

The background of the image shows a large, multi-story building with a prominent central dome and many windows, situated behind a line of trees. In the foreground, there is a body of water with a small sailboat. The entire scene is overlaid with a semi-transparent dark blue filter.

ODTUG Kscope25

dallas - ft worth june 15 - 19

Welcome

A decorative horizontal bar at the bottom of the image, composed of several overlapping geometric shapes in shades of blue, green, yellow, and orange.



0-60 Data Exchange...The Pretty Data Management

More than a pretty face



AGENDA



Introductions



Data Management vs Data Exchange



Data Integrations



Data Maps



Orchestration with Pipelines



The EPM Integration Agent



Putting It All Together

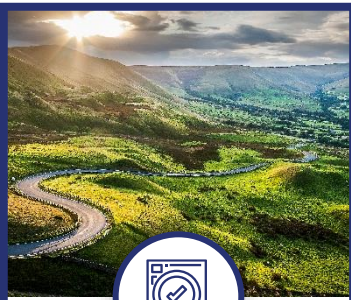
About the Speaker



Brian Marshall
EPM Cloud Architect

- 20+ years of Oracle EPM experience
- Oracle ACE Alumni
- Internationally recognized speaker
- Kscope Speaker 2010-2018, 2022-2025
- Kscope 2022 Best Overall Speaker, Kscope 2015 Best Speaker Award
- Over 250 projects
- Architected over 100 projects
- Experienced in FCC, Planning, ARCS, EDMCS, Cloud Data Exchange, Essbase (ASO, BSO and Hybrid), and HFM, Essbase Analytics, and replication of Consolidation functionality in both Essbase and Free Form Planning in PBCS)
- Extensive experience with Groovy and the REST APIs

About Olympus Consulting



Strategy

Collaborate with executive leadership to implement strategic initiatives using Oracle Cloud EPM, aligning goals, optimizing processes while driving efficiency.

Assessments

Evaluate the functionality and performance of an implementation to ensure it meets organizational needs, efficiency goals, and strategic initiatives.

Cloud Readiness

Assess the current implementation to determine its suitability, readiness, and potential challenges for a seamless migration to the cloud environment.



Reporting and Analysis

Excel, web-based forms, dashboards, and pixel-perfect reporting with full e-mail bursting capabilities provide enterprise-wide reporting.



Budgeting and Forecasting

Integrates financial, operational, and strategic planning, enhancing collaboration and decision-making across the organization with real-time data and predictive analytics.



Consolidations

Streamlines financial processes, ensuring accurate, timely reporting and compliance, enhancing efficiency, and providing real-time insights for better decision-making.



Account Reconciliations

Provides insights into cost and profitability drivers, optimizing resource allocation and financial performance through detailed analysis across various dimensions.



Integrations

Integrates data from various sources, supports file-based and direct integrations, and automates data mapping and loading for efficient financial and operational processes across all EPM business processes.

Proactive Support

Monitor daily data loads, update meta-data and data mappings, support Smart View users, and execute ad-hoc automated processes like data loads.

Reactive Support

Handle client requests per SLA, investigate automated process errors, and perform root cause analysis to identify and resolve issues efficiently.

Report Services

Create new reports based on user requests, update existing reports per new requirements, and manage report security access for all users.



What Makes Us Different?

- As thought Leaders in EPM, Olympus has presented over 30 times at Kscope in the last 10 conferences including multiple *Best Speaker* awards.
- Oracle Cloud Beta program member, pre-release experience with new features along with a direct line of communication to the Oracle development team.
- For Planning Magic Quadrant, Gartner interviewed 8 Olympus clients out of the 30 or so Oracle clients.
- Olympus has a 100% success rate on EPM implementations.
- Every consultant is Architect level with at least 17 years of experience.

Data Management vs. Data Exchange

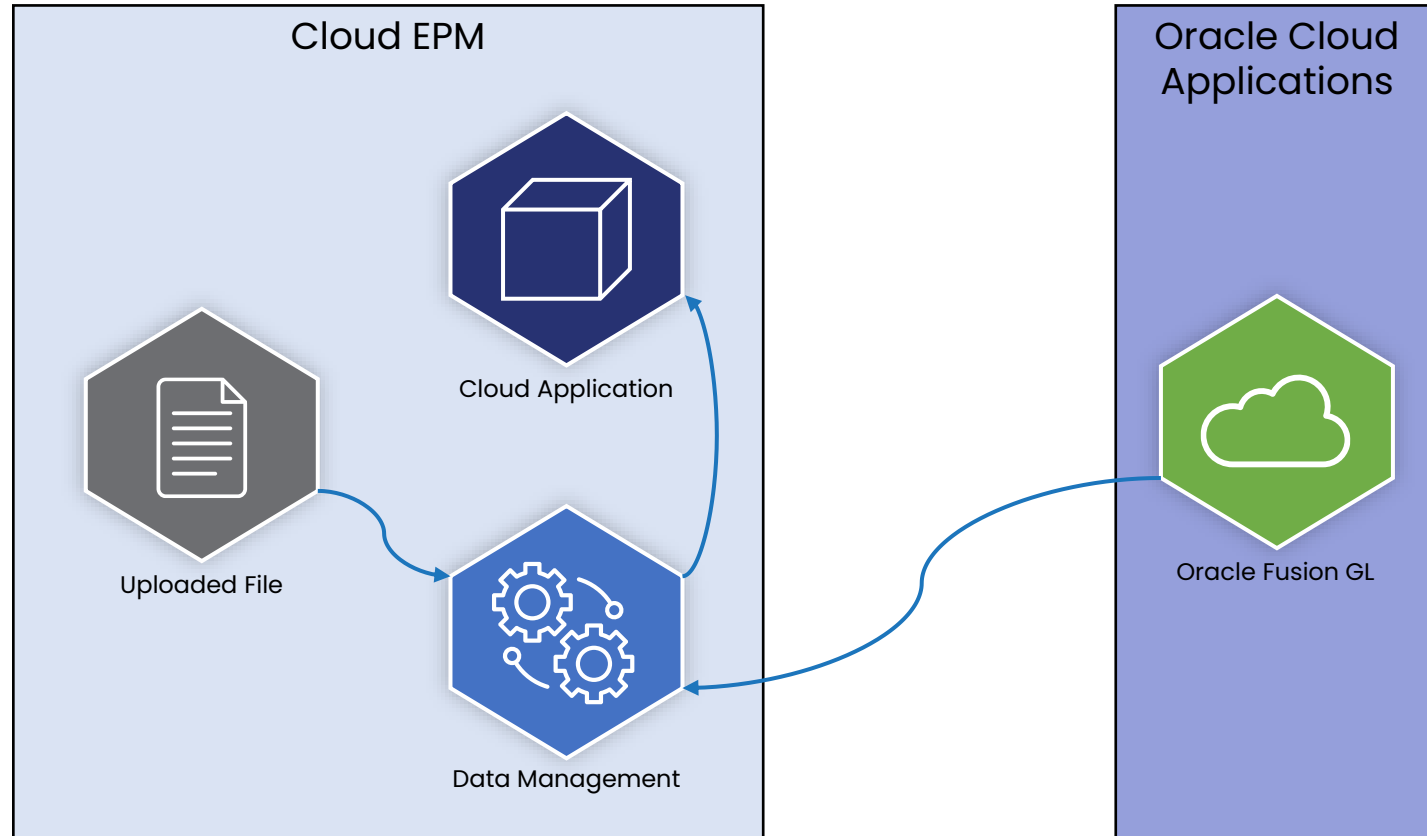
Overview



- Data Management
 - Traditional ETL tool used for loading and transforming data
 - Based on the on-premises tool Financial Data Quality Management Enterprise Edition (FDMEE) without the scripting engine
 - Supports file-based and direct-source integrations
 - Uses mapping rules for data transformation
 - Provides drill-through capabilities to source systems
 - Opens as a new window from the Oracle Cloud EPM application
- Data Exchange
 - Foundationally based on FDMEE
 - Still provides all baseline functionality of traditional Cloud Data Management (minus batches)
 - More than just a data integration tool
 - Data map functionality to transfer data between cubes and applications
 - Provides pipelines enabling true orchestration of automated processes
 - Inclusion of the missing link to on-premise systems while providing a full scripting engine that exceeds even FDMEE in terms of capabilities
 - Modernized and streamlined user interface accessed directly inside of each Oracle Cloud EPM application

