

Moving from On-Prem Essbase and OBIEE to Oracle Analytics Cloud (in 6 Weeks or Less)

info@interRel.com

interRel.com



ODTUG 
 Kscope18
 ORLANDO, FLORIDA • JUNE 10-14

Register Now
www.kscope18.odtug.com

Use Code IRC To Get \$100 Off!

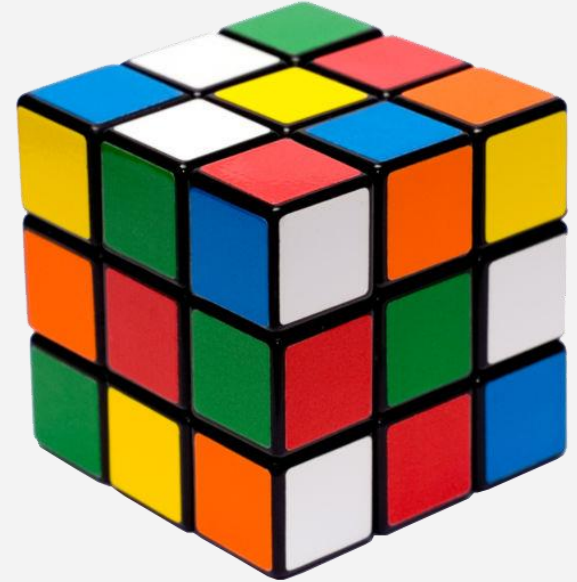
O R L A N D O



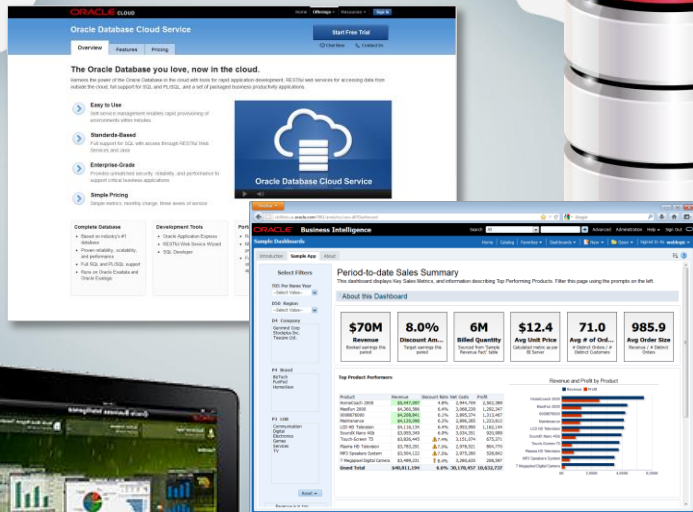
- These slides represent the work and opinions of the presenter and do not constitute official positions of Oracle or any other organization.
- This material has not been peer reviewed and is presented here with the permission of the presenter.
- This material should not be reproduced without the written permission of interRel Consulting.

What is OAC-Essbase and OAC-BI What you need to know

- Based on Essbase 12c includes:
 - BSO
 - ASO
 - Advanced Analytic Engine (Hybrid)
 - Includes all functions
 - Special configuration setting for Hybrid calculations
- Is run on Linux
- By default all cubes are Unicode enabled



OAC-BI: Business Intelligence Cloud Service



- Unlimited Users
- Unlimited Applications
 - 2 Flavors
 - Standard
 - Enterprise
 - Non-Metered
 - Universal Credits



- Production
- UAT (Optional)
- Development
- User Sandbox (Optional)



Essbase Comparison and Differences



OAC-Essbase vs. Essbase: In Common

Feature	On-prem Essbase	Essbase Cloud
BSO, ASO, Hybrid	Y	Y
Unicode supported	Y	*Default
Load rules (dimensions and data)	Y	*Via Cube designer and UI
Generation, level and parent-child dimension builds	Y	Y
Calculations: Formulas, calculation scripts, MDX scripts	Y	Y
Good 'ole Essbase security filters	Y	Y
Migration of on-premises cubes	Y	*dbxtool, new LCM, EssCLI
Direct access to the Essbase server for Admins (FTP, MaxL, patches, etc.)	Y	Y
On-demand backups and patching/upgrades	Y	Y(User initiated)

Feature	On-prem Essbase	Essbase Cloud
Substitution variables supported	Y	*App or DB level
Locks (application, database, objects)	Y	Y
Smart View ad hoc & reporting	Y	Y
Text, Date, and Boolean data supported	Y	Y
Duplicate member names and aliases	Y	Y
Multiple alias tables supported	Y	Y
Partitioning (transparent, replicated)	Y	Y
Attribute dimensions	Y	Y
CDF support (custom defined functions)	Y	Y

OAC-Essbase vs. Essbase: Different

Feature	On-prem Essbase	Essbase Cloud
Administration interface	EAS	Web GUI
Direct integration with BI	OBIEE	BICS (needs on Prem RPD), DVCS
Automation	MaxL	CLI, MaxL , Rest API (CLI preferred)
Shared Services security management	Y	N (New Identity manager Cloud service coming soon)
New features: *Sandboxing, *Scenario Mgmt (*EE of OAC only)	N	Y
Spreadsheet to cube and vice versa	N	Y

OAC-Essbase vs. Essbase: Different

Feature	On-prem Essbase	Essbase Cloud
Direct Cloud integration (DBaaS, EssCS, with more coming soon)	N	Y
8-character artifact naming limitation	Y	N
Oracle-owned software and hardware	N	Y
Report scripts (*.rep)	Y	N
Mobile support for Cloud reporting and visualizations	N	Y
Supported integration with Financial Reports	Y	N
Supports EPRCS (via Management Reports)	N	Y

OAC-Essbase

- Can't run Report scripts from job console and No UI (can run from MaxL)

OAC-BI

- Limited scheduling capabilities
- Not included in OAC-BI
 - Group
 - KPI
 - KPI Watchlist
 - List Format
 - Segment
 - Strategic Scorecard
 - BI Publisher(coming soon)



How Do I Migrate?

