



COLLABORATE17

TECHNOLOGY AND APPLICATIONS FORUM
FOR THE ORACLE COMMUNITY

Replacing Discoverer – What are the Options?

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Session ID: 10238

<IOUG> OAUG Quest

#C17LV



Replacing Discoverer – What are the options?

Introductions / Agenda

Introduction

- Art Dowd, Consulting Director, O2Works
 - Former VP of IT for Hospitality Company
 - Extensive business background prior to moving to the IT side of the house
 - Implemented / Upgraded Oracle eBus Suite
 - 18 years with Oracle Applications
 - Experience with Oracle Consulting and two well regarded Oracle Applications consulting firms
 - Board member for OAUG Upgrade SIG

Audience Survey

- Accountants / Functional users
- DBA's
- Developers
- Transaction reporting enthusiasts
- Replacement product vendors
- Oracle employees

Agenda

- What is Discoverer
- What's the deal on Discoverer
- Discoverer support dates documentation
- Replacement options
 1. Pros and cons of staying on 11g Discoverer
 2. Pros and cons of “migrating” to OBIEE
 3. Convert from Discoverer to APEX
 4. Oracle BI Cloud
 5. Oracle's Fusion Accounting Hub Reporting Cloud Service (FAHRCS)
 6. Evaluating 3rd party options
- Questions and Answers



Replacing Discoverer – What are the options?

What is Discoverer / what's the fuss about?

What is Oracle Discoverer?

- A **free** ad-hoc query and analysis reporting tool that provides end users with easy access to relational and multi-dimensional data.
- Allows direct access to transactional data residing in the EBS database.... **Real time data.**
- It is heavily used for transactional queries and enables users to capture a business view of data while hiding the complexity of the underlying data structures.
- It has a very large install base

What is the problem?

- Oracle is “sun-setting” Discoverer and “transitioning” to the Oracle Business Intelligence Foundation Suite.
- The March, 2014 *Oracle Business Intelligence Discoverer Statement of Direction* document provides details behind the move. It can be found at:
<http://www.oracle.com/technetwork/developer-tools/discoverer/overview/discoverer-sod-jan2009-132849.pdf>
- Discoverer will no longer be offered after version **Discoverer 11gR1**. (11.1.1.7 is the terminal release).
- Support information for Discoverer is found in the Middleware Lifetime Support document (p. 8)
<http://www.oracle.com/us/support/library/lifetime-support-middleware-069163.pdf>

Discoverer Support Dates

Release	GA Date	Premier Support Ends	Extended Support Ends	Sustaining Support Ends
9iAS R2 (9.0.2)	Apr 2002	Jul 2005	Not Available	Jul 2008
9iAS R2 (9.0.3)	Oct 2002	Jul 2005	Not Available	Jul 2008
Application Server 10g (9.0.4)	Dec 2003	Dec 2006	Dec 2008	Dec 2009
Application Server 10gR2 (10.1.2.x) *	Jan -Oct 2005	Dec 2011	Not Available	Indefinite
Content Management SDK 10gR2 (9.0.4.2.x)	Jan -Oct 2005	Dec 2013	Not Available	Indefinite
Content Database 10gR2 (10.2.x)	Jan -Oct 2005	Dec 2013	Not Available	Indefinite
Fusion Middleware 10gR3 (10.1.3x) **	See below	See below	See below	See below
Fusion Middleware 11gR1 (11.1.1.x) ***	See below	See below	See below	See below
Portal 11gR1, Forms 11gR1, Reports 11gR1 and Discoverer 11gR1 (11.1.1.x)	Jun 2009	Jun 2014	Jun 2017	Indefinite
Forms and Reports 11gR2 (11.1.2.x)	Oct 2011	Dec 2016	Dec 2018	Indefinite
Fusion Middleware 12c (12.1.x) *****	Dec 2011 -Feb 2015	Dec 2017	Dec 2019	Indefinite
Fusion Middleware 12c (12.1.x) *****	Oct 2015 – Mar 2016	Oct 2020	Oct 2023	Indefinite

Discoverer Support

Release	GA Date	Premier Support Ends	Extended Support Ends	Sustaining Support Ends
Portal 11gR1, Forms 11gR1, Reports 11gR1 and Discoverer 11gR1 (11.1.1.x) ****	Jun 2009	Jun 2014	Jun 2017	Indefinite

******** Until December 2012, support will be provided for restricted use of Oracle Single Sign-on (10.1.4.x) & Delegated Administration Services (10.1.4.x) when used with Oracle Internet Directory 11gR1 for user authentication of Portal 11gR1 , Forms 11gR1, Reports11gR1 and Discoverer 11gR1 application users. Customers are advised to migrate to Oracle Access Management 11gR1 as soon as it is certified with their particular product.