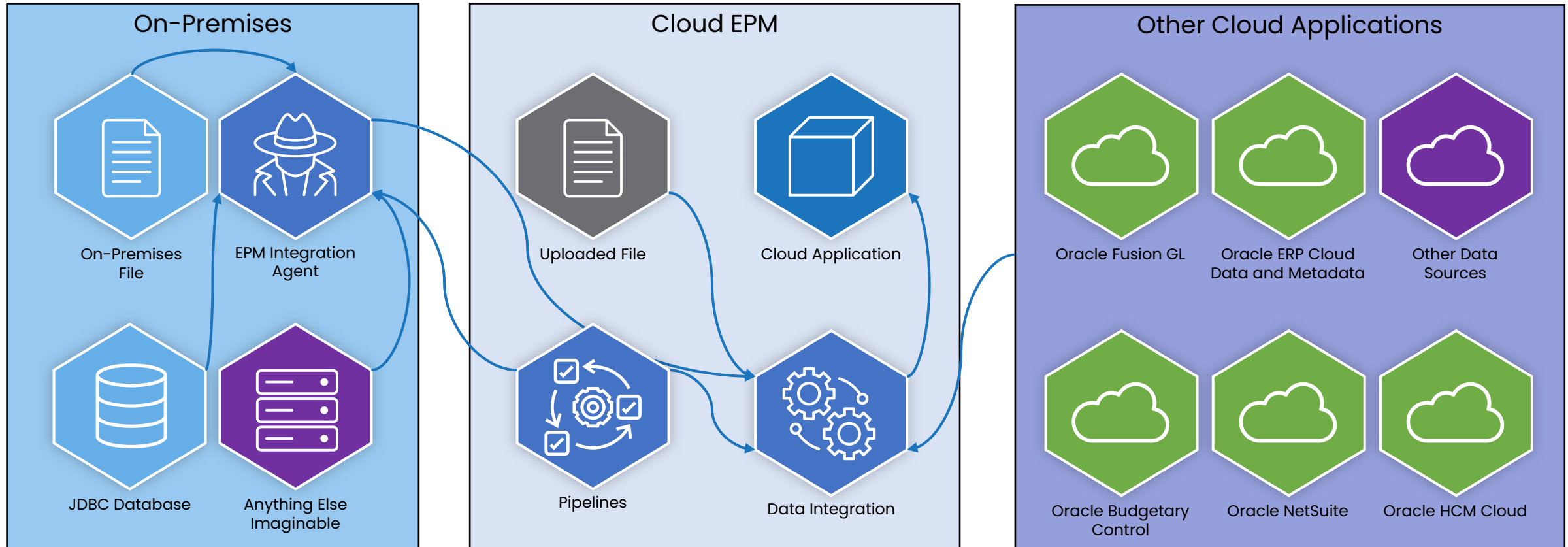
Data Management vs. Data Exchange

Data Management Architecture



Data Management vs. Data Exchange

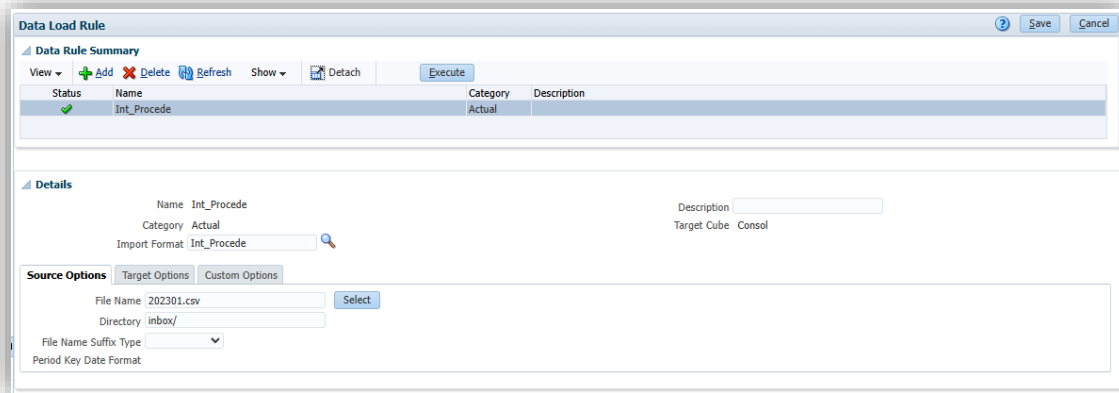
Data Exchange Architecture



Data Management vs. Data Exchange

Data Load Rule

Data Management



Data Load Rule

Data Rule Summary

Status	Name	Category	Description
✓	Int_Procede	Actual	

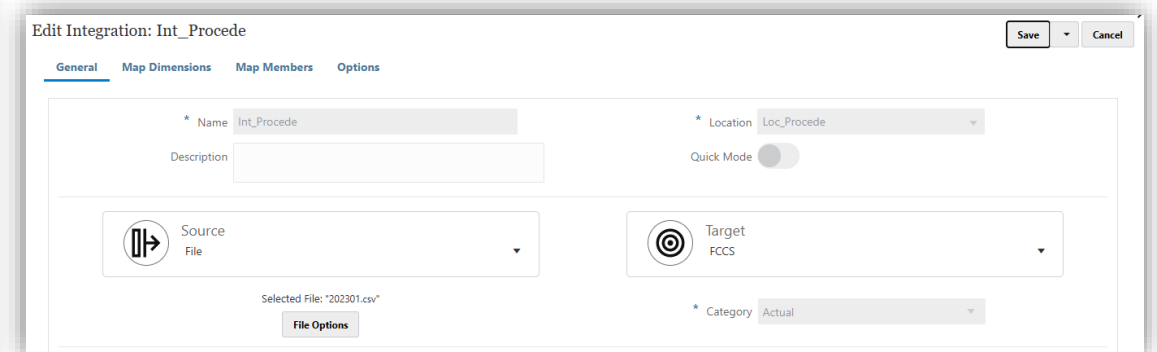
Details

Name: Int_Procede
Category: Actual
Description:
Import Format: Int_Procede

Source Options

File Name: 202301.csv
Directory: inbox/
File Name Suffix Type:
Period Key Date Format:

Data Exchange



Edit Integration: Int_Procede

General | Map Dimensions | Map Members | Options

Name: Int_Procede
Location: Loc_Procede
Quick Mode: ☐

Source: File
Target: FCCS
Selected File: "202301.csv"

Category: Actual

Data Management vs. Data Exchange

Import Format

Data Management

Import Format

Import Format Summary

Status	Name	Source	Target
✓	FCCS	File	FCCS
✓	Int_Budget	FactBudget	FCCS
✓	Int_Budget_Units	FactBudgetUnits	FCCS
✓	Int_Proceed	File	FCCS
✓	Int_SQL	SQLData	FCCS

FCCS: Details

Name: FCCS
Source: File
* File Type: Delimited - Numeric Data
Drill URL:

Description:
Target: FCCS
* File Delimiter: Comma



FCCS: Mappings










Source Column	Field Number	Expression	Add Expression	Target
Account	1			Account
Amount	4			Amount
				Data Source
Department	3			Department
Entity	2			Entity
				Intercompany
				Movement
				TypicalBalance
				View

Data Exchange

General | **Map Dimensions** | Map Members | Options

* Import Format: FCCS
* Type: Delimited - Numeric Data
Drill URL:
* Delimiter: Comma

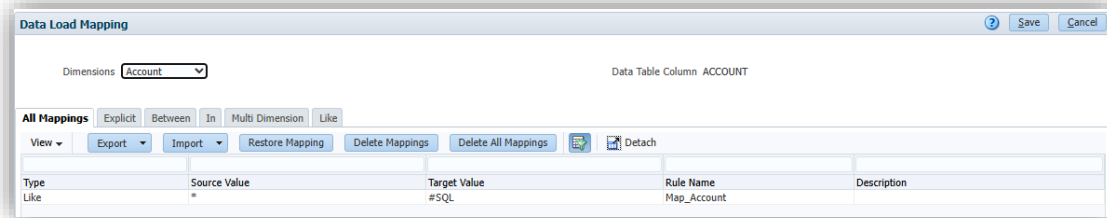
File  → 

1	Account	Account	
4	Amount	Amount	
2	Entity	Entity	
3	Department	Department	
Column	Add Source Dimension	Data Source	
Column	Add Source Dimension	Intercompany	
Column	Add Source Dimension	Movement	
Column	Add Source Dimension	TypicalBalance	
Column	Add Source Dimension	View	

