



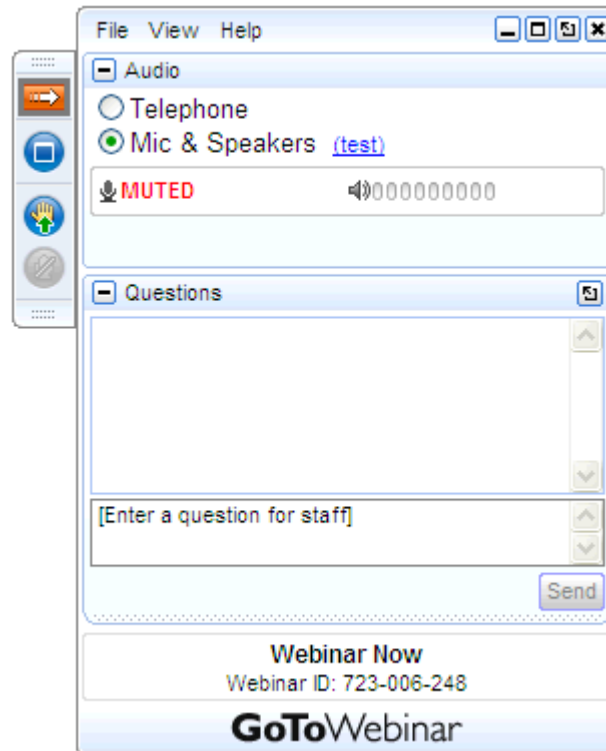
# SENTURUS

## USING TM1 WITH COGNOS BI

Cube Design Tips



# GoToWebinar Control Panel



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# Presentation Slide Deck on [www.senturus.com](http://www.senturus.com)



The screenshot shows the 'RESOURCES' section of the Senturus website. The header features the Senturus logo and a navigation menu with links: HOME, SERVICES, EXPERIENCE, TRAINING, EVENTS, RESOURCES, ABOUT US, and CONTACT. The main heading 'RESOURCES' is centered over a background image of an open book. Below the heading, a paragraph describes the resource library. A search bar and sorting options are provided. On the right, a 'LEGENDS' section includes 'FEATURED' and 'NEW' tabs, and a 'TOPICS' list with checkboxes and counts for various topics.

**SENTURUS** HOME SERVICES EXPERIENCE TRAINING EVENTS **RESOURCES** ABOUT US CONTACT

## RESOURCES

This is a comprehensive library of our past webinars, demonstrations, white papers, presentations and helpful hints easily sorted by the topics to the right. All of them are free. We constantly add new materials, so please check back often to see our latest content.

SEARCH RESOURCES  **GO**

SORT BY **Popularity** Date Title Type

RESOURCE TITLE	TYPE	GO

### LEGENDS

**FEATURED** **NEW**

### TOPICS

- ☐ ACORN (1)
- ☐ ANAPLAN (1)
- ☒ BUSINESS VALUE TOPICS (17)
- ☒ IBM COGNOS (59)
- ☐ INNOTAS (1)

# Today's Agenda

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- Introductions
- Overview
- TM1 Report Examples with Cognos BI
- TM1 Cube Design Options
- Including TM1 Text in BI Reports
- Special Offers
- Senturus Introduction
- Additional Resources
- Q & A



# Introduction: Today's Presenters

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**Greg Herrera**  
President & Co-Founder  
Senturus



**Ken O'Boyle**  
Senior Planning Architect  
Senturus

# Poll Question

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Which IBM Cognos products do you currently have deployed?

- Cognos BI only
- Cognos TM1 only
- Both Cognos BI and TM1
- Neither product



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## **OVERVIEW**

Why Use TM1 with Cognos BI?

# Overview

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## For BI Users: Reasons to Use TM1 as a Data Source

- Faster cycles from input/data load to content delivery
- Reduced ETL processes
- Reporting and analysis directly against an application
- Streamlined inclusion of planning information within the enterprise reporting platform



# Overview

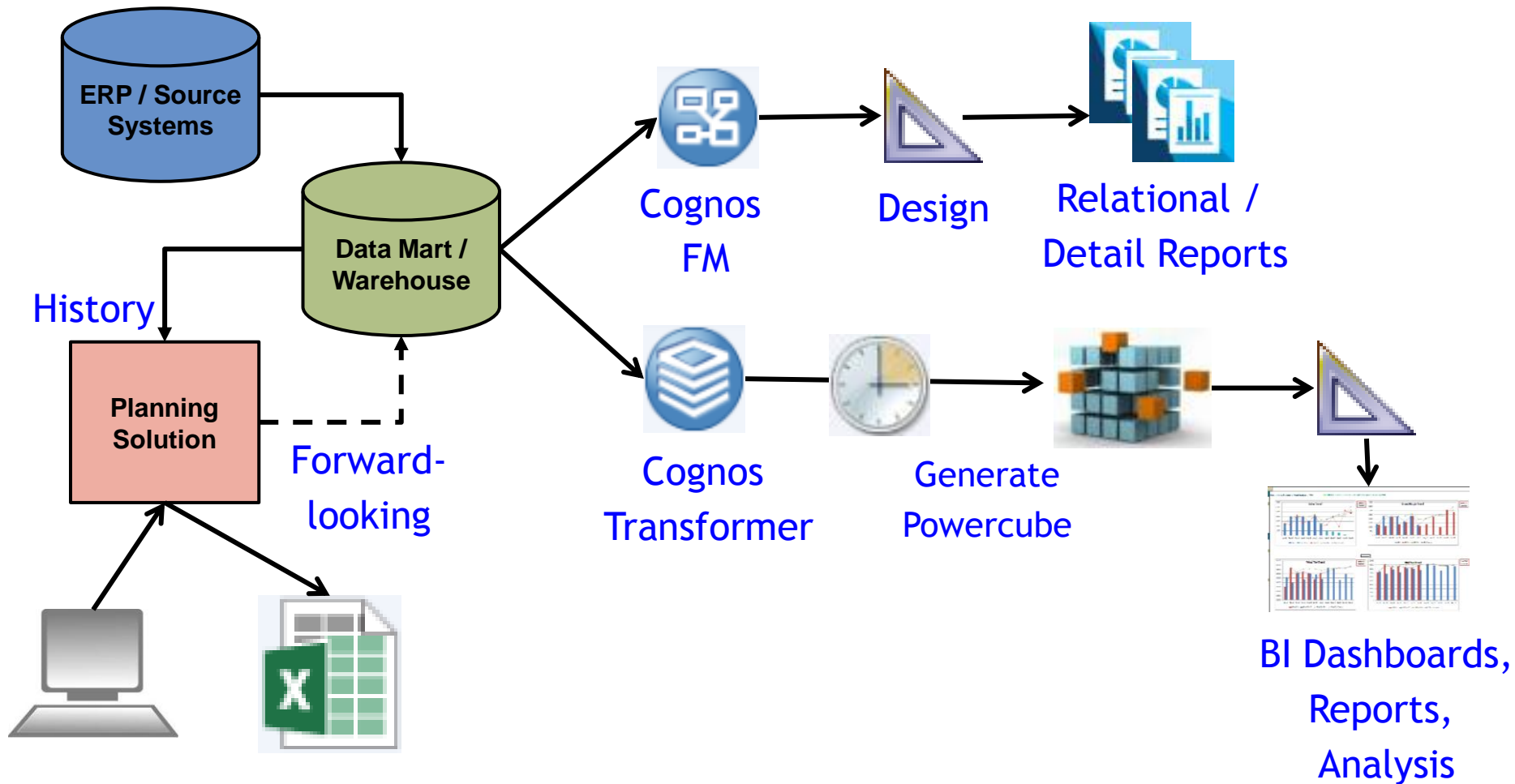
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## For TM1 Users: Reasons to Use Cognos BI

