OBIEE SampleApp V506

What's New Overview

June 2015

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SampleApp V506 Areas of New Content on the Image

A. 12.1.0.2 + DBIM

    1. DBIM Installed   2. DB direct Json Sourcing   3. 12c DB Count Distinct Estimate

B. Impala + Big Data SQL

    4. OBIEE + BDSQL   5. OBIEE + Impala   6. ORAAH

C. OBIEE 11.1.1.9

    7. Sessions tracking in UT   8. New Exalytics Agg Features   9. New OOB Vizualisations

    10. New Custom Style feature   11. Saved Calculations in Web-cat   12. Hierarchical Session Variables

D. Other items

    13. More configured Vizs   14. APEX Contextual Comments   15. DB Procedure Dashboard interact

    16. New BIMAD Apps

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SampleApp V506 Installed Software

- **Oracle Enterprise Linux 6.5 x64**

- **OBIEE** 11.1.1.9 GA two distinct OBIEE instances, Essbase 11.1.2.4, updated BIMAD

- **Oracle MapViewer** 11.1.1.9.1

- **Oracle BICS Data Sync v1**

- **Oracle Database 12c IMDB** 12.1.0.2, PDB Install, AWM 12.1.0.2a, APEX 4.2.6 & ORDS 2.0.1, ODM, Oracle Spatial and Graph

- **ORE** 1.4.1 & R-3.1.1

- **ENDECA** 3.1, Server 7.6.1,Studio 3.1, Provisioning Services

- **Cloudera CDH 5.1.2,** Oracle BigData SQL, Oracle BigData Connectors

- **Plug and Play Companions :** EPM 11.1.2.3, BIApps Demos

- **Utils** : Start scripts, MapBuilder, SQLDev 4.1

Oracle BIEE SampleApp **V506**

Oracle Enterprise Linux 6.5 x64
Oracle Business Intelligence EE 11.1.1.9.1
    Mobile Application Designer
   Oracle MapViewer Version 11.1.1.9.1
    MVDemo Samples App
    Essbase Server 11.1.2.4, Essbase Studio,FR
    Sample Application Content
BICS Data Sync version 1
Oracle Database 12c 12.1.0.2.0 (imdb)
    R 3.1.1 ORE 1.4.1
    Oracle APEX 4.2.6, ORDS (formally listener)2.0.10
    SQL Developer 4.1.0
    AWM Workspace Manager 12.1.0.2a
    Oracle Data Mining
    Oracle Spatial and Graph
BigData
    CDH 5.1.2 with Cloudera Manager
    Oracle BigData SQL
    Oracle BigData Connectors
Oracle Endeca Information Discovery 3.1
    Endeca Server 7.6.1,Studio 3.1
    Provisioning Services
Standalone EPM 11.1.2.3 Suite (plug-in)
Biapps 11.1.1.1.7 (plug-in)

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SampleApp V506 : New 11.1.1.9 Visuals

Horizontal Prompt Members Layout
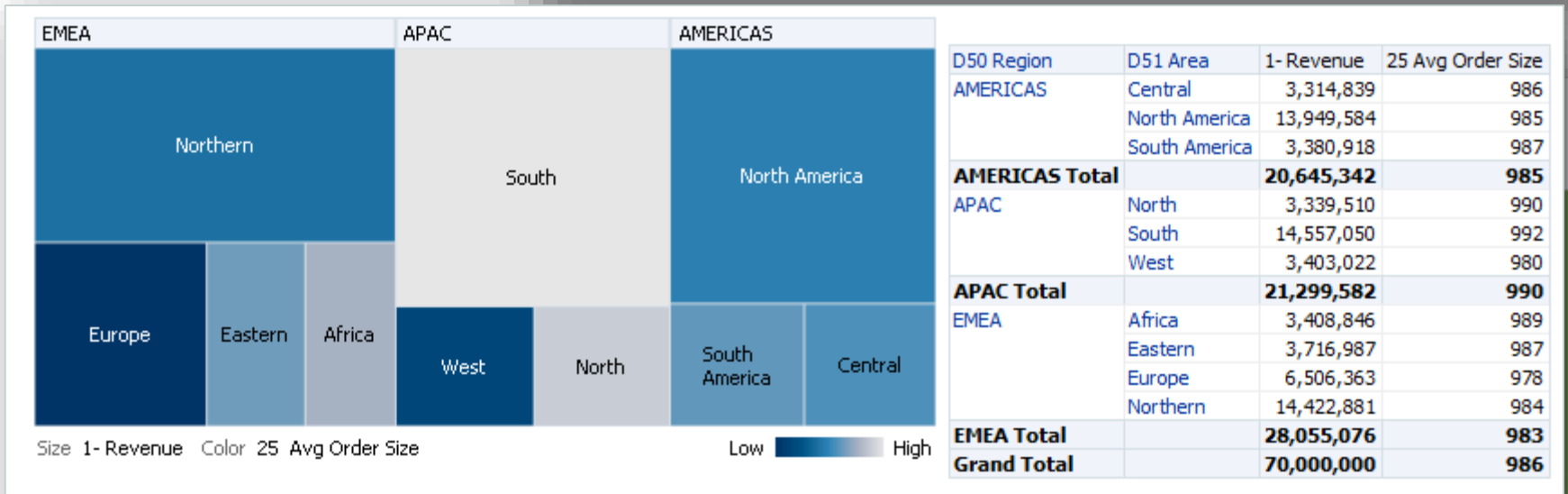
Treemap visuals