Essbase to OAC-Essbase

Multiple ways:

- DBXTool/Cube Builder
- EssCS LCM utility
- Some artifacts through EssCLI
- Manual through FTP/SFTP



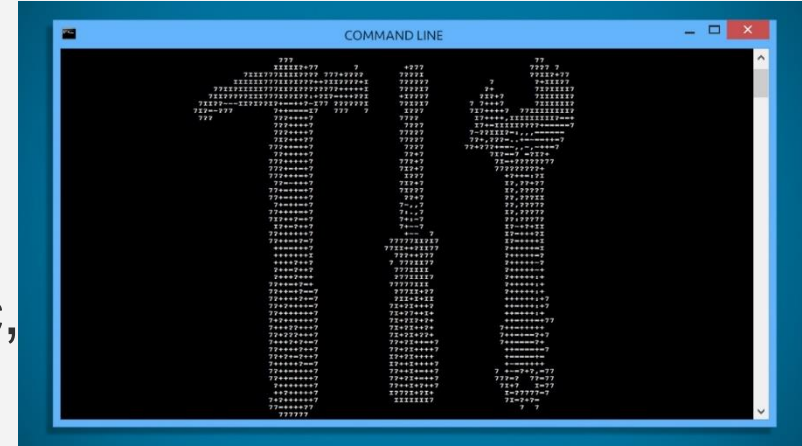
- Used to create a DBX (Excel file) from an outline
- Can then be used to create a cube on EssCS either through Cube Builder or the import feature of the Web UI

1	Application Name	Sample			
2	Database Name	Test			
3	Version	1.0			
4					
5	Dimension Definitions				
6					
7		Dimension Type	Storage Type	Outline Order	Base Dimension
8	Metric	Accounts	Dense		1
9	Products	Regular	Sparse		2
10	Time	Regular	Sparse		3
11	Regions	Regular	Sparse		4
12	Customer	Regular	Sparse		5

1	Dimension Name	Metric					
2							
3	Definitions						
4	File Name	Dim_Metric					
5	Rule Name	Metric					
6	Build Method	PARENT-CHILD					
7	Incremental Mode	Merge					
8							
9	Members						
10	Columns	PARENT	PARENTID	CHILD	MEMBERID	STORAGE	CONSOLIDATION
11				Metric	Metric	O	
12		Metric	Metric	CD	Metric.CD		~
13		Metric	Metric	USD	Metric.USD		~
14		Metric	Metric	Grtr0	Metric.Grtr0		~
15		Metric	Metric	Grtr50k	Metric.Grtr50k		~
16		Metric	Metric	% deals	:Metric.% deals > 50K X		"Grtr50k"/("Grtr50k"+"Grtr0");
17		Metric	Metric	% deals	:Metric.% deals > 50K X		"Grtr0"/("Grtr50k"+"Grtr0");

1	Properties			
2				
3	Application Type	BSO	Aggregate missing values	No
4	Outline Type	Duplicate	Create blocks on equations	No
5	Date Format	yyyy-mm-dd	Two-Pass calculation	Yes
6	Scenario Sandboxes	0		
7				
8	Alias Tables (Alternate Member Names)			
9				
10	Default			
11				
12	Dynamic Time Series			
13				
14	H-T-D		Q-T-D	
15	Y-T-D		M-T-D	
16	S-T-D		W-T-D	
17	P-T-D		D-T-D	
18				
19	Attribute Settings			
20				
21	Dimension Name	Attribute Calculations	Prefix/Suffix Value	None
22	Sum Member	Sum	Prefix/Suffix Format	Prefix
23	Count Member	Count	Prefix/Suffix Separator	Underscore
24	Minimum Member	Min	Attribute Numeric Ranges	Tops of Ranges
25	Maximum Member	Max	Date Member	Month First (mm-dd-yyyy)
26	Average Member	Average	True Member	True
27	False Member	False		

- Java Executable with Batch or Shell scripts
- Wrapper for REST API
- Upload/download files (txt, rul, csc, xls, mxl)
- Run dimension builds/data loads
- Execute calculations
- Clear data from a cube
- Execute MaxL
- LCMExport / LCMImport



- Special version developed for EssCS
- Downloadable executable
- Exports all artifacts in an application (All or Nothing)
- Should only be used for export from On-Prem. Use CLI LCMImport to import to the cloud



```
C:\Users\rtafoya\Downloads\dbxtool\dbxtool\bin>cd C:\Users\rtafoya\Downloads\EssbaseLCMUtility
C:\Users\rtafoya\Downloads\EssbaseLCMUtility>EssbaseLCM export -server 192.168.19.65:1423 -user admin -application @Sample -zipFile C:\Users\rtafoya\Downloads\@sample.zip
Essbase LCM command line tool - 12.2.1
Enter Essbase password:
The configured temporary directory is [C:\Users\rtafoya\AppData\Local\Temp\]. The directory for export/import operations is [C:\Users\rtafoya\AppData\Local\Temp\hyesh1bd]
Exporting application [@Sample]
Exporting /@Sample/Databases/Basic/Data...Success
Exporting /@Sample/Databases/Basic/Database Properties...Success
Exporting /@Sample/Databases/Basic/Rule files/Act1.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Addchild.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/AIF0006.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Attnprod.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Data.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Genref.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Genref2.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Level.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Levelmul.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Parchil.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Parchil2.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/sb_rul1.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Shbrlv.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Shgenref.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Shlev.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Siblow.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Sibpar.rul...Success
Exporting /@Sample/Databases/Basic/Rule files/Sibstr.rul...Success
Exporting /@Sample/Databases/Interntl/Interntl outline...Success
Adding directory [@Sample] to [C:\Users\rtafoya\Downloads\@sample.zip]
Export Complete: Application [@Sample] exported to [C:\Users\rtafoya\Downloads\@sample.zip]
File, which needs clean up: C:\Users\rtafoya\AppData\Local\Temp\hyesh1bd
File, which needs clean up: @Sample
File, which needs clean up: C:\Users\rtafoya\AppData\Local\Temp\hyesh1bd\@Sample\Databases\Basic\Data5
File, which needs clean up: C:\Users\rtafoya\AppData\Local\Temp\hyesh1bd\@Sample\Databases\Basic>Data6
```

- Admins have access to the server
- Can use IaaS as a tunnel to the server
- FTP files to the server:
 - Need to be in the database folder to be seen by the scheduler
 - Change the owner of the files
 - Change the permissions on the files



