

Introducing
Microsoft® Office
PerformancePoint™ Server
2007

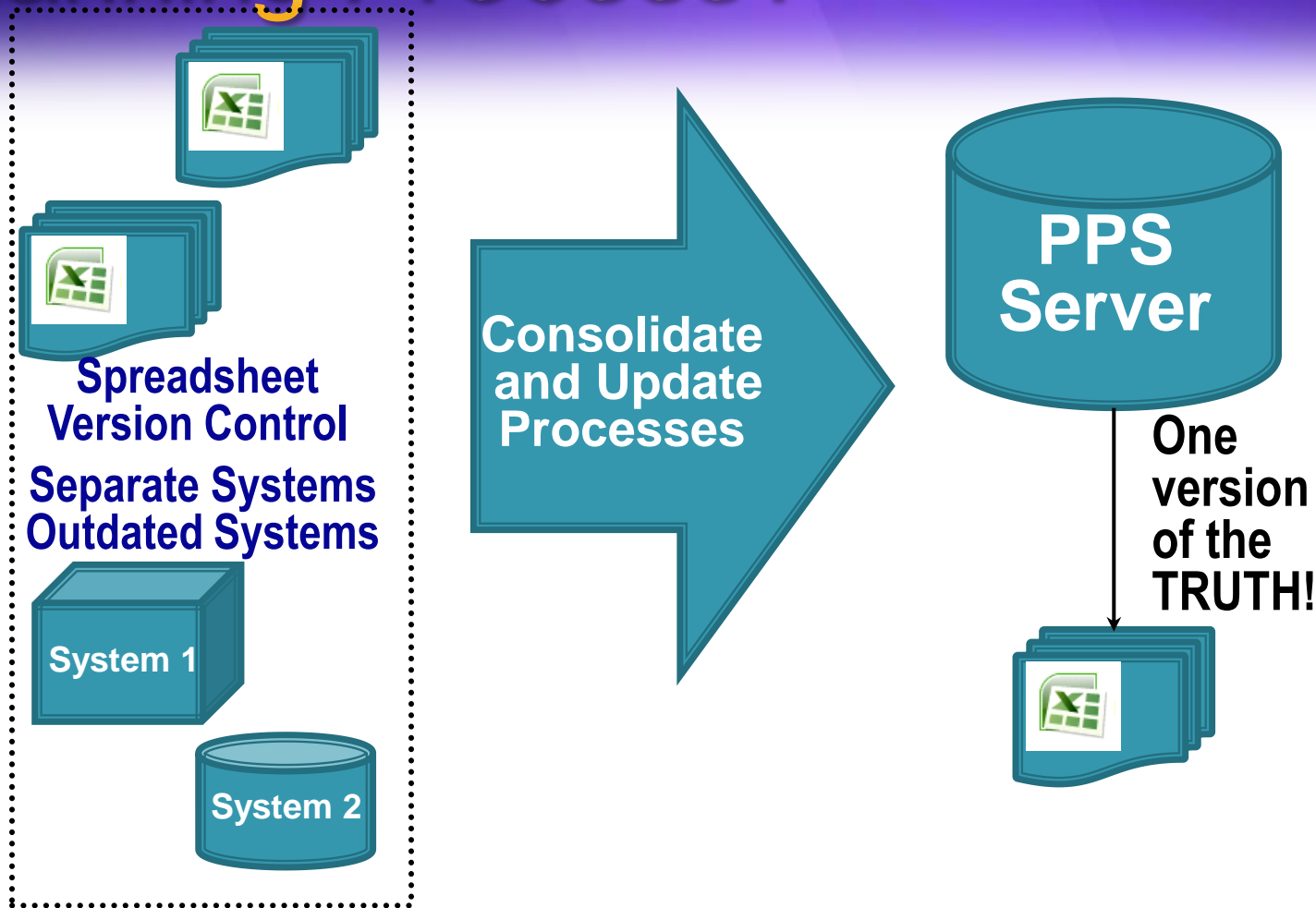
Agenda

- Overview of PPS
- Dimensions & Multi-dimensionality
- The PPS Life Cycle, and Introduction to PPS Applications
- Model Sites, Models, Model Types, and Model Properties
- Dimensions, Members, Member Sets, Member Views, and Member Properties
- Data Integration
- Users, Roles, and Security
- Forms and Reports in PPS Excel Add-In
- Financial Intelligence
- Calculations: Business Rules, and Jobs
- Process Management: Cycles and Assignments

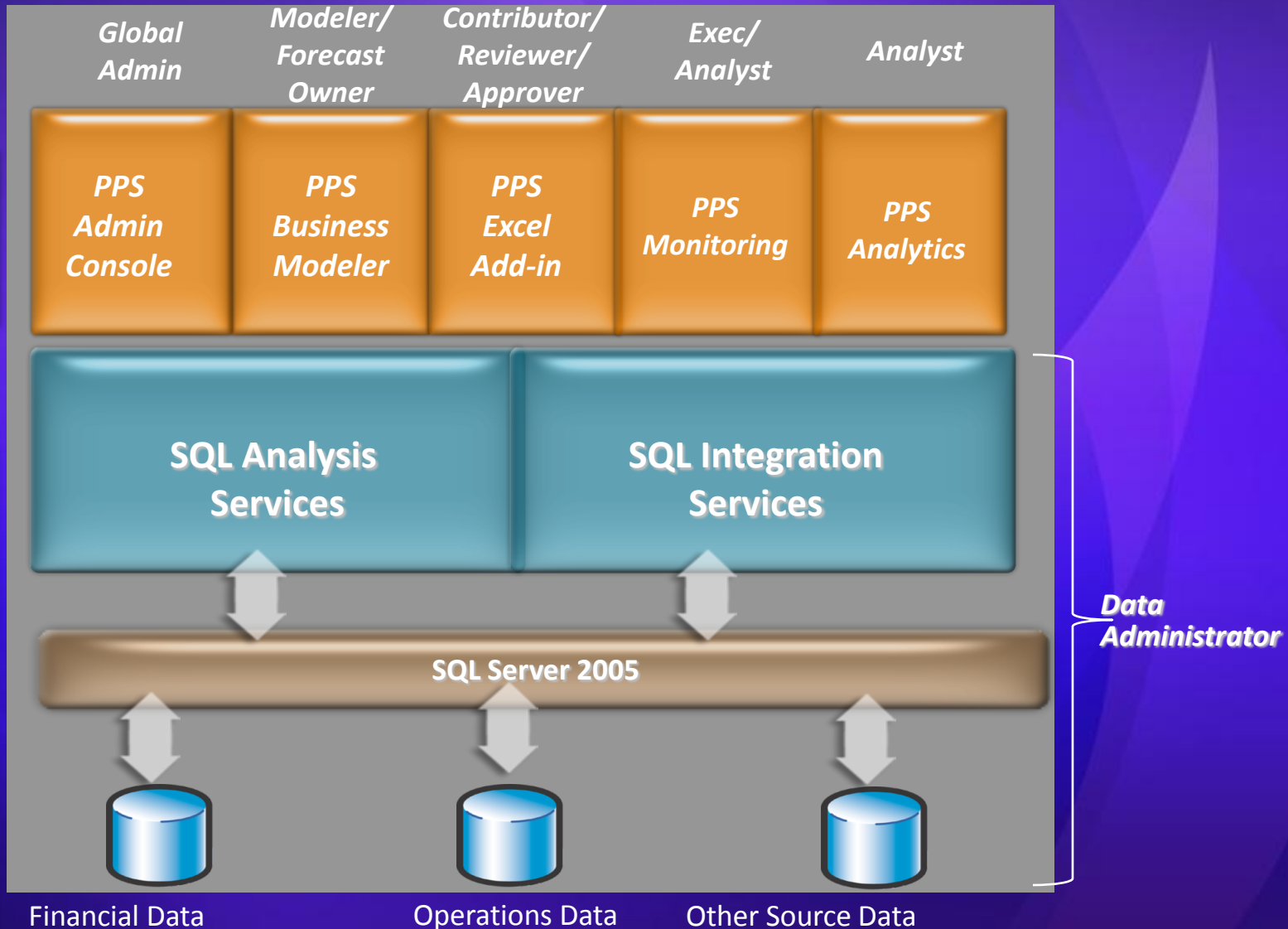
What is PerformancePoint Planning

- Planning, Budgeting & Forecasting
- Reporting (Management and External)
- Modeling (Visualizing your data)

Why Change from the current Planning Process?



PPS: What Is It?



End-User Tools & Corporate Performance Management Applications

Business Intelligence Platform Based on SQL Server

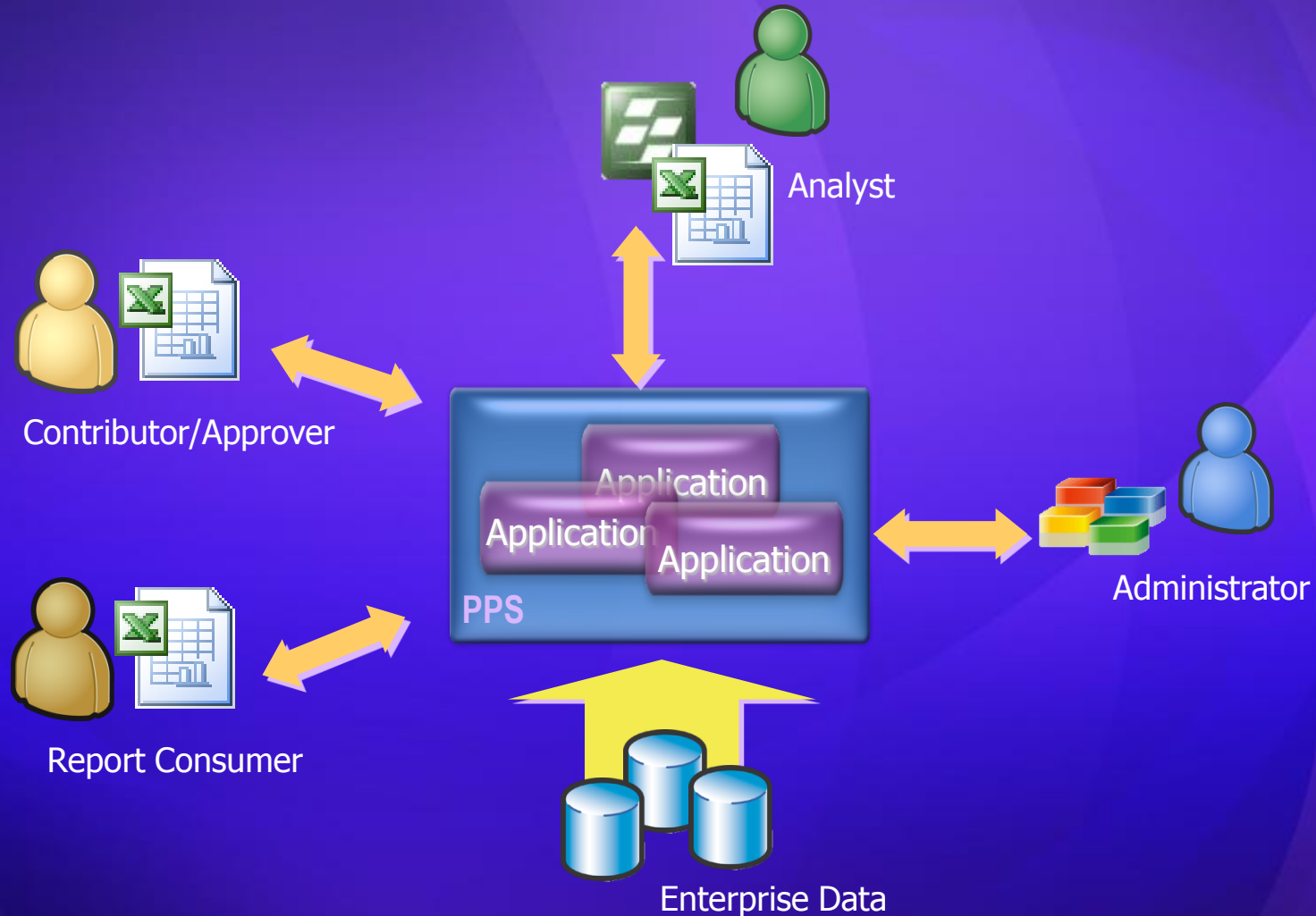
Data Administrator

Financial Data

Operations Data

Other Source Data

PPS: What Does It Do?



