

CONFERENCES
AND EVENTS
24

MEMBER'S
CORNER
30

VENDOR'S
CORNER
34



WINTER 2018

insight

THE OFFICIAL PUBLICATION OF THE
ORACLE APPLICATIONS USERS GROUP

8 The REEMERGENCE of ORACLE ANALYTICS CLOUD

STABILIZING DATABASE PERFORMANCE
USING SQL PLAN BASELINES

14

HOW TO MAKE CUSTOMERS HAPPY:
SHIP PRODUCTS ON TIME!

20

PLANNING A MIGRATION FROM ORACLE EBS
TO ORACLE ERP CLOUD? TIPS AND TRICKS TO
HELP YOU

34

Address Service Requested
OAUG
3525 Piedmont Road
Building Five, Suite 300
Atlanta, GA 30305



COLLABORATE 19

TECHNOLOGY AND APPLICATIONS FORUM
FOR THE ORACLE COMMUNITY

OAUG Forum



#C19TX

APRIL 7-11, 2019

SAN ANTONIO

COLLABORATE 19 – Oracle Applications Users Group Forum offers user training and networking for E-Business Suite, SCM, ERP & CX Cloud, On-Prem & Cloud, EPM/Hyperion, Data Science & Analytics, Personal Growth & Leadership and more.

Visit collaborate.oaug.org to learn how you can:

ATTEND

Include **#C19TX** in your budget, get approval and register at the lowest rates, available now!

EXHIBIT

Partner with the OAUG to increase business and reach new audiences actively seeking solutions as they navigate their on-prem, cloud and hybrid strategies.

Visit collaborate.oaug.org/exhibitinfo or contact Marci Nessing (mnessing@oaug.org) for more information!

OAUG[™]
oracle applications users group

OAUG Forum – April 7-11, 2019 – Henry B. González Convention Center – San Antonio, TX USA

PRESIDENT'S PERSPECTIVE

INSPIRING THE NEXT GENERATION OF OAUG MEMBERS AND LEADERS

As 2018 draws to a close, I look back with pride on the work the OAUG has accomplished and look forward to new personal and professional opportunities.



Christine Hipp
OAUG President
chipp@oaug.org
Twitter: @Chipp123Hipp

Among other initiatives, the OAUG has increased its focus on our up-and-coming leaders and their careers as well as the next generation of members. For example:

- Building on its efforts to provide education and networking for those who are new on their career path with Oracle Applications, the OAUG Emerging Leaders introduced a Mentorship Program in 2018. Mentors and mentees are matched one on one to work on setting goals in areas such as networking, career progression and new manager or general professional development. (See page 32 in this issue of *OAUG Insight* magazine)
- The OAUG Collegiate Forum partnered with Oracle Academy and California State University East Bay in November 2018 to host students looking to develop a post-graduation career strategy with a focus on Oracle Applications and Technology opportunities.

Next year, I'd also like to encourage you to consider promoting STEM opportunities in your local community. Oracle Academy offers a simple way to make this a reality with their freely available "Workshop in a Box" options. These are easy to access through an Oracle Academy Individual Membership, and they make it simple for you to deliver introductory computer science workshops without any specialized knowledge. Taking the time to deliver one of these to a local club or at a STEM day can inspire a child who may not have otherwise been exposed to

computer science, and they may become our next generation of OAUG members!

I found it simple to create my own individual account using my Oracle account and choosing my local high school as the educational institution. To do the same, join Oracle Academy at bit.ly/1RnAXVc and use this handy guide to get started: bit.ly/2zTMTIT.

I personally look forward to delivering the "Alice Workshop in a Box" in my own community and hope to hear your stories of inspiring the next generation.

Contact me at chipp@oaug.org.

"Next year, I'd like to encourage you to consider promoting STEM opportunities in your local community. Oracle Academy offers a simple way to make this a reality."

A Publication of the Oracle Applications Users Group

3525 Piedmont Road, Building Five,
Suite 300, Atlanta, GA 30305
phone: +1 404.240.0897, fax: +1 404.240.0998
email: membership@oaug.com, oaug.org

Al Garver, Executive Director
Cindy Force, Managing Editor
Jim Grove, Creative Director

To contribute to OAUG Insight, send letters to the
editor, or obtain advertising information, contact:

Cindy Force, Director, Marketing Communications
3525 Piedmont Road, Building Five,
Suite 300, Atlanta, GA 30305
cforce@oaug.com

Photographs appearing throughout OAUG Insight
courtesy of Meeting Expectations.

OAUG Insight is designed to provide members
of the Oracle Applications Users Group with
organizational and other information. The
opinions and viewpoints published herein are
not necessarily those of OAUG. OAUG, its article
writers, directors, officers, employees, agents,
and members and Oracle Corp. make no warranty
for the accuracy, veracity, or completeness of
any information herein, nor do they have any
responsibility or liability for any losses or damages
incurred as a result of reliance on any information
provided herein or from the use of any program
or program segment discussed herein. OAUG
assumes no responsibility for any errors that may
appear herein. The information published herein
is subject to change without notice. Acceptance
of advertising is for the benefit and information of
the membership but does not constitute official
endorsement of the product or service by OAUG.

Copyright © Oracle Applications Users Group
2018. All rights reserved. OAUG is a registered
trademark of the Oracle Applications Users Group.
Oracle and Oracle Applications are trademarks of
Oracle Corporation, Redwood Shores, Calif. Any
other trademark cited herein is the property of its
owner. No part of this publication may be reprinted
or reproduced without the prior written consent
of OAUG.

SUBSCRIPTIONS: OAUG member organizations
may receive up to 10 copies of *OAUG Insight*
magazine by mail.

The electronic version of *OAUG Insight* magazine
is available to all members on oaug.org/publications.
Contact membership@oaug.org or
+1 404.240.0897 with questions about your
subscription options.



2018 Oracle Applications Users Group (OAUG) Board of Directors.

First row: Tamicka Camp, Christine Hipp, Andrew Farber, Douglas Manning, Kathleen Fauerbach, Karen Brownfield.

Second row: Beth McLaughlin, Alyssa Johnson, Felecia Alston-Green, Joseph Imbimbo, Donna Rosentrater, Mohan Dutt, Bill Dunham, Jason Watkins.

2018 BOARD OF DIRECTORS

Christine Hipp

OAUG President
Los Alamos National Laboratory

Douglas Manning

OAUG President-Elect
Johns Hopkins University -
Applied Physics Laboratory

Andrew Farber

OAUG Treasurer
Consumer Reports

Kathleen Fauerbach

OAUG Secretary
City of Las Vegas

Felecia Alston-Green

DeKalb County Government

Karen Brownfield

Infosemantics, Inc.

Tamicka Camp

Southern Company Services.

Bill Dunham

OATC, Inc.

Mohan Dutt

Equinix, Inc.

Joseph Imbimbo

PPG Industries

Alyssa Johnson

Keste

Beth McLaughlin

Dunkin' Brands

Donna Rosentrater

PAREXEL

Jason Watkins

Hillsborough County Aviation Authority

Features

14 Stabilizing Database Performance Using SQL Plan Baselines

SQL Plan Baselines can help stabilize the execution plans of SQL Statements to help make programs faster and perform more consistently, thus returning their Elapsed Times back to normal acceptable levels.

BY MARK J. ROGERS, GARMIN INTERNATIONAL

20 How to Make Customers Happy: Ship Products on Time!

There are many reasons why a supply and demand picture might change in an ERP system. Changes in the net supply availability can impact existing orders, so they might be available to ship early, or their shipment could get delayed.

BY ANKUR KULSHRESHTHA, TAYLORMADE GOLF COMPANY

34 Vendor Corner: Planning a Migration from Oracle EBS to Oracle ERP Cloud?

Get tips and tricks to help improve your chances of a smooth migration.

BY DAVID WRIGHT, MORE4APPS

OAUG Leadership

- 3 President's Perspective
- 4 OAUG 2018 Board of Directors

The
REEMERGENCE of
ORACLE ANALYTICS CLOUD

BY PATRICK CALLAHAN, AST LLC

ORACLE ANALYTICS CLOUD IS THE CULMINATION OF LEGACY, ON-PREMISES ORACLE BI, BI CLOUD, DATA VISUALIZATION CLOUD AND ESSBASE, ALL COMING TOGETHER INTO A COMPLETE ANALYTICS PLATFORM.

8

Conferences & Events



- 24 Highlights from Oracle OpenWorld 2018
- 29 Members Save on COLLABORATE 19 Registration

Members' Corner

- 30 Geos and SIGs
- 31 Maximize Your OAUG Membership Investment
- 32 OAUG Emerging Leaders Mentor Program



COLLABORATE 19

TECHNOLOGY AND APPLICATIONS FORUM FOR THE ORACLE COMMUNITY

April 7-11, 2019
San Antonio, TX, USA
collaborate.oaug.org



SUBSCRIPTIONS: OAUG member organizations may receive up to 10 copies of *OAUG Insight* magazine by mail.

The electronic version of *OAUG Insight* magazine is available to all members on oaug.org/publications. Contact membership@oaug.org or +1 404.240.0897 with questions about your subscription options.

OAUG STAR PARTNERS

(List updated as of press time.)

The OAUG Star Partners are a vital force in supporting the OAUG's mission of providing Oracle Applications users the tools required to enhance their productivity, maximize their investment, and influence the quality, usability and support of Oracle Applications. Participants in the OAUG Star Partner Program represent some of the most experienced and most successful providers of services and solutions to the Oracle users community.

FIVE-STAR



FOUR-STAR



THREE-STAR



TWO-STAR ELITE



Onapsis



TWO-STAR

- Absolute Technologies
- Blackline
- CloudiO
- Data Intensity
- Deloitte
- Enginatics
- eprentise
- Fastpath
- FXLoader
- Infosemantics
- Ingentis
- Inspirage
- Inyxa
- Nexinfo

RISING-STAR

- Hubble by insightsoftware
- Project Partners
- Syntax

SPECIAL THANKS

- Oracle Validated Integration



The OAUG Star Partner program gives Associate members a bundled approach to active, integrated participation in the OAUG community. The program combines membership, advertising and conference benefits into a value-priced package that delivers recognition, premium advertising opportunities and outstanding conference visibility.

