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Great Lakes Oracle Conference

Oracle Analytics Cloud for the Finance Analyst

Tim German, Qubix

MAY 16 & 17, 2018

CLEVELAND PUBLIC AUDITORIUM, CLEVELAND, OHIO

WWW.NEOOUG.ORG/GLOC

Agenda

- What is OAC?
- Understand how to build Essbase Cloud cubes from unstructured data in Excel
- Learn the capabilities of the Excel Cube Designer plug-in to build / refine Essbase Cloud models
- Learn how to connect Data Visualization to Essbase Cloud
- Learn how to add more meaningful visualizations than are possible in Excel via Data Visualization
- Understand why these new capabilities are valuable for performance of daily work
- Q&A

Presenter

- Tim German
- 20 years experience with Essbase and Oracle EPM / BI
- Oracle ACE since 2015
- www.cubecoder.com
- @CubeCoderDotCom
- https://community.oracle.com/people/TimG

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What is OAC

- **O**racle **A**nalytics **C**loud
- Released March 17th 2017
- Multiple versions
- All contain…
  - Essbase Cloud (aka EssCS)
  - Data Visualization
  - Synopsis Mobile App

What is OAC

- Still the “core” Essbase engine
- New interfaces
- New pricing / licensing model
- New capabilities
  - Sandboxing / Scenario management
  - Smart View prompts

What is OAC

- Optionally…
  - Big Data Cloud Service
  - Oracle Business Intelligence (OBI)
- Oracle say…

“a single platform that empowers your entire organization to ask any question of any data in any environment on any device.”

What is OAC

- For Finance Analysts
  - Essbase is key!
  - Reporting in Excel
  - But also Data Visualization

What is OAC

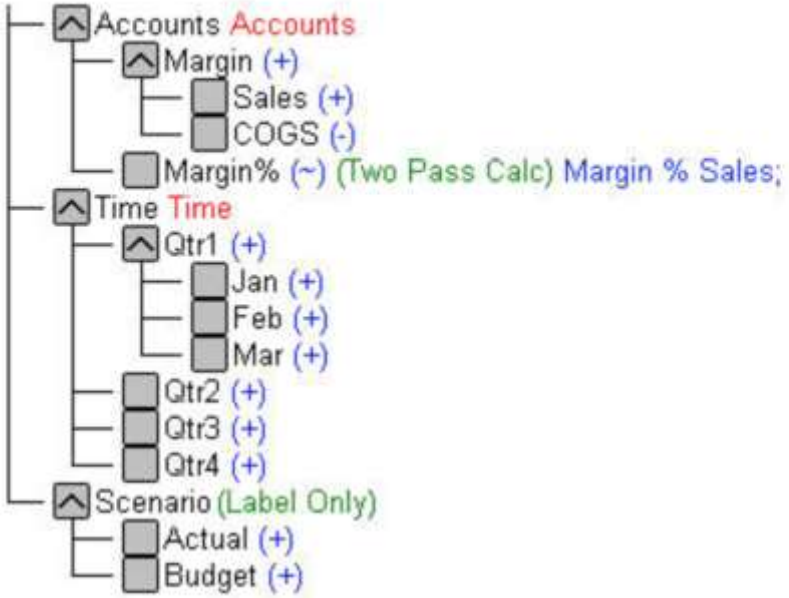
- What is Essbase?
- World's Greatest OLAP (On-Line Analytical Processing) Database
- Multidimensional
- Aggregation and Calculation
- Facilitates Modeling

What is OAC

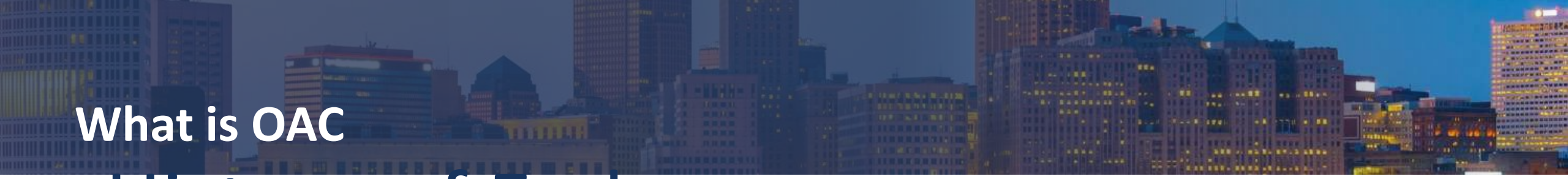
- Multidimensionality

Figure 15. Three-Dimensional Database

Figure 14. A Multidimensional Database Outline



- Source: https://docs.oracle.com/cd/E57185_01/EDBAG/understanding_multidim_dbs.html