Dimensions & Multi-Dimensionality

Dimensions & Multi-Dimensionality

• Dimensions

- Dimensions represent how data is accessed.
- Usually represent a person, place, thing, or concept.
- Answers the who, what, when, or where part of a question.
- Presents the “how” or “by” part of a question.

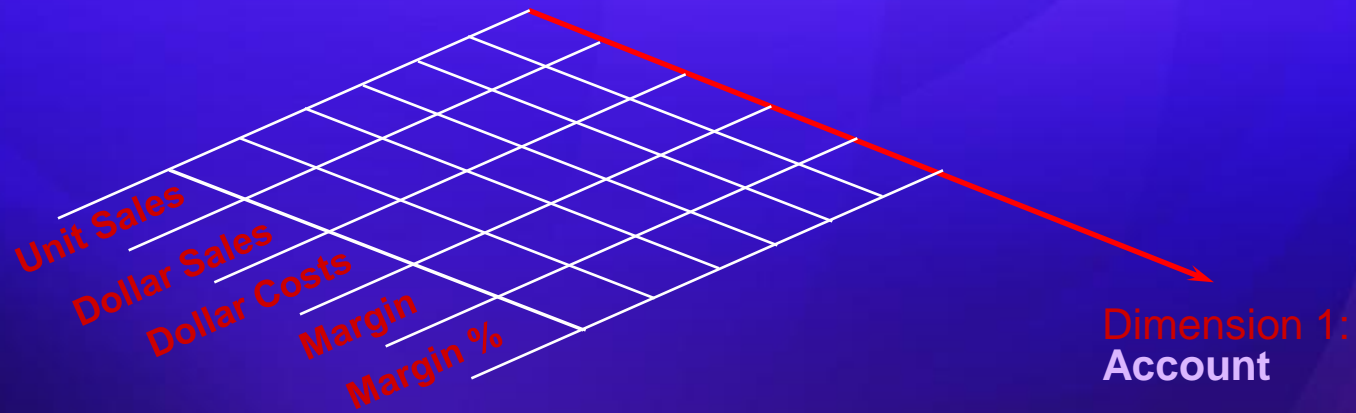
• Multi-Dimensionality (Models)

- Combination of dimensions to store and communicate data

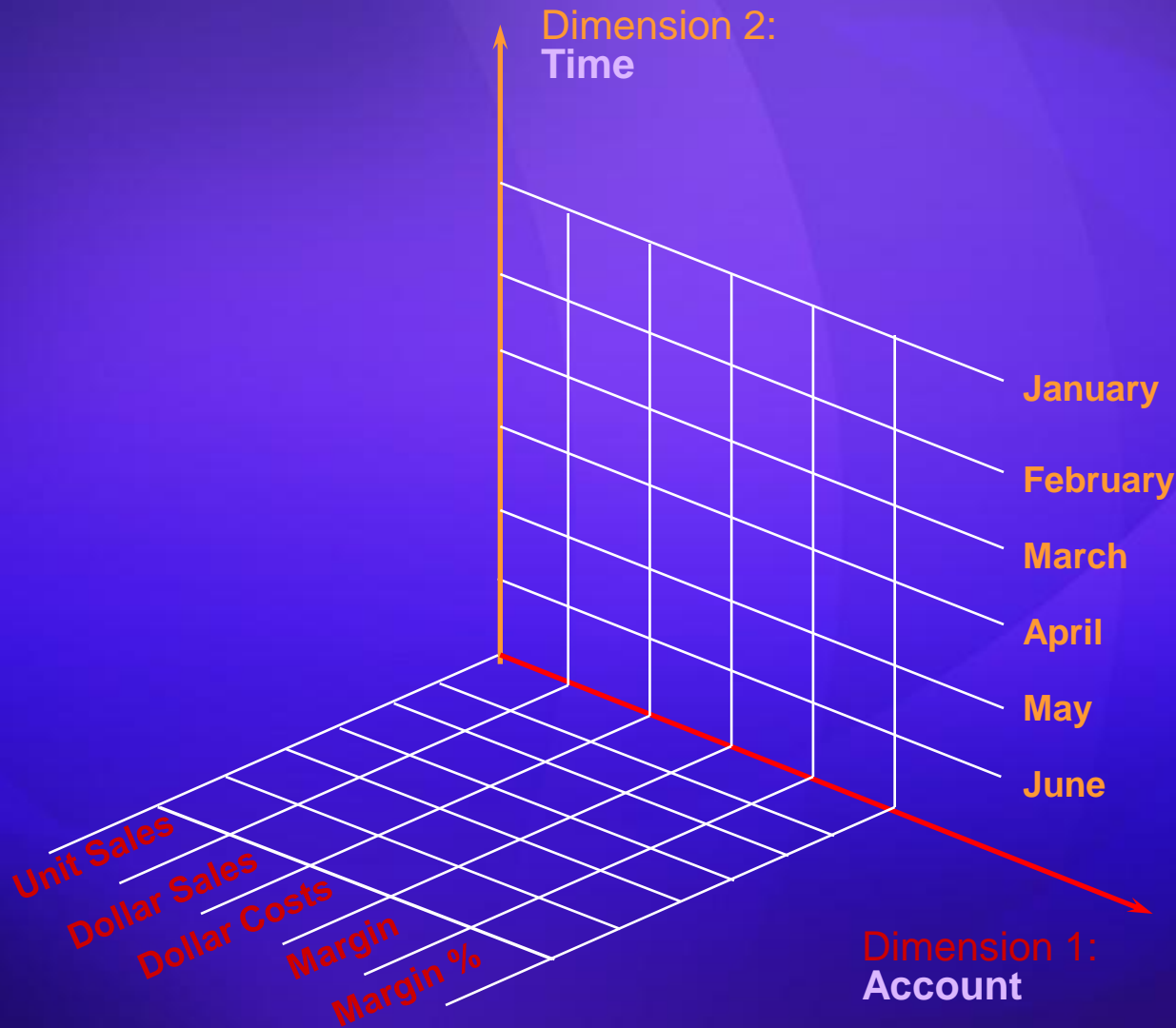
Dimensional Attributes

- Hierarchy – A structure within a dimension that represents the organization of data grouped in levels of most general to most specific.
- Member - Represents a specific value contained within a Dimension or Hierarchy.
- Level – Denotes “how far down” a level is in the hierarchy
- Leaf – Denotes lowest level member in a hierarchy
- Non-Leaf – A member of the hierarchy which has one or more children