SampleApp V506 : 11.1.1.9 Sessions Tracking

Sessions Trending
Time run: 2/27/2015 6:49:04 AM

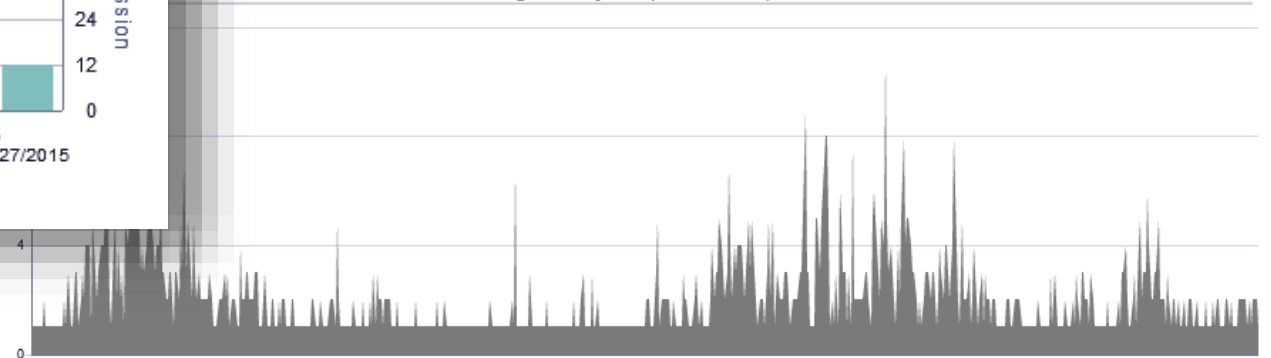|	Sun	Mon	Tue	Wed	Thu	Fri	Grand Total
# of Sessions	23	25	111	112	103	29	401
# of Queries	135	162	1,068	2,353	2,805	948	7,471
Total Num dB Queries	95	139	1,153	2,872	3,785	7,896	15,940
Avg Queries Per Session	5.9	6.5	9.6	21.0	27.2	32.7	18.6
Avg dB Queries per Session	4.1	5.6	10.4	25.6	36.7	272.3	39.8
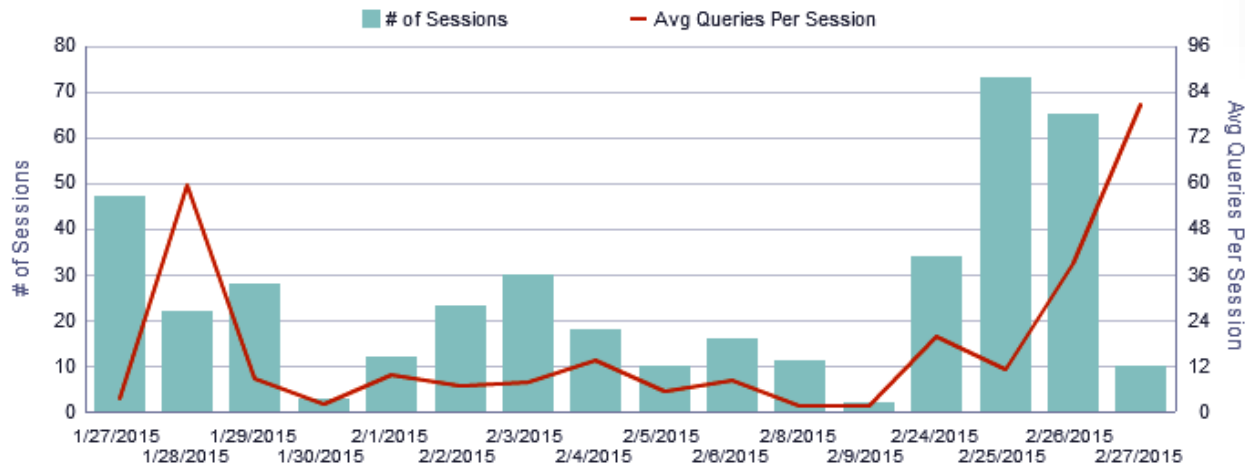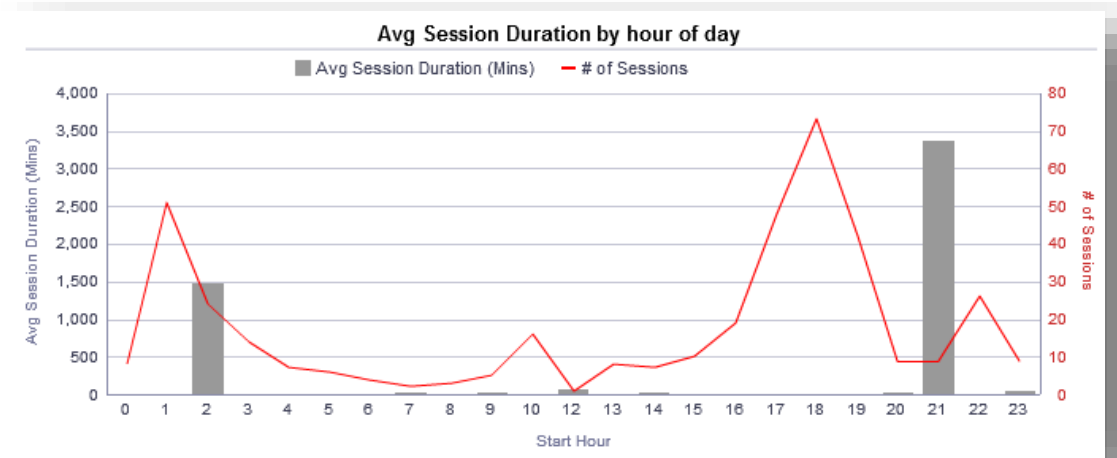
UT tracking Sessions ID details, allows deep Analytics on users sessions