What is OAC

- History of Essbase
- 1992 v1
- Began as extension to spreadsheets
- Lived in Finance
- Arbor -> Hyperion -> Oracle

Essbase Cloud

- New Excel-based tools to let *users* develop and share models
  - "Cube Designer" plug-in
  - Unstructured data import
- Bundled with Data Visualization (DV)

Building from Unstructured Data

Building from Unstructured Data

- Traditional Essbase build process
  - Identify dimensions
  - Define structures
  - Import structures (aka ‘metadata’)
  - Load data
- Uses IT-centric tools
- Suited to ‘curated’ production systems
- Does not maximize cloud potential

Building from Unstructured Data

- Essbase Cloud can interpret Excel workbooks in data dump format
- Columnar *structure* required
- Identifies data and metadata (dimensionality)
- Creates Essbase cube – shareable, extendable, modifiable

Building from Unstructured Data

	A	B	C	D	E	F	G	H	I	J	K
1	Units	Discounts	Fixed Costs	Variable Costs	Revenue	Month	Quarter	Years	Region	Area	Country
2	9	23.94	72.74	368.58	375.43	February	Qtr 1	CY2015	EMEA	North Africa	Morocco
3	10	0	367.44	372.47	1896	May	Qtr 2	CY2015	EMEA	Northern	United Kingdom
4	9	1.41	7.53	36.1	37.52	March	Qtr 1	CY2015	AMERICAS	Central	Panama
5	13	26.29	111.06	484.11	1401.8	December	Qtr 4	CY2014	AMERICAS	Central	Jamaica
6	12	20.83	195.45	818.08	2218.7	July	Qtr 3	CY2015	AMERICAS	South America	Peru
7	8	17.03	55.86	205.73	697.57	November	Qtr 4	CY2015	APAC	North	Russia
8	10	31.45	108.32	329.57	1117.8	June	Qtr 2	CY2015	AMERICAS	Central	El Salvador
9	5	14.74	207.26	650.77	523.22	April	Qtr 2	CY2014	AMERICAS	South America	Brazil
10	10	20	168.83	1104.13	1065.6	June	Qtr 2	CY2014	AMERICAS	South America	Uruguay
11	9	1.86	9.14	28.7	45.56	February	Qtr 1	CY2015	EMEA	Northern	Finland
12	19	0	354.48	33.84	232.03	January	Qtr 1	CY2016	APAC	West	India
13	12	83.24	266.75	20055.8	3223.1	September	Qtr 3	CY2015	APAC	West	India
14	10	60.09	413.4	2096.37	2133.1	May	Qtr 2	CY2015	APAC	North	Mongolia
15	4	0.53	24.97	1.93	16.58	February	Qtr 1	CY2014	EMEA	Africa	Nigeria
16	4	0.49	2.73	17.49	17.22	November	Qtr 4	CY2014	AMERICAS	North America	United States
17	10	0	243.55	1235.4	1256.7	October	Qtr 4	CY2015	EMEA	Europe	Switzerland
18	12	24.5	114.9	452.43	1304.2	July	Qtr 3	CY2015	EMEA	Middle East	Lebanon
19	9	29.48	46.75	220.71	626.17	February	Qtr 1	CY2016	AMERICAS	Central	Colombia
20	9	27.37	132.75	126.83	661.58	March	Qtr 1	CY2015	EMEA	Eastern	Ukraine
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21	9	28.93	114.66	465.1	591.58	February	Qtr 1	CY2015	AMERICAS	Central	Panama
22	21	6.38	446.99	42.67	337.61	April	Qtr 2	CY2016	AMERICAS	South America	Uruguay

Building from Unstructured Data

- Data is instantly available
- Dimensionally structured
- Aggregated
- Visible in Smart View for analysis
- Formulae… …one day?

