# Implementation of Hyperion EPM Systems Integrated to Oracle EBS

Presented By Dhananjay Pandit



## **Coherent the Photonics Company**

# Provider of Photonics Solutions – Primarily Lasers for Commercial and Scientific Research Applications

- Founded in 1966, Corporate Office, Santa Clara, CA
- Fiscal 2009 Sales \$435.9 Million TTM, 2010 close to ~600 Million
- Fiscal 2009 Orders \$419.2 Million TTM, 2010 close to ~600 Million
- 1,700+ Employees
- Sales 34% U.S. and 66% International
- 355 Patents, 92 Pending

*Note: Photonics is the Merger of Lasers, Optics and Electronics Source: Company management as of 7/3/09.* 



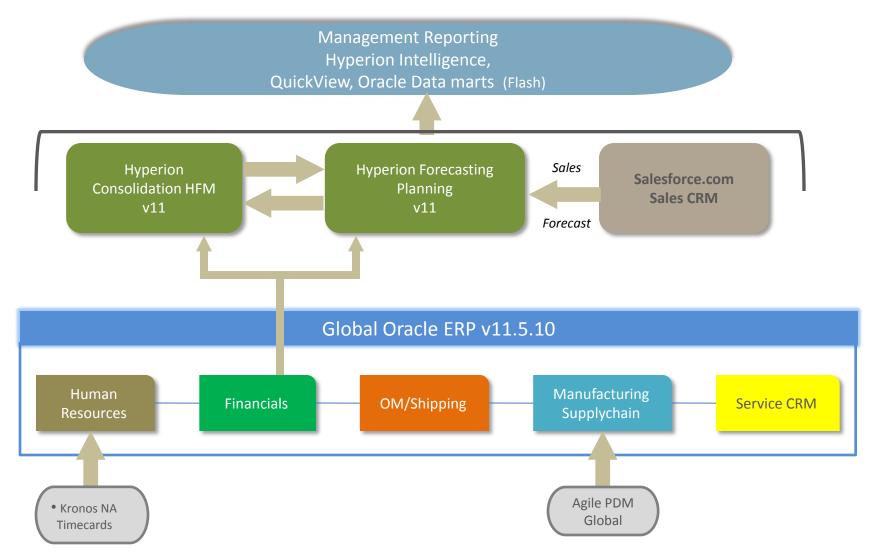
#### **Diversified Applications and Markets**

	Applications	Revenue Mix (TTM as of 7/04/09)
Microelectronics	<ul> <li>Mask writing, semiconductor inspection, marking, flat panel display, solar and advanced packaging and interconnects</li> </ul>	OEM Components Materials & Instrumentation* Processing
Materials Processing	<ul> <li>Marking, welding, engraving, cutting and drilling, textile manufacturing and rapid prototyping</li> </ul>	29% Sci & Gov. 26%
Scientific Research & Gov. Programs	<ul> <li>Regenerative amplification, multiphoton excitation microscopy and spectroscopy</li> </ul>	Geographic Sales Distribution (TTM as of 7/04/09)
OEM Components & Instrumentation	<ul> <li>Microscopy, DNA sequencing, flow cytometry, drug discovery, refractive surgery, Raman spectroscopy, entertainment, laser projection and forensics</li> </ul>	Europe 28% 32% Asia Pacific 6%



R.O.W.

#### **Coherent Application Overview**





#### **EPM and Financial Close Benefits**

Element	Past	EPM 9.3.1	EPM 11.1.1.3
Oracle Close Preparation	Manual, Low visibility of interfaces	High Visibility and Identification of transactional interfaces	Reduction in problem transactions, ME Close preparation to avert any delays
Oracle Sub-ledger Close AutomationManual for 40 inventory orgs, 8 Operating units		Native, Automated sub-ledger posting and closing process	Fully automated Oracle ME close up to GL, automated consolidation.
Oracle EBS Data Feeds to Hyperion	flat files, many layers, manual	Scheduled, controlled through Oracle EBS Concurrent Manager	Improved integration, fully automated HFM and Planning data feeds
Legal Entity Month End Submissions	Excel Spreadsheets	Automated data feeds from Oracle EBS to HFM	<i>One Touch</i> automated data feeds from EBS to HFM/Planning
Sox 404 Compliance	Manual controls	HFM Sox 404 improvements, submission approval workflows	Sustain current high level of compliance
Financial Time to Close	7-10 business days	5 business days	5 business days, Automated, streamlined financial consolidation from Oracle
Management Reporting	Inconsistent data due to timing differences	Consistent data, timely delivery	Improved financial information and reporting

