

CLOUDBRIDGE

DM VALIDATION

TECHNICAL GUIDE

Prepared by Cloudbridge| 20th Dec 2023

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**Version Control**

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| Date | Version | Changed By | Reason for Change |
| 20-Dec-2023 | 1.0 | Sinchana Ramesh | No previous version. |
| 14-Mar-2024 | 2.0 | Shaik Latheef | Added SUPPLIERS,PO, FA & GL Validation Entries |
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Circulation List

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| Name | Organisation/Title |
| Ken MacMahon | Version 1 |
| Praveen Nair | Version 1 |
| Pallavi Kanajar | Version 1 |
| V1 Cloud Practice | Version 1 |

Glossary

The following terminology and abbreviations are used throughout this document:

|  |  |
| --- | --- |
| Term | Description |
| PO | Purchase Order |
|  |  |
|  |  |
|  |  |

# 1. Introduction

## 1.1 Purpose

This document aims to outline the process related to the recent inclusion of a new enhancement called Validation which has been added to Maximise.

## 1.2 Scope and Application

This document provides the Cloudbridge high-level summary of the Validation process for Data Migration.

This document outlines the following details:

* A concise summary of Validation Reports.
* Details on the necessary configuration for the Validation process.
* An outline of the steps involved in performing Validation.
* Entities in Cloudbridge with Validation Reports.

# 2. Overview

## 2.1. About Cloudbridge Validation Reports (Cloudbridge DM)

Validation Reports play a crucial role in the post-extraction phase, where their primary purpose is to validate the accuracy of the extracted data. This entails verifying that the data aligns with the anticipated format, structure, and established standards. Key aspects of this validation process include checking for adherence to data types and naming conventions, as well as addressing issues like duplicates, missing values, and outliers. Additionally, an essential facet of the validation is the assessment of the extraction process's performance to ensure efficient operation without adverse impacts on the subsequent transform and load processes.

## 2.2. Configuration

The following configurations must be set up for the Validation Phase.

* The installation of the tables listed below needs to be done.
* The installation process for validation tables closely mirrors that of Cloudbridge STG tables, with the distinction of incorporating an additional column, "**Validation\_Error\_Message**" to convey error messages encountered during the validation phase.
* As of now, there is no file archiving, this will be developed in the future.
* Validation Staging Table or act of staging data in a database table.

|  |  |
| --- | --- |
| Business Entity | Validation Table Name |
| SUPPLIERS | XXMX\_AP\_SUPPLIERS\_VAL |
| SUPPLIER\_ADDRESSES | XXMX\_AP\_SUPP\_ADDRS\_VAL |
| SUPPLIER\_SITES | XXMX\_AP\_SUPPLIER\_SITES\_VAL |
| SUPPLIER\_CONTACT | XXMX\_AP\_SUPP\_CONTACTS\_VAL |
| SUPPLIER\_SITE\_ASSIGNS | XXMX\_AP\_SUPP\_SITE\_ASSIGNS\_VAL |
| SUPPLIER\_BANK\_ACCOUNTS | XXMX\_AP\_SUPP\_BANK\_ACCTS\_VAL |
| PURCHASE\_ORDERS | XXMX\_SCM\_PO\_HEADERS\_STD\_VAL  XXMX\_SCM\_PO\_DISTRIBUTIONS\_STD\_VAL  XXMX\_SCM\_PO\_LINE\_LOCATIONS\_STD\_VAL  XXMX\_SCM\_PO\_LINES\_STD\_VAL |
| INVOICES | XXMX\_AP\_INVOICES\_VAL  XXMX\_AP\_INVOICE\_LINES\_VAL |
| TRANSACTIONS | XXMX\_AR\_TRX\_LINES\_VAL  XXMX\_AR\_TRX\_DISTS\_VAL |
| PURCHASE\_ORDER\_RECEIPT | XXMX\_SCM\_PO\_RCPT\_TXN\_VAL  XXMX\_SCM\_PO\_RCPT\_HDR\_VAL |
| CASH\_RECEIPTS | XXMX\_AR\_CASH\_RECEIPTS\_VAL |
| FIXED\_ASSETS | XXMX\_FA\_MASS\_ADDITIONS\_VAL  XXMX\_FA\_MASS\_ADDITION\_DIST\_VAL  XXMX\_FA\_MASS\_RATES\_VAL |
| OPEN\_BAL | XXMX\_GL\_OPENING\_BALANCES\_VAL |
| SUMM\_BAL | XXMX\_GL\_SUMMARY\_BALANCES\_VAL |
| DETAIL\_BAL | XXMX\_GL\_DETAIL\_BALANCES\_VAL |

* Configuration of Metadata is required for specific Business Entity, Addition of three new columns will be added to the **XXMX\_MIGRATION\_METADATA** table.

