



Security in Hyperion Fusion 11

By Alex Ladd MindStream Analytics





Disclaimer/Safe Harbor

This presentation will try to discuss Security in Fusion 11, however, due to the size of the topic we will mostly focus on Shared Services, Reporting & Analysis, HFM, Planning & Essbase. If you have questions about other products please ask after the presentation.





Agenda

- Introduction
- Polling Questions
- Fusion 11 Basics
- Roles in Fusion 11
 - Shared Services, Reporting, HFM, Planning & Essbase
- Multidimensional Data Security Basics
- Sample Customer Challenge





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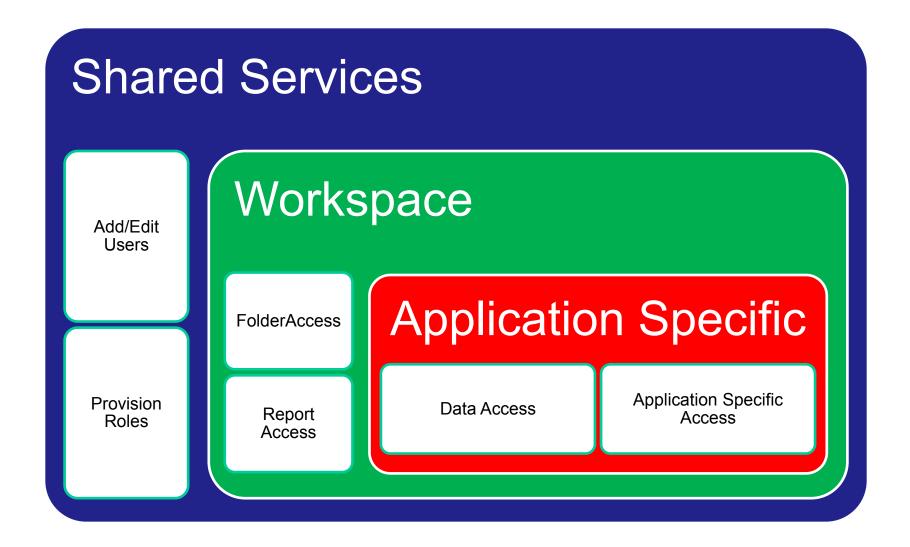
Questions

- How many people currently use Fusion 11?
 - Any users of System 9?
- How many people are using Interactive Reporting?
- How many use Production Reporting (SQR)?
- How many people are confused by all the roles in Fusion 11?