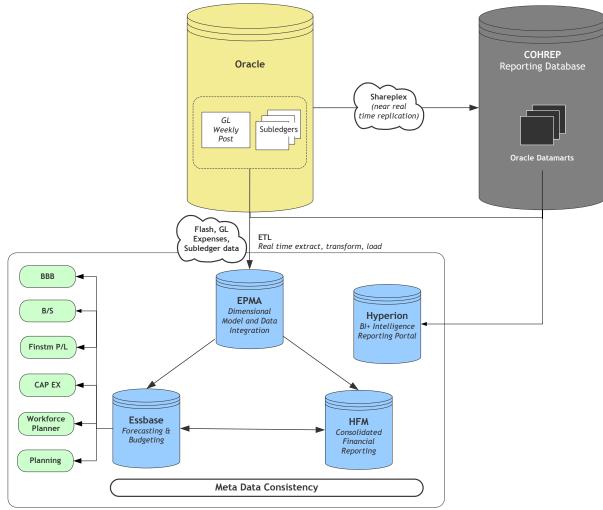


#### Planning - Recap (Budget, Forecast, Actual, Flash BBB)

Element	Past	EPM 9.3.1	EPM 11.1.1.3
Oracle EBS Data Feeds to Hyperion Planning	flat files, many layers, manual	Scheduled, controlled through Oracle EBS Concurrent Manager and EPMA	Improved integration, fully automated data feeds.
Dimensional Model and metadata Management	Silo'd from Oracle EBS and Hyperion Enterprise	EPMA one source dimensional and metadata management consistent with EBS and HFM	EPMA one source dimensional and metadata management consistent with EBS, HFM, Essbase Cubes
Forecast to Actual Reporting	Manual, multi-layer process to get data	Automated data integration using EBS, Data marts, and EPMA native interfaces	Improved security and control for Data feed processes
Headcount Reporting	Manual process on excel	Fully automated process from EBS HRMS to EPMA to HFM and Planning	Fully automated process from EBS HRMS to EPMA to HFM and Planning
Full P/L Reporting	Incomplete P/L due to missing Salary and Fixed Asset depreciation data	Complete P/L with salary, depreciation, gross margin, and period expenses; synchronized to HFM ME P/L	Improved Planning feed process to enable running data feeds for selective entities
Flash BBB Reporting	Manual, multi-layer process to get data	Automated data integration using EBS, Data marts, and EPMA native interfaces	Automated data integration using EBS, Data marts, and EPMA native interfaces
Management Reporting	Inconsistent data due to timing differences	Consistent data, timely delivery, complete data	Improved financial budget to forecast to actual information



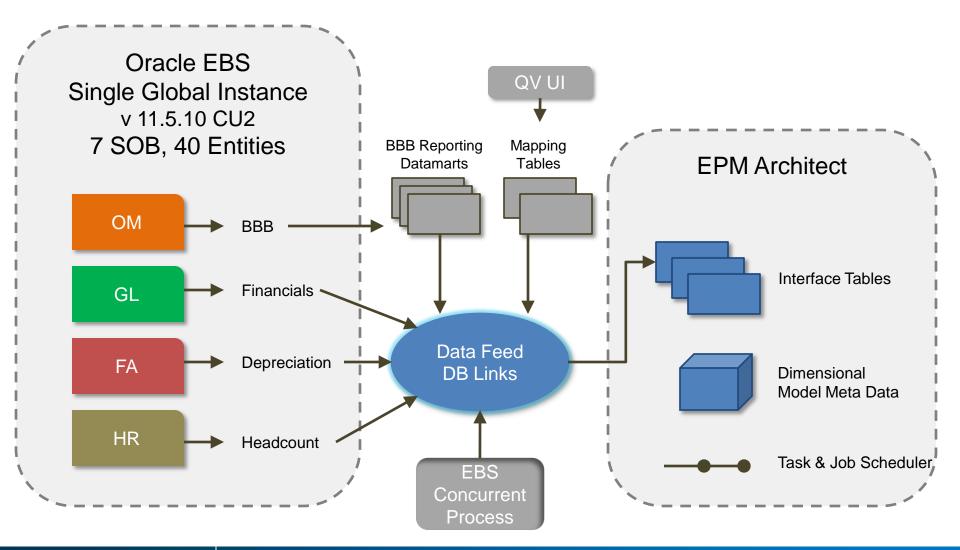
#### **Coherent Hyperion Financial Reporting Environment**