Oracle's Lifetime Support Policy defines the support levels and dates for Oracle products.

<http://www.oracle.com/support/library/brochure/lifetime-support-middleware.pdf>

Support Information

Oracle Lifetime Support Policy
Oracle Fusion Middleware

Go to: www.Oracle.com

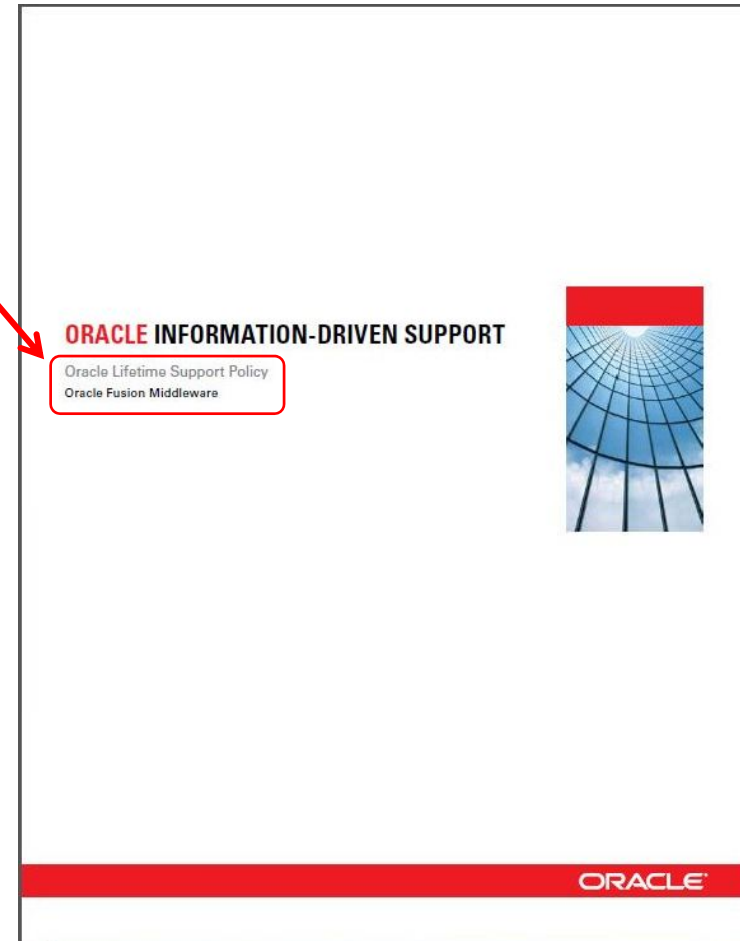
Query: "lifetime-support-middleware"

Fill in: annoying Oracle sign in screen



The screenshot shows a 'Sign In' form with the following elements:

- Sign In** header
- Username input field with a [Lost Username?](#) link
- Password input field with a [Lost Password?](#) link
- Sign In** button
- Text: **Don't have an Oracle account?** [Sign Up](#) for a free Oracle Web account
- [Need Help?](#) link
- Footer: Powered by Oracle Access Manager 11g





Replacing Discoverer – What are the options?

Replacement Options

Discoverer Replacement Options

1. Stay on Discoverer pre 11g or upgrade to 11.1.1.7.0. Extended support goes through June, 2017 and Sustaining support is indefinite.
2. “Migrate” to Oracle’s recommended strategic architecture that includes:
 - a) Oracle Business Intelligence Enterprise Edition (OBIEE) tool
 - b) Informatica/ODI data warehousing and pre-package applications including OBIA
3. Transition from Discoverer to APEX
4. The Oracle BI Cloud
5. Fusion Accounting Hub Reporting Cloud Service (FAHRCS)
6. Evaluate 3rd party products.

1. Stay on Discoverer 11g

Pro's

- Easiest route
- Extended Oracle support through June, 2017
- No new licensing \$\$\$
- No changes for users
- If upgrading from prior version, Oracle supports the upgrade

Con's

- No new features or enhancements will be made to Discoverer beyond 11.1.1.7.0
- Delays eventual migration project to another BI tool
- Oracle “recommends” migrating to Oracle Business Intelligence Foundation Suite, by June 2015.