SampleApp V506 : New Exalytics Features

Aggregate Persistence Wizard handling Count-Distinct aggregations in Aggregate Tables

FACT_AGG_OR_RS_04 table definition
- Month (Dimension)
- Product Desc (Ragged skipped dimension grain)
- Product Type (Ragged skipped dimension parent level)
- Product LOB (Ragged skipped dimension parent level)
- Product Brand (Ragged skipped dimension parent level)
- Revenue (Metric)

of distinct Aircrafts

Orig Division Name	Source Fact Table	2010 / 01
East North Central Division	FACT_AGG_OR_CD_05 - 3.7m Rows	3,754
East South Central Division	FACT_AGG_OR_CD_05 - 3.7m Rows	2,478
Middle Atlantic Division	FACT_AGG_OR_CD_05 - 3.7m Rows	3,679
Mountain Division	FACT_AGG_OR_CD_05 - 3.7m Rows	3,212
New England Division	FACT_AGG_OR_CD_05 - 3.7m Rows	2,791
Pacific Division	FACT_AGG_OR_CD_05 - 3.7m Rows	3,066
South Atlantic Division	FACT_AGG_OR_CD_05 - 3.7m Rows	4,111
West North Central Division	FACT_AGG_OR_CD_05 - 3.7m Rows	3,165
West South Central Division	FACT_AGG_OR_CD_05 - 3.7m Rows	3,592

Ragged Skipped- Aggregate Source

		1- Revenue			
		◢ Total Time			
H2 Products Ragged SkipLevels	Source Fact Table		▷ 2010	▷ 2011	▷ 2012
◢ Product (Rgd Sk Lvl) Total	FACT_AGG_OR_RS_04 - 6k Rows	15,690,331,994	5,239,544,257	5,225,582,673	5,225,205,064
▷ A - Brand 1	FACT_AGG_OR_RS_04 - 6k Rows	736,711,089	257,378,801	244,346,037	234,986,251
◢ A - Brand 2	FACT_AGG_OR_RS_04 - 6k Rows	683,532,940	238,495,524	224,605,731	220,431,686
▷ C - Type 3	FACT_AGG_OR_RS_04 - 6k Rows	225,345,266	76,845,376	73,572,513	74,927,378
▷ C - Type 4	FACT_AGG_OR_RS_04 - 6k Rows	340,284,835	119,683,887	111,634,335	108,966,613
B - LOB 3	FACT_AGG_OR_RS_04 - 6k Rows	117,902,839	41,966,261	39,398,883	36,537,695
▷ A - Brand 3	FACT_AGG_OR_RS_04 - 6k Rows	687,543,769	223,021,827	219,171,570	245,350,373
A - Brand 4	FACT_AGG_OR_RS_04 - 6k Rows	91,509,662	28,042,820	31,409,121	32,057,722
▷ A - Brand 5	FACT_AGG_OR_RS_04 - 6k Rows	5,488,331,459	1,819,578,659	1,842,882,628	1,825,870,172
▷ A - Brand 6	FACT_AGG_OR_RS_04 - 6k Rows	4,319,179,644	1,451,839,944	1,432,058,200	1,435,281,500
▷ A - Brand 7	FACT_AGG_OR_RS_04 - 6k Rows	3,683,523,430	1,221,186,683	1,231,109,387	1,231,227,360

FACT_AGG_OR_CD_05 table definition
- Route detail (Dimension)
- Month (Dimension)
- Orig Airport (Dimension)
- Dest Airport (Dimension)
- Aircraft number (Count Distinct Metric) - Air

Aggregate Persistence Wizard handling Ragged Skipped Level Hierarchies in Aggregate Tables

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SampleApp V506 : Other 11.1.1.9 Features

New default dashboard styles, and simpler way of defining custom styles

Storing reusable Webcat calculations definitions in Global Variables

Hyperion Planning as a physical source to OBIEE

Fuse Dashboard Style

Hierarchical values Session Variables base on JSON definitions

SampleApp V506 : 12c 12.1.0.2 Database features

Attribute Importance - for column: REVENUE
Inferred from random sample data

RANK	ATTRIBUTE_NAME	IMPORTANCE_VALUE
01	UNITS	0.6754
02	BILL_MTH_KEY	0.1426
03	BILL_QTR_KEY	0.0723
04	ORDER_KEY	0.0101
05	ORDER_NUMBER	-0.0221
06	ORDER_TYPE	-0.0226
07	PROD_KEY	-0.0257
08	CURRENCY	-0.0261
09	CUST_KEY	-0.0293
10	DISCNT_RATE	-0.0341

