



New Features in Oracle Analytics Cloud 4

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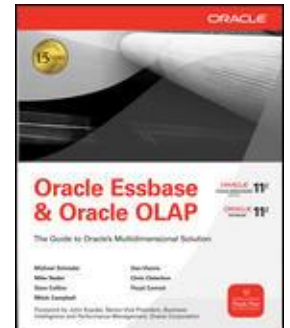
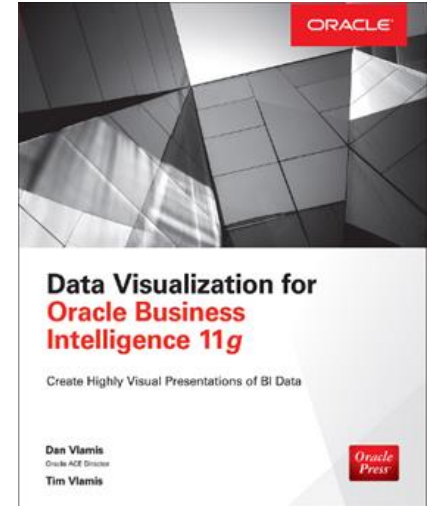
Vlamis Software Solutions

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

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Oracle Business Intelligence
Foundation Suite 11g





OBIEE, BICS, DVD, OAC 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](#)
 - 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
 - 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](#)
- 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](#)
- 12.2.1.2 and DVD 2.0 (October 2016)
 - Webcast Nov 22, 2016 [DVD 12.2.2 and OBIEE 12.2.1.2. New Features](#)
- DVD 3.0 (June 2017)
 - Webcast Aug 29, 2017 [DVD 3.0 New Features](#)
 - New visualizations
 - Additional data sources and Enhanced data prep and updated data flows
- DVD 4 (October 2017)
 - Webcast Nov 9, 2017 [DVD 4 New Features](#)
 - New Home Page and New Visualization control experience
 - New column controls for date/time, auto-binning
 - New narrate experience
 - New data flow steps, including create Essbase cube step
 - Machine learning
- OAC 4 (December 2017)
 - Webcast Dec 19, 2017 [OAC 4 New Features](#)

All listed on website at <http://www.vlami.com/obiwebinars/>



Use Questions or Chat or Questions to communicate

Oracle Business Intelligence Webinars

2018

- OAC 4
 - Webcast January 16: Registration now open!
 - Data limit truncation warnings
 - Narrate enhancements for groups
 - Data flow enhancements
 - Sequences for Data flows
 - Data flow scheduling
 - Renaming steps
 - Create Essbase cube step
 - BI Publisher consuming XSAs
 - Essbase new features
 - Admin / Console new features
 - Content embedding
 - Data replication
 - Email deliverables
 - Map Viewer console
 - Import / export TCM models

Oracle Business Intelligence Webinars

In Practice Mode

Audience view 100%

Sharing: Stopped. No one sees your screen.

Start Recording 5.9 GB remaining

Questions

X	Question	Asker

Send Privately Send to All

Chat

Me (to All - Entire Audience): 12:53 PM: Test chat here

All - Entire Audience Send

Seeing is Believing
Webinar ID: 641-563-843
GoToWebinar



OAC V4 Functional New Features Overview

A. Data Visualizations

- New Home Page + UI Refresh**
 - *Drag spreadsheet to home page, canvas
- New Viz control experience**
 - *Properties Pane,
 - *Copy/Paste/Duplicate,
 - *Pin Filter to all Canvases
 - *Data Actions
- New Column Controls**
 - *Date/Time level set & switch
 - Show metric as a percentage
 - *Auto-Binning metrics used as Categories
 - Automatic Number Type
- New Project control Features**
 - Rename Connection or Data Source
 - Unrelated data sources in a project
 - Data Limit Truncation Warnings
 - Simplified Project Permissions**
- *New Narrate experience
- Improved Sharing**

B. Data-flows

- New Steps**
 - Merge Rows Step (Set Operator)
 - Create Essbase Cube Step**
 - *Binning Step
 - *Grouping Step new UI
 - Cumulative Aggregate Step
 - *Filter Step
- Sequences for Data-flows**
- Customize Name/Description of a step**
- Data-flows Scheduling**

C. New Data Sources

- Oracle Talent Management Cloud
- Oracle Autonomous DWCS
- Oracle BDCS-CE

D. BI Publisher in OAC

- BIP Ability to consume XSAs



E. Essbase Specific new features

F. Machine Learning

- *ML Attributes Explain Feature
- ML Train & Apply OOB Models
 - Sentiment
 - Numeric prediction
 - Multi Classifier
 - Clustering
 - Binary Classifier
- ML Custom Scripts upload & Apply
- ML Model Scenarios

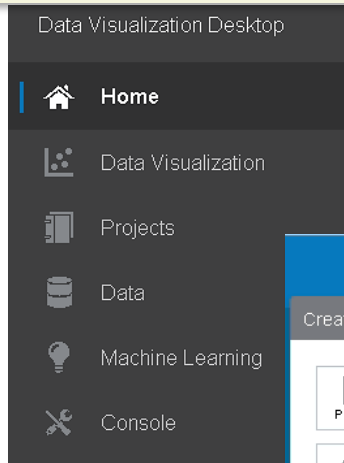
G. Admin / Console

- Content Embedding
- Data Replication
- Emails Deliveries
- Map-viewer Console**
- Import / export TCM models
- Public API Support

