

# Oracle EPM Pipelines: From Chaos to Order

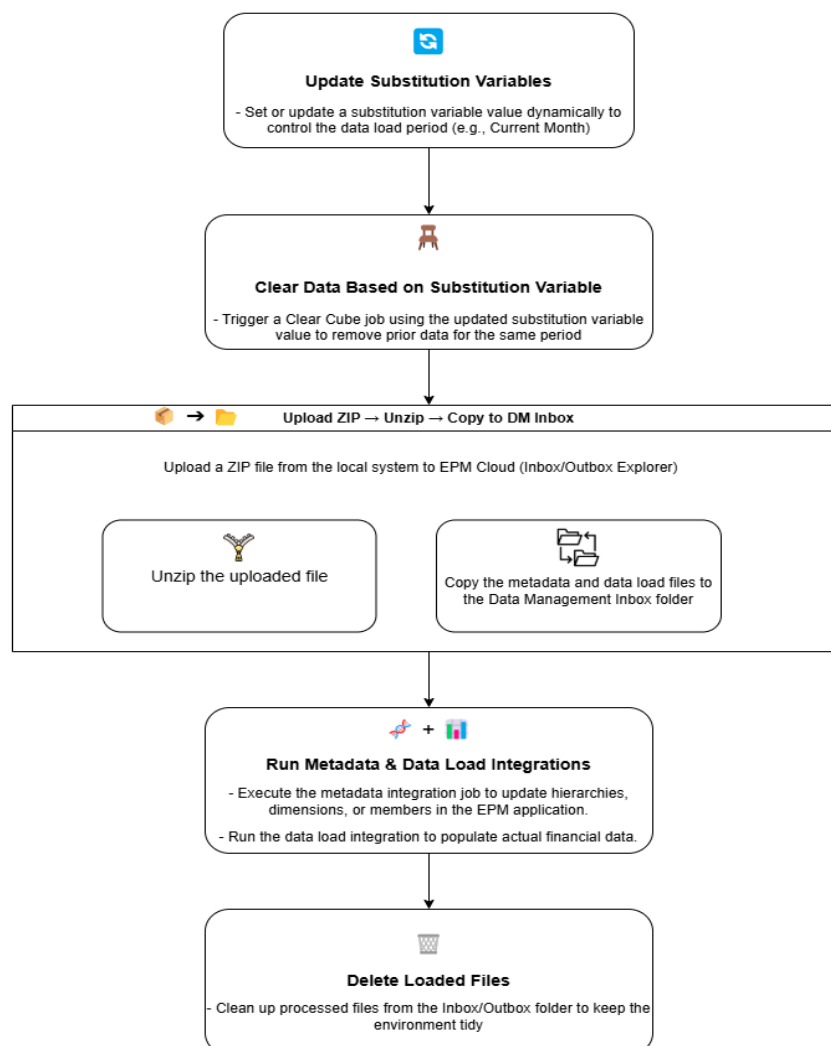
## Opening Preface:

In today's fast-paced business environment, the ability to rapidly process and accurately report financial data is paramount. Traditional methods of managing enterprise performance data are often cumbersome, error-prone, and heavily reliant on manual intervention. This not only increases operational risks but also delays critical decision-making.

Enter Oracle EPM Pipelines, a game changing feature that redefines how businesses approach automation and integration. With Pipelines, we were able to transform their manual workflow into an efficient, streamlined process. By organizing all three critical steps into a single Pipeline within the application, we eliminated the need for manual intervention and brought order to what was once a chaotic routine.

This blog explores how leveraging such an automated pipeline not only improves data accuracy and operational efficiency but also empowers financial and IT teams to focus on strategic initiatives rather than routine tasks.

In this article, we dive deep into each step of the process, illustrate practical implementations, and demonstrate how this innovative approach can transform your enterprise performance management system.



## Stage 0:

### Create a New Pipeline

On the Data Exchange page, select the Data Integration tab and then click on  icon and choose the Pipeline option.

Pipeline : EPOP\_EPM Process Optimization Pipeline

1

2

Details

Variables

\* Pipeline Name

EPOP\_EPM Process Optimization Pipeline

\* Pipeline Code

EPOP

No special characters or space is allowed

Maximum Parallel Jobs

2

All jobs in the process run in a sequence or parallel so enter Maximum Parallel Jobs for each stage as 2.

