a series of iterative testing methods including string test, system testing, parallel testing (small and large volume), UAT, and performance testing. Every phase targeted test cases and specific exit criteria to ensure maximum build productivity
- Create a **detailed and comprehensive test data matrix** for parallel and systems testing using below techniques and utilities to ensure all modules are tested in detail and certified
 - o Develop a **data crawler** utility to automatically extract unique test conditions and policies by running it in a production-like environment
 - o Employ **qualitative data analysis** techniques on critical data points from activities and screens extracted through complex queries
 - o Create data through existing inbound process using historical masked production and test files
- Conduct heavy performance testing with parallel batch and user load
- Performed impact analysis for all non-core components and made necessary redesign and modifications