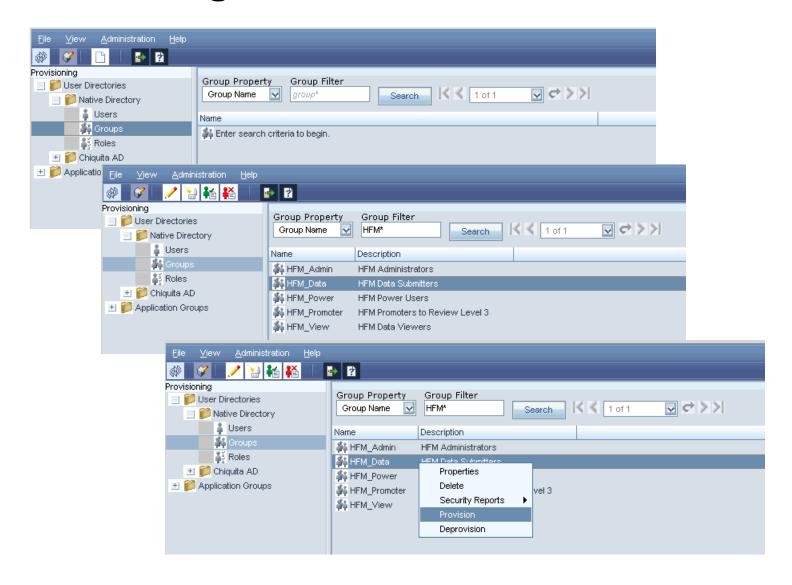
Layers of Security







Provisioning Roles in Shares Services

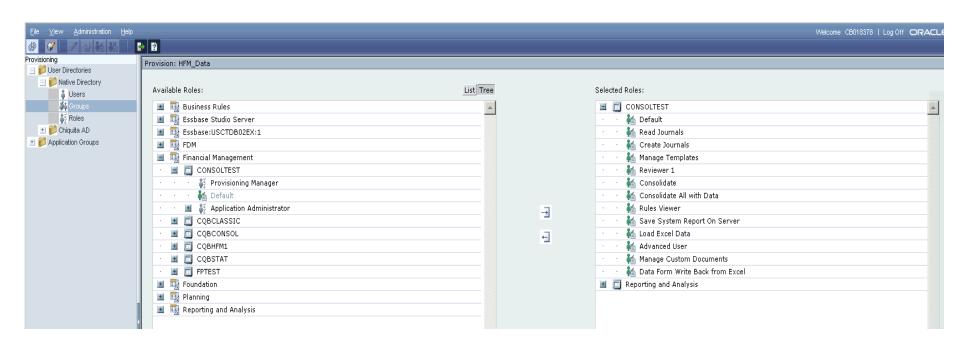






Provisioning Roles in Shares Services

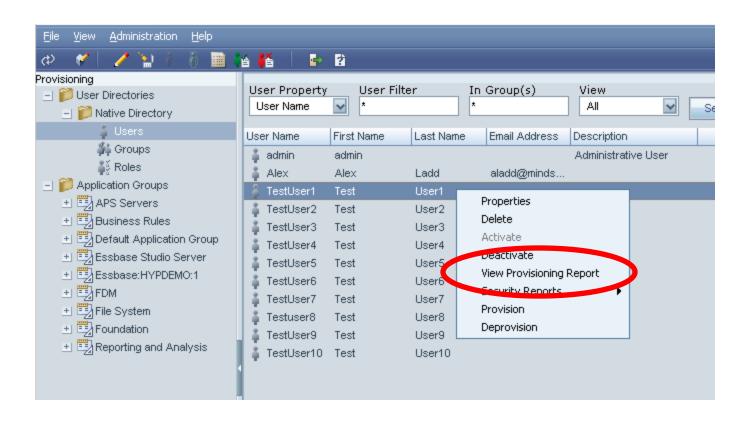
- All roles are application specific
- All applications are stored in a Shared Service Project (usually named by Product such as Financial Management)







Provisioning Reports







The Provisioning Report

View Report			
Find All :	Roles		
For:	Users		
Filter By:	TestUser1		
Show Effective Roles :	Yes		
Group By:	Application		
	☑ Select All		
	Business Rules		
	Essbase Studio Server		
	Essbase: HYPDEMO:1		
	□ ✓ ASOsamp		
	□ ✓ Demo		
	□ ✓ DMDemo		
	□ ▼ Epicor		
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In Application:	□		
	Sampeast Sampeast		
	Sample		
	Sample_U		
	Samppart		
	FDM		
	□		
	■ Foundation		
	Reporting and Analysis		
Help		Create Report	Cancel