Location

Type Location Name

(Optional): keep blank as we don't want to associate location to pipeline

Proxy User

(Optional): If we want to enable non-administrators to run a Pipeline job

Cancel

Save and Continue

The new Pipeline is added to the Data Integration homepage. Each Pipeline is identified with a Flow Chart Symbol  under the **Type** header.

### Set Variables

On the Variables page, users will find by default a set of out-of-box variables (global values), users can set parameters at runtime. You can delete variables if you do not need, or you can create new variables as per business need.

Variables can be pre-defined types like: Period, Import Mode, Export Mode, etc., or they can be custom values used as job parameters.

Over here I have created one custom variable viz. CURRYR which will be used to update applications substitution variable. It will be referred to in the stages below, where clear data is required.

The variables SEND\_MAIL, SEND\_TO, and ATTACH\_LOGS are also used to send email notifications - with the log file.

### Edit Pipeline : EPOP\_EPM Process Optimization Pipeline

**Details**
**Variables**

+


| Variable Name* | Display Name* | Display Sequence* | Required                            | Validation Type* | Validation Parameters |
|----------------|---------------|-------------------|-------------------------------------|------------------|-----------------------|
| CURRYR         | Current Year  | 1                 | <input checked="" type="checkbox"/> | Text             | ▼                     |
| STARTPERIOD    | Start Period  | 2                 | <input checked="" type="checkbox"/> | Text             | ▼                     |
| ENDPERIOD      | End Period    | 3                 | <input checked="" type="checkbox"/> | Text             | ▼                     |
| SEND_MAIL      | Send Mail     | 4                 | <input checked="" type="checkbox"/> | Lookup           | ▼ MAIL_CONDITION      |
| SEND_TO        | Send To       | 5                 | <input type="checkbox"/>            | Text             | ▼                     |
| ATTACH_LOGS    | Attach Logs   | 6                 | <input checked="" type="checkbox"/> | Lookup           | ▼ YES_NO              |

Cancel
Save

## Stage 1: Update Substitution Variable

Under Pipeline, you can now create 1 or multiple stages by clicking



Each stage contains jobs that you want to run in the Pipeline at that stage and can include jobs of any type and for multiple target applications.

### Stage Information

Stage : Sub Variable

Stage Name \*  
Stage1

Title \*  
Sub Variable

Sequence  
1

Parallel  
☐

On Success  
Continue

On Failure  
Stop

Stage Name

A number to define the chronological order in which a stage is executed

If this stage gets cleared "Success" then it will move to next Stage, else it will stop.

## Job Information

On the stage card, click  (Create Job icon).



On the stage card, click > to add a new job to the stage.

Job : Update Sub Var

Type \*

Set Substitution Variable

Connection

Local

Name

Title \*

Update Sub Var

Sequence

1

Plan Type

Substitution Variable Name \*

CurrYr

Substitution Variable Value \*

\$CURRYR

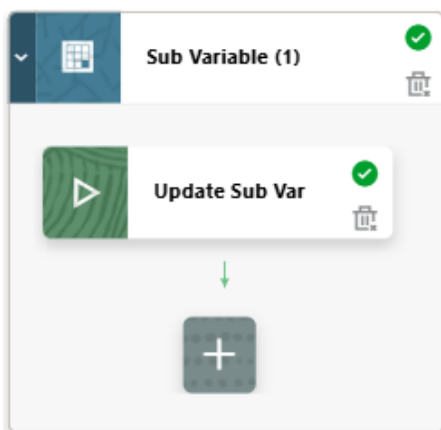
There are different types of Job, based on work, user can select. Over here since we want to Set Variable, we have selected, "Set Substitution Variable"

select "Local" if the data integration is in the current environment.

keep blank, if you are using "All Cubes" as the plan type

Enter the name of the substitution variable

\$CURRYR – it will ask value at runtime



Showcase, how jobs are nested under a Stage. Each stage can have multiple Jobs.

## Stage 2: Clear Data

Create the second stage to clear the data before loading to the application based on current year variable

by clicking on 

### Stage Information

Stage : Clear Data

Stage Name \*  
Stage2

Title \*  
Clear Data

Sequence  
2

Parallel  
☐

On Success  
Continue

On Failure  
Stop

Stage Name

### Job Information

Add a Business Rule type job and enter the following details:

Job : 01\_Clear Data

Type \*  
Business Rule

Connection  
Local

Name \*  
01\_Clear Data

Title \*  
01\_Clear Data

Sequence  
1

Label  
Param1

Value

There are different types of Job, based on work, user can select. Over here since we want to Trigger Business Rule, we have selected, "Business Rule"

## Stage 3: File Operations

Create the third stage to perform file operations like File Upload, File Delete, File Zip / Unzip by clicking on



### Stage Information:

Stage : File Operation

Stage Name \*

Stage3

Title \*

File Operation

Sequence

3

▼

▲

Parallel

☐

On Success

Continue

▼

On Failure

Stop

▼

Stage Name

### Job Information-1

Create a job to unzip the uploaded zip file withing epminbox folder.