Excel Cube Designer

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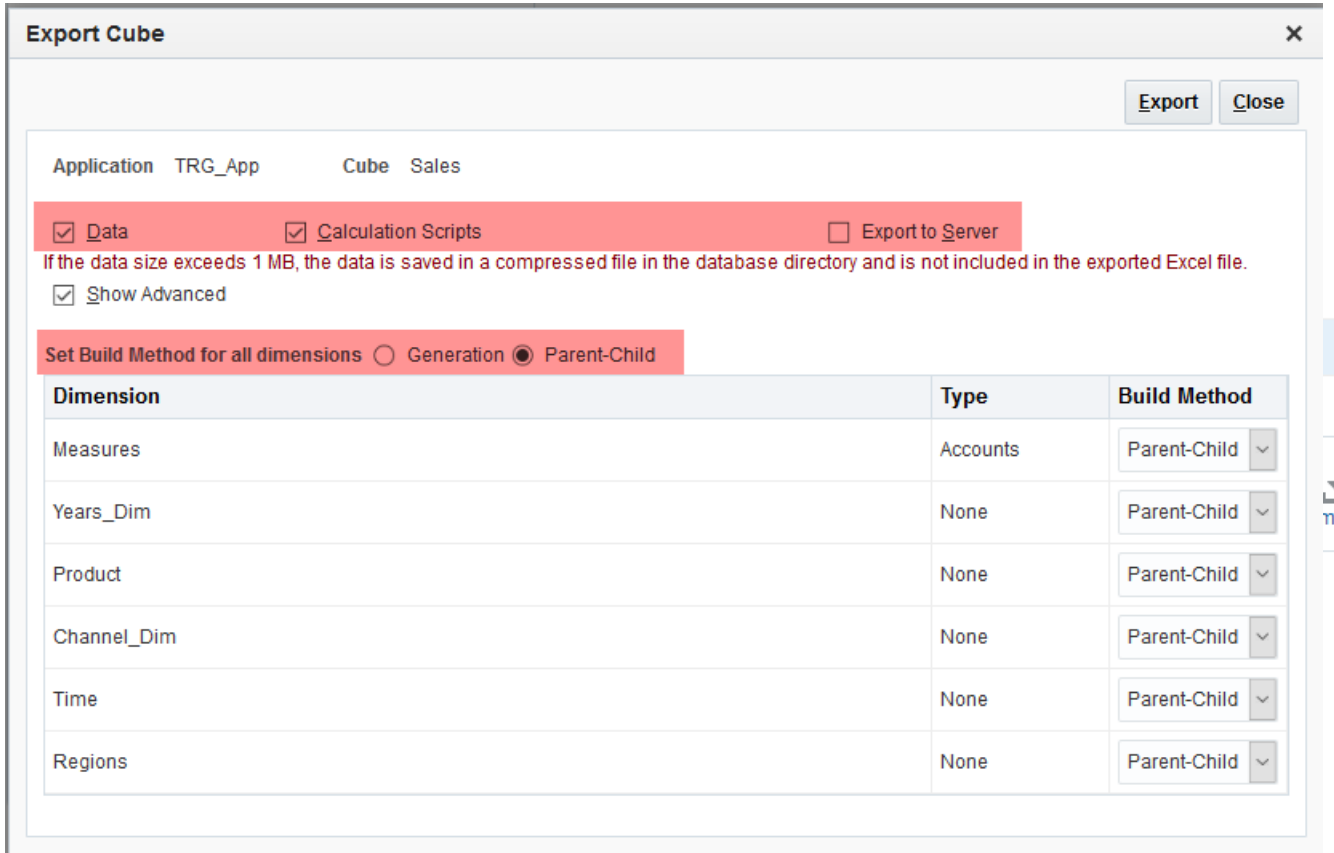
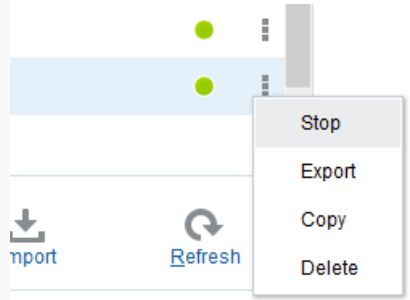
Excel Cube Designer

- Export back out into…
- Cube Designer!





