

# BIEE 11G 培训

## 主题: Admintool

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# BIEE - Admintool

- 新的层次结构展现
- 支持的层次结构
- 时间函数



# Demo



# BIEE - Admintool

- 新的层次结构展现
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- 时间函数



# BIEE - 层次结构

## ■ 新的层次结构展现功能

<b>层次列</b>		1- Revenue	<b>度量值</b>
	Sales Rep Hierarchy		
	[-] Michele Lombardo	50,000,000	
	[-] Helen Mayes	13,818,928	
<b>关闭层次</b>	[-] Angela Richards	4,559,148	
	Aurelio Miranda	2,590,020	
	Jack Benetti	29	
	[+] Chris Jones	30	
	[+] Monica Velasquez	93	
<b>展开层次</b>	[+] Paul Atkinson	32	
	[+] Sophie Bergman	13,201,947	

**父节点下的  
所有子成员**

# BIEE - 层次结构

## ■ 模型设计

表示

- [-] A - Sample Sales
  - [+] Time
  - [+] Alternate Calendars
  - [+] More Time Objects
  - [+] Products
  - [+] Product Ragged Skipped Lvl
  - [+] More Product Objects
  - [+] Offices
  - [+] More Office Objects
  - [-] Sales Person
    - Sales Rep Hierarchy**
    - E0 Sales Rep Number
    - E1 Sales Rep Name
    - E2 Sales Rep Type
    - E4 Position
    - E6 Position Level
    - E7 Hire Date
    - E8 Manager Number
    - E9 Manager Name
    - E10 Length Of Service

业务模型和映射

- [-] 1 - Sample App
  - [+] H0 Time
  - [+] H1 Products
  - [+] H2 Products Ragged SkipLevels
  - [+] H3 Offices
  - [+] H4 Offices and Channels (M:M)
  - [+] H5 Sales Rep**
  - [+] H6 Customers
  - [+] H9 Orders
  - [+] D0 Time (Time Dimension)
  - [+] D1 Products (Level Based Hier)
  - [+] D2 Products (Ragged SkipLevels Hier)
  - [+] D3 Offices
  - [+] D4 Offices and Channels (M:M Joins)
  - [+] D5 Sales Rep (Parent Child Hier)
  - [+] D6 Customers (Snowflakes)
  - [+] D7 Orders (Facts Attributes)
  - [+] F0 Revenue Base Measures
  - [+] F1 Targets Base Measures
  - [+] F2 Targets Fragmented Measures



