Case Study: Simplifying Financial Data Integration Between NetSuite and Databricks

A multi-entity organization relied on Databricks to process its operational data and NetSuite to manage its financial records. However, moving financial transactions between the two systems required three separate integrations through Oracle Integration Cloud.

As the organization's data needs evolved, managing these integrations became increasingly complex, requiring coordination across multiple platforms and teams.

DecisivEdge developed a direct integration between NetSuite and Databricks, bringing the three workflows into one centralized process. The solution was designed to simplify integration management, identify transaction errors earlier, and improve visibility into financial data processing.

CHALLENGE

The organization's existing integration process was functioning as intended, but its architecture introduced unnecessary complexity.

Financial data originated in Databricks, passed through Oracle Integration Cloud, and was then transferred into NetSuite. With different parts of the process managed across separate platforms, making changes and investigating errors required additional coordination.

The organization faced several challenges:

- *Complex integration management:* Three separate integrations needed to be maintained, monitored, and updated.
- *Delayed error detection:* Issues with financial transactions were typically identified when they reached NetSuite, rather than earlier in the process.
- *Limited visibility:* Transaction errors and processing results were tracked outside Databricks, making troubleshooting more complicated.
- *Difficulty scaling:* Adding new financial data sources meant building and maintaining additional integration workflows.

The organization needed a simpler way to connect NetSuite and Databricks without disrupting its existing financial processes.

SOLUTION

DecisivEdge redesigned the integration architecture to enable Databricks to communicate directly with NetSuite, eliminating the need for Oracle Integration Cloud in this particular process.

Instead of maintaining three separate integrations, the team developed one reusable workflow to manage financial transactions between the two systems.

Key Components of the Re-Designed Solution

1. *Identifying Errors Faster Through Automated Validation:*
   DecisivEdge built validation checks into the Databricks workflow to identify potential issues before journal entries are submitted to NetSuite.

   These checks verify that debits and credits balance, transaction information is consistent, and referenced accounts, departments, classes, and subsidiaries are active in NetSuite.

2. *Direct Integration with NetSuite:*
   The solution uses NetSuite's existing REST API to create or update journal entries directly from Databricks.

   It retains NetSuite's external-ID upsert functionality, allowing the system to recognize previously submitted transactions and update existing records rather than create duplicates.

   The integration also preserves the existing NetSuite API call structure and error logging mechanism.

3. *Automated Reconciliation and Audit Tracking:*
   The redesigned workflow creates an audit record for each journal entry, documenting the transaction submitted, its processing status, and any errors encountered.

   It also includes automated reconciliation to verify that submitted entries have been recorded in NetSuite.

4. *Improving Transaction Visibility:*
   The solution tracks financial transactions as they move between systems, recording their status and any errors encountered. It also includes automated checks to confirm whether transactions were successfully recorded in NetSuite.

5. *Maintaining Existing Financial Processes:*
   The new integration was designed to preserve how NetSuite receives and processes financial transactions, including safeguards against duplicate entries.

6. *Supporting Future Integration Needs:*
   The reusable framework is designed to accommodate additional financial data sources without requiring a completely new integration for each one.

RESULTS

- *3 Integrations Re-designed Into 1:*
  A single workflow was developed to replace three separate integrations between Databricks and NetSuite.

- *33 Automated Tests Passed:*
  The solution successfully passed 33 automated test scenarios in a simulated environment, covering transaction processing, error handling, and reconciliation.

- *Automated Financial Data Checks:*
  Validation and reconciliation capabilities were built into the workflow to identify potential errors before transactions reach NetSuite and verify whether they were successfully recorded.

- *Existing NetSuite Processes Preserved in the Design:*
  The new integration retains the existing transaction posting approach and error logging functionality, with production compatibility still to be confirmed.

ABOUT DECISIVEDGE

DecisivEdge leads organizations through their transformation journey. We believe that the right mix of people, processes, and technology will drive modernization, business optimization and automation. To learn more, please visit our website at www.decisivedge.com, email us at getresults@decisivedge.com or contact us at 302.299.1570.