2. “Migrate” to Oracle’s strategic architecture

Pro’s

- Oracle’s strategic direction reporting architecture
- Oracle’s reporting solution is in the Gartner Platforms and Analytic Platforms Magic quadrant again
- Designed for direct integration and drill through from OBIA to Oracle EBS

Con’s

- \$\$\$ License \$\$\$
- Depending upon Architecture configuration, probably not Real Time
- Multiple offerings can be confusing. Need to know what you really want.
- Understand other potential system requirements. (i.e. OBIA vs. Data Warehouse and Essbase)

2. “Migrate” to Oracle’s strategic architecture (cont.)

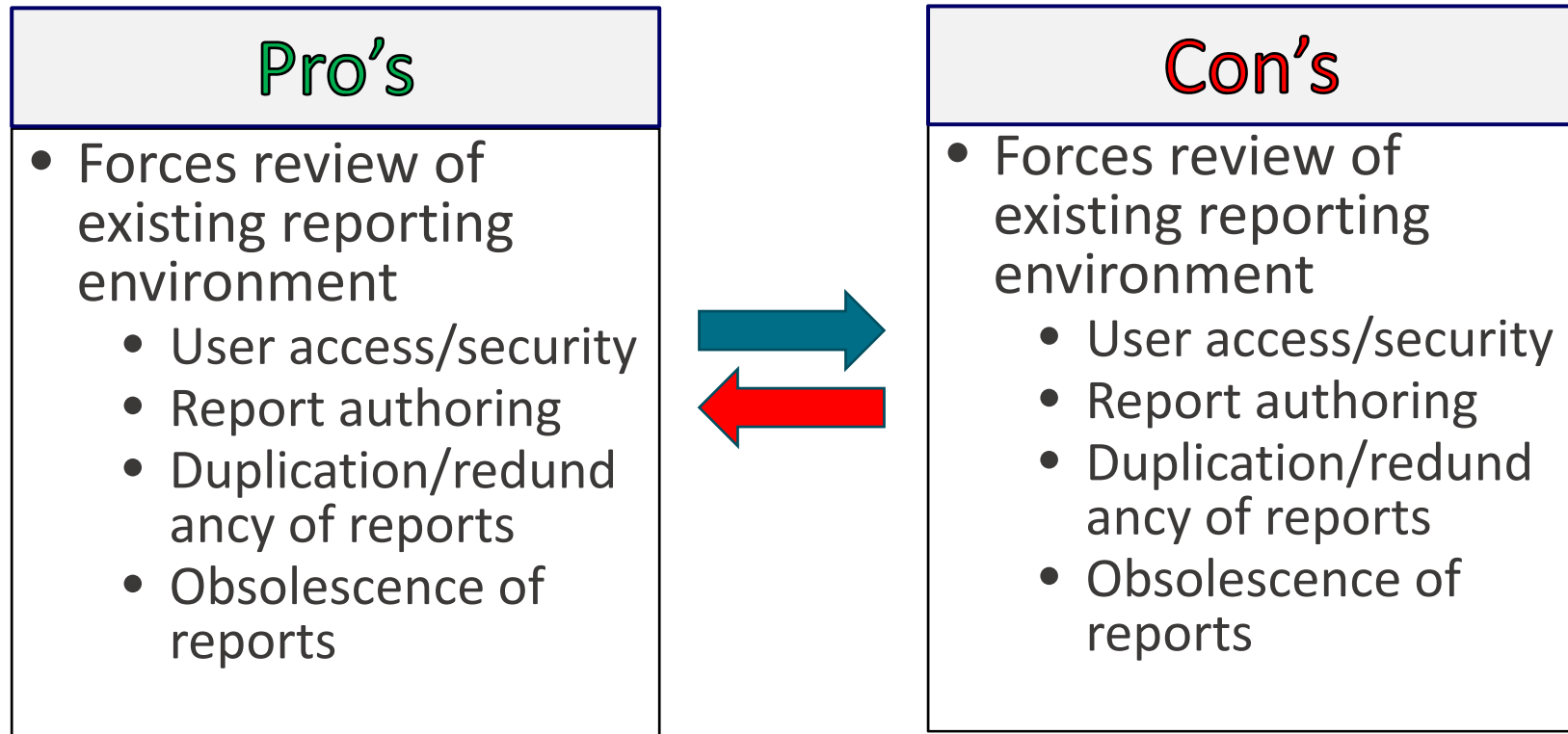
Pro’s

- Integration w/ BI Publisher, Essbase, and Hyperion
- Pre-built, packaged data warehouse solutions (Analytics by subject area)
- Migration tool for meta-data (Discoverer end-user-layer)
- Pro-active intelligence for quick identification of variances and exceptions
- Configurable dashboards