# BIEE - 层次结构

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# BIEE - 层次结构

## ■ Level Based (平衡的)

### Level Name

### Period Hierarchy

Total

Total

Year

2009

2010

Quarter

Q1

Q2

Q3

Q4

Q1

Q2

Q3

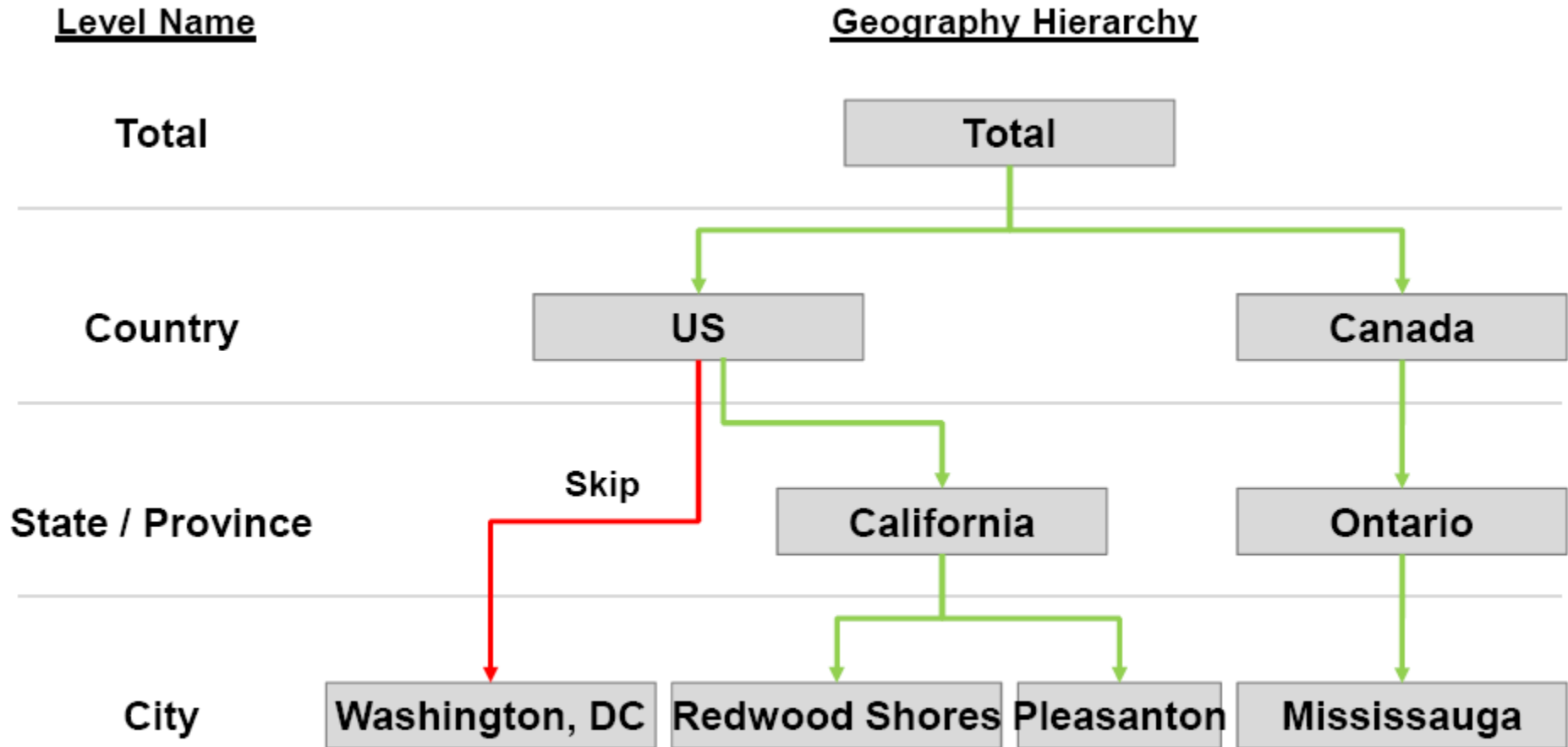
Q4





# BIEE - 层次结构

## ■ Level Based(非平衡的)

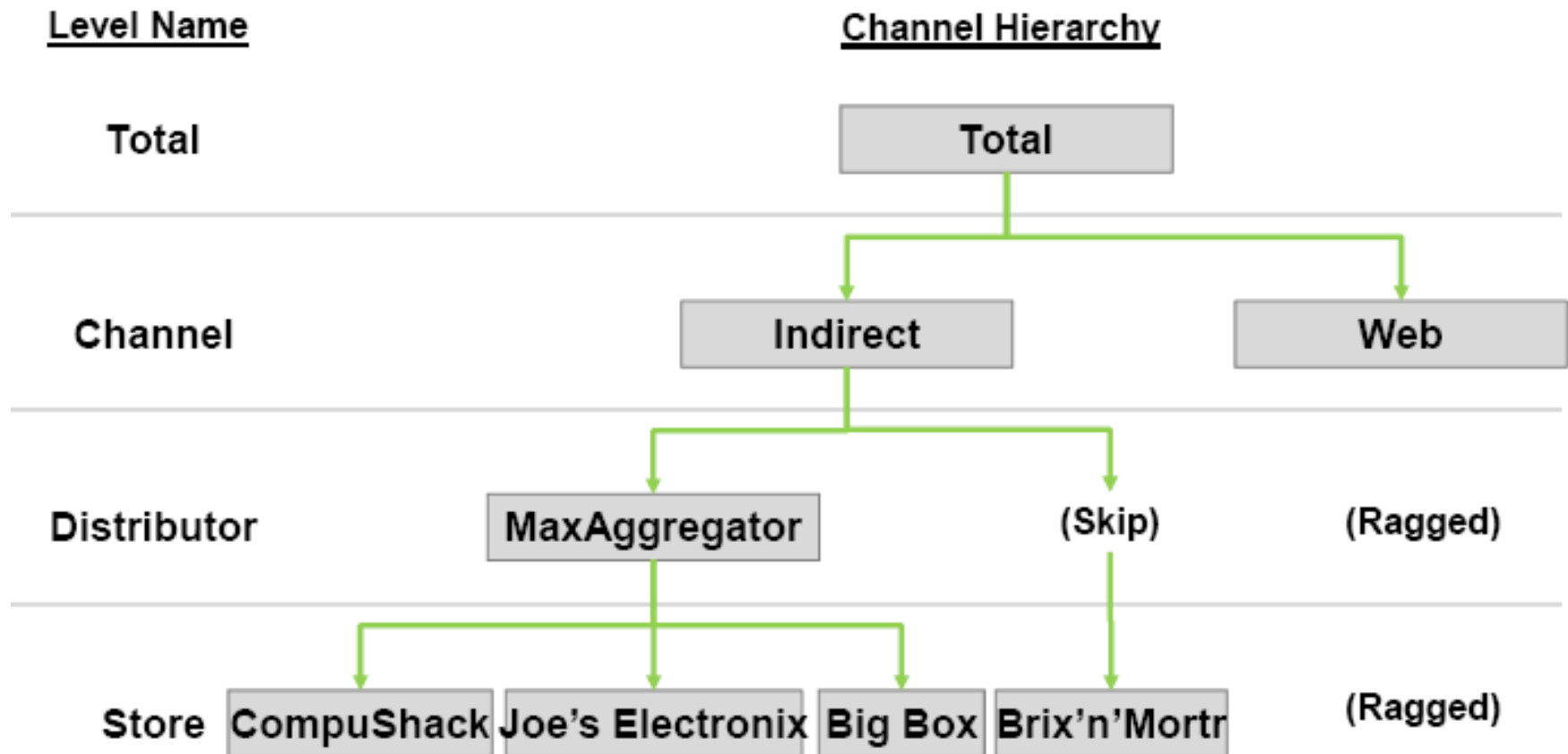


**Note: skip nodes are data driven (OBIEE expects NULL field)**



# BIEE - 层次结构

## ■ Level Based(非平衡的)



Note: ragged branches are data driven (OBIEE expects NULL fields)