- Enterprise-scale, web-based reporting platform
- Broaden the audience for TM1 content
- Reduce dependence on Excel

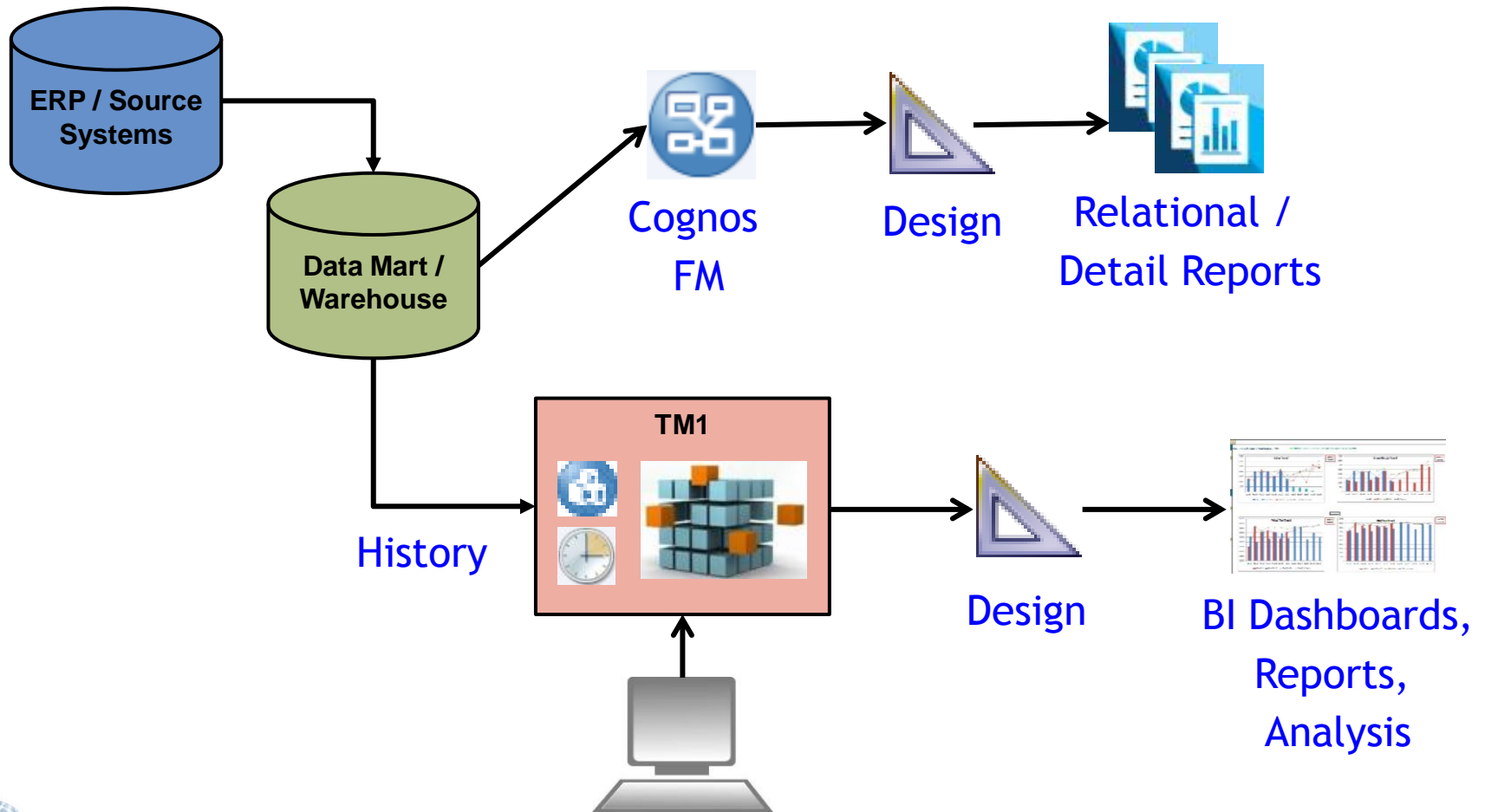
# Overview

## Common BI Architecture Including Planning Solution



# Overview

## Streamlined BI Architecture with TM1



# Overview

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## Key Points

- The BI Package for a TM1 cube has a similar look and capabilities as other OLAP/DMR sources
- Common requirements can be delivered with TM1
  - Balanced and Unbalanced Hierarchies
  - Alternate Hierarchies
  - Dimension Attributes
  - Relative Time
- TM1 Dimension and Cube design impacts BI capabilities
- TM1 allows you to store text values in an OLAP source

# Poll Question

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Which issues are you experiencing today using Cognos BI with an OLAP/DMR data source (TM1 or other)?

- BI data source/package doesn't support reporting requirements
- Unable to include text data in reports (cell values)
- Constrained by limited reporting capabilities over the web
- Long processing time to reflect data updates in BI content
- Other