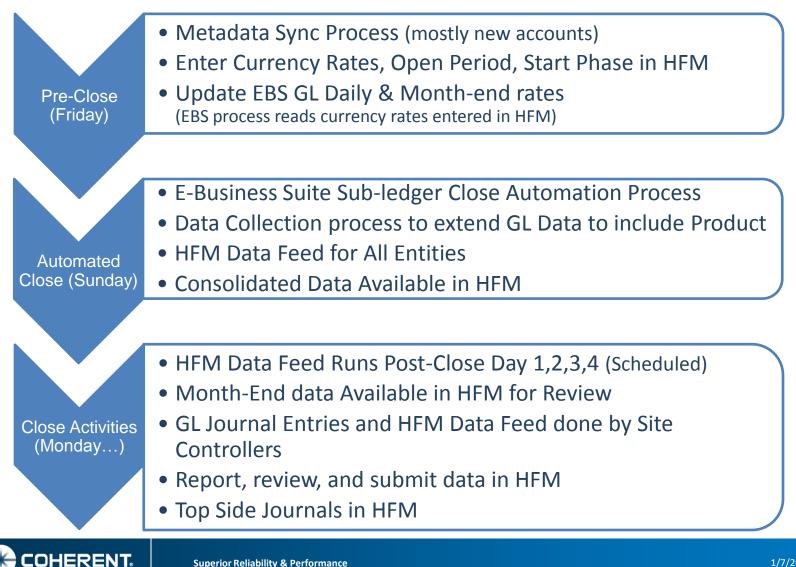


#### **Hyperion EPM Architecture**

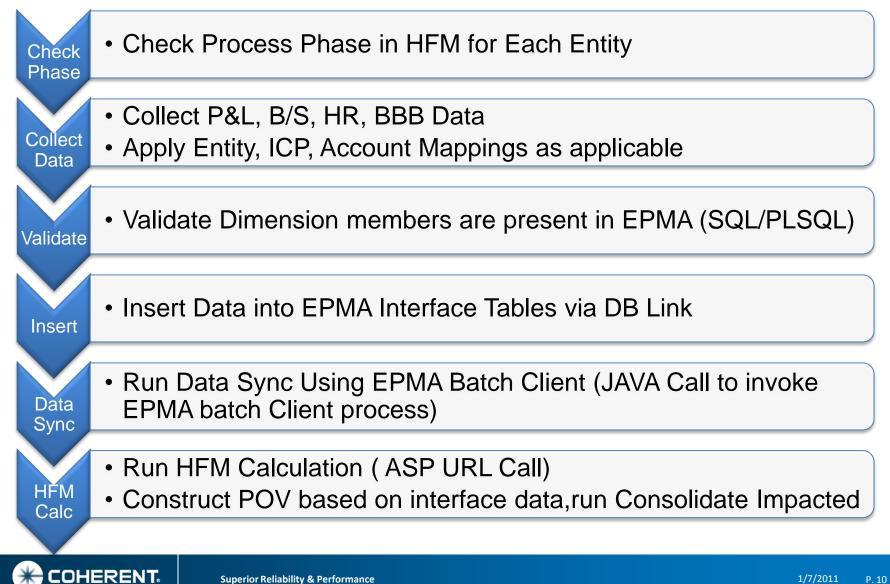




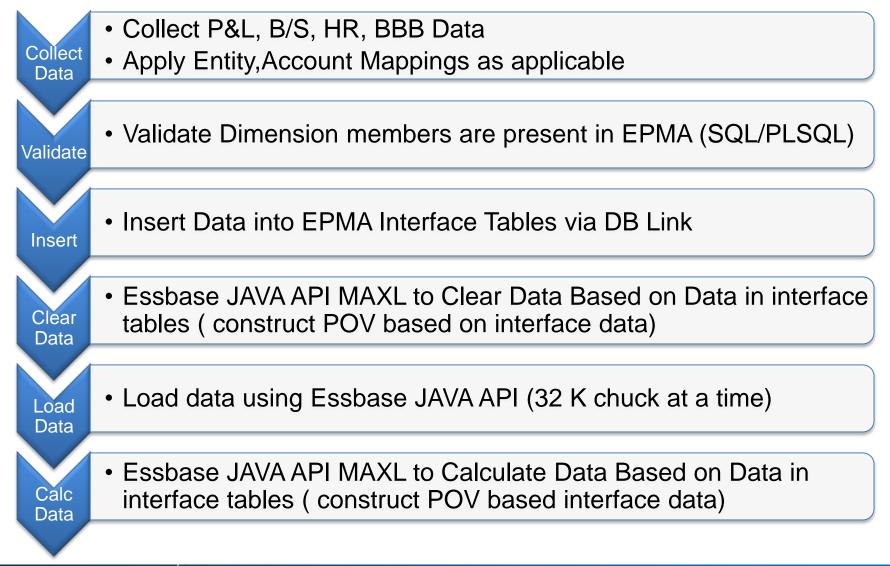
## **Period Close Process Overview**



## **HFM Data Flow Process** (EBS Concurrent Process)



## Planning Data Flow Process (EBS Concurrent Process)



#### HFM Data Feed Concurrent Process submission Parameters (IT and Business)

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F	tun this Reques	t				Сору				
	Nan	ne Coherent HFM Dat	a Feed							Data Sync Name
	Paramete	rs NOV-10:010:010:Ye	s:HFM 010 Oracle Data L	oad:Dhananja	ay.pandit@coh	erent.com::Y				drop down (from
	Lang <mark>o</mark>	Parameters (2000-000-000-		0000000000				× 199999		EPMA via DB Link)
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				od NOV-10	Santa Clara Oth					is made available
_ #	t these Time		Entity Range Fr		Santa Clara Otr Santa Clara Otr					to run applicable
	Run th		Entity Range		Santa Clara Otr	ner				data sync process
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			ddresses (Comma Seperati ddresses (Comma Seperati		ly.panun@cone					
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			BS,Exp,PL,SPC Data Loa							