Print Preview

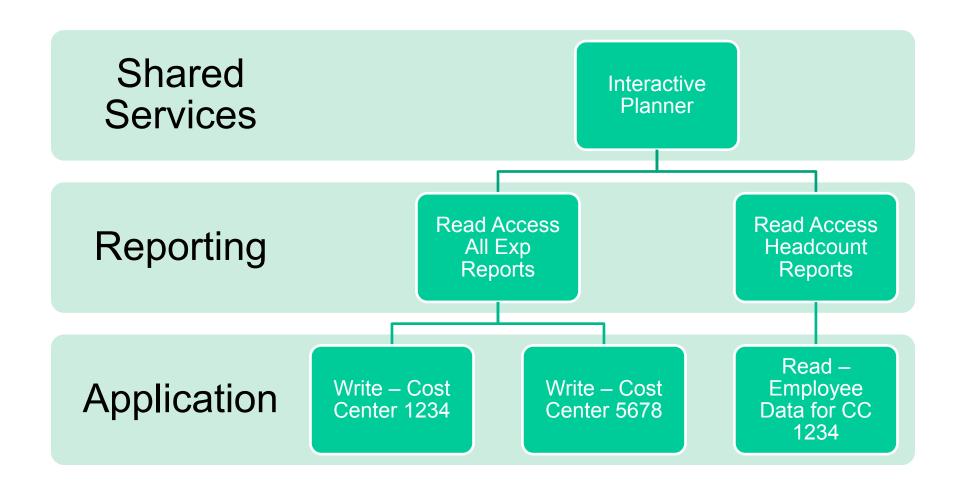
Provisioning Report - Results

Project	Application	User@Directory	Role	ch 9, 2010 11:07:08 PM ES Inheritance Information
Foundation	Shared Services	TestUser1@Native Directory		-
		TestUser1@Native Directory		-
reporting and milary sis	responding and rinary sis	TOSCOSOFI WINGGITO BITOSCOFY	Content Manager	-
			Content Publisher	-
			Data Editor	-
			Data Source Publisher	-
			Dynamic Viewer	-
			Explorer	-
			Favorites Distributor	-
			Job Manager	-
			Job Publisher	-
			Job Runner	-
			Manage Models	-
			Metrics Analyst	-
			Metrics Editor	-
			Metrics Viewer	-
			Personal Page Editor	-
			Personal Page Publisher	-
			Personal Parameter Editor	-
			Report Designer	-
			Scheduler	-
			Smart Form Publisher	-





Groups Used as Hierarchies







Roles in Fusion 11

Number of Roles
13
3 Server, 7 per App
4
23
4
43
8
3
3
4
2
3
4
4





Quick Role Facts

- 128 Roles
- Essbase has 10
 - 7 are repeated for every Essbase Database
- What do all the Roles mean?
 - http://download.oracle.com/docs/cd/E12825_01/epm.111/epm_security.pdf
 - Page 157





Shared Services Roles

- 10 separate roles
 - 3 Shared Services Roles
 - All 3 Shared Services Roles are administrative
 - Breaking project manager out from other administrative tasks isn't worth it, usually
 - 7 EPMA roles
 - The EPMA roles are all pretty self explanatory
- Will likely need to combine the EPMA roles and the Shared Services roles because of LCM





Shared Services

Role Name	Description	Shared Services	ЕРМА
Administrator	The Admin - All powerful	X	
Directory Manager	Manages Users & Groups within Native Directory	X	
LCM Administrator	Runs the LCM Utility (Includes Directory Mgr, Provisioning Manager & Project Manager)		X
Project Manager	Creates & Manages Shared Services Projects	X	
Create Integrations	Creates data integrations		X
Run Integrations	Runs data integrations		X
Dimension Editor*	Creates & Manages dimensions in EPMA & Dimension interfaces		X
Application Creator*	Creates Applications in EPMA		X
Calculation Manager Administrator	Administrates Calc Manager functions		X
Application Administrators	Dimension Owner for all dimensions in an application		X

^{*}Required to access Classic App Administration (HFM & Planning) in Workspace Web.





Shared Services Common Provisioning Combos

- Most common is a small group of Admins have; Administrator, Directory and Project Manager
 - Sometimes certain development resources will have Directory or Project Manager roles without Admin
- More than likely LCM Admin is either lead developer or the Administrator
- Usually Dimension Editors and Create/Run Integrations are the same group of people, often times they are owners or admins of specific applications
- Calculation Manager most broadly used





Reporting and Analysis Roles

- 23 separate roles
 - 8 roles are only for Interactive Reporting or Production Reporting
 - Many of the 8 have to do with parameters for IR & PR reports
 - 10 roles that are really Workspace roles
 - Example: Content Manager, Explorer, Personal Page Editor, Favorites Distributor, etc
 - For FR and WA no difference for Admin vs. Global Admin
- Many of features of Workspace are not fully utilized so therefore many roles are not utilized