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## **TM1 REPORTS**

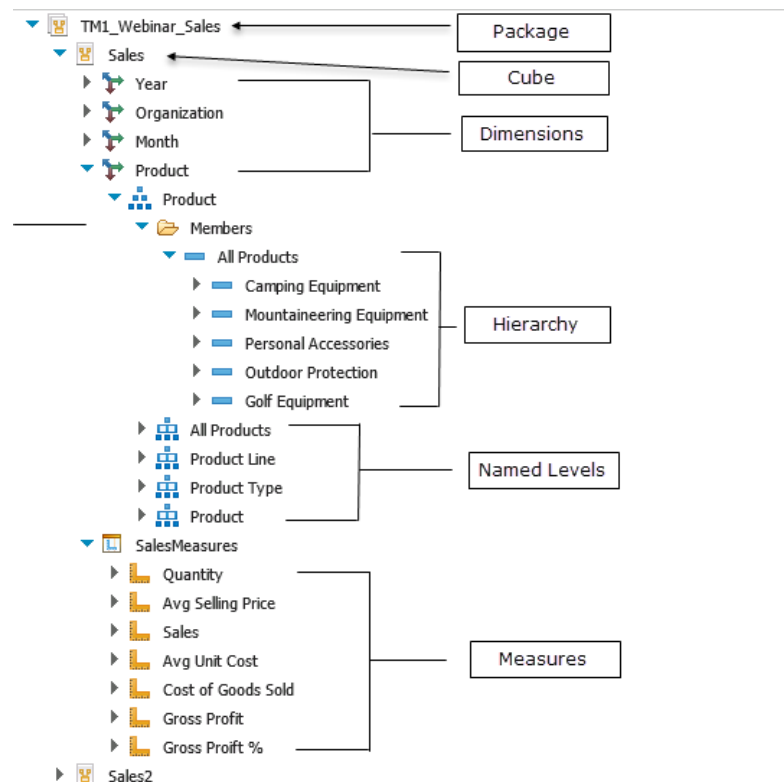
Examples



# TM1 Reports: Package Example

## TM1 Package Characteristics

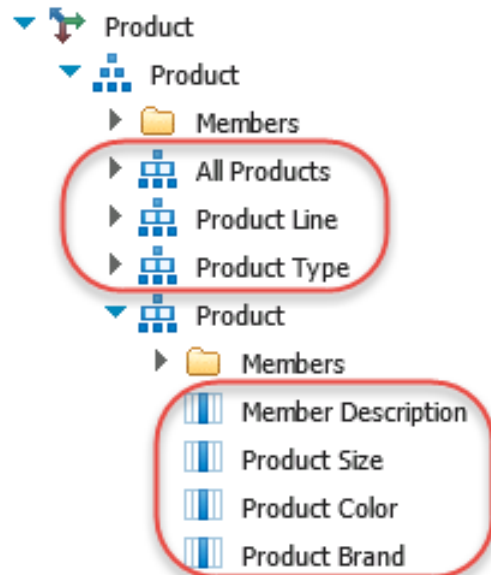
- Package is a reference to one or more TM1 Cubes
- Displayed the same as other OLAP/DMR sources
- Measures Dimension is specified in TM1 cube design



# TM1 Reports: Hierarchies

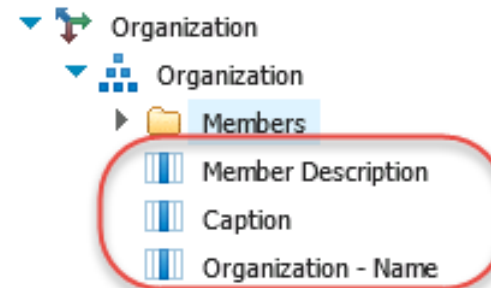
## Balanced vs. Unbalanced

### Balanced: Example = Product



- Named levels listed accurately and consistently
- Attributes available within each level

### Unbalanced: Example = Organization



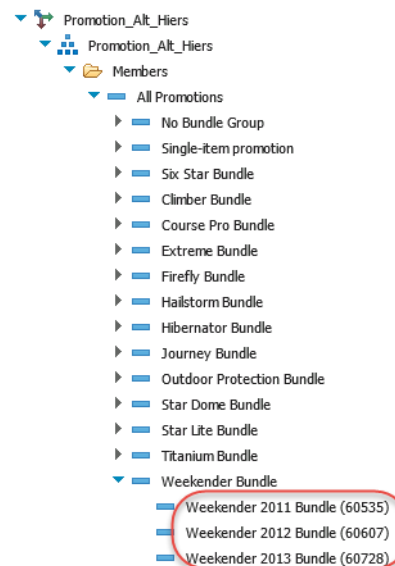
- Level based reporting is problematic
- Attributes available across the entire hierarchy

# TM1 Reports: Alternate Hierarchies

## Example: Promotion\_Alt\_Hiers Dimension

- Use Case: Marketing Promotions
- Two hierarchies each with a distinct root element
- Each leaf-level element rolls up to two parent elements
- Rollups by Bundle Group and Campaign

### Rollup by Bundle Group



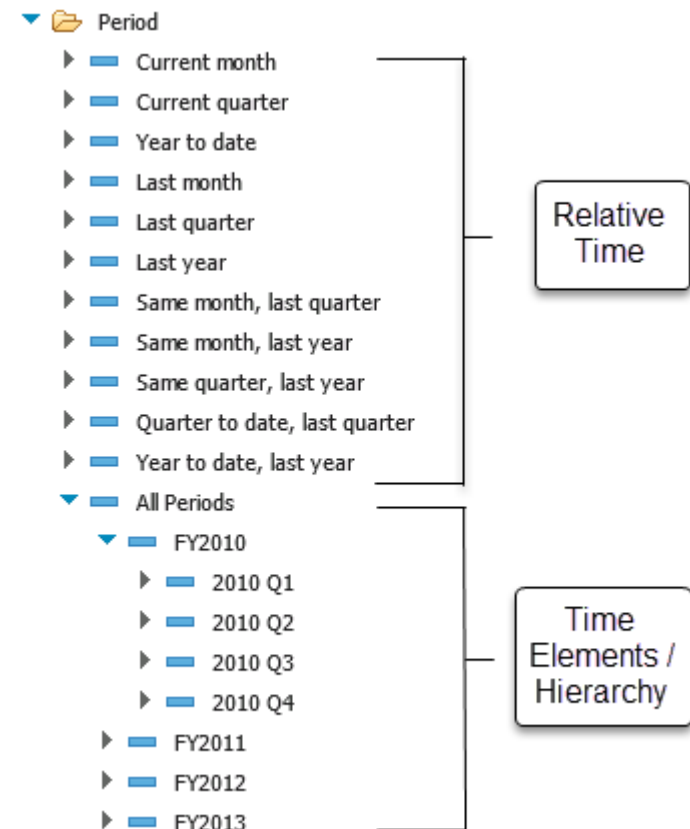
### Rollup by Campaign



# TM1 Reports: Relative Time

## Time Dimension Characteristics

- Relative time elements can be constructed (in TM1 10.2.2 they can also be generated)
- Implemented as alternate hierarchies













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## **TM1 CUBE DESIGN OPTIONS**