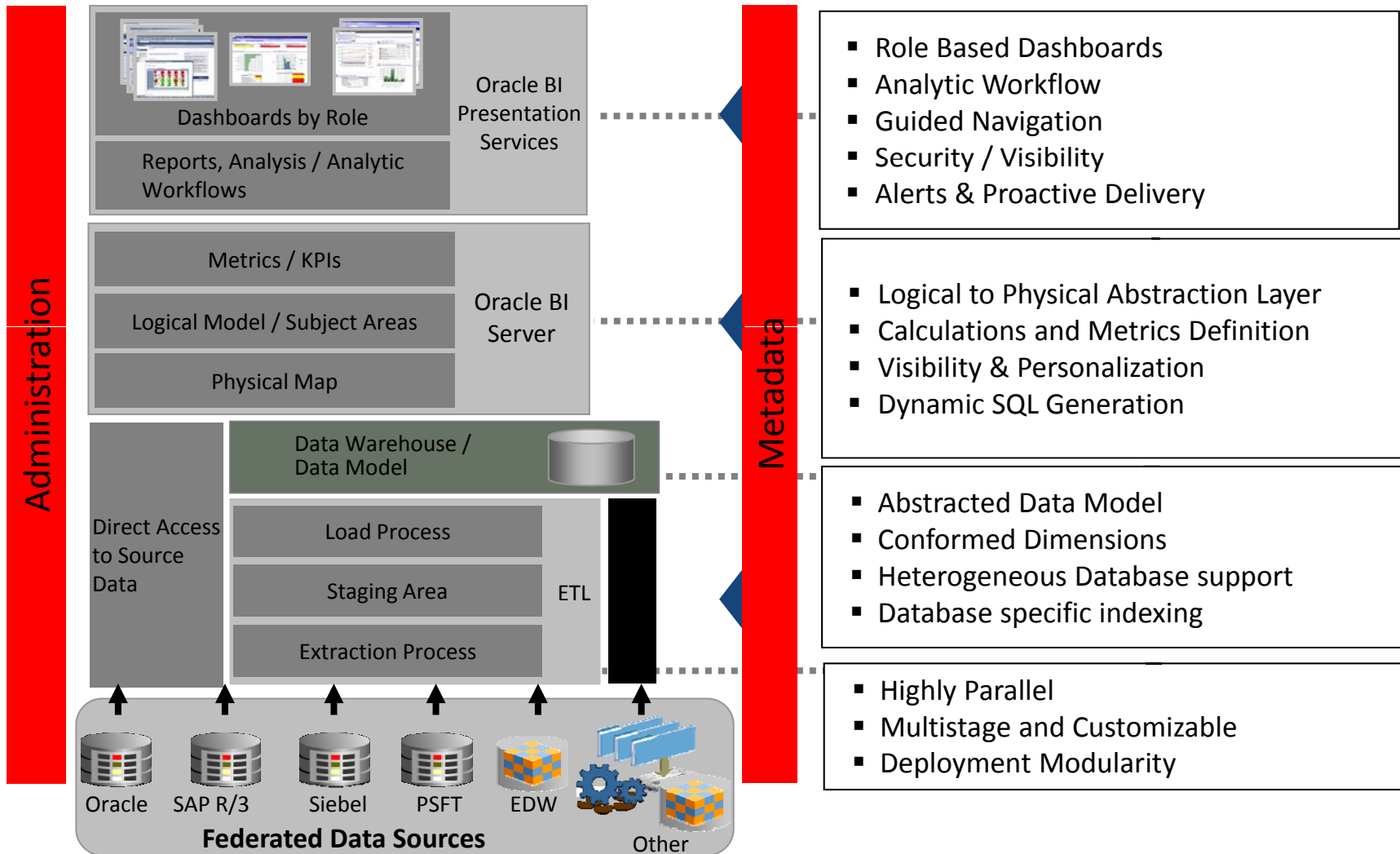
Con’s

- Requires development time
- Discoverer data model sources not already in a Star-schema structure will not automatically migrate.
 - Will need to be adjusted into OBIEE’s required facts-and-dimension structure within the repository (meta data)
 - Workbooks/reports will need to be re-built in OBIEE. Oracle does not provide a migration tool for Discoverer workbooks/reports

2. “Migrate” to Oracle’s strategic architecture (cont.)