Data Management vs. Data Exchange

Data Mappings

Data Management



Data Load Mapping

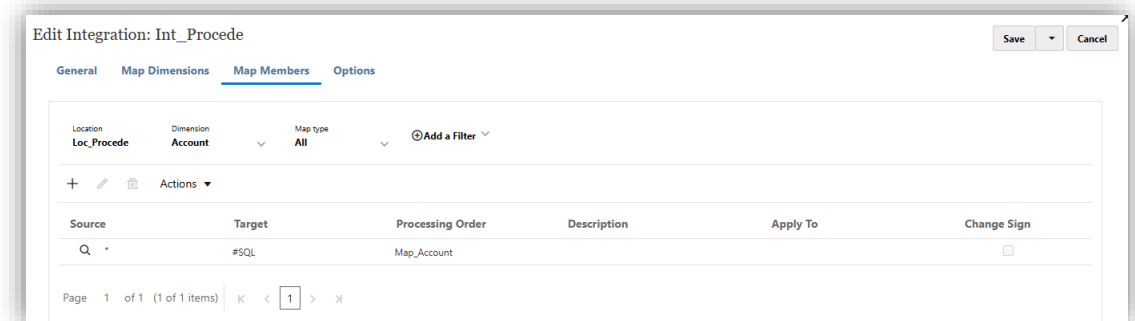
Dimensions: **Account** Data Table Column: ACCOUNT

All Mappings Explicit Between In Multi Dimension Like

View Export Import Restore Mapping Delete Mappings Delete All Mappings Detach

Type	Source Value	Target Value	Rule Name	Description
Like	*	#SQL	Map_Account	

Data Exchange



Edit Integration: Int_Procede

General Map Dimensions **Map Members** Options

Location: **Loc_Procede** Dimension: **Account** Map type: **All** Add a Filter

+ Actions

Source	Target	Processing Order	Description	Apply To	Change Sign
Q *	#SQL	Map_Account			<input type="checkbox"/>

Page 1 of 1 (1 of 1 items) | < 1 > |

Data Management vs. Data Exchange

Load Rule Options

Data Management

Data Load Rule [Save] [Cancel]

Data Rule Summary

View [Add] [Delete] [Refresh] [Show] [Detach] [Execute]

Status	Name	Category	Description
✓	Int_Procede	Actual	

Details

Name: Int_Procede
Category: Actual
Import Format: Int_Procede

Description:
Target Cube: Consol

Source Options | **Target Options** | **Custom Options**

View [Detach]

Property Name	Value
Load Type	Data
Purge Data File	No
Enable Zero Loading	Yes
Enable Data Security for Admin Users	No
Display Validation Failure Messages	Yes
Create Drill Region	No
Journal Status	Working
Journal Type	Regular
Journal Post As	Periodic
Auto-Reversing Period Year (e.g.: Jan FY22)	
Journal Balance Type	Balanced

Data Exchange

Edit Integration: Int_Procede [Save] [Cancel]

General | **Map Dimensions** | **Map Members** | **Options**

Options | **Business Rules**

General Option

* File Name: 202301.csv
Directory: inbox/
File Name Suffix Type:
Period Key Date Format:
Category: Actual

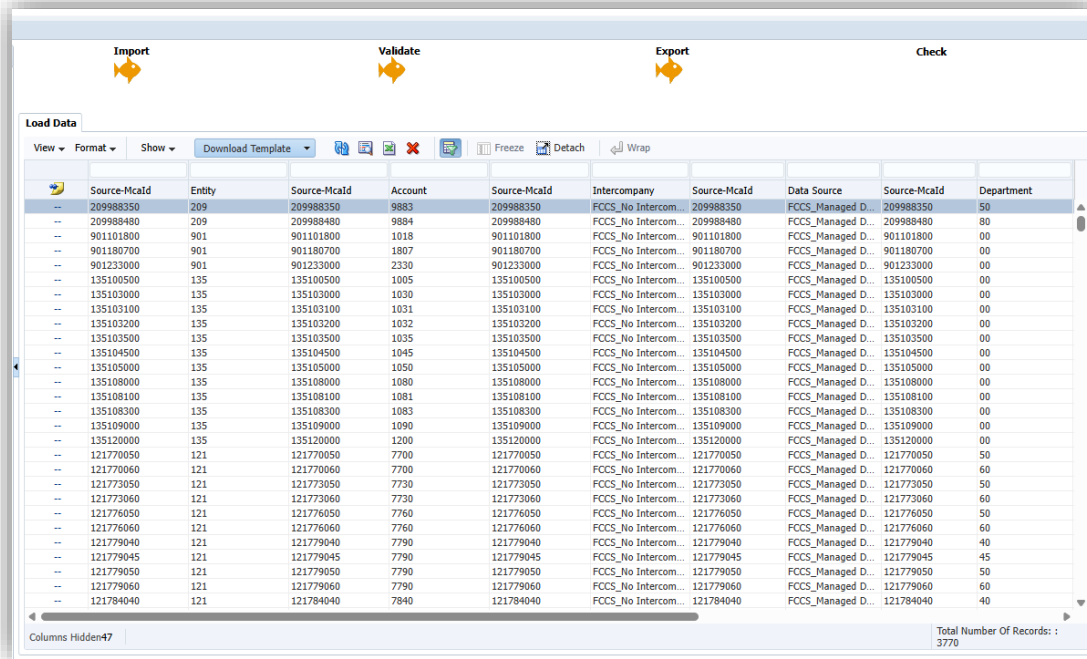
Target Option

Load Type: Data
Purge Data File:
Enable Zero Loading:
Enable Data Security for Admin Users:
Display Validation Failure Messages:
Create Drill Region:
Journal Status: Working
Journal Type: Regular
Journal Post As: Periodic
Auto-Reversing Period Year (e.g.: Jan FY22):
Journal Balance Type: Balanced

Data Management vs. Data Exchange

Workbench

Data Management



Import Validate Export Check

Load Data

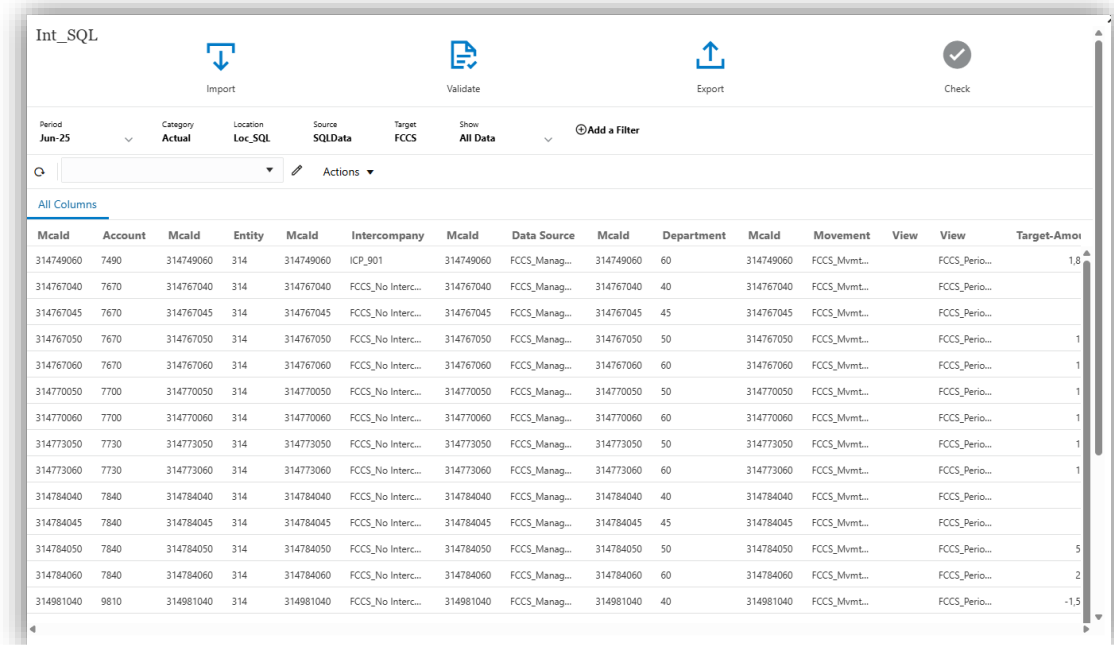
View Format Show Download Template Freeze Detach Wrap