|  |  |  |  |
| --- | --- | --- | --- |
| BUSINESS\_ENTITY | VAL\_PACKAGE\_NAME | VAL\_PROCEDURE\_NAME | VAL\_TABLE |
| SUPPLIERS  SUPPLIER\_ADDRESSES  SUPPLIER\_SITES  SUPPLIER\_CONTACT  SUPPLIER\_SITE\_ASSIGNS  SUPPLIER\_BANK\_ACCOUNTS | XXMX\_SUPPLIER\_VALIDATIONS\_PKG | VALIDATE\_SUPPLIER\_PROFILES  VALIDATE\_SUPPLIER\_ADDRESSES  VALIDATE\_SUPPLIER\_SITES  VALIDATE\_SUPPLIER\_CONTATCS  VALIDATE\_SUPPLIER\_SITE\_ASSIGN  VALIDATE\_SUPPLIER\_BANK\_ACCTS | XXMX\_AP\_SUPPLIERS\_VAL  XXMX\_AP\_SUPP\_ADDRS\_VAL  XXMX\_AP\_SUPPLIER\_SITES\_VAL  XXMX\_AP\_SUPP\_CONTACTS\_VAL  XXMX\_AP\_SUPP\_SITE\_ASSIGNS\_VAL  XXMX\_AP\_SUPP\_BANK\_ACCTS\_VAL |
| PURCHASE\_ORDERS | XXMX\_PO\_VALIDATIONS\_PKG | VALIDATE\_PO\_HEADERS  VALIDATE\_PO\_DISTRIBUTIONS  VALIDATE\_PO\_LINE\_LOCATIONS  VALIDATE\_PO\_LINES | XXMX\_SCM\_PO\_HEADERS\_STD\_VAL  XXMX\_SCM\_PO\_DISTRIBUTIONS\_STD\_VAL  XXMX\_SCM\_PO\_LINE\_LOCATIONS\_STD\_VAL  XXMX\_SCM\_PO\_LINES\_STD\_VAL |
| INVOICES | XXMX\_INVOICES\_VALIDATIONS\_PKG | VALIDATE\_INVOICE\_HEADERS  VALIDATE\_INVOICE\_LINES | XXMX\_AP\_INVOICES\_VAL  XXMX\_AP\_INVOICE\_LINES\_VAL |
| TRANSACTIONS | XXMX\_AR\_INVOICE\_VALIDATION\_PKG | VALIDATE\_AR\_LINES  VALIDATE\_AR\_DISTRIBUTIONS | XXMX\_AR\_TRX\_LINES\_VAL  XXMX\_AR\_TRX\_DISTS\_VAL |
| PURCHASE\_ORDER\_RECEIPT | XXMX\_PO\_RCPT\_VALIDATIONS\_PKG | VALIDATE\_PO\_RCPT\_HEADERS  VALIDATE\_PO\_RCPT\_TRANSACTIONS | XXMX\_SCM\_PO\_RCPT\_TXN\_VAL  XXMX\_SCM\_PO\_RCPT\_HDR\_VAL |
| CASH\_RECEIPTS | XXMX\_RECEIPTS\_VALIDATION\_PKG | VALIDATE\_CASH\_RECEIPTS | XXMX\_AR\_CASH\_RECEIPTS\_VAL |
| FIXED\_ASSETS | XXMX\_FA\_VALIDATIONS\_PKG | VALIDATE\_MASS\_ADDITION  VALIDATE\_FA\_MASS\_ADDITION\_DIST  VALIDATE\_MASSRATES | XXMX\_FA\_MASS\_ADDITIONS\_VAL  XXMX\_FA\_MASS\_ADDITION\_DIST\_VAL  XXMX\_FA\_MASS\_RATES\_VAL |
| OPEN\_BAL | XXMX\_GL\_OPEN\_BAL\_VAL\_PKG | VALIDATE\_GL\_OPEN\_BALANCES | XXMX\_GL\_OPENING\_BALANCES\_VAL |
| SUMM\_BAL | XXMX\_GL\_SUMMARY\_BAL\_VAL\_PKG | VALIDATE\_GL\_SUMMARY\_BALANCES | XXMX\_GL\_SUMMARY\_BALANCES\_VAL |
| DETAIL\_BAL | XXMX\_GL\_DETAIL\_BAL\_VAL\_PKG | VALIDATE\_GL\_DETAIL\_BALANCES | XXMX\_GL\_DETAIL\_BALANCES\_VAL |

# 3. Executing Validation Process: A Step-by-Step Guide

Consider the following steps when performing the validation process.

* The validation package follows the following naming convention.

