

# Oracle BI 12.2.1.1 New Features

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# VlamiS Software Solutions

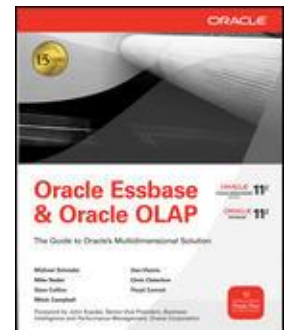
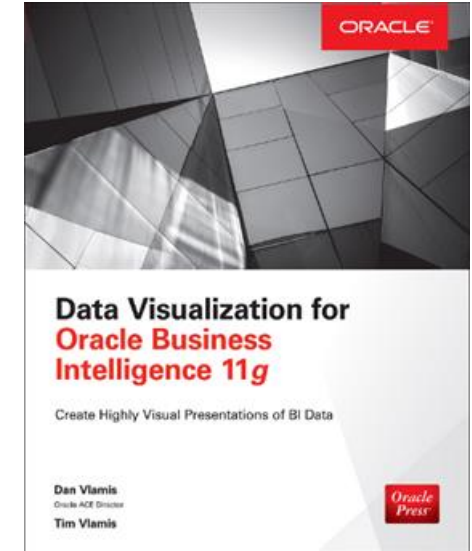
- VlamiS Software founded in 1992 in Kansas City, Missouri
- Developed 200+ Oracle BI and analytics systems
- Specializes in Oracle-based:
  - Enterprise Business Intelligence
  - Data Warehousing
  - Data Mining and Predictive Analytics
  - Data Visualization
- Multiple Oracle ACEs, consultants average 15+ years
- [www.vlamiS.com](http://www.vlamiS.com) (blog, papers, newsletters, services)
- Co-authors of book “Data Visualization for OBI 11g”
- Co-author of book “Oracle Essbase & Oracle OLAP”
- Oracle University Partner
- Oracle Gold Partner

 EDUCATION RESELLER

 APPROVED  
EDUCATION CENTER

 Gold  
Partner

Specialized  
Oracle Business Intelligence  
Foundation Suite 11g





# OBIEE and BICS New Features Webcasts

- 11.1.1.3 (August 2010)
  - Huge release with major new functionality
- 11.1.1.5 (May 2011)
  - BIWA TechCast May 25: [Oracle BI 11.1.1.5 - New Features](#)
- 11.1.1.6 (February 2012)
  - BIWA TechCast Feb 29: [Oracle BI 11.1.1.6 New Features](#)
  - New features mostly for Exalytics
- 11.1.1.6.2 and 11.1.1.6.2 BP1 (May 2012 and June 2012)
  - BIWA TechCast Aug 1: [Oracle BI 11.1.1.6.2 BP1 New Features](#)
  - BI Mobile rewrite
  - Trellis Views
- 11.1.1.7 (April 2013)
  - BIWA TechCast Apr 5 [Oracle BI 11.1.1.7 New Features](#)
  - Freeze headers/scroll bars for tables and pivot tables
  - View content in SmartView in Excel and enhanced export
  - New Oracle R Enterprise (ORE) integration and capabilities
- 11.1.1.9 (May 2015)
  - BIWA TechCast Jun 4, 2015 [Oracle BI 11.1.1.9 New Features](#)
  - Search in Subject Areas pane
  - New Treemap view
  - Global variables and Save Column As choice in Criteria tab
- 12.2.1 (October 2015)
  - BIWA TechCast Nov 19, 2015 [Oracle BI 12.2.1 New Features](#)
  - Alta UI Skin, new home page
  - Visual Analyzer and Data Mashup
- BICS March 2016 (March 2016)
  - Webcast Apr 5, 2016 BICS [BICS March 2016 New Features](#)
- 12.2.1.1 (June 2016)
  - BIWA TechCast Jul 19, 2016 [Oracle BI 12.2.1.1 New Features](#)
  - New Visualizations in VA
  - Dashboard Subpages
  - New Data Wrangling features
  - BI Publisher and MapViewer enhancements



# Use Questions or Chat or Questions to communicate

www.vlamiS.com



Oracle-based Business Intelligence  
and Data Warehousing Solutions

Home Blog About Us Data Mining OBIEE BICS OLAP **Presentations** Services Technologies Training Test Dr

## Papers by Year

2016

2015

2014

2013

2012

2011

2010

2009

2008

2007

2006

2005

2004

2003

2002

2001



## Papers and Presentations | 2015

You must have an **Adobe Acrobat** compatible reader installed to view our papers. If you would like to have a copy of a paper or presentation we have given that has not yet been posted, please send an e-mail to [papers@vlamis.com](mailto:papers@vlamis.com) with the name of the conference and the year you need. Links to papers will open in a new window.

### BIWA Summit

January 27 - 29, 2015 • Redwood City, CA • [Website](#)

#### Data Visualization for Oracle Business Intelligence 11g

[Abstract](#) | [Presentation](#)

#### Integrating Oracle Advanced Analytics into OBIEE dashboards

[Abstract](#)

#### VlamiS Lightning Round Presentation

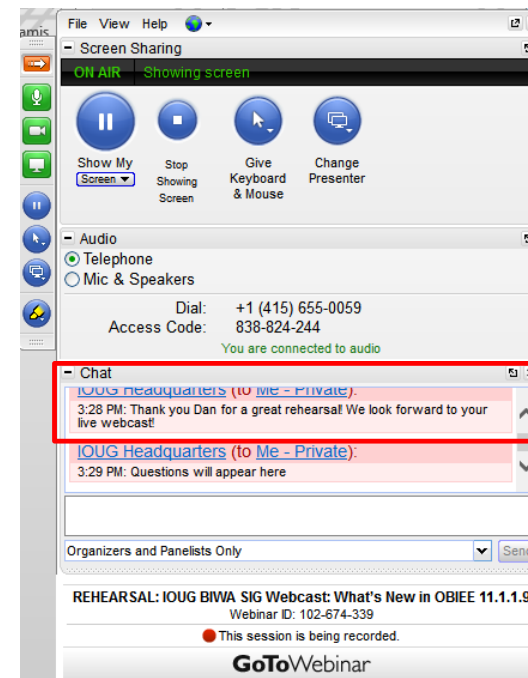
[Presentation](#)

### BIWA Techcast

February 17, 2015

#### Data Visualization for Oracle Business Intelligence 11g

[Abstract](#) | [Presentation](#) | [Watch Replay](#)



Courtesy Oracle BI PM Demo Group





# High Level List of New Features

- First patch release of 12c
- Feature parity with BICS and DVCS
- More VA data visualization enhancements
- Data Wrangling – Transformations associated with a data set
- New Data Sources & Permissions
- Data Blending XSA – XSA Sources
- Dashboard Subpages
- Detailed Upgrade Guide
- New Baseline Validation Tool (BVT) features
- BI Publisher and MapViewer Enhancements

