Hyperion Focus 17

“Essbase in the Cloud” an introduction to OAC

Serge Kpossou (AMOSCA) & Guy Bellucci (Oracle)

keyteach TPH Merlin XI epm FastTrack ORACLE Accelatis a datAvail company AMOSCA Claremont. APPLIEDOLAP cubus EPM Maestro UKOUG UK ORACLE USER GROUP

Agenda

- What is Essbase
- Essbase's journey from IT owned analytics software to business analytics platform
- Oracle Analytics Cloud Service : OAC(S)
  - What is OAC
  - How does Essbase Cloud compare with Essbase On-premise
  - Enhanced Reporting features:
    - Data Visualization Cloud Service (DVCS)
    - Business Intelligence Cloud Service (BICS)
  - Sizing your OAC Environment
  - What's coming ? upcoming features update from Oracle
- Demonstration:
  - Navigation
    - we'll browse through OAC new features
  - OAC Cube Designer
    - We'll create an application & cube using from a random dataset, and we'll build powerful analytics, within minutes !

What is Essbase ?

- Essbase is a multidimensional database management system that provides a platform upon which to build analytic applications.

- Multidimensional databases use OLAP, a database technology optimized for processing queries and reports rather than transactions

- In August 2005, *Information Age magazine* named Essbase as one of the 10 most influential technology innovations of the previous 10 years, along with ~~Netscape~~, ~~the BlackBerry~~, Google, virtualization, Voice Over IP (VOIP), Linux, XML, the Pentium processor, and ADSL.

- Essbase has changed the landscape of data analytics, spurred the creation of scores of rival OLAP products – and billions of OLAP cubes

Hyperion Focus 17

Essbase: evolution over the years

Essbase
- 1991: first release

V6
- Hyperion & Arbor merge (1998)

V7
- Introduction of Hyperion Hub (2004), ASO

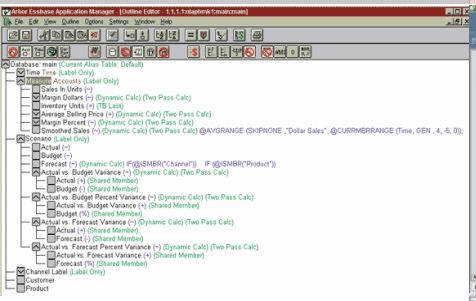
System 9
- Introduction of SmartView, HSS (2006)

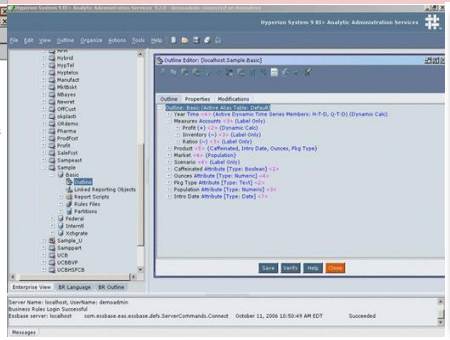
V11
- Introduction of Hybrid (2014)

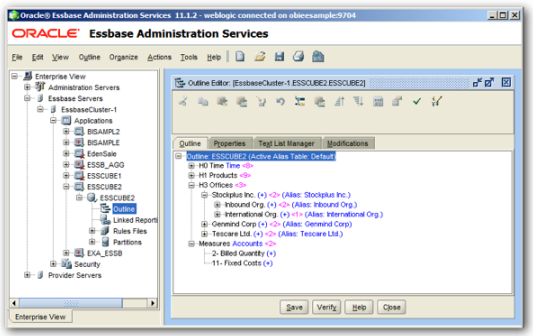
V12
- Oracle BI connectivity (2016)

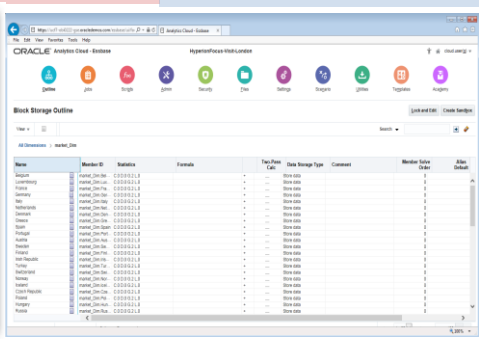
Essbase Cloud
- 2017: first cloud release

Client / Server era | **3 Tier (Web based) Architecture era** | **Cloud computing era**









- Essbase has been around for 28 years and has experienced countless facelifts & improvements

- In 2017, Essbase is still one of the most powerful analytics tool on the market

keyteach. TPH Merlin XL epm FastTrack ORACLE Accelatis Powering I.T. Empowering Business. a datAvail company AMOSCA Claremont. APPLIEDOLAP cubus EPM Maestro UKOUG UK ORACLE USER GROUP

OAC highlights : a modern business analytics platform

Essbase Cloud

Computing Power & Storage Capacity
- Elastic, In-Memory & Exalytics, Clustering & high availability, cost of a Terabyte is £30 per month !

Cubes Storage
- Hybrid (ASO/BSO)

Users Interface & Reporting

BICS & DVCS allow powerful analytics and less IT involvement in reports design

Command line utilities
- Essbase Command Line, LCM Migration tool, REST APIs, MAXL

Systems Administration
- Web interface, Excel Cube designer, SSH Access to Essbase Server

Build / Maintenance complexity
- Simplified Applications/Cubes design process

Cloud Only Essbase features
- Sandboxing, Scenario management, Design by Example templates, Excel Import / Export

Essbase Cloud vs Essbase On-premise

Feature	Essbase Cloud	On-Premise Essbase
BSO, ASO, Hybrid	Y	Y
Load rules (Dimension & Data)	Y	Y
Calculations: formulas, calculations scripts, MDX scripts	Y	Y
Unicode supported	Y (Default)	Y
Locks (application, database, objects)	Y (Blocks, objects)	Y (database, objects)
Security filters	Y	Y
Migration of on-premises cubes (*)	Y (Export Utility, LCM utility, ESSCLI)	Y
SmartView & Ad-hoc reporting	Y	Y
Attribute Dimensions, UDAs, Text, date and Boolean data	Y	Y
Duplicate member names and aliases	Y	Y
Parent-Child and Generation dimension build methods	Y	Y
On demand backups and patching/upgrades	Y (LCM Utility)	Y
SQL queries for Dimension/data loads	Y	Y
Multiple Alias tables supported	Y (Alias default & Alias Long name)	Y
Substitutions variables (*)	Y (App and DB level)	Y
Implied Sharing	N	Y
Direct access to the server (FTP, Maxl, Patches, etc)	Y (SSH)	Y
Partitioning	N (upcoming feature)	Y
8 Characters naming(Over 8 digits limitation)	N	Y
Approvals	Y	N
Cube Designer	Y	N
Essbase Clients / Reporting Tools	SmartView, DVCS, DVD, BICS, Day by Day	SmartView, Financial reporting

Hyperion Focus 17

Data Visualization CS & Business Intelligence CS

Complete: Everything You Need for Analytics

Oracle Analytics Cloud combines existing and new services to deliver the industry's most comprehensive analytics in the cloud, providing all the capabilities you expect as well as new ways to capitalize on your organization's collective intelligence:

- Everything you need for analytic agility, from fast, fluid self-service discovery to simple yet sophisticated data loading and blending, powerful inline data prep, automatic visualizations, data storytelling, instant mobile with full authoring, easy and extensible advanced analytics, and more. These capabilities are part of Oracle Data Visualization, which is delivered via Oracle Data Visualization Cloud Service (DVCS), Oracle Data Visualization Desktop (DVD), and integrated into Oracle Business Intelligence Cloud Service (BICS).
- A true governed self-service environment, created by combining the breadth of Data Visualization with the depth of Oracle's enterprise analytics, which includes well-established models for business definitions and security. This combination is delivered in BICS, helping to ensure appropriate access and drive accuracy across your entire organization without sacrificing agility.
- Cutting edge collaboration is driven via Oracle Day by Day, which extends mobile and social concepts to analytics to create a self-learning solution that provides proactive, contextual insights.
- Powerful, easy what-if analysis that allows you to capture the collective intelligence in your spreadsheets by empowering users to bring them together to quickly create and test scenario models in Oracle Essbase Cloud.

World Class BI

A best-in-class analytics platform offering you the full array of intuitive BI tools you expect

Intuitive Cloud Experience

Friendly interactive interface has built-in guidance and tutorials to get users productive quickly

Advanced Analysis and Visualizations

Select interactive visualizations and easily create advanced calculations to reveal the insights in your data

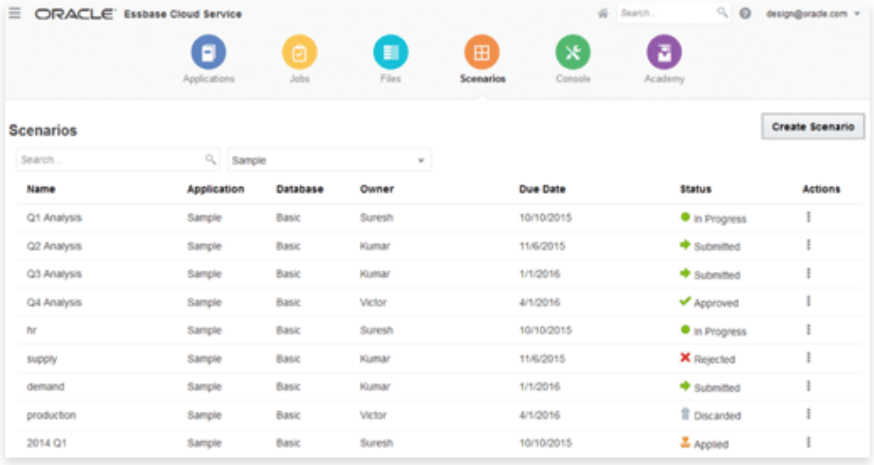
Interactive Dashboards

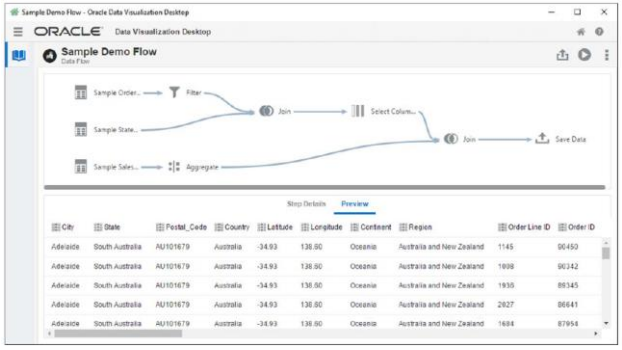
Configurable dashboards enable you to quickly analyze and manage activity across the entire system

keyteach. TPH Merlin XI epm FastTrack ORACLE Accelatis Powering I.T. Empowering Business. a datAvail company AMOSCA Claremont. APPLIEDOLAP cubus EPM Maestro UKOUG UK ORACLE USER GROUP

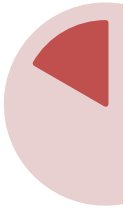
Oracle Analytics Cloud (OAC)

- Oracle Analytics Cloud (OAC) is a single strategic platform designed for speed and scale.
- It offers easy access to any source so you make the best use of all your data no matter where it is.
- It provides a variety of options for intelligent analysis without being overwhelming to deploy and manage, using Oracle Data Visualization Cloud Service (DVCS), Oracle Data Visualization Desktop (DVD), and Oracle Business Intelligence Cloud Service (BICS)





Oracle Analytics Cloud (OAC) offering



Standard Edition

Standard Edition is a bundle designed for agile analysis in workgroups and includes:

1. Oracle Data Visualization Cloud Service
2. Oracle Data Visualization Desktop (50 licenses per processor)
3. Oracle Essbase, Standard Edition
4. Oracle Smartview

Data Lake

Starter Environment for building and running Data Flows at scale, visualizing and analysing data using What-If and Scenario Modelling capabilities.

Data Lake was announced 2 weeks ago at Open World. The offering details are yet to be released, but the aim is to provide customers with a powerful data hub and enable reporting across subject areas

Enterprise Edition

Enterprise Edition is a bundle designed to span analytic needs across workgroups and the enterprise. It includes everything in Standard Edition and adds:

1. Oracle Business Intelligence Cloud Service & OBI Excel Plugin
2. Oracle Essbase, Enterprise Edition (adds the following features to Essbase Standard: Essbase sandboxing via a built-in sandbox dimension, scenario management, and the capability to connect to cubes on other instances via partitioning or XREF/XWRiTE functions)
3. Oracle Day by Day

Oracle Analytics Cloud leverages other Oracle cloud products for storage and infrastructure so must be purchased with:

- Oracle Database Cloud Service, any edition
- Oracle Compute Cloud Service, Block Storage
- Oracle Storage Cloud Service

Sizing your OAC environment: recommendations

- PaaS dependencies
  - Data Storage
  - Compute
  - Backup
- Key elements to consider
  - Universal Credits
  - Sizing metrics
  - Common Pitfalls

ORACLE ANALYTICS CLOUD

OAC works together with Oracle's world-class database, cloud storage, and other analytics services to ensure you have the best solution in the industry.