Source-Mcald	Entity	Source-Mcald	Account	Source-Mcald	Intercompany	Source-Mcald	Data Source	Source-Mcald	Department
209988350	209	209988350	9883	209988350	FCCS_No Intercom...	209988350	FCCS_Managed D...	209988350	50
209988480	209	209988480	9884	209988480	FCCS_No Intercom...	209988480	FCCS_Managed D...	209988480	80
901101800	901	901101800	1018	901101800	FCCS_No Intercom...	901101800	FCCS_Managed D...	901101800	00
901180700	901	901180700	1807	901180700	FCCS_No Intercom...	901180700	FCCS_Managed D...	901180700	00
901233000	901	901233000	2330	901233000	FCCS_No Intercom...	901233000	FCCS_Managed D...	901233000	00
135100500	135	135100500	1005	135100500	FCCS_No Intercom...	135100500	FCCS_Managed D...	135100500	00
135103000	135	135103000	1030	135103000	FCCS_No Intercom...	135103000	FCCS_Managed D...	135103000	00
135103100	135	135103100	1031	135103100	FCCS_No Intercom...	135103100	FCCS_Managed D...	135103100	00
135103200	135	135103200	1032	135103200	FCCS_No Intercom...	135103200	FCCS_Managed D...	135103200	00
135103500	135	135103500	1035	135103500	FCCS_No Intercom...	135103500	FCCS_Managed D...	135103500	00
135104500	135	135104500	1045	135104500	FCCS_No Intercom...	135104500	FCCS_Managed D...	135104500	00
135105000	135	135105000	1050	135105000	FCCS_No Intercom...	135105000	FCCS_Managed D...	135105000	00
135108000	135	135108000	1080	135108000	FCCS_No Intercom...	135108000	FCCS_Managed D...	135108000	00
135108100	135	135108100	1081	135108100	FCCS_No Intercom...	135108100	FCCS_Managed D...	135108100	00
135108300	135	135108300	1083	135108300	FCCS_No Intercom...	135108300	FCCS_Managed D...	135108300	00
135109000	135	135109000	1090	135109000	FCCS_No Intercom...	135109000	FCCS_Managed D...	135109000	00
135120000	135	135120000	1200	135120000	FCCS_No Intercom...	135120000	FCCS_Managed D...	135120000	00
121770050	121	121770050	7700	121770050	FCCS_No Intercom...	121770050	FCCS_Managed D...	121770050	50
121770060	121	121770060	7700	121770060	FCCS_No Intercom...	121770060	FCCS_Managed D...	121770060	60
121773050	121	121773050	7730	121773050	FCCS_No Intercom...	121773050	FCCS_Managed D...	121773050	50
121773060	121	121773060	7730	121773060	FCCS_No Intercom...	121773060	FCCS_Managed D...	121773060	60
121776050	121	121776050	7760	121776050	FCCS_No Intercom...	121776050	FCCS_Managed D...	121776050	50
121776060	121	121776060	7760	121776060	FCCS_No Intercom...	121776060	FCCS_Managed D...	121776060	60
121779040	121	121779040	7790	121779040	FCCS_No Intercom...	121779040	FCCS_Managed D...	121779040	40
121779045	121	121779045	7790	121779045	FCCS_No Intercom...	121779045	FCCS_Managed D...	121779045	45
121779050	121	121779050	7790	121779050	FCCS_No Intercom...	121779050	FCCS_Managed D...	121779050	50
121779060	121	121779060	7790	121779060	FCCS_No Intercom...	121779060	FCCS_Managed D...	121779060	60
121784040	121	121784040	7840	121784040	FCCS_No Intercom...	121784040	FCCS_Managed D...	121784040	40

Columns Hidden 47

Total Number Of Records: 3770

Data Exchange



Int_SQL

Import Validate Export Check

Period Jun-25 Category Actual Location Loc_SQL Source SQLData Target FCCS Show All Data Add a Filter

Q Actions

All Columns

Mcald	Account	Mcald	Entity	Mcald	Intercompany	Mcald	Data Source	Mcald	Department	Mcald	Movement	View	View	Target-Amoi
314749060	7490	314749060	314	314749060	ICP_901	314749060	FCCS_Manag...	314749060	60	314749060	FCCS_Mvmt...		FCCS_Perio...	1.8
314767040	7670	314767040	314	314767040	FCCS_No Inter...	314767040	FCCS_Manag...	314767040	40	314767040	FCCS_Mvmt...		FCCS_Perio...	
314767045	7670	314767045	314	314767045	FCCS_No Inter...	314767045	FCCS_Manag...	314767045	45	314767045	FCCS_Mvmt...		FCCS_Perio...	
314767050	7670	314767050	314	314767050	FCCS_No Inter...	314767050	FCCS_Manag...	314767050	50	314767050	FCCS_Mvmt...		FCCS_Perio...	1
314767060	7670	314767060	314	314767060	FCCS_No Inter...	314767060	FCCS_Manag...	314767060	60	314767060	FCCS_Mvmt...		FCCS_Perio...	1
314770050	7700	314770050	314	314770050	FCCS_No Inter...	314770050	FCCS_Manag...	314770050	50	314770050	FCCS_Mvmt...		FCCS_Perio...	1
314770060	7700	314770060	314	314770060	FCCS_No Inter...	314770060	FCCS_Manag...	314770060	60	314770060	FCCS_Mvmt...		FCCS_Perio...	1
314773050	7730	314773050	314	314773050	FCCS_No Inter...	314773050	FCCS_Manag...	314773050	50	314773050	FCCS_Mvmt...		FCCS_Perio...	1
314773060	7730	314773060	314	314773060	FCCS_No Inter...	314773060	FCCS_Manag...	314773060	60	314773060	FCCS_Mvmt...		FCCS_Perio...	1
314784040	7840	314784040	314	314784040	FCCS_No Inter...	314784040	FCCS_Manag...	314784040	40	314784040	FCCS_Mvmt...		FCCS_Perio...	
314784045	7840	314784045	314	314784045	FCCS_No Inter...	314784045	FCCS_Manag...	314784045	45	314784045	FCCS_Mvmt...		FCCS_Perio...	
314784050	7840	314784050	314	314784050	FCCS_No Inter...	314784050	FCCS_Manag...	314784050	50	314784050	FCCS_Mvmt...		FCCS_Perio...	5
314784060	7840	314784060	314	314784060	FCCS_No Inter...	314784060	FCCS_Manag...	314784060	60	314784060	FCCS_Mvmt...		FCCS_Perio...	2
314981040	9810	314981040	314	314981040	FCCS_No Inter...	314981040	FCCS_Manag...	314981040	40	314981040	FCCS_Mvmt...		FCCS_Perio...	-1.5

Data Management vs. Data Exchange

Data Management

- Integration Types
 - Uploaded file-based integrations
 - Oracle Fusion GL integrations (from Essbase)
- Familiar (circa 2002) external interface
- Old-school Batch Operations (now deprecated)