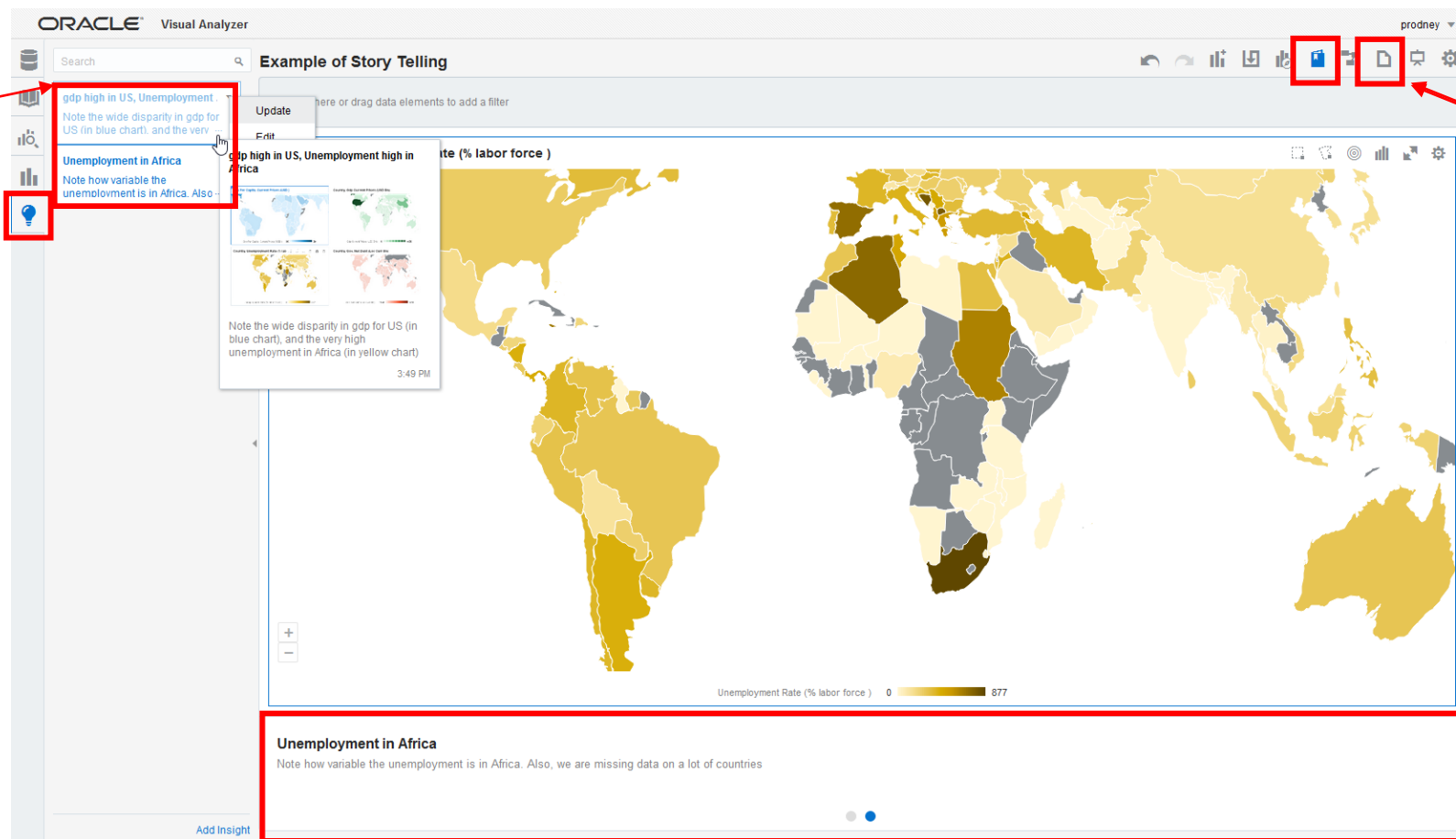




# Story Telling and Insight Enhancements

## ■ BICS and DVCS VA Feature Parity – Story Telling

- Click to make active.
- Drag to reorder.
- Hover to get preview.



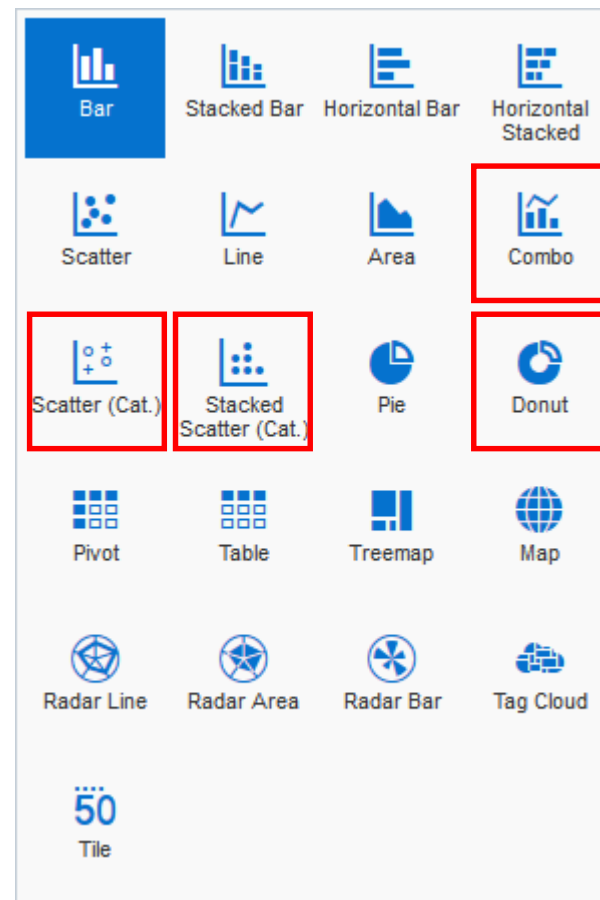
Presentation mode  
hides navigation  
and editing panels