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	L	Request ID		Parent				]		data feeds to keep
			Name		Phase S		Parameters			data consistent
		47482534	Coherent Email.				Dhananjay.pandit@c		/	across HFM and
		47482527	Coherent Email.				)hananjay.pandit@c		Mode)	planning
		47482521 47482520	Coherent Email. Coherent PLN Expense C				)hananjay.pandit@c NOV-10, 010, 010, Act			applications /
		47482519	Coherent PLN Balance S				10V-10, 010, 010, Ac			applications
		47482518	Coherent PLN SPC Feed	(	Completed N		NOV-10, 010, 010, Act			
		47482517	Coherent PLN Profit and	C	Completed N	lormal I	10V-10, 010, 010, Act	tual, , ,		
		47482472	Coherent M2.0 Detail Ext				10V-10, 010, 010, Y			
		47482469	Coherent HFM Data Feed	0	Completed N	ormal I	10V-10, 010, 010, Y, I	HFM 01		



#### Data Synchronizations (Create one per Source and then copy)

Source:	Destination:
PROD HFM Data Interface Defina	<b>Др</b> од
HFM_Scenario	HFM_Scenario
HFM_Year	HFM_Year
HFM_Period	HFM_Period
HFM_View	HFM_View
HFM_Value	HFM_Value
HFM_Entity	HFM_Entity
HFM_Account	HFM_Account
HFM_ICP	HFM_ICP
HFM_Product	HFM_Product
HFM_Functions	HFM_Functions
HFM_Supplemental	HFM_Supplemental
HFM_Custom4	HFM_Custom4

