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**Research Article** 

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# Large Organizations Moving to Oracle Cloud ERP but in Need to Report from Legacy Oracle ERP System

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Abstract: The migration of large organizations to Oracle Cloud ERP represents a strategic shift towards modernizing enterprise resource planning systems. However, a significant challenge arises when these organizations continue to rely on Oracle E-Business Suite (EBS) for financial reporting. This article explores the intricacies involved in transferring journal entries from Oracle Cloud ERP to Oracle EBS, a critical step for maintaining seamless financial operations. The primary challenges include Chart of Accounts mapping, business entities mapping data compatibility, integration complexities, and maintaining data integrity across platforms. To address these issues, the article outlines a series of best practices, including the implementation of robust middleware solutions, comprehensive data mapping strategies, and rigorous validation processes. By adopting these strategies, organizations can ensure a smooth transition, maintaining the accuracy and reliability of their financial reporting while leveraging the advanced capabilities of Oracle Cloud ERP.

**Keywords:** Chart of Accounts, COA, Transactions, Oracle Cloud ERP, Enterprise Resource Planning, Financials, General Ledger, Integrations, Reporting, Journal Entries.

#### Introduction

In the dynamic landscape of enterprise resource planning, large organizations are increasingly transitioning to Oracle Cloud ERP to harness its advanced capabilities, scalability, and enhanced efficiency. However, this strategic shift often comes with a critical challenge, the need to continue financial reporting from their existing Oracle E-Business Suite (EBS). This reliance on Oracle EBS for consolidated financial reporting is deeply ingrained in the operational fabric of many organizations, making any disruption in this process potentially detrimental to business continuity.

As organizations integrate Oracle Cloud ERP, they face significant hurdles in synchronizing data, particularly in moving journal entries from the Oracle Cloud ERP general ledger to the Oracle EBS general ledger. This process is fraught with challenges, including ensuring data compatibility, chart of accounts structure differences, managing integration complexities, and preserving data integrity across disparate systems. These obstacles, if not effectively addressed, can lead to inaccuracies in financial reporting, compliance issues, and operational inefficiencies.

This article delves into the specific challenges associated with transferring journal entries between Oracle Cloud ERP and Oracle EBS. It explores the technical and operational difficulties that organizations encounter and provides a roadmap for overcoming these challenges. Through the implementation of robust middleware solutions, comprehensive data mapping, and rigorous validation processes, organizations can achieve a seamless integration, ensuring that their financial reporting remains accurate and reliable during and after the transition to Oracle Cloud ERP.



# Organization's Challenges to Report from Legacy Enterprise Resource Planning Systems While Moving to Oracle Cloud ERP

As organizations migrate to Oracle Cloud ERP, they aim to leverage its advanced capabilities while maintaining the reliability of their existing Oracle E-Business Suite (EBS) for financial reporting. Despite the similar data structures and formats between Oracle Cloud ERP and Oracle EBS, several critical challenges can disrupt operations if not properly addressed. These challenges primarily revolve around transferring journal entries, mapping Chart of Accounts (CoA), and aligning legal entities across both ERP systems. This article explores these challenges and provides strategies to overcome them.

#### A. Data Compatibility and Integration Complexities

Despite the similar data structures between Oracle Cloud ERP and Oracle EBS, still there will be some changes in the data model between the ERP systems and its critical to consider all these changes while designing the integration between these systems. Implementing robust middleware to facilitate seamless data integration and transformation between Oracle Cloud ERP and Oracle EBS is essential to address these challenges.

#### B. Legal Entities and Organizational Structure Alignment

Aligning legal entities and organizational structures between Oracle Cloud ERP and Oracle EBS is critical for accurate financial consolidation and reporting. Discrepancies can disrupt consolidation processes and lead to reporting errors.

#### C. Data Integrity and Validation

Maintaining data integrity during the transfer of journal entries is crucial to avoid errors in financial reporting. Data corruption, loss, or duplication can significantly impact the accuracy of consolidated financial reports.

#### D. Journal Entry Transfer

Transferring journal entries from Oracle Cloud ERP's general ledger to Oracle EBS is essential for consolidated financial reporting. Although the data structures are similar, the process still involves several complexities.

#### E. Chart of Accounts (CoA) Mapping

Differences in the Chart of Accounts (CoA) setup between Oracle Cloud ERP and Oracle EBS can pose challenges. Ensuring consistent financial reporting requires precise CoA mapping. Aligning these accounts is essential for accurate consolidation and reporting.