**XXMX\_SUPPLIER\_VALIDATIONS\_PKG** – For Suppliers.

**XXMX\_PO\_VALIDATIONS\_PKG** – For Purchase Orders.

**XXMX\_INVOICES\_VALIDATIONS\_PKG** – For Invoices.

**XXMX\_AR\_INVOICE\_VALIDATION\_PKG** – For Transactions.

**XXMX\_PO\_RCPT\_VALIDATIONS\_PKG –** For Purchase Order Receipt**.**

**XXMX\_RECEIPTS\_VALIDATION\_PKG –** For Cash Receipts**.**

**XXMX\_FA\_VALIDATIONS\_PKG–** For Fixed Assets**.**

**XXMX\_GL\_OPEN\_BAL\_VAL\_PKG–** For Opening Balances**.**

**XXMX\_GL\_SUMMARY\_BAL\_VAL\_PKG–** For Summary Balances**.**

**XXMX\_GL\_DETAIL\_BAL\_VAL\_PKG–** For Detail Balances**.**

* Each procedure within the validation package is designed at the sub-entity level, featuring one main procedure aligned with the Business-Entity level, while the remainder of the package structure adheres to the extract package format.

|  |  |  |
| --- | --- | --- |
| Business Entity | Sub Entity | Procedure Name |
| SUPPLIERS | SUPPLIERS | XXMX\_AP\_SUPPLIERS\_VAL |
| SUPPLIER\_ADDRESSES | SUPPLIER\_ADDRESSES | XXMX\_AP\_SUPP\_ADDRS\_VAL |
|  | SUPPLIER\_THIRD\_PARTY\_RELS | XXMX\_AP\_SUPP\_ADDRS\_VAL |
| SUPPLIER\_SITES | SUPPLIER\_SITES | XXMX\_AP\_SUPPLIER\_SITES\_VAL |
| SUPPLIER\_CONTACT | SUPPLIER\_CONTACTS | XXMX\_AP\_SUPP\_CONTACTS\_VAL |
|  | SUPPLIER\_CONT\_ADDRS | XXMX\_AP\_SUPP\_CONTACTS\_VAL |
| SUPPLIER\_SITE\_ASSIGNS | SUPPLIER\_SITE\_ASSIGNS | XXMX\_AP\_SUPP\_SITE\_ASSIGNS\_VAL |
| SUPPLIER\_BANK\_ACCOUNTS | SUPPLIER\_BANK\_ACCOUNTS | XXMX\_AP\_SUPP\_BANK\_ACCTS\_VAL |
|  | SUPPLIER\_PAYEES | XXMX\_AP\_SUPP\_BANK\_ACCTS\_VAL |
|  | SUPPLIER\_PMT\_INSTRS | XXMX\_AP\_SUPP\_BANK\_ACCTS\_VAL |
| PURCHASE\_ORDERS | PO\_HEADERS\_STD | XXMX\_SCM\_PO\_HEADERS\_STD\_VAL |
|  | PO\_LINES\_STD | XXMX\_SCM\_PO\_DISTRIBUTIONS\_STD\_VAL |
|  | PO\_LINE\_LOCATIONS\_STD | XXMX\_SCM\_PO\_LINE\_LOCATIONS\_STD\_VAL |
|  | PO\_DISTRIBUTIONS\_STD | XXMX\_SCM\_PO\_LINES\_STD\_VAL |
| INVOICES | INVOICE\_HEADERS | XXMX\_AP\_INVOICES\_VAL |
|  | INVOICE\_LINES | XXMX\_AP\_INVOICE\_LINES\_VAL |
| TRANSACTIONS | LINES | VALIDATE\_AR\_LINES |
|  | DISTRIBUTIONS | VALIDATE\_AR\_DISTRIBUTIONS |
| PURCHASE\_ORDER\_RECEIPT | PO\_RECEIPT\_TRANSACTIONS | VALIDATE\_PO\_RCPT\_HEADERS |
|  | PO\_RECEIPT\_HEADERS | VALIDATE\_PO\_RCPT\_TRANSACTIONS |
| CASH\_RECEIPTS | CASH\_RECEIPTS | VALIDATE\_CASH\_RECEIPTS |
| FIXED\_ASSETS | MASS\_ADDITIONS | VALIDATE\_MASS\_ADDITION |
|  | MASS\_DISTRIBUTION | VALIDATE\_FA\_MASS\_ADDITION\_DIST |
|  | MASS\_RATES | VALIDATE\_MASSRATES |
| OPEN\_BAL | OPEN\_BAL | VALIDATE\_GL\_OPEN\_BALANCES |
| SUMM\_BAL | SUMM\_BAL | VALIDATE\_GL\_SUMMARY\_BALANCES |
| DETAIL\_BAL | DETAIL\_BAL | VALIDATE\_GL\_DETAIL\_BALANCES |