Database feature : Approximate Count Distinct, highly performing

Approximate Count Distinct

of Pilots (Approximate)

Carrier	2010 Q1	2010 Q2	2010 Q3	2010 Q4
American International	65,332	60,723	67,211	63,819
American Sky	2,521	2,585	2,795	2,958
Atlantic International	31,897	30,633	36,462	35,640
Eastern Airlines	10,258	10,680	11,125	10,409
Great West Airlines	22,139	21,263	27,467	26,454
High Sky Way	18,605	19,188	21,831	21,180
Mid American Airlines	12,929	12,042	13,275	13,058
Midwest International	36,785	36,143	39,558	38,770
Mountain West Air	25,392	24,976	25,386	26,930
NorthEast Express	28,584	28,727	31,305	28,781
Pacific Coast Airlines	23,275	21,748	24,198	24,548
Rainbow Airlines	35,483	35,305	36,128	34,535
Southeast Airlines	27,525	26,518	27,547	28,684
Southern Airway	21,695	17,671	17,597	18,034
SunBelt Airways	48,236	43,750	47,751	50,716
SunFlower Airlines	39,773	38,060	40,677	40,879
West Coast airlines	43,776	42,867	48,068	47,506
horizon airlines	32,247	28,853	30,376	31,736

Approximate to Actual Count Distinct

Appoximate to Actual

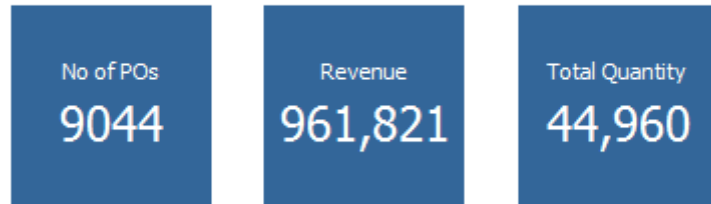| Carrier	2010 Q1	2010 Q2	2010 Q3	2010 Q4	Grand Total
American International	100.4%	98.2%	99.7%	97.8%	**99.0%**
American Sky	98.8%	103.2%	99.3%	100.3%	**100.4%**
Atlantic International	99.4%	98.1%	102.2%	99.1%	**99.7%**
Eastern Airlines	100.3%	100.9%	103.4%	103.1%	**101.9%**
Great West Airlines	100.0%	99.1%	98.5%	100.7%	**99.6%**
High Sky Way	98.0%	99.7%	98.4%	96.8%	**98.3%**
Mid American Airlines	101.1%	100.1%	100.0%	100.1%	**100.3%**
Midwest International	97.9%	98.5%	98.0%	100.2%	**98.7%**
Mountain West Air	98.4%	99.2%	101.1%	99.3%	**99.5%**
NorthEast Express	100.7%	99.8%	103.1%	98.1%	**100.4%**
Pacific Coast Airlines	99.3%	97.9%	100.7%	100.5%	**99.6%**
Rainbow Airlines	97.1%	101.4%	98.2%	98.7%	**98.8%**
Southeast Airlines	99.4%	101.1%	99.6%	98.1%	**99.6%**
Southern Airway	101.9%	98.0%	100.5%	99.9%	**100.1%**
SunBelt Airways	100.2%	96.8%	99.3%	100.6%	**99.2%**
SunFlower Airlines	99.3%	98.9%	100.2%	98.0%	**99.1%**
West Coast airlines	98.6%	99.1%	100.0%	100.5%	**99.5%**
horizon airlines	102.2%	99.3%	97.6%	99.2%	**99.6%**
Grand Total	**99.6%**	**99.4%**	**100.0%**	**99.5%**	**99.6%**

ODM Attribute Importance Analysis, directly from Dashboard

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SampleApp V506 : 12c 12.1.0.2 Database features

Purchase Orders JSON Analysis

No of POs **9044**	Revenue **961,821**	Total Quantity **44,960**

COUNTRY	PO COUNT	QUANTITY	UNITPRICE	REVENUE
Canada	102	483	21.45	10,431
Germany	113	594	21.41	12,866
United Kingdom	3011	14,912	21.40	319,440
United States of America	5735	28,561	21.39	610,424
No Address	83	410	21.01	8,660
Grand Total	**9044**	**44,960**	**21.39**	**961,821**

