

Case Study: Error Handling in Middleware Integration

Overview

A leading FMCG company implemented an integration architecture connecting its ERP system (JD Edwards EnterpriseOne) with multiple external applications such as transportation (OTM), demand forecasting tools, and vendor portals. These integrations were built using Dell Boomi Middleware, which provided robust API-based communication and real-time data synchronization. However, as transaction volumes grew, the company began facing challenges in managing integration errors, leading to data mismatches, transaction failures, and manual rework.

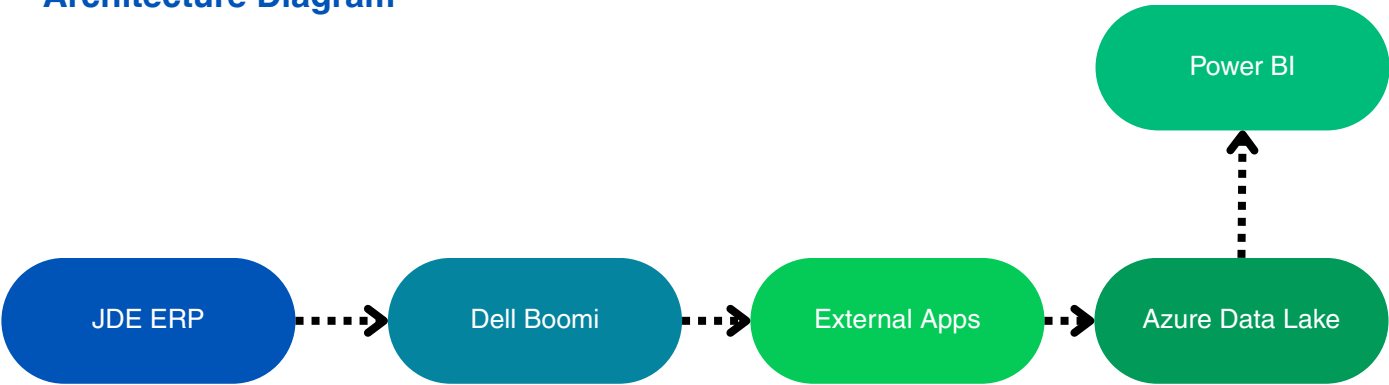
Business Challenge

The integration environment involved over 40 active interfaces across procurement, finance, logistics, and sales. Typical issues included data format errors, connectivity failures, duplicate or missing records, and unclear error visibility, forcing users to rely on IT teams for troubleshooting.

Solution Approach

The IT team designed a Centralized Error Handling and Monitoring framework within Dell Boomi, focusing on error categorization, structured handling, and proactive monitoring.

Architecture Diagram



Error Handling Lifecycle



Benefits Achieved

Metric	Before	After
Average Error Resolution Time	6 hours	< 30 minutes

Manual Ticket Volume	40/day	5/day
Data Consistency Issues	Frequent	Minimal
Business Downtime	High	Reduced by 90%

Conclusion

By implementing a structured error-handling framework in Dell Boomi, the FMCG company achieved significant improvements in reliability, transparency, and operational efficiency. The approach is scalable across any enterprise integration landscape, including JD Edwards, SAP, or Oracle Fusion.