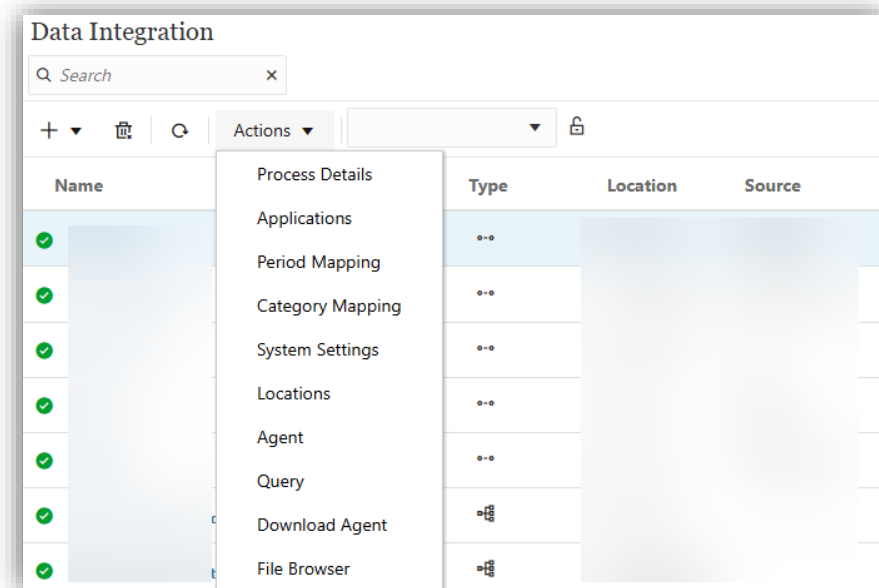
Data Exchange

- Integration Types
 - Uploaded file-based integrations
 - On-premises file-based integrations
 - On-premises databases
 - Oracle Fusion GL integrations (from Essbase)
 - Oracle ERP Cloud Metadata
 - Oracle ERP Cloud (not from Essbase)
 - Budgetary Control
 - Oracle NetSuite (using Saved Searches)
 - Oracle HCM Cloud
 - Quick Mode (for large data volumes)
 - And many more...
- Modernized interface built directly into the application (no new window)
- Pipeline process orchestration
- Data Maps
- EPM Integration Agent with full Groovy and Jython language support...including importing any class available

Data Integrations

Overview

- Data integrations reorganize the disparate concepts found in data management of the data load rule, import format, data mappings, and options into a more streamlined interface
- Upon creation of a new data integration, the system builds out new objects throughout a more “wizard-like” organization
- While you can select already existing objects (import formats and locations), by default these objects are created for you along the way
- The concepts from FDMEE and Data Management are still present (given that the back-end hasn’t really changed), but the new interface makes for a better overall user experience
- New interfaces for everything that support data integrations:
 - Period Mappings
 - Category Mappings
 - Locations
 - Applications (and Connections)



Data Integrations

Period Mappings

Period Mapping							
<div>Global MappingApplication MappingSource Mapping</div>							
<div>+🗑️🔍🔄Actions</div>							
Period Key	Prior Period Key	Period Name	Target Year	Target Period - Month	Target Period - Quarter	Target Period - Year	Target Period - Day
12/31/2020	12/31/2020	BegBalance	No Year	BegBalance			
01/31/2021	12/31/2020	Jan-21	FY21	Jan			
02/28/2021	01/31/2021	Feb-21	FY21	Feb			
03/31/2021	02/28/2021	Mar-21	FY21	Mar			
04/30/2021	03/31/2021	Apr-21	FY21	Apr			
05/31/2021	04/30/2021	May-21	FY21	May			
06/30/2021	05/31/2021	Jun-21	FY21	Jun			
07/31/2021	06/30/2021	Jul-21	FY21	Jul			
08/31/2021	07/31/2021	Aug-21	FY21	Aug			
09/30/2021	08/31/2021	Sep-21	FY21	Sep			
10/31/2021	09/30/2021	Oct-21	FY21	Oct			
11/30/2021	10/31/2021	Nov-21	FY21	Nov			
12/31/2021	11/30/2021	Dec-21	FY21	Dec			
01/31/2022	12/31/2021	Jan-22	FY22	Jan			
02/28/2022	01/31/2022	Feb-22	FY22	Feb			
03/31/2022	02/28/2022	Mar-22	FY22	Mar			
04/30/2022	03/31/2022	Apr-22	FY22	Apr			
05/31/2022	04/30/2022	May-22	FY22	May			
06/30/2022	05/31/2022	Jun-22	FY22	Jun			

Data Integrations

Category Mappings

Category Mapping

Save

Global Mapping

Application Mapping

+

Category	Description	Frequency	Target Category	Category Key
Actual		Monthly	▼ Actual	1
Budget		Monthly	▼ Budget	2

Data Integrations

Locations

Locations						
<div>ListingLock</div>						
<div>Filter</div>						
Name	Description	Import Format	Source	Target	Parent Location	Functiona
FCCS		FCCS	File	FCCS		Entity Currer
Loc_Budget		Int_Budget	FactBudget	FCCS		Entity Currer
Loc_Budget_Units		Int_Budget_Units	FactBudgetUnits	FCCS		Entity Currer
Loc_Procede		Int_Procede	File	FCCS		Entity Currer
Loc_SQL		Int_SQL	SQLData	FCCS		Entity Currer
Loc_Units		Int_Units	UnitsUnitData	FCCS		Entity Currer

Data Integrations

Query (more on this later)

Query

+ ✎ 🗑

Query Name	Query String
Procede	SELECT REPLACE(CorpName, ',') AS Corp , Account AS Mcald , " AS Class , REPLACE(AccountDes, ',') AS Des , AmtBeg , " AS AmtDb , " AS AmtCr , AmtEnd , AmtChg , " AS DateEnd , TypDes , TypicalBal FROM [AscendancyTru
ProcedeBudget	SELECT " AS Date ,Account ,AccountDes ,TypId ,TypDes ,StyleId ,StyleDes ,TypicalBal ,Level1 ,Level2 , " AS Level3 , " AS Level4 , " AS Level5 ,RegionName ,CorplD ,REPLACE(CorpName, ',') AS Corp ,BranchID ,BranchName ,Branch
ProcedeBudgetUnits	SELECT " AS Date ,Account ,AccountDes ,TypId ,TypDes ,StyleId ,StyleDes ,TypicalBal ,Level1 ,Level2 , " AS Level3 , " AS Level4 , " AS Level5 ,RegionName ,CorplD ,REPLACE(CorpName, ',') AS Corp ,BranchID ,BranchName ,Branch
ProcedeUnits	SELECT REPLACE(CorpName, ',') AS CorpName ,Account ,REPLACE(AccountDes, ',') AS Des ,UnitCount ,CustomerName ,VehicleId ,VIN ,Make ,Model ,ModelYear ,SaleType ,Age ,TotalSales ,TotalGrossProfit ,Commission FROM

Data Integrations

Applications (and Connections)

Applications

Search ×

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Actions ▾

Name	Category	Type	System Name	Actions
SQLData	Data Source	On Premises Database	Data	...
FactBudget	Data Source	On Premises Database	FactBudget	
FactBudgetUnits	Data Source	On Premises Database	FactBudgetUnits	
FCCS	EPM Local	Consolidation	FCCS	
File	Data Source	File	File	
UnitsUnitData	Data Source	On Premises Database	UnitData	

Create Application ×

Category

Data Source ▾

Type

File ▾

Name

File

Oracle ERP Cloud

NetSuite

Oracle HCM Cloud

EBS GL Balance

Description

Drill URL

OK

Cancel

Quick Mode

Overview

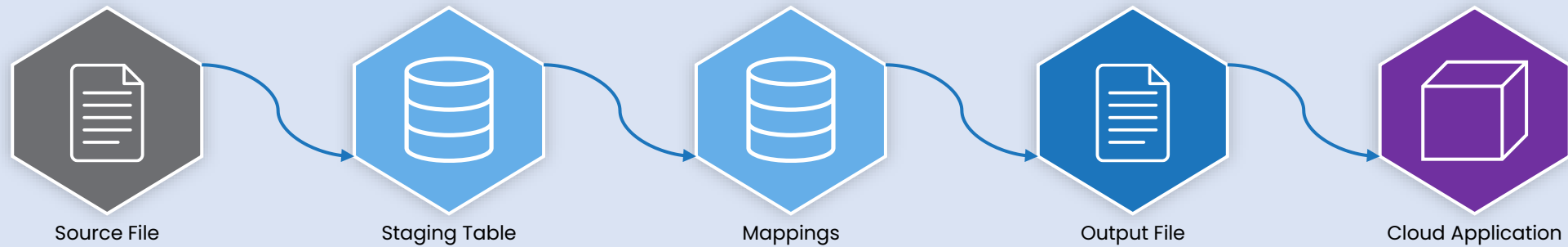


- In a traditional data integration, data loads from a source to a staging table, has mappings applied, and eventually gets exports to an output file that is loaded into the EPM application
- While this works great and offers the greatest mapping functionality and auditing capabilities...the more data you have, the slower the process can be
- In many instances where we need hundreds of thousands of rows of data or even millions of rows of data...a traditional data integration isn't going to cut it
- Enter Quick Mode
- Quick mode takes the database components out of the process leaving operations done in memory and directly on the file system
- This limits our options for data mappings to very basic expressions for mappings and creates a native Essbase file
- A native Essbase file means that we also can't use this type of integration on non-Essbase applications...like Account Reconciliation
- Even better...there is a method to create a connection to an on-premises database specifically with Quick Mode, enabling giant queries to load rapidly with the EPM Integration Agent (more on this later)