Source:	Destination:
PLN Expense Data Load Defination	<b>Ju</b> stmt.Expense
PLN_Scenario	PLN_Scenario
PLN_Years	PLN_Years
PLN_Period	PLN_Period
PLN_Entity_FIN	PLN_Entity_FIN
PLN_Account_FIN	PLN_Account_FIN
PLN_Version	PLN_Version
PLN_Project_FIN	PLN_Project_FIN
PLN_Currencies	PLN_Currencies

×	HFM 040 Oracle Data Load	HFM 040 Oracle Data Load	Thursday, Septemb
<b>R</b>	HFM 050 Oracle Data Load	HFM 050 Oracle Data Load	Wednesday, Nove
<b>N</b>	HFM 060 Oracle Data Load	HFM 060 Oracle Data Load	Thursday, Septemb
<b>R</b>	HFM 070 Oracle Data Load	HFM 070 Oracle Data Load	Thursday, Septemb
<b>N</b>	HFM 080 Oracle Data Load	HFM 080 Oracle Data Load	Thursday, Septemb
<b>R</b>	HFM 090 Oracle Data Load	HFM 090 Oracle Data Load	Thursday, Septemb
<b>N</b>	HFM 100 Oracle Data Load	HFM 100 Oracle Data Load	Thursday, Septemb
<b>R</b>	HFM 190 Oracle Data Load	HFM 190 Oracle Data Load	Tuesday, Decembe
<b>N</b>	HFM 200 Oracle Data Load	HFM 200 Oracle Data Load	Thursday, Septemb
<b>R</b>	HFM 250 Oracle Data Load	HFM 250 Oracle Data Load	Monday, October 0



#### **HFM Entity Phases**

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🖭 🧰 Load 🧹	Phase			Phase1			Phase2
	Phase						
	Entity	Calc St.	ECA Status	Review Level	Pass / Fa	Validation	Review Level
Process Control	US_CA.005	OK SC	F	First Pass	0	0	Not Started
<ul> <li>Ownership Manac</li> </ul>	□US_CA.Santa_Cla	r CN	F	First Pass		0	Not Started
<ul> <li>Manage Equity Pic</li> </ul>	Santa_Clara.010	СН	F	First Pass			Not Started
<ul> <li>Database Manage</li> </ul>	Santa_Clara.040	СН	F	First Pass	Ø	0	Not Started
<ul> <li>Manage Submissid</li> </ul>	Santa_Clara.050	СН	F	Submitted	Ø	0	Not Started
	Santa_Clara.060	СН	F	First Pass	Ø	0	Not Started
	Santa_Clara.070	СН	F	First Pass	0	0	Not Started
	Santa_Clara.080	СН	F	First Pass	0	0	Not Started
	Santa_Clara.090	СН	F	Submitted	0	0	Not Started
	Santa_Clara.100	СН	F	First Pass			Not Started 🚽
		•					F



#### **Review HFM Data Feed Concurrent output**

```
HFM Data Load
_____
                    =47482469
Request Id
Submitted by
                  =FINANCE-JOBS
GL Period
                  =NOV-10
Entity Range Low
                  =010
                  =010
Entity Range High
Run M2.0 Detail
                    =Y
User Email Addresses
                    =Dhananjay.pandit@coherent.com
Error Notify Email
Run Hyperion HFM Process=Y
Run Hyperion PLN Process=Y
Submit for Next Month
                    =N
Repeat Count (Days)
                    =0
Run No of Times Daily
                    =0
Hours Between Daily Runs=0
Run Details
_____
Backlog Date
                    =28-NOV-09
Period Year
                    =2010
_____
Number Rows Deleted (XXCOH.XX HFM DATA Oracle Apps) =402
Number of M1.0 Rows Inserted =223
----Following Entities have phase of Start in HFM -----
Entity =010
_____
Number of M2.0 Rows Inserted =16
Number of M2.0 Depat Allocation Rows Inserted =163
Number of M3.0 Booking/Backlog Rows Inserted =1
Number of M2.5 Headcount Rows Inserted =8
Number of Invalid Entity Records =0
Number of Rows with null members or Invalid Entity/Account =0
Number HFM EPMA Data Interface Rows Inserterd =402
Number HFM EPMA Data Interface Rows Deleted =402
    YTD Data Load into HFM EPMA Interface Complete
 Entity Range:010:010
 GL Perioa :NOV-10
HFM 010 Oracle Data Load Successful
HFM Calculation Complete
PLN PL Data Feed Request Submitted, Request Id =47482517
PLN SPC Data Feed Request Submitted, Request Id =47482518
PLN Balance Sheet Data Feed Request Submitted, Request Id =47482519
```