# BIEE - 层次结构

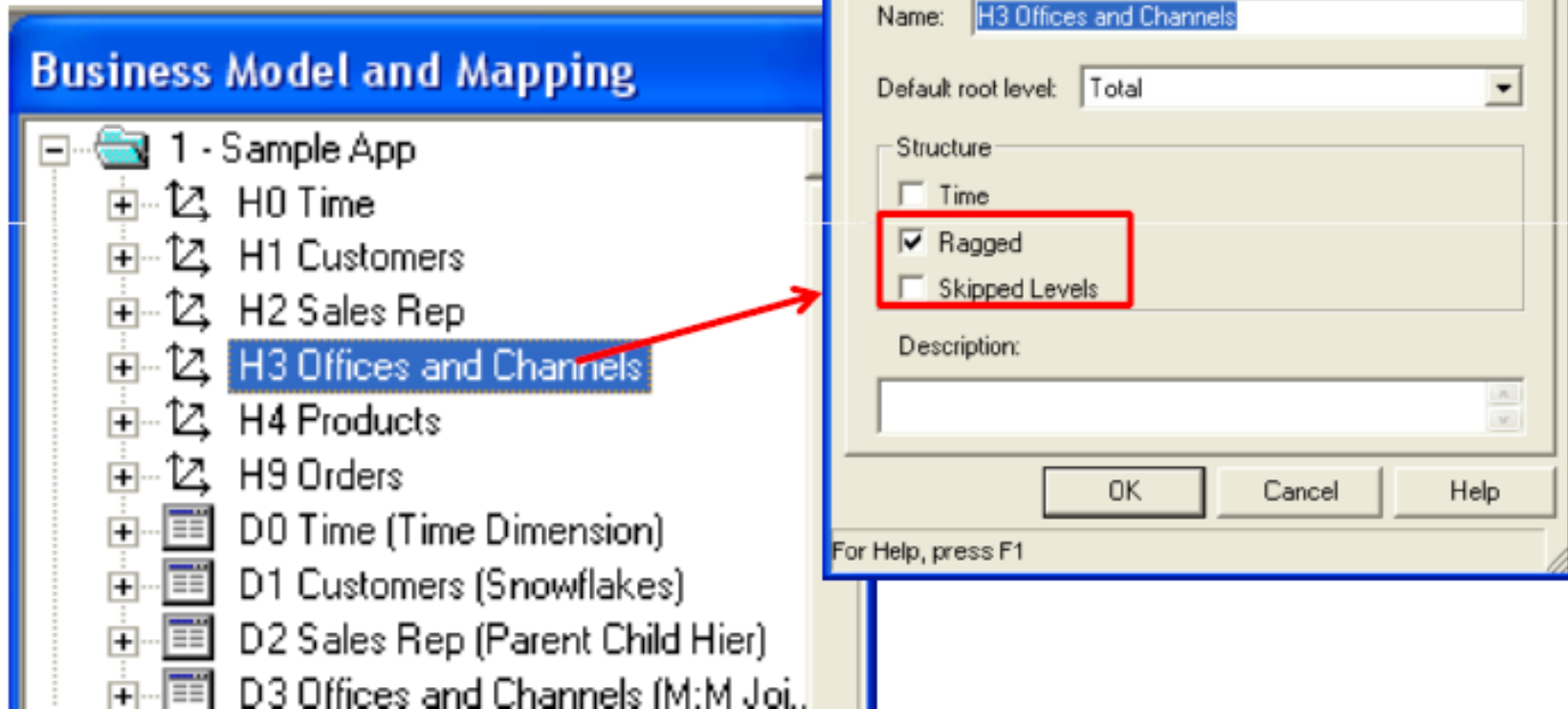
## ■ 不平衡维的数据结构

Level 4					
<u>Key</u>	<u>Member Name</u>	<u>Attribut</u>	<u>Level 3</u>	<u>Level 2</u>	<u>Level 1</u>
Prod_Key	Prod_Desc	Color	Type	LOB	Brand
1	Starter 3-blade Razor	Black	3-blade	Razors for Men	Swordsman
2	Refill 3-blade - 4 cnt.	Black	3-blade	Razors for Men	Swordsman
3	Refill 3-blade - 15 cnt.	Black	3-blade	Razors for Men	Swordsman
4	Starter 5-blade Razor	Black	5-blade	Razors for Men	Swordsman
5	Refill 5-blade - 4 cnt.	Black	5-blade	Razors for Men	Swordsman
6	Refill 5-blade - 15 cnt.	Black	5-blade	Razors for Men	Swordsman
7	Shaving Crème	n/a	Cream	Shaving Creme	Swordsman
8	Shaving Gel	n/a	Gel	Shaving Creme	Swordsman
9	Electric Razor - Black	Black		Electric Razors	Electrosmooth
10	Electric Razor - Chrome	Chrome		Electric Razors	Electrosmooth
11	Starter Razor - Pink	Pink		Razors for Ladies	Goddess
12	Starter Razor - Blue	Blue		Razors for Ladies	Goddess
13	Refill - 6	White		Razors for Ladies	Goddess
14	Refill - 18	White		Razors for Ladies	Goddess
15	Spring Breeze Air Freshener	n/a		Air Fresheners	Spring Breeze