#### F. Journal Reconciliation Challenges

Transferring journal entries from Oracle Cloud ERP's general ledger to Oracle EBS is essential for maintaining accurate and consolidated financial reporting. Journal reconciliation ensures that the transferred data remains consistent and accurate across both systems. However, this process is fraught with challenges. Need to ensure that the journal entries transferred from Oracle Cloud ERP to Oracle EBS are complete and match exactly, avoiding discrepancies. Identifying and rectifying errors during the transfer process, which can cause significant delays and inaccuracies in financial reporting. Synchronizing the timing of journal entries so that data in Oracle EBS is up-to-date and reflects real-time transactions.

Instance	Currency	LEDGER NAME	LE NAME	OU NAME / BU NAME
Oracle Cloud	USD	ABC US USD	ABC US LEGAL ENTITY	ABC USA BU
	CAD	ABC CA CAD	ABC CANADA LEGAL ENTITY	ABC CANADA BU
EBS 12.1.3	USD	ABC USA LEDGER	ABC US-LEGAL ENTITY	ABC USA OU
	CAD	ABC CANADA LEDGER	ABC CANADA-LEGAL ENTITY	ABC CANADA OU
EBS 12.2.2	USD	ABC USA	ABC INC US LEGAL ENTITY	ABC US OU
	CAD	ABC CANADA	ABC INC CANADA LEGAL ENTITY	ABC CA OU

Fig. 1: This table represents the ABC Inc company's ERP ecosystem and the organization structure.

### G. Real-time Data Synchronization

Ensuring real-time synchronization of data between Oracle Cloud ERP and Oracle EBS is essential for timely and accurate financial reporting. Delays in data transfer can lead to outdated or incomplete reports, affecting decision-making and operational efficiency.



#### H. Compliance and Regulatory Requirements

Migrating to a new ERP system while maintaining reporting from a legacy system can complicate compliance with financial regulations and standards. Ensuring both systems adhere to necessary compliance requirements is critical to avoid legal and financial repercussions.

#### Approach For Implementing Journal Entries Transfer Process Across Oracle ERP Systems

By strategically addressing these challenges, organizations can ensure a smooth transition to Oracle Cloud ERP while maintaining reliable and accurate financial reporting from Oracle EBS. This approach minimizes operational disruptions and leverages the advanced capabilities of Oracle Cloud ERP for enhanced business performance. Fig. 1. represents a sample organization structure for the company ABC Inc (fictional company name used in the article), which shows the organization structure in the different ERP system both cloud and onpremises versions.

#### A. Journal Entries Extraction

The first step is to extract the journal entries from the Oracle Cloud General Ledger or the source ERP system. The primary condition used to extract the journals is the journal posting status. Only 'Posted' journals will be extracted for transferring to the target ERP system. Fig. 2. shows the overall flow of journals from the Oracle Cloud ERP to Oracle E-Business Suite (EBS) ERP system. A BIP report will be developed to extract the outbound data. In the extracted data the journals will be grouped by following values –

- Journal Source
- Journal Category
- Journal Date
- Journal Currency
- Journal line Company Segment

A descriptive flex field in each of the journal

lines will have the originating ERP instance value, for example 'ORA\_CLOUD' for the journals extracted from Oracle Fusion ERP. The extraction process will look for the below mandatory columns.

- Journal Status
- Accounting Date
- Currency Code
- Journal Creation Date
- · Actual Flag
- Journal Category Name
- Journal Source Name

Extracted data will be pushed to the PaaS layer using the Integration process.

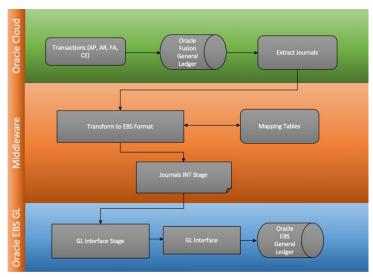


Fig. 2: This figure represents the flow of journals from Oracle Cloud ERP to Oracle EBS.



#### B. Staging in PaaS Layer

After the data from the source ERP is loaded to the middleware, all the data transformations are performed in the layer. Below are custom tables created in the PaaS layer for storing and performing the required transformations.