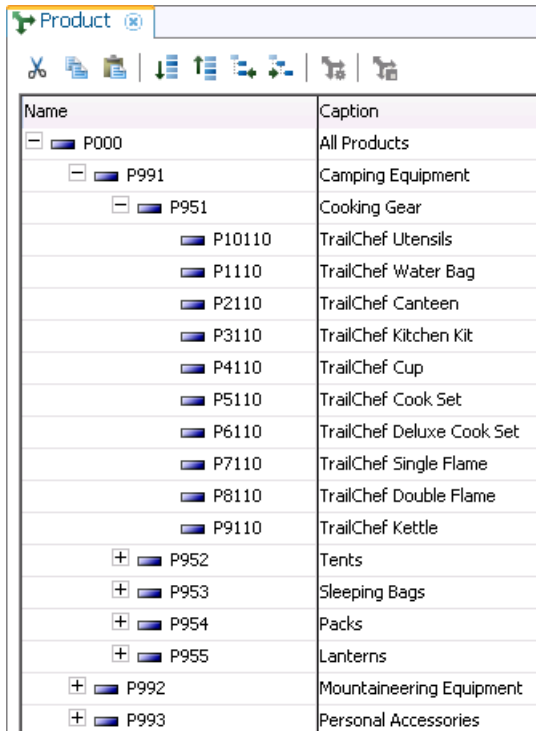
Dimensions, Hierarchies and Attributes

# TM1 Design: Hierarchies

## Balanced vs. Unbalanced

### Balanced

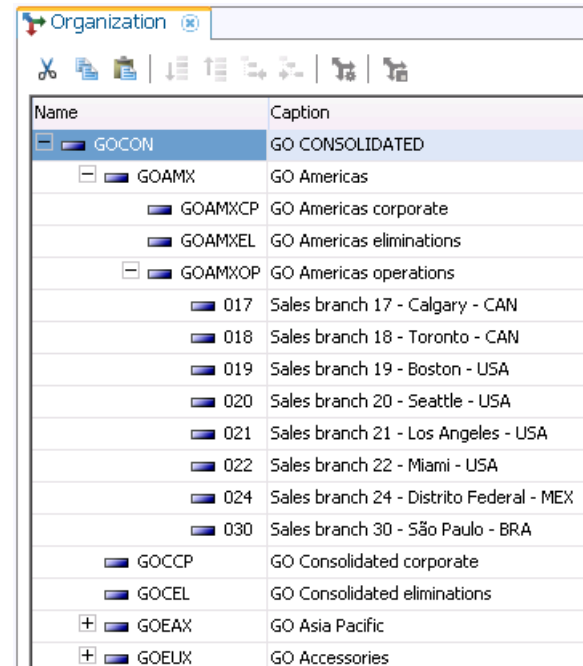
All leaf-elements are the same distance from the root element.



Name	Caption
P000	All Products
P991	Camping Equipment
P951	Cooking Gear
P10110	TrailChef Utensils
P11110	TrailChef Water Bag
P2110	TrailChef Canteen
P3110	TrailChef Kitchen Kit
P4110	TrailChef Cup
P5110	TrailChef Cook Set
P6110	TrailChef Deluxe Cook Set
P7110	TrailChef Single Flame
P8110	TrailChef Double Flame
P9110	TrailChef Kettle
+ P952	Tents
+ P953	Sleeping Bags
+ P954	Packs
+ P955	Lanterns
+ P992	Mountaineering Equipment
+ P993	Personal Accessories

### Unbalanced

Distance from root element varies for leaf-level elements.

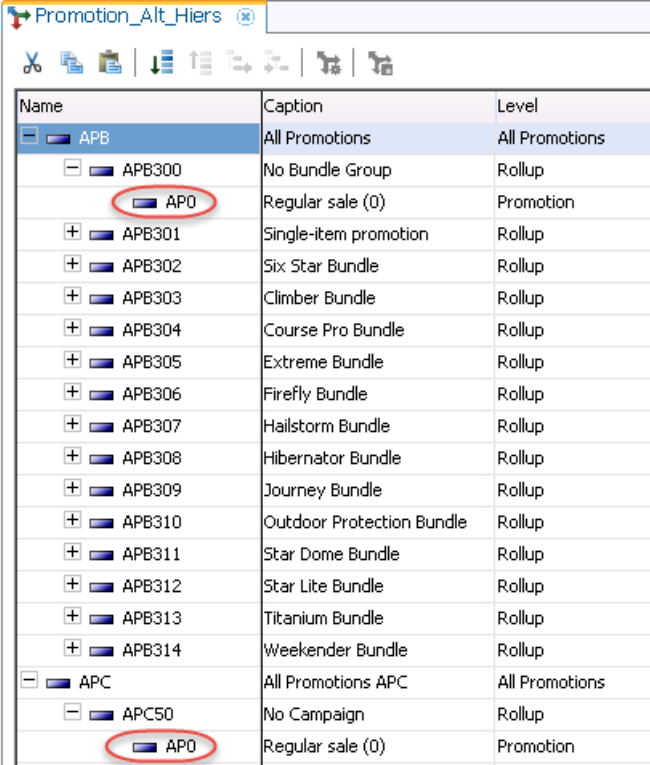


Name	Caption
GOCON	GO CONSOLIDATED
GOAMX	GO Americas
GOAMXCP	GO Americas corporate
GOAMXEL	GO Americas eliminations
GOAMXOP	GO Americas operations
017	Sales branch 17 - Calgary - CAN
018	Sales branch 18 - Toronto - CAN
019	Sales branch 19 - Boston - USA
020	Sales branch 20 - Seattle - USA
021	Sales branch 21 - Los Angeles - USA
022	Sales branch 22 - Miami - USA
024	Sales branch 24 - Distrito Federal - MEX
030	Sales branch 30 - São Paulo - BRA
GOCCP	GO Consolidated corporate
GOCEL	GO Consolidated eliminations
+ GOEAX	GO Asia Pacific
+ GOEUX	GO Accessories

# TM1 Design: Alternate Hierarchies

## Dimension Design for Alternate Hierarchies

- Elements are assigned to more than one parent
- Level names are not hierarchy specific
- Care must be taken to avoid in the design and reporting to avoid double counts

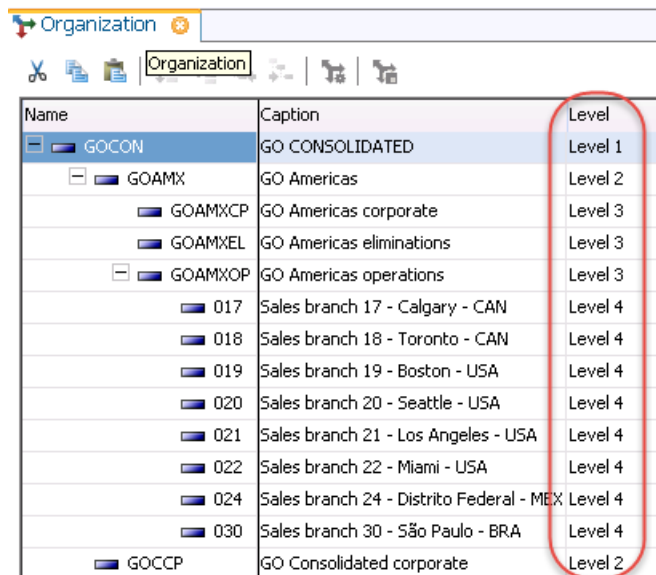


Name	Caption	Level
APB	All Promotions	All Promotions
APB300	No Bundle Group	Rollup
APO	Regular sale (0)	Promotion
APB301	Single-item promotion	Rollup
APB302	Six Star Bundle	Rollup
APB303	Climber Bundle	Rollup
APB304	Course Pro Bundle	Rollup
APB305	Extreme Bundle	Rollup
APB306	Firefly Bundle	Rollup
APB307	Hailstorm Bundle	Rollup
APB308	Hibernator Bundle	Rollup
APB309	Journey Bundle	Rollup
APB310	Outdoor Protection Bundle	Rollup
APB311	Star Dome Bundle	Rollup
APB312	Star Lite Bundle	Rollup
APB313	Titanium Bundle	Rollup
APB314	Weekender Bundle	Rollup
APC	All Promotions APC	All Promotions
APC50	No Campaign	Rollup
APO	Regular sale (0)	Promotion