Nulls for skip level

# BIEE - 层次结构

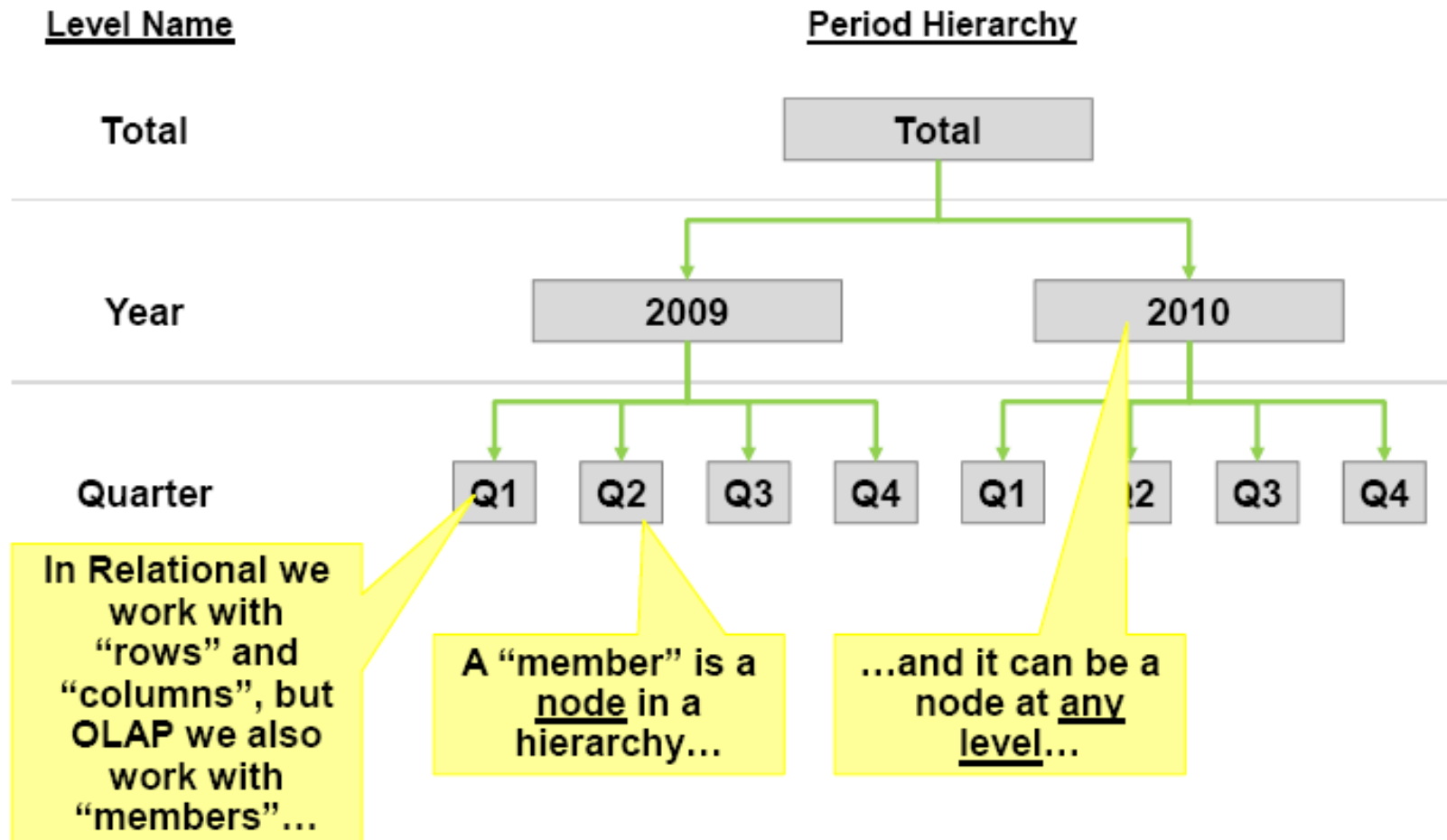
- 建立层次的时候设置层次结构属性





# BIEE - 层次结构

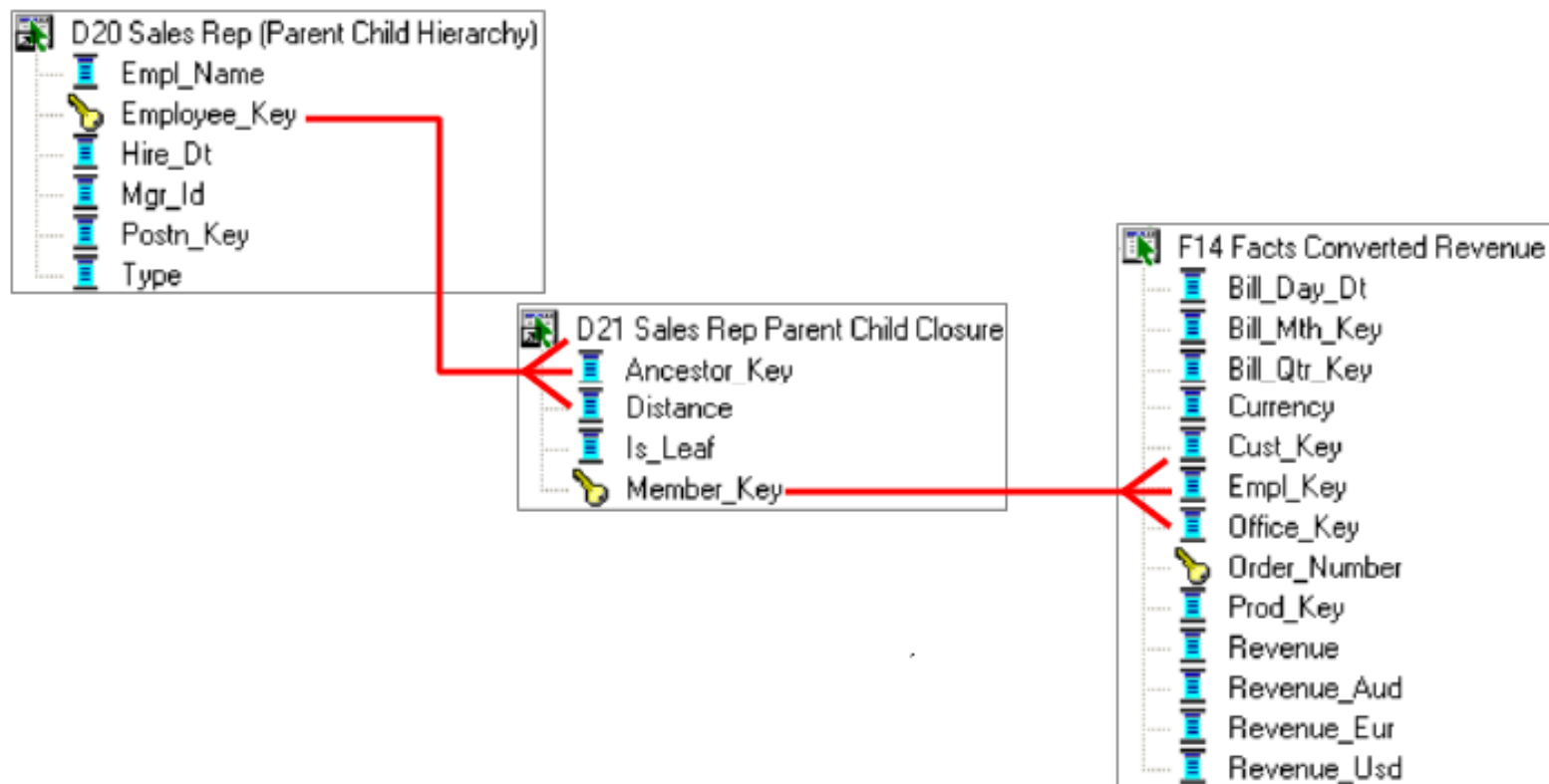
## ■ “多维”数据库中的层次结构



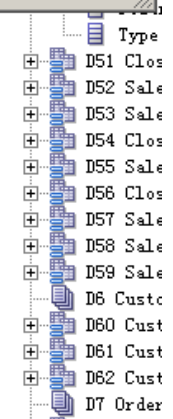
# BIEE - 层次结构

## ■ 父子结构(New)

- 中间表的父节点关联维度，根节点关联事实表
- 查询语句可以自动汇总到任意层次
- Is\_Leaf 作为控制 递归循环 终止使用，在分析中控制 + - 图标的显示
- Distance 优化递归查询语句
- 父子关系表(Parent Child Closure)通过工具生成，此语句可以在ETL中使用