Database directly parsing JSON files as data-source : upload your multiples JSON files and view the results on dashboard immediately
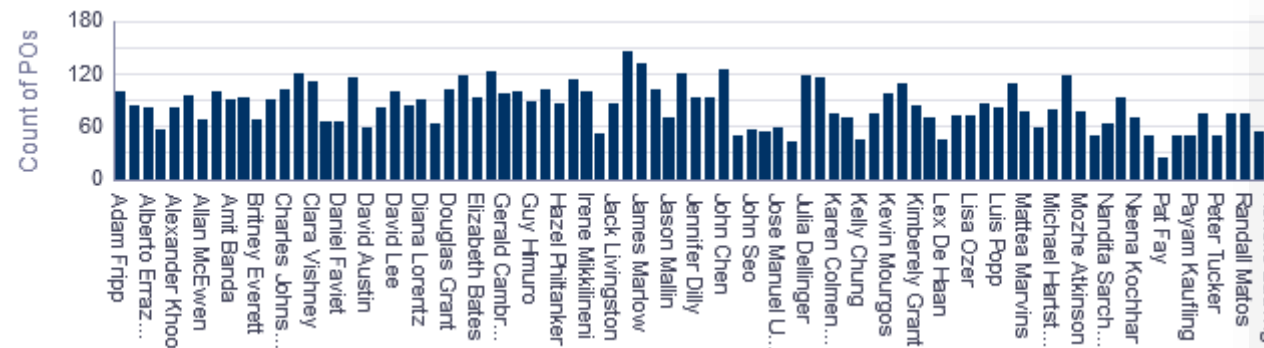
```
Sample of JSON Object read in this example
{ "PONumber"              : 1600,
  "Reference"             : "ABULL-20140421",
  "Requestor"             : "Alexis Bull",
  "User"                  : "ABULL",
  "CostCenter"            : "A50",
  "ShippingInstructions" : { "name"    : "Alexis Bull",
        "Address": { "street"  : "200 Sporting Green",
                     "city"    : "South San Francisco",
                     "state"   : "CA",
                     "zipCode" : 99236,
                     "country" : "United States of America" },
        "Phone" : [ { "type" : "Office", "number" : "909-555-7307" },
                    { "type" : "Mobile", "number" : "415-555-1234" } ] },
  "Special Instructions" : null,
  "AllowPartialShipment" : false,
  "LineItems" : [ { "ItemNumber" : 1,
            "Part"        : { "Description" : "One Magic Christmas",
                              "UnitPrice"   : 19.95,
                              "UPCCode"     : 13131092899 },
            "Quantity"    : 9.0 },
          { "ItemNumber" : 2,
            "Part"        : { "Description" : "Lethal Weapon",
                              "UnitPrice"   : 19.95,
                              "UPCCode"     : 85391628927 },
            "Quantity"    : 5.0 } ] }
```

SampleApp V506 : New BIMAD Apps and new BIMAD Plugg-ins
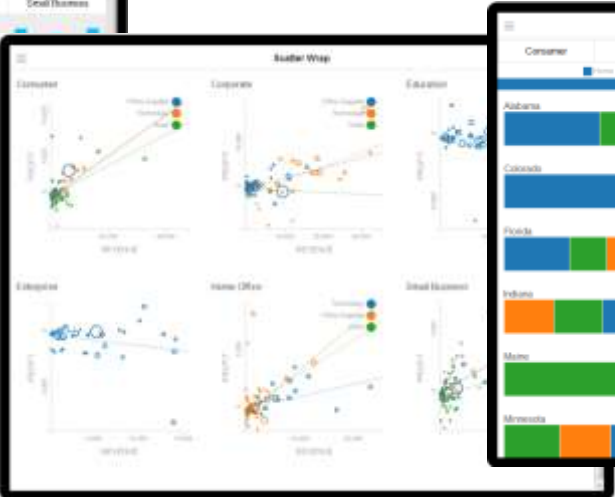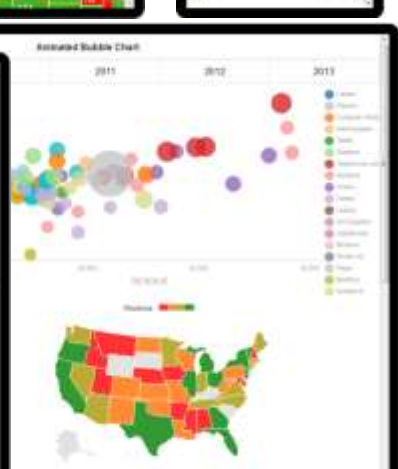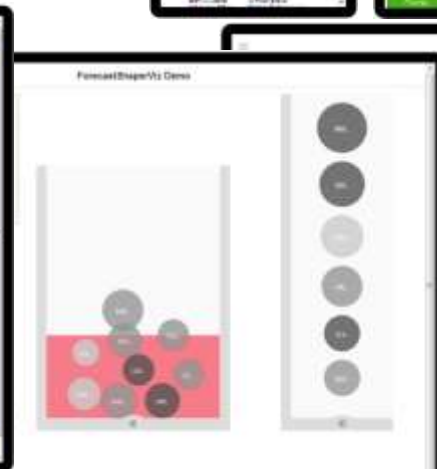
SampleApp V506 : Integration Examples

Add Comments to this report using direct insert

Region ⦿ AMERICAS ◯ EMEA ◯ APAC   Enter Comments [   ]

SQL Statement

Enter a database-specific SQL statement. This statement will be issued as-is to the database associated with the specified

```
select USER_COMMENT_ENTRY(current_date,'@{CommentRegion}{AMERICAS}','@{Comment}
{Comment}','SALES ANALYSIS','@{user.displayName}') as val from dual
where rownum < 2
```

> Invoke any database function directly from dashboard using Evaluate function, passing contextual values