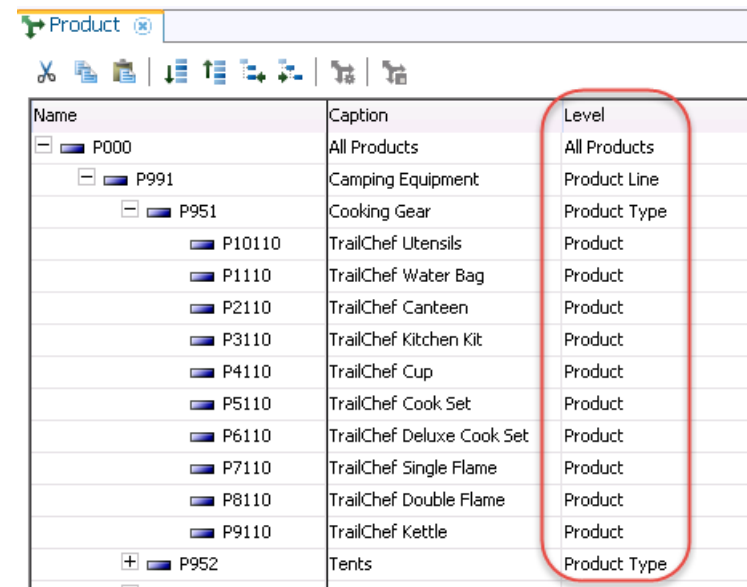
# TM1 Design: Named Levels

## Level Attribute

- System-generated attribute
- Defaults Level 1 ... Level n (top down)
- Defaults are ignored in BI
- Editing the Level for one element updates all peers
- Named Levels provide additional capabilities in BI



Name	Caption	Level
GOCON	GO CONSOLIDATED	Level 1
GOAMX	GO Americas	Level 2
GOAMXCP	GO Americas corporate	Level 3
GOAMXEL	GO Americas eliminations	Level 3
GOAMXOP	GO Americas operations	Level 3
017	Sales branch 17 - Calgary - CAN	Level 4
018	Sales branch 18 - Toronto - CAN	Level 4
019	Sales branch 19 - Boston - USA	Level 4
020	Sales branch 20 - Seattle - USA	Level 4
021	Sales branch 21 - Los Angeles - USA	Level 4
022	Sales branch 22 - Miami - USA	Level 4
024	Sales branch 24 - Distrito Federal - MEX	Level 4
030	Sales branch 30 - São Paulo - BRA	Level 4
GOCCP	GO Consolidated corporate	Level 2

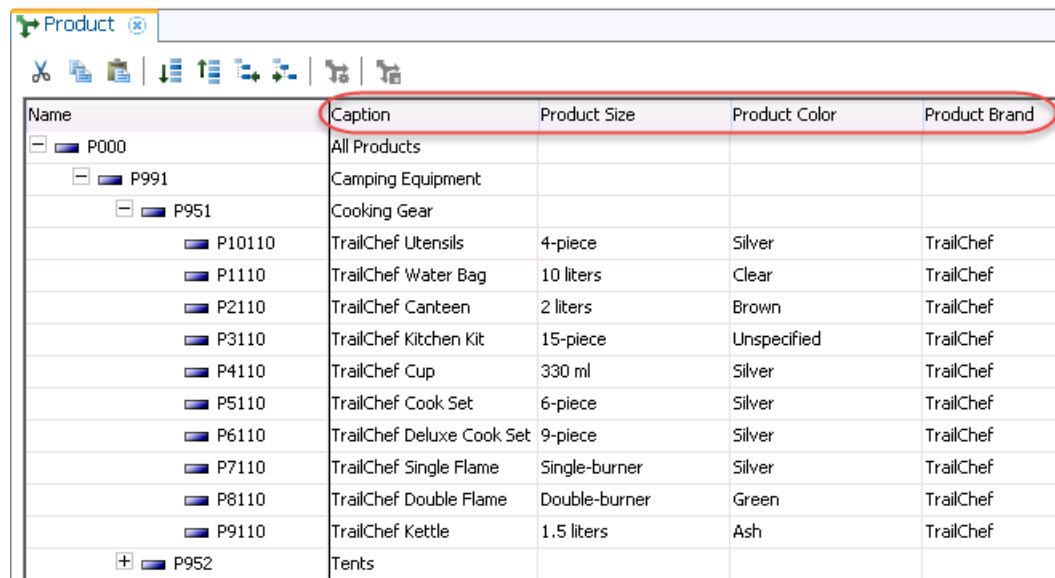


Name	Caption	Level
P000	All Products	All Products
P991	Camping Equipment	Product Line
P951	Cooking Gear	Product Type
P10110	TrailChef Utensils	Product
P1110	TrailChef Water Bag	Product
P2110	TrailChef Canteen	Product
P3110	TrailChef Kitchen Kit	Product
P4110	TrailChef Cup	Product
P5110	TrailChef Cook Set	Product
P6110	TrailChef Deluxe Cook Set	Product
P7110	TrailChef Single Flame	Product
P8110	TrailChef Double Flame	Product
P9110	TrailChef Kettle	Product
P952	Tents	Product Type

# TM1 Design: Attributes

## Attribute Characteristics

- Attribute Types: Alias, Text, Numeric
- One Alias attribute for each dimension can be set as the default display name in the BI package
- Populate at any or all levels of the hierarchy
- Attributes can be included in BI content