* Validation script commands for execution:

**EXEC XXMX\_SUPPLIER\_VALIDATIONS\_PKG.VALIDATE\_SUPPLIERS('FIN','AP','SUPPLIERS');**

**EXEC XXMX\_PO\_VALIDATIONS\_PKG.VALIDATE\_PURCHASE\_ORDERS('SCM','PO','PURCHASE\_ORDERS');**

**EXEC XXMX\_INVOICES\_VALIDATIONS\_PKG.VALIDATE\_INVOICES('FIN','AP','INVOICES');**

**EXEC XXMX\_AR\_INVOICE\_VALIDATION\_PKG.VALIDATE\_RECEIVABLES('FIN','AR','TRANSACTIONS');**

**EXEC XXMX\_PO\_RCPT\_VALIDATIONS\_PKG.VALIDATE\_PO\_RCPT('SCM','PO','PURCHASE\_ORDER\_RECEIPT');**

**EXEC XXMX\_RECEIPTS\_VALIDATION\_PKG.VALIDATE\_CASH\_RECEIPTS('FIN','AR','CASH\_RECEIPTS');**

**EXEC XXMX\_FA\_VALIDATIONS\_PKG.** **VALIDATE\_FIXED\_ASSETS ('FIN','FA','** **FIXED\_ASSETS');**

**EXEC XXMX\_GL\_OPEN\_BAL\_VAL\_PKG.** **VALIDATE\_OPEN\_BALANCES ('FIN','GL','** **OPEN\_BAL');**

**EXEC XXMX\_GL\_SUMMARY\_BAL\_VAL\_PKG.** **VALIDATE\_BALANCES ('FIN','GL','** **SUMM\_BAL');**

**EXEC XXMX\_GL\_DETAIL\_BAL\_VAL\_PKG.** **VALIDATE\_DETAIL\_BALANCES ('FIN','GL','** **DETAIL\_BAL');**

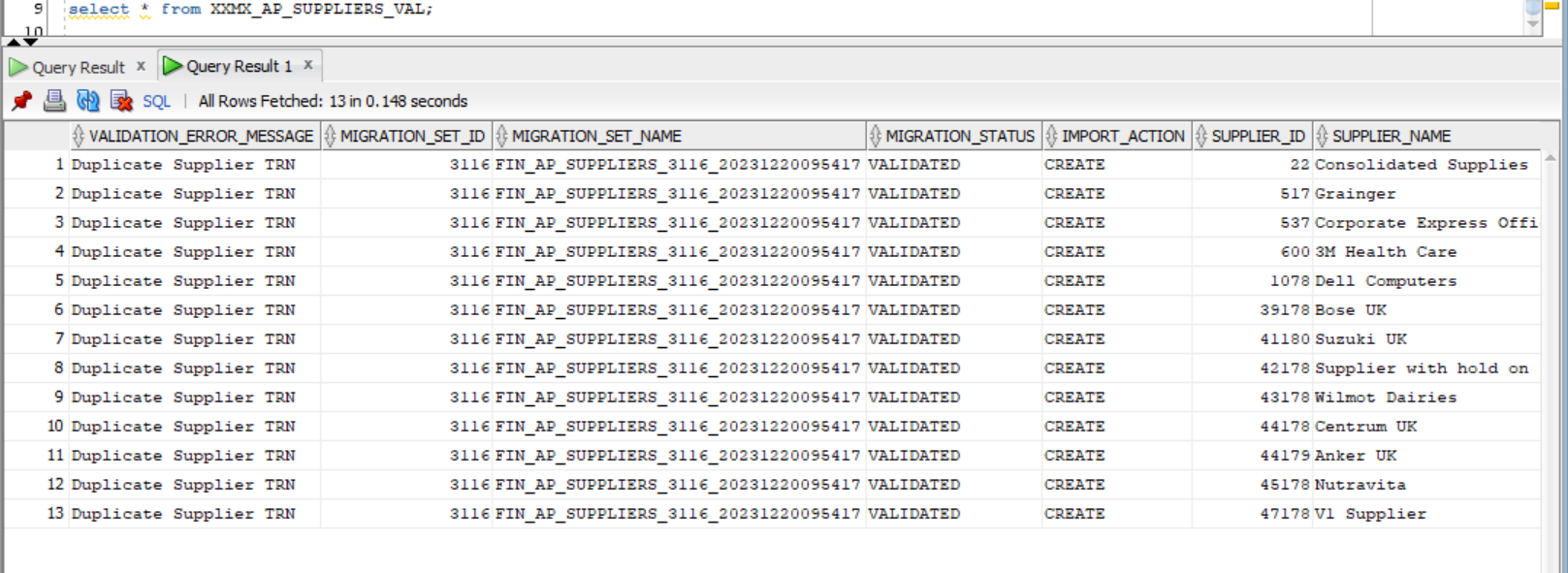
* The execution of the validation phase is currently limited to the back end using PL/SQL; however, future plans involve its development for the front end using VBCS.