Editable Insight



# New Visualizations in VA

- Combo (with dual axes)
- Scatter (Cat.)
- Stacked Scatter (Cat.)
- Donut

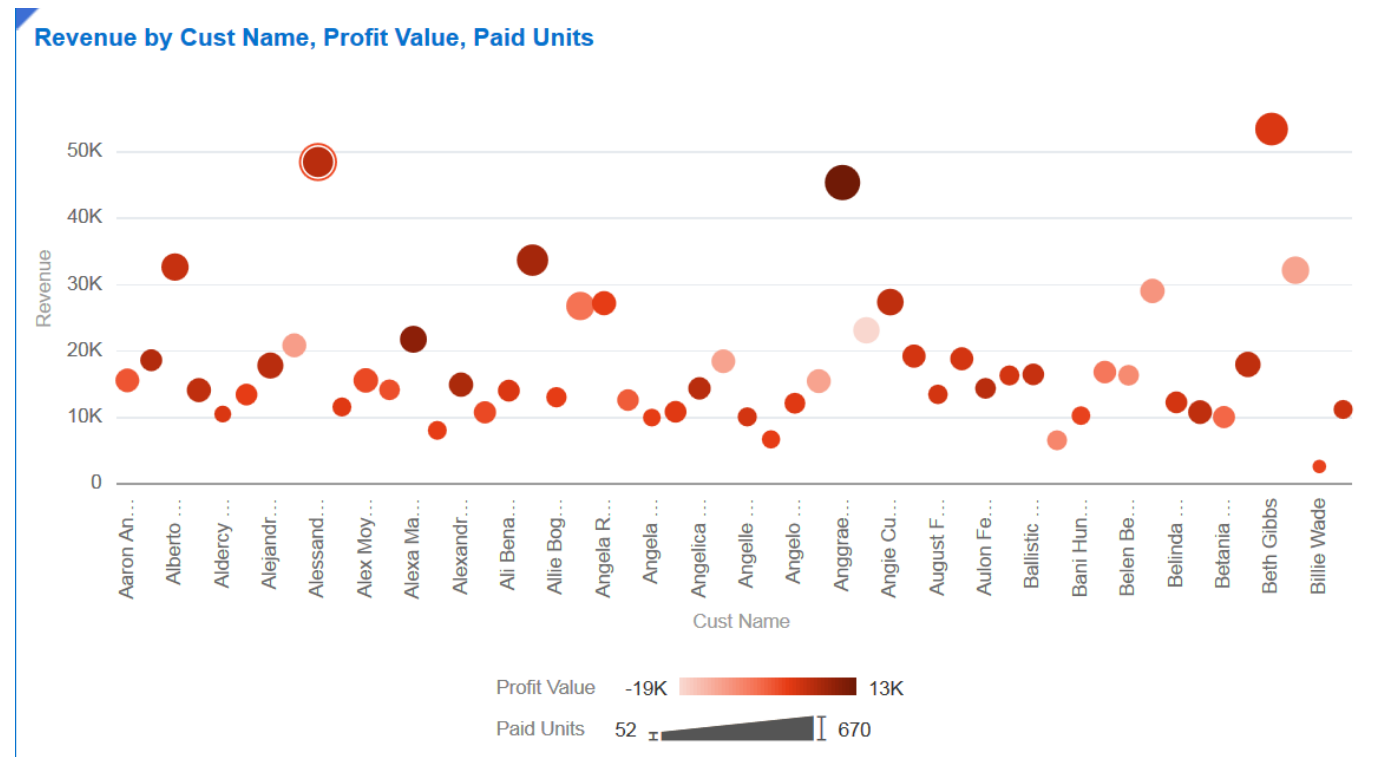
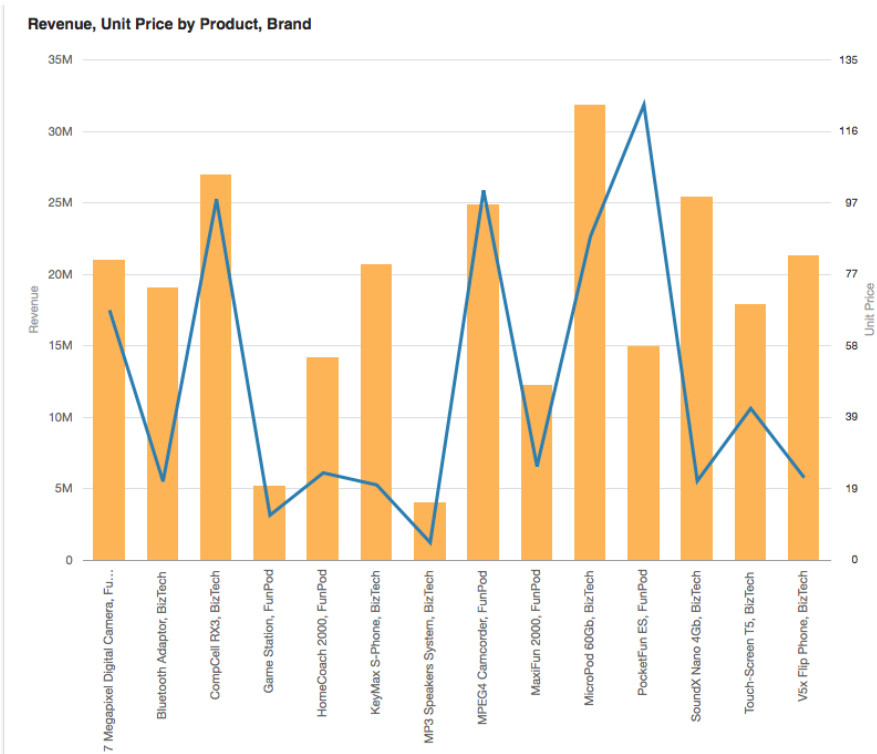






# New Visualizations in VA

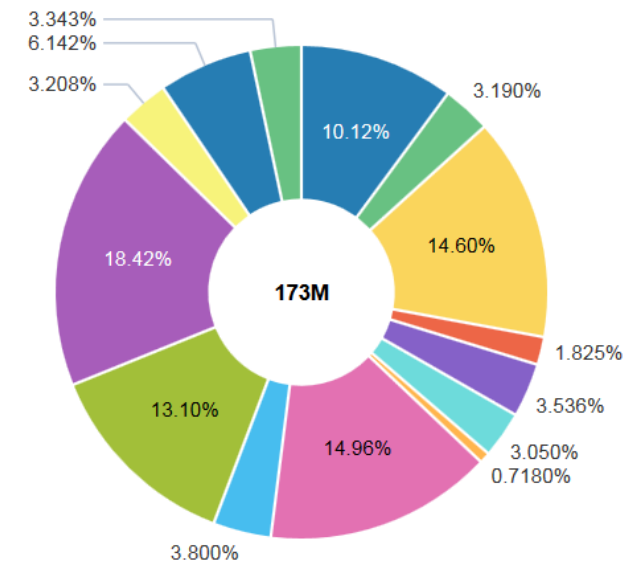
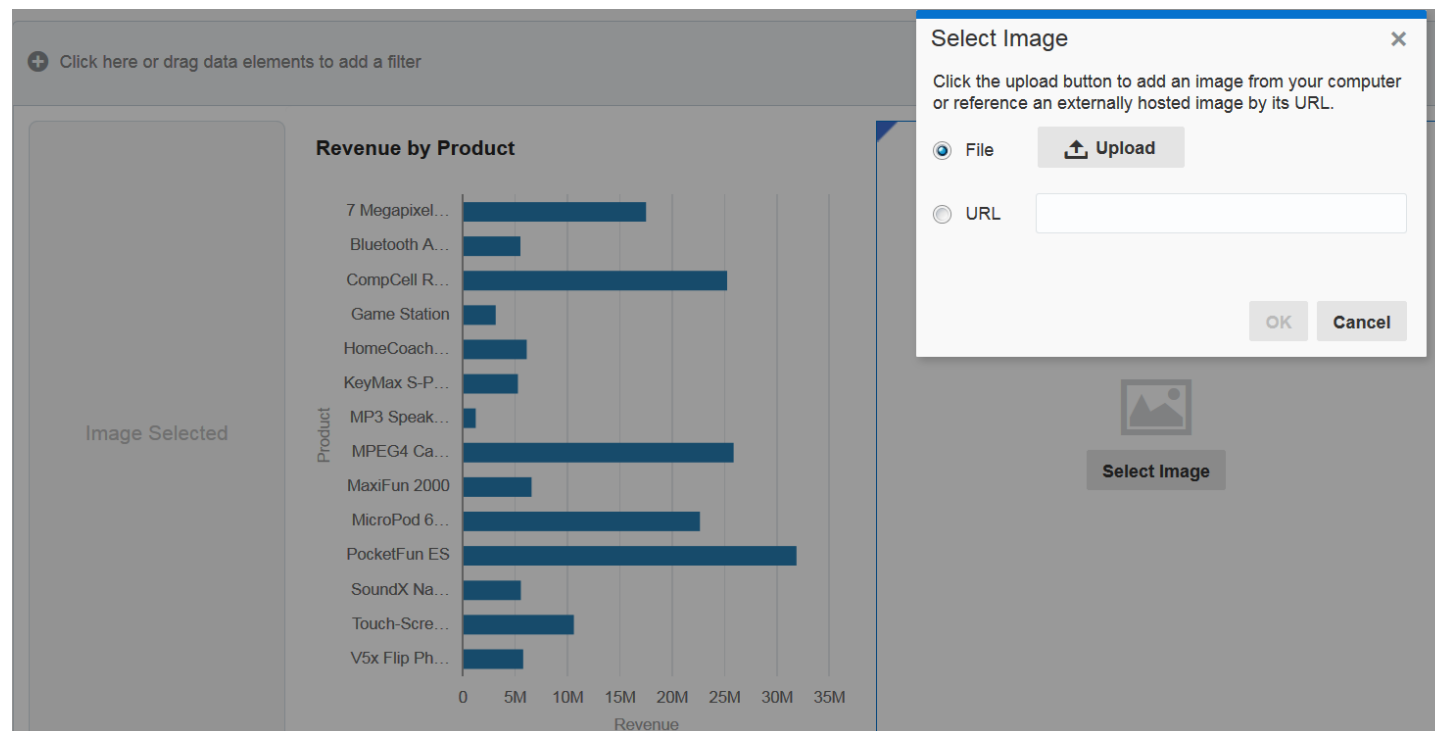
- Combo (with dual axes)
- Scatter with categorical X axis (and stacked scatter)