OBIEE to OAC-BI

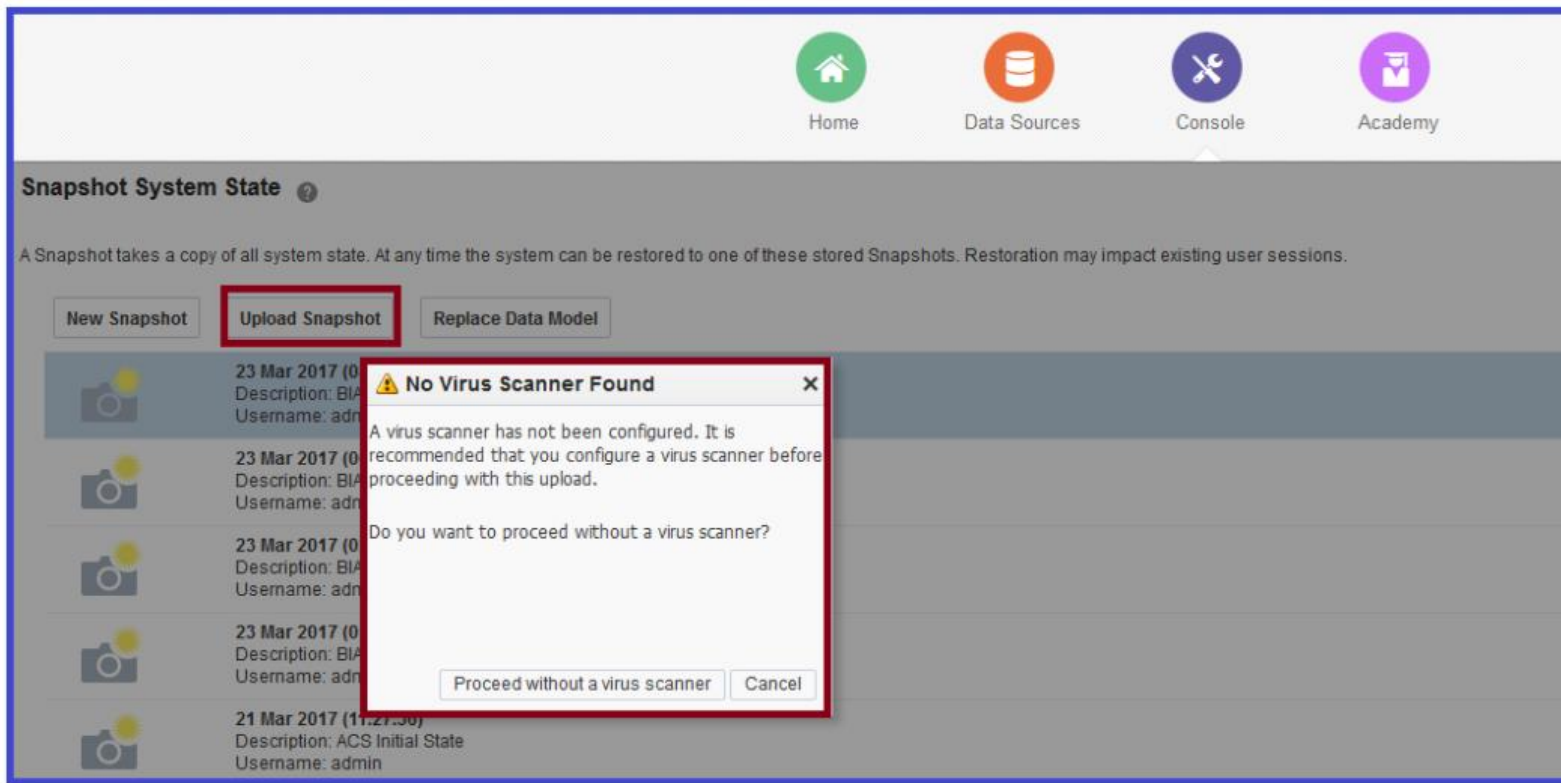
Multi Step Process:

- Migrate Repository
- Migrate Catalog
- Migrate Personal Folders (Optional)

Note: you can “Lift and Shift” the RPD
But unless VPN/IaaS is set up the
Connection to On-Prem will fail



Uploading Catalog:



Home Data Sources Console Academy

Snapshot System State

A Snapshot takes a copy of all system state. At any time the system can be restored to one of these stored Snapshots. Restoration may impact existing user sessions.

New Snapshot **Upload Snapshot** Replace Data Model

No Virus Scanner Found

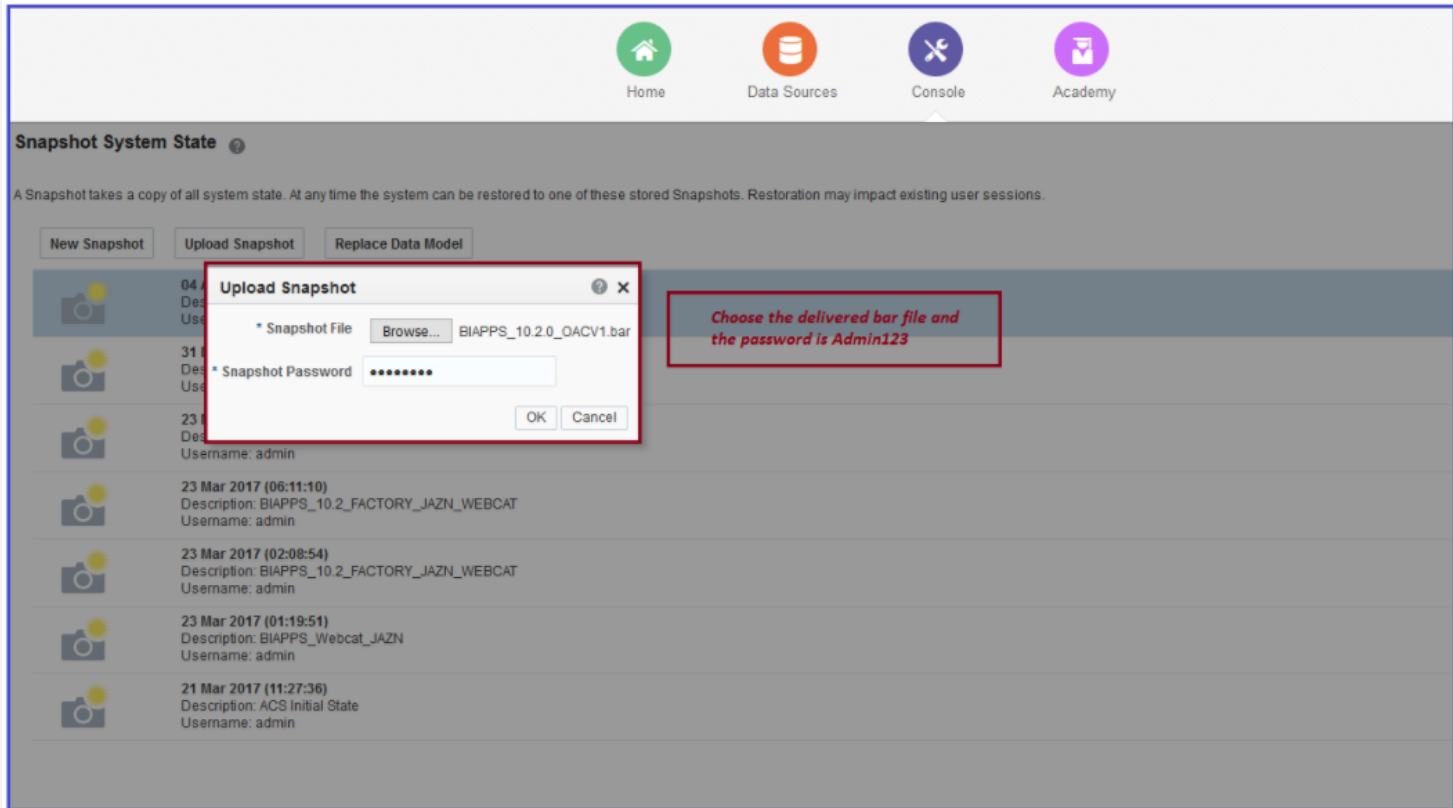
A virus scanner has not been configured. It is recommended that you configure a virus scanner before proceeding with this upload.