For more information on the OAUG Star Partner Program, please contact Marci Nessing at +1.404.760.8179, or via email at mnessing@oaug.org.

The REEMERGENCE of ORACLE ANALYTICS CLOUD

PATRICK CALLAHAN, AST LLC

What is Oracle Analytics Cloud?

Oracle Analytics Cloud (OAC) is the culmination of Oracle legacy, on-premises Oracle BI (OBIEE), BI Cloud (BICS), Data Visualization Cloud (DVCS) and Essbase (multi-dimensional database from Hyperion or OLAP cubes) all coming together into a complete analytics platform. It includes options for traditional reports and dashboards with structured analytics models. It includes the latest data visualization capabilities with unstructured data. New machine learning and data profiling features, easy connectivity to dozens of sources and the incorporation of “Essbase as a Service” make Oracle Analytics Cloud a one-stop shop.

Recently, Oracle also introduced the “autonomous” version, or Oracle Autonomous Analytics Cloud (OAAC), and refers to the original OAC as “customer-managed.” From a feature perspective, OAC and OAAC are the same product. OAAC is essentially a SaaS offering, whereby Oracle manages everything, including the underlying Oracle database that houses the metadata, and applies the product updates automatically during the advertised maintenance periods. With “customer-managed” OAC, the updates are pushed into the customer’s OAC environment, but the customer must decide and initiate when the updates are applied. Moreover, within a “customer-managed” OAC environment, the customer has access to many more back-end configurations, though most changes would not survive a patch/update.

Why Consider Oracle Analytics Cloud?

Oracle has taken its lumps over the last several years in the BI area, as the strategy to migrate OBIEE (and BI Applications) customers to the cloud was incomplete and the early BICS offerings were not equivalent to the competition. Also, the subscription models for BICS and DVCS being user-based made those solutions quite pricey for large organizations.

When OAC was released at Oracle OpenWorld in 2014, it was more of a repackaging and rebranding of BICS and DVCS, but oh how it has changed. It took a few years, but OAC matured, and both customers and partners began to embrace the platform beginning in 2016. The subscription model changed to processor-based (Oracle CPUs), making the solution a much better value. “Essbase as a Service” was incorporated, giving new OLAP capabilities to end users. Oracle BI Publisher was added recently and, overall, the self-service features saw refinement that matched or exceeded those of the competition. I highly recommend having a look at Oracle’s Cloud Investment Plan for Oracle Analytics (bit.ly/2RnN3zh), as it highlights the product strategy and direction.

The efforts paid off with Oracle being recognized prominently in the The Forrester Wave™ “Enterprise BI Platforms with Majority Cloud Deployments, Q3 2017” report (bit.ly/2h3pMSz), which states that OAC distinguishes itself within the marketplace with a broad and deep large-enterprise-grade BI portfolio that includes self-service analytics, the Essbase MOLAP Engine for complex requirements, hybrid deployment options, a “Common Enterprise Information Model” for security and governance, and increased licensing flexibility (**Figure 1**).

Since then, the momentum of Oracle and OAC in the analytics market has sky-rocketed. If you have OBIEE or Oracle BI Applications, consideration of OAC is a must. If you have any of the Oracle ERP, HCM, EPM or CX Cloud solutions, consideration is also a must. Especially for Oracle ERP and HCM, if you want more than what the delivered Oracle Transactional BI (OTBI) modules offer, let Oracle Analytics extend those capabilities. Ultimately, if your organization



Figure 1: From the The Forrester Wave™ “Enterprise BI Platforms with Majority Cloud Deployments, Q3 2017” report (bit.ly/2h3pMSz).

is looking for a complete analytics platform to build upon, Oracle Analytics must be considered.

Getting Started and Setting Up Oracle Analytics

Obviously, you’ll need to purchase Oracle Analytics Cloud subscriptions to use the solution. Oracle makes this fairly easy with free trials currently available which amount to 300 USD of credits. Also, for existing OBIEE or BI Applications customers, there is a “Bring Your Own License” or BYOL program that allows you to try out the Cloud without diving completely in - it provides a significant discount and gives you 90 days to try (or migrate to) Oracle Analytics. Moreover, the online cost estimator (bit.ly/2CM2xZN) can help you size and price preliminary options. Aside from the OAC or OAAC product choice, you’ll notice the need to also order Oracle Compute Block Storage (to house the binaries, Essbase cubes and logs) and Oracle Storage Cloud - Object Storage (for the service level backups, datasets, etc.). For the “customer-managed” OAC, you’ll need to order an Oracle Database Cloud Service (for the OAC system data) and required Oracle Database Backup Cloud Service. Your Oracle sales representative will help you along with this process as well.

Once you have ordered the OAC service, you’ll get an email to activate the service, and away you go. You’ll first need to set up an Oracle Analytics instance. The steps differ slightly between OAC and OAAC, as there are fewer options/requirements for OAAC. This screen shot in **Figure 2** is for OAC (the “customer-managed” version), so you’ll notice additional specifics. For the “customer-managed” OAC option, one must create the Database Cloud first – it is a

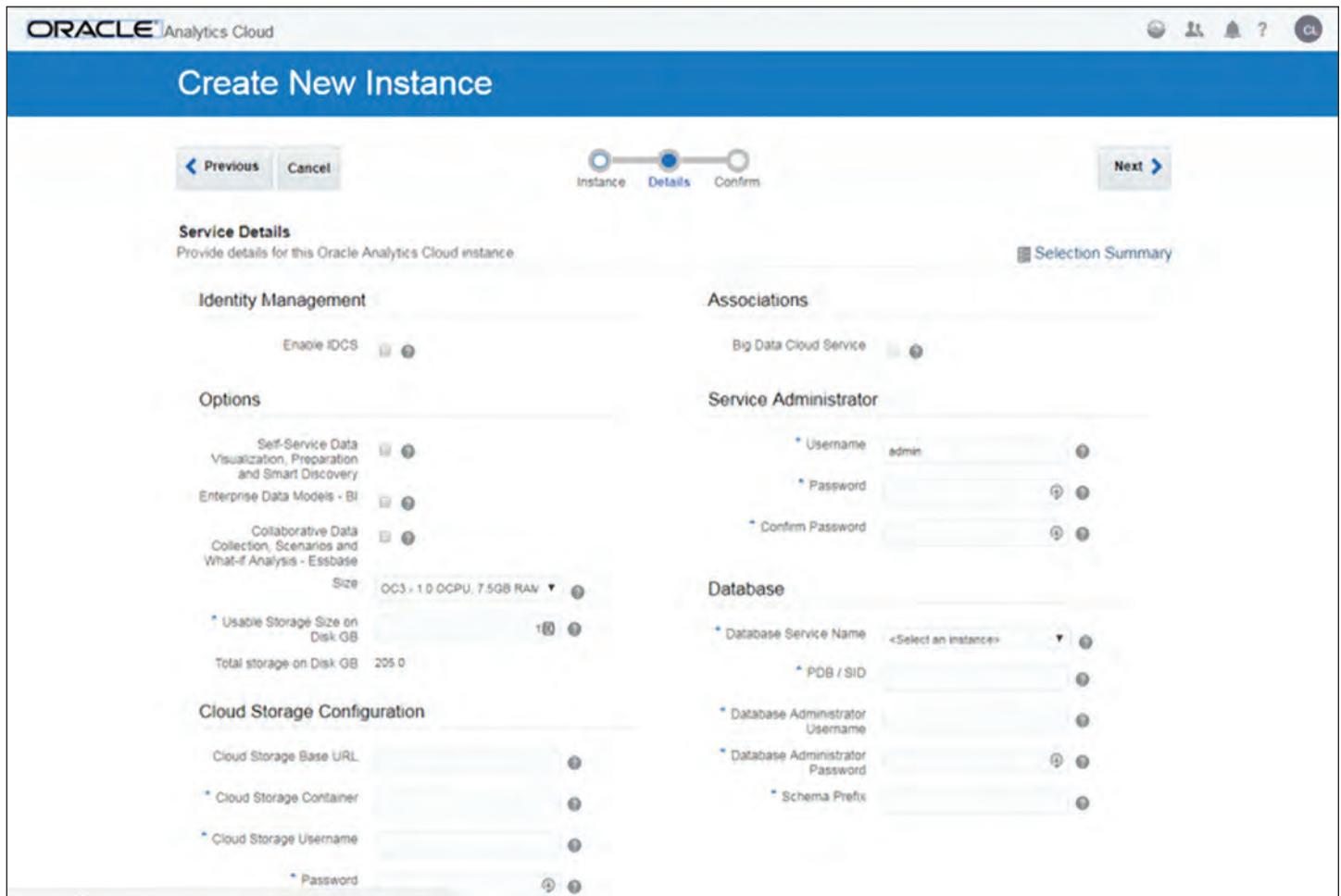


Figure 2: Setting up an Oracle Analytics instance.

prerequisite, though very simple to do. Importantly, one must ensure that the instance “shape and size” aligns with your subscription plans, as overages will occur if you use more than planned. Also important is the decision to use Identity Cloud Service (IDCS) or the embedded security. When planning to authenticate or synchronize with an external LDAP or setup SSO, choose IDCS. OAC comes with IDCS “Foundation,” but check the pricing tiers and features (bit.ly/2QgHH88), as you may also need to subscribe to IDCS.

Once the instance is set up, all that is left is to target the data that you want to use and start building content.

Connecting To and/or Bringing in Data

When rolling out any analytics platform, one must determine how to access the data, either from within the system in which it resides or brought into the platform for easier access. For this, Oracle has many options:

- **Supported Connectors**

- o These allow for direct connections to many Oracle Cloud (SaaS) applications, Amazon, Google and Salesforce to just name a few. The current list of supported data sources (bit.ly/2RnNYQf), can be

found in the Oracle Help Center. There are also “Smart Connectors” for select Oracle SaaS applications that provide access to business entities; respects security, business rules and governance on source systems; and leverages calculations and business logic in reports.