Reporting & Analysis

Role Name	Description	IR	FR	PR	WA
	<u>Power Roles</u>				
Administrator	Lot's of Access but not ALL (Can be denied access by locked files)	X	X	Χ	Х
Global Administrator	ALL Access	X	X	X	Х
Content Manager	Manages Workspace Content (anything imported into workspace)	X	X	X	Х
Data Source Publisher	Import/Create data source connectivity files	X			X
Favorites Distributor	Pushes content to User's Favorites Folder (all content)	X	X	X	Х
Job Manager	Create/Manage Job parameters (Printer locations, Network Directories, etc)	X		X	
Schedule Manager	Create/Manage batches, and other scheduled items	X	X	Χ	





Reporting & Analysis (cont)

Role Name	Description	IR	FR	PR	WA
	<u>Interactive Roles</u>				
Analyst	Access Analytic Content	Х	Х		X
Content Publisher	Import, Save & Edit Workspace documents, batches. Update and Delete FR datasources	Χ	Х	Χ	X
Data Editor	Grants Web Analysis writeback to Essbase				Х
Job Publisher	Import & Modify IR & PR jobs	X		X	
Personal Page Publisher	Create Personal Pages in Workspace	X		X	
Report Designer	Access to Authoring Studios		X		X
Scheduler	Ability to schedule batches and bursts, as well as assign access control. Includes Explorer and Job Runner Roles.	X	X	X	
Smart Form Publisher	Ability to Load custom forms for programs. (Forms allow for collection of Job parameters)			X	





Reporting & Analysis (cont)

Role Name	Description	IR	FR	PR	WA
	<u>View Roles</u>				
Dynamic Viewer	View, run and print IR documents	X			
Explorer	Ability to "Explore" the workspace like Windows Explorer	X	X	X	Х
Interactive Reporting Viewer	Read and print IR documents	X			
Job Runner	Runs jobs & accesses public parameters	X		Х	
Personal Page Editor	Create, modify and customize Personal Pages	X		Χ	
Personal Parameter Editor	Modify Personal Parameters	X		Χ	X
Viewer	Read Workspace Content only from Favorites Folder	X	X	Χ	Х
	System Roles				
Trusted Application	Enables saved connection information for other datasources	X			





Reporting and Analysis Common Provisioning Combos

- Users usually grouped into three types of users
 - Admins
 - They need all types of admin access and permissions to move folders, add/edit data sources, Manage the scheduler, etc.
 - Report Generators
 - These are the people that develop and/or distribute the reports they need; Report Designer, Content Manager, Job Manager, Schedule Manager, Content Publisher and Explore
 - Users
 - May or may not need Explore and Personal Parameter Editor but Explore is easiest for users
- Web Analysis changes the above by adding other access requirements and a fourth group





HFM Roles

- 43 separate roles however only about 30 are typically used as task oriented roles
 - 1 All inclusive administrator role (this role can be different if using EPMA)
 - 10+ Power user roles (Manage Data Forms, Ownership, Database Mgt)
 - 9 specifically related to Intercompany Transaction module (rarely used)
 - 8 related to Journal module tasks (Create, Approve, Post, Read Journals)
 - 7 related to Compliance (Process Mgt and Locking Data, E-mail Alerts)
 - 5+ related to Financial Consolidation tasks (Consolidate, Allocate, Loading Data)
- Roles access typically separated into 3-5 groups
 - Administration (Load, Extract Metadata, Rules full access)
 - Power (Load Data, Journals, Compliance, Manage Forms, Documents)
 - Data (Load Data (through HFM and Excel)
 - View (Run Reports, Smartview access)
 - Promote (has various approval levels and can promote in Process Mgt)





HFM Roles

- All roles are given access through Shared Services but many need to be activated as attributes in HFM dimensions
 - Process Management (Scenario)
 - E-mail Alerting (Scenario for Process Mgt)
 - Journals Entities must be flagged for Journals creation
 - Intercompany Entities and Accounts must be flagged for Intercompany
- In some case to activate roles other "tasks" need to be done first
 - Create Journals Journals Periods must be opened and closed
 - Load Data when Process Mgt is activated level must be in "First Pass"
 - Locking Data Process Mgt level must be in "Published" state / full Consolidation must be completed (in "OK" state)
 - Receive e-mail alerts cannot be Administrator, must have proper Review level assigned