## ■ 工具的使用





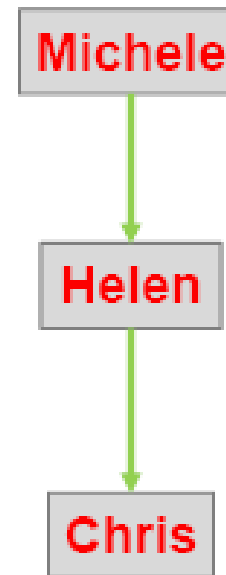
# BIEE - 层次结构

## ■ 父子结构维度简单示例

### P-C Dimension

Emp_Key	Parent_Key	Emp_Name
1	(null)	Michele
2	1	Helen
3	2	Chris

**Chris  
reports to  
Helen  
who  
reports to  
Michelle**







# BIEE - 层次结构

- 通过中间关系表，递归解析父子关系：解析第一层节点

**P-C Dimension**

Emp_Key	Parent_Key	Emp_Name
1	(null)	Michele
2	1	Helen
3	2	Chris

**P-C Relationship**

Ances tor _key	Dist	Is_ leaf	Mem ber _key
1	0	0	1
1	1	0	2
1	2	1	3
2	0	0	2
2	1	1	3
3	0	1	3

**Fact**

Emp_Key	Fact
1	100
1	200
1	555
1	234
2	654
2	111
2	222
2	983
3	47
3	22
3	985

**Query constrained on Michele joins to Ancestor Key for her Member Key and all her descendants' Member Keys**

**Which in turn joins to all facts for herself and her descendants**



# BIEE - 层次结构

- 通过中间关系表，递归解析父子关系：解析第二层节点

P-C Dimension

Emp_Key	Parent_Key	Emp_Name
1	(null)	Michele
2	1	Helen
3	2	Chris

P-C Relationship

Ances tor_key	Dist	Is_ leaf	Mem ber_key
1	0	0	1
1	1	0	2
1	2	1	3
2	0	0	2
2	1	1	3
3	0	1	3

Fact

Emp_Key	Fact
1	100
1	200
1	555
1	234
2	654
2	111
2	222
2	983
3	47
3	22
3	985

Query constrained on Helen joins to Ancestor Key for her Member Key and her descendants' (Chris') Member Key

Which in turn joins to all facts for herself and Chris



# BIEE - 层次结构

- 通过中间关系表，递归解析父子关系：解析第三层节点

**P-C Dimension**

Emp_Key	Parent_Key	Emp_Name
1	(null)	Michele
2	1	Helen
3	2	Chris

**P-C Relationship**

Ances tor _key	Dist	Is_ leaf	Mem ber _key
1	0	0	1
1	1	0	2
1	2	1	3
2	0	0	2
2	1	1	3
3	0	1	3