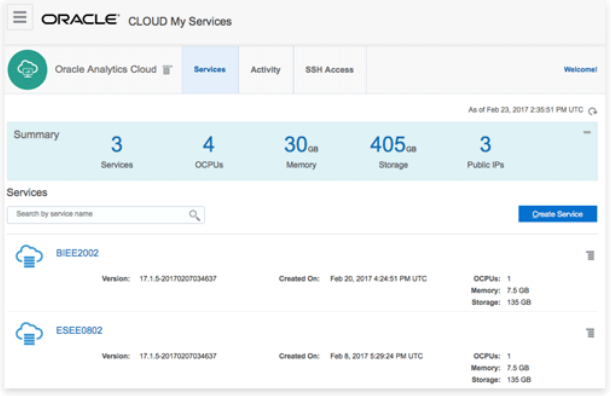
PREREQUISITES

Oracle Analytics Cloud leverages other Oracle cloud products for storage and infrastructure so must be purchased with:

- Oracle Database Cloud Service, any edition
- Oracle Compute Cloud Service, Block Storage
- Oracle Storage Cloud Service

Pricing Highlights

- Pay per instance and usage per hours/day/month
- Compute: pay OCPU per hour (sizing metric)
- Storage – pay per TB
- Database Backup – Pay per request & storage capacity



keyteach. TPH Merlin XI epm FastTrack ORACLE Accelatis a datAvail company AMOSCA Claremont. APPLIEDOLAP cubus EPM Maestro UKOUG UK ORACLE USER GROUP

What's coming ? Upcoming OAC features

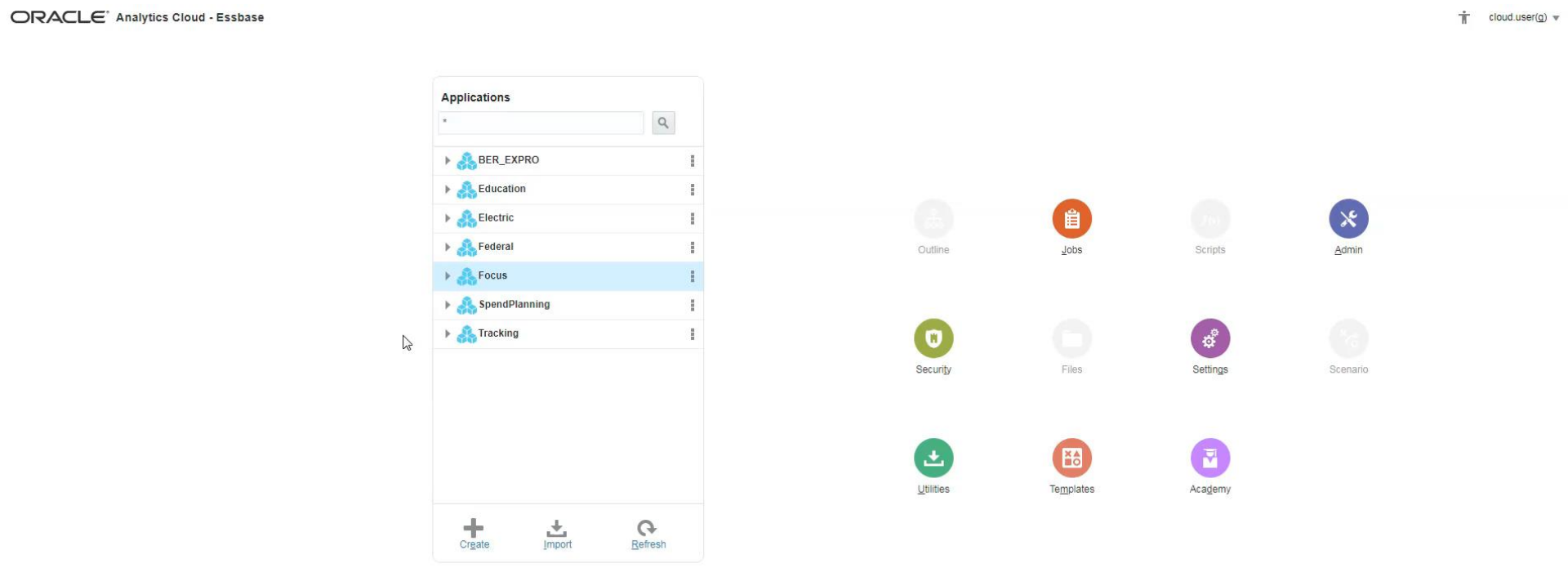
- Latest patch: OACS 17.4.1
  - Support for Oracle Planning and Budgeting Cloud service as a data source.
  - Enhancements to Essbase Cloud
  - Update to Data Visualization 3.0
  - New custom themes feature to allow customer to "brand" the user interface
  - In addition, the release is certified on Oracle Cloud Machine
  - Latest releases and patch updates:
    - http://docs.oracle.com/en/cloud/paas/analytics-cloud/acswn/index.html

As of October 2017, the following features are expected in upcoming releases:

- Custom Map layers (DV)
- IDCS integration
- Scale-out

Hyperion Focus 17

Demonstration:
Navigating through the new Essbase interface

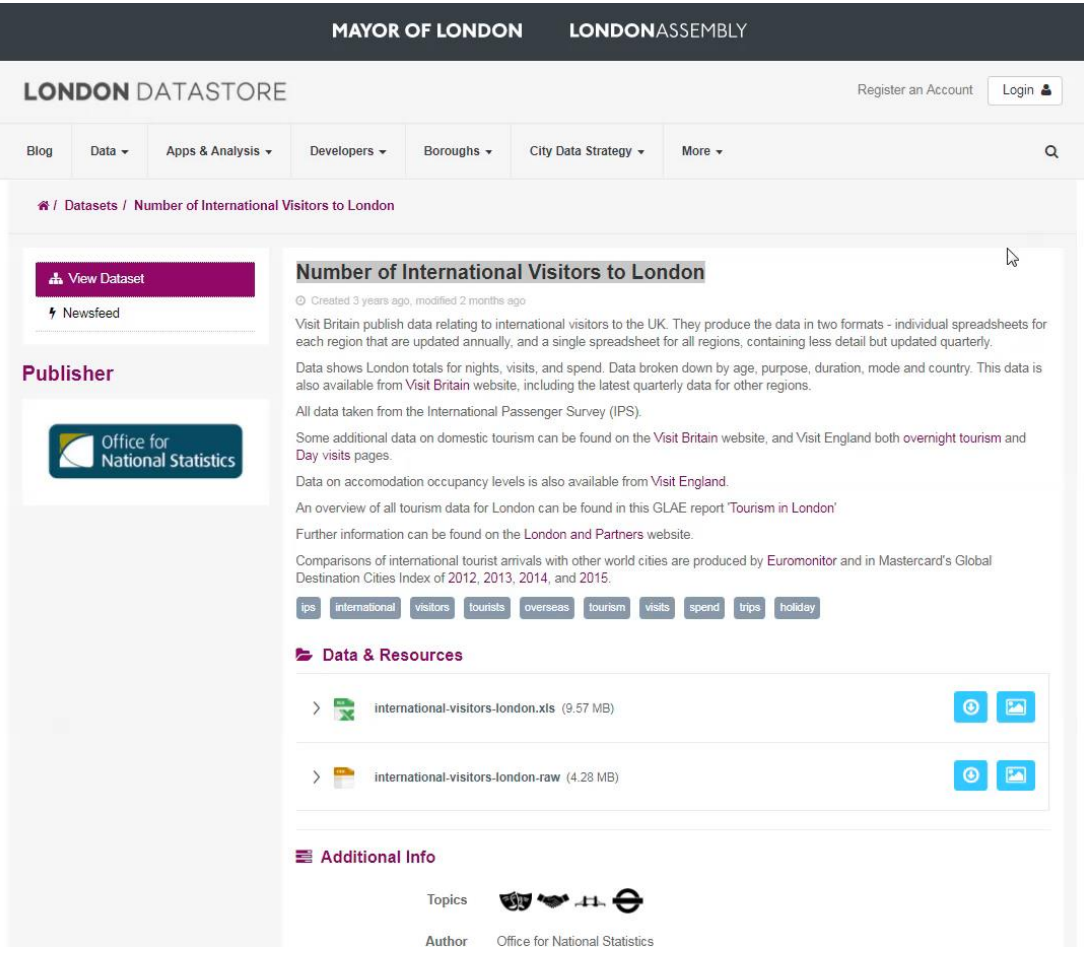


keyteach. TPH Merlin XI epm FastTrack ORACLE Accelatis Powering I.T. Empowering Business. a datAvail company AMOSCA Claremont. APPLIEDOLAP cubus EPM Maestro UKOUG UK ORACLE USER GROUP