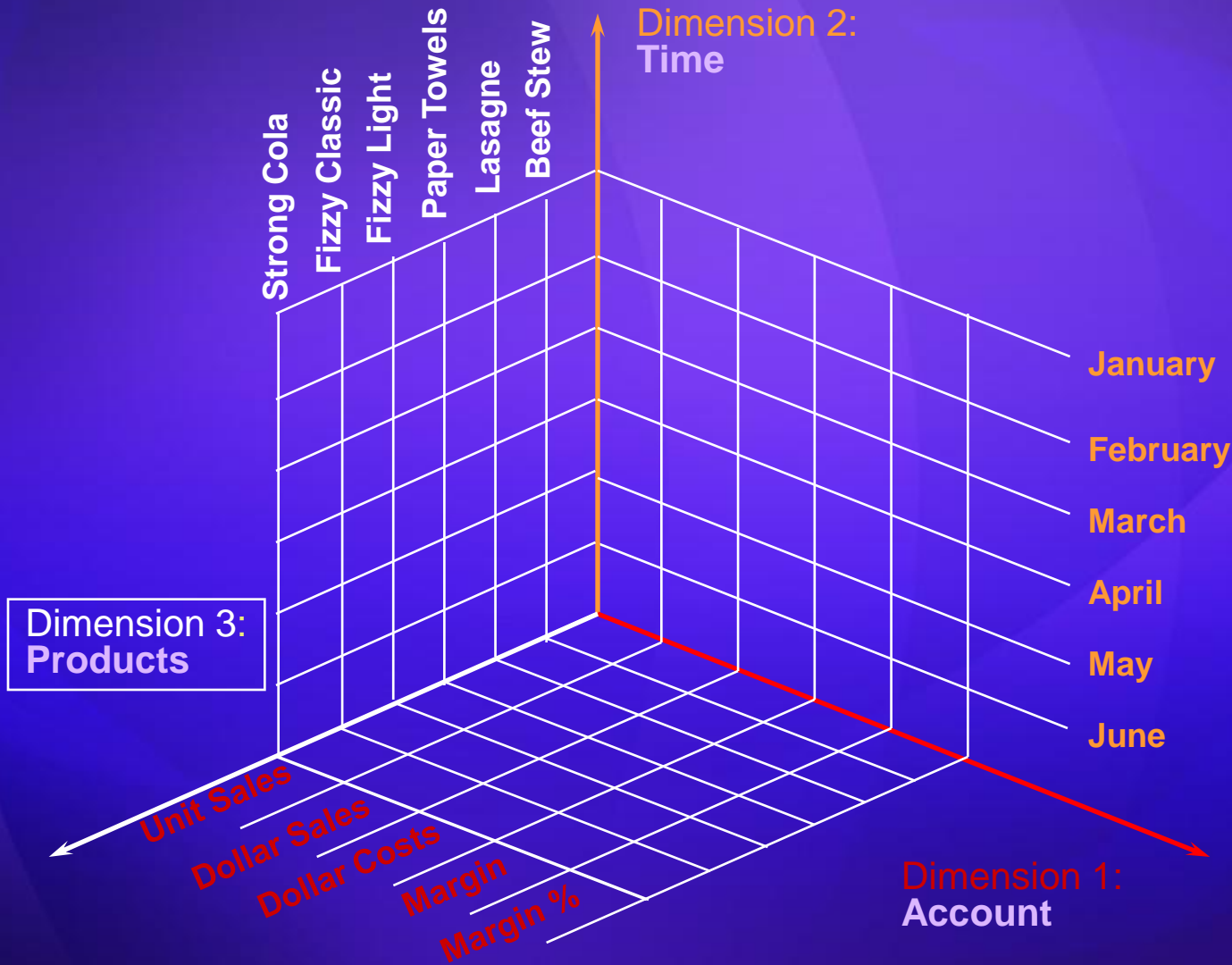
1 Dimension



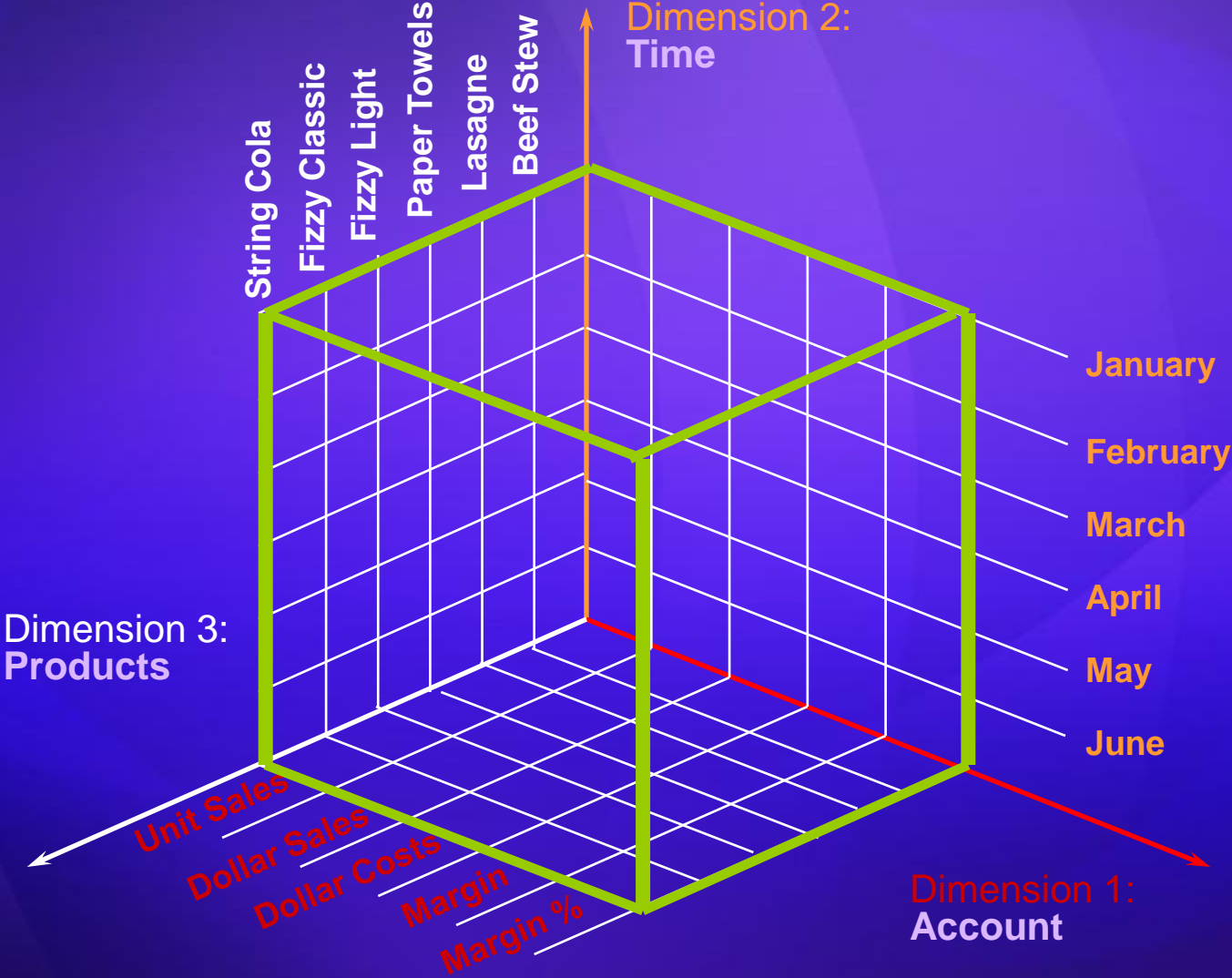
2 Dimensions



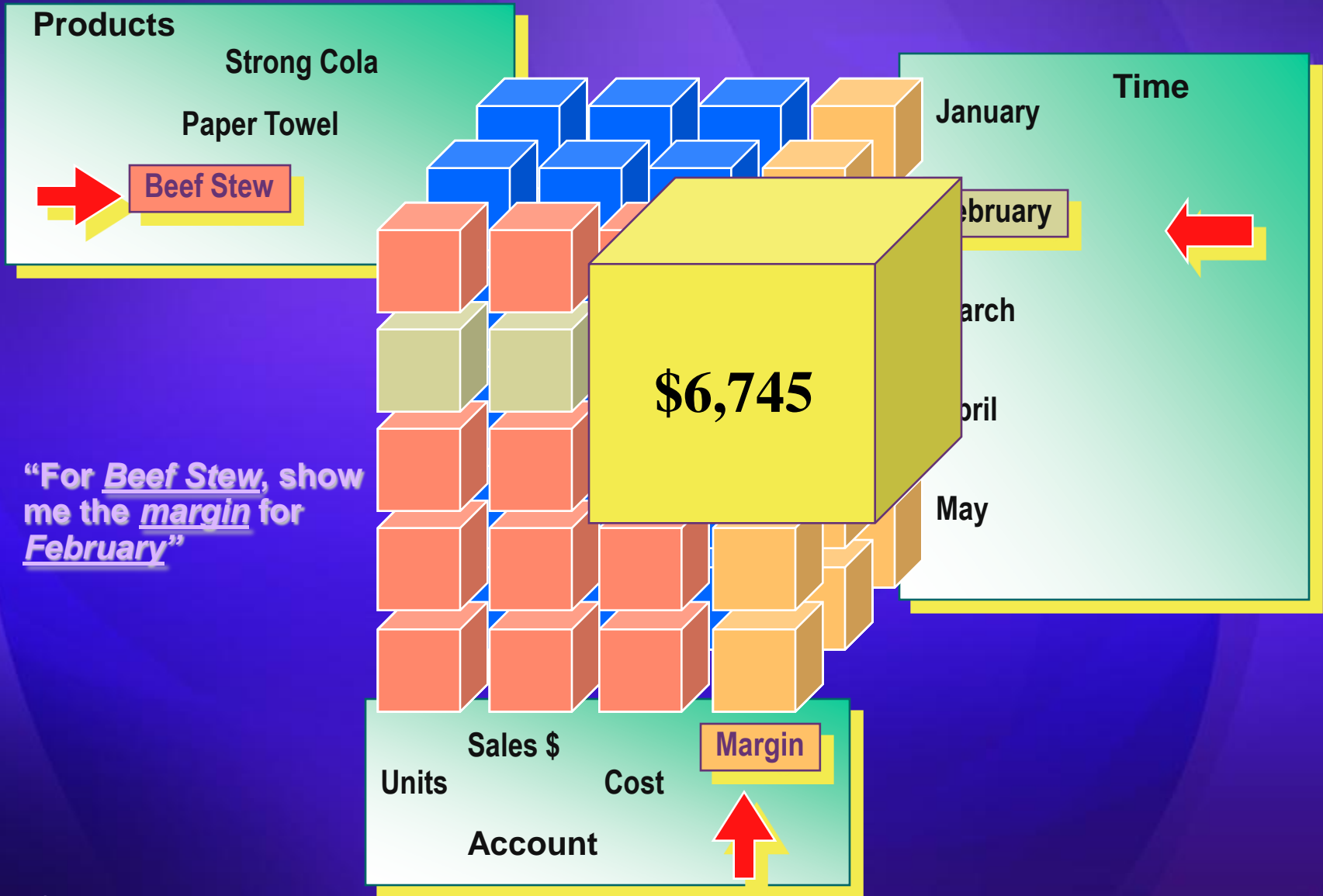
3 Dimensions



Model



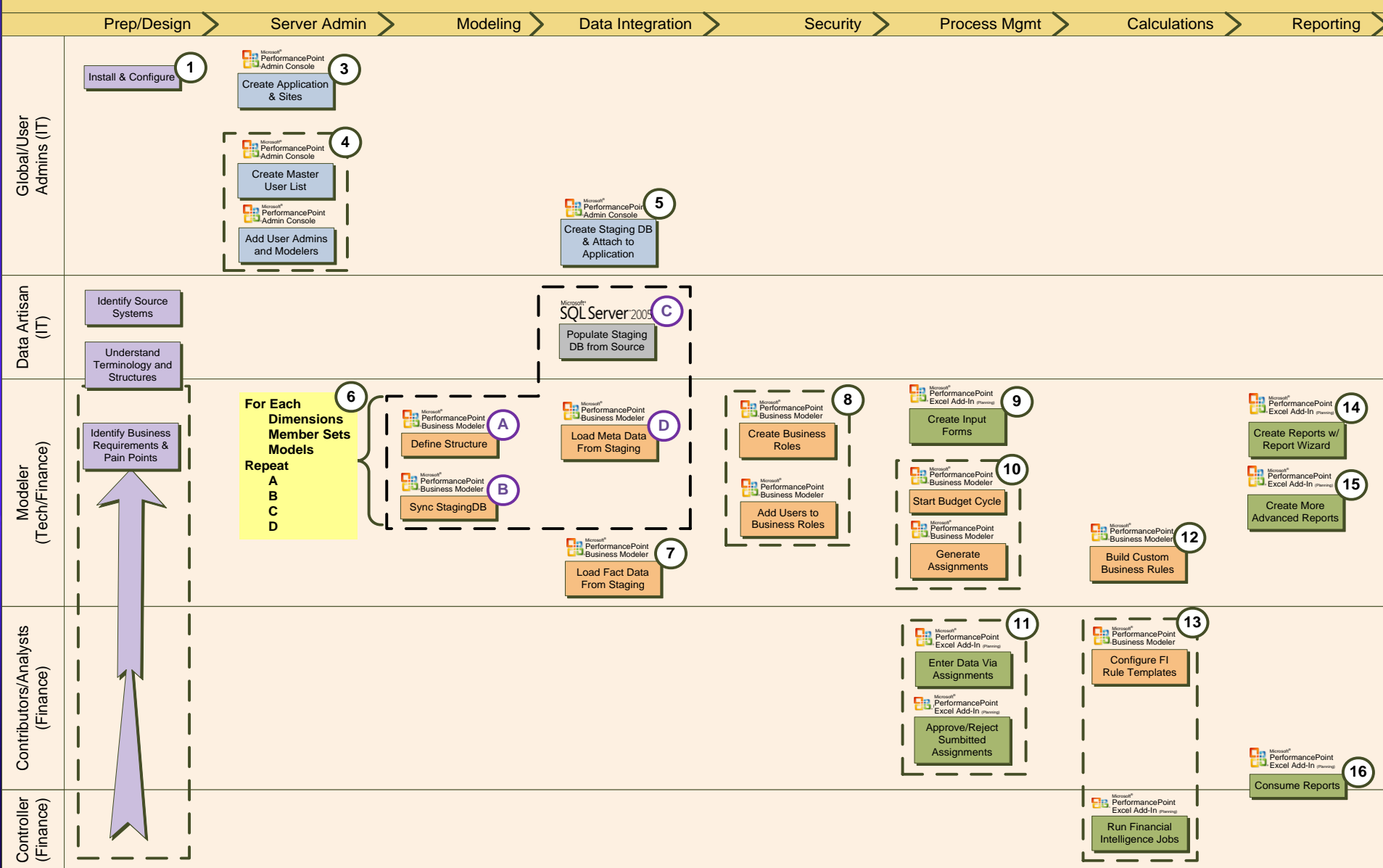
OLAP - An Example



The PPS Life Cycle, and Introduction to PPS Applications

PPS Design/Deploy Life Cycle

Design and Deploy a PerformancePoint Server 2007 Planning Application



PPS Design/Deploy Life Cycle

- Install PPS Software
- Create Application (AppDB & StagingDB) in Admin Console
- Create Admin Users in Admin Console
- Setup Initial Model structure in Modeler
 - Creation of Dimensions, Hierarchies and Model structures
- Sync to StagingDB to mirror table structure of AppDB
- Load Dimensions, Hierarchies & Model facts to StagingDB using SSIS
- Run Validations to ensure data in StagingDB is valid
- Load Dimensions, Hierarchies & Model facts from StagingDB to App DB
- Create & Deploy Model Site to Create AS cubes for all Models
- Create Rules to perform calculations
- Create Excel Input Templates and Reports
- Define Security for Roles and Business Users
- Define Workflow (Cycles and Assignments)
- Users Input Data and Review output

PPS Business Modeler

The screenshot displays the 'Rules_Applications_1' site summary in the PerformancePoint Planning Business Modeler. The interface includes a menu bar (File, Edit, View, Go, Actions, Help), a toolbar, and a workspace browser on the left. The main area shows a table of site statistics, and the right pane lists workspace actions.