Oracle BI Applications Architecture



Beware: Oracle's Battery Not Included

Oracle's "strategic" BI Architecture is multi-faceted quagmire comprised of:

BI Server: Common enterprise business model and abstraction layer

BI Answers: Ad-hoc query and reporting

BI Interactive Dashboards: Highly interactive dashboards

BI Delivers: Proactive business activity monitoring and alerting

BI Publisher: Enterprise reporting and distribution of "pixel-perfect" reports

Office Plug-in: embed, interact, and create BI content from within Office documents

Hyperion Interactive Reporting: Intuitive and highly interactive ad-hoc reporting

Hyperion SQR Production Reporting: High volume, presentation-quality formatted report generation

Hyperion Financial Reporting: Formatted, book-quality financial and management reporting

Hyperion Web Analysis: Web-based online analytical processing (OLAP) analysis, presentation, and reporting

And that doesn't include OBIA...

Oracle Business Intelligence Applications (OBIA) are optional prebuilt Business Intelligence solutions that run on top of the BI Architecture...

- **Oracle Financials**
 - Fixed Assets Analytics
 - Budgetary Control Analytics
- **Oracle Project Analytics**
 - Resource Management Analytics
 - Project Subledger Reconciliation
 - Perspective based dashboards
- **Oracle Human Resources Analytics**
 - Time and Labor Analytics.
 - Payroll Analytics
 - Workforce Gains and Losses
- **Oracle Procurement & Spend Analytics**
 - Sourcing Analytic
- **Oracle Supply Chain and Order Management Analytics**
 - Enhanced Inventory Analysis
 - New Item Cost History
- **Oracle CRM Analytics**
 - Oracle Price Analytics
 - Oracle Service Analytics
 - Oracle Sales Analytic
- **Oracle Student Information Analytics**

AND there is Essbase also for serious data warehouse enthusiasts

Converting Discoverer to OBIEE

- Oracle Discoverer Metadata Conversion Assistant provides minimal metadata conversion support
- You need to manually convert (Rebuild) other Discoverer objects to their OBIEE equivalents. These include:
 - Workbooks
 - Business Areas
 - Folders and Items
 - Joins and Hierarchies
- There is no migration tool for Discoverer workbooks/reports. They must be rebuilt.

Accessing “Real time” data from OBIEE

There is a way to access real-time data from OBIEE. It is painful and expensive. To do that you must...

- Write SQL code from OBIEE that accesses the correct Oracle EBS database tables and pulls the data out and delivers it to OBIEE.
- The tool you can use for this is BI Publisher which can take information from any source, convert it to XML and deliver it to a variety of publishing options. You can embed the SQL commands in BI Publisher.
- These BI Publisher reports can be used to create Discoverer-like reports .
- The down side is that the Discoverer queries that had previously been modifiable are now static and must be adjusted by developers going forward.
- So... if you purchased OBIEE and you don't want to wait for daily data refreshes, you can hire a developer to build real time queries / reports from OBIEE using SQL and BI Publisher. *(Why would you do that?)*

3. Convert from Discoverer to APEX

- What is APEX?
 - Oracle Application Express is a **FREE development environment** that runs on an Oracle database.
 - Fully supported and comes with all Oracle Database editions
- Why does it matter?
 - Discoverer reports can be converted to APEX reports
 - Once the initial template is built and proficiency is established, conversion should take approx. 15 minutes per report.

PROBLEM: *After conversion, queries become reports and end users lose the ability to use Ad Hoc query tools*

3. Convert from Discoverer to APEX

9 Steps to Migrate From Discover to APEX

1. Extract Discover Query
2. Create a DB View to Hold Query
3. Grant Select and Create Synonym for View
4. Create Views for LOV's for Non-Interactive Reports (optional)
5. Create APEX Page to Query View
6. Add APEX Security to Page
7. Create EBS Form Function for APEX Page
8. Add EBS Form Function to EBS Menu
9. Test

Once you have the base infrastructure in place and are proficient, this should take about 15 minutes *per report* to complete

Taken from *Migrate your Discover Reports to Oracle APEX*
Collaborate 15 presentation by John Peters

3. Convert from Discoverer to APEX


- Where to find additional information:
 - John Peter's Collaborate 15 presentation can be found at:
http://jrpjr.com/paper_archive/collab15_disco_to_apex.pdf
 - A WebEx including a demonstration can be found at:
<http://oaug.org/education-events/elearning/archive/2015/item/4084-migrate-your-discover-reports-to-oracle-apex>
- If you have trouble accessing either one, please e-mail me at adowd@o2works.com.