Hyperion Focus 17

Demonstration

Let's create an Essbase cube in 5 minutes
using a random data set (London visitors statistics 2002-2016)

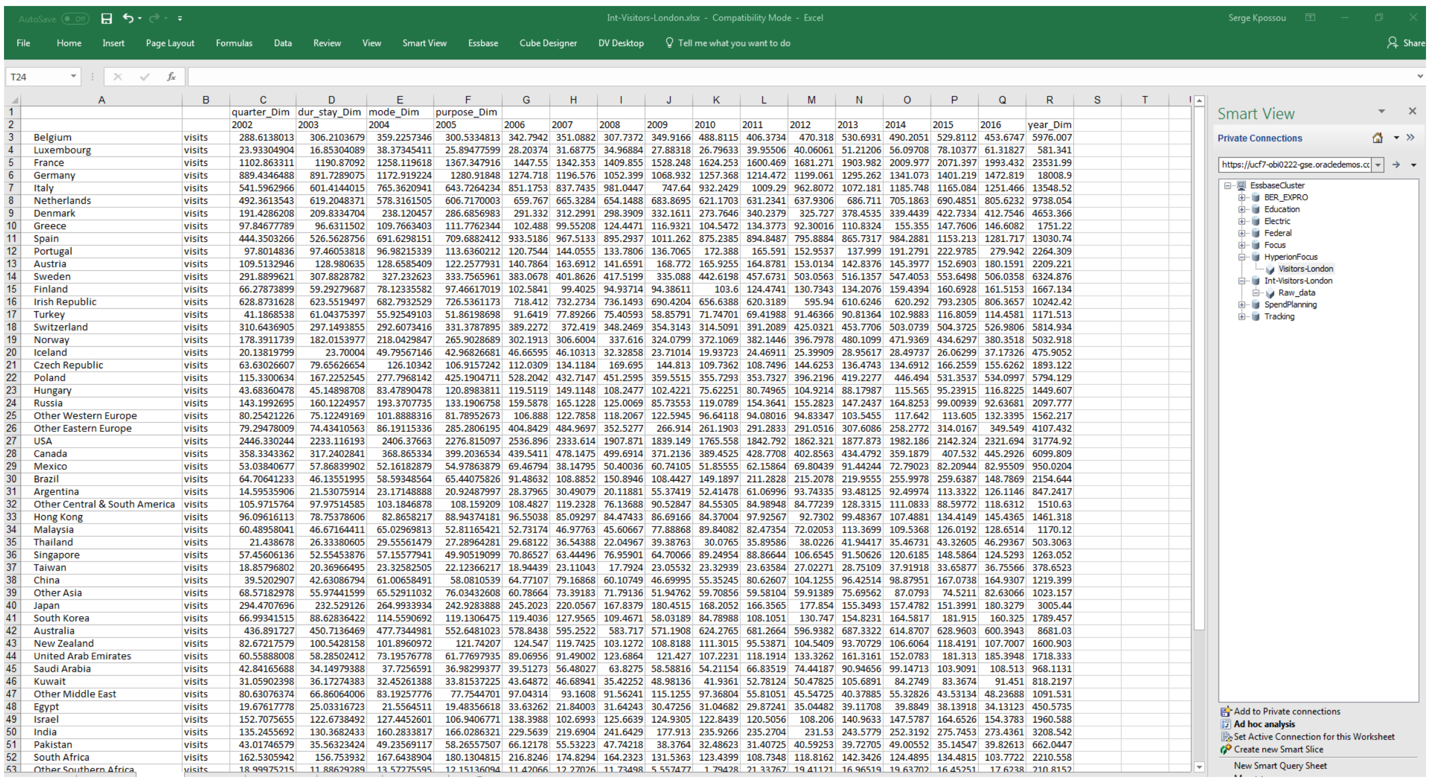


keyteach. TPH Merlin XI epm FastTrack ORACLE Accelatis Powering I.T. Empowering Business. a datAvail company AMOSCA Claremont. APPLIEDOLAP cubus EPM Maestro UKOUG UK ORACLE USER GROUP

Hyperion Focus 17

Demonstration

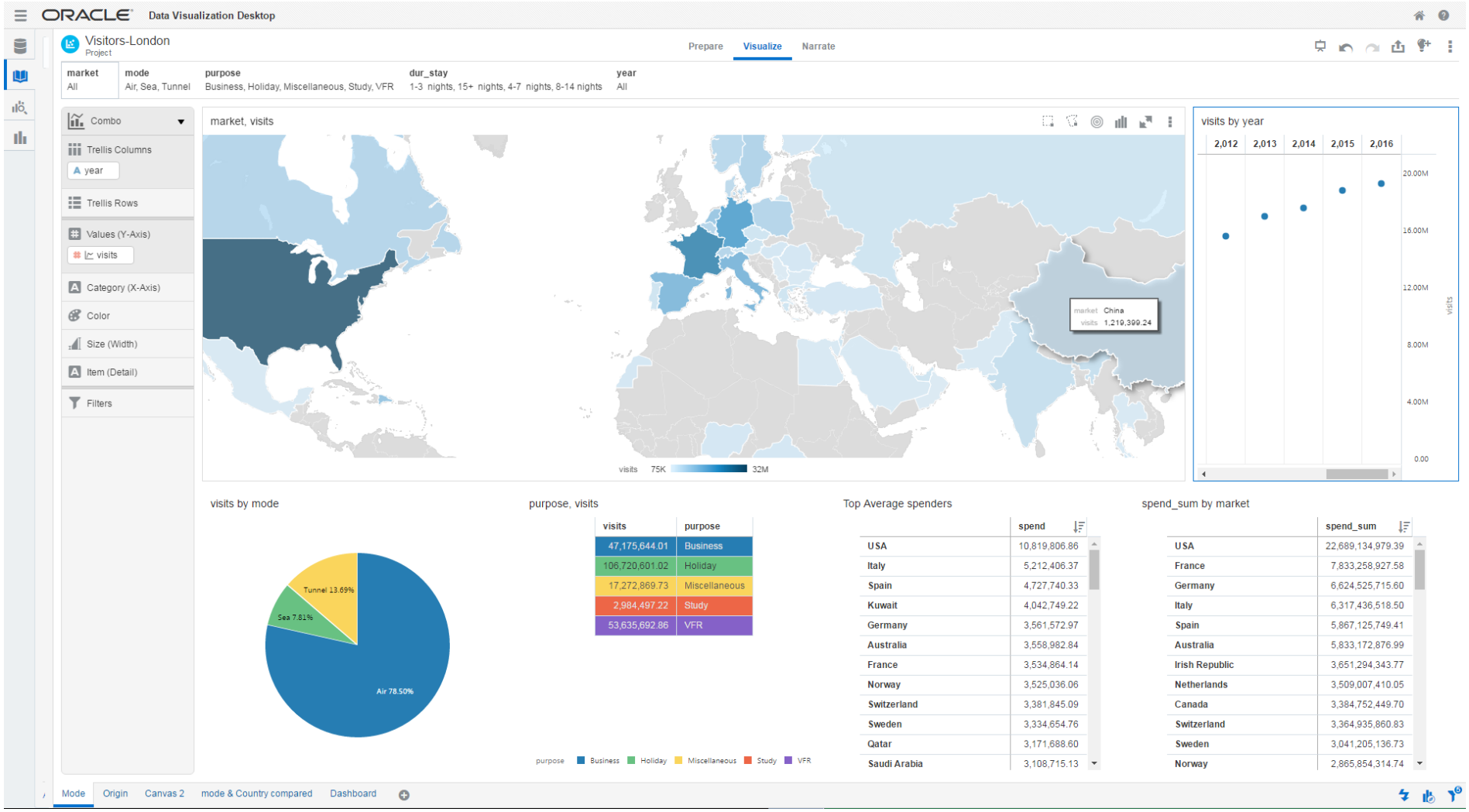
We've created an OAC Essbase cube and accessed raw data through SmartView