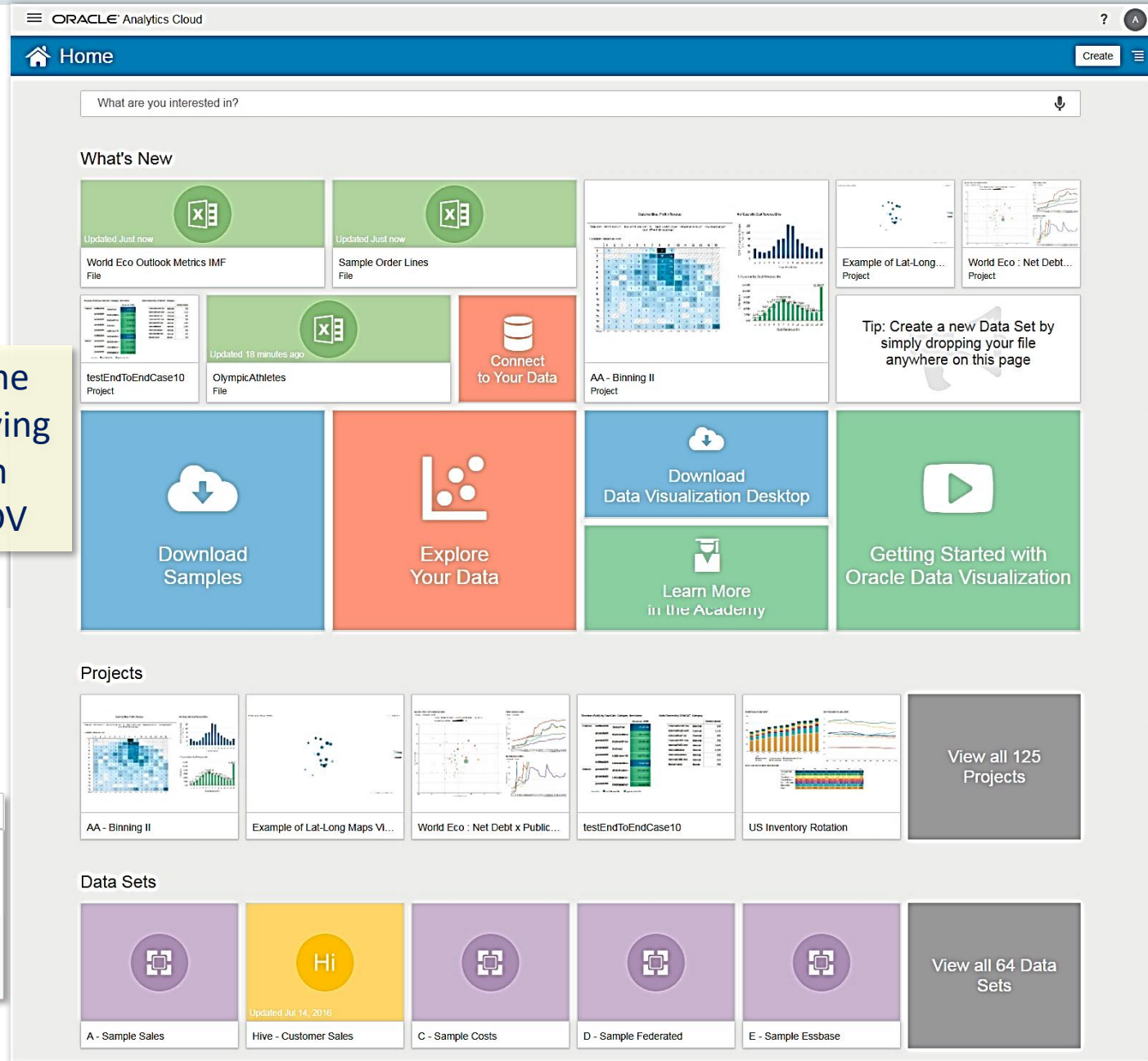
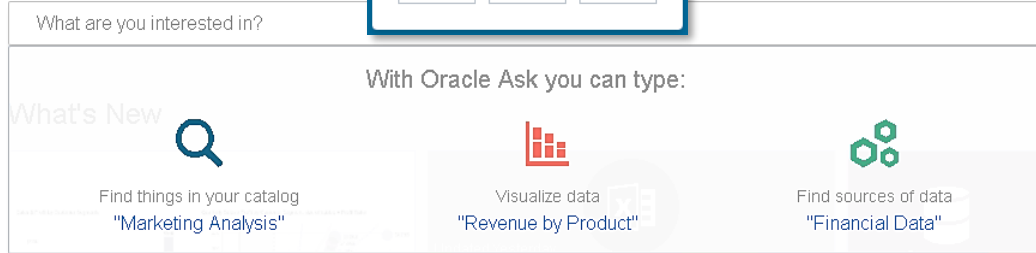
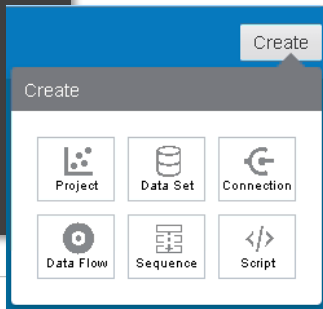
 OAC only feature  DVD only feature
* Shown as part of DVD4 What's New Webcast
To be demoed in OAC 4 What's New Webcast

1 - New Home Page + UI Refresh

Full, more end-user intuitive Alta-based UI refresh



New adaptive home page with self evolving content based on specific usage of DV



2 – New Viz Controls : Properties Pane for Columns and Viz

Data Elements

- Product Container
- Product Name
- Profit
- Quantity Ordered
- Sales
- Discount**
- Gross Unit Price
- Shipping Cost
- Ship Mode
- Ship Date
- Order Date
- {Row Count}
- Sample States
- My Calculations
- Value Labels

Discount Properties

Name	Discount
TreatAs	Measure
Data Type	Double
Aggregation	Sum

Use properties pane to edit default properties of any object (Type, Agg rule, format, level...)

Sales & Profit by Customer Segments

Customer Segment: All | Product Category: Technology | Order Date: From 1/1/16 12:00 AM

Visualization Type: Scatter

Values (Y-Axis): Profit

Values (X-Axis): Sales

Category (Points): Order Date (Q...)

Color: Customer Seg...

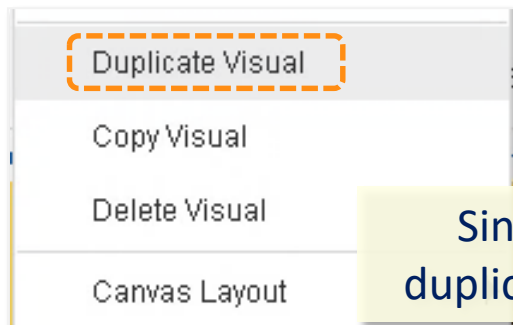
Size: Profit Ratio

Customer Segment	Q4 2015	Q2 2016	Q4 2016
Consumer	\$242K	\$242K	\$520K
Corporate	\$77K	\$128K	\$197K
Home Office	\$46K	\$51K	\$124K
Small Business	\$61K	\$58K	\$131K

Use same properties pane to edit properties of any specific visualization. Viz level properties override column default properties

2 – Cross Canvas Copy/Paste, Viz Duplication Pin/Un-pin filter to all Canvases

Pin or un-pin single filter for whole project or for a single canvas



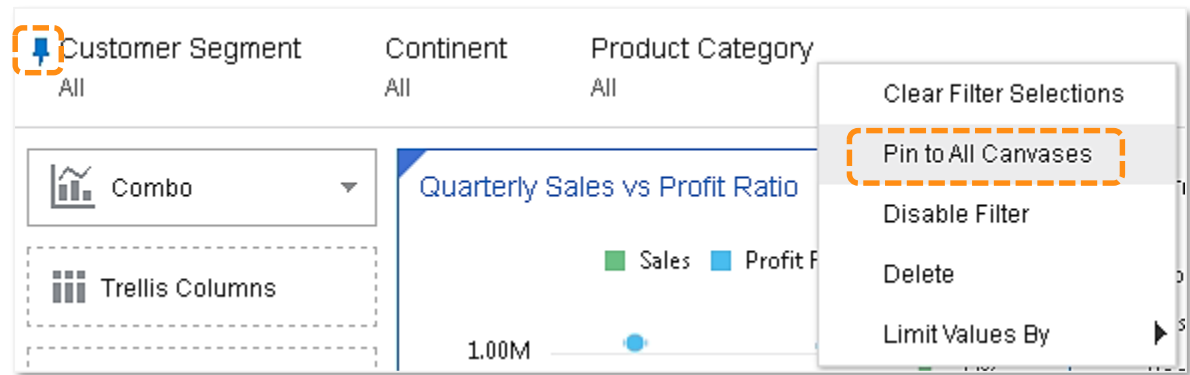
A context menu with four items: Duplicate Visual, Copy Visual, Delete Visual, and Canvas Layout. The 'Duplicate Visual' item is highlighted with a dashed orange border.

Single Click duplicate-visuals



A context menu with four items: Duplicate Visual, Copy Visual, Delete Visual, and Canvas Layout. The 'Copy Visual' item is highlighted with a dashed orange border.

Copy paste any visual from one canvas to another canvas



A dashboard interface showing filters for Customer Segment, Continent, and Product Category, all set to 'All'. A chart titled 'Quarterly Sales vs Profit Ratio' is displayed. A context menu is open over the chart, with 'Pin to All Canvases' highlighted with a dashed orange border. Other menu items include Clear Filter Selections, Disable Filter, Delete, and Limit Values By.

2 - Data Actions

1

- Project Properties
- Canvas Properties
- Data Actions
- Synchronize Visualizations
- Refresh Data
- Refresh Data Sets
- Reset Colors
- Clear Canvas
- Create New Project
- Revert to Saved
- Debug

Project Properties

2

Actions

▾ Navigate to details by Office

Name: Navigate to details by Office

Type: Canvas

Anchor To: Product Category

Project: This Project

Canvas: Performance by Office

Pass Values: All

URL

- Canvas

OK Cancel

A column can navigate to URLs or canvas pages passing contextual values

Configure multiple Navigation targets for each column object in your project.

3

Undo (Ctrl+Z)

Navigate to details by Office

Drill ...

