Data management in Oracle EPM Cloud

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Agenda

• Hybrid IT (Mixed Cloud and on-premise environments) – Why does it matter?

• Oracle cloud integration options
  » Evaluating available options to transfer & manage metadata & data in Hybrid environments

• Hybrid Cloud integration Scenarios
  » PBCS/FCCS ↔ On Premise ERP, EPM Systems
  » PBCS/FCCS ↔ PBCS/FCCS
  » OAC ↔ On Premise ERP, EPM/Essbase Systems

• Recommendations & Conclusion
Managing data in Hybrid environments

The Key Success factor of a Hybrid environment is efficient data & metadata integration

• “Hybrid IT” enables development, execution and governance of integration flows connecting any combination of on premises and cloud based processes, services, applications, and data within individual or across multiple applications
  -Gartner

• Hybrid IT, is the strategy, planning & implementation that enables existing non-cloud infrastructure to run alongside cloud infrastructure, and migrate as necessary

Why does it Matter?
Hybrid integration

We will evaluate available data integration options

- (E)PBCS
- FCCS
- TRCS
- PCMCS

On premise—Accounting Systems, Business applications, Hyperion Financial Management, Planning, etc…
INTEGRATION OPTIONS
Integration Options

Options and tools available to import/export metadata and data

• **PBCS / FCCS**
  » SmartView
  » Native Import / Export jobs
  » Snapshots (LCM in the cloud)
  » Data Management (FDMEE in the cloud)
  » EPM Automate (for Scheduling)
  » Application Programming Interfaces (API)

• **OAC (Oracle Analytics Cloud)**
  » Cube Designer using Templates or Free form
  » Export utility
  » LCM utility
  » Dimension build rules / Data load rules (DBR/DLR)
  » Essbase Command Line – ESSCLI (for Scheduling)
  » Application Programming Interfaces (API)

• **EPM On-Premise – Not covered**
  » Lifecycle management (LCM)
  » Financial Data management Enterprise Edition (FDMEE)
  » Data Relationship Management (DRM)
  » OutlineLoad utility (for Hyperion Planning)
  » Dimension build rules / Data load rules (DBR/DLR) (for Essbase)
  » EPM Maestro (for Hyperion Financial Management)
PBCS/FCCS: Smart View

- Metadata
- Planning admin Extension
- Dimension Editor allows importing metadata
- Data
- Normal SmartView data submission and retrieve
PBCS/FCCS: Import / Export Jobs

Schedule Job

Jobs are actions that you can start now or schedule to run at intervals. Follow the steps below to set up this new job.

• Metadata
  • Metadata Export & Import Jobs
• Data
  • Data Export & Import Jobs

What type of job is this?
- Rules
- Import Data
- Import Metadata
- Export Data
- Export Metadata
- Refresh Database
- Data Map
- Invalid Intersection Reports
- Clear Cube

When do you want to run this job?
- Run Now
- Schedule starting from 10/16/17 11:43 AM

How often do you want to run this job?
- Name
- Recurrence pattern Daily

Data Export

Location: [Optional]
Cube: Plan1
File Type: Comma delimited, Tab delimited, Other
Smart Lists: Export Labels, Export Names
Dynamic Members: Include, Exclude

Application

Row:
- Account
- Lvl0Descendants(Account)
- Lvl0Descendants(YearTotal)

Column:
- Period
- Lvl0Descendants(Scenario)
- Lvl0Descendants(Version)
- Lvl0Descendants(Entity)
- Lvl0Descendants(Project)
- Lvl0Descendants(People)
PBCS/FCCS: Snapshots (LCM)

- Metadata
- Metadata Export & Import (LCM)
- Data
- Data Export & Import (LCM)

Migration between EPM Applications
PBCS/FCCS: Data Management

- Data
- Import, Export, Transform Data
PBCS/FCCS: EPM Automate

• Windows & Linux command line utility
• Enables uploading, downloading of files to and from the cloud
• Enables automation of integration routines
OAC: Cube Export Utility (dbx tool)

- Enables Exporting metadata and data to an Excel Workbook using command line.
- During the export process, a structured file representing metadata, named `Appname_Cubename.xml`, is created in the specified export directory.
- This .xml file is then used to create an application workbook, named `Appname_Cubename_timestamp.xlsx`.
- The application workbook can be used to redeploy the same cube to the cloud service.
A command line based tool used to migrate Essbase artefacts from one Essbase deployment to another within and across releases.

Typical use case:
- Export from On-Premise Essbase (PS4) as a zip file and import in to Essbase cloud (12c)
- The tool can also be used to export and import in to the same releases/Essbase.

The Essbase content exported through LCM utility is a zip file. Supported releases for this tool are 11.1.2.4.0xx, 11.1.2.4.5xx, 12c EssCs.
OAC: Essbase Command Line (ESSCLI)

- Windows & Linux command line utility
- Enables uploading, downloading of files to and from the cloud
- Enable automating integration routines
- Example of commands:
  - Calc
  - Dataload
  - Dimbuild
  - Upload
  - Download
  - Lcmimport
  - Lcmexport
OAC: Cube Designer

- Excel Extension for Essbase Administration
- Enables exporting & importing Essbase artefacts
INTEGRATION SCENARIOS
Transferring PBCS/FCCS Data and Metadata to and from the cloud

EPM Automate / REST APIs: used for automation, files upload & download:

- **METADATA**
  - Import / Export jobs
  - Snapshots (LCM)
  - SmartView
  - DRM
  - LCM
  - Outline Load utility
  - SmartView
  - EPM Maestro

- **DATA**
  - Data Management
  - Snapshots (LCM)
  - SmartView
  - LCM
  - FDME

- **METADATA**
  - Import / Export jobs
  - Snapshots (LCM)
  - Data Management
  - SmartView
Transferring PBCS Data and Metadata to and from other PBCS applications

EPM Automate / REST APIs: used for automation, files upload & download:

SmartView Import / Export jobs*
Snapshots (LCM)*

Data Management

(*) Integration box required to execute
Transferring PBCS/FCCS Data and Metadata to and from the cloud

ESSCLI used for automation, files upload & download

- LCM Utility
- Export Utility
- Cube Designer
- DRM
- DBR

- LCM
- FDMEE
- Cube Designer
- DLR
- Report Scripts
- Data Export

- LCM
- Cube Designer
- DLR
- Report Scripts
- Data Export

- LCM Utility
- Export Utility
- Cube Designer
- DBR
Recommendations & Conclusion

• Metadata and data flows: Ensure that you identify **Hybrid integration points** early in your design phase.

• There are many integration options available, we can highlight the pros and cons for each of them and assist you to choose the best tools for your job.

• We excluded “Integration CS” & “ODI CS” because as of October 2017, these CS modules do not offer FCCS/PBCS/OAC plugins or knowledge modules. This is likely to change in the future. Watch this space.
Thank you. Questions?
Integration Overview

- **Oracle EBS, PeopleSoft, JDE, Fusion APPS, SAP R/3**
- **Data Warehouse Data Mart**
- **Other Systems**
- **File Excel**

**ODI**

Requires full use ODI. Upload to PBCS with REST or EPMAutomate (Drill possible)

**FDMEE 11.1.2.4.200**

Requires FDMEE license. Direct integration from on-prem to PBCS. Load, write-back, drill, scripting

**EPM Cloud**

- REST API or EPMAutomate
- **Data Management**

Drill through to an on-prem URL is supported by data management without on-prem FDMEE