Enter comments for a report

Quarter [2012 Q1 ▾]   Region ⦿ AMERICAS ◯ EMEA ◯ APAC

Add your comments on this report using APEX
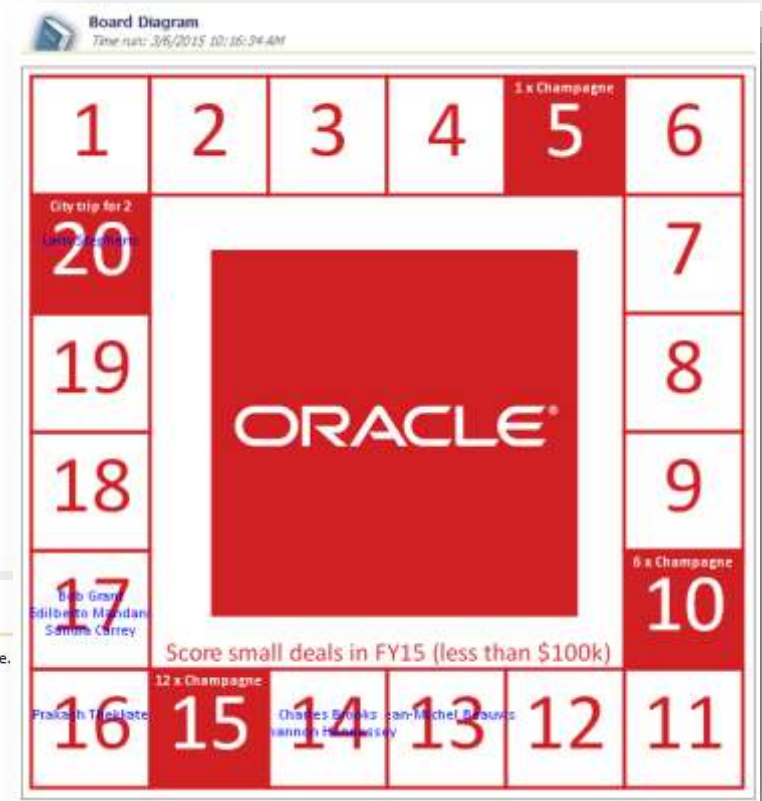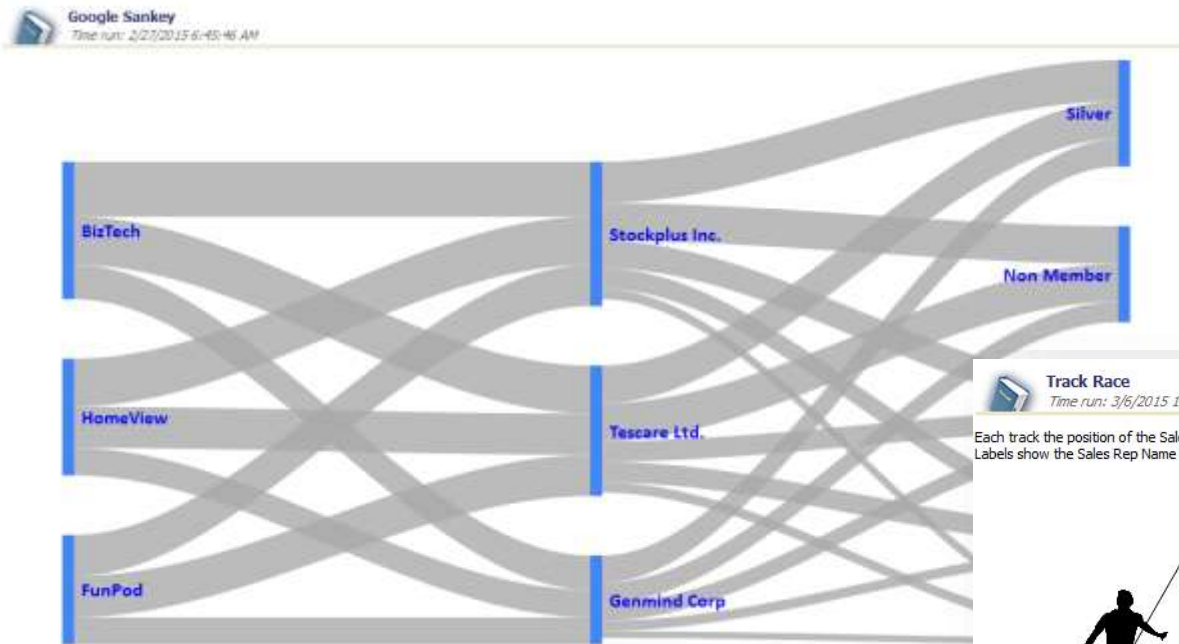
* Date [27-FEB-15] 📅

* For Region   ⦿ AMERICAS   ◯ APAC   ◯ EMEA

* For Report   ◯ BALANCE SHEET   ◯ CASH FLOW   ◯ PROFIT AND LOSS   ⦿ SALES ANALYSIS

r Comment [   ]

Filing User [prodney]

> Pass contextual values directly from dashboard to an APEX application

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SampleApp V506 : More Custom Visuals


Additional Custom visual examples

SampleApp V506 : OBIEE + IMPALA or HIVE

Top Customers with Purchases
Purchase data from HDFS joined with Customer data in Oracle tables