# New Visualizations in VA

- Donut
- Images





# Images and Text Allow For Dashboards

ORACLE Visual Analyzer

Example with logo and text

Text can be a link

Revenue for the Current Year

Revenue by Product

Product	Revenue
PocketFun ES	22M
MPEG4 Camcorder	26M
CompCell RX3	25M
MicroPod 60Gb	23M
7 Megapixel Digital Camera	18M
Touch-Screen T5	11M
MaxiFun 2000	7M
BeCoach 2000	6M
5x Flip Phone	6M
dX Nano 4Gb	6M
Bluetooth Adaptor	6M
Max S-Phone	5M
Game Station	4M
akers System	1M

Canvas Properties

Layout: Auto Fit, Freeform, Auto Fit

Width: Auto

Height: Auto

Synchronize Visualizations: On

OK Cancel

Text Box

Image

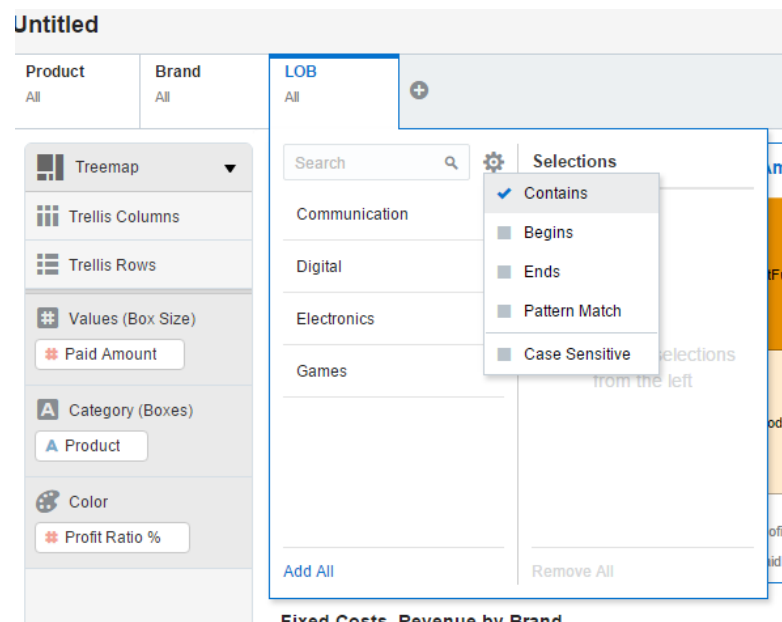
By Type

By Objective



# Enhancements in VA

- Improved Filtering
- Zoom on viz
- “Drill Down on” Anywhere
- Improved color selector



Billed UNITS	UNIT PRICE	Revenue	Billed UNITS
10,967.00	76.86	994,943.27	10,348.00
28,977.00	75.88	2,923,414.49	30,957.00
18,297.00	76.34	1,675,035.54	17,867.00
8,546.00			10,543.00
22,625.00			30,241.00
14,689.00			16,788.00
6,215.00			6,225.00
17,550.00			18,234.00
11,748.00			10,438.00
17,074.00	48.79	917,719.25	16,404.00
46,047.00	45.74	2,928,013.21	51,182.00



# Enhancements in VA

- New option in VA to source data sets from Fusion SaaS applications (user specifies URL and login info) or external sources (lots!)

Create New Project - Select Source

Create New Data Source

Subject Areas | Data Sets

Search

SampleApp

Create Project Cancel

Create New Data Source

**From a File**  
Select an Excel file containing data you want to analyze by clicking the button above or dragging the file into this window.

**From Oracle Applications**  
Select an Analysis containing the data you want to visualize.

**From Database**  
Select a database containing the data you want to visualize.

Cancel

Add a New Connection

Oracle Database

\*New Connection Name (e.g) My Connection

Database Type Oracle

\*Host

\*Port

\*Username

\*Password

\*Service Name

Save Cancel

- Oracle
- Spark
- SQL Server
- DB2
- MySQL
- Teradata
- Redshift (Beta)
- Hive (Beta)
- Impala (Beta)
- MongoDB (Beta)
- Sybase IQ (Beta)
- Salesforce (Beta)

# Oracle BI 12c 12.2.1.1

- Data Wrangling
  - Transformations associated with a data set
  - Wrangling interface available on the Stage (VA has Canvas and Stage)
  - Commonly used transforms are available via UI
  - Can write custom transforms directly in to the expression Editor



Oracle Data Visualization Desktop

ORACLE

Search

Untitled

Euro\_2016

Click here or drag data elements to add a filter

Euro\_2016

Team

Opponent

Group

Date

For

Agst

Win

Team	Opponent	Group	Date	For	Agst	Win
France		Grp-A	6/10/2016 12:00:00 AM		1	
Romania		Grp-A	6/10/2016 12:00:00 AM		2	
Albania		Grp-A	6/11/2016 12:00:00 AM		1	
Switzerland		Grp-A	6/11/2016 12:00:00 AM		0	
		Grp-B	6/11/2016 12:00:00 AM		2	
		Grp-B	6/11/2016 12:00:00 AM		1	
		Grp-B	6/11/2016 12:00:00 AM		1	
		Grp-B	6/11/2016 12:00:00 AM		1	
		Grp-D	6/12/2016 12:00:00 AM		0	
		Grp-D	6/12/2016 12:00:00 AM		1	
		Grp-C			1	
		Grp-C			0	
		Grp-C			0	
		Grp-D			0	
		Grp-E			1	
		Grp-E			0	
		Grp-E			0	
		Grp-E			0	
		Grp-E			0	
		Grp-E			1	
Germany	Ukraine	Grp-C			1	
Ukraine	Germany	Grp-C			0	
Czech Rep	Spain	Grp-D			0	
Spain	Czech Rep	Grp-D			0	
Rep Ireland	Sweden	Grp-E			1	
Sweden	Rep Ireland	Grp-E			0	
Belgium	Italy	Grp-E			0	
Italy	Belgium	Grp-E			1	

Split

Split On: Space ( )

Occurrence: First

Number of parts to create: 1

Hide source element

Split

Duplicate

Convert to Number

Convert to Date

Group...

Split...

Concatenate...

Replace...

Uppercase

Lowercase

Sentence Case

Create Column...

Edit Column...

Hide

Duplicate

Convert to Text

Concatenate...

Year

Quarter

Month Name

Day

Create Column...

Edit Column...

Hide

Duplicate

Convert to Text

Concatenate...

Conditional Group...

Quantile

Log

Power

Square Root

Exponential

Create Column...

Edit Column...

Hide

Edit Agst

Name: Agst

CAST(Against AS CHAR(40))

Validate

Save

Cancel

Operators

String

Math

Calendar/Date

Conversion

Cast

IfNull

Expressions

value to another data type.

CAST(expr AS type)

expr is any expression.

type is any datatype.