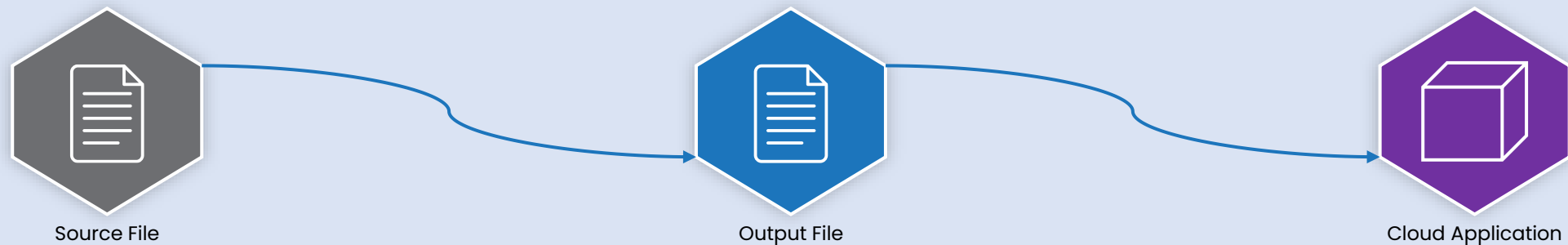
Quick Mode

Data Integration vs. Quick Mode

Standard Data Integration



Quick Mode Data Integration



Data Maps

Overview



- While Data Maps have been available since nearly the beginning of the Oracle Cloud EPM platform, they have evolved and extended their functionality over time
- Data Maps provide a way to move data from cube to cube inside of a single application or from one cube in one application to another cube in a remote application
- To top it off, Data Maps work in concert with Smart Push to provide near real-time replication of data between applications
- Data Maps offer actual mapping functionality, though somewhat limited
- There are still limitations including dynamic member support and data volume limits
- If Data Maps can't facilitate the functional need...we can always use Groovy as a get of jail free card for things like dynamic members

Data Maps

Supported Sources and Targets



Sources

- BSO Plan Types
- ASO Plan Types
- Free Form applications
- Profitability and Cost
- Strategic Modeling

Targets

- BSO Plan Types
- ASO Plan Types
- Free Form applications
- Profitability and Cost
- Strategic Modeling
- FCCS
- TRCS

Pipelines

Overview



- Created as a replacement for the batch functionality built into Data Management...so that Oracle can retire Data Management
- Far more graphically pleasing and sophisticated than the original batch functionality in Data Management
- Makes use of the REST API for Oracle EPM in conjunction with the back-end repository of Data Exchange (which is really the original FDMEE)
- Provides excellent, albeit un-customizable email notifications including log attachments
- When paired with the Oracle EPM Integration Agent, Pipelines provide a full orchestration component that Cloud EPM has needed for years

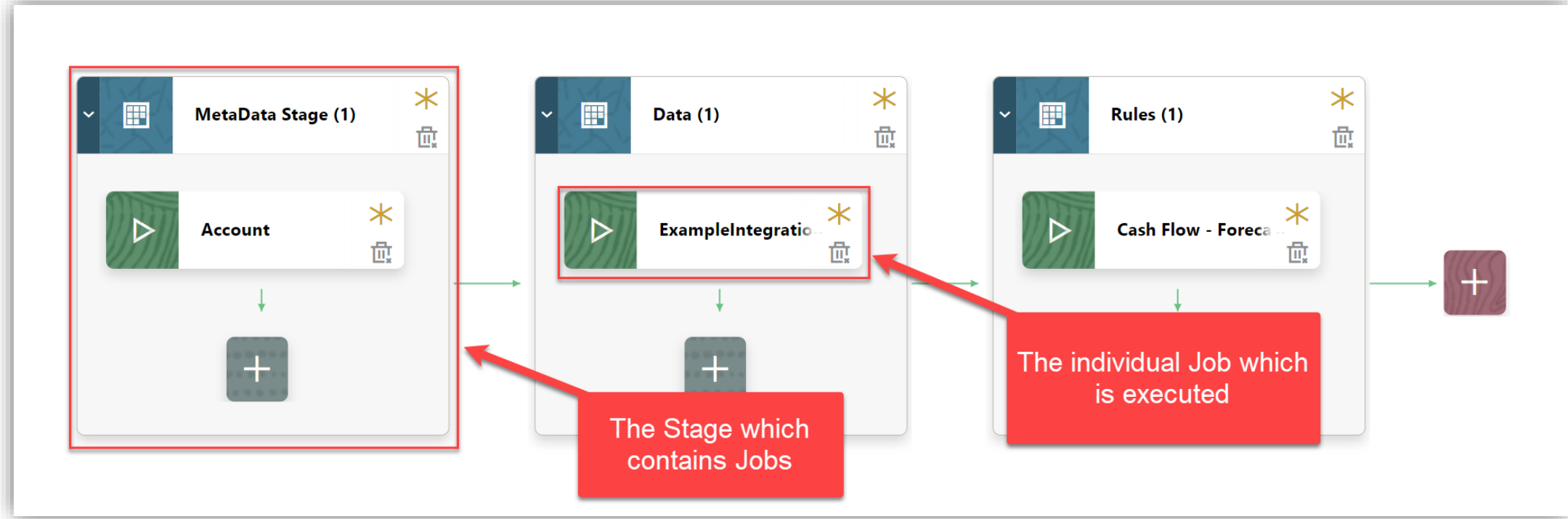
Pipelines

What makes up a pipeline?

- Pipeline
 - Contains the settings specific to the pipeline through variables
 - There are built-in variables like start and end date that are specific to integrations
 - There are other built-in variables: email settings, log attachment settings, etc
 - Pipelines contain stages
- Stages
 - Each pipeline is made up of stages
 - Stages contain jobs and can be set to execute in parallel with one another
 - Stages control the flow through the pipeline, for instance if a stage has a failed job, it can be set to continue to the next stage or stop altogether
- Jobs
 - Each stage is made up of jobs
 - Job have a variety and ever-expanding set of job types that perform various activities in the Oracle Cloud EPM Platform
 - Once a pipeline has been executed, you can see the status of the jobs for the latest run in the GUI

Pipelines

Stages and Jobs



Pipelines

Settings



Edit Pipeline : Sample Pipeline 2

Details Variables



Variable Name*	Display Name*	Display Sequence*	Required	Validation Type*	Validation Parameters	Default Value
STARTPERIOD	Start Period	1	<input type="checkbox"/>	List	Global Period Name LOV Query	Oct-22
ENDPERIOD	End Period	2	<input type="checkbox"/>	List	Global Period Name LOV Query	Oct-22
IMPORTMODE	Import Mode	3	<input type="checkbox"/>	Lookup	DATA_LOAD_IMPORT_MODES	Replace
EXPORTMODE	Export Mode	4	<input type="checkbox"/>	List	Pipeline Export Mode LOV Query	Merge
SEND_MAIL	Send Mail	5	<input checked="" type="checkbox"/>	Lookup	MAIL_CONDITION	Always
SEND_TO	Send To	6	<input type="checkbox"/>	Text	brian@olympusconsulting.com	brian@olympusconsulting.com
ATTACH_LOGS	Attach Logs	7	<input checked="" type="checkbox"/>	Lookup	YES_NO	Yes

Email send options include Always, never, on success and on failure

Attach logs for each job if this is set to yes

Pipelines

Sample Email Notification



TwoMonthLoad : 14-06-2025 09:05:29, Status: SUCCESS - Message (HTML)

no.reply@epm.oraclecloud.com
To: Brian Marshall

TwoMonthLoad : 14-06-2025 09:05:29, Status: SUCCESS

Process ID: 12221

Start Time: 14-Jun-25 09:01:00

End Time: 14-Jun-25 09:05:29

Executed By: [Redacted]