PLN Expense Data Feed Request Submitted, Request Id =47482520

#### **Entity Reports (By Site/Entity Controllers)**

/Entity proof reports				
Folders	1	*	Name 🔺	Туре
🖃 🃁 Root			BS by Entity	Financial Reporti
Corp Report Books .			OIE by Entity	Financial Reporti
📁 .Entity Report Books			P&L by Entity	Financial Reporti
📁 10Q Reports			P&L by Product Family	Financial Reporti
10Q Templates			P&L by Product Family - LC	Financial Reporti
📁 CLC Reports			Validation Checks For Current Period	Financial Reporti
🃁 Entity proof reports			Validation Checks Phase 1	Financial Reporti
📁 Michele Qtr End			Validation Checks Phase 2	Financial Reporti
🃁 Misc Corp reports				
🃁 Planning Security Load				



#### Submission of Entity (By Site/Entity Controllers)

View					
Data View	(1000 B)	Member			R Update
Local	▶ 010				
Phase			Phase1		
Entity	Calc Stati	ECA Stat	Review Level	Pass / Fail	Validation
010	OK SC	F	Submitted	9	0
	4			• •	

History			
Time	User	Action	State
12/4/2009 10:22:59 AM		Submit	Submitted
11/26/2009 7:32:35 AM		Start	First Pass

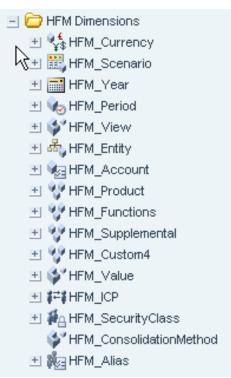


#### **EPMA Metadata Dimension Model**

#### HFM and Planning Dimensions



🖭 🏆 PLN\_Line\_Item\_FIN







#### **EPMA Import Profile**

#### Import Profile based on Interface area defined

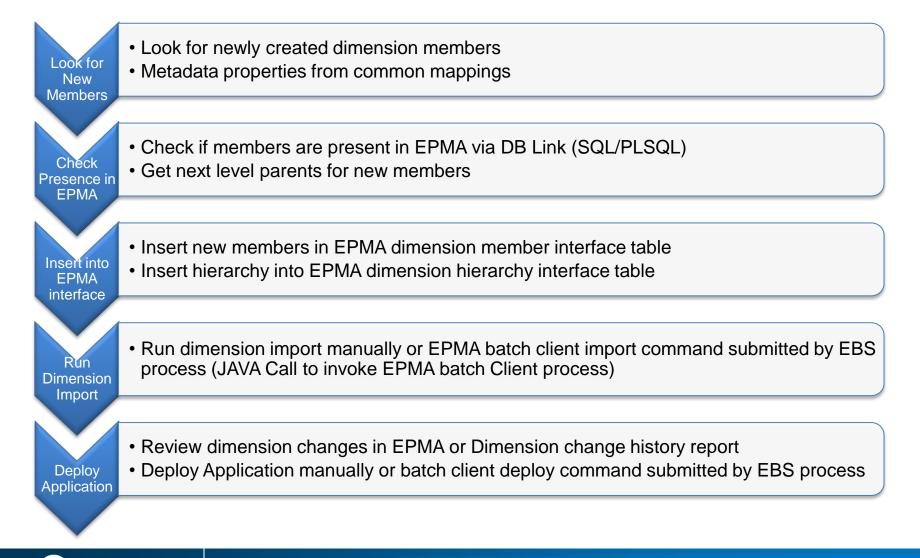
t Dimensions			
port Dimensions			
port bimonalona			🗋 🥒 🤡 🗈
Name	Description	Author	Created
PLN_Employee_FIN Load	PLN_Employee_FIN Load	PanditD	Friday, October 03, 2008 7:48
HFM Oracle Account	HFM Oracle Account	PanditD	Wednesday, October 29, 200
EPMI System Profile 4	EPMI System Profile 4	PanditD	Wednesday, December 09, 20