Customer Name	Customer Country	Income Level	Gender	Marital Status	Purchase Cnt
Wilfredo Wilder	United States	B: 30,000 - 49,999	Male	S	24
Carlo Gonzales	United States	B: 30,000 - 49,999	Male	S	23
Maryann Powers	United States	A: Below 30,000	Female	M	21
Phineas Benton	Hungary	C: 50,000 - 69,999	Male	M	21
Jita Nilini	India	A: Below 30,000	Male	S	19
Harold Abe	Japan	C: 50,000 - 69,999	Male	S	18
Heriberto Jong	United Kingdom	B: 30,000 - 49,999	Male	S	18
Jerrold Small	United States	A: Below 30,000	Male	S	18
Rafael Trujillo	United States	E: 90,000 - 109,999	Male	S	18
Tariyel De Vivero	Mexico	B: 30,000 - 49,999	Male	S	18
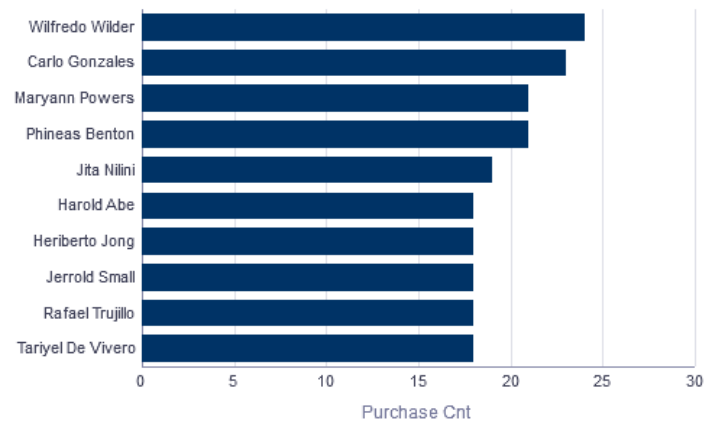
Top Movies Purchased
Genereted by joining fact data from HDFS with movie attributes in Oracle relational tables

Movie Title	Release Year	No of Purchases	Revenue
Match Point	2005	183	364
Risky Business	1983	150	299
Cabin Fever	2002	142	283
The Time Machine	2002	104	207
Dirty Dancing	1987	91	181
Four Rooms	1995	81	161
Sweet Home Alabama	2002	66	131
Memento	2000	53	158
Candyman	1992	50	99
Braveheart	1995	41	122
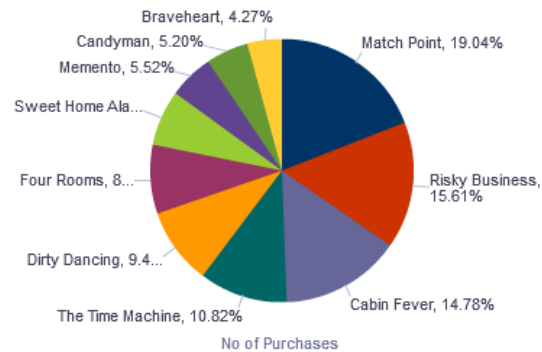
OBIEE directly sourcing from Cloudera Impala
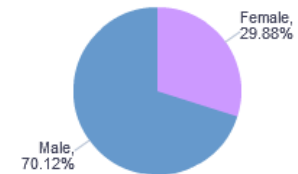
ORACLE
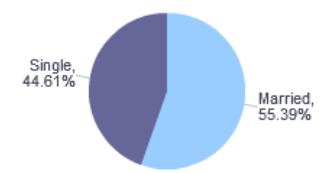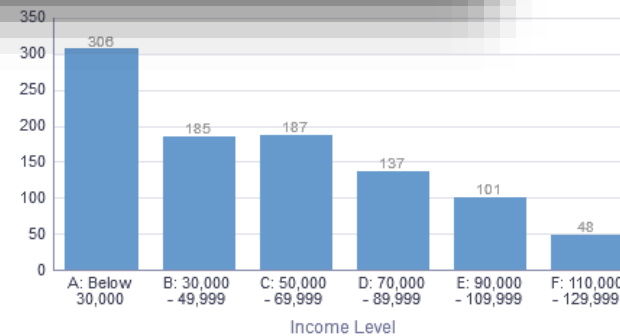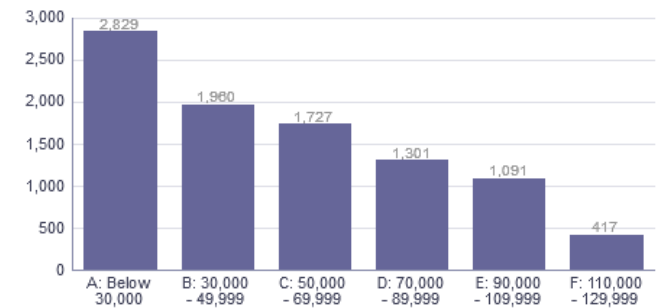
SampleApp V506 : OBIEE + BIG DATA SQL

Recency, Frequency and Monetary Analysis of Customers
Customers analyzed by their RFM scores (out of 5). e.g. Most frequently visitng customer gets a frequency score of 5; Most recent gets recency score of 5 and so on

$9,994 Revenue	**2,260** Customer Count	Female, 40.97% / Male, 59.03% / Count of Customers