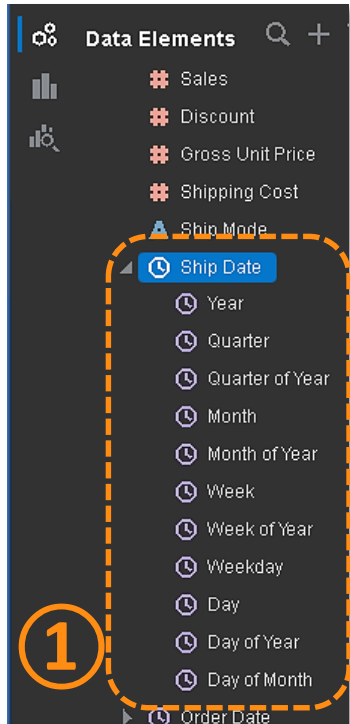
Keep Selected

Remove Selected

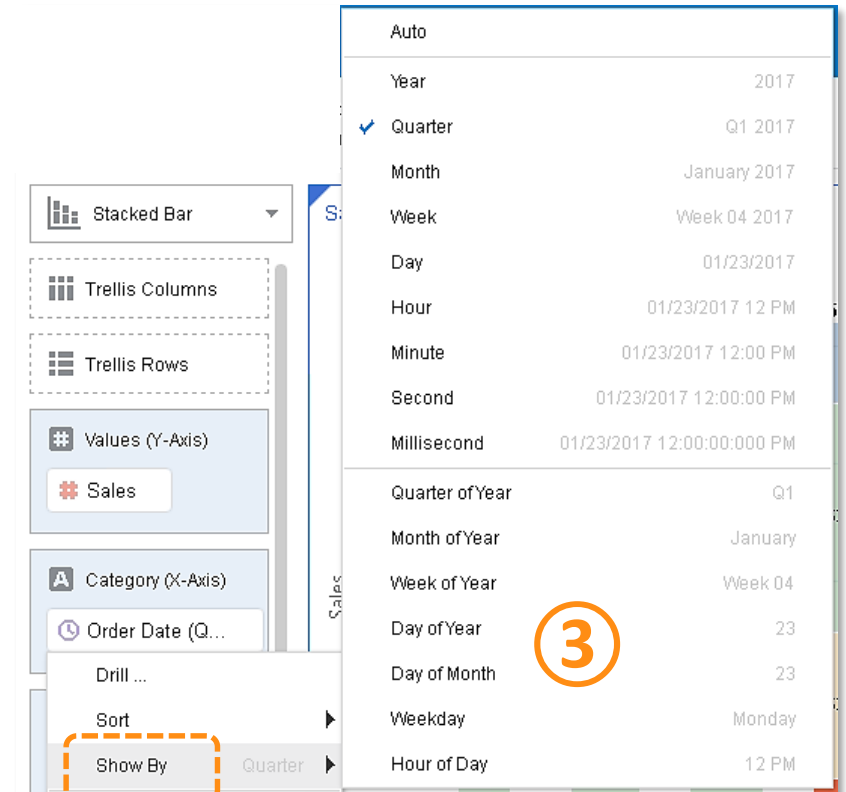
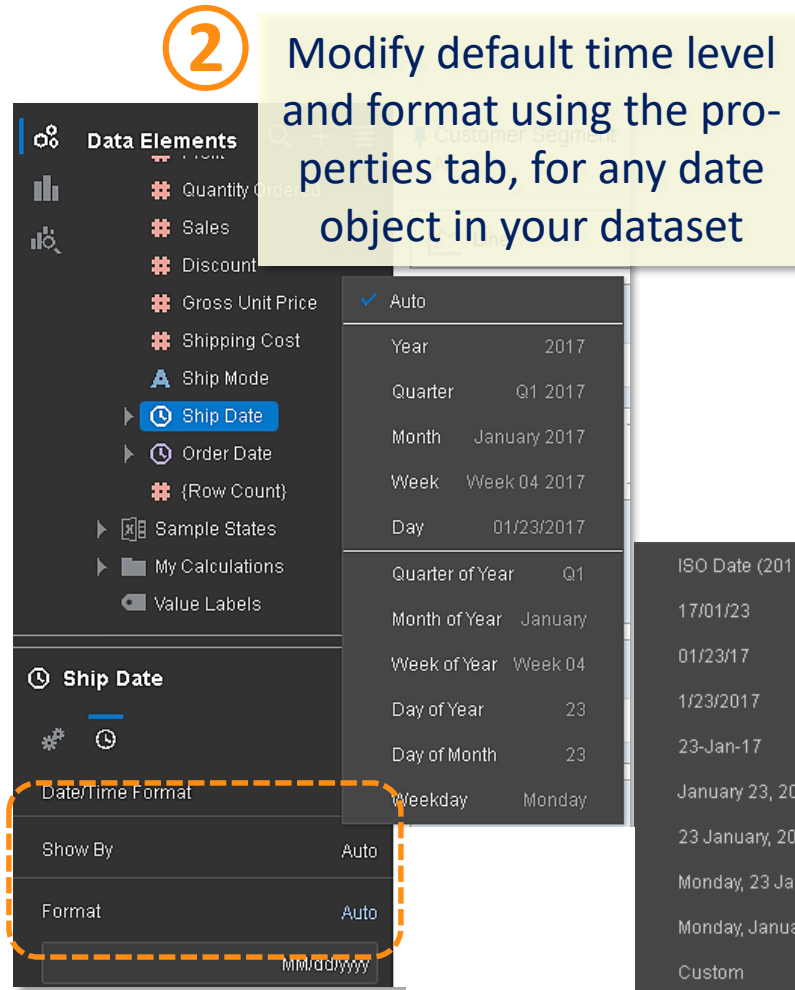
Sort



3 – New Columns Control : Date/Time level set & switch



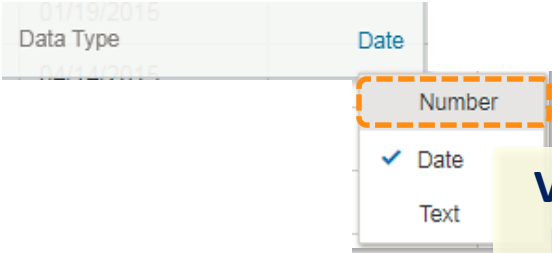
Time level options show by default for any single time object in your data-set.



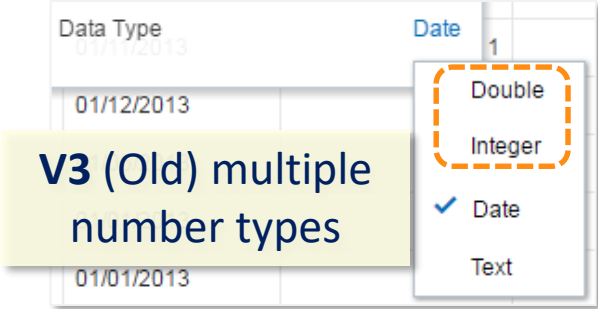
Override column default time levels in each visualization



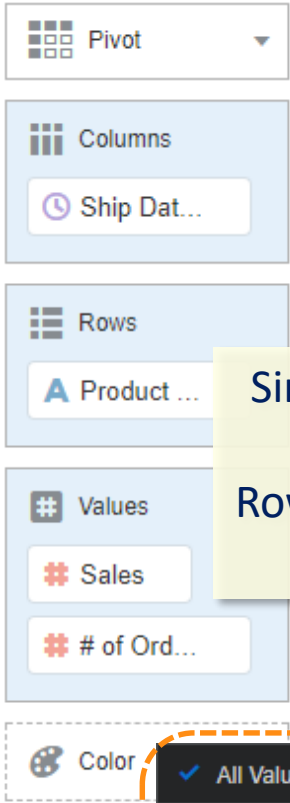
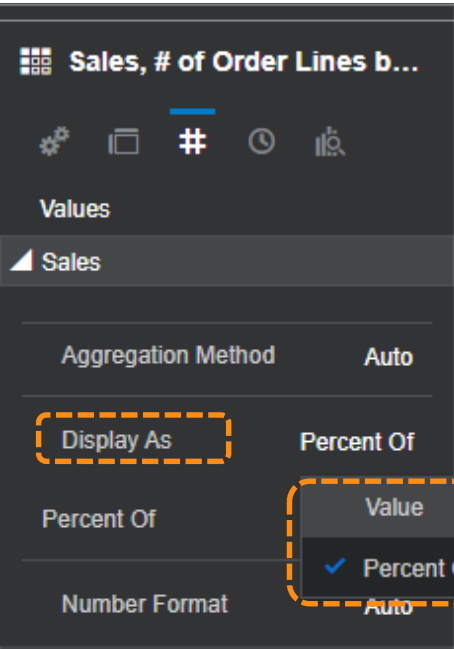
3 – New Columns Control : Show as percent of column, Automatic Number Type