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1			quarter_Dim	dur_stay_Dim	mode_Dim	purpose_Dim												
2			2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	year_Dim
3	Belgium	visits	288.6138013	306.2103679	359.2257346	300.5334813	342.7942	351.0882	307.7372	349.9166	488.8115	406.3734	470.318	530.6931	490.2051	529.8112	453.6747	5976.007
4	Luxembourg	visits	23.93304904	16.85304089	38.37345411	25.89477599	28.20374	31.68775	34.96884	27.88318	26.79633	39.95506	40.06061	51.21206	56.09708	78.10377	61.31827	581.341
5	France	visits	1102.863311	1190.87092	1258.119618	1367.347916	1447.55	1342.353	1409.855	1528.248	1624.253	1600.469	1681.271	1903.982	2009.977	2071.397	1993.432	23531.99
6	Germany	visits	889.4346488	891.7289075	1172.919224	1280.91848	1274.718	1196.576	1052.399	1068.932	1257.368	1214.472	1199.061	1295.262	1341.073	1401.219	1472.819	18008.9
7	Italy	visits	541.5962966	601.4144015	765.3620941	643.7264234	851.1753	837.7435	981.0447	747.64	932.2429	1009.29	962.8072	1072.181	1185.748	1165.084	1251.466	13548.52
8	Netherlands	visits	492.3613543	619.2048371	578.3161505	606.7170003	659.767	665.3284	654.1488	683.8695	621.1703	631.2341	637.9306	686.711	705.1863	690.4851	805.6232	9738.054
9	Denmark	visits	191.4286208	209.8334704	238.120457	286.6856983	291.332	312.2991	298.3909	332.1611	273.7646	340.2379	325.727	378.4535	339.4439	422.7334	412.7546	4653.366
10	Greece	visits	97.84677789	96.6311502	109.7663403	111.7762344	102.488	99.55208	124.4471	116.9321	104.5472	134.3773	92.30016	110.8324	155.355	147.7606	146.6082	1751.22
11	Spain	visits	444.3503266	526.5628756	691.6298151	709.6882412	933.5186	967.5133	895.2937	1011.262	875.2385	894.8487	795.8884	865.7317	984.2881	1153.213	1281.717	13030.74
12	Portugal	visits	97.8014836	97.46053818	96.98215339	113.6360212	120.7544	144.0555	133.7806	136.7065	172.388	165.591	152.9537	137.999	191.2791	222.9785	279.942	2264.309
13	Austria	visits	109.5132946	128.980635	128.6585409	122.2577931	140.7864	163.6912	141.6591	168.772	165.9255	164.8781	153.0134	142.8376	145.3977	152.6903	180.1591	2209.221
14	Sweden	visits	291.8899621	307.8828782	327.232623	333.7565961	383.0678	401.8626	417.5199	335.088	442.6198	457.6731	503.0563	516.1357	547.4053	553.6498	506.0358	6324.876
15	Finland	visits	66.27873899	59.29279687	78.12335582	97.46617019	102.5841	99.4025	94.93714	94.38611	103.6	124.4741	130.7343	134.2076	159.4394	160.6928	161.5153	1667.134
16	Irish Republic	visits	628.8731628	623.5519497	682.7932529	726.5361173	718.412	732.2734	736.1493	690.4204	656.6388	620.3189	595.94	610.6246	620.292	793.2305	806.3657	10242.42
17	Turkey	visits	41.1868538	61.04375397	55.92549103	51.86198698	91.6419	77.89266	75.40593	58.85791	71.74701	69.41988	91.46366	90.81364	102.9883	116.8059	114.4581	1171.513
18	Switzerland	visits	310.6436905	297.1493855	292.6073416	331.3787895	389.2272	372.419	348.2469	354.3143	314.5091	391.2089	425.0321	453.7706	503.0739	504.3725	526.9806	5814.934
19	Norway	visits	178.3911739	182.0153977	218.0429847	265.9028689	302.1913	306.6004	337.616	324.0799	372.1069	382.1446	396.7978	480.1099	471.9369	434.6297	380.3518	5032.918
20	Iceland	visits	20.13819799	23.70004	49.79567146	42.96826681	46.66595	46.10313	32.32858	23.71014	19.93723	24.46911	25.39909	28.95617	28.49737	26.06299	37.17326	475.9052
21	Czech Republic	visits	63.63026607	79.65626654	126.10342	106.9157242	112.0309	134.1184	169.695	144.813	109.7362	108.7496	144.6253	136.4743	134.6912	166.2559	155.6262	1893.122
22	Poland	visits	115.3300634	167.2252545	277.7968142	425.1904711	528.2042	432.7147	451.2595	359.5515	355.7293	353.7327	396.2196	419.2277	446.494	531.3537	534.0997	5794.129
23	Hungary	visits	43.68360478	45.14898708	83.47890478	120.8983811	119.5119	149.1148	108.2477	102.4221	75.62251	80.74965	104.9214	88.17987	115.565	95.23915	116.8225	1449.607
24	Russia	visits	143.1992695	160.1224957	193.3707735	133.1906758	159.5878	165.1228	125.0069	85.73553	119.0789	154.3641	155.2823	147.2437	164.8253	99.00939	92.63681	2097.777
25	Other Western Europe	visits	80.25421226	75.12249169	101.8888316	81.78952673	106.888	122.7858	118.2067	122.5945	96.64118	94.08016	94.83347	103.5455	117.642	113.605	132.3395	1562.217
26	Other Eastern Europe	visits	79.29478009	74.43410563	86.19115336	285.2806195	404.8429	484.9697	352.5277	266.914	261.1903	291.2833	291.0516	307.6086	258.2772	314.0167	349.549	4107.432
27	USA	visits	2446.330244	2233.116193	2406.37663	2276.815097	2536.896	2333.614	1907.871	1839.149	1765.558	1842.792	1862.321	1877.873	1982.186	2142.324	2321.694	31774.92
28	Canada	visits	358.3343362	317.2402841	368.865334	399.2036534	439.5411	478.1475	499.6914	371.2136	389.4525	428.7708	402.8563	434.4792	359.1879	407.532	445.2926	6099.809
29	Mexico	visits	53.03840677	57.86839902	52.16182879	54.97863879	69.46794	38.14795	50.40036	60.74105	51.85555	62.15864	69.80439	91.44244	72.79023	82.20944	82.95509	950.0204
30	Brazil	visits	64.70641233	46.13551995	58.59348564	65.44075826	91.48632	108.8852	150.8946	108.4427	149.1897	211.2828	215.2078	219.9555	255.9978	259.6387	148.7869	2154.644
31	Argentina	visits	14.59535906	21.53075914	23.17148888	20.92487997	28.37965	30.49079	20.11881	55.37419	52.41478	61.06996	93.74335	93.48125	92.49974	113.3322	126.1146	847.2417
32	Other Central & South America	visits	105.9715764	97.97514585	103.1846878	108.159209	108.4827	119.2328	76.13688	90.52847	84.55305	84.98948	84.77239	128.3315	111.0833	88.59772	118.6312	1510.63
33	Hong Kong	visits	96.09616113	78.75378606	82.8658217	88.94374181	96.55038	85.09297	84.47433	86.69166	84.37004	97.92567	92.7302	99.48367	107.4881	134.4149	145.4365	1461.318
34	Malaysia	visits	60.48958041	46.67164411	65.02969813	52.81165421	52.73174	46.97763	45.60667	77.88868	89.84082	82.47354	72.02053	113.3699	109.5368	126.0192	128.6514	1170.12
35	Thailand	visits	21.438678	26.33380605	29.55561479	27.28964281	29.68122	36.54388	22.04967	39.38763	30.0765	35.89586	38.0226	41.94417	35.46731	43.32605	46.29367	503.3063
36	Singapore	visits	57.45606136	52.55453876	57.15577941	49.90519099	70.86527	63.44496	76.95901	64.70066	89.24954	88.86644	106.6545	91.50626	120.6185	148.5864	124.5293	1263.052
37	Taiwan	visits	18.85796802	20.36966495	23.32582505	22.12366217	18.94439	23.11043	17.7924	23.05532	23.32939	23.63584	27.02271	28.75109	37.91918	33.65877	36.75566	378.6523
38	China	visits	39.5202907	42.63086794	61.00658491	58.0810539	64.77107	79.16868	60.10749	46.69995	55.35245	80.62607	104.1255	96.42514	98.87951	167.0738	164.9307	1219.399
39	Other Asia	visits	68.57182978	55.97441599	65.52911032	76.03432608	60.78664	73.39183	71.79136	51.94762	59.70856	59.58104	59.91389	75.69562	87.0793	74.5211	82.63066	1023.157
40	Japan	visits	294.4707696	232.529126	264.9933934	242.9283888	245.2023	220.0567	167.8379	180.4515	168.2052	166.3565	177.854	155.3493	157.4782	151.3991	180.3279	3005.44
41	South Korea	visits	66.99341515	88.62836422	114.5590692	119.1306475	119.4036	127.9565	109.4671	58.03189	84.78988	108.1051	130.747	154.8231	164.5817	181.915	160.325	1789.457
42	Australia	visits	436.891727	450.7136469	477.7344981	552.6481023	578.8438	595.2522	583.717	571.1908	624.2765	681.2664	596.9382	687.3322	614.8707	628.9603	600.3943	8681.03
43	New Zealand	visits	82.67217579	100.5428158	101.8960972	121.74207	124.547	119.7425	103.1272	108.8188	111.3015	95.53871	104.5409	93.70729	106.6064	118.4191	107.7007	1600.903
44	United Arab Emirates	visits	60.55888008	58.28502412	73.19576778	61.77697935	89.06956	91.49002	123.6864	121.427	107.2231	118.1914	133.3262	161.3161	152.0783	181.313	185.3948	1718.333
45	Saudi Arabia	visits	42.84165688	34.14979388	37.7256591	36.98299377	39.51273	56.48027	63.8275	58.58816	54.21154	66.83519	74.44187	90.94656	99.14713	103.9091	108.513	968.1131
46	Kuwait	visits	31.05902398	36.17274383	32.45261388	33.81537225	43.64872	46.68941	35.42252	48.98136	41.9361	52.78124	50.47825	105.6891	84.2749	83.3674	91.451	818.2197
47	Other Middle East	visits	80.63076374	66.86064006	83.19257776	77.7544701	97.04314	93.1608	91.56241	115.1255	97.36804	55.81051	45.54725	40.37885	55.32826	43.53134	48.23688	1091.531
48	Egypt	visits	19.67617778	25.03316723	21.5564511	19.48356618	33.63262	21.84003	31.64243	30.47256	31.04682	29.87241	35.04482	39.11708	39.8849	38.13918	34.13123	450.5735
49	Israel	visits	152.7075655	122.6738492	127.4452601	106.9406771	138.3988	102.6993	125.6639	124.9305	122.8439	120.5056	108.206	140.9633	147.5787	164.6526	154.3783	1960.588
50	India	visits	135.2455692	130.3682433	160.2833817	166.0286321	229.5639	219.6904	241.6429	177.913	235.9266	235.2704	231.53	243.5779	252.3192	275.7453	273.4361	3208.542
51	Pakistan	visits	43.01746579	35.56323424	49.23569117	58.26557507	66.12178	55.53223	47.74218	38.3764	32.48623	31.40725	40.59253	39.72705	49.00552	35.14547	39.82613	662.0447
52	South Africa	visits	162.5305942	156.753932	167.6438904	180.1304815	216.8246	174.8294	164.2323	131.5363	123.4399	108.7348	118.8162	142.3426	124.4895	134.4815	103.7722	2210.558
53	Other Southern Africa	visits	18.99975215	11.88629289	13.57275595	12.15136094	11.42066	12.27026	11.73498	5.557477	1.79428	21.33767	19.41121	16.96519	19.63702	16.45251	17.6238	210.8152

