Replacing Oracle Discoverer – What are the Options?

Session ID: 10540

We'll cover the Oracle and non-Oracle options to replace this critical free application

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#C16LV

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
  - 17 years with Oracle Applications
  - Experience with Oracle Consulting and two well regarded Oracle Applications consulting firms

Overview / 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. Evaluating 3rd party options
- Questions and Answers

What is Discoverer

- The Problem
- Support dates

What is Oracle Discover

- 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 **HUGE** 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

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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

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*

Sign In

Username

Lost Username?

Password

Lost Password?

Sign In

Don't have an Oracle account?
Sign Up for a free Oracle Web account

Need Help?

Powered by Oracle Access Manager 11g

ORACLE INFORMATION-DRIVEN SUPPORT

Oracle Lifetime Support Policy
Oracle Fusion Middleware

ORACLE

Options

- 1. Stay on Discoverer 11g

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) BI tool

   b) Informatica/ODI data warehousing and pre-package applications including OBIA

3. Transition from Discoverer to APEX

4. The Oracle BI CLoud

5. Evaluate 3rd party products.

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1. Stay on Discoverer 11g

Pro's	Con'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	• 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.

Options

- 2. "Migrate" to Oracle's strategic architecture

2. "Migrate" to Oracle's strategic architecture

Pro's	Con's
• Oracle's strategic direction reporting architecture	• **$$$ License $$$**
• Oracle's reporting solution is in the Gartner Platforms and Analytic Platforms Magic quadrant again	• Depending upon Architecture configuration, data may not be Real Time
• Designed for direct integration and drill through from OBIA to Oracle EBS	• 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)

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2. "Migrate" to Oracle's strategic arch.

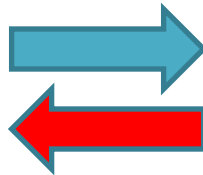| Pro's	Con's

• 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
	• 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

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2. Migrate to Oracle's strategic arch.

Pro's
• Forces review of existing reporting environment

- User access/security
- Report authoring
- Duplication/redundancy of reports
- Obsolescence of reports

Con's
• Forces review of existing reporting environment

- User access/security
- Report authoring
- Duplication/redundancy of reports
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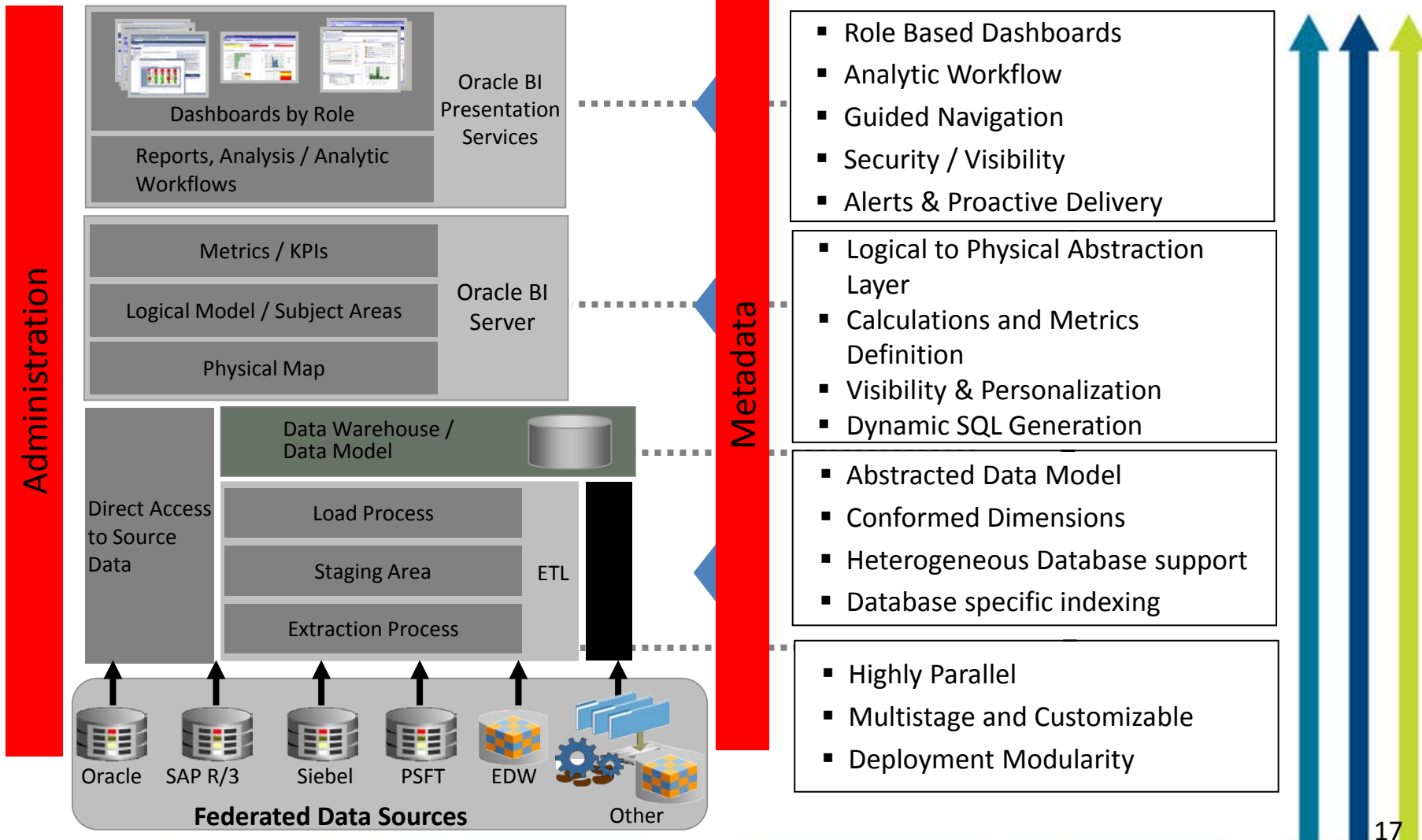
Oracle BI Applications Architecture