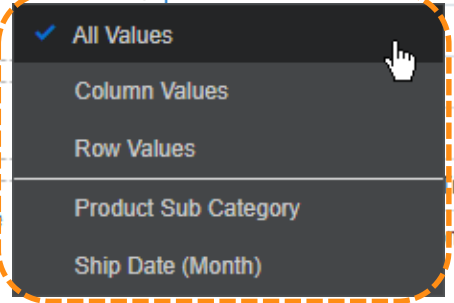
V4 single Number data Type



V3 (Old) multiple number types



Single click show values as percent of Rows/Columns/Subtotals in Pivot Tables



Sales, # of Order Lines by Product Sub Category, S		
	January 2013	
	Sales	# of Order Lines
Appliances	0.06%	11
Binders and Binder Accessories	0.09%	13
Bookcases	0.19%	5
Chair Cushions	0.35%	15
Chairs	0.03%	12
Chairs and Chair Accessories	0.07%	3
Labels	0.01%	5
Labels	0.01%	6
Office Furnishings	0.10%	19
Office Machines	0.37%	12
	0.03%	25
	0.02%	20
	0.00%	4
Trimmers	0.00%	1
n	0.10%	11



3 – New Columns Control : Auto-Binning of metrics when used as Categories

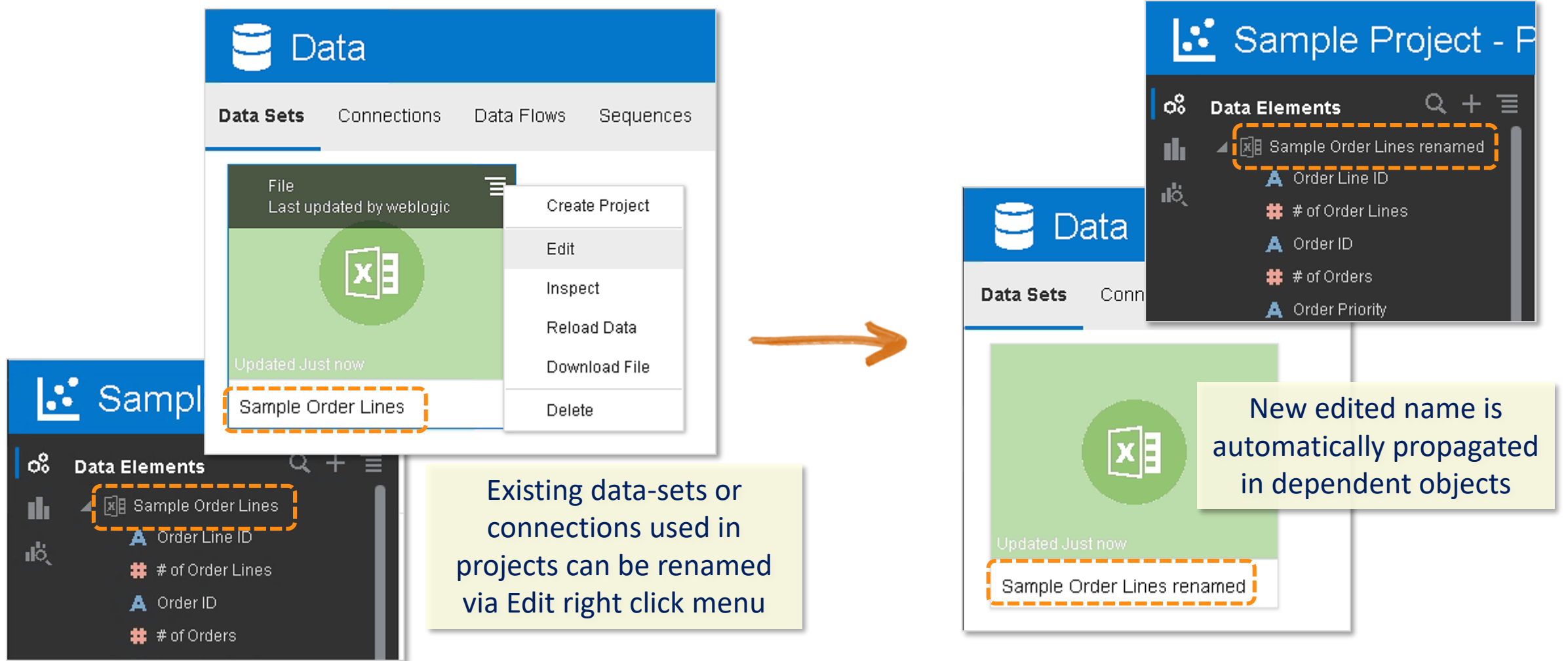
1 Metrics can be used as categories for charts. DV will automatically bin metric values by report grain to present meaningful viz.

2 User can easily override number of bins, group by clause by a right click

The image shows a multi-step process for configuring a chart. On the left, a 'Columns Control' panel lists various metrics. 'Sales' is highlighted in a blue box. Below it, a 'Sales' section shows 'Sales' as a selected metric. In the center, a configuration panel for '# of Customers' shows 'Sales' being added to the 'Category (X-Axis)' field. On the right, a bar chart titled '# of Customers by Sales (Grouped)' displays the results. A context menu is open over the chart, with 'Edit Groups' highlighted. To the far right, a configuration panel for the chart shows 'Level of Detail' set to 'Auto' and 'Groups' set to '15'.

Sales (Grouped)	# of Customers
0 - 260	2100
260 - 520	1300
520 - 780	800
780 - 1.04K	600
1.04K - 1.3K	500
1.3K - 1.56K	450
1.56K - 1.82K	400
1.82K - 2.08K	350
2.08K - 2.34K	300
2.34K - 2.6K	250
2.6K - 2.86K	200
2.86K - 3.12K	180
3.12K - 3.38K	150
3.38K - 3.64K	120
3.64K -	100

4 – New Projects control features : Data Set / Connections renaming



4 – New Projects control features : Unrelated data sources in a project

Data Elements

- Sample Order Lines
- My Calculations
- OlympicAthletes
- My Calculations
- US Oil Import
- My Calculations
- Value Labels

Sales by Product Category

Donut

Sales by Product Category

Product Category	Percentage
Furniture	34.04%
Office Supplies	25.08%
Technology	40.88%

9M

Avg Athletes

Word cloud containing: Tennis, Snowboarding, Triathlon, Table Tennis, Diving, Badminton, Equestrian, Sailing, Curling, Archery, Beach Volleyball, Taekwondo, Softball, Luge, Bobsleigh, Alpine Skiing, Figure Skating, Hockey, Biathlon, Athletics, Handball, Shooting, Boxing, Baseball, Fencing, Waterpolo, Ski Jumping, Cycling, Canoeing, Rhythmic Gymnastics, Gymnastics, Football, Swimming, Rowing, Short-Track Speed Skating, Volleyball.