#### Interface Table column to Dimension property mapping

Interface Area	Shared Library	Remove Target Value For Mis 🔨
Description	Description	
AccountType	AccountType	
GalcAttribute	CalcAttribute	
Consolidation	Consolidation	
ConsolidationAccountType	ConsolidationAccountType	
CurrencyCategory	CurrencyCategory	
CurrencyConversion	CurrencyConversion	
Custom1TopMember	Custom1TopMember	
Custom2TopMember	Custom2TopMember	
Custom3TopMember	Custom3TopMember	
Custom4TopMember	Custom4TopMember	
DataType	DataType	
DefaultParent	DefaultParent	
EnableCustom1Aggr	EnableCustom1Aggr	
EnableCustom2Aggr	EnableCustom2Aggr	
EnableCustom3Aggr	EnableCustom3Aggr	
EnableCustom4Aggr	EnableCustom4Aggr	
EnableDataAudit	EnableDataAudit	



#### **EPMA Meta Data Sync Process (EBS Concurrent Process)**



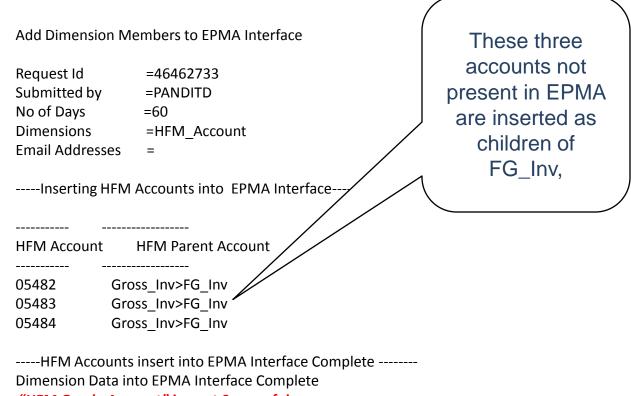


## Meta Data Sync Concurrent Process Submission Parameters

👙 Diagnostics enabled	
Eile Edit View Falder Taals Window Help	
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🖸 Submit Request	
Run this Request	EPMA Dimension import profile drop
Name Coherent EPMA Add Members	down (from EPMA via
Parameters	DB Link), process will run this import profile
Number of Days to Look Back <mark>60 Dimensions HFM_Account </mark>	using EPMA Batch Client
Accounts PLN Entities PLN Products	EPMA Application Name drop down
EPMA Dimension Import Profile HFM Oracle Account	(from EPMA via DB
EPMA Application Name to Deploy PROD User Email Addresses (Comma Seperated)	Links), process will re-deploy this
Error Notification Email Addresses (Comma Seperated)	application using
Run EPMA Batch Commands <b>Yes</b>	EPMA Batch Client