- **Remote Database Connect or VPN**

- o Some customers choose to set up a VPN tunnel between their in-house applications and databases, though Oracle is now advising against this as the latency can be a challenge. Instead, Oracle is recommending the use of Remote Database Connect or RDC – this leverages a small deployment on a WebLogic server within the organization’s firewall.

- **Connections, Data Sets and Data Prep**

- o Using the above connectivity options, “Connections” are easily created. With a connection in place, one can create “Data Sets” that primarily align with either a database table (all or select columns) or a query. Security can be applied to connections and data sets, data sets can be refreshed as needed and joins can be created between data sets, making this functionality much more usable than the earlier “mashup” features of BICS and DVCS. Moreover, data flows within the

THE SOLUTIONS SPOT

OAUG
**Buyer's
Guide**

2018-2019 EDITION

Find products, services and implementation partners that can help you improve the use and management of Oracle Applications in your organization.

Visit oaug.org/buyersguide to access the 2018 OAUG Buyer's Guide. Browse searchable online information. Or download a copy.

Contact sales@oaug.org to secure your place in the OAUG Buyer's Guide.



Figure 3: Creating Data Sets.

“Data Preparation” area can be created to group values, join data sets, sub-select rows/columns, aggregate, define calculated fields, etc. (Figure 3).

• **DataSync or Replication**

- o Ever since the early days of BICS, Oracle has been providing a free utility called Oracle DataSync that was helpful to push data into the cloud. This utility, which must be installed on a client or server, can be considered to offer “lite” ETL capabilities – as such, Oracle customers have started to use it for many purposes, some unrelated to Oracle Analytics.
- o In the latest release/update of Oracle Analytics (October 2018), replication capabilities have been incorporated into the Oracle Analytics front-end that allow for “view objects” from many of the Oracle Cloud (SaaS) applications to be more easily replicated into the analytics environment, generally on a scheduled basis. This is extremely helpful since direct database access is not allowed and often row limits exist for reports/dashboards within those applications (Figure 4).

Leveraging Analytics, Visualizations and Essbase

By default, when logging into Oracle Analytics you’ll find yourself within the Data Visualization (DV) area where data sets are assumed with DV projects anticipated to visualize your data. The “Classic” BI area is also available; this aligns with the legacy OBIEE features. These broad capabilities include the following:

• **Data Visualizations**

- o There are so many options and much to learn around visualizations (Figure 5). I find people often fall back to the visualization types that they recognize – and these are the old ones. I recommend looking at what’s possible; for this, Oracle’s Analytics Library (bit.ly/2CN-WLr8) gives you beginner, intermediate and advanced examples and tutorials.

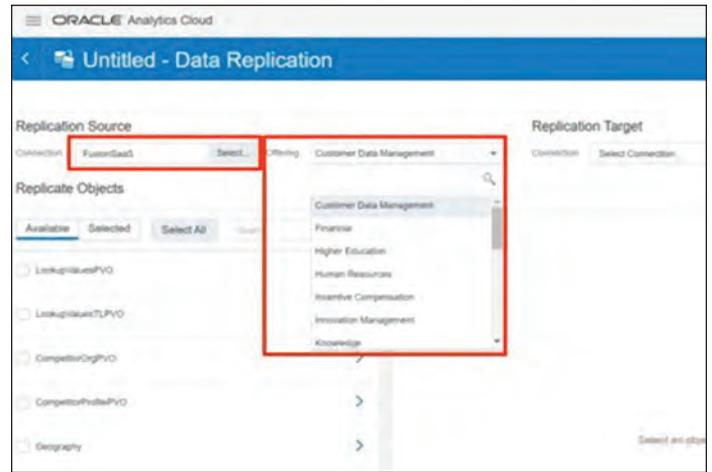


Figure 4: Data replication.

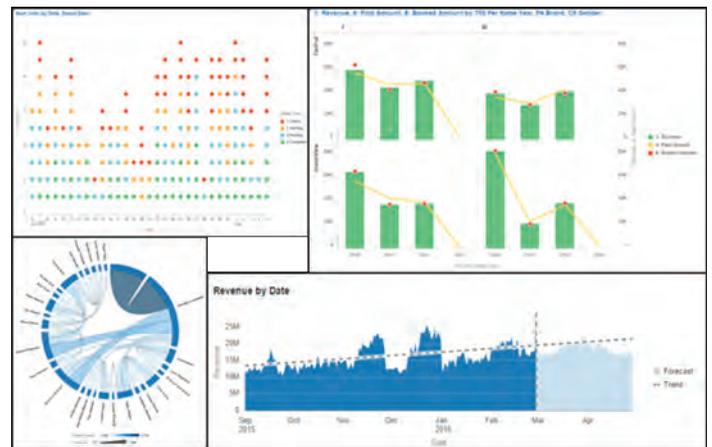


Figure 5: Examples of data visualizations.

• **Classic Analytics**

- o For this, I mean traditional charts/reports (analyses) and dashboards like OBIEE, with the common visualization options. An optional repository (RPD) deployment exists for the analytics model, typically needed when remote data sources are anticipated (via RDC or VPN) or when more sophisticated modeling is expected. For OBIEE cloud migrations, this option is hugely appreciated, though there are restrictions that apply. The online modeling tool (no RPD file) works well for simpler applications.

• **BI Publisher**

- o This “pixel-perfect” reporting option is commonly used by Oracle EBS and PeopleSoft customers. It leverages a layout (template) on top of a data model (query) that is often targeted for larger reports not suitable for dashboard display.

• **Essbase**

- o Legacy Essbase data sets can easily be migrated to Oracle Analytics, though some restrictions apply. However, the attractive Oracle Analytics features for Essbase are those that offer a one-click option to create a “what-if” model for a given data set. These features

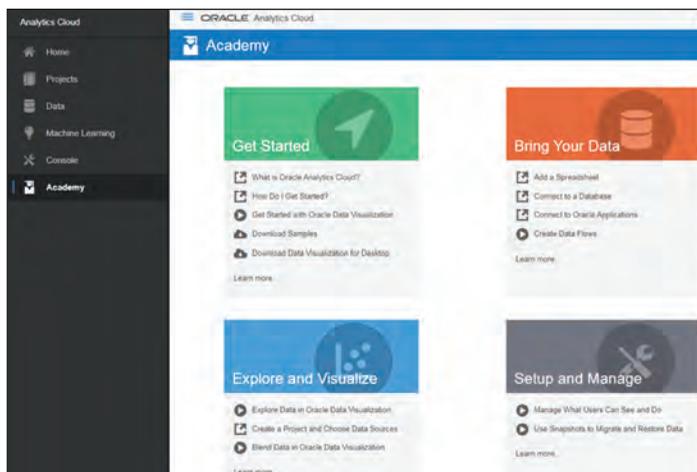


Figure 6: Oracle Analytics Cloud Academy.

exist within the SmartView (MS Office add-in) facilities available with Oracle Analytics.

- **Mobile Support**

- o The DV content you produce can easily be viewed through just about any browser on any device. The newest/coolest “Day by Day” app actually learns what you are interested in by your usage pattern (when and where you are interested in it) and who you like to share/collaborate with. For your dashboards and reports, the Oracle Business Intelligence Mobile app optimizes your content for viewing on a mobile device and the Oracle Analytics Cloud Synopsis app allows you to quickly open and visually interact with spreadsheets and business data.

- **Additional Features, including Machine Learning**

- o Smart Data Discovery offers automatic detection of data patterns; there are data profiling or “explain” features with automatic hierarchy detection and creation/scoring of models. Oracle Analytics has built-in Advanced Analytical functions (Trendline, Cluster, Outlier, Forecast) that are readily available to apply on data visualizations at the click of a button. Additionally, one can upload any R package script to the server and use it on reports. Finally, there are several built-in Machine Learning algorithms (Neural Network Classification, Naive Bayes, Random Forest, etc.) that can be applied with minimal knowledge to “train” and then apply a model.

While some folks may still prefer other platforms, Oracle has filled all of the gaps in Oracle Analytics to ensure that it can compete and win in the marketplace.

Administration and Maintenance

For Oracle Autonomous Analytics Cloud (OAAC), there really is no administration or maintenance. Oracle manages the software patching and the backups, though the customer can take additional application backups or “snapshots” (aka BAR file) that can be leveraged for migrating content.

For the “customer-managed” OAC, backups are the customer’s responsibility; these primarily entail OAC “Service Level Backups” that are saved to Oracle Storage Cloud and contain all the runtime artifacts required to restore your service. These backups are tied to the specific OAC service instance, i.e., not designed to clone a service. Customers typically keep backup versions of the repository (RDP), catalog and the associated Oracle Database as well. For this, one can script and automate all of the backups in the “customer-managed” OAC deployment.

For OAAC, patches and updates are applied on Oracle’s advertised schedule. I recommend that all changes and enhancements be reviewed ahead of any patch/update. As we’ve seen with Oracle’s other SaaS solutions, select regression testing is recommended after accepting these patches/updates when the userbase relies on it.

For the “customer-managed” OAC, patches/updates are automatically delivered to My Services by Oracle, but the customer is responsible for applying patches/updates through a “single click” mechanism. Please note that the customer is responsible for patching the associated database service and OS patching also must be done by the customer via SSH onto the VM and running updates.

Now, Get Started!

I’m often asked how to get started. To me, the best way is to roll up your sleeves and dig in. In the “olden” days, you had to have servers readied and then do lengthy installs. Now, getting an Oracle Analytics instance up and running takes just minutes. Moreover, Oracle and the extensive Oracle community makes it easy. Partners, like AST and others, have many presentations and webinars available online. I highly recommend the Oracle Analytics channel on YouTube ([bit.ly/2qhntAs](https://www.youtube.com/channel/UC2qhtAs)), as well as Oracle’s online documentation, which is extensive with many of its own videos and tutorials. Within the Oracle Analytics environment, the “Academy” also offers helpful content on frequently-asked topics. (Figure 6).

Now, go ahead and give Oracle Analytics Cloud (or Oracle Autonomous Analytics Cloud) a try. You’ll be pleasantly surprised, if not amazed, at what it can offer. ♦



Patrick Callahan is vice president, EPM and BI, at AST LLC, where he oversees Enterprise Performance Management (EPM) and Business Intelligence (BI) practices. He is actively involved in the delivery, management, and quality assurance of AST’s EPM and BI projects. www.astcorporation.com.