Gold Medals: 6 to 270
Age: 533 to 18K

Data-Sets with no joining at all can be brought in a single project, visualizations from each dataset coexist in a canvas

4 – New Projects control features : Simplified Project Permissions, Data Limit Truncation Warnings

OAC Only

Test_Permission

General **Permissions**

Users & Roles Add

Members	Permission
BI Content Author	Can View
biconsumeruser	Can Edit
dvauthoruser	Can View
admin	Can Edit

OK **Cancel**

i Sales by Order Date

Data sampling was applied due to the large quantity of data. Please filter your data. The limit of 1000 categories was exceeded.

Fine project permissioning can be set from project inspect menu

Automatic warning of data sampling when member values are over specific views limit

5 – New Narrate Experience

Canvases

Overview

1.30M 8.50M

Sales by Product Profit by Product

Sales Trend by Product Key Metrics by Product Category

Future Product Sales by Customer

Profitability

Quarterly Sales Profit Ratio

Yearly Profit E

Revenue Trend

General

Base Canvas Trends

Hide Page

Page Title

Description

Add To Story

Revenue Trend

Filters

Hide All Filters

Page Filters

- Customer Segment
- Continent

Revenue Trend

Adjustments

Layout Auto

Size Auto

Visuals

- Sales by Order Date (Month), Product...

Auto

Custom

1024 x 768 (4:3)

1280 x 1024 (5:4)

Galaxy S5

iPhone 5

iPhone 6 Plus

iPad

iPad Pro

Enhanced Story-telling / Narrate experience with deeper control over user annotations and rendering formats

Overview

Product Prof...

Customer P...

Performanc...

Revenue Tre...*

Home Office...

6 – Improved Sharing

OAC Only

Ability to seamlessly integrate with Social networks for sharing results. Requires Oracle Storage Cloud Service.

The screenshot displays the Oracle Analytics Cloud Console interface. On the left, a navigation menu includes 'Console', 'Users & Roles', 'Snapshots', 'Connections', 'Data Replication', 'Safe Domains', 'Social', 'Virus Scanner', 'Custom Plugins', and 'Sessions & Query Cac...'. The 'Social' menu item is highlighted with an orange dashed border. The main content area is titled 'Social' and contains a form for configuring social sharing applications. The 'Service' dropdown is set to 'Slack'. Other fields include 'Status' (Inactive), 'Slack Endpoint' (http://hooks.slack.com/s...), 'Application Name', 'Distributed App' (checkbox), 'Client ID' (Required), 'Client Secret' (Required), 'Redirect URL' (http://slc13ass.us.oracle.com:9704/dv/ui/authresponse.jsp), and 'Team'. A yellow callout box highlights the text: 'Ability to seamlessly integrate with Social networks for sharing results. Requires Oracle Storage Cloud Service.' Three 'Share' dialog boxes are overlaid on the form. The top 'Share' dialog shows options for 'File', 'Print', and 'OSN', with 'OSN' highlighted by an orange dashed border. The middle 'Share' dialog shows options for 'File', 'Email', and 'Print', with 'Cloud' (represented by a cloud icon) highlighted by an orange dashed border. The bottom 'Share' dialog shows options for 'File', 'Email', and 'Print'. To the right, two 'File' dialog boxes are shown. The top 'File' dialog has 'Name' (Sample Project), 'Format' (Powerpoint (ppb)), 'Include' (Powerpoint (ppb)), 'Size' (Image (png)), and 'Orientation' (Data (csv)), with 'Package (dva)' highlighted by an orange dashed border. The bottom 'File' dialog has 'Name' (Sample Project), 'Format' (Powerpoint (ppt)), 'Include' (Active Canvas), 'Size' (Active Canvas), and 'Orientation' (All Canvas), with 'Active Canvas' highlighted by an orange dashed border.

Data Flow Steps

Add Data

Join

Merge Rows

Filter

Aggregate

Save Data Set

Create Essbase Cube

Add Columns

Select Columns

Rename Columns

Merge Columns

Bin

Group

Cumulative Value

7 – Data-flows : New Merge-rows step (union), enhanced filtering

Merge (Union) rows from multiple iso-structured datasources

Merge Rows

- Keep All rows from Input 1 and Input 2 (Union All)
- Unique rows from Input 1 and Input 2 (Union)
- Rows common to Input 1 and Input 2 (Intersect)
- Rows unique to Input 1 (Except)
- Rows unique to Input 2 (Except)

Sample Order Lines

A
B
C
B
C
D

Addntl Data

Filter

Order Priority	Customer Segment	Profit
High, Low	Home Office, Small Business	≥ 150

Search

Exclusions (2/4)

- Consumer
- Home Office
- Corporate
- Small Business

New canvas-like experience for filters node in Data-flows

Sample Or... Filter

Sample Or... Merge Rows Addntl Da...

Data Flow Steps

➔ Add Data

🌐 Join

➕ Merge Rows

🔍 Filter

Σ Aggregate

📁 Save Data Set

📦 Create Essbase Cube

||| + Add Columns

||| ✓ Select Columns

📄 Rename Columns

➕ Merge Columns

🗑️ Bin

📊 Group

📈 Cumulative Value

7 – Data-flows : New Create Essbase Cube Step

Data-flow creating aggregations cubes in Essbase

Create Essbase Cube

Essbase Connection [Select Essbase Connection](#)

Application Name

Cube Name

Description

Automatic detect of metrics, attributes and hierarchies

Essbase will identify columns as measures, dimensions, or attributes and create a cube.

Order Line ID	# of Order Lines	Order ID	# of Orders	Order Priority	Customer ID	# of Customers
6023	6023	88028	88028	Not Specified	2211	2211
179	179	87946	87946	Low	67	67

Data Flow Steps

➔ Add Data

🌐 Join

➕ Merge Rows

🔍 Filter

∑ Aggregate

📁 Save Data Set

📦 Create Essbase Cube

||+ Add Columns

||✓ Select Columns

📄 Rename Columns

➕ Merge Columns

🗑️ Bin

⊞ Group

📈 Cumulative Value

7 – Data-flows : New Cumulative Value Step

The screenshot displays the 'Cumulative Value' step configuration in the Oracle Data Flow Designer. The step is highlighted with a dashed orange border. It is connected to a 'Sample Or...' step. The configuration table below shows the settings for the 'Aggregate' step:

Aggregate	Function	Rows	New column name
Sales	Moving Sum	5	Sales Moving Sum

Below the table, there are options to '+ Aggregate', '+ Sort By', '+ Sort Column', and '+ Restart for each'. The 'Sort By' section is also highlighted with a dashed orange border and shows 'Customer ID' sorted 'A-Z'. The 'Restart for each' section is highlighted with a dashed orange border and shows 'Customer Segment'. A dropdown menu is open for the 'Function' column, showing options: 'Moving Average', 'Moving Sum', 'Running Sum', 'Running Count', 'Running Min', and 'Running Max'. The 'Moving Sum' option is currently selected.

A yellow callout box on the right side of the interface contains the text: "A new node to create rolling or moving aggregates in Data-flows".