Status: SUCCESS

Environment: .epm.us-ashburn-1.ocs.oraclecloud.com:443@epmcloud

Jobs

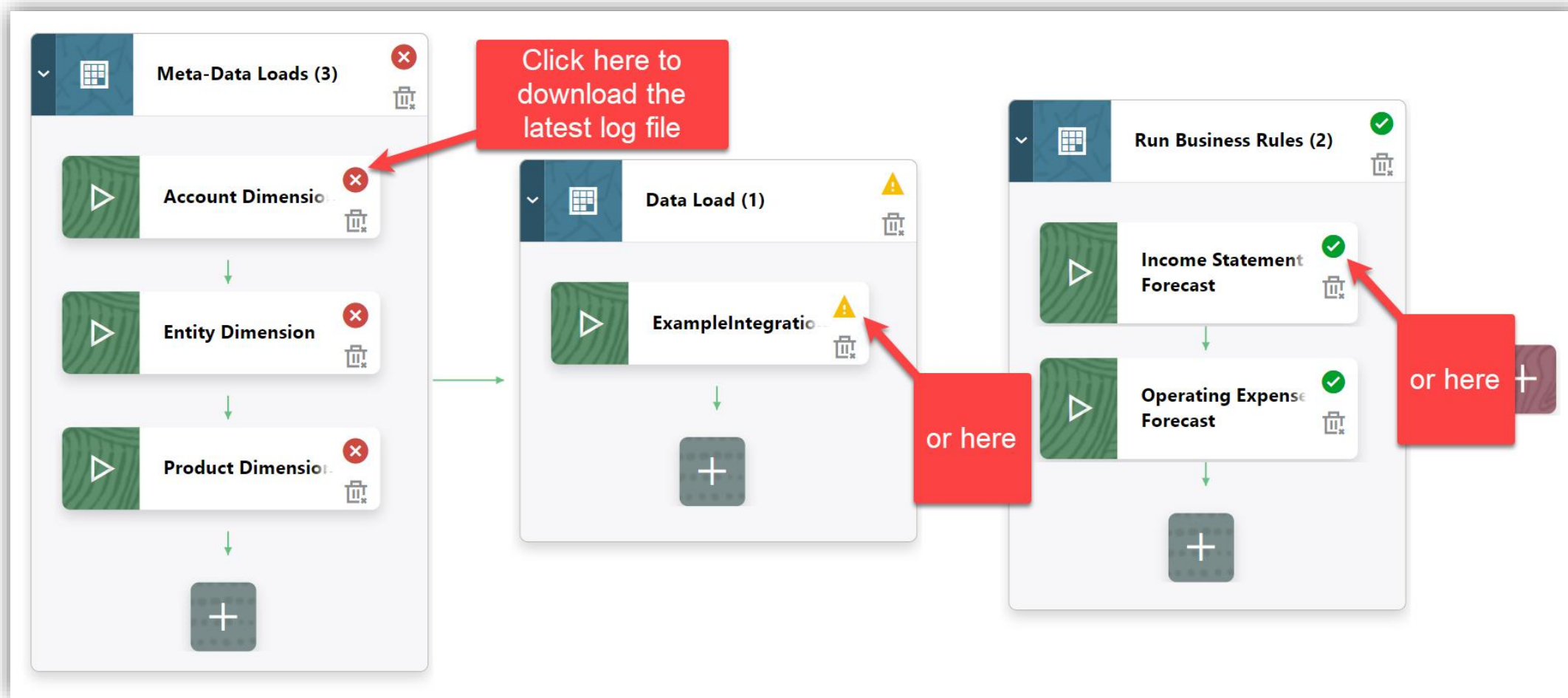
Stage Name	Job Type	Job Name	Job ID	Status	End Time	Log File	Output File
Load Data	Integration	Prior Period Load	12222	SUCCESS	14-Jun-25 09:02:29	Download	
Load Data	Integration	Current Period Load	12223	SUCCESS	14-Jun-25 09:03:08	Download	
Load Units	Integration	Prior Period Units	12224	SUCCESS	14-Jun-25 09:04:01	Download	
Consolidate	Business Rule	Consolidate	12227	SUCCESS	14-Jun-25 09:05:29	Download	

Variables

Variable Name	Variable Value
STARTPERIOD	&LoadPeriod
ENDPERIOD	&LoadPeriod
IMPORTMODE	REPLACE
EXPORTMODE	Merge
PERIOD	&LoadPeriod
PRIORPERIOD	&PriorLoadPeriod

Pipelines



Logs in the GUI



Pipelines

Process Details...now with Pipelines



Process Details												
Search ×		 										
Process ID	Status	Log	Output	Type	Process Name	Location	Source System	Target Application	Process By	ODI Session Number	Error Message	Execution Date
34	✓	⬇		Pipeline Job	Operating Expenses Forecast				brian@olympusconsulting.com			Nov 03, 2023, 11:08:40 AM
33	✓	⬇		Pipeline Job	Income Statement - Forecast				brian@olympusconsulting.com			Nov 03, 2023, 11:08:39 AM
32	⚠	⬇		Data Load	ExampleIntegration	Vision	File	Vision	brian@olympusconsulting.com	3501		Nov 03, 2023, 11:08:18 AM
31	✗	⬇		Pipeline Job	Product				brian@olympusconsulting.com			Nov 03, 2023, 11:08:11 AM
30	✗	⬇		Pipeline Job	Entity Dimension				brian@olympusconsulting.com			Nov 03, 2023, 11:08:10 AM
29	✗	⬇		Pipeline Job	Account Dimension				brian@olympusconsulting.com			Nov 03, 2023, 11:08:10 AM
28	✗	⬇		Pipeline	Pipeline001				brian@olympusconsulting.com			Nov 03, 2023, 11:08:40 AM

EPM Integration Agent

Overview

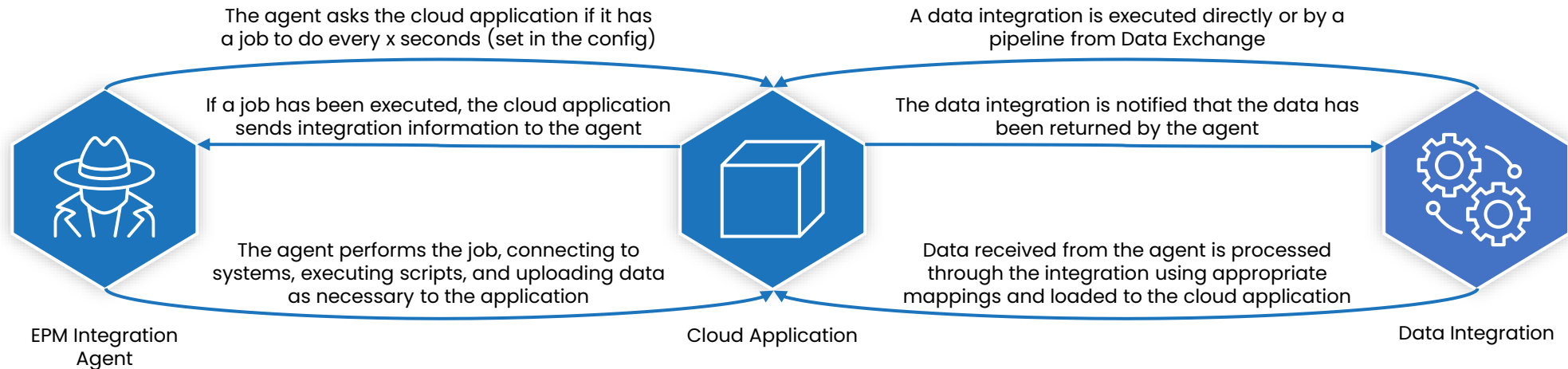


- Created to allow the Oracle Cloud EPM platform to connect to local on-premises data sources with both synchronous and asynchronous modes of execution
- Enables Cloud EPM applications to execute integrations locally giving access to a variable of options:
 - On-premises Flat Files
 - On-premises Databases (Oracle, SQL Server, other databases that provide a JDBC driver)
 - Pre-seeded EBS Queries
 - Pre-seeded PeopleSoft GL Queries
 - Writeback to SQL databases
- SQL code that is executed on the local server by the agent is still maintained via the web interface in the Oracle Cloud EPM application
- Provides a full scripting engine with Groovy and Jython language options and a host of features:
 - Four events to execute scripting
 - API Methods
 - Context Functions
- The final link to create a world-class automated application