Sample Role Assignments by User Group

Roles	End Users	Data.	Data_	Admin.	Administrator
Consolidate All					
Consolidate		Data Submitter	Data Approver	Admin Support	
Consolidate All with Data		Data Submitter	Data Approver	Admin Support	
Data Form Write Back from Excel		Data Submitter		Admin Support	
Database Management		Data Gabillita		Admin Support	
Enable Write Back in Web Grid				T I STATE OF THE S	
Extended Analytics					É
Inter-Company Transaction Admin					5
Inter-Company Transaction Auto Match by Account					8
Inter-Company Transaction Auto Match by ID					. <u>⊍</u>
Inter-Company Transaction Manual Match					호
Inter-Company Transaction Manual Match with Tolerance		N.	IA.		#
Inter-Company Transaction Match Template					ıte
Inter-Company Transaction Post/Unpost					ē
Inter-Company Transaction Unmatch					듄
Inter-Company Transaction User					達
Journals Administrator				Admin Support	200
Approve Journals			Data Approver	Admin Support	Ë
Create Journals		Data Submitter		Admin Support	훈
Create Unbalanced Journals				Admin Support	₩
Generate Recurring		Data Submitter		Admin Support	ý,
Manage Templates		Data Submitter		Admin Support	출
Post Journals		Data Submitter		Admin Support	e E
Read Journals	End User	Data Submitter	Data Approver	Admin Support	<u> </u>
Load Excel Data		Data Submitter		Admin Support	چ
Load System					Ę.
Lock Data		Data Submitter		Admin Support	ajc.
Unlock Data				Admin Support	Str
Manage Custom Documents	End User	Data Submitter	Data Approver	Admin Support	ΪĘ
Manage Data Entry Forms				Admin Support	늉
Manage Ownership				Admin Support	rhe Administrator Role enables all the tasks highlighted in this column
Receive E-mail Alerts for IC Transactions		Data Submitter	Data Approver	Admin Support	Ę
Receive E-mail Alerts for Process Management					
Review Supervisor	End User	Data Submitter	Data Approver	Admin Support	
Reviewer 1 through Reviewer 10					
Submitter				Admin Support	<u> </u>
Run Allocation					
Save System Report on Server	End User	Data Submitter	Data Approver	Admin Support	
Task Automation					
Default	End User	Data Submitter	Data Approver	Admin Support	Administrator





Securing Dimensions in HFM

- What dimensions should be secured in an HFM application is a consideration during the security design for that HFM application
- The most commonly secured application components typically are:
 - Entities
 - Scenarios
 - Forms/Grids
 - It may be occasionally necessary to secure either one or a few accounts or custom dimensions – but try to avoid it if possible for easier maintenance
- Tip: To secure "global" accounts such as CurrencyRates, try restricting access to Entity [None] rather than securing the account





Security Classes

- Once the application components to be secured have been identified, security classes must be:
 - assigned in the metadata and
 - added into Shared Services
- Security classes are used to assign the access level that users/groups have to the application elements
- A User's/Group's ability to access specific application elements depends on the access that the user/group has to the security class assigned to the appropriate application element.
- Only users with the role of Provisioning Manager can execute the tasks within Shared Services

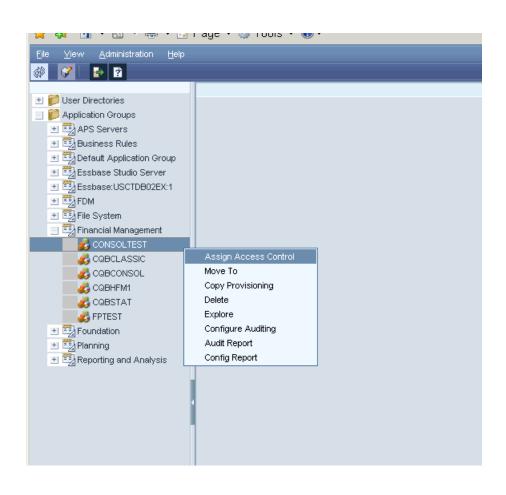




- In order to assign access, both the users/groups as well as the security classes to be assigned must be selected.
 - NONE No Access to elements assigned to the security class
 - METADATA View a specified member in a list but cannot view or modify data for the member
 - READ View data for elements, but cannot promote or reject
 - PROMOTE View data for elements, but CAN promote or reject
 - ALL Modify data for element and can promote or reject