Job : UnZip File

Type \*

File Operations

Connection

Local

▼

Name

▼

Title \*

UnZip File

Sequence

1

▼

▲

File Operation \*

Unzip

▼

Source Directory \*

epminbox

▼

Source File Name \*

ActualLoad.zip

Target Directory

epminbox

▼

Target File Name

▼

There are different types of Job, based on work, user can select. Over here since we want to Perform File Operation, we have selected the same.



This is your inbox / outbox explorer folder.

This is your inbox / outbox explorer folder.

## Job Information-2

Copy metadata file from epminbox folder to data management inbox folder

Job : Copy Metadata File

Type \*  
File Operations

Connection  
Local

Name

Title \*  
Copy Metadata File

Sequence  
2

File Operation \*  
Copy

Source Directory \*  
epminbox

Source File Name \*  
Product\_Metadata.csv

Target Directory  
inbox

Target File Name  
Product\_Metadata \$CURRYR.csv

Job Type is Copy Metadata File.

From epminbox (inbox/outbox explorer folder), where Unzip was done.

Copy to Data Management inbox folder.

Product Metadata \$CURRYR.csv (it will update file name as per selected year in runtime variable)

## Job Information-3

Copy Actual data load file from epminbox to data management inbox folder

Job : Copy File

Type \*  
File Operations

Connection  
Local

Name

Title \*  
Copy File

Sequence  
3

File Operation \*  
Copy

Source Directory \*  
epminbox

Source File Name \*  
Actual\_DataLoad.csv

Target Directory  
inbox

Target File Name  
Actual\_DataLoad \$CURRYR.csv

Job Type is Copy Actual Data File.

From epminbox (inbox/outbox explorer folder), where Unzip was done.

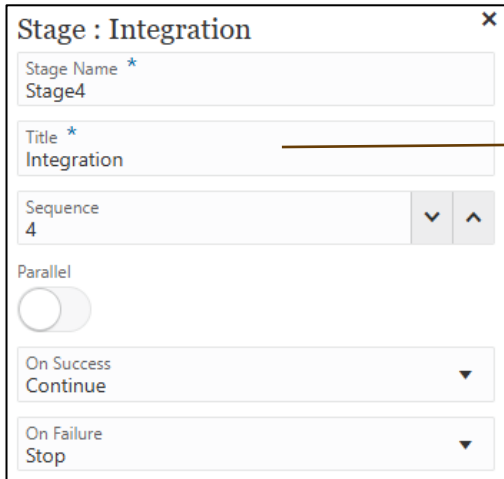
Copy to Data Management inbox folder.

Actual Data \$CURRYR.csv (it will update file name as per selected year in runtime variable)

## Stage 4: Integration

Create the fourth stage to perform Integration by clicking on 

### Stage Information:



Stage : Integration

Stage Name \*  
Stage4

Title \*  
Integration

Sequence  
4

Parallel  
☐

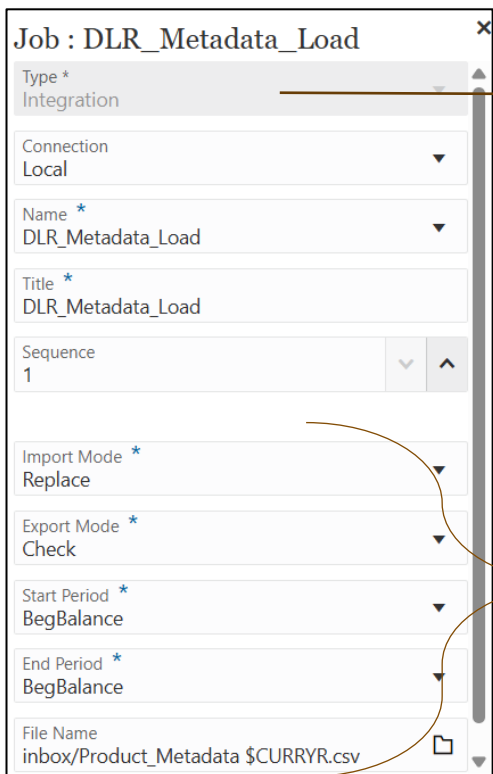
On Success  
Continue

On Failure  
Stop

Stage Name

### Job Information-1

Select an Integration job type to add and execute or run integrations from the Pipeline. You can add any integration created in Data Integration that extracts metadata and data from a file and then push it to an Oracle EPM target application.