STABILIZING DATABASE PERFORMANCE

USING SQL PLAN BASELINES

MARK J. ROGERS, GARMIN INTERNATIONAL

Have you ever been baffled by sudden poor performance in a critical program and unable to identify a cause? Here are steps to systematically identify whether the culprit could be changes in the SQL Execution Plan and how to successfully address such issues.

The Issue

SQL statements are the building blocks of programs. Each program may contain hundreds, if not thousands, of SQL Statements.

- How could you identify which SQL Statement in a program may be the cause of a sudden performance problem?
- More importantly, how could the problem be fixed quickly and reliably?

Oracle provides SQL Plan Management tools starting in 11g that help the DBA ensure that performance will not degrade beyond an accepted minimum level (or “baseline”) using **SQL Plan Baselines**.

Background

Usually the Oracle Optimizer does a good job choosing the best execution plan for most SQL statements. But sometimes the optimizer guesses incorrectly. Using SQL Plan Baselines, the DBA can guide the Oracle Optimizer to consistently use a previous, faster, more reliable execution plan by following the steps below.

SQL Statement Performance Attributes

See **Figure 1** for names and definitions of key attributes of SQL Statements used in performance tuning.

SQL Statement Attribute	Definition	Examples
SQL Statement	The SQL command (in clear-text) a program requests Oracle to execute.	SELECT ORDER_NUMBER FROM apps.oe_order_headers_all;
SQL ID	A hexadecimal number that uniquely identifies one SQL Statement.	0jm349tu4p9dv
SQL Execution Plan	The DB path used by the Oracle Optimizer to execute the requested statement.	Use an index. Do a full table scan.
SQL Execution Plan Hash Value (“PHV”)	A number that uniquely identifies a SQL Execution Plan for a SQL Statement.	1739725531
SQL Plan Baseline	A name that represents an Execution Plan for one SQL Statement.	SQL_PLAN_bbv433br7cxd0d4587f14

Figure 1: SQL Statement Performance Attributes

Investigation

The first step in triaging any sudden performance issue is obviously to ask, “What’s changed?” If no program changes have been made, no network issues are discovered and no other external causes can be identified, you may then look at the Oracle Optimizer for possible causes.

Investigation Steps:

1. **Find the Problematic SQL.** First, identify which SQL Statement is now taking the longest in the program in question. You can use any Oracle tool such as SQL*Plus, SQL Developer or Oracle Enterprise Manager (OEM) to check this.

If the session is currently active, query for the top SQL sessions. If the program is not currently running, examine historical database performance metrics using Automatic Workload Repository (AWR) or Active Session History (ASH) views. The goal here is to obtain the SQL ID for the worst SQL statement.

Examples:

- **AWR Dictionary Views:**

```
SELECT SQL_ID, OPTIMIZER_COST,
       CPU_TIME_DELTA, ELAPSED_TIME_DELTA
FROM DBA_HIST_SQLSTAT
WHERE MODULE LIKE '%Discoverer%';
```

- **Current Database Session:**

```
SELECT SQL_ID
FROM GV$SESSION
WHERE PROGRAM like '%Discoverer%';
```

- **ASH Views:**

```
SELECT SQL_ID, SQL_PLAN_HASH_VALUE,
       to_char(SAMPLE_TIME, 'hh24:mi:ss')
FROM DBA_HIST_ACTIVE_SESS_HISTORY
WHERE MODULE = 'XXGEWSHRDPIKBI';
```

2. **Locate a Good Execution Plan.** Identify when the SQL Statement was performing well in the past and locate the Execution Plan Hash Value (PHV) which represents that good Execution Plan. It is also helpful to record the PHV used when the SQL had degraded performance to make sure that regressed plan is avoided.

Examples:

- **OEM displays multiple Plan Hash Values for the same SQL Statement:**

Notice that one Plan Hash Value uses much less Elapsed Time and CPU Time than the other for the same SQL ID. See **Figure 2**.

- **AWR View:**

```
select distinct
```

Select	SQL ID	SQL Text	Plan Hash Value	Parsing Schema	Executions	Elapsed Time (seconds)	CPU Time (seconds)	Buffer Gets	Disk Reads	Module
<input type="checkbox"/>	6xt377u8julj6	SELECT o101397.CUSTOMER as E117827,o101397.CUSTOMER_NUMBER ...	2979313126	APPS	1	191.41	129.12	11517847	338672	Disco10
<input type="checkbox"/>	6xt377u8julj6	SELECT o101397.CUSTOMER as E117827,o101397.CUSTOMER_NUMBER1311100229	APPS	1	28404.97	28105.23	1069525441	221105	Disco10

Figure 2: OEM lists multiple Plan Hash Values for the same SQL ID.

#	Plan Hash Value ¹	Avg Elapsed Time in secs	Avg CPU Time in secs	Avg User I/O Wait Time in secs	Avg Other Wait Time in secs ²	Avg Buffer Gets	Avg Disk Reads	Avg Direct Writes	Avg Rows Processed	Total Executions	Total Fetches	Total Version Count	Total Loads	Total Invalidations	Src	Source ³
1	1815629144 [B]	11356.865	11244.464	47.458	10.964	1557245218	105752	0	0	1	0	1	1	1	AWR	DBA_HIST_SQLSTAT
2	2344080714 [W]	306888.118	304677.820	670.998	63.126	1668376024	707632	0	0	1	0	1	1	1	AWR	DBA_HIST_SQLSTAT

Figure 3: e SQLTXPLAIN report shows multiple PHVs for the same SQL ID.

```

a.plan_hash_value as PLAN_HASH,
a.optimizer_cost as COST,
to_char(b.begin_interval_time, 'dd-Mon-RR hh24:mi')
  BEGIN_INTERVAL
from
  DBA_HIST_SQLSTAT a
, DBA_HIST_SNAPSHOT b
where
a.sql_id = 'bnnjxbm2jqq4j'
and a.snap_id = b.snap_id and a.instance_number = b.in-
  stance_number
and a.dbid = b.dbid;
PLAN_HASH      COST BEGIN_INTERVAL
-----
98131500      76 15-Dec-14 09:00
2882999164   3126060 15-Dec-14 09:30
    
```

- **Current Session View:**

```

SELECT
  plan_hash_value
, round(cpu_time/1000000/60,3) as cpu_time
, round(elapsed_time/1000000/60,3) as elapsed_time
, optimizer_cost as cost
FROM GV$SQL
WHERE sql_id = '8908qlk9cwbd1';
    
```
- **SQLTXPLAIN Report:**

The report in Figure 3 shows different Plan Hash Values (and

their respective statistics) for the same SQL ID.

Note: [B] means “Best” and [W] means “Worst” execution plans found.

Solutions

Create a SQL Plan Baseline. Create a SQL Plan Baseline to guide the Oracle Optimizer to only consider a good Execution Plan for the SQL Statement. This “baseline” will do just that: it provides a Baseline – or minimum level of performance – for the statement. The Baseline helps ensure the SQL performs at least as well as it did previously. A SQL Plan Baseline is a complete execution plan and, therefore, behaves more predictably each time it is used, unlike SQL Profiles, which are only a collection of hints and thus more prone to potentially unexpected behavior.

How do I create a SQL Plan Baseline? There are several ways to create SQL Plan Baselines. One or more methods may be available to you, depending on the circumstances. The following steps illustrate some of the more common approaches. Their short descriptions are followed by details of each approach.

1. **Grab It!** Create a SQL Plan Baseline directly from the Shared Pool. This method creates a SQL Plan Baseline directly from an execution plan in the Cursor Cache; it is the simplest way to create a SQL Plan Baseline. Example:


```

DBMS_SPM.LOAD_PLANS_FROM_CURSOR_CACHE
(SQL_ID => '6xt377u8julj6', PLAN_HASH_VALUE =>
'3098995604');
    
```

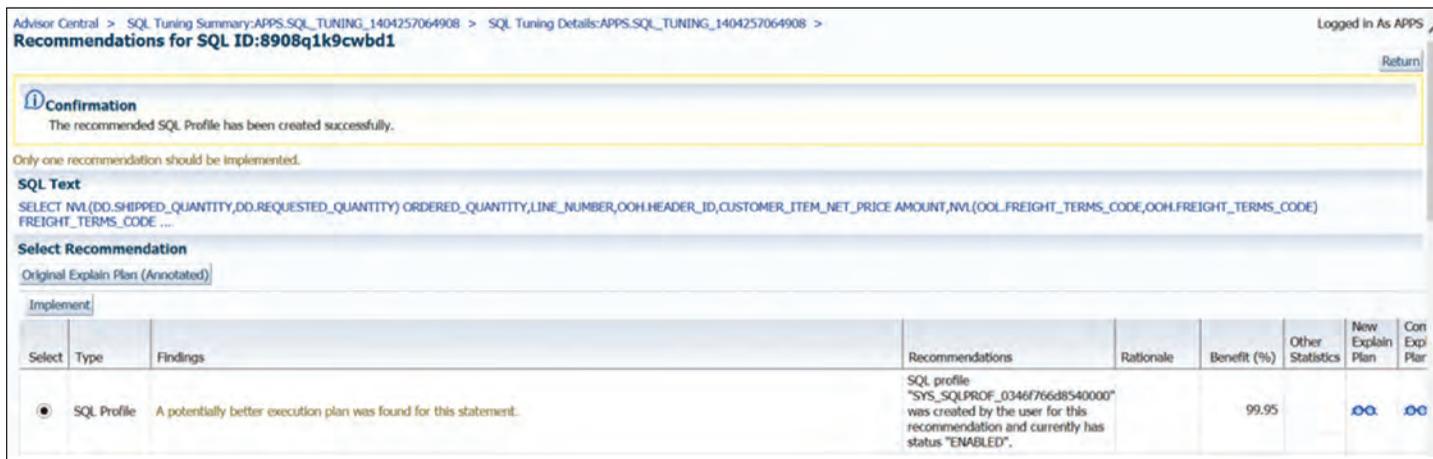


Figure 4: Create a SQL Profile and then build a SQL Plan Baseline from it.