# 4. Validations List

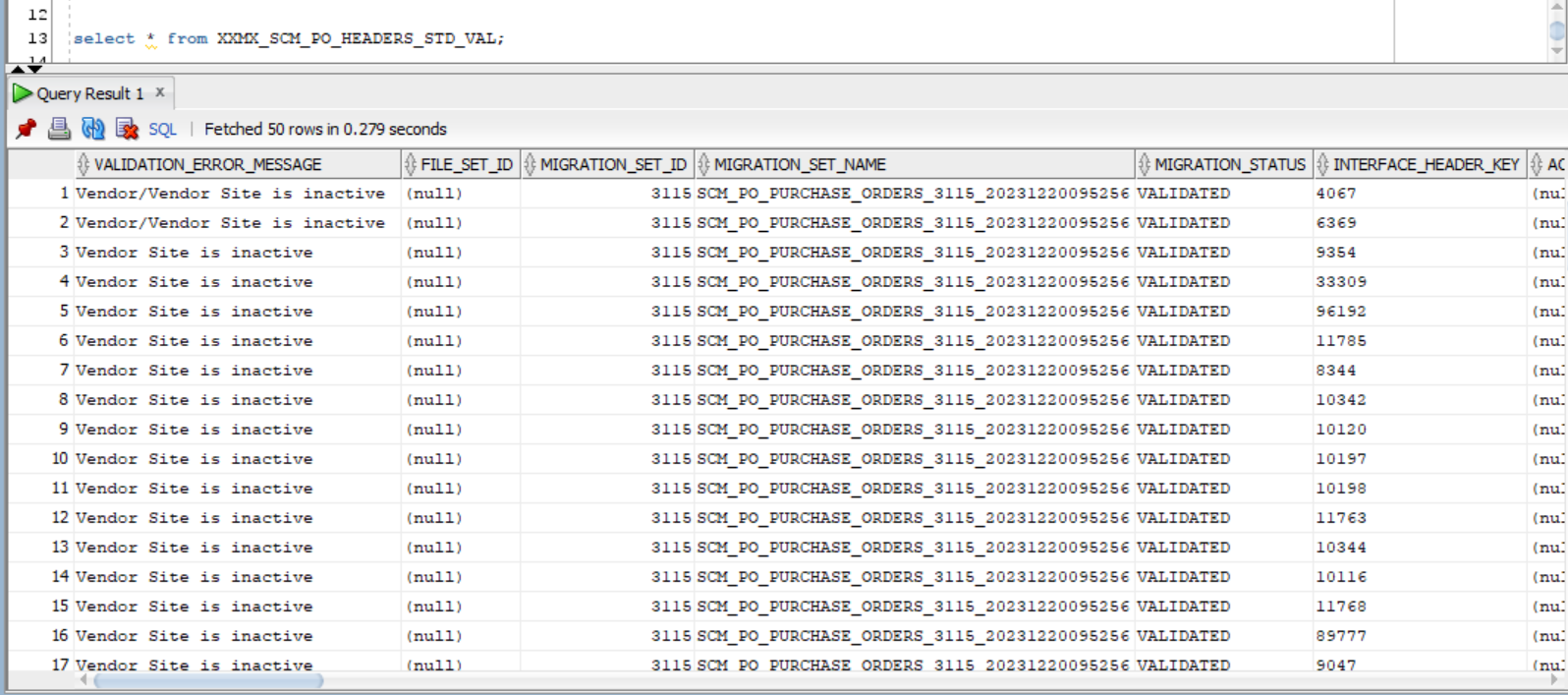
|  |  |  |
| --- | --- | --- |
| Business Entity | Sub Entity | Procedure Name |
| SUPPLIERS | SUPPLIERS | * Validate Supplier Records getting duplicated * Validate Supplier name getting duplicated * Validate Supplier TRN is duplicated * Validate Supplier Name having Junk / Invalid characters * Validate Suppliers when the Federal Reportable flag is Y/N |
| SUPPLIER\_ADDRESSES | SUPPLIER\_ADDRESSES | * Validate Supplier Address Records getting duplicated * Validate Supplier Name having Junk / Invalid characters |
| SUPPLIER\_SITES | SUPPLIER\_SITES  SUPPLIER\_THIRD\_PARTY\_RELS | * Validate Supplier Site Name having Junk / Invalid characters * Validate Supplier Sites whose Remittance Advice Delivery Method is null however Remittance Email or Remittance Fax is not null * Validate Supplier Sites where Hold Reason cannot be null when the supplier has been applied any of the three 'Hold from Payment' holds * Validate Supplier Sites where Address Name is blank * Validate Supplier Sites where Pay Site Flag or Purchasing Site Flag is 'Y' and where RFQ Only Site Flag = 'Y' |
| SUPPLIER\_CONTACT | SUPPLIER\_CONTACTS  SUPPLIER\_CONT\_ADDRS | * Validate Supplier Contact with First Name null or Email Address null or Email address not having ‘@’ |
| SUPPLIER\_SITE\_ASSIGNS | SUPPLIER\_SITE\_ASSIGNS | * Validate Supplier Site match or not |
| SUPPLIER\_BANK\_ACCOUNTS | SUPPLIER\_PAYEES  SUPPLIER\_BANK\_ACCOUNTS  SUPPLIER\_PMT\_INSTRS | * Validate Supplier Payee * Validate Supplier Bank Name having Junk / Invalid characters |
| PURCHASE\_ORDERS | PO\_HEADERS\_STD | * Validate if PO is open but Vendor/Vendor Site is inactive * Validate if Buyer is an active employee * Validate Supplier Sites whose Remittance Advice Delivery Method is null however Remittance Email or Remittance Fax is not null * Validate if PO Header has at least one PO Line |
|  | PO\_LINES\_STD | * Validate if unit price value exceeds 10 decimal places * Validate if PO Line has at least one PO header * Validate if PO Line has at least one PO Line Location |
|  | PO\_LINE\_LOCATIONS\_STD | * Validate if PO Line Location has at least one PO Line * Validate if PO Line Location has at least one PO Distribution * Validate if PO Line Quantity matches with PO Line Location Quantity * Validate if PO Line Amount matches with PO Line Location Amount |