**Fact**

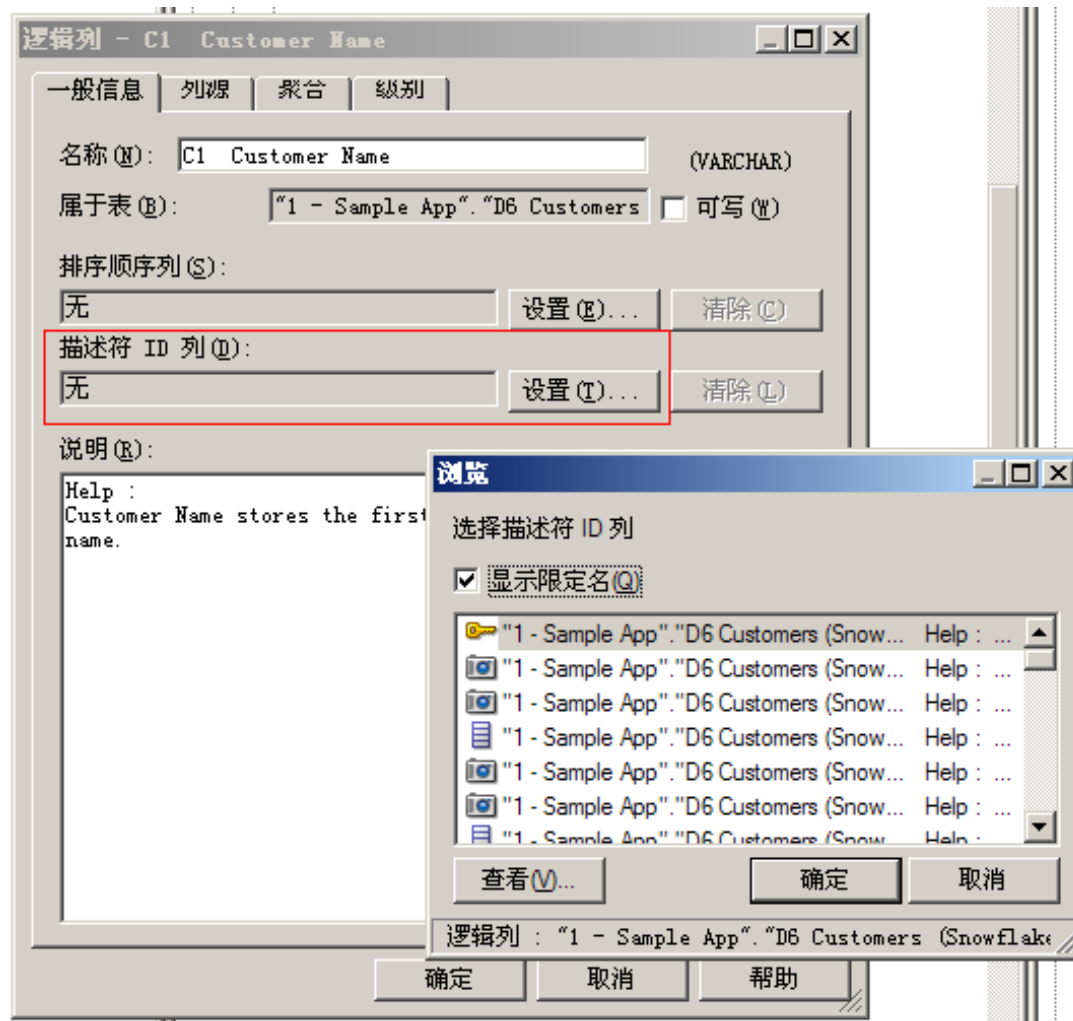
Emp_Key	Fact
1	100
1	200
1	555
1	234
2	654
2	111
2	222
2	983
3	47
3	22
3	985

Query constrained on Chris just joins to Ancestor Key for himself, since he is a leaf member

Which in turn joins to all facts for just himself

# BIEE - 层次结构

- 双列显示: 允许你选择Display Name, 但筛选器会根据 Column Code进行值的筛选



# BIEE - 层次结构

## ■ 双列显示提示

**New Prompt: P1 Product**

Prompt For Column: "Products"."P1 Product"

Included Code Column: P0 Product Number

Label: P1 Product

Description:

Operator: is equal to / is in

User Input: Choice List

**Options**

Choice List Values: All Column Values

☐ Limit values by: All Prompts

☒ Enable user to select multiple values

☐ Enable user to type values

☐ Require user input

☒ Enable user to select by Code Column

Label: P0 Product Number

Default selection: None

Set a variable: None

Help OK Cancel

Check this option to enable users to optionally see the value of mapped code column.

**P1 Product**

☐ 8 - V5x Flip Phone

☐ 17 - CompCell RX3

☐ 9 - Touch-Screen T5

☐ 10 - KeyMax S-Phone

☐ 2 - SoundX Nano 4Gb

☐ 3 - MicroPod 60Gb

☐ 20 - Bluetooth Adaptor

Search...

411,391 | 3,657,



# BIEE - 层次结构

■ Demo



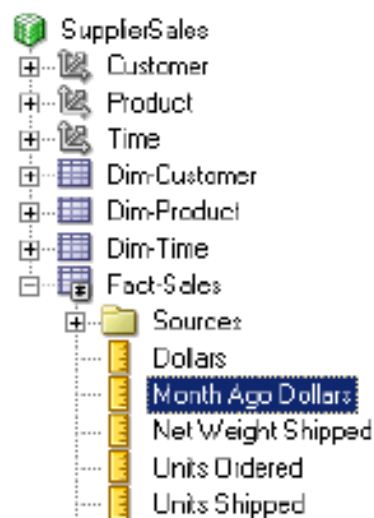
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# BIEE - 时间函数