Do you want to proceed without a virus scanner?

Proceed without a virus scanner Cancel

23 Mar 2017 (0...)	Description: BIA	Username: adm
23 Mar 2017 (0...)	Description: BIA	Username: adm
23 Mar 2017 (0...)	Description: BIA	Username: adm
23 Mar 2017 (0...)	Description: BIA	Username: adm
21 Mar 2017 (11:27:30)	Description: ACS Initial State	Username: admin

Uploading Catalog:



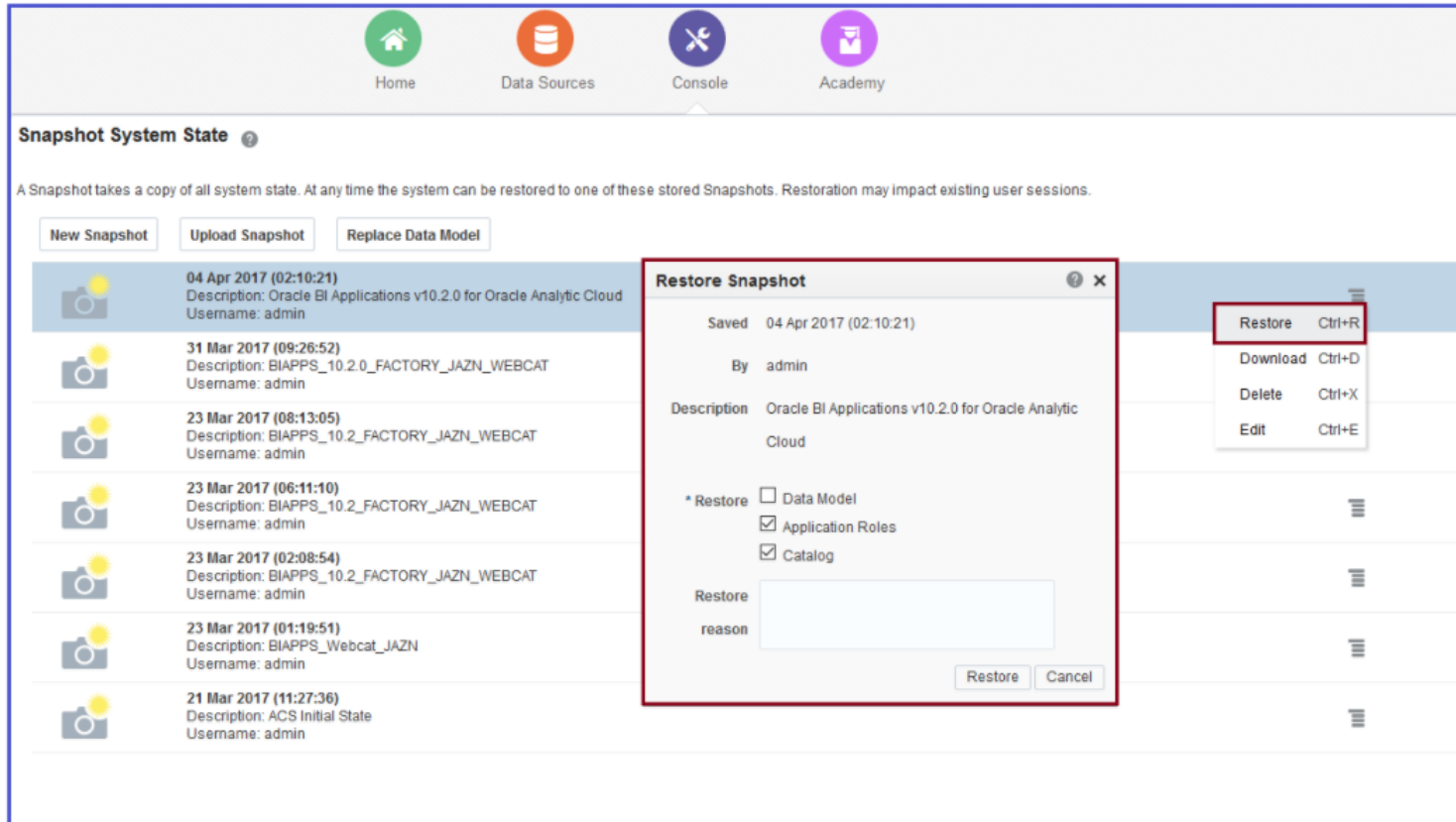
The screenshot displays the BIAPPS console interface. At the top, there are navigation icons for Home, Data Sources, Console, and Academy. Below this is the 'Snapshot System State' section, which includes a description: 'A Snapshot takes a copy of all system state. At any time the system can be restored to one of these stored Snapshots. Restoration may impact existing user sessions.' There are three buttons: 'New Snapshot', 'Upload Snapshot', and 'Replace Data Model'. The 'Upload Snapshot' button is highlighted, and a dialog box is open over it. The dialog box has the title 'Upload Snapshot' and contains the following fields:

- '* Snapshot File' with a 'Browse...' button and the text 'BIAPPS_10.2.0_DACV1.bar'
- '* Snapshot Password' with a masked password field (dots)
- 'OK' and 'Cancel' buttons

To the right of the dialog box, a red-bordered box contains the text: 'Choose the delivered bar file and the password is Admin123'. Below the dialog box, a list of snapshots is visible, including:

- 04 Mar 2017 (06:11:10) Description: BIAPPS_10.2.0_FACTORY_JAZN_WEBCAT Username: admin
- 31 Mar 2017 (06:11:10) Description: BIAPPS_10.2.0_FACTORY_JAZN_WEBCAT Username: admin
- 23 Mar 2017 (06:11:10) Description: BIAPPS_10.2_FACTORY_JAZN_WEBCAT Username: admin
- 23 Mar 2017 (02:08:54) Description: BIAPPS_10.2_FACTORY_JAZN_WEBCAT Username: admin
- 23 Mar 2017 (01:19:51) Description: BIAPPS_Webcat_JAZN Username: admin
- 21 Mar 2017 (11:27:36) Description: ACS Initial State Username: admin

Uploading Catalog:



The screenshot displays the Oracle BI Applications console interface. At the top, there are navigation icons for Home, Data Sources, Console, and Academy. Below this, the 'Snapshot System State' section is visible, with buttons for 'New Snapshot', 'Upload Snapshot', and 'Replace Data Model'. A list of snapshots is shown, with the most recent one selected. A 'Restore Snapshot' dialog box is open, showing details for a snapshot saved on 04 Apr 2017. The dialog includes options to restore the Data Model, Application Roles, and Catalog. A context menu is also visible over the snapshot list, with the 'Restore' option highlighted.