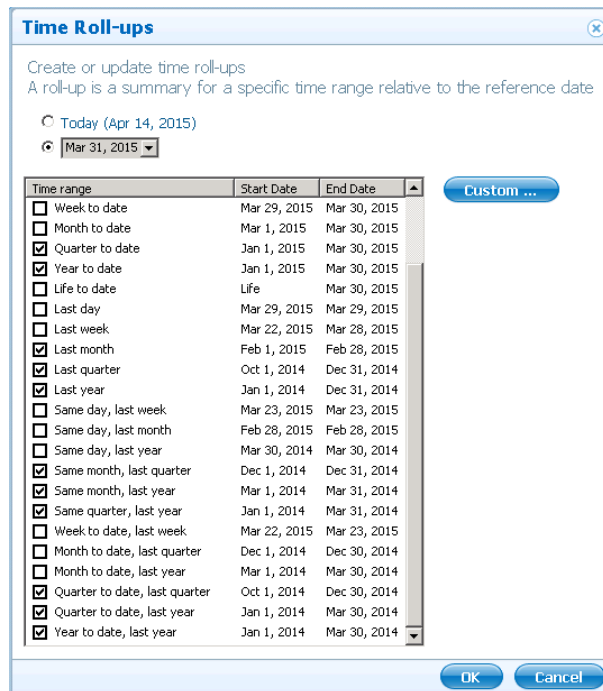
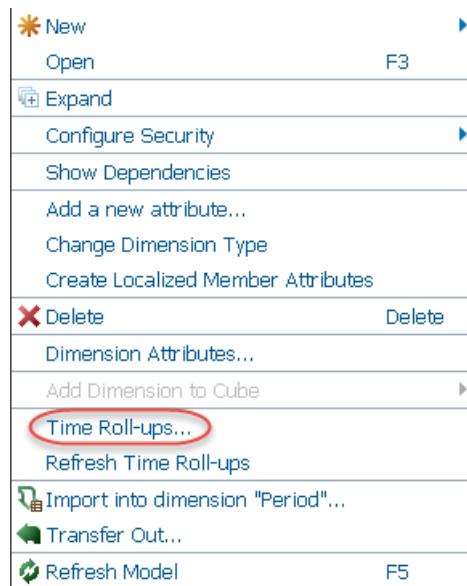
Name	Caption	Product Size	Product Color	Product Brand
P000	All Products			
P991	Camping Equipment			
P951	Cooking Gear			
P10110	TrailChef Utensils	4-piece	Silver	TrailChef
P1110	TrailChef Water Bag	10 liters	Clear	TrailChef
P2110	TrailChef Canteen	2 liters	Brown	TrailChef
P3110	TrailChef Kitchen Kit	15-piece	Unspecified	TrailChef
P4110	TrailChef Cup	330 ml	Silver	TrailChef
P5110	TrailChef Cook Set	6-piece	Silver	TrailChef
P6110	TrailChef Deluxe Cook Set	9-piece	Silver	TrailChef
P7110	TrailChef Single Flame	Single-burner	Silver	TrailChef
P8110	TrailChef Double Flame	Double-burner	Green	TrailChef
P9110	TrailChef Kettle	1.5 liters	Ash	TrailChef
P952	Tents			



# TM1 Design: Relative Time

## Time Dimension Features

- Dimension Type = Time: generates common attributes
- Populate Time Dimension Wizard populate elements, hierarchy and attributes
- Right-mouse menu has option to generate relative time elements



# TM1 Design: Measure Dimension

## Measure Dimension Characteristics

- Cube Property: Measure Reporting Dimension
- Mandatory selection before creating BI package
- Elements are displayed as Measures in BI

Properties	
Property	Value
Name	Sales2
Type	Cube
Security Owner	
<input type="checkbox"/> Dimensions	5
	<a href="#">Organization</a> (Webinar/Sales Reporting/Dimensions/Organization)
	<a href="#">Promotion_Alt_Hiers</a> (Webinar/Sales Reporting/Dimensions/Promotion_Alt_Hiers)
	<a href="#">Period</a> (Webinar/Sales Reporting/Dimensions/Period)
	<a href="#">Product</a> (Webinar/Sales Reporting/Dimensions/Product)
	<a href="#">SalesMeasures</a> (Webinar/Sales Reporting/Dimensions/SalesMeasures)
<input type="checkbox"/> Source Links	0
<input type="checkbox"/> Target Links	0
<input type="checkbox"/> Internal Links	0
Time Reporting Dimension	Period
Measures Reporting Dimension	SalesMeasures



## **TM1 TEXT CELLS IN BI REPORTS**

List Report Example

# TM1 Text in Cells

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## Common Challenge

- TM1, unlike many OLAP platforms, supports Text values in cube cells
- BI crosstabs do not render text, so the typical method for reporting and analysis against an OLAP source is not applicable to this use case

## Solution

- Use BI list reports when you need to deliver text values in reports

# TM1 Text in Cells

## Scenario

- TM1 Supports Text/Date-formatted Measures
- Requirement: Formatted Report with Crosstab Layout
- BI Crosstab Component does not Display Dates or Text

## TM1 Cube Viewer

Employee						
Rows: Columns: Context:						
RowNo-Emp Employee Report Employee Info 10 G&A Dept Cost Center Forecast Version						
	Employee Name	New Hire	Business Title	Status	St	Annual Salary
1	Agatha Reyes		Receptionist	FT	CA	35,360
2	Alice Walter		FP & A	FT	CA	110,000
3	Bart Scott		Executive Assistant	FT	CA	95,000
4	Dave Smythe		Corporate Controller	FT	CA	162,750
5	Donald Ward		Senior Accountant	FT	CA	85,000
6	Emily Browne		Senior Accountant	FT	CA	60,937
7	Jake Cartel		Treasurer	FT	CA	147,000
8	Janice Thomas		Chief Financial Officer	FT	CA	230,000
9	Karly Millers		Senior Accountant	PT	CA	50,000
10	Michael Horak		Accounts Payable Specialist	FT	CA	55,000
11	Paula Merkley		Chairman and CEO	FT	CA	350,000
12	Rick Butler		Sr. Business System Analyst	FT	CA	105,000
13	Samantha Pierce		Sr. Accounting Manager	FT	CA	127,500
14	Stan Gardiner		President & COO	FT	CA	250,000
15	TBH	Y	Sales Controller	FT	CA	127,500
16	TBH	Y	SOX	FT	CA	80,000
17	TBH	Y	General Counsel	FT	CA	200,000
18	TBH	Y	2015 Planning	FT	CA	90,000
19	TBH	Y	2015 Planning	FT	CA	90,000

## Cognos BI Crosstab

IBM Cognos Viewer - TM1 Report with Text - Crosstab

Keep this version

### Employee Report

10 G&A Dept

Forecast

	Employee Name	New Hire	Business Title	Status	St	Current Annual Salary
All Employees						2,451,047
1	--	--	--	--	--	35,360
2	--	--	--	--	--	110,000
3	--	--	--	--	--	95,000
4	--	--	--	--	--	162,750
5	--	--	--	--	--	85,000
6	--	--	--	--	--	60,937
7	--	--	--	--	--	147,000
8	--	--	--	--	--	230,000
9	--	--	--	--	--	50,000
10	--	--	--	--	--	55,000
11	--	--	--	--	--	350,000
12	--	--	--	--	--	105,000
13	--	--	--	--	--	127,500