Data Flow Steps

➔ Add Data

🌐 Join

➕ Merge Rows

🔍 Filter

Σ Aggregate

📁 Save Data Set

📦 Create Essbase Cube

||+ Add Columns

||✓ Select Columns

📄 Rename Columns

➕ Merge Columns

🗑️ Bin

📊 Group

📈 Cumulative Value

7 – Data-flows : New Create Group Step

New wizard-UI node for grouping dimension members values in Data-flows

Group

➕ Group Customer Segment Name Include Others

Group 1
Consumer

Search 🔍

Selections (1/4)

✓ Consumer
Consumer

Corporate
Home Office
Small Business

Add all Remove all

Group 1 (1/4)
Corporate
Home Office
Small Business

Group	Count
Group 1 (1/4)	1
Corporate	4
Home Office	3
Small Business	2

Data Flow Steps

➔ Add Data

🌐 Join

➕ Merge Rows

🔍 Filter

Σ Aggregate

📁 Save Data Set

📦 Create Essbase Cube

||+ Add Columns

||✓ Select Columns

🔄 Rename Columns

➕ Merge Columns

🗑️ Bin

📊 Group

📈 Cumulative Value

7 – Data-flows : New Binning Step

New wizard-UI node to bin granular data in Data-flows

Bin Sales

New element name

Number of bins ▼ ▲

Method ▼

- Manual
- Equal Width
- Equal Height

Range Histogram

0 1,200 2,401 3,602 4,800

Range List

Bin	Range
Bin1	Minimum to 752
Bin2	> 752 to 2,401
Bin3	> 2401 to 3,602
Bin4	> 3602

Customize bin width manually or by moving sliders

Data Flow Steps

➔ Add Data

☰ Group

📈 Cumulative Value

📊 Time Series Forecast

😊 Analyze Sentiment

</> Apply Custom Script

📈 Train Numeric Prediction

🧠 Train Multi-Classifer

🧠 Train Clustering

🧠 Train Binary Classifier

🧠 Train Custom Model

🧠 Apply Model

7 – Data-flows : New Forecast and Sentiment Analysis Steps

Extract Sentiment from text based columns

Analyze Sentiment

Create	Output	Column Name
<input checked="" type="checkbox"/>	emotion	emotion

Parameters

- * Text To Analyze [Customer Name](#)

Time Series Forecast

Create	Output	Column Name
<input checked="" type="checkbox"/>	forecasted	forecasted

Parameters

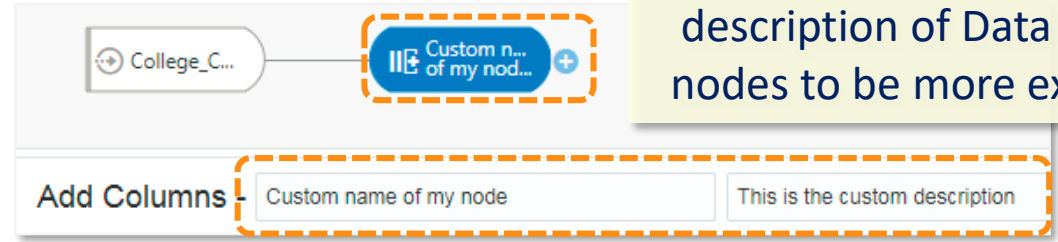
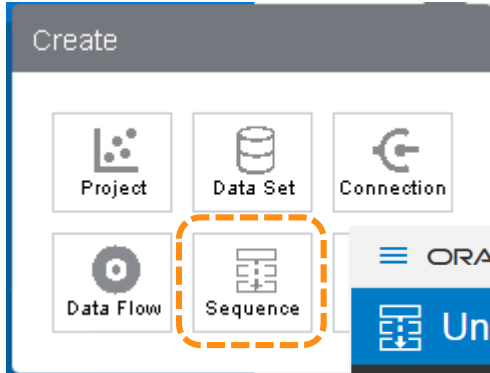
- * Target [Select a column](#)
- * Time [Order Date](#)
- * Periods

Forecast date-based metric values

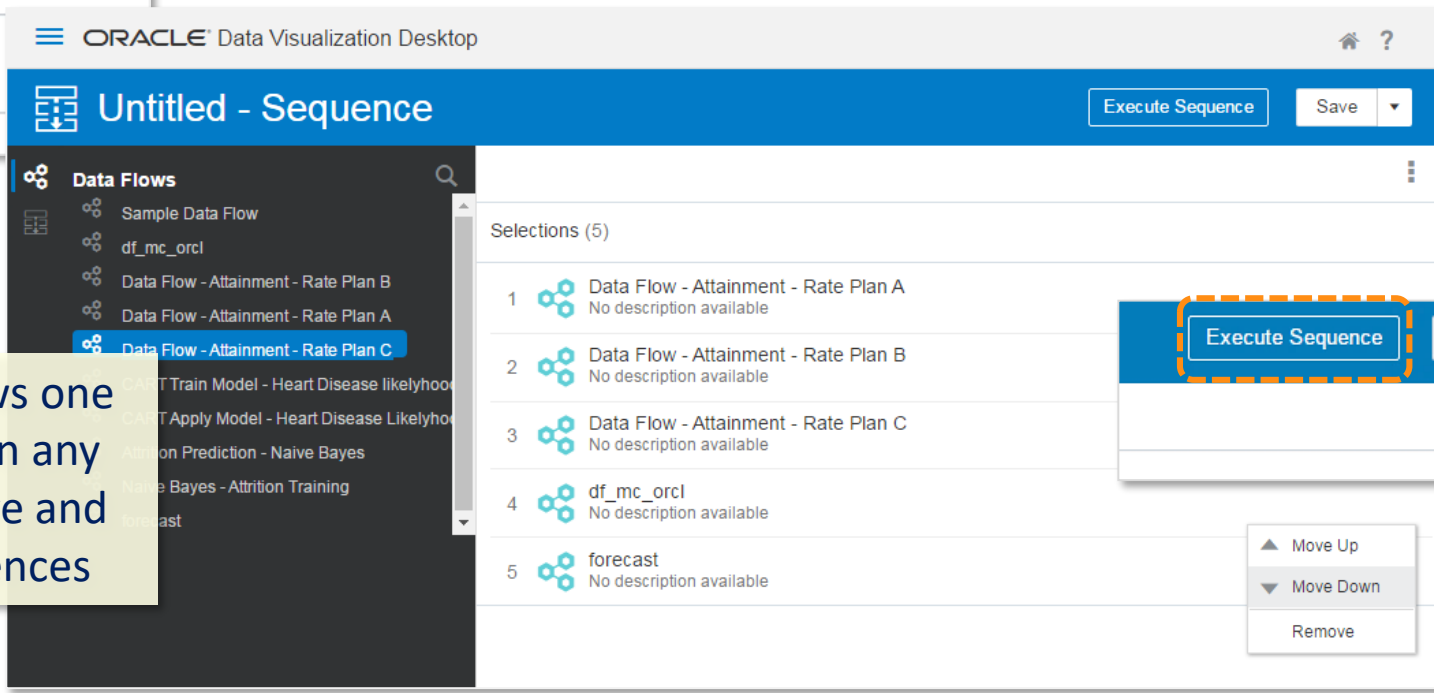
8 & 9 – Data-flows Sequences

Data-flows step custom renaming

Customize name and description of Data Flow nodes to be more explicit



Chain Data-flows one after another in any sequences. Save and execute sequences



10 – Data-flows Scheduling

Data

Data Sets Connections **Data Flows** Sequences

Type	Name	Description
	Test Dataflow	

- Run
- Open
- Schedule**
- Delete

1

Schedule Data-flows via a right click

Test Dataflow Jobs

+ Add Job

Job Name	Last Started	Next Start

*Name: Test Dataflow_1
*Start: 10/16/17
*Time: 05:03 PM
Repeat: Never

- Never
- Daily
- Weekly
- Monthly
- Yearly
- Custom

ORACLE Analytics Cloud

Console

Users & Roles Snapshots Connections Sessions & Query Cac... Issue SQL Search Index

Jobs

All Active Sort by Next Start Time












Type	Job Name	Activity	Scheduled by	Status	Next Start
	Test Dataflow_1	DataflowJob	admin		Oct 16, 2017, 6:03 PM













2













Monitor schedules from the Console screen













11,12,13,14 – New Data-source Types

Select Connection Type

-  Oracle Applications
-  Oracle Big Data Cloud (Beta)
-  Oracle Data Warehouse Cloud (Beta)
-  Oracle Database
-  Oracle Content and Experience Cloud
-  Oracle Essbase
-  Oracle Service Cloud
-  Oracle Talent Acquisition Cloud (Beta)
-  Action Ingres
-  Action Matrix
-  Action Vector

-  Amazon EMR
-  Amazon Redshift
-  Apache Drill
-  Apache Hive
-  Cassandra
-  DB2
-  Dropbox
-  Google Analytics
-  Google Cloud
-  Google Drive
-  Greenplum
-  Hortonworks Hive