More on APEX

During the Collaborate 16 presentation Q&A , a Sr. Product Manager from Oracle who specializes in Oracle Application Express wanted to let people know that the new 5.0 release of APEX has greatly improved their reporting capabilities. That is absolutely correct and the improvement is impressive.

- The downside is that the reality is APEX is a feature of the Oracle database and typically falls under the DBA's domain.
- DBA's who are held accountable for system performance are not known to be receptive to adding users who will have access to run queries and reports against the production database.
 - Access is typically reserved for DBA's, developers, or some qualified super-users
- APEX is a declarative development platform not easily intuitive for a non-technical user.
- Functional users will need to be moderately versed in SQL and will need to invest time learning in order to become proficient.
- For more information on APEX and to sign up for a free APEX workspace, check out: <http://www.oracle.com/technetwork/developer-tools/apex/overview/index.html>

4. Oracle BI Cloud

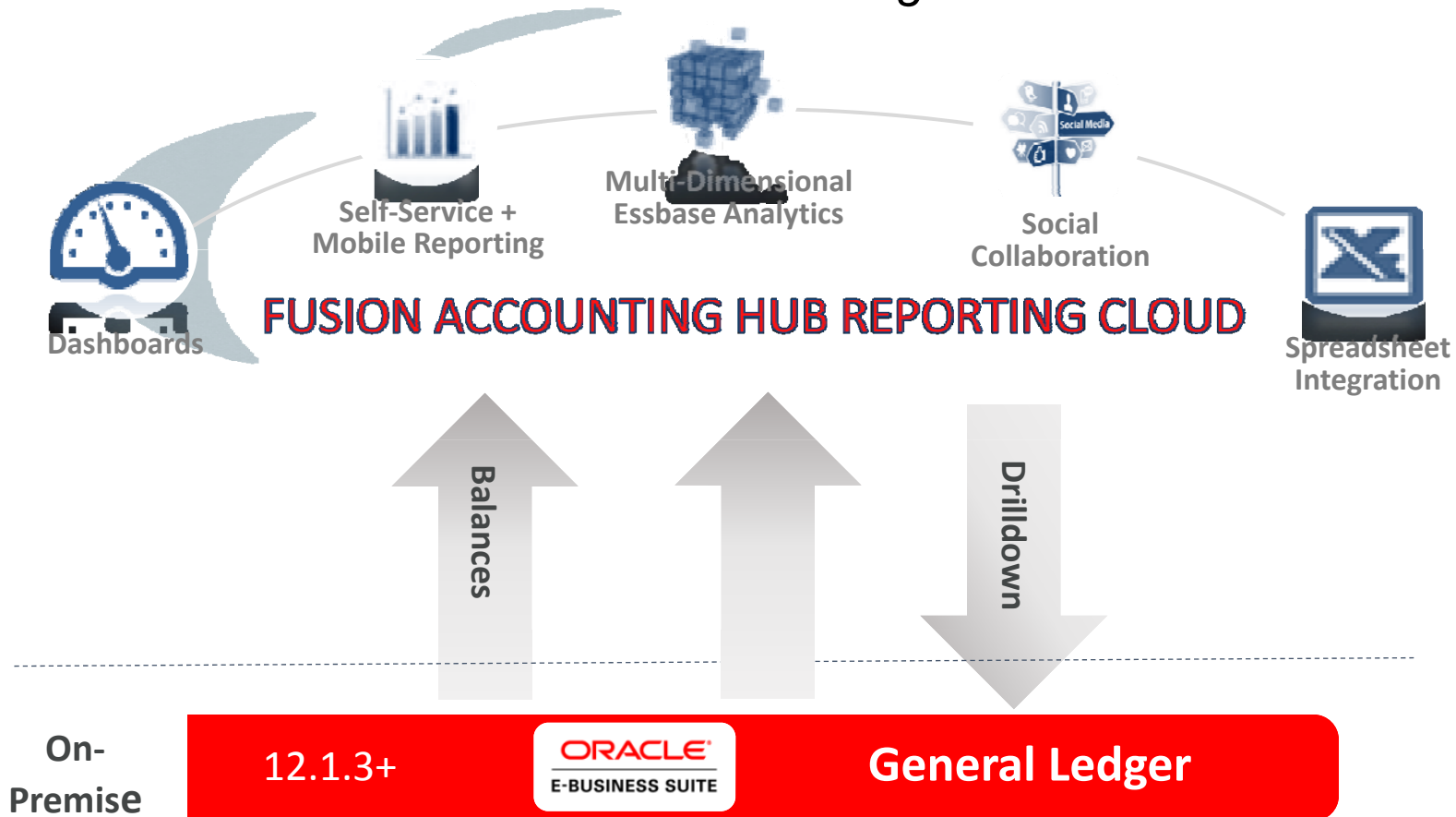
- Cloud??? Are you kidding? 
- Oracle offers a BI Cloud
 - Due to the complexity of the OBIEE / OBIA code, the Oracle BI Cloud does not offer the same features and functionality as on-premise OBIEE.
 - It is likely that there will never be an identical Cloud OBIEE offering.
 - Oracle is working with Partners who are interested in developing custom applications for potential Oracle BI Cloud customers
 - As a result, there are numerous partner-driven cloud “solutions” cropping up.
- Data refreshes from Cloud to on-premise (or on-premise to Cloud) drive the Cloud cost since it is based on data movement.
 - Most Cloud refreshes are done once per day.
 - Refresh speeds are dependent upon network connection and that is an additional cost.
- While Discoverer reporting capability could be rebuilt in the cloud using both Software as a Service (SaaS) and Platform as a Service (PaaS), they will not have real-time data capabilities.