REQUEST_ID	USER_CONCURRENT_PROGRAM_NAME	RESPONSIBILITY_NAME	SUBMITTER	HOWLONG
103113992	Garmin UK Pick Slip Report BIP	Order Management Manager GE	GE IT Scheduler	5.05
103106862	Garmin UK Pick Slip Report BIP	Order Management Manager GE	GE IT Scheduler	1.66666666666667
103068930	Garmin UK Pick Slip Report BIP	Order Management Manager GE	GE IT Scheduler	9.83333333333333
103064888	Garmin UK Pick Slip Report BIP	Order Management Manager GE	GE IT Scheduler	3.05
103061927	Garmin UK Pick Slip Report BIP	Order Management Manager GE	GE IT Scheduler	50.1
103052166	Garmin UK Pick Slip Report BIP	Order Management Manager GE	GE IT Scheduler	2.68333333333333
103049258	Garmin UK Pick Slip Report BIP	Order Management Manager GE	GE IT Scheduler	1.3
103047406	Garmin UK Pick Slip Report BIP	Order Management Manager GE		4.65
103046627	Garmin UK Pick Slip Report BIP	Order Management Manager GE	GE IT Scheduler	42.2333333333333
103042848	Garmin UK Pick Slip Report BIP	Order Management Manager GE	GE IT Scheduler	2.66666666666667

Figure 5: Example of Elapsed Time disparity.

- Dig for It!** Create a SQL Plan Baseline from a SQL Tuning Set. This method allows the DBA to use a previous Execution Plan found in the AWR to create a SQL Plan Baseline; this approach can, therefore, be used even if the execution plan is aged out of the Cursor Cache. First, The DBA must create a SQL Tuning Set that includes an acceptable Execution Plan for the SQL Statement. The next step is to specify the name of the SQL Tuning Set when creating the SQL Plan Baseline as shown in the example below.

```
DBMS_SPM.LOAD_PLANS_FROM_SQLSET (
  sqlset_name => 'MONTH_END', sqlset_owner=>'APPS',
  basic_filter => 'PLAN_HASH_VALUE=2377563997 and
  SQL_ID='4z6vn4n9xbn8f')
```

- Force It!** If no acceptable Execution Plan is found in the AWR or the Cursor Cache, you may investigate whether Oracle can recommend a new execution plan, such as via a SQL Profile. If the SQL Profile helps, then a SQL Plan Baseline may be built based on the new execution plan suggested by the SQL Profile; after that, the SQL Profile is no longer needed since a SQL Plan Baseline is a complete execution plan.

In the example in Figure 4, the SQL Tuning Advisor recommended a SQL Profile. If the SQL Profile is favorable, you can build a SQL Plan Baseline from this new Execution Plan.

- Steal It!** If a SQL Statement performs well on one database but poorly on another, the Execution Plan may be transported to the database with the less favorable execution plan. Even a non-production database may be used as the source of an acceptable Execution Plan. Use the following example to “pack” and “unpack” the SQL Plan Baseline, transferring a good Execution Plan from one database to another.

```
DBMS_SPM.PACK_STGTAB_BASELINE (
  plan_name => 'SQL_PLAN_4r1bp6z2rrz3949c6aac5')
DBMS_SPM.UNPACK_STGTAB_BASELINE (
  plan_name =>'SQL_PLAN_4r1bp6z2rrz3949c6aac5',
  enabled =>'YES', accepted => 'YES', fixed => 'NO')
```

Solution Validation

Confirm the SQL Plan Baseline was created successfully with the following query.

```
SELECT plan_name, ENABLED, ACCEPTED, FIXED,
```

```
ELAPSED_TIME, LAST_EXECUTED
FROM dba_sql_plan_baselines where created >
sysdate-30;
```

Further Improvements

Oracle can automatically capture additional execution plans for the same SQL Statement. These additional Execution Plans may provide further performance improvements. The DBA may test and validate these new Execution Plans for possible use as additional SQL Plan Baselines for this same SQL Statement. Use the EVOLVE function to accept these execution plans. If the parameter VERIFY='YES' is specified in this command, Oracle will perform an actual performance comparison between the proposed execution plan and the current execution plan stored in the SQL Plan Baseline.

Example:

```
DBMS_SPM.EVOLVE_SQL_PLAN_BASELINE ( verify
=> 'YES',
sql_handle => 'SYS_SQL_2b73676effc87');
```

It Really Works!

At Garmin, a SQL Statement that is critical for our warehouse operations suddenly and sporadically began performing poorly, causing significant problems. We discovered that at the same time the performance problems started a new execution plan for a key SQL statement executed by the program was created. It was the same SQL statement, just a different Execution Plan. See Figure 5 for an example of the Elapsed Time disparity.

Resolution Steps:

- Using ASH views, a SQL Statement was located that was consuming the majority of Elapsed Time for this program.
- A good execution plan for this SQL Statement appeared briefly in the Cursor Cache; a SQL Plan Baseline was quickly created from that good Execution Plan using the “Grab It” method above.
- Subsequent executions of this SQL Statement began to use the new SQL Plan Baseline and thus the good Execution Plan immediately. This change resulted in the program’s Elapsed Times to once again be more reliable and consistent.

Summary

- SQL execution plans selected by the Oracle Optimizer can significantly impact database performance.
- The Oracle Optimizer may occasionally select an execution plan that causes severe performance degradation.
- SQL Plan Baselines can help stabilize the execution plans of SQL Statements to help make programs faster and perform more consistently, thus returning their Elapsed Times back to normal acceptable levels.

Additional Resources

COLLABORATE 18 Presentation: Use your OAUG member login to download the slides for more information and detailed scripts. bit.ly/2PejShg

Oracle Database SQL Tuning Guide: bit.ly/2NseqFV ♦



Mark Rogers is a Senior Oracle Applications Database Administrator at Garmin International. He is an OCP Certified Oracle DBA and possesses in-depth experience of Oracle RDBMS versions 7.x to 12c. Mark has supported numerous ERP modules in Oracle E-Business Suite 10.7 to R12.2, as well as a plethora of connected applications.

SQL Plan Baselines can help stabilize the execution plans of SQL Statements to help make programs faster and perform more consistently, thus returning their Elapsed Times back to normal acceptable levels.

cardconnect.
A First Data Company

Integrated payments built for enterprises.

cardconnect.com

The OAUG

Conference

Paper Database

the answers you need
when you need them

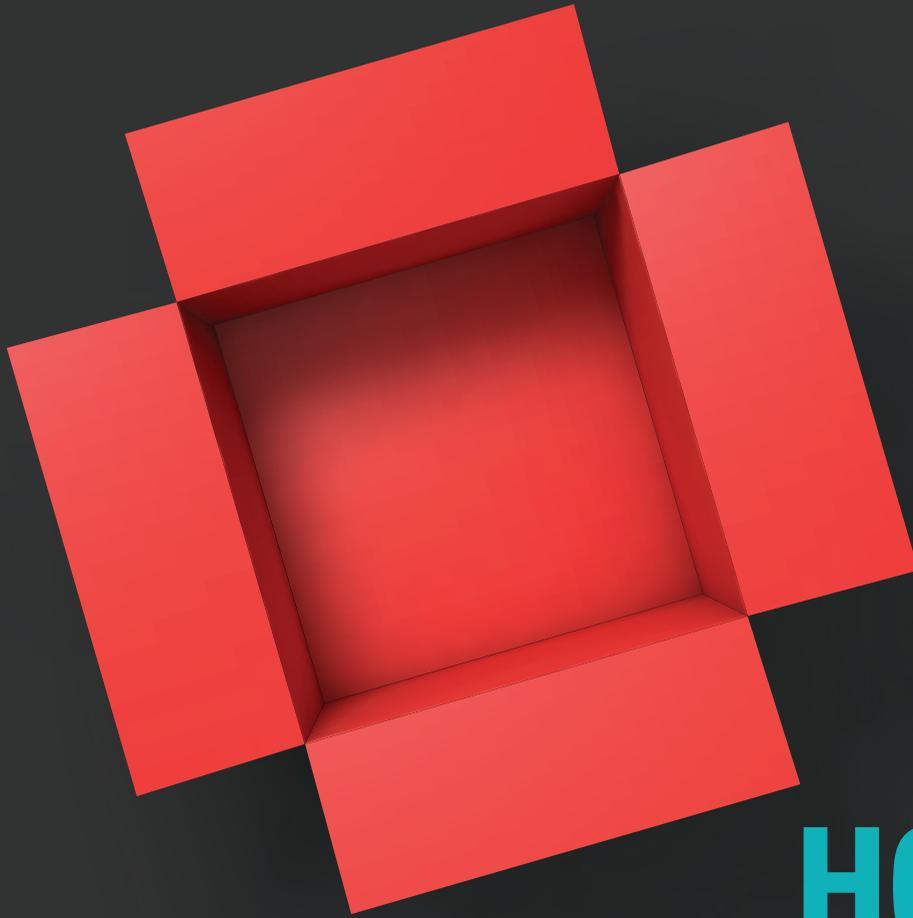


Use the Conference Paper Database on oaug.org and see how easy it is to find:

- Best practices
- Productivity tips
- Real user experiences

The OAUG Conference Paper Database includes thousands of white papers and presentations from dozens of OAUG conferences over the past several years.

Everyone can search the OAUG Conference Paper Database, but only OAUG members can download the presentations. If your organization is not a member yet, please join online or contact the membership staff at [+1.404.240.0897](tel:+14042400897) or membership@oaug.org to learn more about the many benefits of OAUG membership.



HOW TO MAKE CUSTOMERS HAPPY: Ship Products on Time!

ANKUR KULSHRESHTHA, TAYLORMADE GOLF COMPANY

There are many reasons why a supply and demand picture might change in an ERP system. Changes in the net supply availability can impact existing orders, so they might be available to ship early, or their shipment date could get delayed.