Category	Property	Value
Connection	Server:	http://ar004-12:46787/
	Application:	Rules Application
	Model site:	Rules Applications 1
	Label:	Rules Applications 1
	Description:	
Models	Models total:	8
	Shared:	8
	Checked out by current user:	2
Dimensions	Dimensions total:	13
	Shared:	13
	Checked out by current user:	0
Forms and Reports	Templates:	0
	Operational Reports:	0
Process Management	Cycles:	0
	Assignments:	0
	Jobs:	3
Security and Roles	Users:	0
	Business Roles:	0
Associations	Associations total:	0
	Checked out by current user:	0

Workspace Actions:

- Site Tasks
 - Create an Application...
 - Create a Model Subsite...
 - Delete Application...
 - Delete Model Subsite...
 - Save Model Site
 - Deploy Model Site
 - Close Model Site

Retrieved config settings from server Connected to server http://ar004-12:46787/...

PPS Excel Addin

Completed Model.xlsx @ Rules_Application - Microsoft Excel

Home Insert Page Layout Formulas Data Review View Add-Ins PerformancePoint Help

Connect Offline Refresh Assignments Auto-recalculate Reports Matrix Styles View Show Action Pane Jobs Connection Settings About

Connection Assignments Authoring View Advanced Help

\\ar004-12\Workflow\RulesClas

A1

Completed Model.xlsx @ Rules_Application

Select a matrix: Matrix1

Available actions for selected matrix: Select dimensions

Filters: BusinessProcess.St... Colors.ColorSet Currency.All Members TimeDataView.All ...

Columns: Scenario.All Members Time.YQM

Rows: Entity.Locations Account.GL

Values: Default Measure

Refresh

Assignments

Authoring

Ready

Sheet1 Sheet2 Sheet3

70%

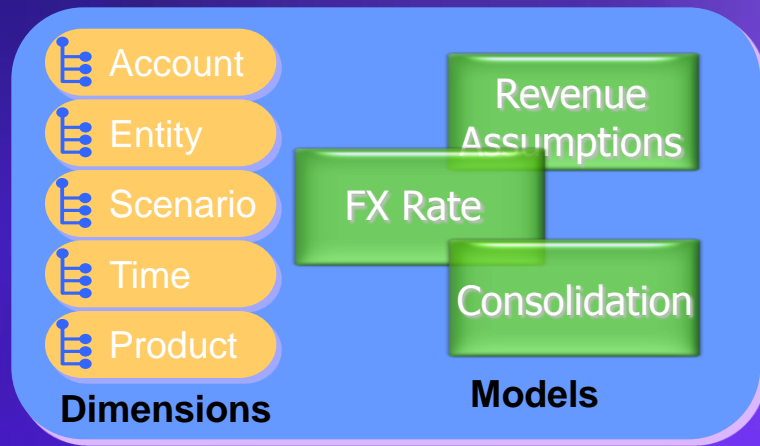
Fake Company Inc.

		Actuals								
		P1 FY2007	P2 FY2007	P3 FY2007	Q1 FY2007	P4 FY2007	P5 FY2007	P6 FY2007	Q2 FY2007	P7 FY2007
Value										
620003	Rent	10,000	10,000	10,000	30,000	10,000	10,000	10,000	30,000	10,000
640000	Resort Supplies	777	777	777	2,331	777	777	777	2,331	777
650000	Utilities	1,040	1,040	1,040	3,120	1,040	1,040	1,040	3,120	1,040
650001	Telephone	9,000	9,000	9,000	27,000	9,000	9,000	9,000	27,000	9,000
650002	Garbage	345	345	345	1,035	345	345	345	1,035	345
650003	Water & Sewer	667	667	667	2,001	667	667	667	2,001	667
650004	Security	1,100	1,100	1,100	3,300	1,100	1,100	1,100	3,300	1,100
630001	Advertising - Media	200	200	200	600	200	200	200	600	200
630002	Advertising - Agency	445	445	445	1,335	445	445	445	1,335	445
630003	Marketing & Sales	1,000	1,000	1,000	3,000	1,000	1,000	1,000	3,000	1,000
660002	Janitorial/Cleaning Service	765	765	765	2,295	765	765	765	2,295	765
660001	Consulting									
C1	Whistler									
660003	Legal									
620003	Rent	20,000	20,000	20,000	60,000	20,000	20,000	20,000	60,000	20,000
640000	Resort Supplies	1,554	1,554	1,554	4,662	1,554	1,554	1,554	4,662	1,554
650000	Utilities	2,080	2,080	2,080	6,240	2,080	2,080	2,080	6,240	2,080
650001	Telephone	18,000	18,000	18,000	54,000	18,000	18,000	18,000	54,000	18,000
650002	Garbage	690	690	690	2,070	690	690	690	2,070	690
650003	Water & Sewer	1,334	1,334	1,334	4,002	1,334	1,334	1,334	4,002	1,334
650004	Security	2,200	2,200	2,200	6,600	2,200	2,200	2,200	6,600	2,200
630001	Advertising - Media	400	400	400	1,200	400	400	400	1,200	400
630002	Advertising - Agency	890	890	890	2,670	890	890	890	2,670	890
630003	Marketing & Sales	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	2,000
660002	Janitorial/Cleaning Service	1,530	1,530	1,530	4,590	1,530	1,530	1,530	4,590	1,530
660001	Consulting									
C2	Banff									
660003	Legal									
620003	Rent	40,000	40,000	40,000	120,000	40,000	40,000	40,000	120,000	40,000
640000	Resort Supplies	3,108	3,108	3,108	9,324	3,108	3,108	3,108	9,324	3,108
650000	Utilities	4,160	4,160	4,160	12,480	4,160	4,160	4,160	12,480	4,160
650001	Telephone	36,000	36,000	36,000	108,000	36,000	36,000	36,000	108,000	36,000

Planning Administration Console

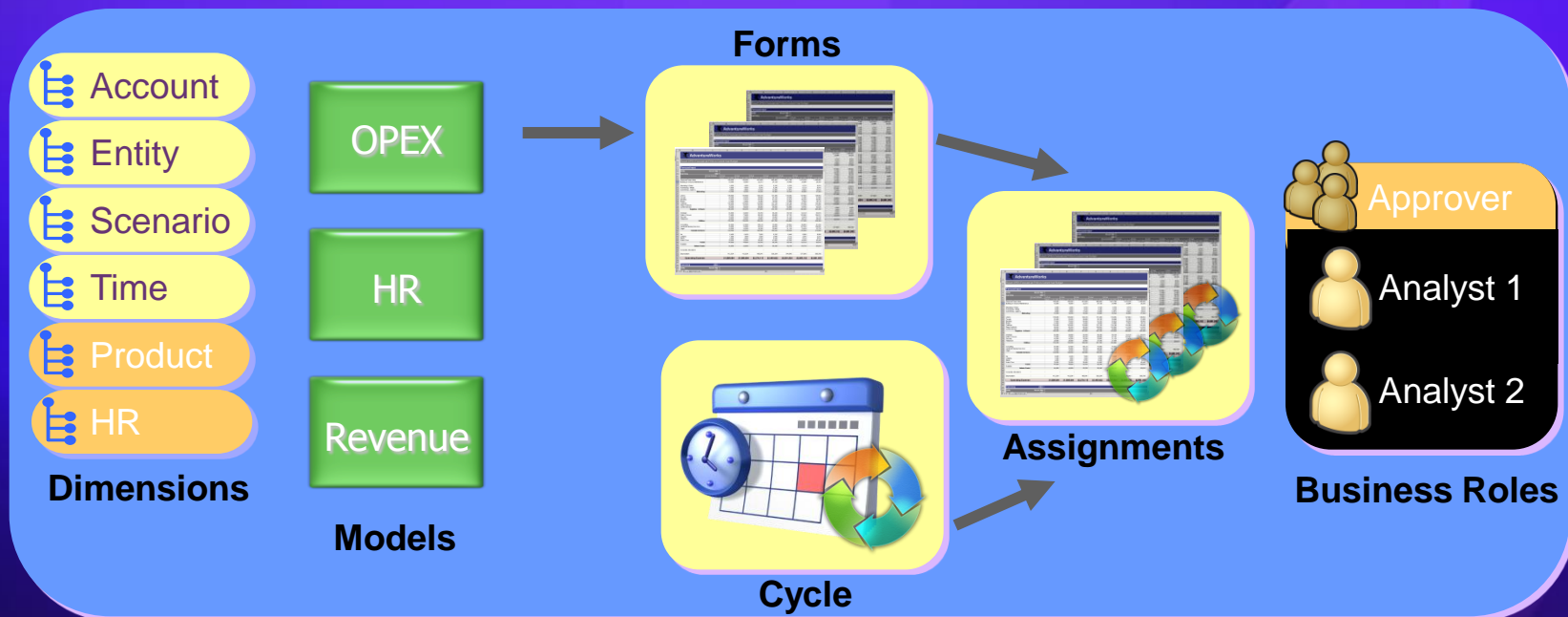
The screenshot shows a web browser window titled "PerformancePoint System Administration Console - Microsoft Internet Explorer". The address bar contains "http://ar004-12:46788/Default.aspx". The page header includes "PerformancePoint™ Server 2007 CTP 2" and "Microsoft Office". A left-hand navigation menu lists various options: Connection (selected), Applications, Model Sites, Users, Global Administrator Role, User Administrator Role, Data Administrator Role, Modeler Role, Session Settings, Auditing, Logging, and Asynchronous Service. The main content area is titled "Connection" and contains the text "Type the path to the server to which you want to connect:". Below this is a text input field with the value "http://ar004-12:46787/" and a "Connect" button. The status below the input field reads "Status: **Connected to the computer running PerformancePoint Server.**". A "Help?" link is visible in the top right of the main content area. The browser's status bar at the bottom shows "Done" and "Local intranet".