Snapshot System State

A Snapshot takes a copy of all system state. At any time the system can be restored to one of these stored Snapshots. Restoration may impact existing user sessions.

Restore Snapshot

Saved 04 Apr 2017 (02:10:21)

By admin

Description Oracle BI Applications v10.2.0 for Oracle Analytic Cloud

* Restore Data Model Application Roles Catalog

Restore reason

Restore Cancel

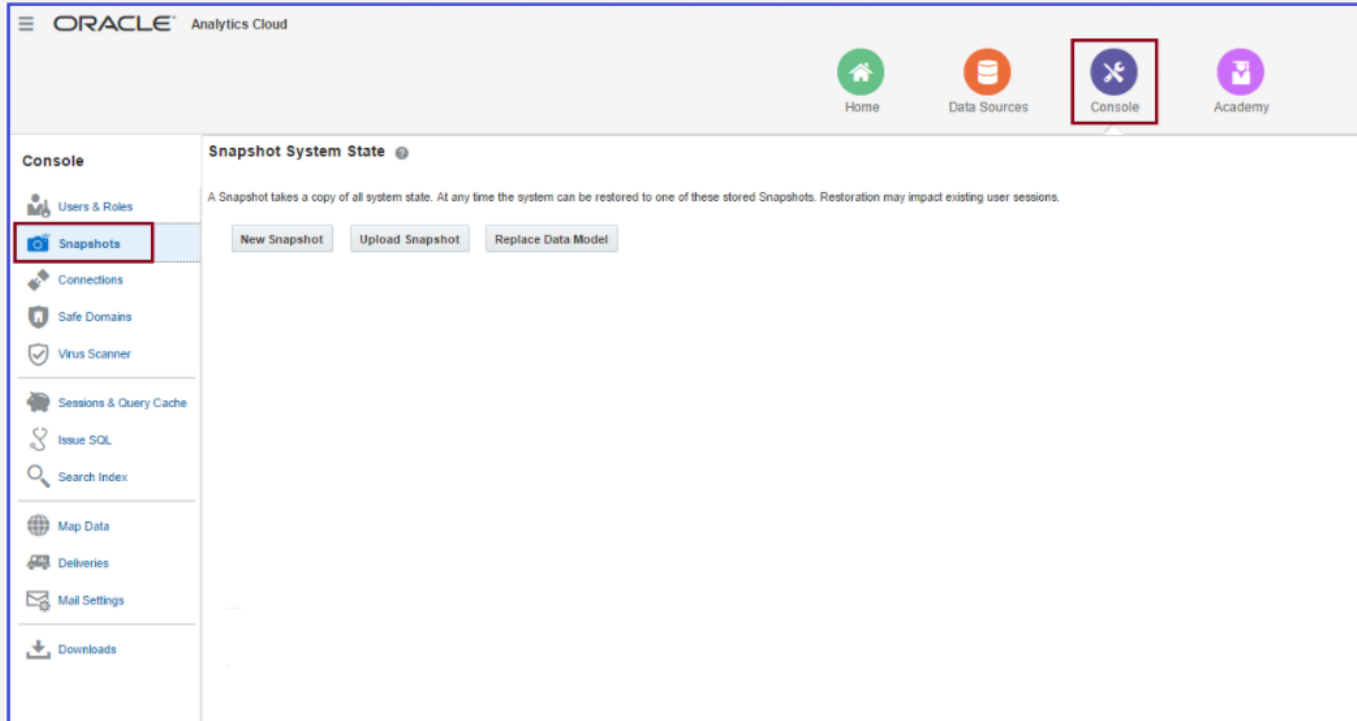
Restore Ctrl+R
Download Ctrl+D
Delete Ctrl+X
Edit Ctrl+E

Timestamp	Description	Username
04 Apr 2017 (02:10:21)	Oracle BI Applications v10.2.0 for Oracle Analytic Cloud	admin
31 Mar 2017 (09:26:52)	BIAPPS_10.2.0_FACTORY_JAZN_WEBCAT	admin
23 Mar 2017 (08:13:05)	BIAPPS_10.2_FACTORY_JAZN_WEBCAT	admin
23 Mar 2017 (06:11:10)	BIAPPS_10.2_FACTORY_JAZN_WEBCAT	admin
23 Mar 2017 (02:08:54)	BIAPPS_10.2_FACTORY_JAZN_WEBCAT	admin
23 Mar 2017 (01:19:51)	BIAPPS_Webcat_JAZN	admin
21 Mar 2017 (11:27:36)	ACS Initial State	admin

Uploading Catalog:

Verify the imported Application Roles in Application Role Management page (Console> Users and Roles-> Application Roles)

Lift and Shift Repository:

A screenshot of the Oracle Analytics Cloud interface. The top navigation bar includes the Oracle logo and 'Analytics Cloud' text. On the right, there are four icons: Home (green house), Data Sources (orange database), Console (blue wrench, highlighted with a red box), and Academy (purple graduation cap). The left sidebar lists various system management options, with 'Snapshots' (blue camera icon, highlighted with a red box) selected. The main content area is titled 'Snapshot System State' and contains a descriptive paragraph and three buttons: 'New Snapshot', 'Upload Snapshot', and 'Replace Data Model'.