Example: CAST(hiredate AS CHAR(40))

Prebuilt Transform

Manually created Transform

Text Types

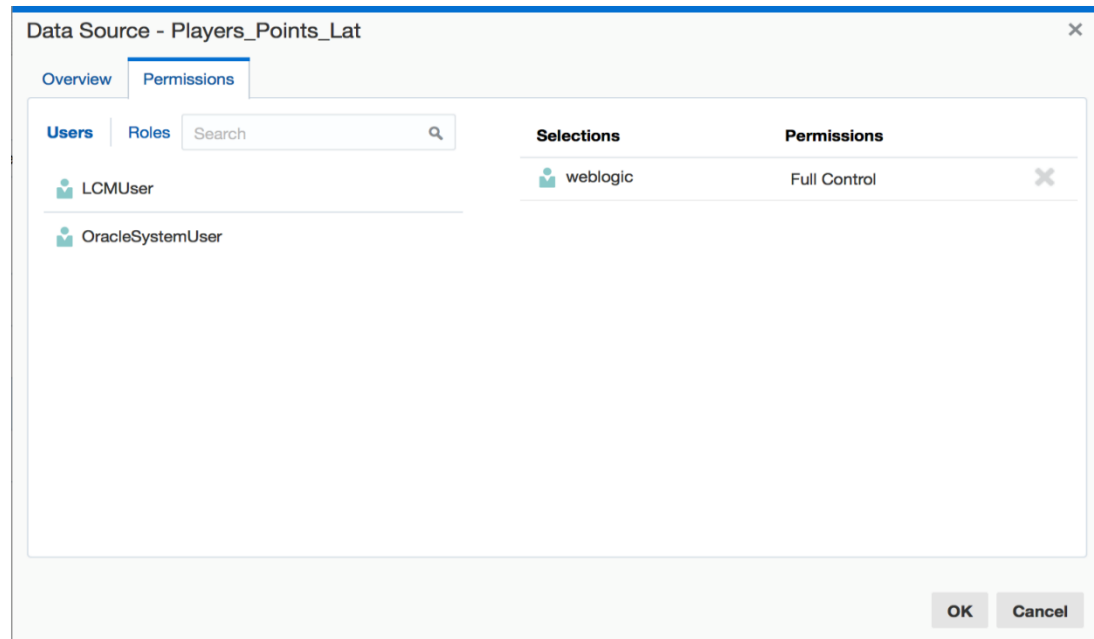
Date Types

Numbers

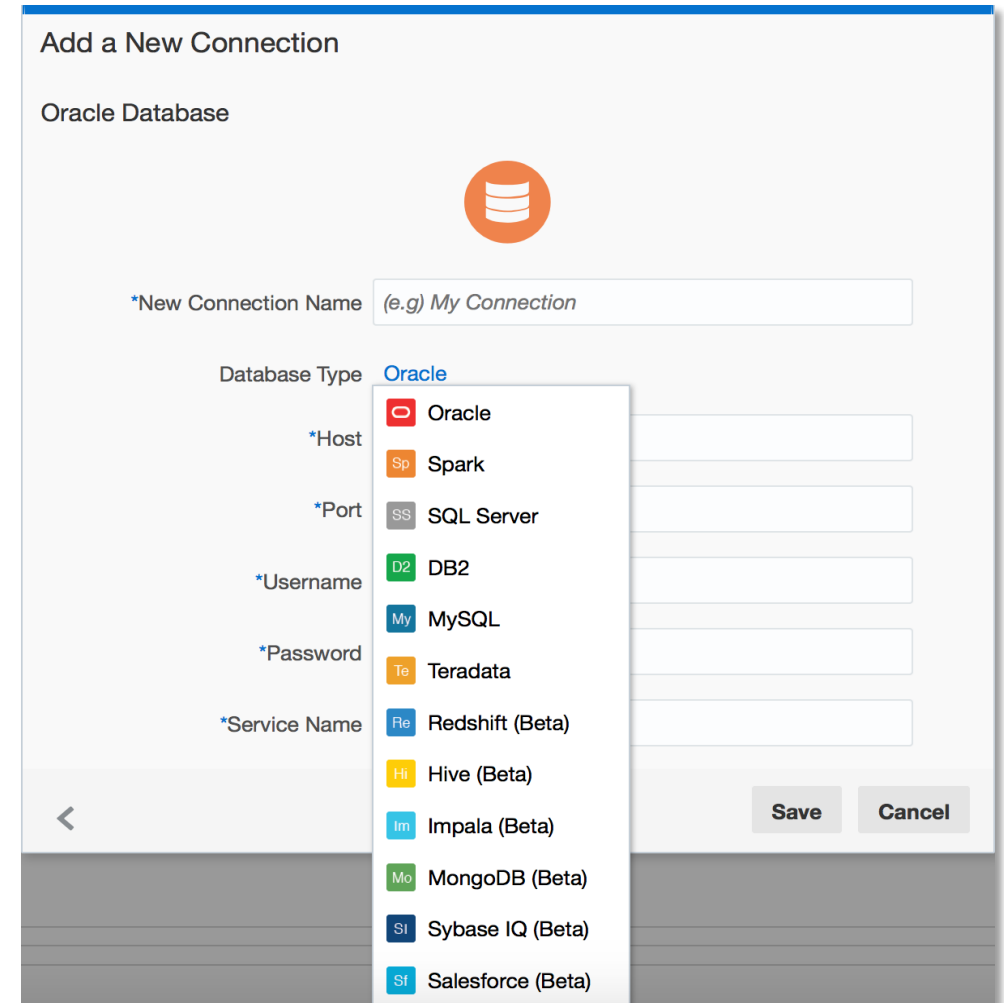


# Oracle BI 12c 12.2.1.1

- Permissions on Data Sources

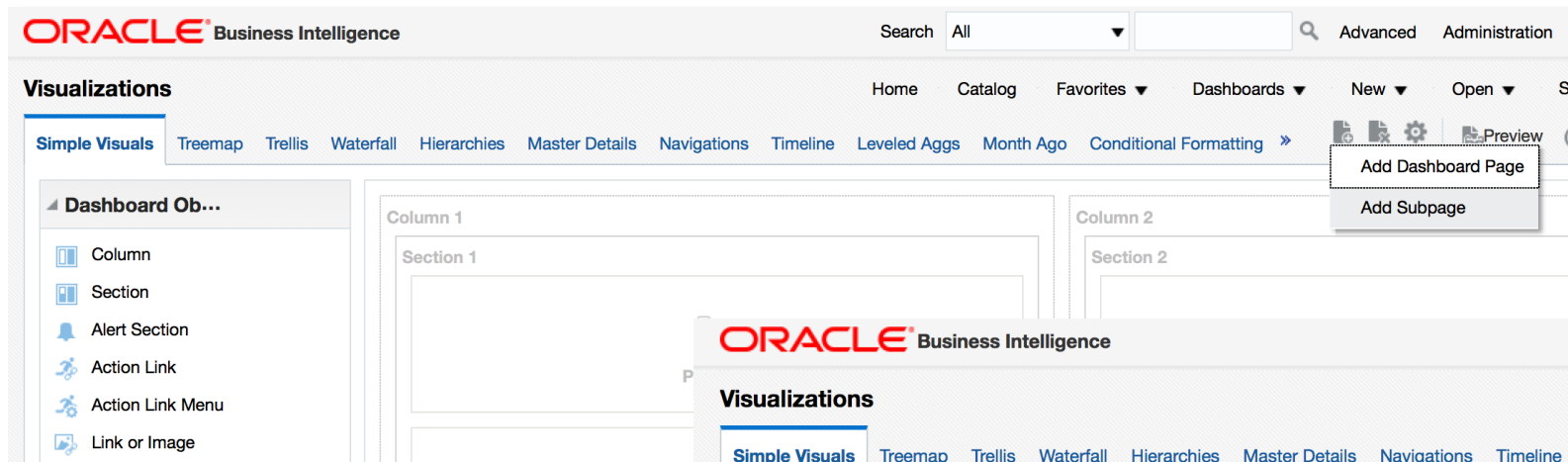


- New Data Sources



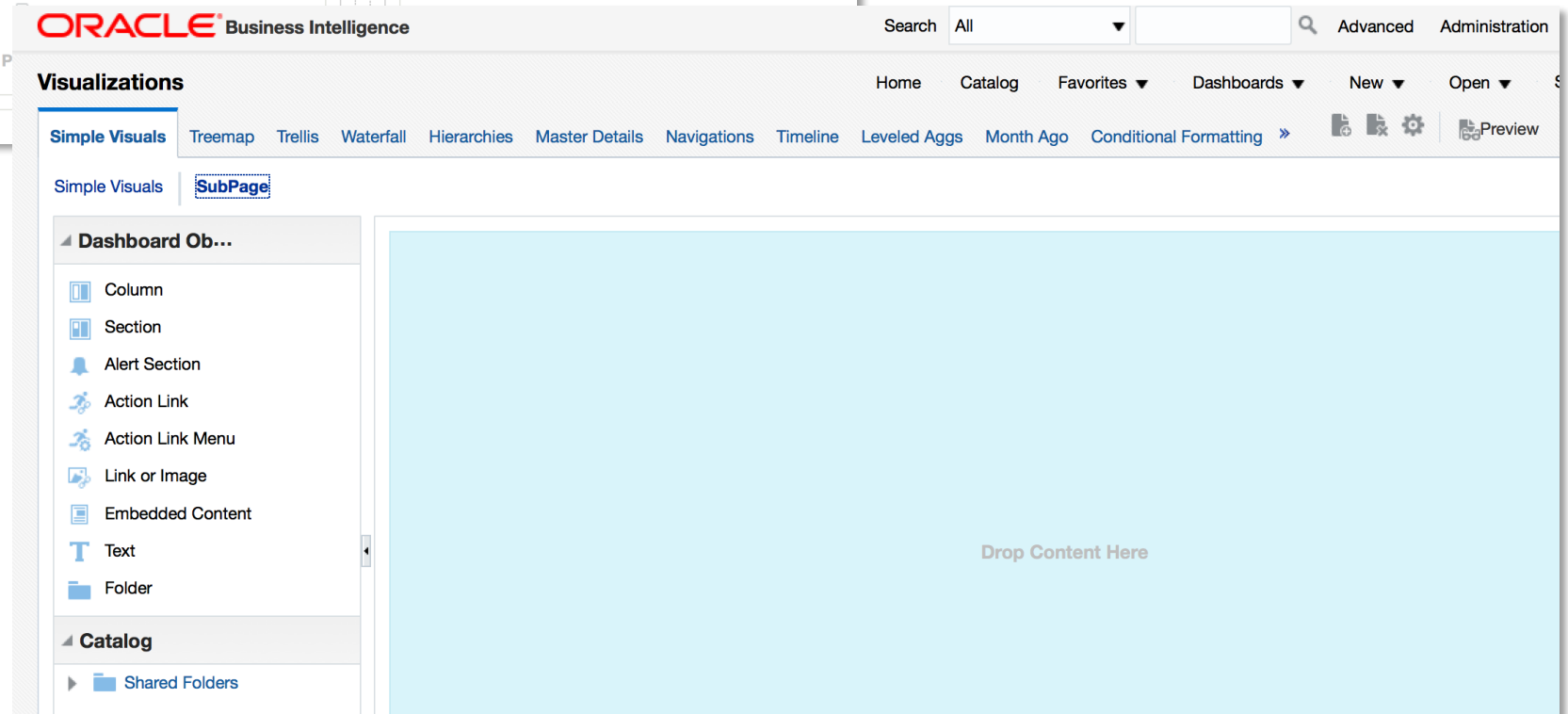


# Answers and Dashboards



Easier Navigation

Dashboard  
Sub Page





# BI Publisher 12.2.1.1 New Features

- For End Users
  - Deliver documents to Oracle Document Cloud Service
- For Report Authors
  - Use WebCenter Content as a Data Source
  - Attach PDF to your Invoices
  - Integrate using RESTful APIs
  - Deliver E-mail Body in HTML format along with Report as attachment
- For Administrators
  - Manage Custom Fonts
  - Manage PGP Keys for FTP Delivery Encryption
  - Manage large size reports via Dynamic Memory Guard
  - Manage File Data Security on Cloud via Encryption

Information from BI Publisher Product Management.

See <http://www.oracle.com/technetwork/middleware/bi-publisher/new-features-guide-for-12-2-1-1-3074557.pdf>