5. Fusion Accounting Hub Reporting Cloud Service (FAHRCS)

- Before it became FAHRCS, there was... **Oracle Fusion Accounting Hub** which came from **Financial Accounting Hub (FAH)**
- **FAH** consolidates financial data of various ledger and source systems to a single reporting and analytics hub without having any modifications to legacy systems and processes.
 - Standardizes the accounting from Oracle & Non-Oracle third party transactional systems to efficiently create detailed, auditable, and reconcilable accounting platform
 - Convert and auto synchronize various ledger and legacy system data into single reporting ledger
- Oracle used it to integrate various chart of account structures from multiple acquisitions
- Eliminates need to re-implement due to a change to the Organizational structure

Fusion Accounting Hub Reporting Cloud Service

Real-Time Multi-Dimensional Reporting /Analytics for your Existing General Ledger



5. Fusion Accounting Hub Reporting Cloud Service (FAHRCS)

FAHRCS includes:

- Custom infolets
- Reporting tools
- Sunburst
- Oracle Social Network
- Drill down to EBS
- SmartView for excel



5. Fusion Account Hub Reporting Cloud Service (FAHRCS)

Some Downsides to FAHRCS:

- **Not real time data**
 - You have to “define your streaming frequency” (schedule / run concurrent requests to push updated general ledger balances to Cloud Financials in FAHRCS). They recommend incremental uploads to speed the process.
- No on-going synching of hierarchies. One time initial transfer.
- No budgets are transferred from EBS.
 - Must be entered manually (but they provide a spreadsheet loader)
- The ledgers with balances coming from EBS must have no other data in them
 - Descriptive FlexFields are not transferred
 - Encumbrance journals are not transferred
- Commitment control should not be enabled in the cloud environment
- Completely separate security model that is not shared with EBS
 - Users must be recreated and separately maintained in FAHRCS (along with a new security profile)
 - After logging into FAHRCS with these credentials, users must log in again to EBS when drilling down into journal lines or Subledgers.
- And... oh yeah, \$\$\$

6. Evaluate 3rd party products

- Many organizations have ignored Oracle's "recommended" transition to the ill-fitting, over-priced OBIEE "solution" that does not provide real time analytics
- This has resulted in a variety of spreadsheet-based, analytical tools that deliver Discoverer type reporting and then some.
- Almost all of these products use Excel as the presentation layer because:
 - Everyone uses Excel (accountants especially)
 - It is flexible
 - Use of Excel reduces the cost of the reporting tool and focuses on the data delivery

6. Evaluate 3rd party products

There are a variety of tools aimed at different Reporting aspects. Some things to consider...

- Is a reporting architecture change required?
 - Discoverer reports slowing down the Oracle ERP?
 - Discoverer reports performing poorly?
 - Does it have the ability to map to multiple heterogeneous data sources?
- Is integration with the Oracle ERP products required?
 - Drill through to Oracle OLTP transaction detail?
 - Out-of-the-box EBS reports by module?
 - BI Publisher integration?
 - Hyperion integration?
- Is ad-hoc functionality required?