|  | PO\_DISTRIBUTIONS\_STD | * Validate if Requestor is an active employee * Validate if Project is closed or not * Validate if Task is closed or not when Project is Open * Validate if PO Distribution has at least one PO Line Location * Validate if PO Line Location Quantity matches with PO Distribution Quantity * Validate if PO Line Location Amount matches with PO Distribution Amount |
| FIXED\_ASSETS | MASS\_ADDITIONS | * Validate if Asset Cost is not a zero * Validate the Asset type * Validate the ytd impairment * Validate if MASS\_ADDITION\_ID column is null * Validate if the asset number are unique are not * Validate the posting status * Validate the Asset Description having the Junk/Invalid Characters * Validate if Fa mass addition ID has at least one fa mass distribution |
|  | MASS\_DISTRIBUTION | * Validate if UNITS column is NULL * Validate if EMAIL is valid * Validate if fa mass distribution ID has at least one Fa mass addition ID |
|  | MASS\_RATES | * Validate if MASS\_ADDITION\_ID column is null * Validate if fa mass Rates has at least one Fa mass addition ID |
| OPEN\_BAL | OPEN\_BAL | * Validate if entered credit and entered debit is matching for summary balances: we have considered segment 1 as balancing segment * Validate if ACCOUTNED credit and entered debit is matching for summary balances: we have considered segment 1 as balancing segment * Validate if entered cr has 0 * Validate if entered dr has 0 * Validate if accounted dr has 0 * Validate if accounted dr has 0 * Validate if period name is in wrong format * Validate if junk/invalid characters are present |
| SUMM\_BAL | SUMM\_BAL | * Validate if entered credit and enetered debit is matching for summary balances: we have considered segment 1 as balancing segment * Validate if ACCOUNTED credit and enetered debit is matching for summary balances: we have considered segment 1 as balancing segment * Validate if entered cr has 0 * Validate if entered dr has 0 * Validate if accounted dr has 0 * Validate if accounted dr has 0 * Validate if period name is in wrong format * Validate if junk/invalid characters are present |
| DETAIL\_BAL | DETAIL\_BAL | * Validate if entered credit and enetered debit is matching for summary balances: we have considered segment 1 as balancing segment * Validate if ACCOUNTED credit and enetered debit is matching for summary balances: we have considered segment 1 as balancing segment * Validate if entered cr has 0 * Validate if entered dr has 0 * Validate if accounted dr has 0 * Validate if accounted dr has 0 * Validate if period name is in wrong format * Validate if junk/invalid characters are present |
|  |  |  |