EPM Integration Agent

How Does it Work...Asynchronous

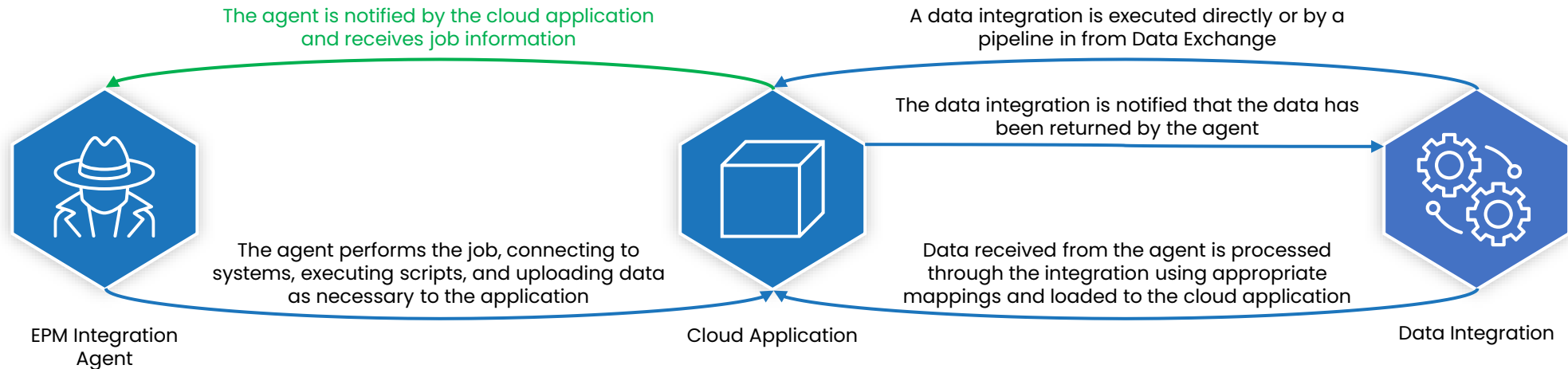
- The most common implementation of the EPM Integration Agent is asynchronous mode as it requires the least amount of overall configuration
- This implementation requires the same level of access to the cloud application as EPM automate...so not much



EPM Integration Agent

How Does it Work...Synchronous

- Far less common than an asynchronous configuration, the synchronous configuration takes the waiting out of job execution
- No x seconds to wait to see if a job is process
- Requires that the cloud application has an open line of communication to the agent
- Requires significant effort by IT to configure and ensure security for such a connection



EPM Integration Agent

Event Scripting



- When Data Management first made an appearance in the cloud, one of the biggest and most used features that couldn't be migrated was Event Scripting
- While unfortunate, it made sense that Oracle didn't want to support custom code and classes on their tightly managed infrastructure
- With the EPM Integration Agent, we finally get that functionality back...and better than ever
- The agent supports more than just Jython this time with the addition of Groovy
- API methods are available, much like those that were available in FDMEE with Event Scripting...but now include Groovy as well
- Context functions have also been included to ensure that event scripts can be fine-tuned for the functional process at hand

EPM Integration Agent

Events

- Much like the FDMEE Event Script of yesteryear, each script is maintained for the entire agent, regardless of integration
- This means that we have specific files that must be updated and maintained for each event
- If we use Groovy, we have to ensure that we actually have Groovy installed on the server and the path for the bin directory properly set in the config
- Events
 - Before Extract
 - Script executed before the agent extract processing. If you want to perform any processing prior to the SQL processing, that code should be included in this script.
 - BefExtract.groovy
 - After Extract
 - Script executed after the agent extract processing. After the extract a file is prepared, which includes the job id with the .dat suffix in the agent/MyData/data local folder
 - AftExtract.groovy
 - Before Upload
 - Script executed before the data file is uploaded to the Cloud EPM. The file uploaded to the Cloud EPM is the <jobID>.dat file from the agent/MyData/data folder.
 - BefUpload.groovy
 - After Upload
 - Script executed after the data file is uploaded to the Cloud EPM.
 - AftUpload.groovy

EPM Integration Agent

API Methods



- In continuing with the trend of the similarity to the classic FDMEE Event Scripting, there are various API methods that allow us to perform actions during the execution of scripts
 - `logInfo()` – Write out information to the log file
 - `logError()` – Write out an error to the log file
 - `setBindVariables()` – Update variables
 - `getBindVariables()` – Get the value of variables
 - `getQuery()` – Fetch the query that is being executed
 - `updateQuery()` – Modify the query that is being executed
 - `skipAction()` – Probably the most commonly used API method...essentially stop the step in the script action and move to the next
 - `getConnectionDetails()` – Fetch the connection details (username, URL, etc)
 - `setCustomConnectio(conn)` – Change the connection from SQL Server or Oracle (the only two options on the web) to a custom JDBC driver and connection URL

EPM Integration Agent

Context Functions



- Why stop now when we can continue with the trend of the similarity to the classic FDMEE Event Scripting, this time with Context
- Context Functions are available by simply referencing agentContext["VARIABLENAME"] in the event script
- These functions are essential for ensuring that code is only executed for appropriate integrations or locations, as an example
- Context Functions:
 - JOBTYP
 - EPM_APP_DATA_HOME
 - DELIMITER
 - DATAFILENAME
 - JOBID
 - INTEGRATION
 - WRITEBACK_DATA_FILE
 - LOCATION
 - SOURCE_APPLICATION
 - TARGET_APPLICATION

Complex...Yet Elegant

To provide context for what Data Exchange as a full automation and orchestration tool can provide, here is a sample flow from a client using just about everything...and the kitchen sink:

- Data Integration to execute SQL scripts from an on-premises database to create and upload data mappings and meta-data files using full Groovy event scripts with the EPM Integration Agent
- Import meta-data previously uploaded using Groovy and the EPM Integration Agent to ensure that all dimensions have been updated and the Essbase cube has been refreshed
- Import data mappings previously uploaded using Groovy and the EPM Integration Agent to prepare for data loads
- Import data from the on-premises database using a query managed from the cloud and Quick Mode to ensure maximum performance with the EPM Integration Agent
- Import data from NetSuite directly using a saved search and the mappings uploaded previous from the on-premises database
- The entire process which loads significant data (hundreds of thousands of records into a cube with hundreds of thousands of members) takes less than 15 minutes to run each night and less than 5 minutes during the day-time processes

The Next Olympus Session



Unlocking the Potential of Oracle EPM Reports: From Zero to Sixty

Wednesday @ 2:40 in Grapevine 3



The ability to create insightful and impactful reports is key to harnessing the full potential of Oracle EPM, delivering value to users, management, and executives alike. This session will walk attendees who are new to Oracle's EPM Reports platform through the process of building data-driven, well-formatted reports from the ground up, breaking down the complexities of report creation into manageable, easy-to-follow steps. By demystifying report creation, attendees will gain the confidence to design essential reports, such as Income Statements and Balance Sheets, tailored to their organization's unique needs. Armed with this knowledge, users can go on to explore and utilize the full power of the EPM Reports platform.



PINSTACK
B O W L B I T E



North Texas Oracle EPM User Group Meeting

When: September 18, 2025, 3:00 – 6:30

Where: Pinstack @ 6205 Dallas Pkwy, Plano, TX 75024

What: Presentations by Oracle, Olympus, and Customers followed by Bowling, Beverages, and Appetizers

Full Agenda:

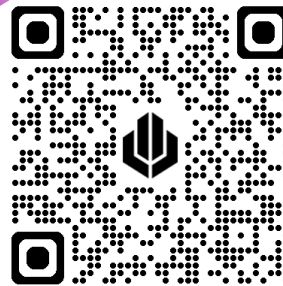
2:45 **Arrival and Check In**

3:00 **Oracle Presentation**, Al Marciante,
Vice President, Product Management at Oracle

3:30 **More Than Just Data Management...Data
Exchange**, Brian Marshall, Partner at Olympus
Consulting

4:15 **Client Success Story**, How Oracle Cloud EPM
reduced costs and time to close

5:00 **Bowling, Beverages, and Bites**



Registration

THANK YOU

Brian Marshall



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