Administration

Metadata

Oracle BI Presentation Services

- Dashboards by Role
- Reports, Analysis / Analytic Workflows

- Role Based Dashboards
- Analytic Workflow
- Guided Navigation
- Security / Visibility
- Alerts & Proactive Delivery

Oracle BI Server

- Metrics / KPIs
- Logical Model / Subject Areas
- Physical Map

- Logical to Physical Abstraction Layer
- Calculations and Metrics Definition
- Visibility & Personalization
- Dynamic SQL Generation

Data Warehouse / Data Model

Direct Access to Source Data

- Load Process
- Staging Area
- Extraction Process

ETL

- Abstracted Data Model
- Conformed Dimensions
- Heterogeneous Database support
- Database specific indexing

- Highly Parallel
- Multistage and Customizable
- Deployment Modularity

Oracle   SAP R/3   Siebel   PSFT   EDW   Other

Federated Data Sources

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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 <u>minimal</u> 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.

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Bonus Slide #1 – Accessing "Real time" data from OBIEE

During the presentation Q&A , a BI Practice Director from a consulting firm that specializes in Oracle BI made the point that there is a way access real-time data from OBIEE. That is correct. 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 he uses 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. He embeds the SQL commands in the BI Publisher.
- These BI Publisher reports can be used to create Discoverer-like reports .

- The down side is that like APEX, 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.

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Options

- 3. Convert from Discoverer to APEX

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.

Bonus Slide #2 – More on APEX

During the 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

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Options

- 4. Oracle BI Cloud

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
- 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.

Options

- 5. 3rd Party Products

5. 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?

5. 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?

5. 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?