Job : DLR\_Metadata\_Load

Type \*  
Integration

Connection  
Local

Name \*  
DLR\_Metadata\_Load

Title \*  
DLR\_Metadata\_Load

Sequence  
1

Import Mode \*  
Replace

Export Mode \*  
Check

Start Period \*  
BegBalance

End Period \*  
BegBalance

File Name  
inbox/Product\_Metadata \$CURRYR.csv

Job Type is Integration.

As we are loading metadata so we have fixed Import Mode, Export Mode, Start Period, End Period as well as File Name as its remain same for metadata load.

## Job Information-2

Select an Integration job type again to add and execute or run another data load integration from the Pipeline.

Job : DLR\_Actual\_DataLoad

Type \*

Integration

Connection

Local

Name \*

DLR\_Actual\_DataLoad

Title \*

DLR\_Actual\_DataLoad

Sequence

2

Import Mode \*

Replace

Export Mode \*

Replace

Start Period \*

\$STARTPERIOD

End Period \*

\$ENDPERIOD

File Name

inbox/Actual\_DataLoad \$CURRYR.csv

Job Type is Integration.

User can input the values on Runtime.

It will be Take the Unzip File from Stage 3 Output

## Stage 5:

Create the Fifth stage to perform File Deletion Operation by clicking on . This stage will remove the original files extracted in stage 3, ensuring the environment remains tidy.

## Stage Information:

Stage : File Operation2

Stage Name \*

Stage5

Title \*

File Operation2

Sequence

5

Parallel

☐

On Success

Continue

On Failure

Stop

Stage Name

## Job Information-1 & 2

Creating two Jobs to delete Data File and Metadata File Separately. As we are deleting loaded files we don't have to mention target details. This will help keep our inbox folder clean.

### Job : Delete File

Type \*  
File Operations

Connection  
Local

Name

Title \*  
Delete File

Sequence  
1

File Operation \*  
Delete

Source Directory \*  
epminbox

Source File Name \*  
Actual\_DataLoad.csv

Target Directory

Target File Name

Delete File Operation

### Job : Delete File2

Type \*  
File Operations

Connection  
Local

Name

Title \*  
Delete File2

Sequence  
2

File Operation \*  
Delete

Source Directory \*  
epminbox

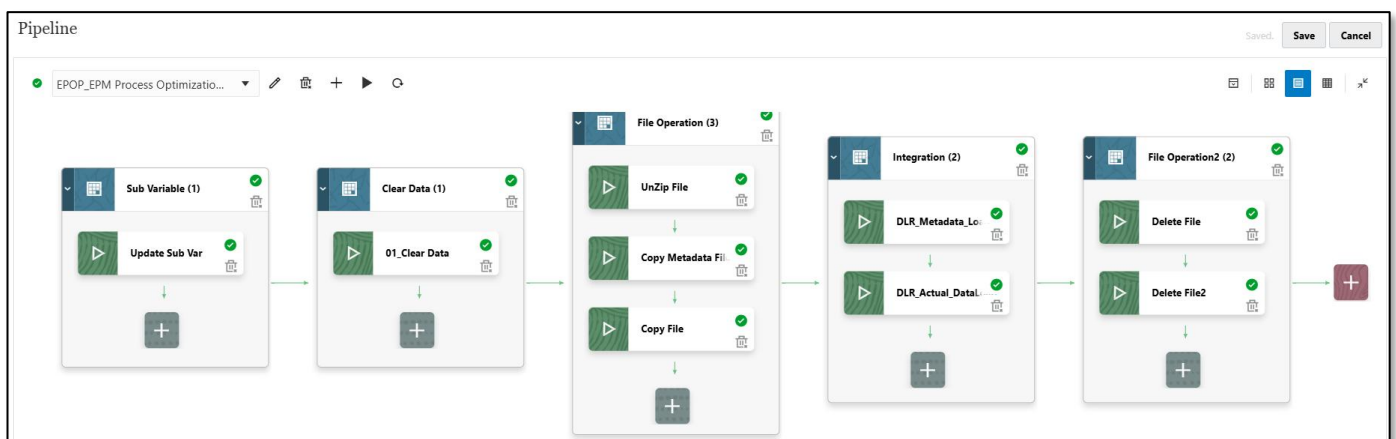
Source File Name \*  
Product\_Metadata.csv

Target Directory

Target File Name

## Final Pipeline:

### Overview



## Executing Pipeline:

Click the play  button to run the pipeline; you'll be prompted to enter the variable details.

