

Incremental reconciliation logic

1 We will get 2 set of input files from client every month. It will be monthly data.

2 Files are --> File-Portal & File-ERP

3 Both files are of same format only

Sample data File-Portal-april month

Portal_Month	Portal_AccountNumber	Portal_AccountDate	Portal_Amount
2023-04	100	Jan-1	100
2023-04	102	Feb-1	300
2023-04	104	Mar-1	200
2023-04	107	Apr-1	100
2023-04	109	Apr-2	300

Sample data File-ERP-april month

ERP_Month	ERP_AccountNumber	ERP_AccountDate	ERP_Amount
2023-04	100	Jan-1	100
2023-04	102	Feb-1	300
2023-04	104	Mar-1	200
2023-04	107	Apr-1	100
2023-04	109	Apr-2	300

4 Once we get the data we will load data to its repository table. sample format of repository table is below.

Portal_Month	Portal_AccountNumber	Portal_AccountDate	Portal_Amount	Status_Month	Reconciliation status
2023-04	100	Jan-1	100	2023-04	Open
2023-04	102	Feb-1	300	2023-04	Open
2023-04	104	Mar-1	200	2023-04	Open
2023-04	107	Apr-1	100	2023-04	Open
2023-04	109	Apr-2	300	2023-04	Open

ERP_Month	ERP_AccountNumber	ERP_AccountDate	ERP_Amount	Status_Month	Reconciliation status
2023-04	100	Jan-1	100	2023-04	Open
2023-04	102	Feb-1	300	2023-04	Open
2023-04	104	Mar-1	200	2023-04	Open
2023-04	110	Apr-1	100	2023-04	Open
2023-04	111	Apr-2	300	2023-04	Open

Then we will perform reconciliation using both files and create a final output as below for sharing with client team.

If a same Account number is present in both files , then the status is "Closed" else status is "open"

Portal_Month	Portal_AccountNumber	Portal_AccountDate	Portal_Amount	ERP_Month	ERP_AccountNumber	ERP_AccountDate	ERP_Amount	Status_Month	Reconciliation Remark	Status
2023-04	100	Jan-1	100	2023-04	100	Jan-1	100	2023-04	In both Portal&ERP	Closed
2023-04	102	Feb-1	300	2023-04	102	Feb-1	300	2023-04	In both Portal&ERP	Closed
2023-04	104	Mar-1	200	2023-04	104	Mar-1	200	2023-04	In both Portal&ERP	Closed
2023-04	107	Apr-1	100					2023-04	Portal Only	Open
2023-04	109	Apr-2	300					2023-04	Portal Only	Open
				2023-04	110	Apr-1	100	2023-04	ERP Only	Open
				2023-04	111	Apr-2	300	2023-04	ERP Only	Open

Reconciliation status

Explanation of "Reconciliation Status"

In both Portal&ERP

This account appear in both portal and ERP

Portal Only

This account appear only in Portal

ERP Only

This account appear only in ERP

5 After reconciliation we will update status month and Reconciliation status on Repository table

Portal_Month	Portal_AccountNumber	Portal_AccountDate	Portal_Amount	Status_Month	Reconciliation status
2023-04	100	Jan-1	100	2023-04	Closed
2023-04	102	Feb-1	300	2023-04	Closed
2023-04	104	Mar-1	200	2023-04	Closed
2023-04	107	Apr-1	100	2023-04	Open
2023-04	109	Apr-2	300	2023-04	Open

ERP_Month	ERP_AccountNumber	ERP_AccountDate	ERP_Amount	Status_Month	Reconciliation status
2023-04	100	Jan-1	100	2023-04	Closed
2023-04	102	Feb-1	300	2023-04	Closed
2023-04	104	Mar-1	200	2023-04	Closed
2023-04	110	Apr-1	100	2023-04	Open
2023-04	111	Apr-2	300	2023-04	Open

6 So April reconciliation is closed and client can identify the gaps between the table, we can build further reports and dashboards based on this to analyze the gap

7 Then in the next month, we client will share May data. So this time we should consider both 'May data' and 'Entries of Status=Open' in repository table. Because theres a chance that Open entry of April Portal data may reconcile in May ERP Data and vice versa

Sample data File-Portal-may month

Portal_Month	Portal_AccountNumber	Portal_AccountDate	Portal_Amount
2023-05	110	Apr-1	100
2023-05	120	Feb-1	300
2023-05	122	Mar-1	200
2023-05	124	Apr-1	100
2023-05	125	Apr-2	300

Sample data File-ERP-may month

ERP_Month	ERP_AccountNumber	ERP_AccountDate	ERP_Amount
2023-05	120	Feb-1	100
2023-05	122	Mar-1	300
2023-05	123	Apr-1	200
2023-05	125	Apr-2	100
2023-05	109	Apr-2	300

8 Upload May data to exiting repository table

Portal_Month	Portal_AccountNumber	Portal_AccountDate	Portal_Amount	Status_Month	Reconciliation status
2023-04	100	Jan-1	100	2023-04	Closed
2023-04	102	Feb-1	300	2023-04	Closed
2023-04	104	Mar-1	200	2023-04	Closed
2023-04	107	Apr-1	100	2023-04	Open
2023-04	109	Apr-2	300	2023-04	Open