5. Evaluate 3rd party products (cont.)

Some potential vendors based on recommendations from our customer base…

Vendor	Certified	Website
Insight Software (now Hubble)		http://www.insightsoftware.com/blog/2014/06/3-signs-you-should-replace-oracle-discoverer/
Global Software	ORACLE Validated Integration Oracle Applications *	http://www.globalsoftwareinc.com/discoverer-report-replacement
Excel 4 Apps	ORACLE Validated Integration Oracle Applications	http://collateral.excel4apps.com/oracle/reportswand/documents/RW-Discoverer+Comparison.pdf
EIS Technologies	ORACLE Validated Integration Oracle Applications	https://www.eistech.com/index.php
Noetix / Magnitude Software		http://noetix.com/products/
API Wizard		http://www.api-wizard.com/

Oracle Validated Integration

Presentation Available

O2Works – Knowledge Base: www.o2works.com

Any Questions?   **Thank you!**

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About O2Works

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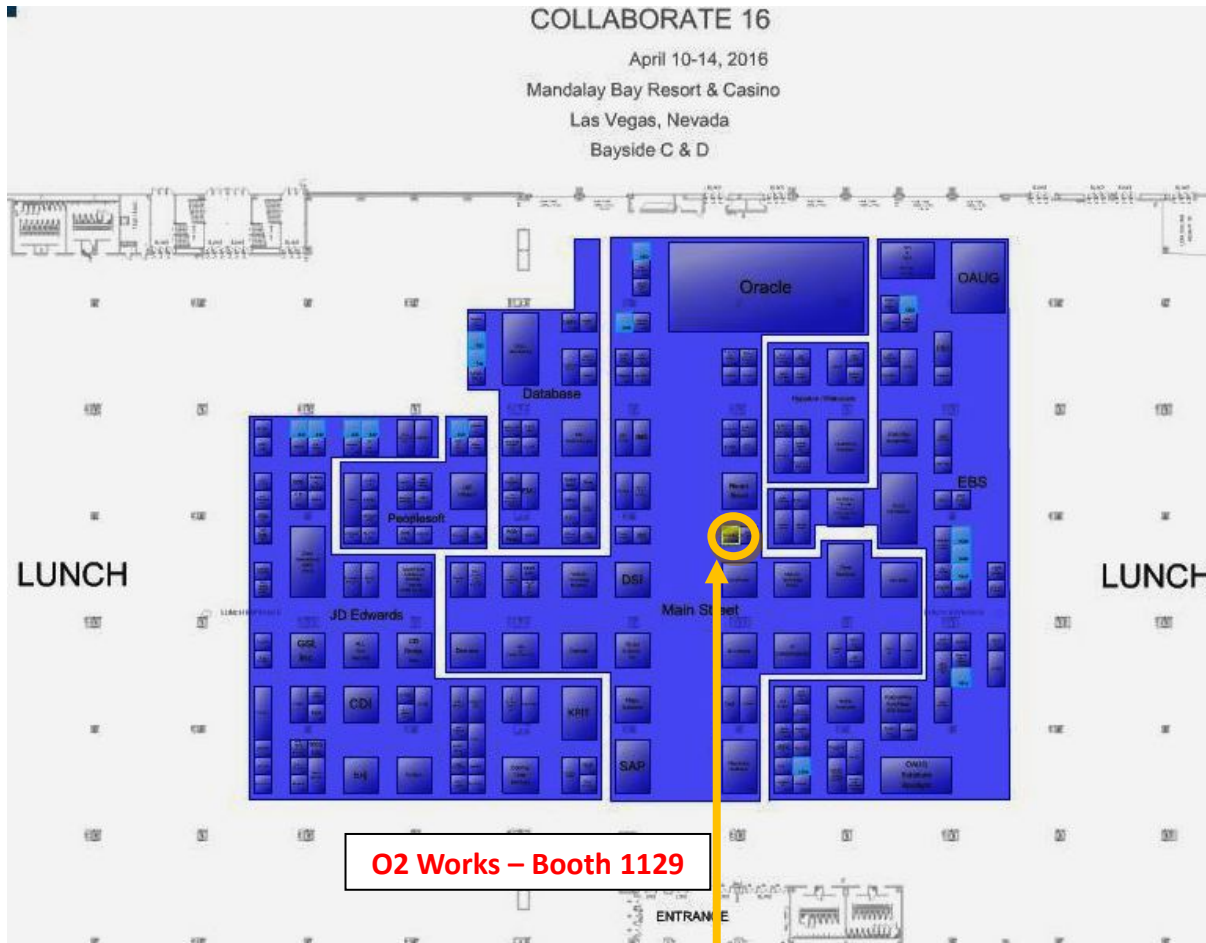www.o2works.com/knowledgeworks

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Entrance

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