PPS Applications



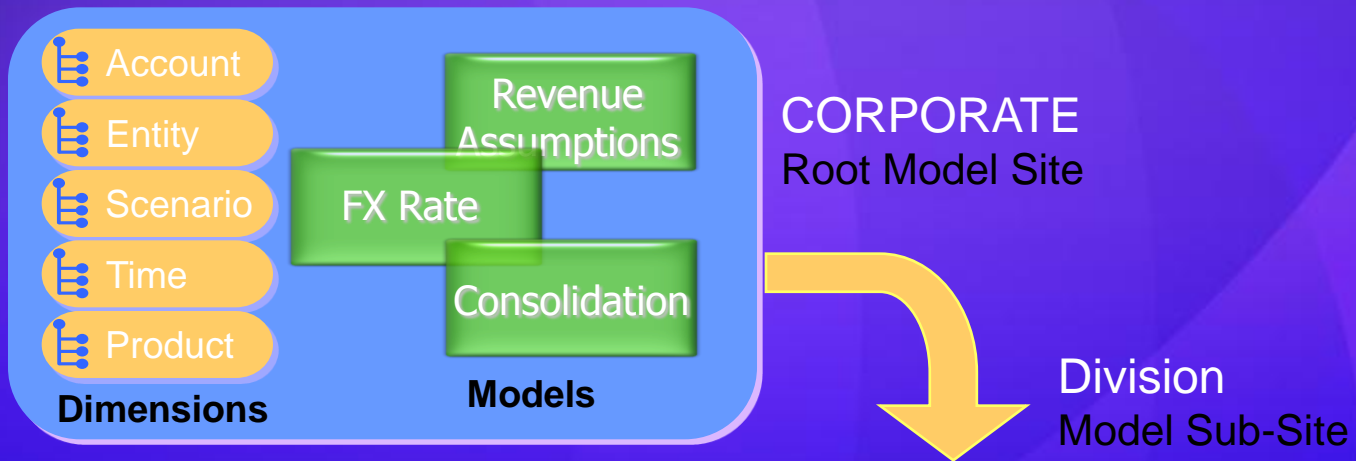
CORPORATE
Root Site

Division
Sub-Site

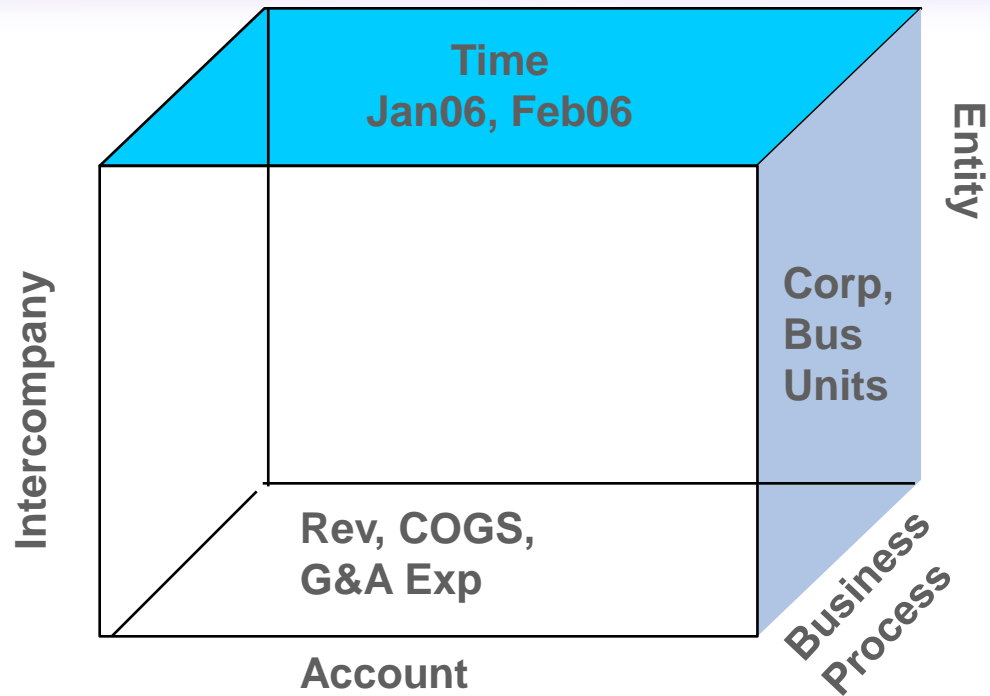


Model Sites, Models, Model Types, and Model Properties

Model Sites and Sub-Sites

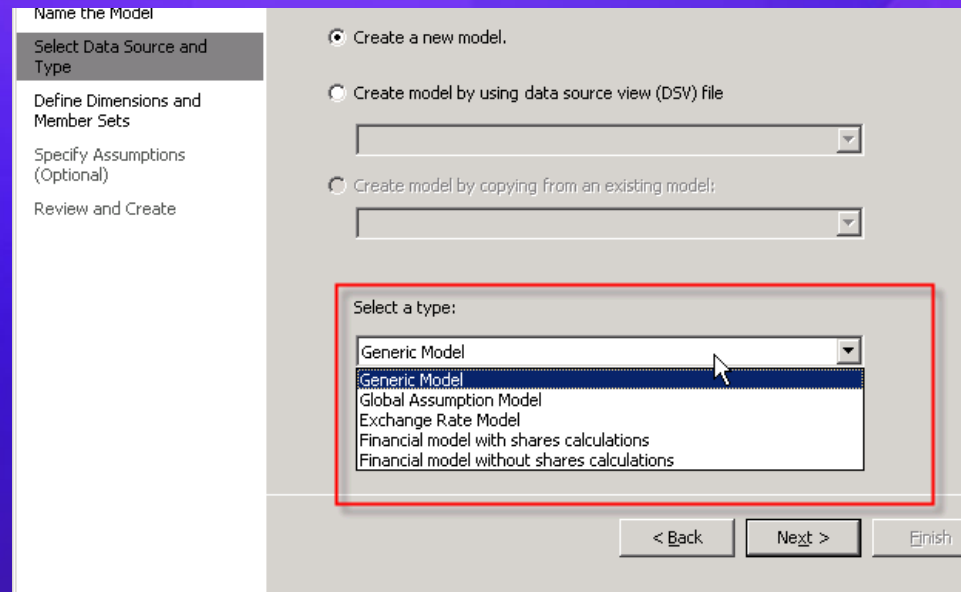


Models



Model Types

- Global Assumption Model
- Exchange Rate Model
- Financial Models
 - With Shares
 - Without Shares
- **Generic Models**



Assumptions – Store in Assumptions Models

- Baseline Data Implemented through Models

Expenditure Assumptions

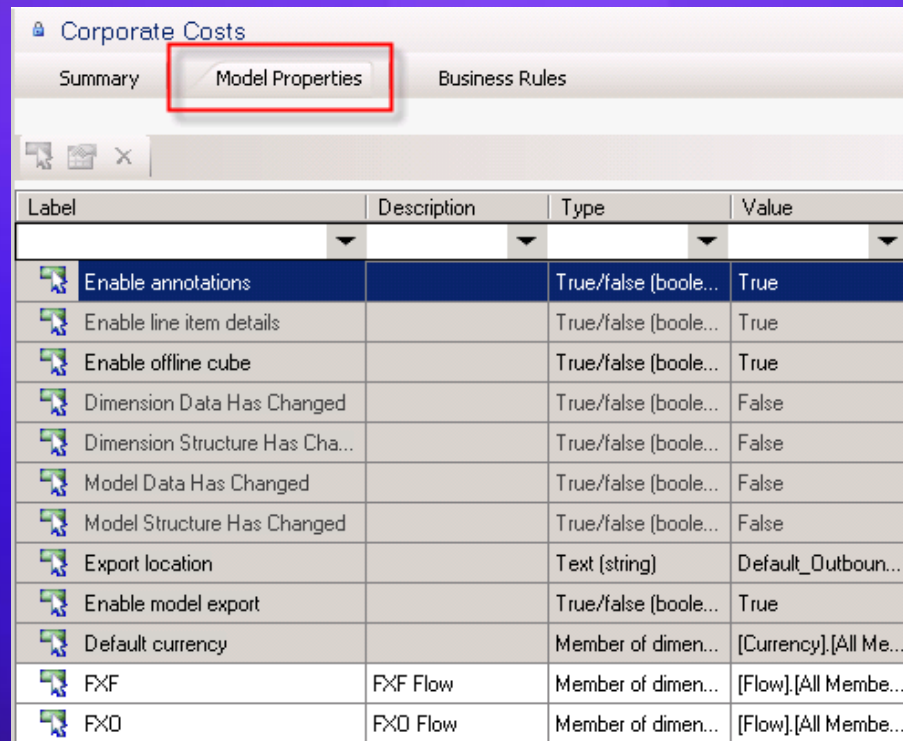
Summary | Model Properties | Business Rules

General

Name	Expenditure Assumptions
Label	Expenditure Assumptions
Description	
Model type	Global Assumption Model
Shared	True
Last processed date	
Checked out by	PPSPRE-CTP1\Administrator
Current period	Year2004
Parent model site	ASH_Corporate

Model Properties

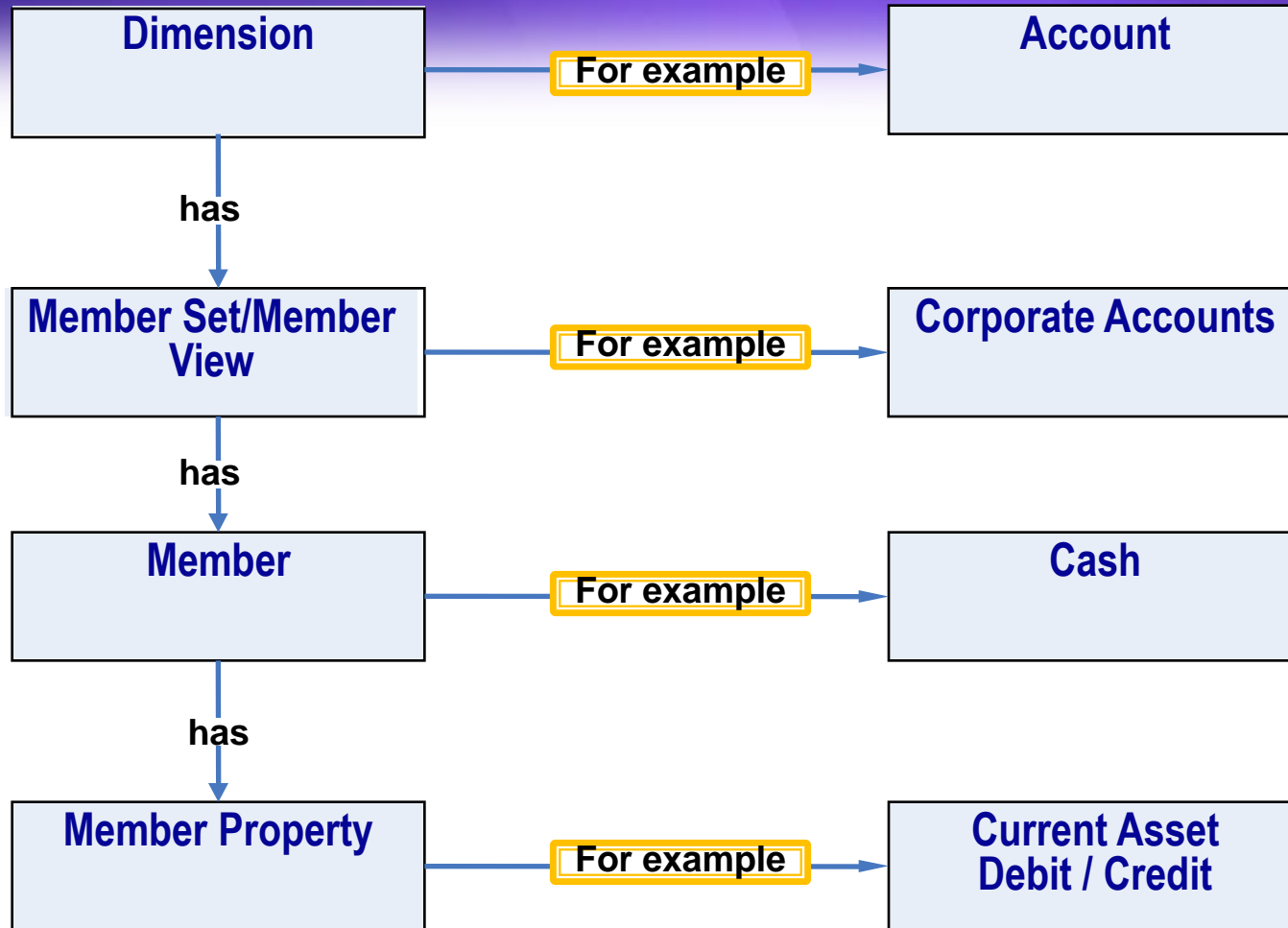
- Model Properties (Variables) linked to the Model
- Can be accessed during calculations (Business Rules)
- Dynamically Updated