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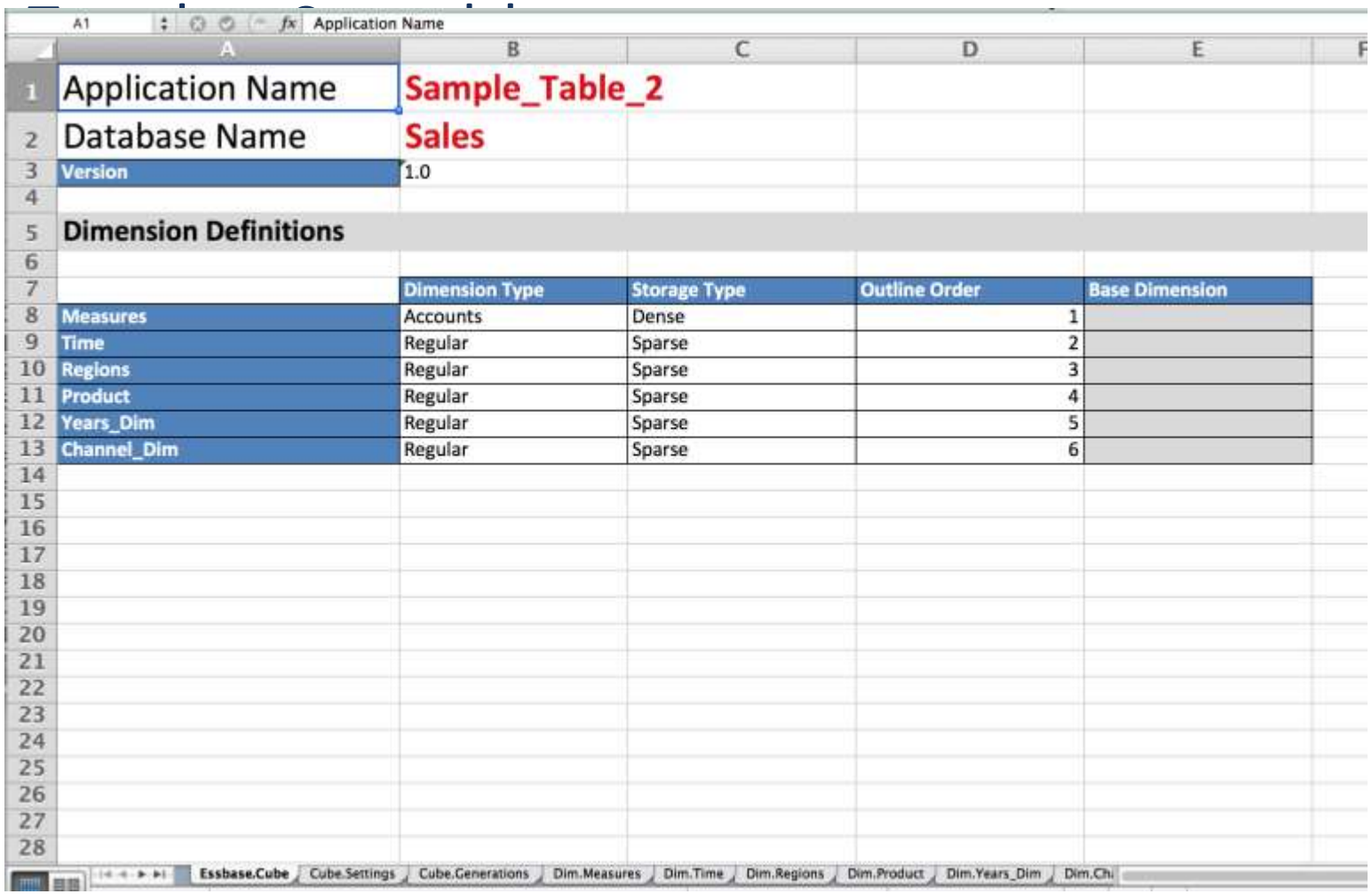
Excel Cube Designer

- 

	A	B	C	D	E
1	Application Name	Sample_Table_2			
2	Database Name	Sales			
3	Version	1.0			
4					
5	**Dimension Definitions**				
6					
7		Dimension Type	Storage Type	Outline Order	Base Dimension
8	Measures	Accounts	Dense	1	
9	Time	Regular	Sparse	2	
10	Regions	Regular	Sparse	3	
11	Product	Regular	Sparse	4	
12	Years_Dim	Regular	Sparse	5	
13	Channel_Dim	Regular	Sparse	6	
14					
15					
16					
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26					
27					
28					