ORACLE Analytics Cloud

Home Data Sources Console Academy

Console

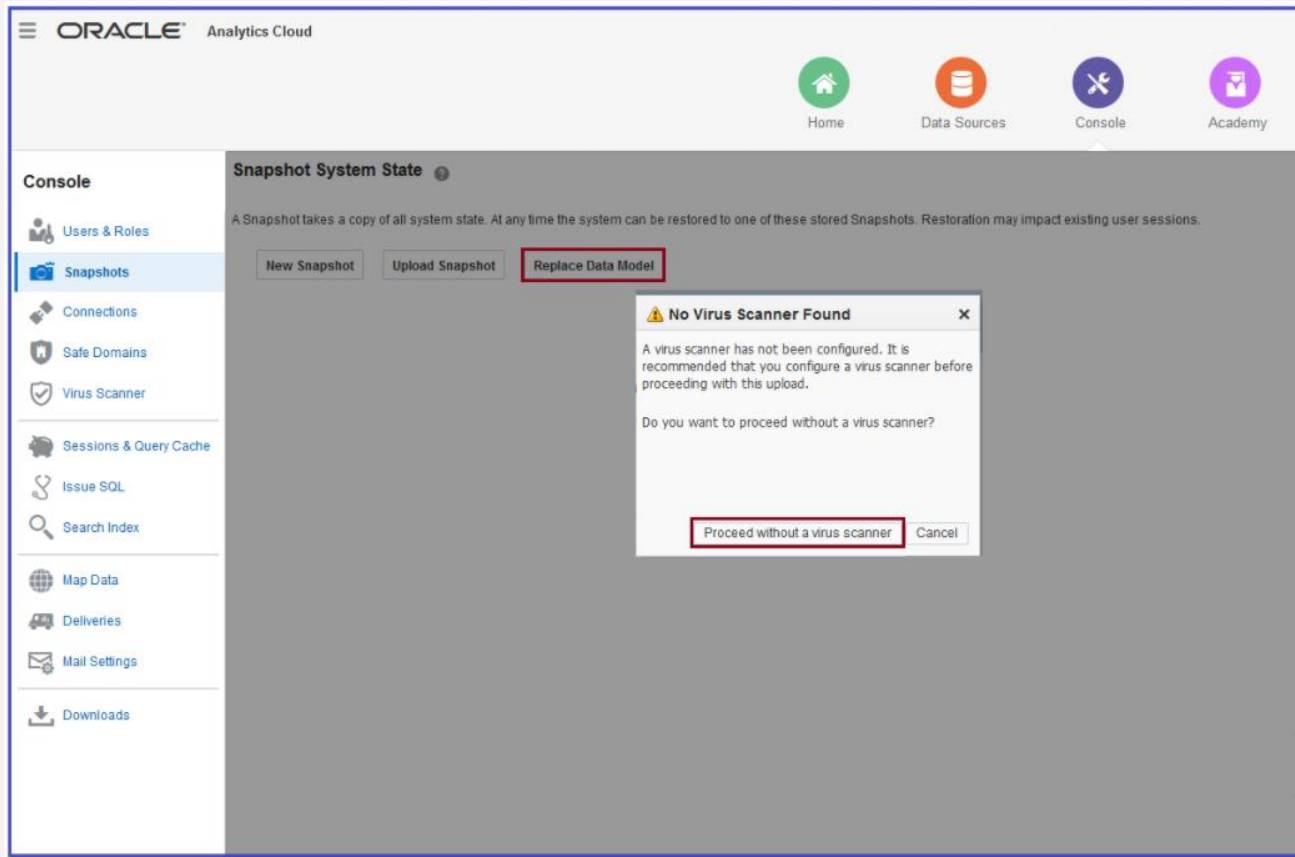
- Users & Roles
- Snapshots**
- Connections
- Safe Domains
- Virus Scanner
- Sessions & Query Cache
- Issue SQL
- Search Index
- Map Data
- Deliveries
- Mail Settings
- Downloads

Snapshot System State

A Snapshot takes a copy of all system state. At any time the system can be restored to one of these stored Snapshots. Restoration may impact existing user sessions.

New Snapshot Upload Snapshot Replace Data Model

Lift and Shift Repository:



ORACLE Analytics Cloud

Home Data Sources Console Academy

Console

- Users & Roles
- Snapshots**
- Connections
- Safe Domains
- Virus Scanner
- Sessions & Query Cache
- Issue SQL
- Search Index
- Map Data
- Deliveries
- Mail Settings
- Downloads

Snapshot System State

A Snapshot takes a copy of all system state. At any time the system can be restored to one of these stored Snapshots. Restoration may impact existing user sessions.

New Snapshot Upload Snapshot **Replace Data Model**

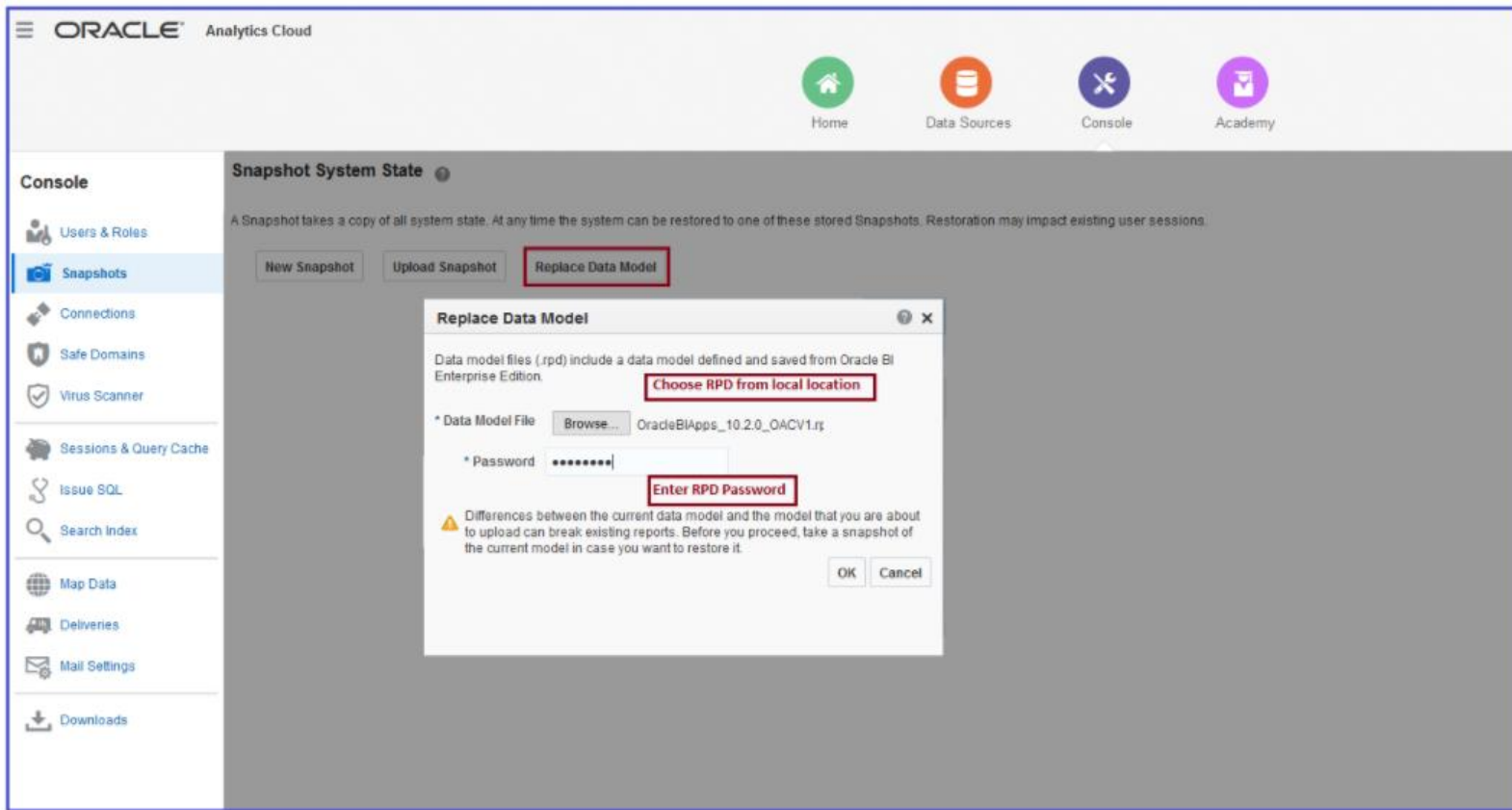
No Virus Scanner Found

A virus scanner has not been configured. It is recommended that you configure a virus scanner before proceeding with this upload.