Top Page up Page down Bottom

# TM1 Text in Cells

## Display TM1 Text with List Report

- Be sure to make a specific selection for each dimension in the report body, page or context area
- Include at least one measure as a column

### Cognos BI List Report

IBM Cognos Viewer - TM1 Report with Text - List										
admin Log Off About IBM										
Keep this version Add this report										
<b>Employee Report</b>										
10 G&A Dept										
Forecast										
Row No	Employee Name	Business Title	New Hire	Status	Location	Hire Period	Current Annual Salary	Monthly Salary	Monthly Bonus Accrual	Monthly Wages
All Employees							2,451,047	204,254	28,583	232,837
1	Agatha Reyes	Receptionst		FT	HQ	Apr-13	35,360	2,947		2,947
2	Alice Walter	FP & A		FT	HQ	Jul-11	110,000	9,167		9,167
3	Bart Scott	Executive Assistant		FT	HQ	Jan-04	95,000	7,917		7,917
4	Dave Smythe	Corporate Controller		FT	HQ	May-07	162,750	13,562	1,667	15,229
5	Donald Ward	Senior Accountant		FT	HQ	May-12	85,000	7,083		7,083
6	Emily Brow ne	Senior Accountant		FT	HQ	May-08	60,937	5,078		5,078
7	Jake Cartel	Treasurer		FT	HQ	May-09	147,000	12,250		12,250
8	Janice Thomas	Chief Financial Officer		FT	HQ	Mar-08	230,000	19,167	6,083	25,250
9	Karly Millers	Senior Accountant		PT	HQ	Sep-13	50,000	4,167		4,167
10	Michael Horak	Accounts Payable Specialist		FT	HQ	Aug-13	55,000	4,583		4,583
11	Paula Merlkey	Chairman and CEO		FT	HQ	Jun-10	350,000	29,167	12,500	41,667
12	Rick Butler	Sr. Business System Analyst		FT	HQ	Oct-13	105,000	8,750		8,750
13	Samantha Pierce	Sr. Accounting Manager		FT	HQ	Nov-13	127,500	10,625		10,625



# TM1 Text in Cells

## List Report Design

### Cognos BI List Report Design

The screenshot displays the Cognos BI List Report Design interface. The top menu bar includes File, Edit, View, Structure, Data, Style, Run, Tools, and Help. Below the menu is a toolbar with various icons for report design. The main workspace shows a report titled "Employee Report" with a context filter of "10 G&A Dept" and a forecast of "Forecast". The report is structured as a table with the following columns: Row No, Employee Name, Business Title, New Hire, Status, Location, Hire Period, Current Annual Salary, Monthly Salary, Monthly Bonus Accrual, and Monthly Wages. The table contains 19 rows of data, including a summary row for "All Employees".

Row No	Employee Name	Business Title	New Hire	Status	Location	Hire Period	Current Annual Salary	Monthly Salary	Monthly Bonus Accrual	Monthly Wages
All Employees							2,451,047	204,254	28,583	232,837
1	Agatha Reyes	Receptionist		FT	HQ	Apr-13	35,360	2,947		2,947
2	Alice Walter	FP & A		FT	HQ	Jul-11	110,000	9,167		9,167
3	Bart Scott	Executive Assistant		FT	HQ	Jan-04	95,000	7,917		7,917
4	Dave Smythe	Corporate Controller		FT	HQ	May-07	162,750	13,562	1,667	15,229
5	Donald Ward	Senior Accountant		FT	HQ	May-12	85,000	7,083		7,083
6	Emily Browne	Senior Accountant		FT	HQ	May-08	60,937	5,078		5,078
7	Jake Cartel	Treasurer		FT	HQ	May-09	147,000	12,250		12,250
8	Janice Thomas	Chief Financial Officer		FT	HQ	Mar-08	230,000	19,167	6,083	25,250
9	Karly Millers	Senior Accountant		PT	HQ	Sep-13	50,000	4,167		4,167
10	Michael Horak	Accounts Payable Specialist		FT	HQ	Aug-13	55,000	4,583		4,583
11	Paula Merkley	Chairman and CEO		FT	HQ	Jun-10	350,000	29,167	12,500	41,667
12	Rick Butler	Sr. Business System Analyst		FT	HQ	Oct-13	105,000	8,750		8,750
13	Samantha Pierce	Sr. Accounting Manager		FT	HQ	Nov-13	127,500	10,625		10,625
14	Stan Gardiner	President & COO		FT	HQ	Jan-14	250,000	20,833	8,333	29,167
15	TBH	Sales Controller	Y	FT	HQ	Mar-14	127,500	10,625		10,625
16	TBH	SOX	Y	FT	HQ	Oct-14	80,000	6,667		6,667
17	TBH	General Counsel	Y	FT	HQ	Jul-14	200,000	16,667		16,667
18	TBH	2015 Planning	Y	FT	HQ	Apr-15	90,000	7,500		7,500
19	TBH	2015 Planning	Y	FT	HQ	Oct-15	90,000	7,500		7,500

The right-hand pane shows the "Source" section with a tree view of the data sources. The selected source is "TM1\_Webinar\_Employee", which includes a hierarchy of "Employee Info" containing fields like Employee Name, New Hire, Business Title, Status, St, Location, Monthly Home Office Allowance, Hire Date, Hire Period, Term Period, Action, Current Annual Salary, Salary Effective Month, Annual Bonus Target, Monthly Salary, Monthly Bonus Accrual, and Monthly Wages.



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**SPECIAL OFFERS**

# Solving Financial Reporting Challenges

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## Complimentary Consultation

- One-hour meeting with Senturus experts to discuss your challenges and potential solutions
- Possible recommendations:
  - TM1 reporting enhancements
  - BI/TM1 integration POC
  - GL mart
  - Upgrade/refresh platform or leverage another client interface

Contact Senturus at [info@senturus.com](mailto:info@senturus.com) or 888-601-6010

# NEW: Developing TM1 Cubes for Cognos BI Training

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- May 20-21, 2015
- Learn to develop and deploy TM1 cubes to maximize reporting capabilities with Cognos BI
- Fully interactive course led by our IBM-certified experts with real world experience
- Register online: [www.senturus.com/training](http://www.senturus.com/training)

# Special Offer: \$200 off TM1 Online Training

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Coupon Code: TM1Cubes200

- First ten people to use it
- Expires April 25, 2015



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## **SENTURUS INTRODUCTION**