-  HP Vertica
-  IBM BigInsights Hive
-  Impala
-  Informix
-  MapR Hive
-  Microsoft Access
-  MonetDB
-  MongoDB
-  MySQL
-  Netezza
-  Pivotal HD Hive
-  PostgreSQL

-  Presto
-  Salesforce
-  Spark
-  SQL Server
-  Sybase ASE
-  Sybase IQ
-  Teradata
-  Teradata Aster
-  Elasticsearch
-  JDBC
-  OData
-  ODBC

Essbase Specific New Features Overview



- **Server Enhancements**

- Calc Trace Support both via Calc Scripts & SmartView
- Data Audit Trail
- Support for Replicated Partitions
- Hybrid – Dynamic Solve Order based on member formula

- **Web UI**

- New Connections, Data Sources Interface (Drill Thru, Location Aliases)
- Logs at Application Level
- Drill Through Support
- MAXL Execution from Jobs interface
- UI for App Configurations (Drop Down for parameters)

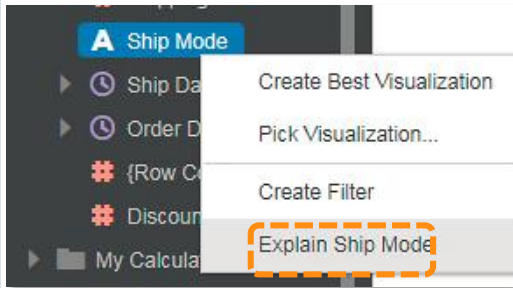
- **Smart View**

- Ability to Change Solve Order

- **Cube Designer**

- Improvements to the Transform Wizard
- Generation Names Support
- Text Lists Support in CD Wizard
- Support for Member Formula in unstructured import
- Support for Accounts Dimension hierarchy in unstructured import

15 – ML : Attribute Explain



Use Explain right click option on any attribute column to Uncover insights and patterns about this column within the whole data set

Explain Ship Mode

Basic Facts about Ship Mode
What are the values of Ship Mode and how do they relate to each other?

Key Drivers of Ship Mode
What elements in this data best explain the values of Ship Mode?

Segments that Explain Ship Mode
What hidden groups in the data can predict outcomes for Ship Mode?

Anomalies of Ship Mode
What groups in the data exhibit unexpected results for Ship Mode?

Basic facts about Ship Mode

Ship Mode is a Text Attribute with 3 unique values across 9000 rows (100%). The most common Ship Mode is Regular Air (74%) and the least common is Express Air (12%).

Key Drivers of Ship Mode

Based on All Values for Ship Mode, the 7 attributes most strongly correlated to outcomes for Ship Mode are: **Product Name, Ship Date, Product Container, Product Sub Category, Product Category, City, Grouped Sub Category**.

The charts below show the distribution of Ship Mode values across each of the key drivers. Click the checkmarks above any of the visuals to add them to your project when done.

Anomalies of Ship Mode

More than 91 combinations of 27 data were analyzed. Here are the top outliers we found to patterns that occur in the overall Data Set for **Ship Mode: Delivery Truck**.

When Ship Mode is Delivery Truck and Grouped Sub Category is Stationery, we expected Product Sub Category: Bookcases to be 97, however it is 201, representing a difference of 104.

Easily add the visualizations that Explain provides to DV project canvas



16 – ML : Train & Apply OOB Models

Data Flow Steps

Add Data

Group

Cumulative Value

Time Series Forecast

Analyze Sentiment

Apply Custom Script

Train Numeric Prediction

Train Multi-Classifer

Train Clustering

Train Binary Classifier

Train Custom Model

Apply Model

Select Train Numeric Prediction Model Script

Elastic Net Linear Regression for model training

Linear Regression for model training

Train various predictive, classification, clustering models on your data.

Select Train Multi-Classification Model Script

Naive Bayes for Classification

Random Forest for model training

CART for model training

Neural Network for Classification

SVM for Classification

Select Train Clustering Model Script

K-Means Clustering for model training

Hierarchical Clustering for model training

Easily Apply trained models on production data in Data-flows

Model - CART - Heart Disease likelihood Train Model

General Quality Related

F1 Value Model Accuracy 28%

Actual Values	Predicted Values				Total	Precision	Recall	F1
	Absent	Highly Likely	Less Likely	Others				
Absent	13	0	0	23	36 (60%)	81%	35%	0.49
Highly Likely	3	0	0	7	10 (17%)	0%	0%	0.00
Less Likely	0	0	0	10	10 (17%)	0%	0%	0.00
Others	0	0	0	4	4 (7%)	9%	98%	0.17
Total	16 (27%)	0 (0%)	0 (0%)	44 (73%)	60 (100%)			

Correct Prediction 0 100%
Incorrect Prediction 0 100%

Easily visualize quality metrics for each trained model

Select Train Two-Classification Model Script

Naive Bayes for Classification

Random Forest for model training

CART for model training

Neural Network for Classification

Logistic Regression for model training

SVM for Classification

- Naive Bayes - Attrition Train Model

Quality Related

Positive Label for Attrition Yes

Actual Values	Predicted Values		Total
	Yes	No	
Yes	17	30	47 (16%)
No	9	238	247 (84%)
Total	26 (9%)	268 (91%)	294 (100%)

F1 Value 0.46
Model Accuracy 87%
Precision 65%
Recall 36%
False Positive Rate 4%

Correct Prediction 0 100%
Incorrect Prediction 0 100%

17 – ML : Custom Script upload and Apply

DVD Only

Add Script

Name: Geo Location To Address (Python) [Change file](#)

Description: This script translate longitude and latitude to address.

Preview of Geo Location To Address (Python)

Parameters Inputs **Outputs**

name
house_number
street
settlement

OK **Cancel**

Upload any custom scripts (R, Python) to the system and train/apply them just like any OOB Models

Add Script

Name: R.TermFrequency [Change file](#)

Description: Script Version: V1
Description: This script term frequency analysis on textual data. It takes textual data as input, filters out stop words and identifies number of

Preview of R.TermFrequency

Parameters Inputs **Outputs**

RecID
RecTxt
TermFrequency

ORACLE Data Visualization Desktop

Machine Learning

Scripts **Models**

Naive Bayes - Attrition Train M... Updated Just now	CART - Heart Disease likelyho... Updated Just now
--------------------------------------------------------	------------------------------------------------------



18 – ML : Model Scenarios

Data Elements

- Attrition Possibility Data
- My Calculations
- Value Labels

Add Calculation...
Add Data Set...
Add Scenario...
Data Diagram...

Select a Model

Search

Name	Author	Modified
Naive Bayes - Attrition Train model	weblogic	Just now
OptyScoring	weblogic	Sep 14, 2017
adult-bayes		
nb-adult		

Map Your Data to the Model

Select which Data Set you want to use with the Model

Data Set: Attrition Possibility Data

Map the the data to the required model inputs

Model Input	Data	
BusinessTravel	Select Data	x
DailyRate	Select Data	x
Education	Select Data	x
EnvironmentSatisfaction	Select Data	x
MaritalStatus	Select Data	x
MonthlyRate	Select Data	x

Only showing model inputs where no match was found | Show all inputs

OK Cancel

Apply trained models directly on DV data in the context of canvas (not in Data-flows)

Data Elements

- Attrition Possibility Data
- Naive Bayes - Attrition Train model**
 - Attrition Prediction**
 - PredictionConfidence
- My Calculations
- Value Labels

19 – Embedding DV Content

OAC Only

Debug



JSON

XML (JSON Recommended)

Embed

Easily Embed DV content in operational applications

Embedding Script To Include

Include following <script> tag once per page. Based on the JavaScript framework used, replace <embeddingMode> with either "jet" or "standalone"

```
<script src="http://sl[redacted].us.oracle.com:9704/dv/ui/api/v1/plugins/embedding/<embeddingMode>/embedding.js" type="javascript">
</script>
```

Copy

Default

To embed this project showing the default view, use the following HTML inside an appropriately sized element:

```
<oracle-dv project-path="<projectPath>">
</oracle-dv>
```

Copy

Canvas "Canvas 1"

To embed this project showing the "Canvas 1" canvas, use the following HTML inside an appropriately sized element:

```
<oracle-dv project-path="<projectPath>" active-page="canvas" active-tab-id="1">
</oracle-dv>
```

Copy

Apply

Format

Unformat

OK


20, 21 – Data Replication, Email Deliveries

Define and schedule automatic replication of Oracle Service Cloud data-sources into OAC

OAC Only

ORACLE® Data Visualization

Untitled - Data Replication



The diagram shows a flow from a 'Source' (blue rounded rectangle) to 'Objects' (white rounded rectangle) and then to a 'Target' (white rounded rectangle).