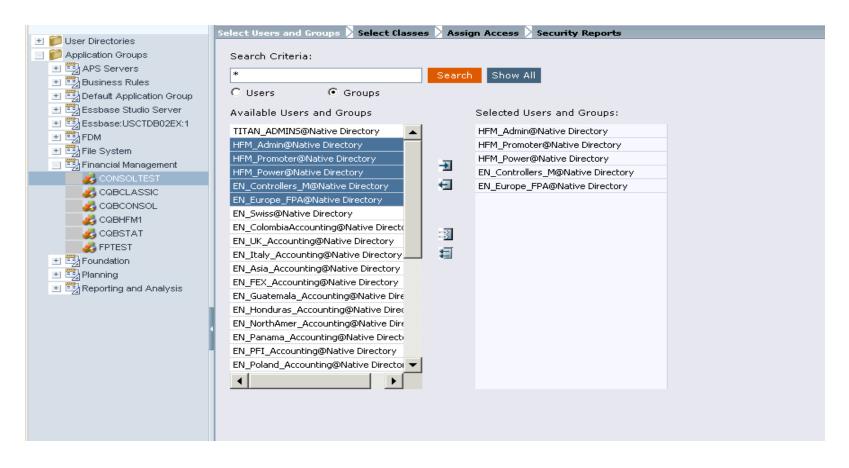








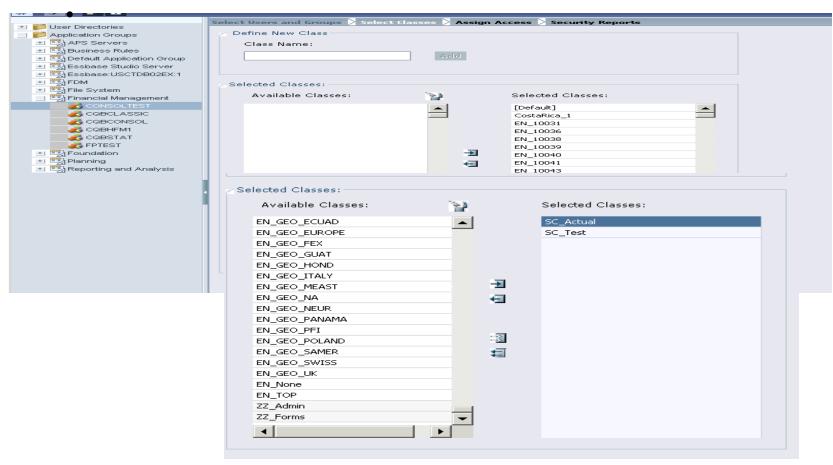
- Select Users or Groups that you want to provision
- Groups define Roles (starts with HFM) and Entity Access (starts with EN)