Run Pipeline : EPOP\_EPM Process Optimization Pipeline

Variables

| Name         | Value                       |
|--------------|-----------------------------|
| Current Year | FY24                        |
| Start Period | Jan-24                      |
| End Period   | Dec-24                      |
| Send Mail    | Always                      |
| Send To      | shubham.panchal@orbrick.com |
| Attach Logs  | Yes                         |

Cancel

Run

## Email Notification:

An email will be sent containing a ZIP file with log files for all pipeline stages. The email body includes the status of each stage, and the value of the variable used during pipeline execution.


no.reply@oraclecloud.com

To:  Shubham Panchal









Sun 4/6/2025 2:26 PM


EPOP\_381.zip  
37 KB

|                                                                                                                                                                                               |                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>Pipeline Name:</b> EPOP                                                                                                                                                                    | <b>Process ID:</b> 381              |
| <b>Start Time:</b> 06-Apr-25 08:54:13                                                                                                                                                         | <b>End Time:</b> 06-Apr-25 08:55:28 |
| <b>Executed By:</b> epm_default_cloud_admin                                                                                                                                                   | <b>Status:</b> <b>SUCCESS</b>       |
| <b>Environment:</b> <a href="https://epm-304427-plan.hap.iad.demoservices003.oraclepdemos.com:443/epmcloud">https://epm-304427-plan.hap.iad.demoservices003.oraclepdemos.com:443/epmcloud</a> |                                     |

## Jobs

| Stage Name | Job Type                  | Job Name            | Job ID | Status    | End Time           | Log File                 | Output File |
|------------|---------------------------|---------------------|--------|-----------|--------------------|--------------------------|-------------|
| Stage1     | Set Substitution Variable | Update Sub Var      | 382    | ✓ SUCCESS | 06-Apr-25 08:54:14 | <a href="#">Download</a> |             |
| Stage2     | Business Rule             | 01_Clear Data       | 383    | ✓ SUCCESS | 06-Apr-25 08:54:25 | <a href="#">Download</a> |             |
| Stage3     | File Operations           | UnZip File          | 384    | ✓ SUCCESS | 06-Apr-25 08:54:26 | <a href="#">Download</a> |             |
| Stage3     | File Operations           | Copy Metadata File  | 385    | ✓ SUCCESS | 06-Apr-25 08:54:26 | <a href="#">Download</a> |             |
| Stage3     | File Operations           | Copy File           | 386    | ✓ SUCCESS | 06-Apr-25 08:54:26 | <a href="#">Download</a> |             |
| Stage4     | Integration               | DLR_Metadata_Load   | 387    | ✓ SUCCESS | 06-Apr-25 08:55:11 | <a href="#">Download</a> |             |
| Stage4     | Integration               | DLR_Actual_DataLoad | 388    | ✓ SUCCESS | 06-Apr-25 08:55:21 | <a href="#">Download</a> |             |
| Stage5     | File Operations           | Delete File         | 389    | ✓ SUCCESS | 06-Apr-25 08:55:28 | <a href="#">Download</a> |             |
| Stage5     | File Operations           | Delete File2        | 390    | ✓ SUCCESS | 06-Apr-25 08:55:28 | <a href="#">Download</a> |             |

## Variables

| Variable Name | Variable Value |
|---------------|----------------|
| CURRYR        | FY24           |
| STARTPERIOD   | Jan-24         |
| ENDPERIOD     | Dec-24         |

## Conclusion:

This blog walked you through a practical, end-to-end Oracle EPM Pipeline setup that simplifies and automates key financial data integration tasks from managing substitution variables and clearing data, to handling file operations, metadata updates, data loads, and post-process cleanups. By leveraging the full potential of EPM Pipeline jobs, you not only streamline your workflows but also minimize manual errors and save valuable time for both users and developers.

Hope this blog helped you and your team to learn practical features and business benefits of Pipeline.

Thanks,

Shubham Panchal