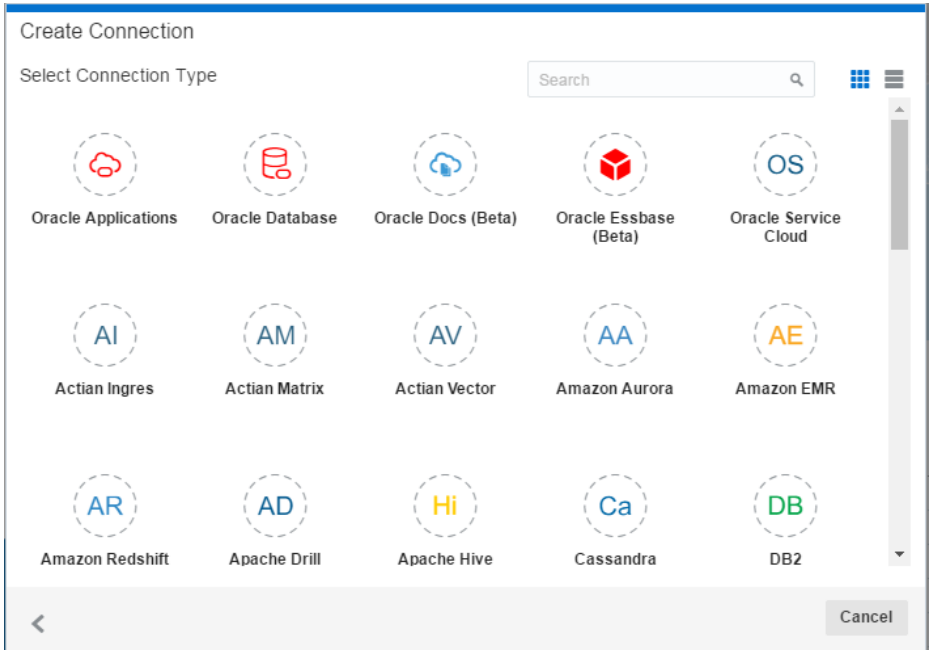
Now, let's get more insights using DVCS / BICS