Do you want to proceed without a virus scanner?

Proceed without a virus scanner Cancel

Lift and Shift Repository:



The screenshot displays the Oracle Analytics Cloud console interface. At the top, the Oracle logo and 'Analytics Cloud' text are visible. Below this, there are navigation icons for Home, Data Sources, Console, and Academy. On the left side, a sidebar menu lists various console options, with 'Snapshots' currently selected. The main content area is titled 'Snapshot System State' and includes a descriptive paragraph about snapshots. Three buttons are present: 'New Snapshot', 'Upload Snapshot', and 'Replace Data Model', with the latter being highlighted by a red box. A modal dialog box titled 'Replace Data Model' is open in the foreground. It contains the following elements: a text box for 'Data Model File' with a 'Browse...' button and the filename 'OracleBIApps_10.2.0_OACV1.rj' (highlighted with a red box); a password field with masked characters and the label '* Password' (highlighted with a red box); and a warning message about potential report breaks. At the bottom of the dialog are 'OK' and 'Cancel' buttons. The text 'Choose RPD from local location' and 'Enter RPD Password' are also highlighted with red boxes.

ORACLE Analytics Cloud

Home Data Sources Console Academy

Console

- Users & Roles
- Snapshots**
- Connections
- Safe Domains
- Virus Scanner
- Sessions & Query Cache
- Issue SQL
- Search Index
- Map Data
- Deliveries
- Mail Settings
- Downloads

Snapshot System State

A Snapshot takes a copy of all system state. At any time the system can be restored to one of these stored Snapshots. Restoration may impact existing user sessions.

New Snapshot Upload Snapshot **Replace Data Model**

Replace Data Model

Data model files (.rpd) include a data model defined and saved from Oracle BI Enterprise Edition. **Choose RPD from local location**

* Data Model File

* Password **Enter RPD Password**

⚠ Differences between the current data model and the model that you are about to upload can break existing reports. Before you proceed, take a snapshot of the current model in case you want to restore it.

Lift and Shift Repository:

Verify the Uploaded RPD by Navigating to Analyses and clicking “Create Analysis. You should see the available subject areas.

Note: you can “Lift and Shift” the RPD
But unless VPN/IaaS is set up the
Connection to On-Prem will fail

After Essbase migration What next?

- Config files settings have to be set at the application level for each database migrated



Apps are Migrated, what's next?

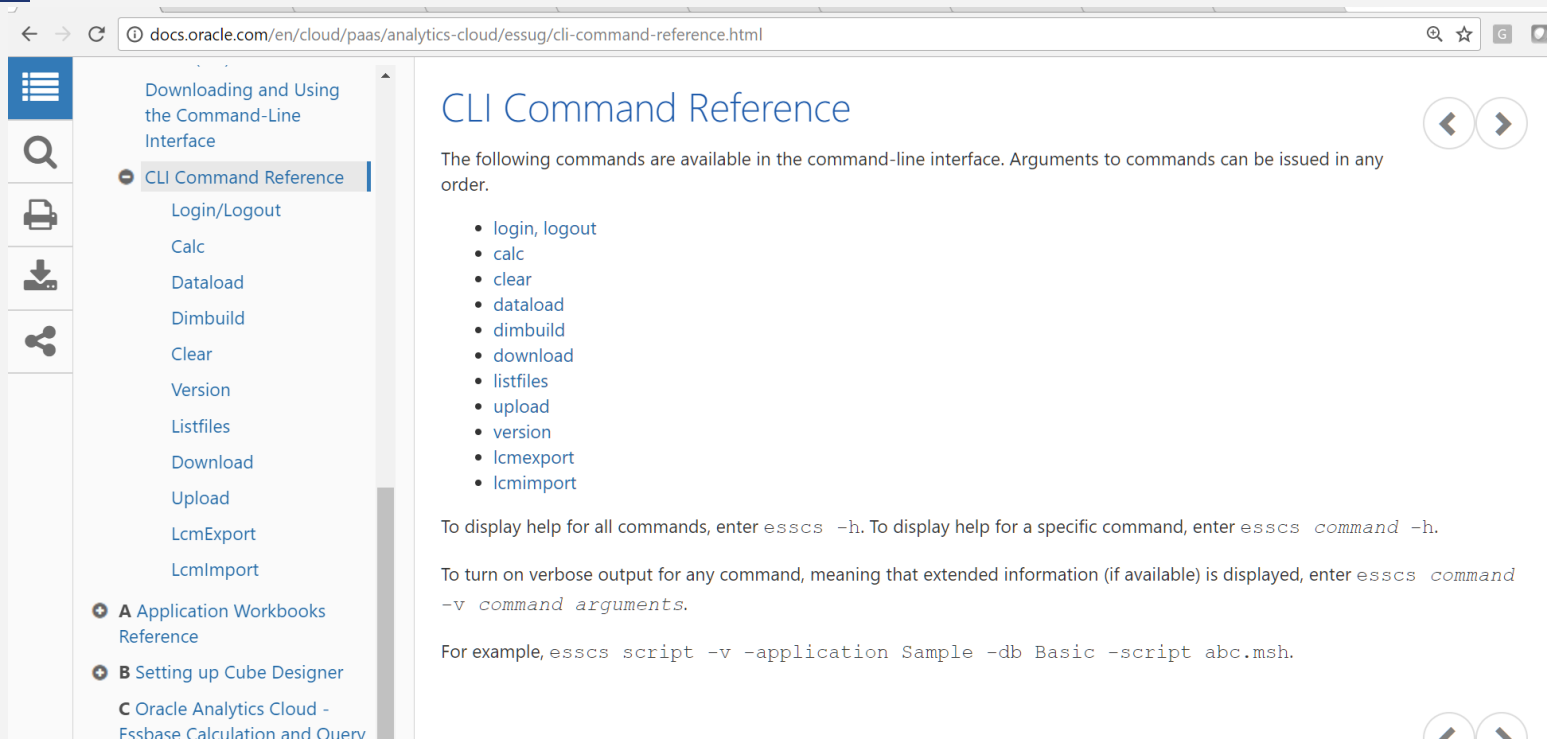
- Backups will need to be created
 - LCM is “all or none” per application
 - Data Exports and artifacts can be copied to backup directories
- MaxL scripts will need to be modified for paths, case sensitivity, logins, etc.
- Server-side Windows Batch scripts will need to be converted to Shell scripts
- Note:
 - Some automation/Data Movement can be done with EssCLI
 - Some automation can be done with MaxL (run from the server)