- XXABC GL JOURNALS INT SOURCE STG
- XXABC\_GL\_JOURNALS\_EBS\_TARGET\_STG
- XXABC GL COA MAPPING
- XXABC GL JE SOURCE LKP
- XXABC GL JE CATEGORY LKP
- XXABC GL JE LEDGER LE LKP

Extracted data from the source ERP system is loaded to the table XXABC\_GL\_JOURNALS\_INT\_SOURCE\_STG.

#### C. Transform the CoA in Middleware

The critical transformation performed in the PaaS layer is the chart of accounts mapping from the source system to the target system. CoA structure and values will be different across the ERP systems and it will be very difficult to maintain the same CoA values in the disparate ERP systems. Custom table XXABC\_GL\_COA\_MAPPING will have the CoA structure and values for each ERP systems. This table will act as the CoA converter in the integration flow. Journal Source, Journal Category, Ledger, Legal Entity lookup tables are used to map the corresponding values in the transformation process.

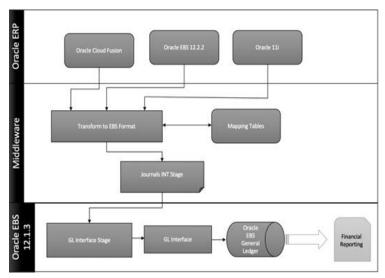


Fig. 3: This figure shows the flow of journals from multiple ERP systems to Oracle EBS ERP.

#### D. Load the Journals in the EBS GL Interface

After transforming the journal data into the Oracle EBS format, it will be inserted into the table XXABC\_GL\_JOURNALS\_EBS\_TARGET\_STG in the middleware. The next step in the process is to generate a file and will be placed in a secured server. Integration process will pick up this file and insert it into the custom staging table XXABC\_GL\_JOURNALS\_INT\_TARGET\_STG in the target EBS instance which will have the same structure of the GL\_INTERFACE table. After completing all the validations this journal data will be transferred to the GL\_INTERFACE table.

#### E. Import to EBS General Ledger

Last step in the integration flow is to trigger the import Journal Process to import the journals from GL\_INTERFACE to GL\_JE\_BATCHES, GL\_JE\_HEADERS and GL\_JE\_LINES tables in the target EBS ERP system. Post the journals in the EBS General Ledger and then the journal data will be available for financial reporting. A unique id across all instances for each journals will be maintained, which will be used to link and trace back the originating journal information in the source ERP system. This is primarily done to perform any deep analysis on the journals, also enables the drill down capability to subledger transaction details.



#### **Impact**

The implementation of effective solutions discussed in this article to address the challenges associated with migrating to Oracle Cloud ERP while reporting from Oracle EBS has a profound and positive impact on an organization. These solutions ensure data accuracy, consistency, real-time visibility, compliance, and strategic utilization of ERP capabilities, ultimately supporting enhanced business performance and sustainable growth.

#### Scope

The integration of Journals from source ERP system to target Oracle EBS ERP system is in the scope of this article. This article focuses solely on these the journal data transformation and integrations across Oracle ERP systems both Cloud and On-prim versions.

#### Conclusion

Migrating to Oracle Cloud ERP presents a strategic opportunity for large organizations to modernize their enterprise resource planning systems and capitalize on enhanced capabilities, scalability, and efficiency. However, the necessity to continue financial reporting from Oracle E-Business Suite (EBS) remains a critical requirement for many, to avoid operational disruptions. While the similar data structures and formats between Oracle Cloud ERP and Oracle EBS mitigate some challenges, several key issues still need to be addressed to ensure a seamless transition.

The primary challenges revolve around the accurate transfer of journal entries from Oracle Cloud ERP's general ledger to Oracle EBS, effective mapping of the Chart of Accounts (CoA), and the alignment of legal entities and organizational structures. Despite the complexities, these challenges can be effectively managed through strategic planning and the use of robust technological solutions discussed in this article.

In conclusion, while the migration to Oracle Cloud ERP necessitates overcoming specific challenges related to journal entry transfer, CoA mapping, and legal entity alignment, these can be addressed with the right strategies and tools. By focusing on these critical areas, organizations can achieve a smooth transition, ensuring that financial reporting remains accurate, reliable, and uninterrupted. This not only mitigates operational disruptions but also enables organizations to fully leverage the advanced capabilities of Oracle Cloud ERP, driving enhanced business performance and strategic growth.

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