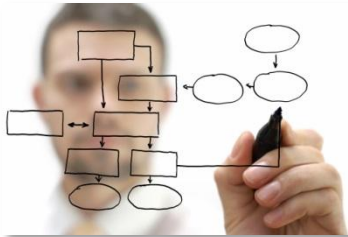
Who we are

# Senturus: Business Architects for Business Analytics

**Technology Depth**

+

**Business Acumen**



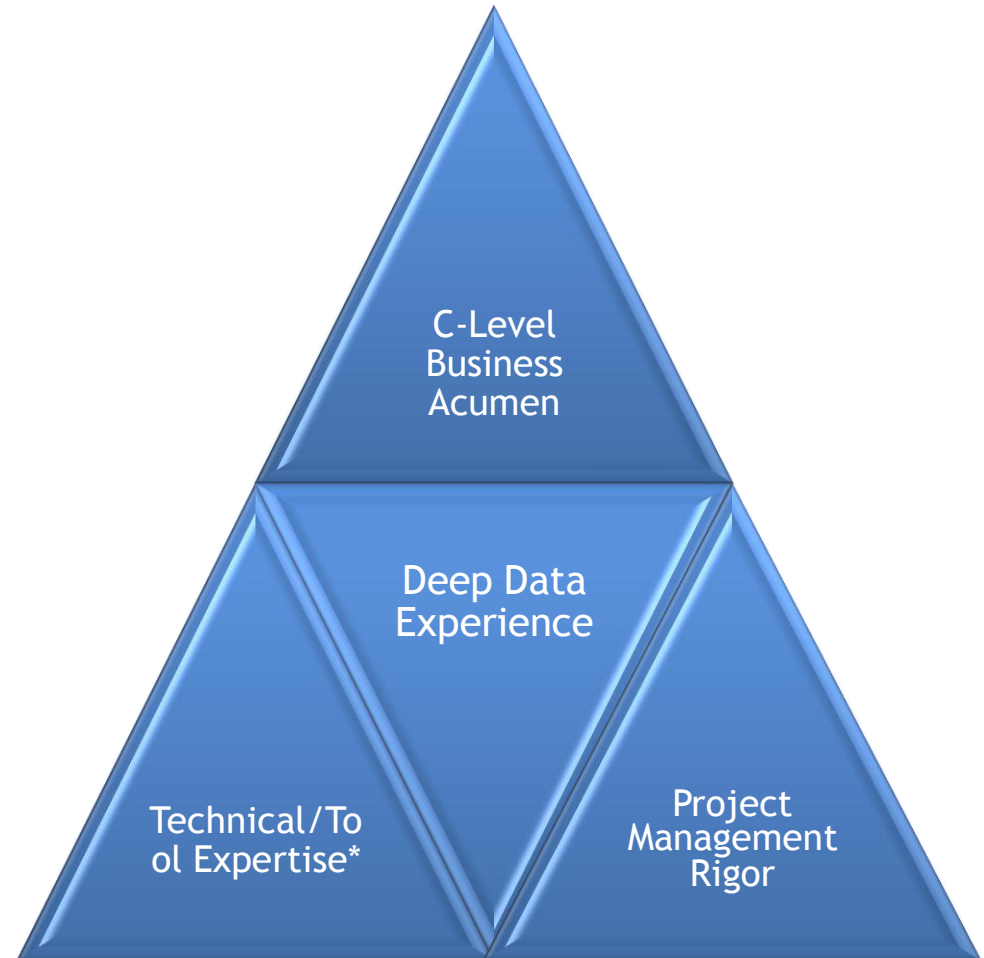
Business  
Intelligence



Enterprise  
Planning



Predictive  
Analytics



# A Few of Our 800+ Clients



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## **ADDITIONAL RESOURCES**

# Upcoming Events

[www.senturus.com/events](http://www.senturus.com/events)



## INSTALLING COGNOS BI 10.2.2

TIPS FOR SUCCESSFUL MIGRATION

Thursday, April 30 - 11am PT/ 2pm ET - 60 min.

[DETAILS](#)



## NOR CAL COGNOS USERS GROUP MEETING

MEETING IN REDWOOD CITY, CA

Thursday, May 7, 2015 - 9:30am - 2:00pm\* PT -

[DETAILS](#)



## DEMYSTIFYING IN-MEMORY TECHNOLOGIES

BEST USES AND COMPETITIVE ADVANTAGES FOR THE ENTERPRISE

Wednesday, May 13 - 11am PT/ 2pm ET - 60 minutes

[DETAILS](#)

# Cognos Training Options

**SENTURUS** HOME RESOURCES EVENTS **TRAINING** SERVICES EXPERIENCE ABOUT US CONTACT

**REAL INSTRUCTORS, REAL TIME, REAL LEARNING**

There's nothing virtual about our public online training courses. Senturus' instructors are live online, so attendees can ask questions and get real-time answers as if they were in a physical classroom. Students may also interact with each other. As they practice each new skill, the instructor will be able to see their screens and offer guidance. Classes are small enough for personal attention: typically 6 to 10 students take part, and each receive a hard-copy of the materials in advance.

**UPCOMING COURSES**

SEARCH TRAINING  **GO**

SORT BY **Date** Product Focus Title

PRODUCT	VERSION	FOCUS	TITLE	DATES	GO
<b>COGNOS</b>	10.2	REPORT STUDIO	REPORT STUDIO AUTHORIZING BEGINNING AND INTERMEDIATE	FEB - FEB 25 - FEB 26	→
<b>COGNOS</b>	10.2	REPORT STUDIO	REPORT STUDIO AUTHORIZING ADVANCED	FEB 27	→

**TRAINING**

- OVERVIEW
- REAL-WORLD TRAINING
- COURSE SCHEDULE**
- CUSTOM TRAINING

**YOUR REGISTERED TRAINING**

You have no training session in [your shopping cart](#).

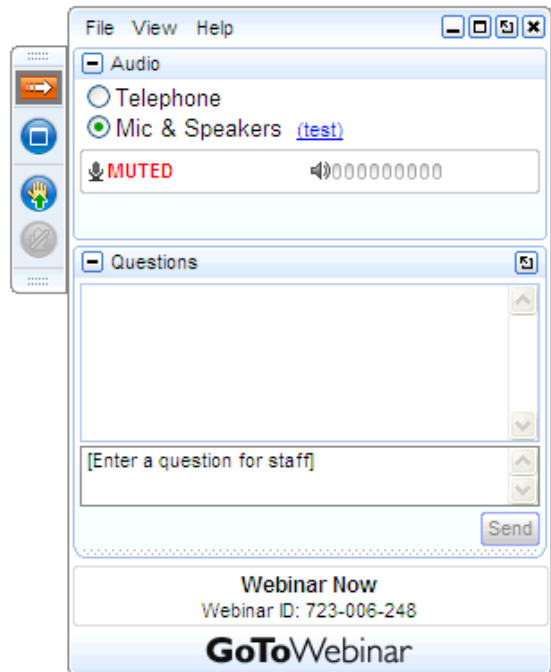
**ADDITIONAL HELP**

[Contact us](#) for more information, or phone 888.601.6010 ext1.

Learn about our [onsite, private & custom program](#).

\*Custom, tailored training also available\*

# Q&A



# Thank You!

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