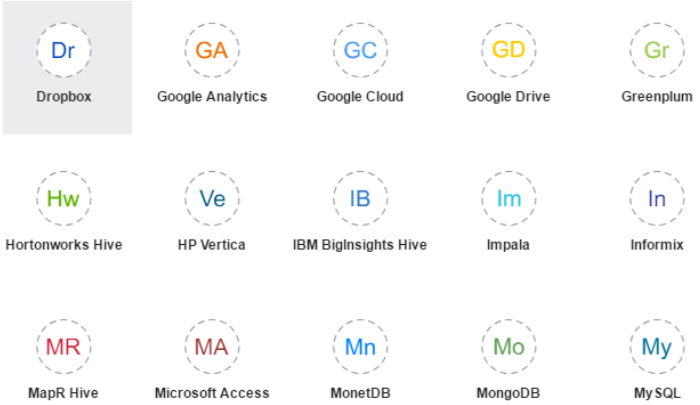
Data Visualization dashboard (created in 5 min)

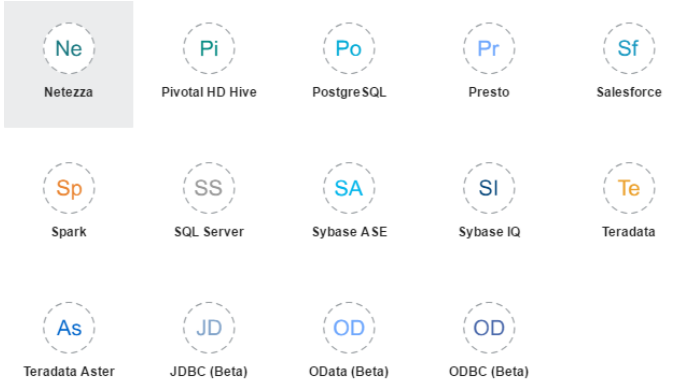


keyteach. TPH Merlin XL epm FastTrack ORACLE Accelatis Powering I.T. Empowering Business. a datAvail company AMOSCA Claremont. APPLIEDOLAP cubus EPM Maestro UKOUG UK ORACLE USER GROUP

Self Service data blending



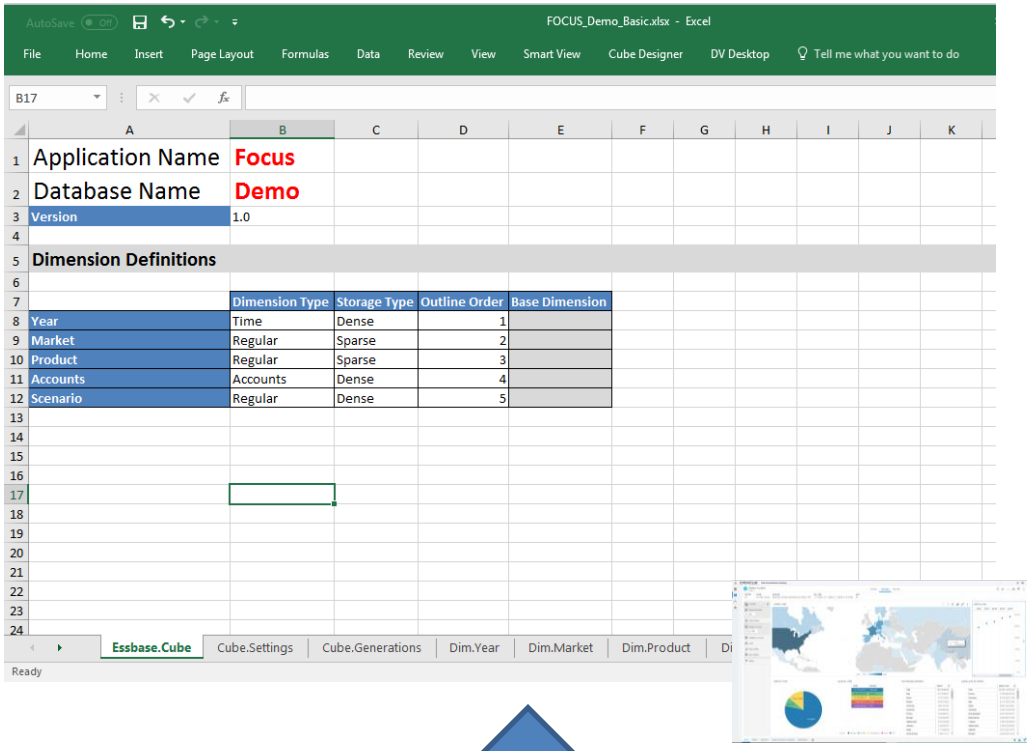




keyteach. TPH Merlin XI epm FastTrack ORACLE Accelatis a datAvail company AMOSCA Claremont. APPLIEDOLAP cubus EPM Maestro UKOUG UK ORACLE USER GROUP