# Oracle MapViewer 12.2.1.1 New Features

- More deployment options
  - Generic EAR file can be deployed to other JEE containers such as Tomcat or GlassFish
  - Can now be deployed in generic WebLogic Server (without JRF)
- Web admin console enhancements
  - More streamlined / improvements to page performance and responsiveness
- Dynamic tile layer improved query and rendering performance
- Support for GeoRaster virtual mosaic and LRS themes
- Upgraded support for HERE Maps using HERE V3 API
- Style enhancements: can now have stacked styles on features

Information from MapViewer Product Management.

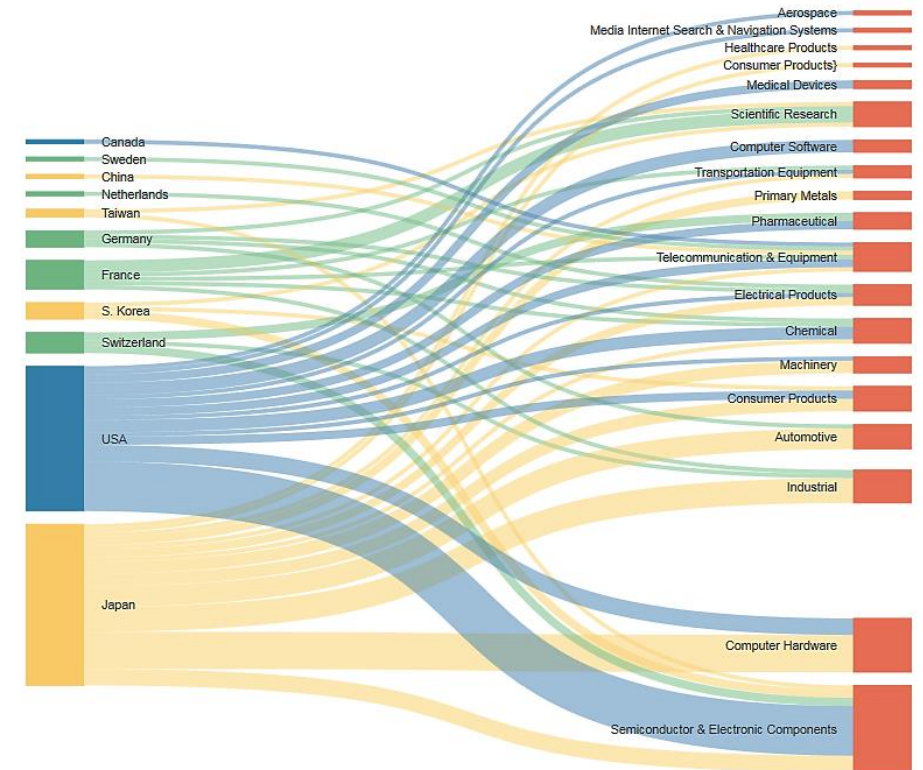


# Oracle Test Drive

- Free to try Oracle BICS, Oracle Advanced Analytics
- Go to [www.vlamis.com/td](http://www.vlamis.com/td)
- Runs on Oracle Cloud
- Test Drives for:
  - Oracle BICS
  - Oracle Advanced Analytics (initially Oracle Data Mining)
  - More test drives to be added
- Once sign up, you can access for 24 hours
- Click by click script included, but can go “off road”
- Faster and easier than official Oracle “trial web account”