6. Evaluate 3rd party products (cont.)

Things to consider...

- Do you have advanced analytical requirements?
 - Aggregation of large amounts of data?
 - Time variation trend and variance analysis?
- Is dashboard functionality required?
- Do you need Real Time data?
 - For most current installations, Discoverer runs off of the EBS database tables and is real time
- What data refresh parameters can you live with?
 - Does a nightly refresh work for most days?
 - What about during month end close?

6. Evaluate 3rd party products (cont.)

Other things to consider...

- Where does the product land on the Gartner BI Platforms and Analytic Platforms Magic Quadrant?
- How current is the vendor with its product integration with Oracle. (i.e. is it up to the 12.2 platform changes?)
- How responsive is the vendor to Oracle changes?
- How financially viable is the vendor ?
- Does the product have Oracle Validated Integration certification?
- How often does the vendor upgrade the product?
- What are the licensing costs?

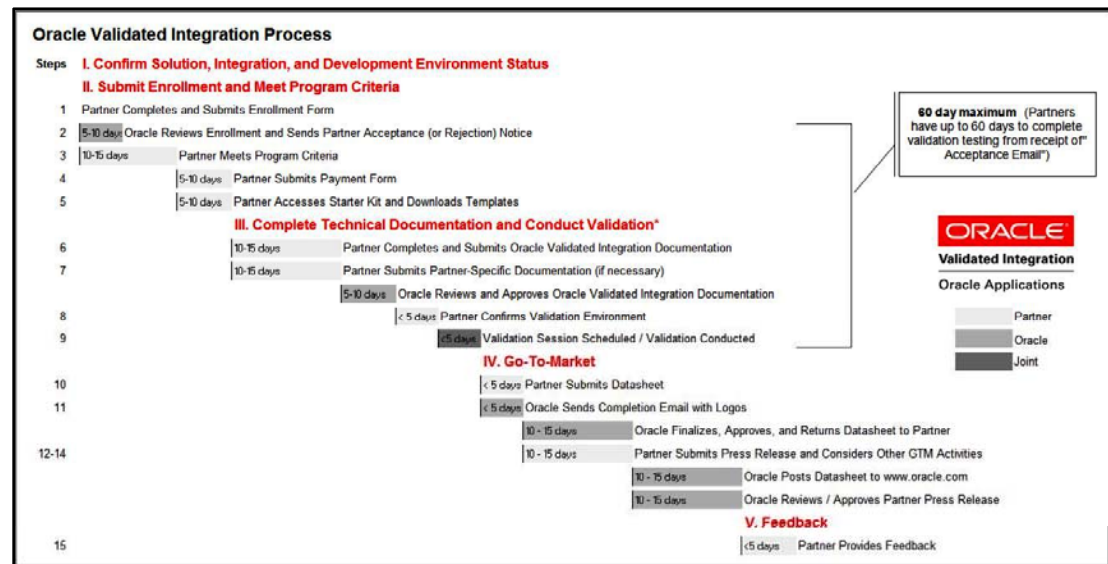
6. Evaluate 3rd party products (cont.)

Oracle Validated Integration

Provides a strategic framework and delivers exclusive go-to-market benefits that allow partners to position proven integrations to Oracle.

Five Step process:




1. Confirm Solution w/ Oracle
2. Submit Enrollment & meet criteria
3. Complete Technical Documentation & Validation
4. Go to Market
5. Provide feedback



Per Oracle, once the solution is confirmed by Oracle, it takes 8 – 10 weeks to complete the process and “go to market”

6. Evaluate 3rd party products (cont.)

Some potential vendors based on recommendations from our customer base...

Vendor	Certified	Website
Insight Software (now Hubble)		https://gohubble.com/hubbleology/86/replacing-oracle-discoverer
Global Software	 *	https://www.globalsoftwareinc.com/excel-based-tools/discoverer-report-replacement
Excel 4 Apps		http://www.excel4apps.com/products/Oracle/Discoverer-Replacement
EIS Technologies		https://www.eistech.com/discoverer-conversion.php
Noetix / Magnitude Software		http://noetix.com/products/
API Wizard		http://www.api-wizard.com/

* Oracle Validated Integration

About O2Works



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www.o2works.com/knowledgeworks



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Q&A

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