# 5. Validation Phase Snippets

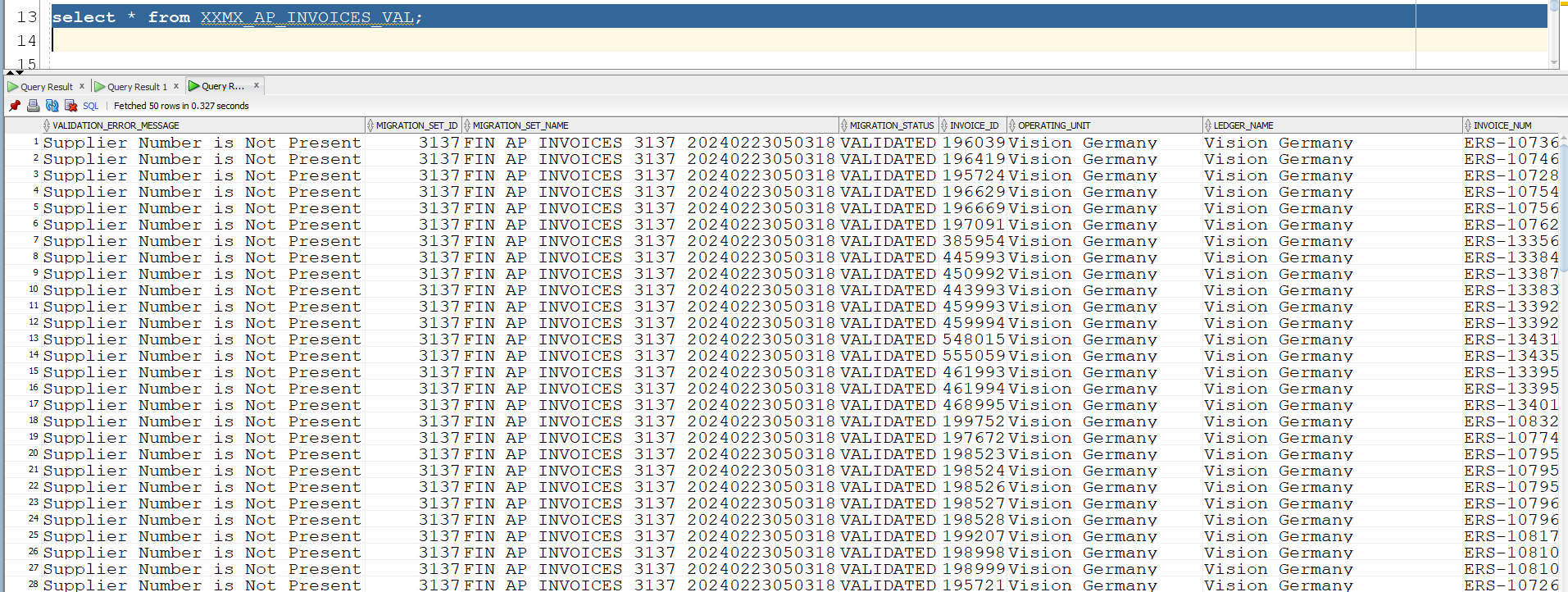
* **Validation Phase for Supplier looks like below.**

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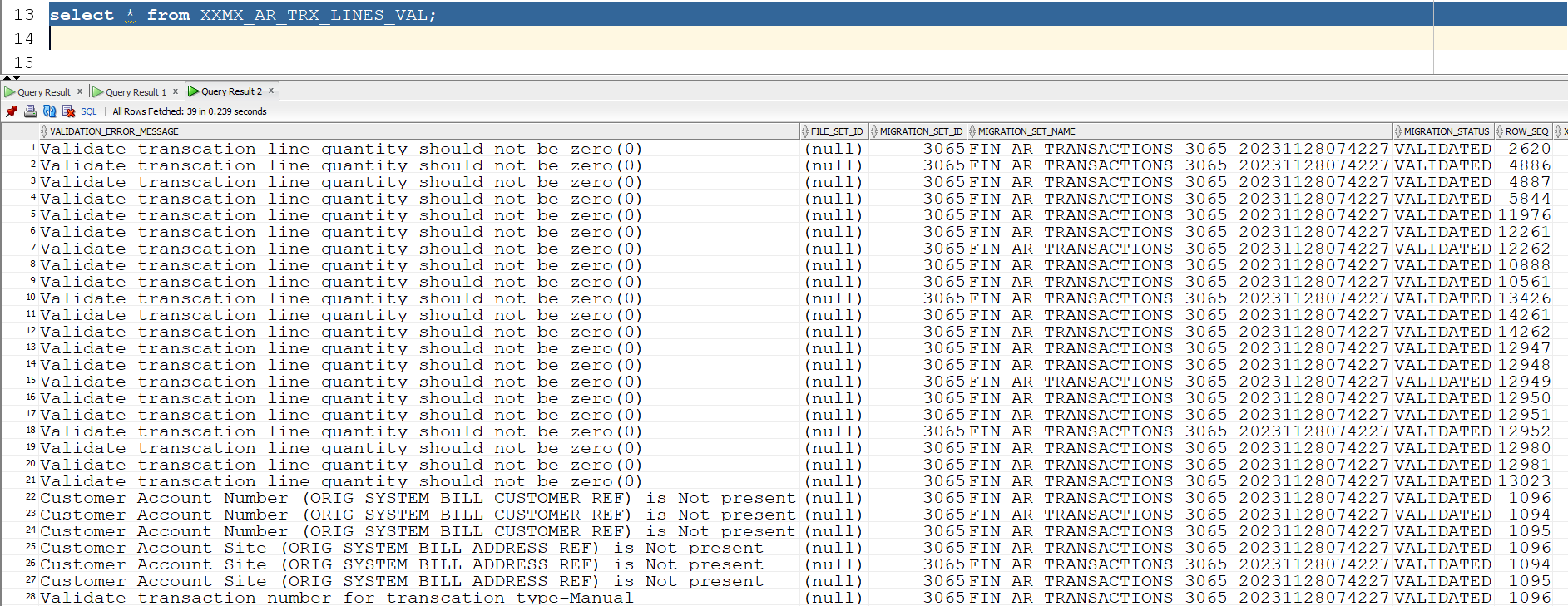
* **Validation Phase for Purchase Orders looks like below.**