# SampleApp V607 : Installed Software

- Oracle Enterprise Linux 6.7 x64
- OBIEE **12.2.1.1**  
Essbase 12.2.1.1, BVT, Oracle MapViewer 12c, MV Demo Samples
- Oracle Database 12.1.0.2.0 EE (PluggableDB),  
04/2016 patchset, APEX 5.0.3 & ORDS 2.0.1, ODM, Oracle Spatial
- ORE 1.4.1 & R-3.1.1
- CDH 5.7, Oracle BDSQL, Spark & Hive Thrift Server
- Utils : Start scripts, MapBuilder 12c, SQLDev 4.1.3



# SampleApp V607 : New DV Sourcing Features Data Wrangling

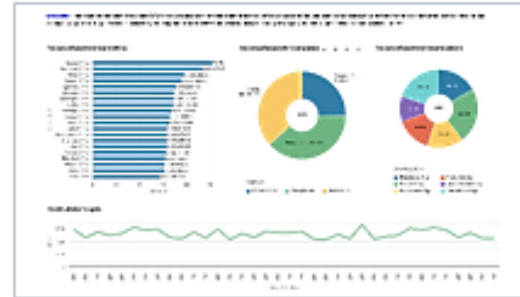
Oracle DB, Spark, Impala, Hive direct DV sourcing...



Spark-Online Sales Analysis

Visual Analyzer

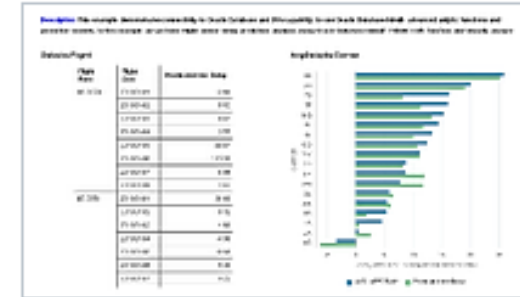
12:27 PM



OracleDB-Target Revenue A...

Visual Analyzer

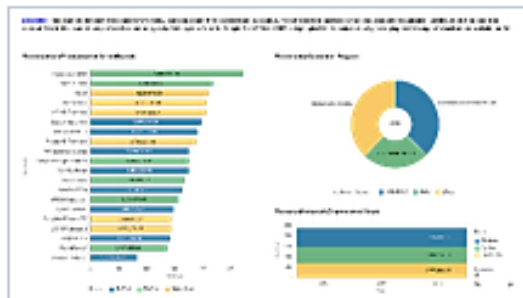
12:27 PM



OracleDB-Flight Delay Analy...

Visual Analyzer

12:27 PM



OBIEE-Sales Analysis

Visual Analyzer

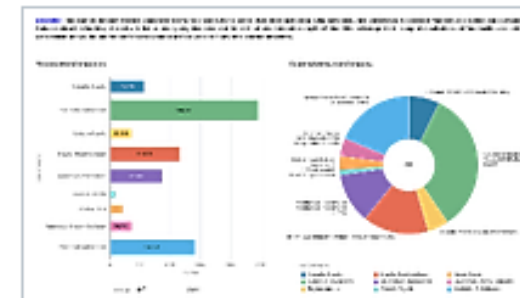
12:26 PM



Impala-Inventory Analysis

Visual Analyzer

12:26 PM



Hive - Customer Sales Analysis

Visual Analyzer

12:25 PM

Sample Order Lines

Order Line ID

# of Order Lines

Order ID

10	1	
----	---	--

Rename...

Duplicate

Convert to Number

Convert to Date

Group...

Split...

Concatenate...

Replace...

Uppercase

Lowercase

Sentence Case

Create Column...

Edit Column...

Delete

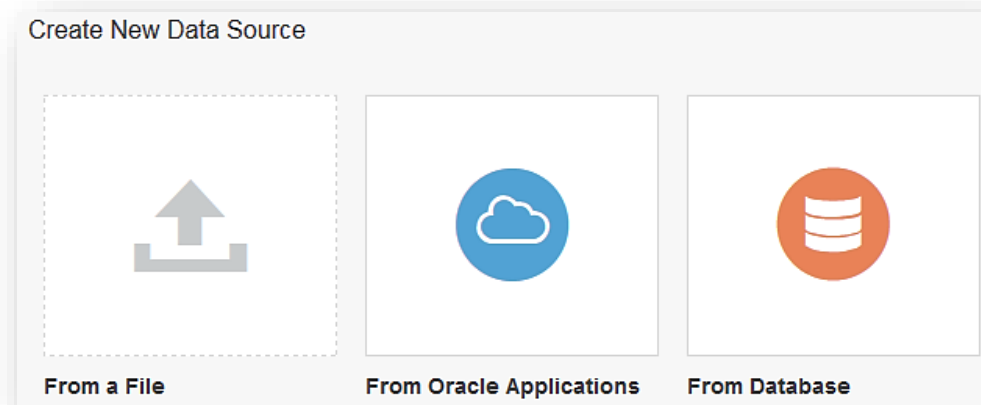
Hide

And more....