Label	Description	Type	Value
Enable annotations		True/false (boole...	True
Enable line item details		True/false (boole...	True
Enable offline cube		True/false (boole...	True
Dimension Data Has Changed		True/false (boole...	False
Dimension Structure Has Cha...		True/false (boole...	False
Model Data Has Changed		True/false (boole...	False
Model Structure Has Changed		True/false (boole...	False
Export location		Text (string)	Default_Outboun...
Enable model export		True/false (boole...	True
Default currency		Member of dimen...	[Currency].[All Me...
FXF	FXF Flow	Member of dimen...	[Flow].[All Membe...
FXD	FXD Flow	Member of dimen...	[Flow].[All Membe...

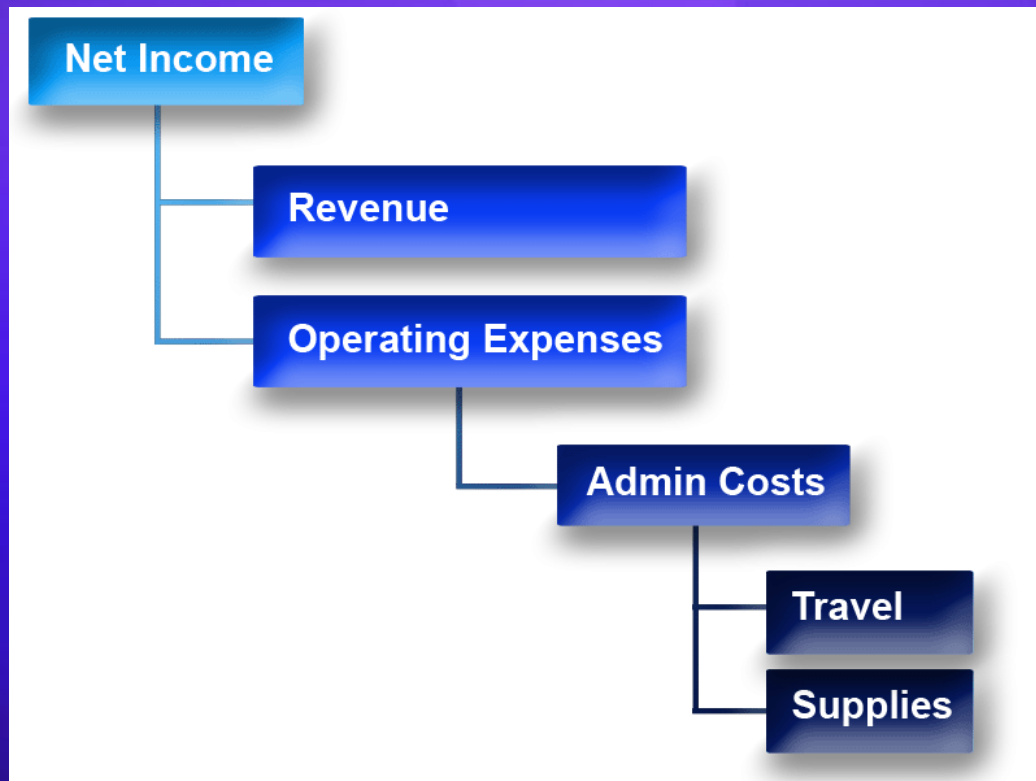
Dimensions, Members, Member Sets, Member Views, Member Properties

Dimensions



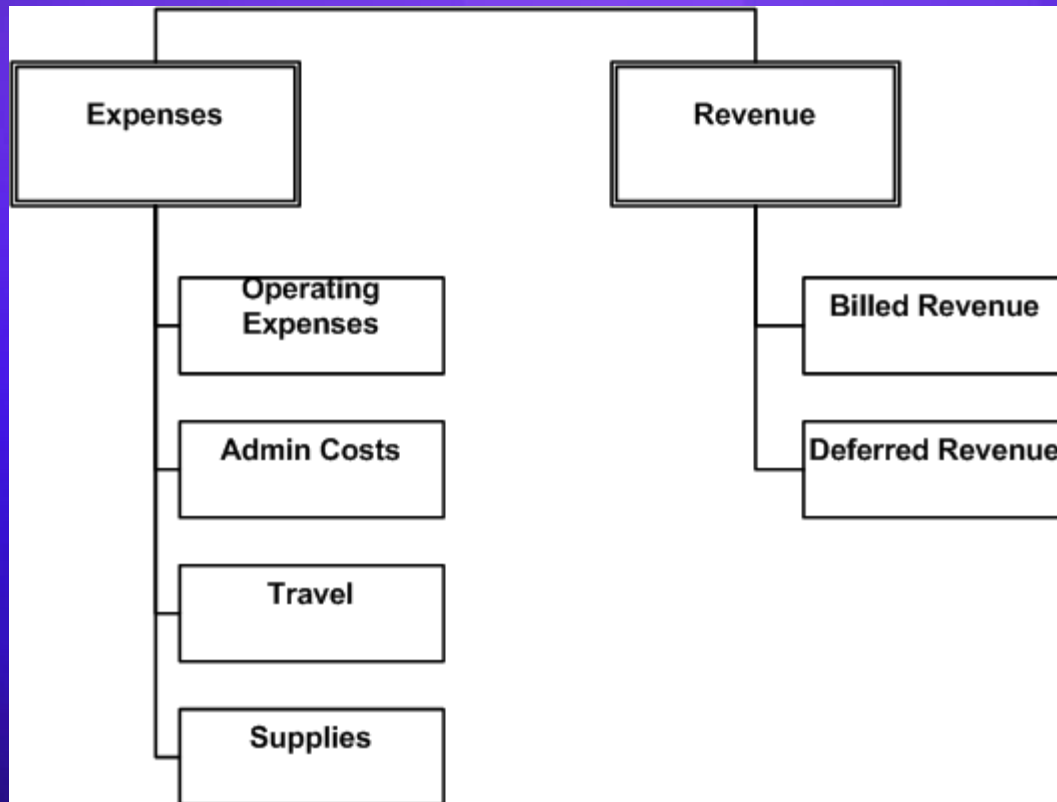
Member Sets (Hierarchies)

- A Member set is Defined by a set of Members of a Dimension organized in a hierarchy based on specific grouping needs.



Member View

- A Member View is Defined by all Members of a Dimension or Member Set organized in a Hierarchy based on a specific Member Property



System-Generated Dimensions by Model Type

Model Type	Pre-Defined Dimensions
Generic Model	Scenario, Time
Assumptions Model	Scenario, Time
Exchange Model	Scenario, Time, Source Currency, Exchange Rate, Destination Currency, Entity
Financial Model With Shares Calculation	Scenario, Time, Account, BusinessProcess, Entity, TimeDataView, Flow, Consolidation Method, Owned Entity
Financial Model Without Shares Calculation	Scenario, Time, Account, BusinessProcess, Entity, TimeDataView

Data Integration

Data Integration Flow

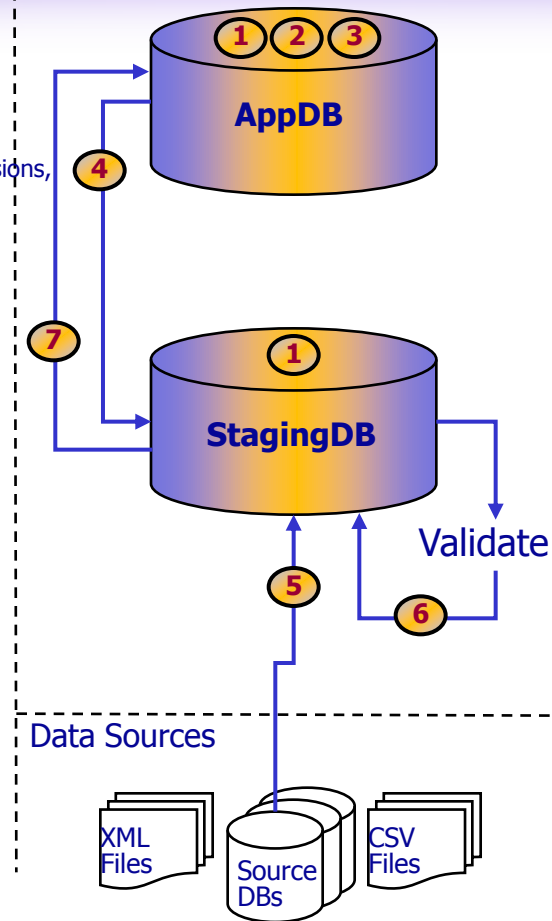
Actions using PPS Admin Console

- 1 Create Application, AppDB & StagingDB
- 2 Add Users to DB for GA & Modeler

Actions using PPS Modeler

- 3 Create structures: Dimensions, Hierarchies & Models
- 4 Synchronize StagingDB
- 7 Load Staging Data to AppDB

Performance Point Server



Actions using SQL Server

- 5 Load data from Data Sources: Dimension, Hierarchy & Fact (Model)
- 6 Validate StagingDB Data: Dimension, Hierarchy & Fact (Model)