Source


Source Connection [Select Connection](#)

ORACLE® Analytics Cloud

Console

- Users & Roles
- Snapshots
- Connections
- Data Replication
- Safe Domains

Deliveries ?

 [Today](#) [Refresh](#) [Restore Jobs](#)

Name	Date	Repeats	Status	Actions
No data to display				

22 – Map-viewer Administration Console in OAC

OAC
Only

ORACLE MapViewer Administration Console 12c Home Admin Metadata Configuration About Logout

Signed in As admin

Metadata

Existing Data Sources

Name
OracleMaps
OBIEE_NAVTEQ_Sample

List styles

List predefined themes

Access Map-viewer Console in OAC and customize map Backgrounds and Map Layers

23 - Import / export TCM models

The screenshot displays the Oracle Thin Client Modeler interface. At the top, there is a navigation bar with icons for VA Projects, Dashboards, Analyses, Catalog, Modeler (highlighted), Console, and Academy. Below this, the 'Models' section is visible, featuring a dropdown menu set to 'All connections', a 'Create model' button, and an 'Import Model' button (highlighted with a dashed orange border). A table lists models, with 'SampleApp' selected. The table has columns for Name, Connects to, Last published, and Actions. The 'SampleApp' row shows a default connection and a description. The 'Actions' column for 'SampleApp' includes 'Open', 'Delete', and 'Export' (highlighted with a dashed orange border). An 'Import Model' dialog box is open in the foreground, prompting the user to 'Select the source JSON file' and providing an 'Upload' section with a 'Browse...' button and the text 'No file selected.'. The dialog box has 'OK' and 'Cancel' buttons at the bottom.

Name	Connects to	Last published	Actions
SampleApp	Default connection Description: Database included with Oracle		Open Delete Export

Import Model

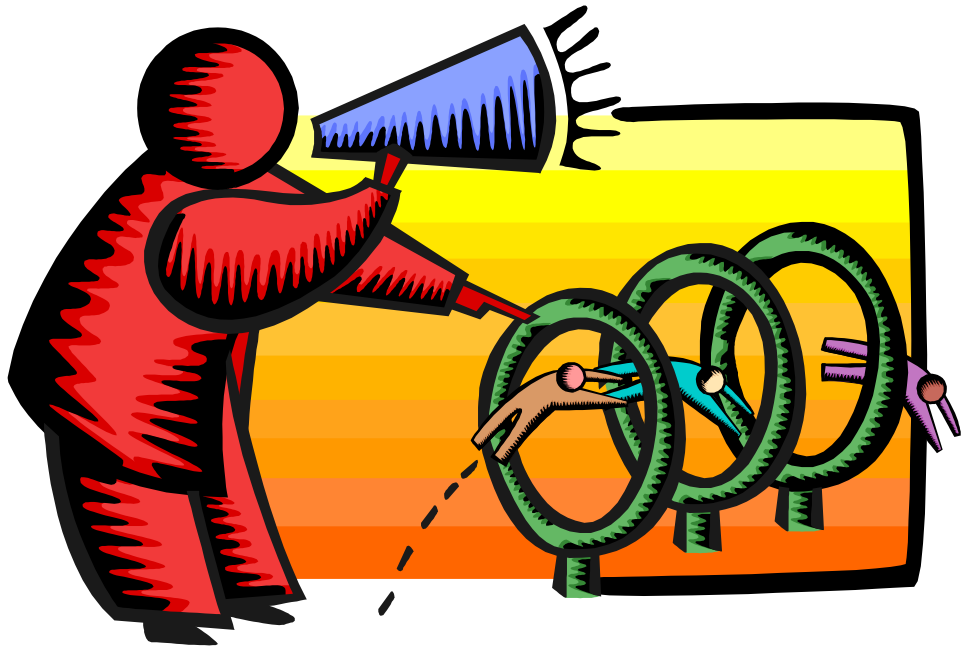
Select the source JSON file

Upload No file selected.

Import and Export single models from Thin Client Modeler



Demo





Oracle Analytics Library

Data Visualization Cloud - LI X +

https://www.oracle.com/solutions/business-analytics/data-visualization/library.html

Search

Overview Plug-ins Sample Projects Maps & Spatial

Search

How to deploy Analytic Samples sort by Last Updated

Example DV project: Great Circle Distance

Oracle

October 29, 2017

Fully functional example DV project computing distance between 2 points using latitude and longitude. Script xml and Sample project included in download(Admin123)

[Read me](#) [Download](#)

Example DV project: Term Frequency Analysis

Oracle

October 25, 2017

Example DV project, the concept of Term Frequency is the number of times a term occurs in a document. To get the Term frequency analysis working on DV, we leverage DV's new feature of executing Python scripts. Includes .dva(Admin123) examples

[Read me](#) [Download](#)

Example DV project: Heart Disease Prediction

Oracle

October 25, 2017

Example DV project that can predict Heart disease likelihood using Train Multi-Classification ML node in dataflows. Includes .dva(Admin123) examples

[Read me](#) [Download](#)

Example DV project: Bike Rental Prediction

Oracle

October 25, 2017

Example DV project that can be used to predict Bike Rental count using Train Numeric Prediction ML node in dataflows. Includes .dva(Admin123) examples

[Read me](#) [Download](#)

DV Governance

Example DV project: Attrition Prediction

Map Layer: China

Oracle

Feedback icons: Phone, QR code, Email



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All Analytics. All Data. No Nonsense.

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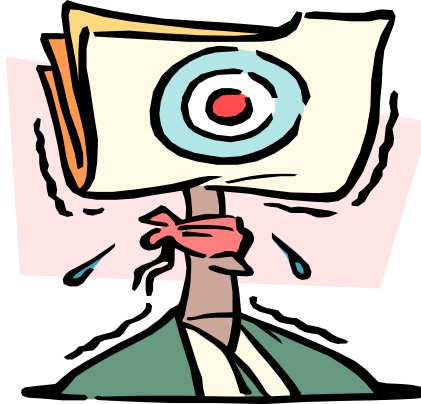
www.AnalyticsandDataSummit.org

Call for speakers is now open with rolling acceptances until December 22, 2017





Resources and Questions?



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Vlamiis Home www.vlamiis.com Blog www.vlamiis.com/blog Prior OBIEE releases www.vlamiis.com/obiwebinars

Help on new features <https://docs.oracle.com/en/cloud/paas/analytics-cloud/acsw/index.html>

Oracle Analytics Library with plugins and demos <https://www.oracle.com/solutions/business-analytics/data-visualization/library.html>

YouTube channel Oracle Analytics from SampleApp Team <https://www.youtube.com/user/EvolvingBI/videos>

YouTube video playlist on DV4 new features <https://www.youtube.com/watch?v=AoMxQDX4KNQ&list=PL0cpw36tp3yKTe2EDF29vr60wWIM4aWDP>

YouTube Oracle Analytics Cloud - Essbase New Capabilities by Kumar Ramaiyer, Oracle <https://www.youtube.com/watch?v=kNjzqblFtZs>

Repeat webinar January 16, 2018 on OAC 4 new features <https://register.gotowebinar.com/register/6372765384033549313?source=decwebinar>

Analytics and Data Summit 2018 Conference <http://www.AnalyticsandDataSummit.org>