For example, let's assume Order #1 is placed with a shipment date of April 30. As the inventory levels were adequate when the order was placed, the order received a good date. The next day, Order #2 is received for a priority customer, and it is picked and shipped the same day. This decremented the inventory that was originally scheduled for Order #1 and means that the first order will not go out on time. In this situation, Order #1 will not be identified as late until its ship date of April 30, and the customer will not be informed about this delay until April 30. (Figure 1)

Standard Process

There is a standard process that can be run on a daily basis for all open orders to “reschedule” them, i.e., reevaluate the shipment date on all the orders based on the current supply availability. This process is called “Schedule Orders.”

In Oracle E-Business Suite (EBS) 12.1.3, this process has a couple of major challenges:

1. The process does not have the capability to execute a big batch of order lines in a parallel fashion. If the process is able to handle 20 lines per second and there are 1 million open order lines, then the process will take more than 10 hours to complete. This might make it impossible to run it daily.
2. The schedule works at the line level, meaning that the process will re-schedule every line in the batch one at a time. Although this seems correct, when the entire order book is scheduled one at a time, this may cause inconsistencies with the dates. In the example presented in Figure 2, Order #1 received a bad date, however, Order #2, which was placed after Order #1, still retained a good date.

Custom Process

The custom process addresses the concerns associated with the standard process:

1. It has the functionality to run the scheduling job in parallel for a batch of order lines.
2. It also un-schedules ALL the orders lines at one go. After that, it schedules the order lines in a sequential order.

The process is executed in multiple steps (Figure 3):

Step 1

The job selects all the order lines eligible for rescheduling.

Step 2

All the lines are sorted based on the predefined condition. In our organization, it was set to the group of items and within the group by creation date. As the creation date could be the same for multiple lines, Line ID was used, which is unique for every order line in the system.

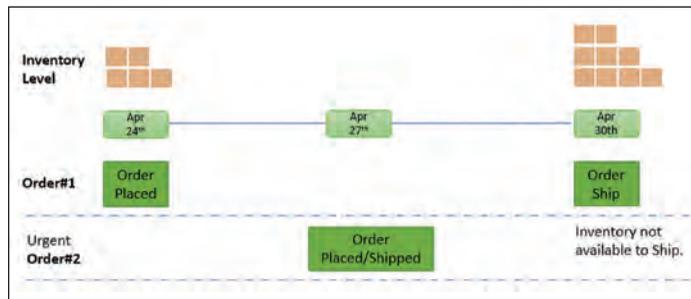


Figure 1: Order Flow.

What is the Issue?

Order #	Qty	Creation Date	Request Date	Schedule Ship Date	On Hand Supply
No Order					2
O1	1	24-Apr	24-Apr	24-Apr	2
O2	1	25-Apr	25-Apr	25-Apr	0

Standard Re-Scheduling Process – Order by Creation Date then Request Date

Step#	Process	Order #	Qty	Creation Date	Request Date	Schedule Ship Date	On Hand Supply
1	Unschedule	O1	1	24-Apr	24-Apr	-	2
2	Schedule	O1	1	24-Apr	24-Apr	25-Apr	0
3	Unschedule	O2	1	25-Apr	25-Apr	-	2
4	Schedule	O2	1	25-Apr	25-Apr	25-Apr	0

04/25

Order #	Qty	Creation Date	Request Date	Schedule Ship Date	Notes	On Hand Supply
O1	1	24-Apr	24-Apr	24-Apr	-	2
O2	1	25-Apr	25-Apr	25-Apr	-	0
O3	1	26-Apr	26-Apr	2020(ATP Horizon)	Pick-Ship same day	1

04/26

Standard Re-Scheduling Process – Order by Creation Date then Request Date

Step#	Process	Order #	Qty	Creation Date	Request Date	Schedule Ship Date	On Hand Supply
1	Unschedule	O1	1	1-Feb	1-Feb	-	1
2	Schedule	O1	1	1-Feb	1-Feb	2020(ATP Horizon)	0
3	Unschedule	O2	1	2-Feb	2-Feb	-	1
4	Schedule	O2	1	2-Feb	2-Feb	2-Feb	0

Figure 2: Issue with Scheduling.

Step 3

ALL the open order lines pertaining to one item are grouped as a single batch. Although multiple concurrent requests were submitted, it's ensured that every batch ONLY belongs to one request, but one request can have multiple batches.

Step 4

All the order lines within one request were unscheduled. This released all the allocated supply back to the available-to-promise (ATP) function. At this point, ATP has the complete picture of the supply in the system.

Step 5

All the order lines within one request are now scheduled in a sequential order. This process allocates supply to the order lines one at a time, making sure the supply goes to the order lines based on the creation date, i.e., order line ID

Further Enhancements to the Custom Process:

Additional functionality was added to the custom process on top of the above discussed capability:

- Exclude order or order lines on hold.
- Exclude lines with reservations both full and partial.
- Regional scheduling priority, i.e., scheduling logic was developed based on the region. The US and Japan have different logic for scheduling.
- Ability to store the historical creation date. This was mainly useful in case order line was getting split and the same priority needs to be maintained for the new split line.

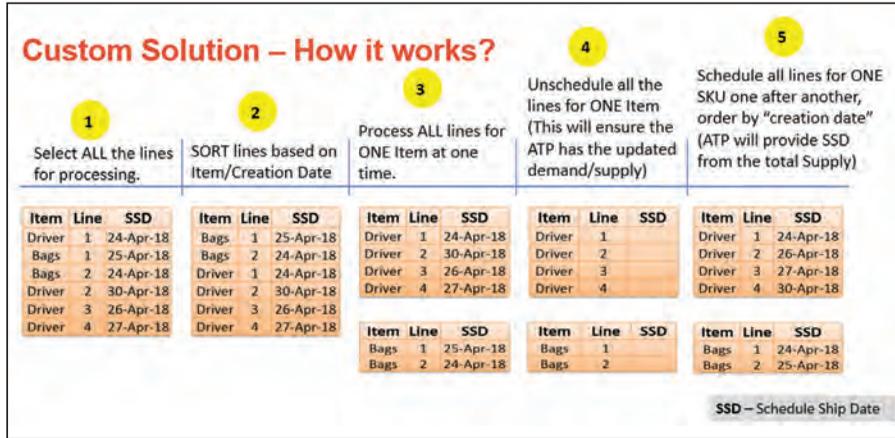


Figure 3: Custom Solution.

Other Considerations

- A process that may change supply or demand should not run while scheduling is going on. For example:
 - o ATP net/complete refreshes.
 - o Order import.
 - o Material transaction interface.
- The scheduling process by itself is not resource intensive, however, here are a few things to keep in mind:
 - o The number of child processes submitted should be based on the processing capabilities of the Oracle system (iterative process to identify the best number).
 - o The total number of child processes for one warehouse should not exceed the maximum number of processes allowed on your instance.
 - o Try to stagger the processes at slightly different times. (For us, the US region process was run during the US night time, Japan during Japan night time, etc.)
 - o The “Commit Threshold” parameter is critical and is usually based on the systems memory configuration.
- Run the Custom Scheduling process to make sure the items are rescheduled correctly based on the total availability rather than availability of a single order line.
- If possible, do not run the process on a daily basis. Doing so introduces other potential issues, such as:
 - o Schedule ship date change often on orders.
 - o Holding critical jobs for long time daily impacts business operations.
 - o Requires support from the DBA team.
 - o Developing good monitoring mechanisms to check the success of the process. We have daily summary alerts.
 - o Profiling by warehouse to store all the lines before and after the process is run – increases storage cost.
 - o Looking for the errors on the failed process. We found some errors that helped the business, such as latest acceptable, date too early, etc.

Summary

The Custom Scheduling solution described above helped TaylorMade globally to provide accurate dates to its customers, including:

- o The capability to schedule the entire open order book on a daily basis.
- o Improved the on time to promise, a key performance indicator for global operations.
- o Provided opportunity to inform customers on shipment delays ahead of time.

New Functionalities in the Standard Schedule Orders Program:

Obtained from Oracle EBS Releases 12.1 and 12.2 Release Content Documents (Doc ID 1302189.1):

- Performance is improved by filtering out lines on a “Line Scheduling” activity hold and thereby reducing the number of records inserted into the workflow activity status history table.
- Scheduled through the “Schedule Orders” concurrent program, all the lines in a Ship/Arrival set will be progressed together beyond the “Scheduling” activity if scheduling is successful.
- Bulk processing of order lines in ATP process and parallel processing in schedule orders program has been enabled resulting in significant performance improvements in Scheduling in Order Management.
- Except - “Progress Lines at Schedule-Eligible Activity.”
- System now un-schedules all selected lines in one go and then schedules the lines one by one as per the Order By criteria specified. In this process, demand consumed by all the selected lines is released at once. This helps to achieve better schedule ship dates within the set of selected lines as per Order By criteria.
- Excluding Reserved Lines from Scheduling.
- There will be an additional option to differentiate between Inventory reservations and Non-Inventory reservations for including/excluding reserved lines from being rescheduled /unscheduled. ♦



Ankur Kulshreshtha is a solutions manager at TaylorMade Golf Company. He has more than 15 years of experience in the Oracle technology area working with manufacturing and electronics industries.

LEARN FROM THE PROS IN FIVE MINUTES!

OAUG Pro Tips: Take 5 videos are a great way to learn a tip from another member in about five minutes. Go ahead. Take five and learn something new.



oaug.org/resources/pro-tips



O2Works has nearly 20 years of history in putting Oracle to work for your Organizations around the globe - on time and within budget. We have the knowledge to be your trusted consulting partner. Our team includes some of the first consultants to work with the Oracle E-Business Suite from some of the first versions of the product release in the late 1980s.

Our teams include project managers, developer analysts, functional subject matter experts, and DBA/Sysadmins. We deliver the full spectrum of talent required to implement, upgrade and maintain the applications. Our extremely low turnover of U.S. based consultants further enables our focus on long term consultative relationships.

We are confident that once you work with our consultants, we will be the only Oracle Partner you will ever need. We build longterm relationships with our clients. Our team is there to support your team, so that when we leave, your staff has the knowledge to keep the systems running as smoothly as when we were there.