Users, Roles, and Security

Security in PPS – Role Based

- Role-Based Security in PPS
 - Administrative Roles
 - Business Roles

Users and Roles: GA, UA, DA, Modeler, and Business Roles



Global Administrator

User Administrator

Data Administrator

Modeler

Business Roles

Forms and Reports in PPS Excel Add-In

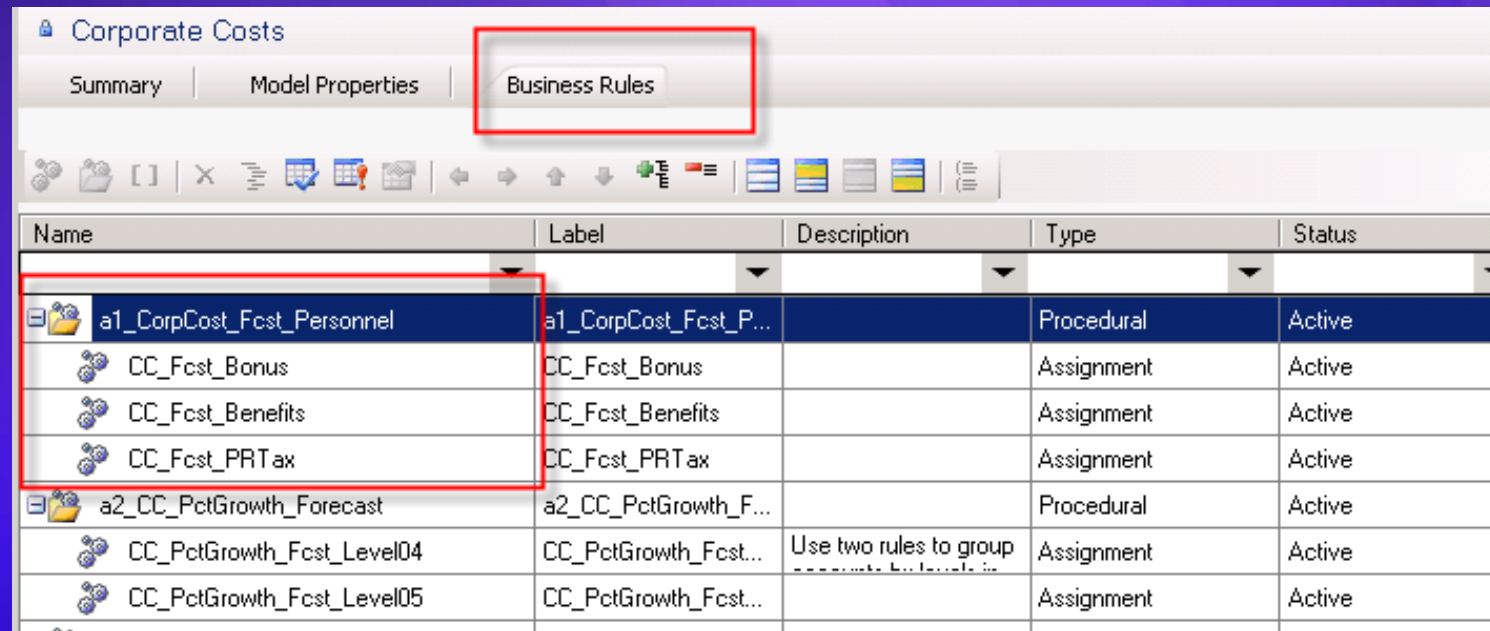
PerformancePoint Add-in for Excel

	A	B	C	D	E	F	G	H	I
1	Subsidiary Scorecard Goals for FY2008: France								
2	Link to Scorecard Metric Definitions			* denotes System Generated Child Member					
3									
4									
5									
6									
7									
8									
9	Currency			USD ▼					
10	Account			BMO ▼					
11				France			Monaco		
12				High	Target	Low	High	Target	Low
13				Value					
14	% of Partners Engaged in	FY2008		4.00	22.00	1.00		2.00	
15	Marketing Campaigns	Q1 FY2008		1.00					
16		Q2 FY2008		1.00	10.00				
17		Q3 FY2008		1.00	10.00				
18		Q4 FY2008		1.00					
19	BIF Investment as a % of	FY2008		4.00	22.00	1.00		2.00	
20	Total Optimizing	Q1 FY2008		1.00					
21	Opportunities Investment	Q2 FY2008		1.00	10.00				
22		Q3 FY2008		1.00	10.00				
23		Q4 FY2008		1.00					

Financial Intelligence

Calculations: Business Rules, and Jobs

Business Rules and Rule Sets



The screenshot shows the 'Corporate Costs' application interface. The 'Business Rules' tab is selected and highlighted with a red box. Below the tab is a toolbar with various icons. A table lists the business rules, with a red box highlighting the first rule and its sub-rules.

Name	Label	Description	Type	Status
a1_CorpCost_Fcst_Personnel	a1_CorpCost_Fcst_P...		Procedural	Active
CC_Fcst_Bonus	CC_Fcst_Bonus		Assignment	Active
CC_Fcst_Benefits	CC_Fcst_Benefits		Assignment	Active
CC_Fcst_PRTax	CC_Fcst_PRTax		Assignment	Active
a2_CC_PctGrowth_Forecast	a2_CC_PctGrowth_F...		Procedural	Active
CC_PctGrowth_Fcst_Level04	CC_PctGrowth_Fcst...	Use two rules to group accounts by levels in	Assignment	Active
CC_PctGrowth_Fcst_Level05	CC_PctGrowth_Fcst...		Assignment	Active

Business Rule Types

Rule Type	Usage
Assignment	Assigns values to cells in the cube and writes the value back to the fact table. An assignment rule performs the operations specified on the right side of the equal sign (=), and stores the result in the location specified on the left side of the equal (=) sign, as per the Scope statement.
Allocation	Distributes the source value across a specified member set called the target. Allocation rules include single-model allocation, PullCrossModelAllocation, and PushCrossModelAllocation.
Definition	Calculate values “on the fly” as the values are requested in an Excel Form. These values are not stored in the cube. This rule type is suited to calculate Variances or Variance Percent.
Variable	Assignment statement to update the value assigned to a model property.
Currency	Converts currency values from one exchange rate to another
Intercompany Reconciliations	Balances transactions that occur between different partner entities in a parent company
Consolidation	Consolidates account data in a multi-company scenario. There are two kinds of consolidation processes: with shares calculation, and without shares calculation. Both kinds include currency conversion and elimination of intercompany transactions. Consolidation with shares calculation also includes calculating percent consolidation and minority ownership.
Outbound	Delivers data to an external target.

Rule Implementation

Implementation	Permitted Rule Types	Usage
MdxQuery	<ul style="list-style-type: none"> • Assignment Rules • Allocation Rules • PushCrossModelAllocation • PullCrossModelAllocation 	Rules are written in PerformancePoint Expression Language (PEL). The target subsystem generates MDX query language that is executed against both the cube and fact table at rule runtime.
SQL	<ul style="list-style-type: none"> • Assignment Rules • Allocation Rules 	Rules are written in PEL. The target subsystem generates SQL code from the rule that is executed against both the cube and fact table at rule runtime.
Outbound	<ul style="list-style-type: none"> • Outbound Rules 	<ul style="list-style-type: none"> • Rules are written using the PEL Scope Editor to define the data to be exported from the cube. Outbound rules are generally run as jobs.
General	<ul style="list-style-type: none"> • Variable Rules 	<ul style="list-style-type: none"> • Assignment statement to update the value assigned to a model property.
NativeMDXQuery (Special)	<ul style="list-style-type: none"> • Assignment Rules 	<ul style="list-style-type: none"> • Rule is written in native MDX that is executed against the fact table and cube at rule runtime.
NativeSQL (Special)	<ul style="list-style-type: none"> • Assignment Rules 	Rule is written in SQL code, rule is run as a direct pass-through to the SQL database, executing only against the fact table.


Rule Set Types

Rule Set Type	Permitted Rule Types	Usage
Procedural	Allocation rules Assignment rules Variable Rules	<ul style="list-style-type: none"> •Rules that perform allocations •Rules that perform user-defined calculations •Rules that assign values to model properties
Automatic	Assignment rules	Rule executes automatically when the cube reprocesses.
Definition	Definition rules	Calculations that be calculated every time that the model is deployed, and become part of the model definition. This rule set type does not create Fact records, only values in the Cube.
Outbound	Outbound rules	Use this rule set type to export data to an external target.
Currency	Currency rules	Use this rule set type to perform currency conversions from local currency to the Parent's reporting currency.
Intercompany Reconciliation	Intercompany reconciliation rules	Use this rule set type for eliminating transactions between related entities.
Consolidation	Consolidation rules	Rule set type for rules that create elimination entries for a financial model with (or without) shares calculation.

Jobs

- A Job is an automated system task, such as loading data, running Rule Sets, or sending Notifications

Create a Job Instance Wizard -- Page 1 of 5



Name the Job

Name the Job

- Select a Job Template
- Select Job Properties
- Schedule the Job
- Review and Create

Provide a name, label, and optional description.

Name:

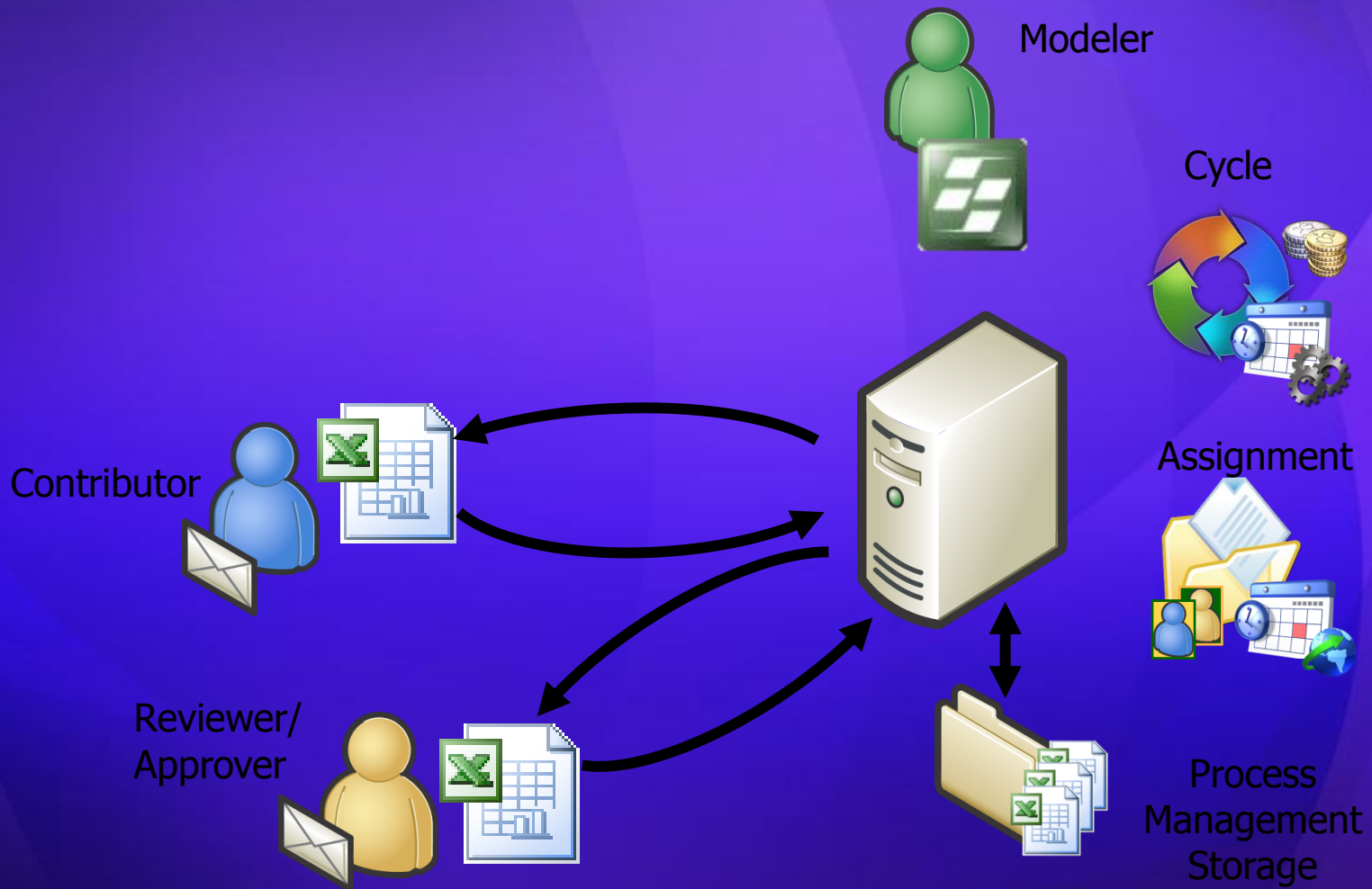
Label:

Description (optional):

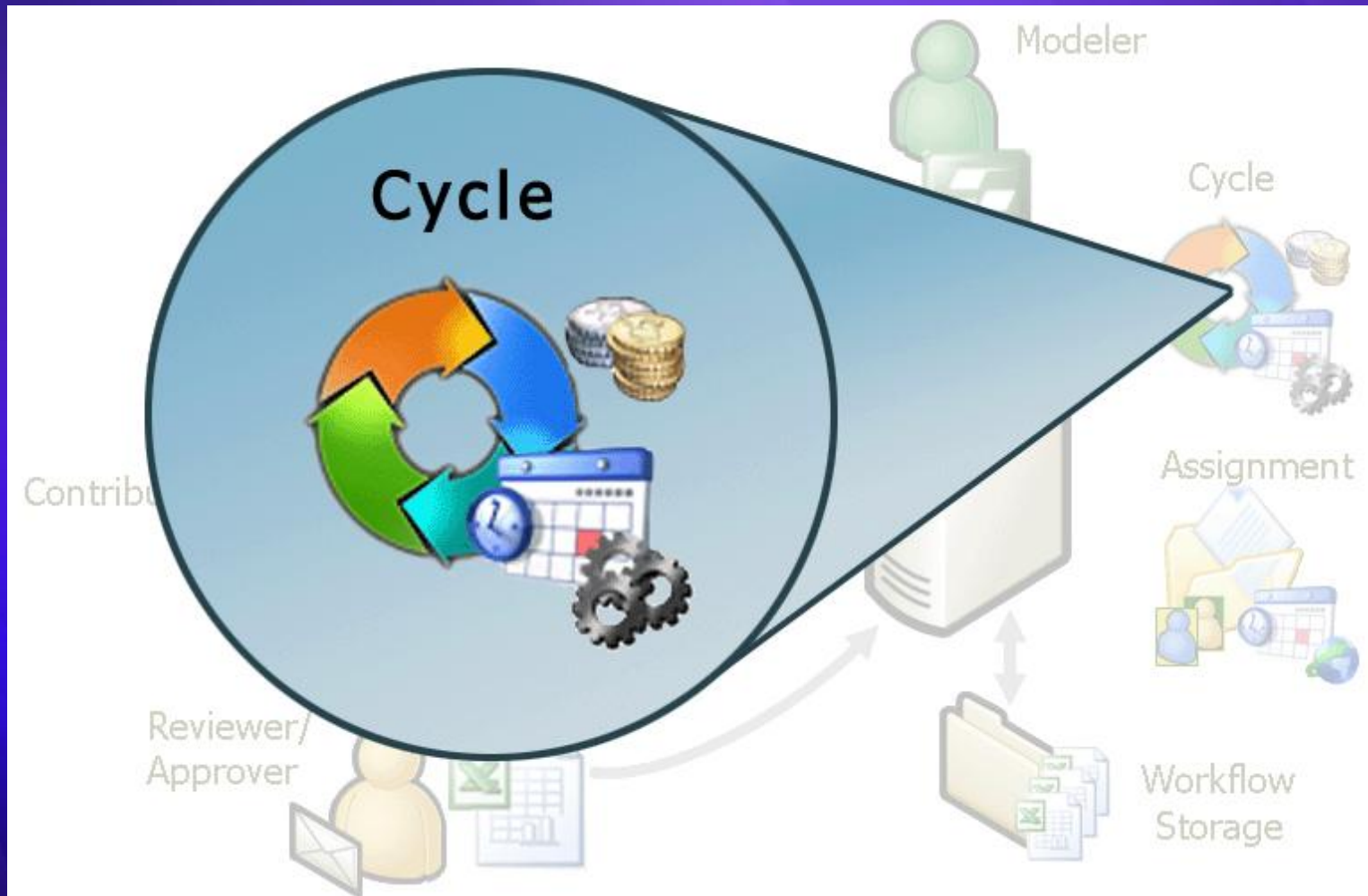
Owner:
 ...

Process Management: Cycles and Assignments

PerformancePoint Process Management

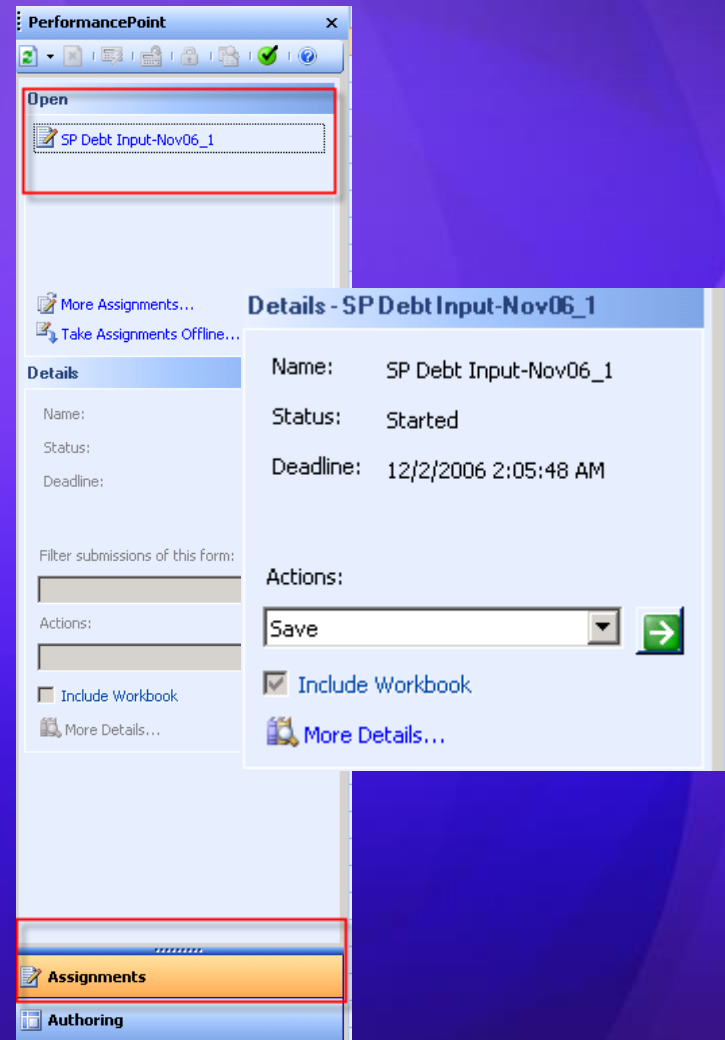


Cycles

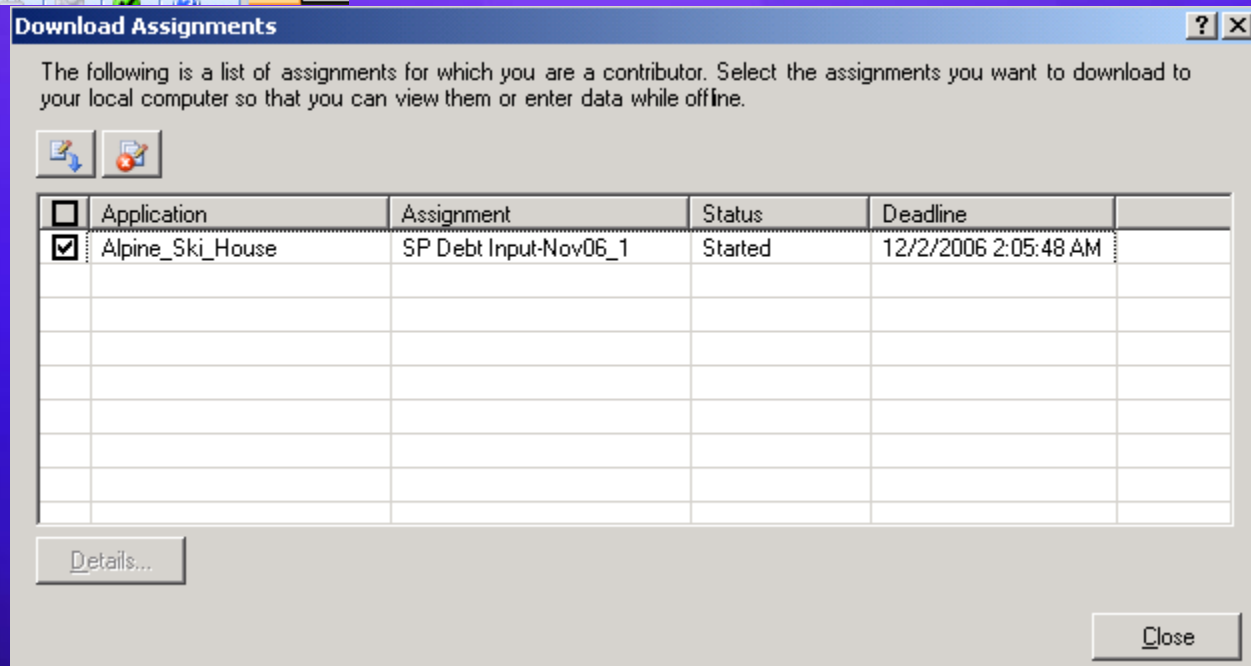
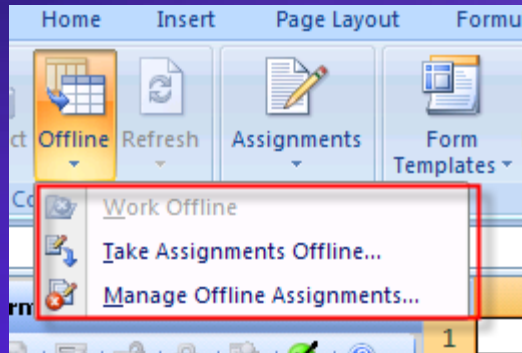


Assignments

- The Assignments action pane is the default action pane of the PerformancePoint Add-in for Excel.
- You can use the action pane to
 - Open Assignments
 - View Assignment details
 - Save
 - Submit
- The Assignments action pane contains a toolbar and two sections.



Offline



Questions