ERP_Month	ERP_AccountNumber	ERP_AccountDate	ERP_Amount	Status_Month	Reconciliation status
2023-04	100	Jan-1	100	2023-04	Closed
2023-04	102	Feb-1	300	2023-04	Closed
2023-04	104	Mar-1	200	2023-04	Closed
2023-04	110	Apr-1	100	2023-04	Open
2023-04	111	Apr-2	300	2023-04	Open

2023-05	110	Apr-1	100	2023-05	Open	Status is "Open"	2023-05	120	Feb-1	100	2023-05	Open	Status is "Open" since it is a new entry
2023-05	120	Feb-1	300	2023-05	Open	Status is "Open"	2023-05	122	Mar-1	300	2023-05	Open	
2023-05	122	Mar-1	200	2023-05	Open	Status is "Open"	2023-05	123	Apr-1	200	2023-05	Open	
2023-05	124	Apr-1	100	2023-05	Open	Status is "Open"	2023-05	125	Apr-2	100	2023-05	Open	
2023-05	125	Apr-2	300	2023-05	Open	Status is "Open"	2023-05	109	Apr-2	300	2023-05	Open	

9 In may month, we client is sharing May data. So this time we should consider both 'May data' and 'Entries of Status=Open' in repository table for reconciliation. Because theres a chance that Open entry of April Portal data may reconcile in May ERP Data and vice versa
So here we are carryforwarding open data of APRIL to next month reconciliation

So for reconcilaition we take data where Reconciliation status="Open" only from both table

Portal_Month	Portal_AccountNumber	Portal_AccountDate	Portal_Amount	ERP_Month	ERP_AccountNumber	ERP_AccountDate	ERP_Amount	Status_Month	Reconciliation Remark	Status	This account appear only in Portal
2023-04	107	Apr-1	100					2023-05	Portal Only	Open	This account appear only in Portal
2023-04	109	Apr-2	300	2023-05	109	Apr-2	300	2023-05	In both Portal&ERP	Closed	This account appear in both portal and ERP
2023-05	110	Apr-1	100	2023-04	110	Apr-1	100	2023-05	In both Portal&ERP	Closed	This account appear in both portal and ERP
2023-05	120	Feb-1	300	2023-05	120	Feb-1	100	2023-05	In both Portal&ERP	Closed	This account appear in both portal and ERP
2023-05	122	Mar-1	200	2023-05	122	Mar-1	300	2023-05	In both Portal&ERP	Closed	This account appear only in Portal
2023-05	124	Apr-1	100	2023-05				2023-05	Portal Only	Open	This account appear in both portal and ERP
2023-05	125	Apr-2	300	2023-05	125	Apr-2	100	2023-05	In both Portal&ERP	Closed	This account appear only in ERP
				2023-04	111	Apr-2	300	2023-05	ERP Only	Open	This account appear only in ERP
				2023-05	123	Apr-1	200	2023-05	ERP Only	Open	

see account 109 Open item from April protal data is matched with ERP May data
account 110 Open item from April ERP data is matched with Portal May data

10 based on the reconciliation we will update respoistory table

Portal_Month	Portal_AccountNumber	Portal_AccountDate	Portal_Amount	Status_Month	Reconciliation status	ERP_Month	ERP_AccountNumber	ERP_AccountDate	ERP_Amount	Status_Month	Reconciliation status
2023-04	100	Jan-1	100	2023-04	Closed	2023-04	100	Jan-1	100	2023-04	Closed
2023-04	102	Feb-1	300	2023-04	Closed	2023-04	102	Feb-1	300	2023-04	Closed
2023-04	104	Mar-1	200	2023-04	Closed	2023-04	104	Mar-1	200	2023-04	Closed
2023-04	107	Apr-1	100	2023-04	Open	2023-04	110	Apr-1	100	2023-04	Closed
2023-04	109	Apr-2	300	2023-04	Closed	2023-04	111	Apr-2	300	2023-04	Open
2023-05	110	Apr-1	100	2023-05	Closed	2023-05	120	Feb-1	100	2023-05	Closed
2023-05	120	Feb-1	300	2023-05	Closed	2023-05	122	Mar-1	300	2023-05	Closed
2023-05	122	Mar-1	200	2023-05	Closed	2023-05	123	Apr-1	200	2023-05	Open
2023-05	124	Apr-1	100	2023-05	Open	2023-05	125	Apr-2	100	2023-05	Closed
2023-05	125	Apr-2	300	2023-05	Closed	2023-05	109	Apr-2	300	2023-05	Closed

11 so finally the repository table is updates

12 this task will continue every month, we that we have to use SCD concepts to update Reposioty table using output of reconciliation

13 When we load client data to portal or ERP repository , we should check that-> this data already appearing there or not using delta load method.

14 When we do Jun month reconciliation , we will consider April Open items, May Open items and Jun data from PORTAL repository and ERP repository