- Implementations
- Client Advocate
- Quality Assurance
- Upgrades
- Testing
- Application Optimization
- Training
- Maintenance
- Extensions
- Conversions

Call, email, or visit our Knowledge Works center where you can download white papers, presentations and more.

info@o2works.com | 972.466.2260

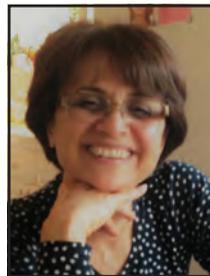
www.o2works.com



ORACLE Gold Partner

ORACLE OPEN WORLD

MEMBERS SHARE HIGHLIGHTS FROM ORACLE OPENWORLD 2018



“The highlights of Oracle Open World 2018 were many. The sessions were good and the keynotes were informative. Among Public Sector sessions, I attended the City of San Jose’s session on ‘Next Generation of Citizen Experiences using Emerging Technologies’ and found it fascinating. It was great to see three different organizations: Oracle, the City of San Jose, and their system integrator (AST), come together and provide

a very viable solution for the citizens of the city. I also attended ‘Improving Government Operations with the Cloud’ which was presented by the City of Detroit. During this session, I caught a glimpse into what cloud can do for a city, including how one moves forward with the transition of on-prem to cloud. Last but not least, I attended the OAUG Public Sector SIG where Hyperion in the Cloud was presented and well received.

A session that was specifically asked for by public sector organizations for COLLABORATE 19 was a comparison of ERP on-prem and in the cloud, including pros and cons and a roadmap for it. I look forward to learning more about that.”

Medik Ghazikhanian
City of Burbank

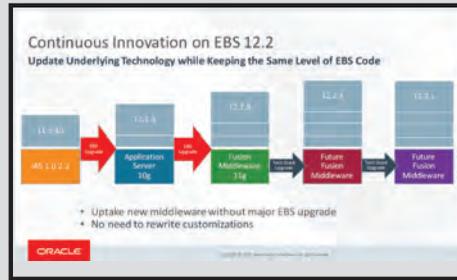


“I attended TestFest at Oracle OpenWorld 2018 and got my certification as a Risk Management Cloud Implementation Specialist. TestFest is a great opportunity to solidify all the knowledge around Oracle products and have something to represent that knowledge.

For COLLABORATE 19, I am looking forward to learning how customers are handling their roadmaps to the cloud and hearing more real-life experiences with Oracle’s latest technologies and processes.”

Lewis Hopkins
Smart ERP Solutions

CONTINUOUS INNOVATION FOR ORACLE EBS 12.2: ONGOING INVESTMENT AND SUPPORT WITHOUT A MAJOR UPGRADE



At Oracle OpenWorld 2018, OAUG President Christine Hipp had the opportunity to interview Cliff Godwin, Senior VP of Applications Development and the chief architect of E-Business Suite (EBS). Cliff talked about some big news for EBS users,

where to go for new licenses and other help with on-premises software, and why COLLABORATE is a don't-miss event for EBS users. Read the full Q&A interview on the OAUG Blog at bit.ly/2zv7er.



“The highlight of OpenWorld for me is to listen to the strategy/roadmap sessions by Oracle VPs. As more companies start to go live with cloud products, I’m interested to see Oracle’s vision for the future. I also enjoy spending time in the exhibitor area (Exchange) hearing about new products and services or touching base face to face with some of our current strategic vendors who are partnering with Oracle.

I’m really excited about the upcoming COLLABORATE 19. I enjoy the COLLABORATE experience and hearing directly from other users how they have been implementing Oracle. It’s nice to hear directly from them about their successes and any pain points they may have. On a side note, I’ve been to dozens of conferences in my career but never in San Antonio. So new surroundings will be a nice change of scenery!”

Brian Pellegrin
SCI Shared Resources, LLC



“I always enjoy presenting a session on our initiatives at the University of Pittsburgh and being able to share our experiences and our journey to new solutions, as well as our successes working with our partners. One of the best things for me about attending these types of conferences is meeting and sharing information with colleagues that are on the same path. I also enjoy attending the events focused on specific areas, such as Oracle Analytics, which allows you to learn what’s happening with others as it relates to your initiatives. It’s great to be able to make those connections and expand your community of colleagues.

What I am most looking forward to this year at COLLABORATE 19 is to learn what others are doing, primarily in the area of Analytics Cloud, as well as HCM and Financials Cloud, and sharing what we are doing at the University of Pittsburgh. This year, I will be attending as a member of the OAUG Board of Directors, so I am looking forward to the opportunity to work together with the board members, the special interest groups, such as the Analytics, BI and Big Data SIG, and members to make their experience at COLLABORATE valuable.”

Dianne DeNezza



“Oracle OpenWorld 2018 was great and always leaves us wanting more. The Oracle E-Business Suite sessions and OAUG participation were well worth the cost of admission.

We merely whet our appetites for the upcoming COLLABORATE 19 – OAUG Forum in San Antonio, Texas, where we will get to flesh out and better appreciate the E-Business Suite enhancements and developments revealed at OpenWorld 2018, such as:

- EBS Continuous Innovation -- Oracle’s Commitment for the Next Decade.
- EBS Simplified SignOn Screens.
- EBS Consistent User Interface: PC / Tablet / MobileApps.
- EBS Functional Enhancements for Receivables, Payables, EBTax, etc.
- EBS OA-Framework Dramatic Enhancements (Screen and PopUp Windows Auto-Fill-to-Fit)
- EBS Themes and Colors.
- EBS 12.2 Tablet Gesture Support and User Interface (UI) Enhancements.
- EBS 12.2.6, 12.2.7, 12.2.8 OA-Framework Screens replacing Oracle-Forms.”

Michael Barone
OATC Inc.



“The best thing about OpenWorld for me is getting to catch up with our community of friends and colleagues. I had a blast talking with the OAUG’s Oracle Analytics, BI and Big Data SIG Board members, such as Dianne DeNezza, from the University of Pittsburgh, and Raghav Venkat, from the City of Las Vegas, (as well as SIG community members too numerous to mention here) and comparing notes on what’s changing

both in our day-to-day jobs as well as in the analytics arena at Oracle.

We reconstituted the OAUG’s Oracle Analytics, BI and Big Data SIG Board during 2017, and despite all of the changes to our team and structure, were honored to win a SIG Certificate of Distinction award at COLLABORATE 18. That said, as SIG Board Co-Chair, I feel like we’re now really into the swing of things, with a board and membership that has been dedicated over the past year to monthly webinars, regular social media and newsletter communications, and participation in conferences.

How does this relate to COLLABORATE 19? We’ve once again updated the conference content to reflect major changes in the Analytics, BI and Big Data marketplace. We have an incredible group

of submissions from colleagues who I consider industry luminaries in this arena, and I think that we're taking this focus area to a whole new level at the conference this year! So, I'm most excited to learn, to share and to have fun with the COLLABORATE 19 community, especially in our SIG's focus area."

Kirby Lunger
Performance Architects, Inc.



"OpenWorld 2018 was my first Oracle event, and its sheer size and scale was certainly impressive. What impressed me most, though, was the number of OAUG members who stopped by the users group community booth just to reconnect. Given all the showmanship and excitement we were competing with for time and attention in the exhibit hall, those moments with our members really spoke to the community that exists among OAUG members and the value they attach to the dialogue we facilitate.

OAUG leaders also had an opportunity to sit down with Cliff Godwin and several other members of the EBS Development team and the Oracle Applications Unlimited team. It was exciting to hear about the new continuous innovation approach they are applying to the ongoing development of this software platform – a change that makes it simpler than ever for EBS users to take advantage of the latest innovations as they unfold, making maximum use of their Oracle investment. Later that same day, Cliff went live with us on Facebook to talk about that change and to encourage listeners to attend COLLABORATE 19 in April. It was great to hear an Oracle executive as established and respected as him talk about the unique value Oracle Applications users will find at COLLABORATE 19 – and the way Oracle Development teams benefit from the insights and interactions there as well.

Meeting OAUG members, corporate partners and Oracle leaders at OpenWorld left me even more excited about the experience we are creating at COLLABORATE 19! Scores of people are hard at work now, designing educational sessions, planning networking opportunities and creating a truly unique opportunity to facilitate collaboration among users, vendors and Oracle team members that will help everyone share their genius – borne out of successes and failures – and ultimately work smarter, not harder. At the end of the day, our aim is to help Oracle Applications users make effective strategic decisions about their own technology roadmap (including when and how to move to the cloud and how to optimize performance once there) so that their teams are maximally productive and their companies positioned for success."

Ragan Cohn
OAUG Executive Director



"At OpenWorld, there were a number of interesting discussions on WHY customers are moving to the cloud, and there is certainly more 'noise' about it yet with companies thinking about planning the transition over the next three to five years.

Many visitors to the More4Apps stand didn't seem to know what ERP their company use. (We suspect they said yes to EBS just to get their hands on our cute toy "Paul the Ball" and other goodies!)

I think we were in the longest lunch queue ever with resulting sore feet. Afterwards, many of the exhibitors went to visit the Sketchers outlet store just to wear the memory foam on Thursday post conference!

For us, the most exciting part of the annual COLLABORATE conference is working with some of our customers on their partner presentations. We are incredibly proud to have customers that want to stand up and share how they have used More4Apps Wizards to help people in the real world achieve incredible cost savings and process improvements within their business."

Jenny MacGregor
More4Apps



“The atmosphere of the entire OpenWorld event was amazing. The number of sessions available catered for a range of people, from users and their daily business processes to the more hands on technical users. With the current push of Oracle Cloud, it was great to see E-Business Suite still making an appearance in the sessions and around the exhibition hall. My key highlight from Oracle Open world would have to be the roadmaps

into cloud and EBS, providing a much clearer picture into where Oracle is heading and what they are actively doing to enhance the user experience. I am looking forward to applying my learnings and experiences into my daily work life.

For COLLABORATE 19, I am most looking forward to the user collaboration and presentations discussing the roadmaps people have had with their experiences with Oracle to aid my own business progressions.”

Paul Hassall
More4Apps



“A highlight at OpenWorld 2018 was the announcement about Oracle EBS 12.2.x continuous innovation! Probably the biggest takeaway for me is that Oracle will now be on a “continuous innovation” release with no more annual EBS releases. This adds some excitement for EBS users as it will allow them, if desired, to uptake new features/functionality when released, versus waiting until the fall each year. In addition,

new features and improvements of Oracle Cloud Infrastructure (OCI) for those “lift and shift” projects!