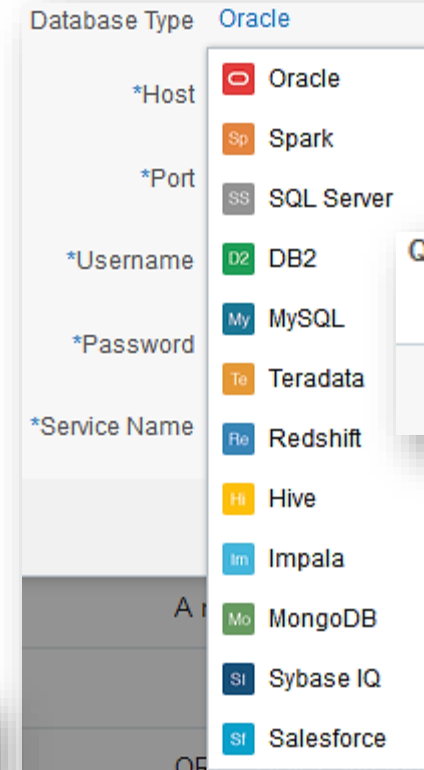


# SampleApp V607 : New DV Sourcing Features

## Multiple datasource types

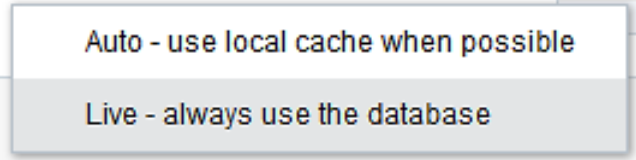


## Numerous Connection types

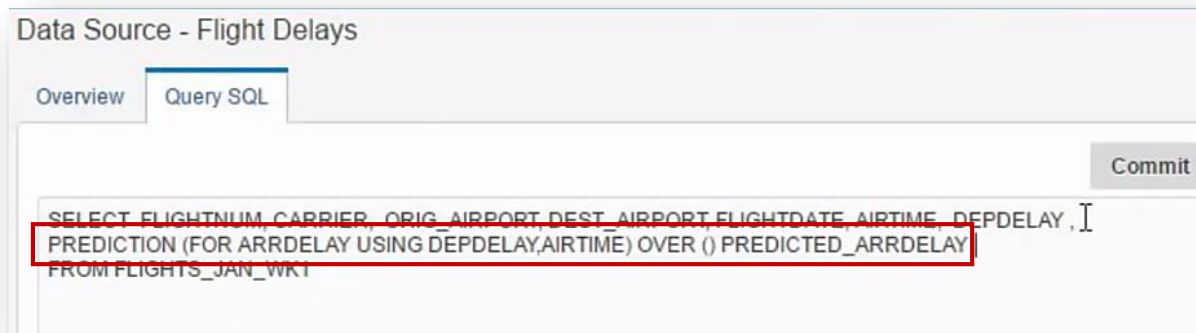


## Live Connection Flag

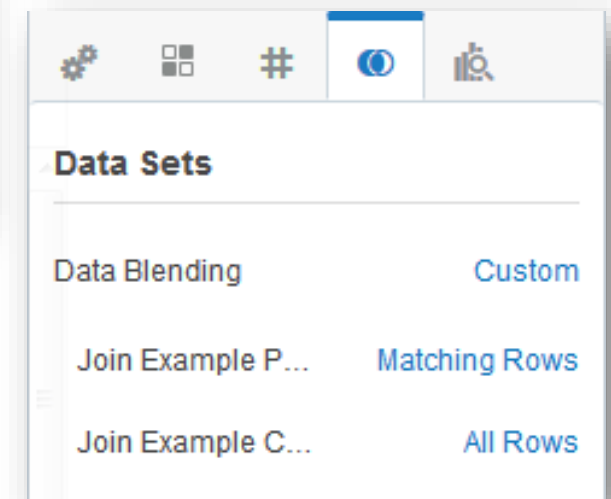
Query Mode



## SQL Based Sources (including Advanced SQLs)



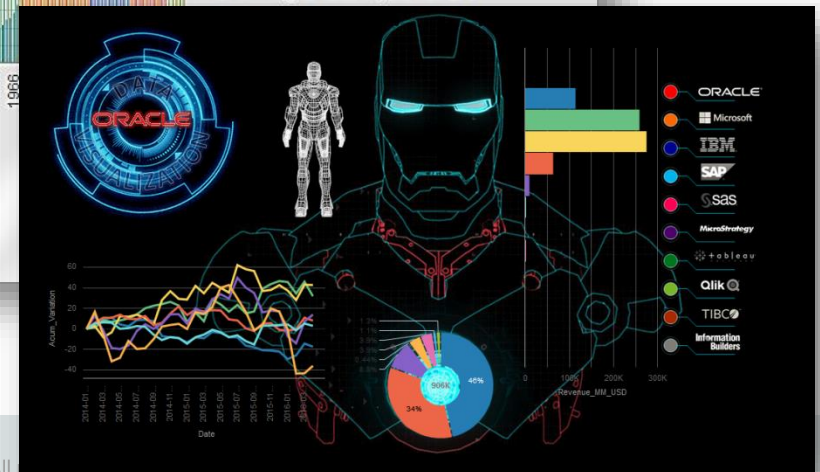
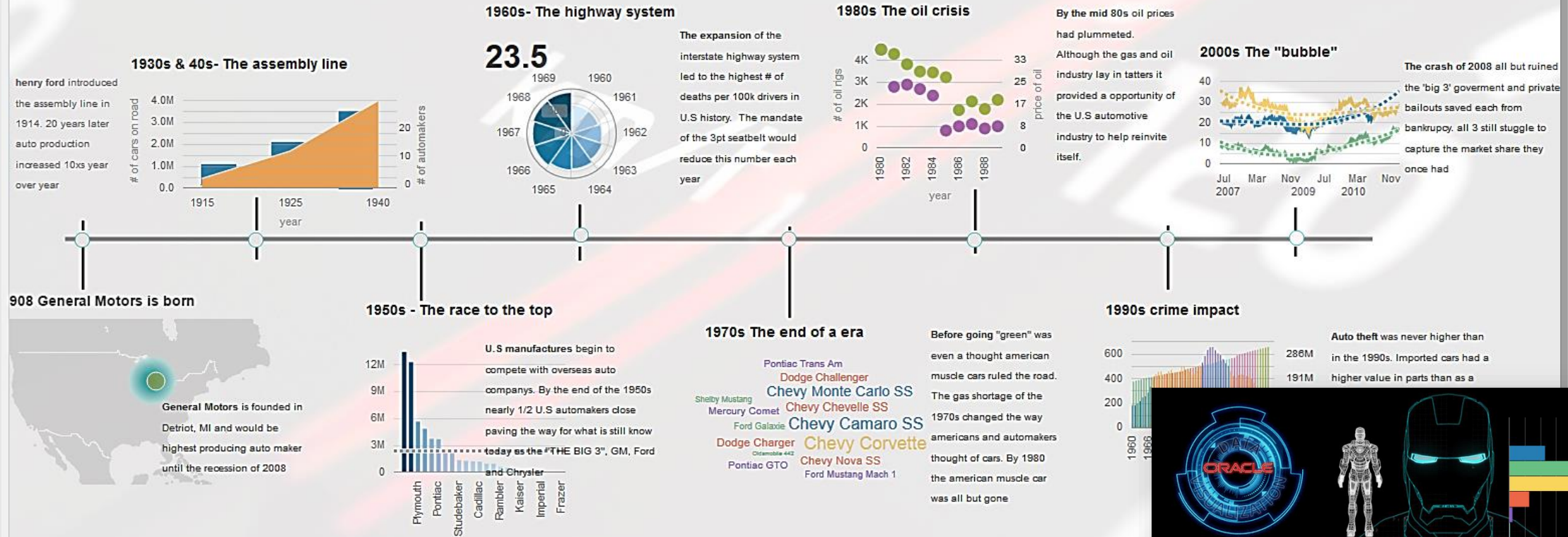
## Edit Join type (Data Blending)



# SampleApp V607 : Freeform DV Visualizations

Infographic U.S Auto\_062416

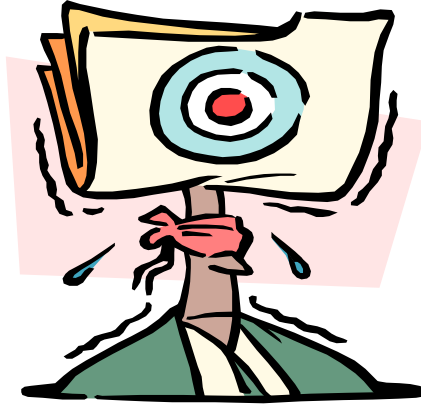
## Timeline Infographic - U.S Auto Industry



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# Resources and Questions?



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Vlami Home page [www.vlami.com](http://www.vlami.com) Blog [www.vlami.com/blog](http://www.vlami.com/blog)

Test Drive [www.vlami.com/td](http://www.vlami.com/td) Prior OBIEE releases [www.vlami.com/papers](http://www.vlami.com/papers)

Oracle BI SampleApp v607 and Resources (August 16, 2016!) <http://www.vlami.com/papers2016/#aug16>

Sample App What's New <http://www.oracle.com/technetwork/middleware/bi-foundation/obiee-samples-167534.html>

YouTube channel BI Tech Demo from SampleApp Team <https://www.youtube.com/user/OracleBITechDemos>

Fusion Middleware 12c Documentation <http://docs.oracle.com/middleware/1221/bisuite/index.html>

12.2.1.1 Documentation <http://www.oracle.com/technetwork/middleware/bi-enterprise-edition/documentation/bi-ee-087853.html>

BICS Demo as part of OTN Summit <http://www.vlami.com/papers2016/#jul12>

BIWA Summit 2017 Conference <http://www.biwasummit.org>