Customer Name	Gender	Recency	Freq△▼	Monetary	Revenue
Aanand Martinez	Male	2	5	4	$16
Abdu Duke	Male	4	5	5	$18
Abdu Talenti	Male	1	5	4	$13
Abel Mathews	Male	2	5	5	$25
Abgar Saligrama	Male	1	5	5	$29
Abhinabhas Bragaghio	Male	3	5	4	$10
Adelisa De Zeeuw	Female	2	5	3	$8
Adelynn Meadows	Female	3	5	3	$6
Adityasena Hynninen	Male	1	5	5	$26
Adrien Gobinet	Male	1	5	4	$16
Ailis Harbir	Female	4	5	3	$9

	Revenue by Frequency					Total	Customer Count by Frequency					Total
Recency	1	2	3	4	5		1	2	3	4	5	
1	$0	$2	$95	$11		$108	156	140	129	8		433
2	$0	$12	$93	$178	$29	$312	121	144	139	46	2	452
3	$0	$0	$90	$568	$745	$1,402	68	97	124	129	51	46
4	$0	$0	$11	$624	$2,317	$2,952	43	40	61	125	136	40
5	$0	$2	$31	$702	$4,486	$5,221	18	30	43	147	263	50
Total	$0	$16	$319	$2,083	$7,577	$9,994	406	451	496	455	452	220

Revenue / Count of Customers chart — Tile No by Revenue (Monetary), legend: Revenue, Count of Customers

> OBIEE leveraging Big Data SQL to optimize queries to Big Data datasources

Click Pattern to Buy

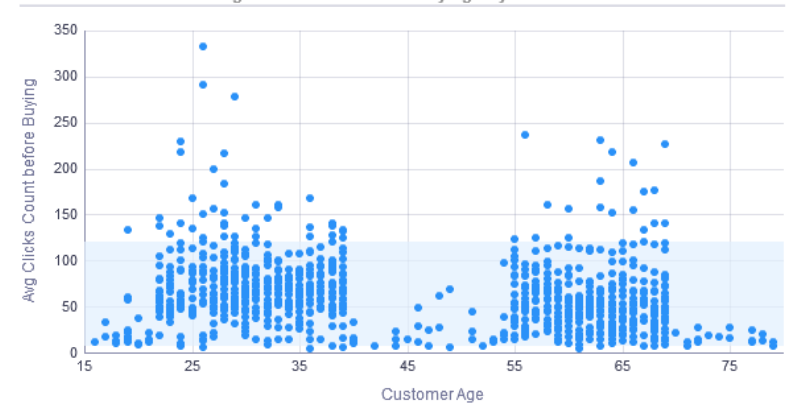Pattern detection SQL to identify clicks leading upto one or more purchases

```
SELECT
CUST_ID, F_CLICK_TSTAMP, CLICK_COUNT, BUY_TSTAMP,  BUY_COUNT,
TRUNC(NO_OF_DAYS_FC,4) AS DAYS_SINCE_FCLICK, LOGIN_FLAG, LOGIN_COUNT
FROM MOVIEDEMO.MOVIEAPP_CLICKS_BDSQL_V
  MATCH_RECOGNIZE
  (PARTITION BY CUST_ID
  ORDER BY SESS_DATE
  MEASURES
    FIRST(CLICK.ACT_LOGIN) AS LOGIN_FLAG,
    FIRST(CLICK.SESS_DATE) AS F_CLICK_TSTAMP,
    COUNT(CLICK.ACT_LOGIN) AS LOGIN_COUNT,
    COUNT(CLICK.*) AS CLICK_COUNT,
    FIRST(BUY.SESS_DATE) AS BUY_TSTAMP,
    COUNT(BUY.*) AS BUY_COUNT,
    FIRST(BUY.SESS_DATE)- FIRST(CLICK.SESS_DATE) AS NO_OF_DAYS_FC
ONE ROW PER MATCH
PATTERN (CLICK+ BUY+)
DEFINE CLICK AS (ACT_PURCHASE IS NULL),
BUY AS (ACT_PURCHASE IS NOT NULL))
```

Avg Clicks Count before Buying - by Customer (scatter plot: Avg Clicks Count before Buying vs Customer Age)

Click patterns leading upto one or more purchases

Customer Name Elise Cole

Selected Customer Details (select customer from above graph)

Customer Name Elise Cole

First Click (tstamp)	Days before buy	Clicks Count	Buy Click (tstamp)	Buys Count	Login Flag	Login Count
7/22/2012 7:31:58 AM	6.3	28	7/28/2012 3:53:52 PM	3	Y	7
8/5/2012 3:05:21 AM	0.8	32	8/5/2012 9:17:18 PM	1	Y	8
8/5/2012 10:21:04 PM	19.9	29	8/25/2012 9:00:35 PM	1	Y	8
8/25/2012 9:28:40 PM	13.4	30	9/8/2012 7:25:58 AM	2	Y	9
9/8/2012 10:41:20 AM	0.5	61	9/8/2012 9:34:27 PM	1	Y	19
9/8/2012 10:17:50 PM	6.1	153	9/15/2012 12:11:15 AM	2	Y	45
9/15/2012 1:51:16 AM	0.0	2	9/15/2012 1:55:45 AM	1		0

Customer ID	Customer Name	Gender	Marital Status	Income Level	Age	Login Count	Buys Count	Avg Clicks to Buy
1272856	Elise Cole	Female	M	B: 30,000 - 49,999	34	96	11	48

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