#### Meta Data Sync Concurrent Process Output



"HFM Oracle Account" import Successful

EPMA Application "PROD" Deployment Complete



## **HFM Account Dimension after sync from Oracle EBS**

🖃 💗 🛛 Net_Inv	Category: Consoli	dation 🔽 🗄	?	
🖃 🗣 Gross_Inv	Rroperty	Value		Some Metadata
🖭 🌳 🛛 RM_Inv	Name	05484	2	Properties are
🖭 👽 WIP_Inv	Default Parent	FG_Inv	B	
FG_Inv	Submission Group	1	~	inherited and
k 🖓 05020	Alias		9	some are
905030	User Defined 1		~	specifically set
VII 05029	User Defined 2		~	
VI 05100	User Defined 3		~	based on Common
V <sub>1</sub> 05485	Is ICP	N	~	Metadata
V <sub>1</sub> 05480	Security Class	ITadmin	+	
VII 05022	Calc Attribute		~	Mappings
VE 05025	Consolidation Account	Asset	+	
VE 05482	Is Calculated		~	
VII 05483	Is Consolidated		+	
∧ ♥ 05484	Plug Account		~	
	Custom1 Top Member	TOPC1	+	
	Custom2 Top Member		~	
	Custom3 Top Member		~	
Three accounts	Custom4 Top Member		~	
Three accounts	Number Of Decimal Pla.		~	
added to FG inv	Enable Custom1 Aggre.		+	
based on new	Enable Custom2 Aggre.		+	
	Enable Custom3 Aggre.		+	
accounts in EBS and	Enable Custom4 Aggre.	🗹	+	
Common Metadata	XBRL Tags		~	
	ICP Top Member		~	
Mapping	Uses Line Items		~	
	Enable Data Audit	Y	+	





## **HFM Data/Metadata Mapping Example**

Αссоι	unt M	ap	ping	S								Qui	ckView -PRC	D:Pandit,Dhana	anjay (P
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Update [G	atid] Acc Ma	oun p Id	Range	Entity Range High	Account Range Low	Account Range High		Dept Range High	HFM Account	Acat	HFM Mult Factor	HFM Icp	HFM Product	Planning Product	Plannin Accoun
	-				• •		• •	•	•						
HFM Account Type	Hfm Se	ec	Тор	Тор	Тор	3 Hfin C4 Top r Member	Data	Pln Tim e Balan	e Pin' Bonor						
ASSET	ITadm	in													
ASSET	ITadm	in													
ASSET	ITadm	in													
HFM Account Type	Hfm Se Class	ec	Тор	Тор	Тор	3 Hfm C4 Top er Member	Data	Pln Tim							

- Some Member Properties derived using mapping tables
- Most other properties derived using inheritance or defaults



## **Dimension Change History**

- EPMA has limited reporting capability for reviewing changes
- Created Query to review dimension changes for Audit Reporting
- If changes have wider scope then review changes prior to Deploy

Dime	Dimension <sub>T</sub> Change History												
1	1 -to- 5 of 5 Search Customize Links Field-Lists Layout Charts Hyperion EPM Oracle Database(Primary Database)												
User Name	Library Name	Dimension Name	Member Name	Member Description	Description	Property Name	From Value	From Origin	To Value	To Origin			
Pandit	Master	HFM_Product	DDF		Insert Member				DDF_Total	Unknown			

To Origin	Transaction Action	Transaction Level	Original Member Order	New Member Order	Detail Id	Transaction Id	Tran Action Date
						▼ ▲	▼ ▲
Unknown	InsertMember	Result		3	1	232867	01-DEC-2009 18:26:53



## Benefits of Integrated Hyperion EPM (Planning, HFM, EPMA)

- Automated, tightly integrated Financial Close
- Improved metadata, dimensional management
- Automated data integration with same source data feeds used for Planning and HFM
- Improved timing and data consistency
- Reduced Financial Close cycle-time
- Improved budget, forecast, actual process & reporting
- Improved Management Reporting
- Improved Sox 404 Compliance
- Eliminate batch processes to run Planning load & calc scripts for actual data loads



# Oracle Customer Board Advisory Board Member Forum (EPMA) Desired EPMA Improvements suggested

- Parameter driven EPMA Process to Submit MAXL calls Clear/Calcuate Essbase
   Data and be able to string them in a sequence using task flow
- UI to set which properties are inherited from Parent in Master/Shared Library
- EPMA Dimension Library at least last action UNDO capability
- Better reporting to monitor dimension member changes
- Ability to call Batch client process via JAVA API call or web service
- Ability to Clone environments, e.g. make a copy of Prod to Dev instance
- Copy and Clear data capability for EPMA Based applications, should be able to save the setting for subsequent call.
- PL/SQL/Java API call to check for presence of a Member in specified dimension



#### **Contact Information**

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