Essbase.Cube | Cube.Settings | Cube.Generations | Dim.Measures | Dim.Time | Dim.Regions | Dim.Product | Dim.Years_Dim | Dim.Chi

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Excel Cube Designer

- More flexible / direct control of cube structure
- More control of settings / storage parameters
- From scratch or from unstructured

Excel Cube Designer

- Getting Started
  - Download Plug-In
  - Connect Smart View so Plug-In recognizes connection

Excel Cube Designer

- Create a new cube
  - Empty Template
  - Set, name and order dimensions

Excel Cube Designer

- Developing the Cube Structure
  - Cube-level settings
  - Dimension-level settings (tagging as time and so on)
  - Define dimension structure / hierarchies
  - Even add formulas…

Excel Cube Designer

- Push to the Cloud!
  - Save template
  - Push to server
  - Review…

Connecting Data Visualization

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Connecting Data Visualization

- Navigate to DV URL
- Create New Connection
- Create New Data Source

Connecting Data Visualization

- Create New Project
- Add Data Source

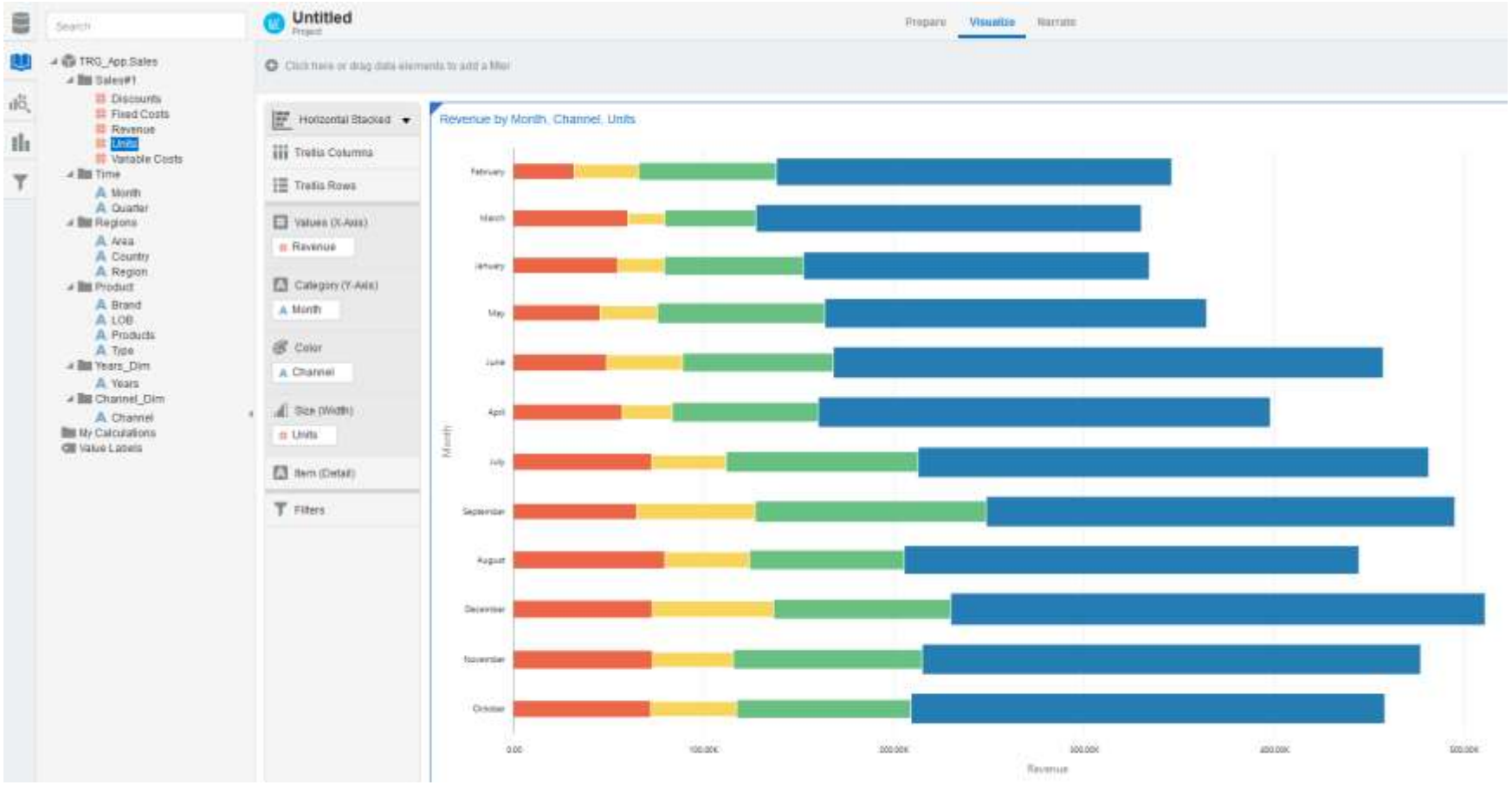
Connecting Data Visualization

- Three step process
  - Prepare
  - Visualize
  - Narrate

Used DV to Create More Meaningful Visualizations

Used DV to Create More Meaningful Visualizations

- Some Visualization types are familiar



Using DV to Create More Meaningful Visualizations

- Treemap

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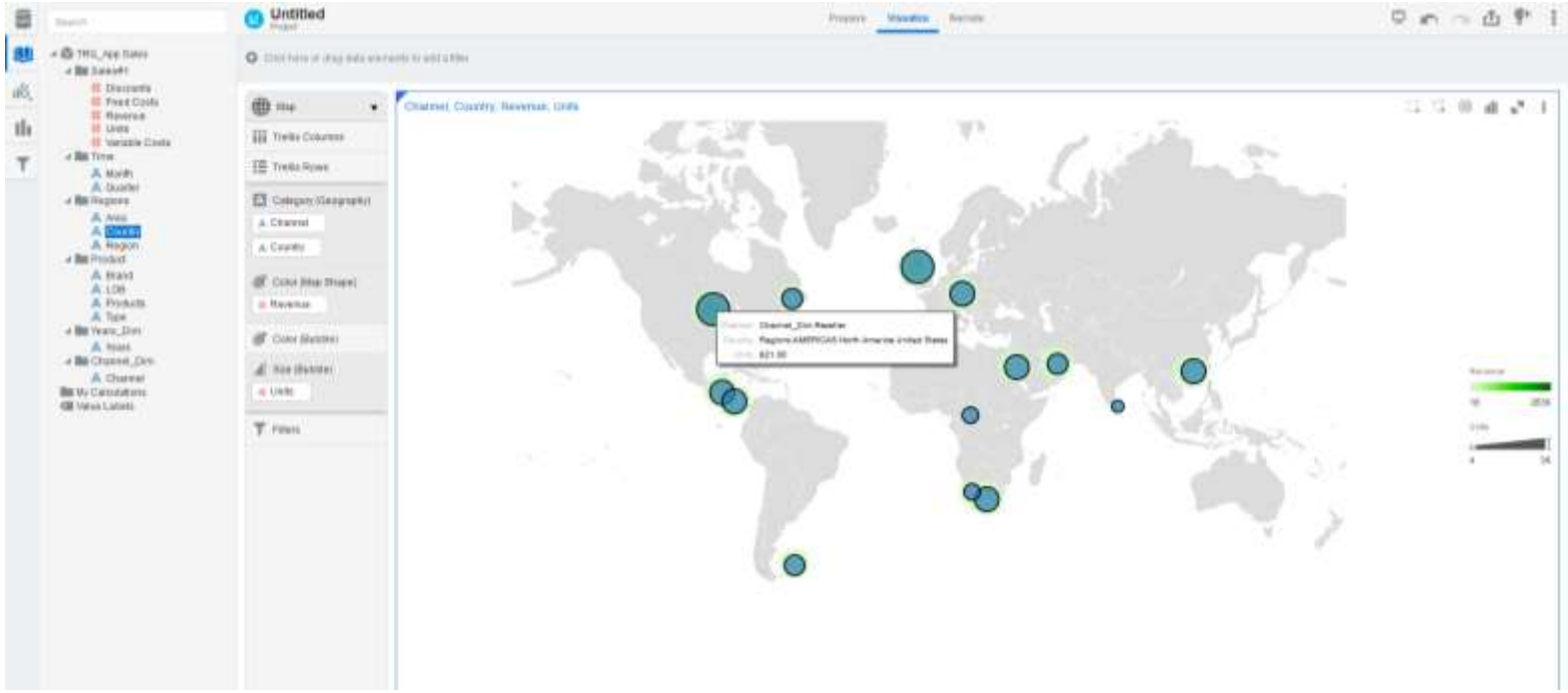
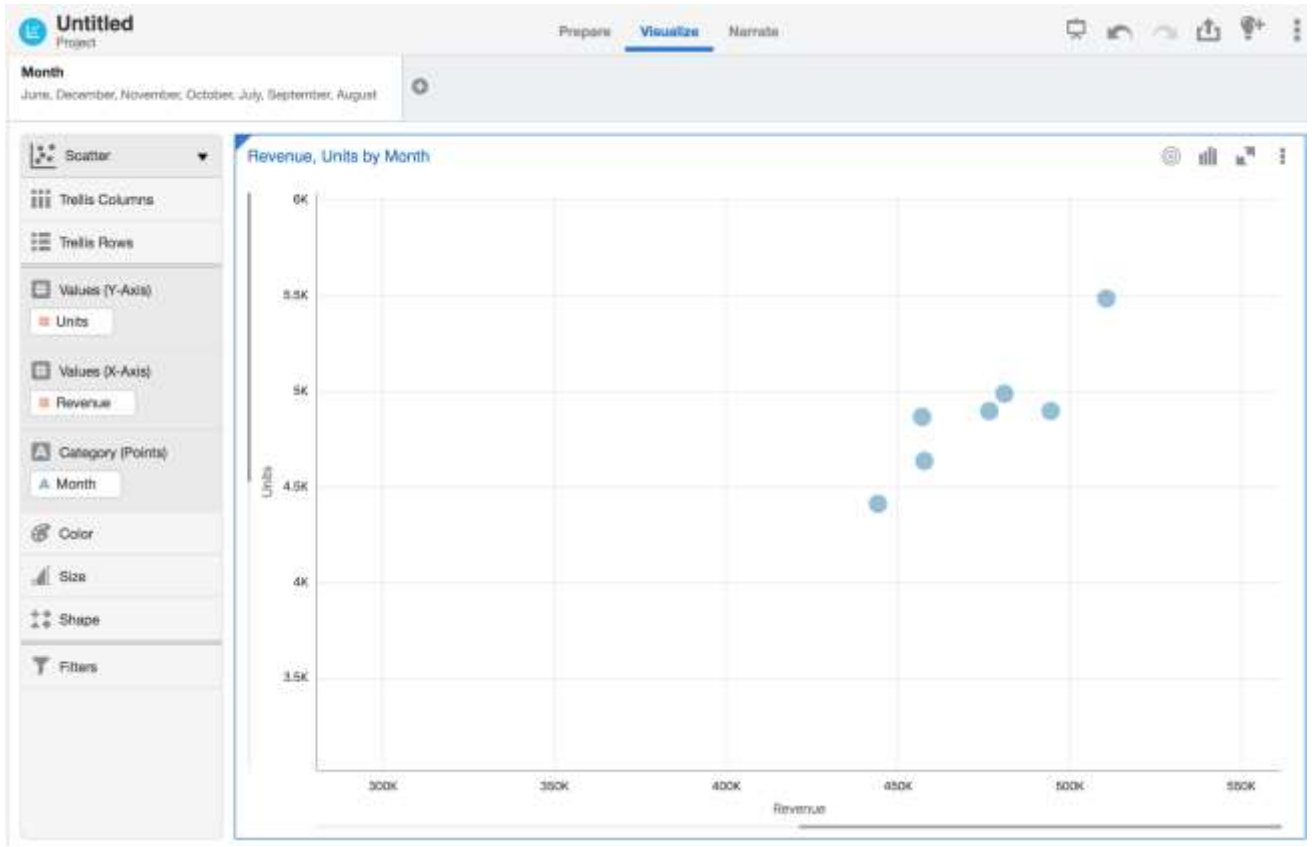
Used DV to Create More Meaningful Visualizations

- “Real” maps!



Used DV to Create More Meaningful Visualizations

- Automatic visualization select and easy filters for “drilldown”



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Used DV to Create More Meaningful Visualizations

- And more…
  - –Trend forecast
  - –Regression analysis
  - –Machine Learning – explanation and prediction
  - –Mashups
  - –Automatic narrative generation

Daily Value

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Daily Value

- Essbase back in the hands of power users and analysts retaining enterprise grade security etc
- Faster and more flexible modeling via Sandboxing and Hybrid
- Mash-up capabilities
- More compelling and meaningful visualizations
- More sharing
- Faster to insight

Q&A

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