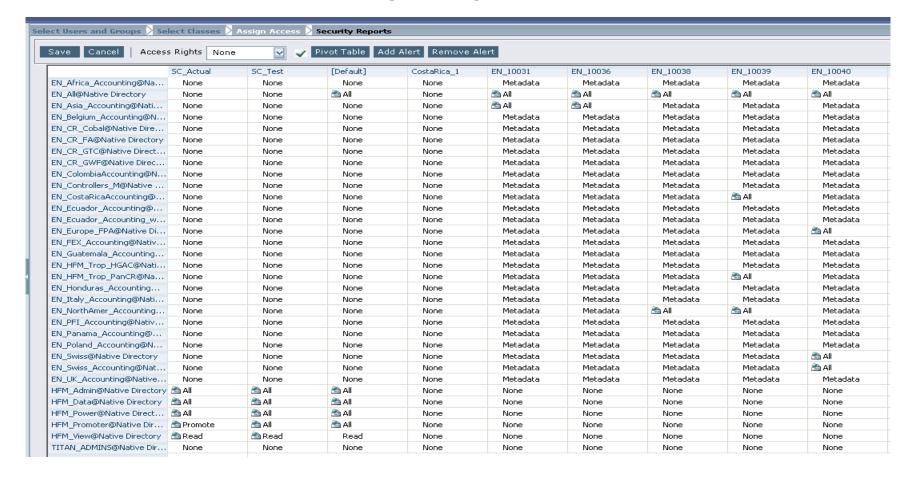
- Select all Security Class you want to assign access to
- Classes with an EN_ are entity specific
- Classes with an SC_ are scenario specific







- Data access can be assigned by Entity Class to Entity Group
- Role access can be assigned by Scenario Class to Role Group







Planning Roles

- 8 separate roles
 - Application Owner & Admin differ very minutely
- Mass Allocation & Offline User are roles and options on web forms. Remember to set them in both places
- Essbase Write Access is great if you want to use the Excel Addin.
 - Shouldn't need this in 11.1.2
 - Using Excel Add-in can create security holes





Planning Roles

Role Name	Description
Power Roles	
Administrator	All access to an application, except Mass Allocate and Owner
Application Owner	Ability to reassign ownership
Mass Allocation*	Enables ability to use Mass Allocate functionality
Offline User*	Enables ability to take web forms Offline
Essbase Write Access	Enables users to write data back to Essbase from an application other than planning. Mostly used for Essbase Excel Add-in.
<u>User Roles</u>	
Interactive User	Creates and Maintains web forms, business rules, task lists and other functionality. Manage budget process and can create smart slices.
Planner	Submit data, run business rules, use task lists and can use smart view.
View User	View access only.

^{*}This functionality must also be enabled on a particular web form to be utilized.





Essbase Roles

- 3 Roles for Server
 - Everyone must have one!
 - Typically Administrator and Server Access are the two that are used
 - Create/Delete Application is usually for a system id for scripting
- 7 Roles for Applications
 - Application Manager can be very useful in bigger environments but rarely do people take the time to use it.
 - Database Manager is rarely used
 - Start/Stop application very useful for system id for scripting





Essbase Roles

Role Name	Description
Server Roles	
Administrator	Full Access
Create/Delete Application	Can create and delete applications
Server Access*	Server Access (Need this to connect to the server)
Application Roles	
Application Manager**	Administrator of an application
Database Manager	Admnisters a database within an application
Start/Stop Application	Ability to Start & Stop an application
Calc	Calculates, Updates and reads Data values
Write	Updates and reads data values
Filter	Accesses specific data and metadata according to filter restrictions
Read	Read Only

^{*}Planning Users still require Essbase "Server Access".

^{**}Need to add "Provisioning Manager" role to allow granting access.





1 Cost Center & Actual, Budget

Cost Centers Scenarios				
	Budget	Actual		
CC-1234	1	0 15		
CC-5678	2	0 25		





2 Cost Centers & Actual, Budget

Cost Centers Scenarios					
	Budget	Actual			
CC-1234	1	0 15			
CC-5678	2	0 25			





Customer Challenge

- Customer Needed to Adjust Forecast in future months
- Using the Essbase Write Access role with Planning so users could use Excel instead of Planning Forms in Excel.
- Users changing prior months' actuals





Solution 1

- Use Conditional Formatting in Hyperion Financial Reports to Highlight differences between Actual scenario and Actual Months in Forecast
- Requires use of Financial Reports
- No Guaranteed Check





Solution 2

- Business Rules Copy Actuals to Forecast repeatedly or when user saves data to ensure Actuals are Actuals
- Potentially overwrites User inputs
 - Doesn't provide User with feedback
- How to know when this is done?





Solution 3

- Talleyrand!!!
- Planning Web Forms get Ad-Hoc capability
 - Should alleviate this exact issue
- Not released yet





Questions??

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