- Ago: 查看指定周期前的数据，用于同比，环比分析

`Ago(<<Measure>>, <<Level>>, <<Number of Periods>>).`

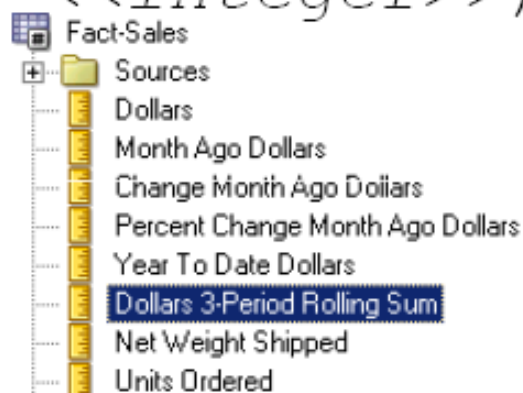




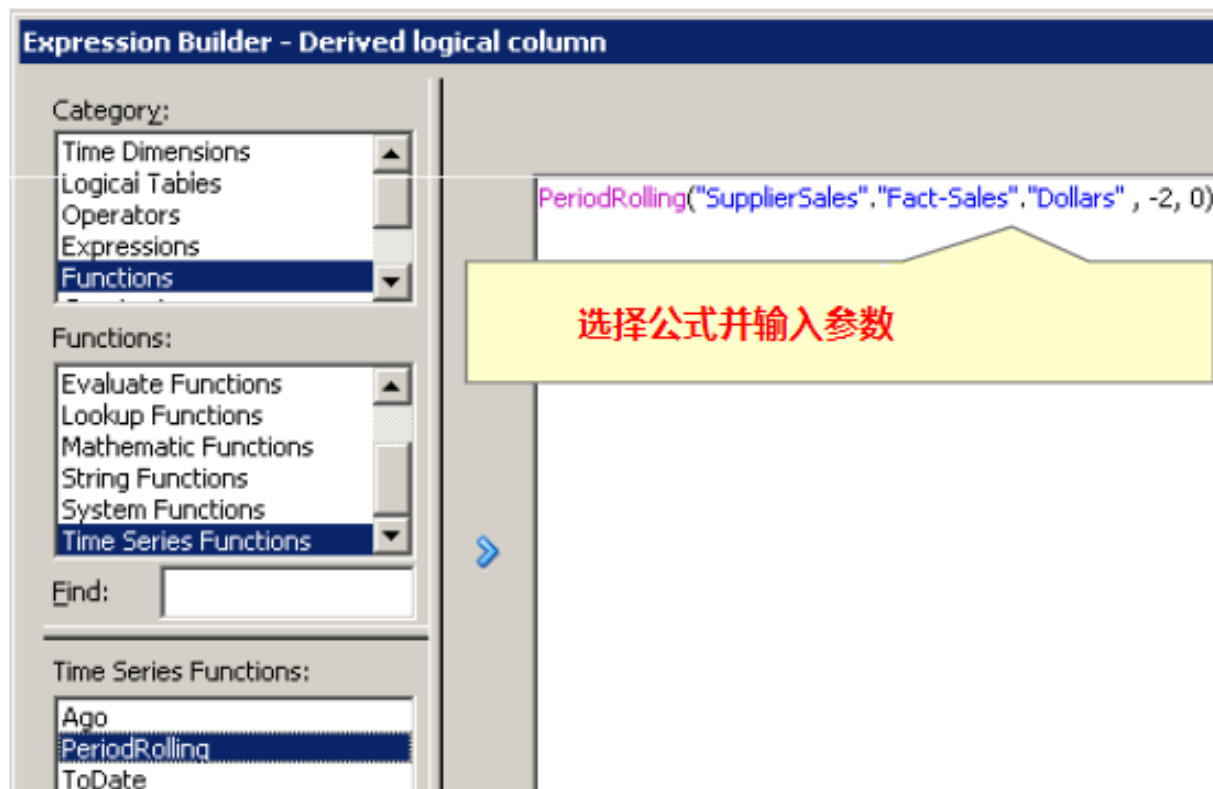
# BIEE - 时间函数

- PERIODROLLING: 查看指定周期范围内的数据，比如近两个月以内

`PeriodRolling(<<Measure>>, <<integer>>, <<integer>>).`



创建逻辑列





# BIEE - 时间函数

## ■ 时间函数示例

- 实际发生
- 一个季度之前
- 本季度累计
- 最近3个期间的总和
- 最近3个期间平均

	2008 Q1			2008 Q2			2008 Q3			2008 Q4		
	2008 / 01	2008 / 02	2008 / 03	2008 / 04	2008 / 05	2008 / 06	2008 / 07	2008 / 08	2008 / 09	2008 / 10	2008 / 11	2008 / 12
Dollars	100	200	300	101	202	303	110	220	330	444	555	666
Dollars Qago				100	200	300	101	202	303	110	220	330
Dollars QTD	100	300	600	101	303	606	110	330	660	444	999	1,665
Dollars 3-Period Rolling Sum	100	300	600	601	603	606	615	633	660	994	1,329	1,665
Dollars 3-Period Rolling Avg	33.3	100.0	200.0	200.3	201.0	202.0	205.0	211.0	220.0	331.3	443.0	555.0



Question Time!

# Q & A

## Questions & Answers

# Thank You !



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