Hyperion Focus 17

OAC offers two options for applications & cubes design

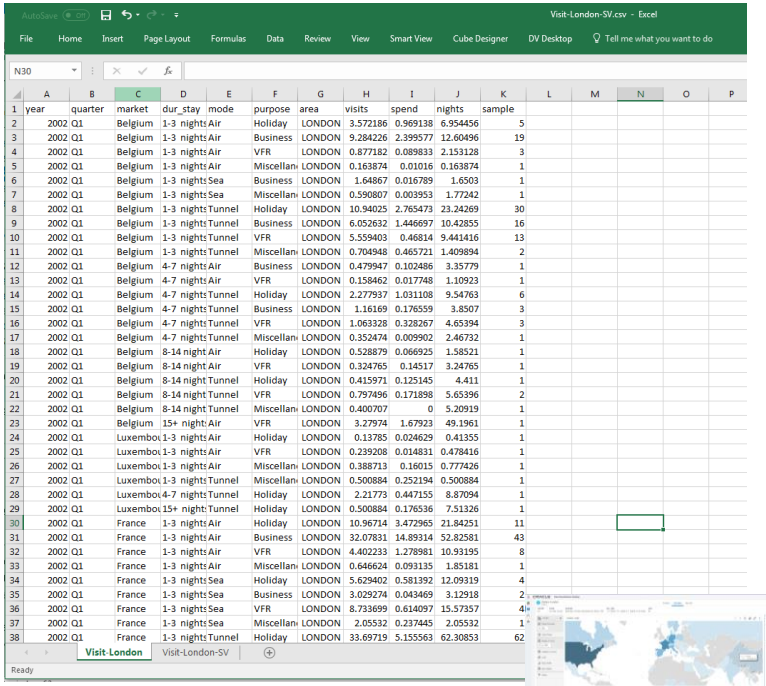


FOCUS_Demo_Basic.xlsx - Excel

	A	B
1	Application Name	Focus
2	Database Name	Demo
3	Version	1.0
4		
5	**Dimension Definitions**	

	Dimension Type	Storage Type	Outline Order	Base Dimension
Year	Time	Dense	1	
Market	Regular	Sparse	2	
Product	Regular	Sparse	3	
Accounts	Accounts	Dense	4	
Scenario	Regular	Dense	5	

Essbase.Cube | Cube.Settings | Cube.Generations | Dim.Year | Dim.Market | Dim.Product



Visit-London-SV.csv - Excel

year	quarter	market	dur_stay	mode	purpose	area	visits	spend	nights	sample
2002	Q1	Belgium	1-3 nights	Air	Holiday	LONDON	3.572186	0.969138	6.954456	5
2002	Q1	Belgium	1-3 nights	Air	Business	LONDON	9.284226	2.399577	12.60496	19
2002	Q1	Belgium	1-3 nights	Air	VFR	LONDON	0.877182	0.089833	2.153128	3
2002	Q1	Belgium	1-3 nights	Air	Miscellan	LONDON	0.163874	0.01016	0.163874	1
2002	Q1	Belgium	1-3 nights	Sea	Business	LONDON	1.64867	0.016789	1.6503	1
2002	Q1	Belgium	1-3 nights	Sea	Miscellan	LONDON	0.590807	0.003953	1.77242	1
2002	Q1	Belgium	1-3 nights	Tunnel	Holiday	LONDON	10.94025	2.765473	23.24269	30
2002	Q1	Belgium	1-3 nights	Tunnel	Business	LONDON	6.052632	1.446697	10.42855	16
2002	Q1	Belgium	1-3 nights	Tunnel	VFR	LONDON	5.559403	0.46814	9.441416	13
2002	Q1	Belgium	1-3 nights	Tunnel	Miscellan	LONDON	0.704948	0.465721	1.409894	2
2002	Q1	Belgium	4-7 nights	Air	Business	LONDON	0.479947	0.102486	3.35779	1
2002	Q1	Belgium	4-7 nights	Air	VFR	LONDON	0.158462	0.017748	1.10923	1
2002	Q1	Belgium	4-7 nights	Tunnel	Holiday	LONDON	2.277937	1.031108	9.54763	6
2002	Q1	Belgium	4-7 nights	Tunnel	Business	LONDON	1.16169	0.176559	3.8507	3
2002	Q1	Belgium	4-7 nights	Tunnel	VFR	LONDON	1.063328	0.328267	4.65394	3
2002	Q1	Belgium	4-7 nights	Tunnel	Miscellan	LONDON	0.352474	0.009902	2.46732	1
2002	Q1	Belgium	8-14 night	Air	Holiday	LONDON	0.528879	0.066925	1.58521	1
2002	Q1	Belgium	8-14 night	Air	VFR	LONDON	0.324765	0.14517	3.24765	1
2002	Q1	Belgium	8-14 night	Tunnel	Holiday	LONDON	0.415971	0.125145	4.411	1
2002	Q1	Belgium	8-14 night	Tunnel	VFR	LONDON	0.797496	0.171898	5.65396	2
2002	Q1	Belgium	8-14 night	Tunnel	Miscellan	LONDON	0.400707	0	5.20919	1
2002	Q1	Belgium	15+ night	Air	VFR	LONDON	3.27974	1.67923	49.1961	1
2002	Q1	Luxembou	1-3 nights	Air	Holiday	LONDON	0.13785	0.024629	0.41355	1
2002	Q1	Luxembou	1-3 nights	Air	VFR	LONDON	0.239208	0.014831	0.478416	1
2002	Q1	Luxembou	1-3 nights	Air	Miscellan	LONDON	0.388713	0.16015	0.777426	1
2002	Q1	Luxembou	1-3 nights	Tunnel	Miscellan	LONDON	0.500884	0.252194	0.500884	1
2002	Q1	Luxembou	4-7 nights	Tunnel	Holiday	LONDON	2.21773	0.447155	8.87094	1
2002	Q1	Luxembou	15+ night	Tunnel	Holiday	LONDON	0.500884	0.176536	7.51326	1
2002	Q1	France	1-3 nights	Air	Holiday	LONDON	10.96714	3.472965	21.84251	11
2002	Q1	France	1-3 nights	Air	Business	LONDON	32.07831	14.89314	52.82581	43
2002	Q1	France	1-3 nights	Air	VFR	LONDON	4.402233	1.278981	10.93195	8
2002	Q1	France	1-3 nights	Air	Miscellan	LONDON	0.646624	0.093135	1.85181	1
2002	Q1	France	1-3 nights	Sea	Holiday	LONDON	5.629402	0.581392	12.09319	4
2002	Q1	France	1-3 nights	Sea	Business	LONDON	3.029274	0.043469	3.12918	2
2002	Q1	France	1-3 nights	Sea	VFR	LONDON	8.733699	0.614097	15.57357	4
2002	Q1	France	1-3 nights	Sea	Miscellan	LONDON	2.05532	0.237445	2.05532	1
2002	Q1	France	1-3 nights	Tunnel	Holiday	LONDON	33.69719	5.155563	62.30853	62

Visit-London | Visit-London-SV

Structured Application design using an Excel Template

On the fly cube design
– for quick analytics
- Warning there are Governance & Maintenance implications

keyteach. TPH Merlin XI epm FastTrack ORACLE Accelatis Powering I.T. Empowering Business. a datAvail company AMOSCA Claremont. APPLIEDOLAP cubus EPM Maestro UKOUG UK ORACLE USER GROUP

Hyperion Focus 17

Essbase & OAC: “A remarkable journey from IT owned Analytics to Business Analytics”… try it out !

Thank you. Questions ?