Maintenance and Automation

CLI Commands:

<http://docs.oracle.com/en/cloud/paas/analytics-cloud/essug/cli-command-reference.html>



The screenshot shows a web browser displaying the Oracle Cloud CLI Command Reference page. The browser's address bar shows the URL: `docs.oracle.com/en/cloud/paas/analytics-cloud/essug/cli-command-reference.html`. The page title is "CLI Command Reference". The main content area lists the following commands available in the command-line interface:

- login, logout
- calc
- clear
- dataload
- dimbuild
- download
- listfiles
- upload
- version
- lcmexport
- lcmimport

The page also includes instructions on how to display help for all commands or for a specific command, and how to turn on verbose output for any command. For example, the command `esscs script -v -application Sample -db Basic -script abc.msh.` is shown.

Navigation icons (back, forward, search, star, G, and refresh) are visible in the browser's top right corner. A sidebar on the left contains a menu with the following items:

- Downloading and Using the Command-Line Interface
- CLI Command Reference (selected)
- Login/Logout
- Calc
- Dataload
- Dimbuild
- Clear
- Version
- Listfiles
- Download
- Upload
- LcmExport
- LcmImport
- A Application Workbooks Reference
- B Setting up Cube Designer
- C Oracle Analytics Cloud - Essbase Calculation and Query

CLI Commands example:

Calc

Calculates a cube.

Syntax

```
calc -application appname -db cubename -script scriptfilename
```

Example

```
esscs calc -application Sample -db Basic -script CALCALL.CSC
```



Continuing Education

Play it Forward



- Videos to expand on what you've learned here
 - Product introductions
 - New Features in Oracle Analytics
 - Cutting Edge Cloud updates
 - Expert-level videos for BI gurus
 - Technical Reference in video form
- To experience the education revolution first-hand, join our community at epm.bi/videos

#PlayItForward

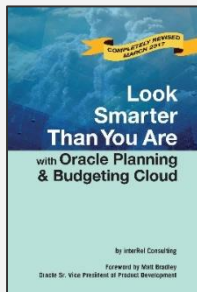
First Ever Oracle EPM Cloud Books Now Available!

OAC



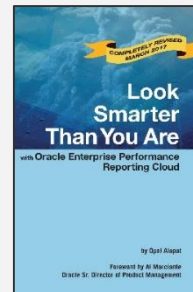
- Steps to set up your Oracle Analytics Cloud instance
- How to build Essbase Cloud cubes from start to finish
- Maintaining dimensions and loading data
- Creating calculations and calculating data
- Assigning security

EPBCS



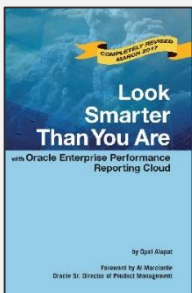
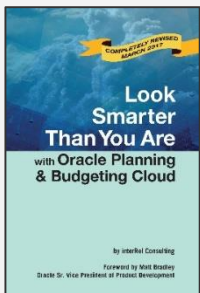
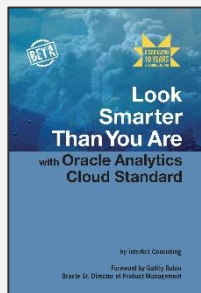
- Build an Oracle Planning & Budgeting Cloud
- Application from start to finish
- Administer and automate your solution
- Migrate from on-premises to the Cloud
- Best practices for setting up your Oracle EPM Cloud Instance

EPRCS



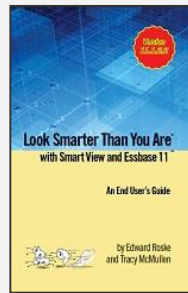
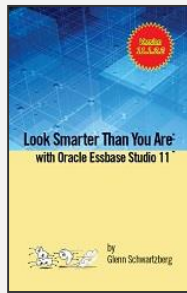
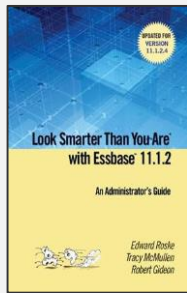
- Build a report package
- Execute the reporting cycle from start to finish
- Sign off or reject the final product
- Assign security
- Migrate objects between environments

Cloud



Admin/End Users

Essbase



Admin

Studio

Smart View

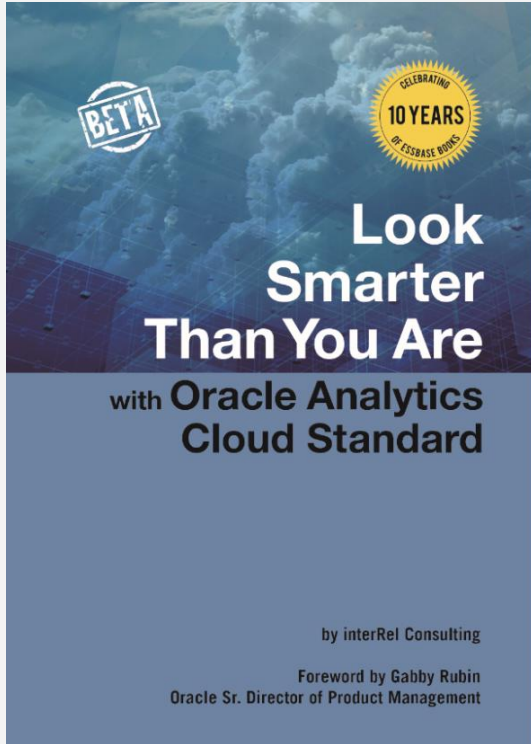
Planning



Admin

End User

Advanced



Look Smarter Than You Are with OAC Standard

*Only OAC book on the market!

Learn:

- Processes for setting up your PaaS environment
- Foundational Essbase concepts
- Foundational Smart View concepts
- Best practices for building Essbase Cloud cubes
- Best practices for building Cloud data visualizations
- Security design best practices
- Administration processes

- **Collaborate 18**

Las Vegas – April 22-26, 2018

- **Kscope18**

Orlando – June 10-14, 2018

- **Check our website for new events – www.interRel.com**

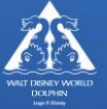


ODTUG 
 Kscope18
 ORLANDO, FLORIDA • JUNE 10-14

Register Now
www.kscope18.odtug.com

Use Code IRC To Get \$100 Off!

O R L A N D O



Questions

Moving from On-Prem Essbase and OBIEE to Oracle Analytics Cloud (in 6 Weeks or Less)

info@interRel.com

interRel.com