****

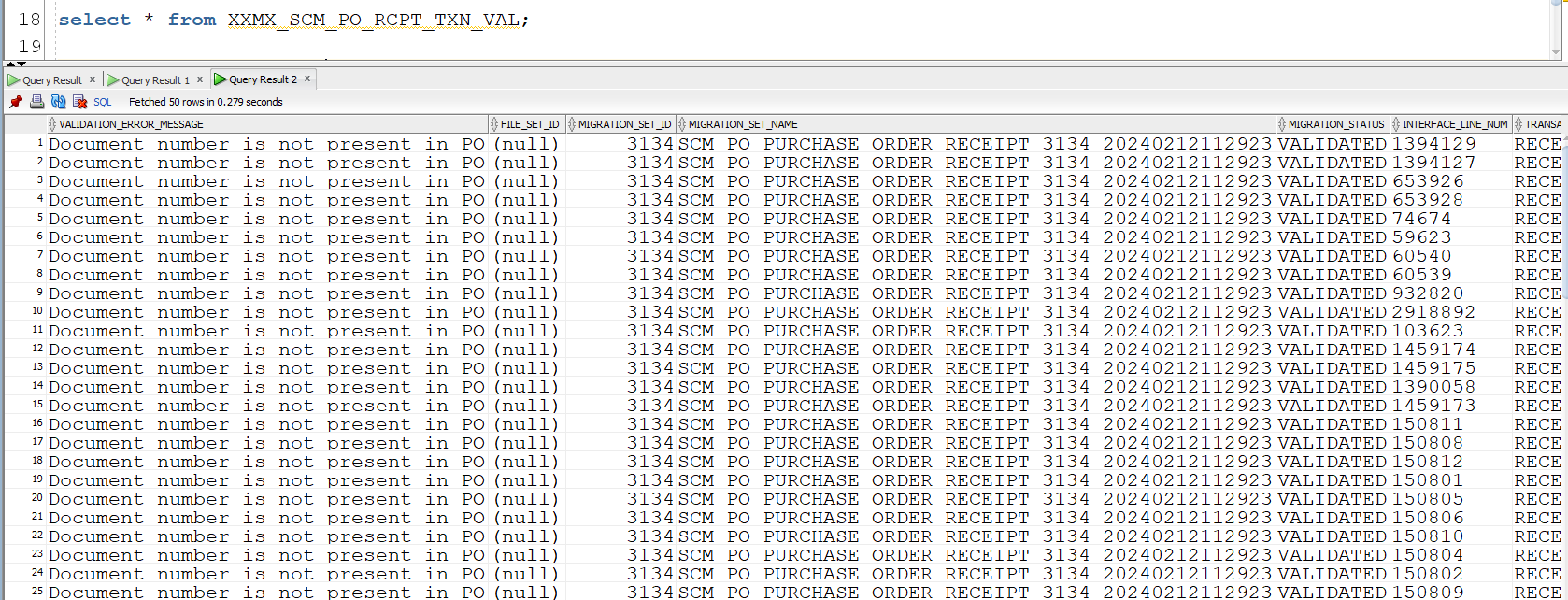
* **Validation Phase for Invoices looks like below.**

****

* **Validation Phase for Transactions looks like below.**

****

* **Validation Phase for Purchase Order Receipt looks like below.**

****

* **Validation Phase for Cash Receipts looks like below.**

A screenshot of a computer

Description automatically generated





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