A new location (San Antonio, Texas) for COLLABORATE 19 is very exciting. I look forward to collaborating with our Oracle partners to get an update on the “continuous innovation” releases to date, and, as always, catching up with friends and like-minded professionals on their projects and cloud strategies.”

Bill Dunham
OATC, Inc.

OAUG MEMBERS LOOK AHEAD TO THE COLLABORATE 19 OAUG FORUM



COLLABORATE 19

TECHNOLOGY AND APPLICATIONS FORUM
FOR THE ORACLE COMMUNITY

OAUG MEMBERS SAVE ON COLLABORATE 19 REGISTRATION

Did you know that OAUG members save on the face-to-face networking and extensive education that happens at COLLABORATE? The average OAUG Corporate User member sends 2.7 people to COLLABORATE, each saving \$400 on registration.

Take full advantage of your OAUG membership benefits by making sure your organization's membership is up to date. Then register to attend the COLLABORATE 19 – OAUG Forum, April 7-11, 2019, in San Antonio, Texas. Contact membership@oaug.org if we can help you check your membership status. Or join or renew online at oaug.org/membership.

The COLLABORATE 19 – OAUG Forum delivers expert on-prem Oracle Applications knowledge and guidance for the cloud so users can derive greater value from their Oracle investments and strategically plan for the future. Join live, expert-led education that synthesizes best practices and cutting edge insights, peer networking, access to solutions providers with the best new products and more.

The OAUG Forum covers Oracle E-Business Suite, On-Prem EPM/Hyperion, Cloud EPM/Hyperion, ERP Cloud, Data Science & Analytics, SCM Cloud, CX Cloud, Personal Growth & Leadership and more.



COLLABORATE 19
TECHNOLOGY AND APPLICATIONS FORUM
FOR THE ORACLE COMMUNITY

OAUG Forum



#C19TX
collaborate.oaug.org



APRIL 7–11, 2019

SAN ANTONIO

GEO-SIG NEWS

LETTER FROM THE CHAIRS

JON RILEY AND MICHELLE THIESSEN

A complete list of Geos and SIGs, upcoming meetings, website addresses and contact information is available at oaug.org under the Communities tab.



Jon Riley



Michelle Thiesse

*Jon Riley and Michelle Thiesse
Geo/SIG Committee Co-Chairs
Email us at geo-sig@oaug.org.*

As 2018 comes to an end, we reflect on a successful year for the OAUG Geographic (Geo) and Special Interest Groups (SIG). We have a lot to reflect on this year:

- We created new SIGs this year to expand OAUG's content offering, including the E-Business Suite Advanced Architecture and High Availability SIG and the Emerging Technology SIG.
- Our Geos and SIGs had a successful COLLABORATE 18 with over 40 face-to-face SIG sessions allowing attendees to discuss hot topics in their product areas across EBS, Hyperion and Cloud Applications. The Geos hosted their inaugural charity event, the OAUG Geo Networking Build-a-Bike! Geos networked with attendees by geographic region and built 30 bikes for underprivileged children in the Las Vegas area!
- The OAUG hosted 11 sessions at Oracle OpenWorld 2018. These sessions featured product experts and best practices shared from users with real-life expertise, allowing the OAUG to be a large source of relevant education.
- In addition to our presence at annual conferences, the OAUG realigned SIGs to Oracle Cloud products. We also categorized SIGs on the OAUG Communities page at oaug.org/communities by On-Premises, Cloud and Hybrid, allowing members to easily find the information they need!

The end of the year means looking forward to next year, and as always, we are looking forward to COLLABORATE 19 in San Antonio, Texas!

In an industry that is constantly changing, the OAUG is always looking to cover more product areas and geographical regions. If you are interested in starting a new Geo or SIG, please do

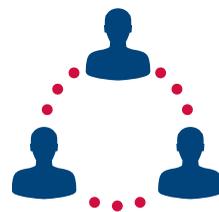
not hesitate to reach out to us with your inquiry. We invite your questions, feedback and suggestions – please contact us at geo-sig@oaug.org. ♦

GEOGRAPHIC USER GROUPS

Geographic User Groups (Geos) participants reside within a defined geographic region and meet to facilitate discussion among local and regional Oracle Applications users.

SPECIAL INTEREST GROUPS

Special Interest Group (SIG) members share a common interest or shared industry concerning specific Oracle Applications products. Participants may be geographically dispersed and typically meet at OAUG conferences.



Geographic & Special Interest **GROUPS**

OAUG MEMBERSHIP SPOTLIGHT

An average OAUG Corporate User member company sees a 317% return on their membership investment through valuable problem-solving resources and networking opportunities.

SAVE ON FACE-TO-FACE NETWORKING AND EXTENSIVE EDUCATION at COLLABORATE 19: Technology and Applications Forum for the Oracle Community – OAUG Forum.

- The average OAUG Corporate User member sends 2.7 people to COLLABORATE, each saving \$400 on registration.
- COLLABORATE offers 22 hours of breakout sessions at an average rate of \$75 per hour – far less than competitive training options, plus it's live and interactive. Your team gets answers in real time.

LEARN FROM THE EXPERTS IN CONVENIENT LIVE ELEARNING WEBINARS

The average OAUG Corporate User member has 6.2 employees attend OAUG live eLearning webinars each year. Valued at \$100 per session, that's \$620 of learn-in-place education.

GAIN INSIGHTS INTO HOW OTHERS HAVE SOLVED THE ISSUES YOU'RE FACING TODAY

- On average, employees of Corporate User members download 29.8 free presentations and webinar recordings per year. Valued at \$50 each, that's \$1490 in resources per year.
- *OAUG Insight* magazine features case studies and practical insights. The average OAUG Corporate User member has 8.4 individuals subscribed to *OAUG Insight* magazine. Valued at \$25 per issue, that's \$840 in value per year.

INFLUENCE ORACLE

Oracle listens to the collective voice of the Oracle Applications community. The OAUG Customer Support Council informs Oracle of member concerns and assists members in understanding Oracle Support services. The Customer Support Council was instrumental in Oracle's waiver of Extended Support fees for a number of product lines.

EXPERIENCE THE TRUE VALUE OF OAUG MEMBERSHIP

- Get new insights to help you avoid costly mistakes.
- Find ideas to increase efficiencies.
- Gain knowledge to extend the life of your software investment.

SEE HOW OAUG MEMBERS SHINE

View ProTips videos, read the OAUG Blog and visit the new OAUG Career Center to see how OAUG members shine when you visit oaug.org/shine. If you're not a member yet, join online at oaug.org/membership or contact the membership staff at membership@oaug.org or +1 404.240-0897. ♦

“The cumulative knowledge of the members of the OAUG and their willingness to share is incredible. By leveraging the resources offered through the OAUG, I have seen my team learn about new innovations and implement them quickly.”

—Debbie Morris
Southern Company Services

“Being able to reach out to someone who could help us quickly solve a problem or point us in the right direction with design questions literally saved us hundreds of hours of wasted research and development costs.”

—Matt Youmans
Worthington Industries



OAUG EMERGING LEADERS MENTOR PROGRAM

RUSSELL DE LEON, OAUG EMERGING LEADERS COMMITTEE CHAIR



The OAUG Emerging Leaders (formerly known as the OAUG Young Professionals Forum) is focused on helping people who are just beginning their career with Oracle Applications or just beginning their career in general. Grow in your career by networking with peers and mentors as well as registering for helpful educational content.

The group has many initiatives, like webinars that are held multiple times a year with a focus on professional development or Oracle Applications topics.

Additionally, the OAUG Emerging Leaders has a mentorship program that provides an opportunity for young and new professionals to guide their professional and career goals with an OAUG mentor. The mentorship program was launched at the COLLABORATE 18 conference and is exclusively for OAUG members or current students.

The OAUG Emerging Leaders Mentor Program works by matching mentees with a volunteer mentor who will help the individual set goals in areas such as networking, career aspiration, being a new manager or general professional development guidance in the applications and technology space. To participate, mentees need to complete a survey with information about their career and location. The OAUG Emerging Leaders group will help facilitate a mentor/mentee match as close as possible to career path and location based on the information on the survey. Once matched, both parties will be asked to set up goals and deadlines for the program to help create a successful mentor/mentee relationship. Mentees can expect the assigned mentor to provide guidance and answer questions about professional career and future growth

as well as answer technology and applications related questions.

This program is the OAUG's way of providing the mentee a professional contact that could provide assistance with professional development. This program will also assist individuals in expanding their network within the OAUG community and its members.

Please check the Emerging Leaders page at oaug.org/mentor on the OAUG website for more information. ♦



As the OAUG Emerging Leaders committee chair, I am fully committed and strongly support this mentorship program. As one could imagine, Oracle and its applications are overwhelming, especially to someone that's just starting a career in the industry.

A mentorship program like the initiative from the OAUG Emerging Leaders is a crucial element to OAUG young professionals or students, not only in bridging the gap between their profession and the industry but also serving as a guiding light in developing and advancing their career. This will certainly bring countless benefits to the OAUG members and users moving forward.

Russell De Leon

Business Systems Analyst

College of American Pathologists



Subscribe to the OAUG Blog to select categories of interest, receive news and announcements, post comments, share via social media and view related and popular posts. oaug.org/blog

SAMPLE POSTS

- Oracle Reaffirms Commitment to EBS Customers
- Let's Talk Localizations
- EBS Output Post Processor Configurations
- Overcoming Fear and Resistance to Embracing a Cloud Solution

OVERCOMING FEAR AND RESISTANCE TO EMBRACING A CLOUD SOLUTION

🕒 Wednesday, 21 June 2017 ✍️ Tusar Das 📁 General, Education
 👁️ 2217 Hits 💬 0 Comments

Before documenting requirements, cultivating executive sponsorship and getting to the nuts and bolts of a recent Oracle Sales Cloud solution, we had to overcome some initial concerns and misconceptions.

Three things were top of mind:

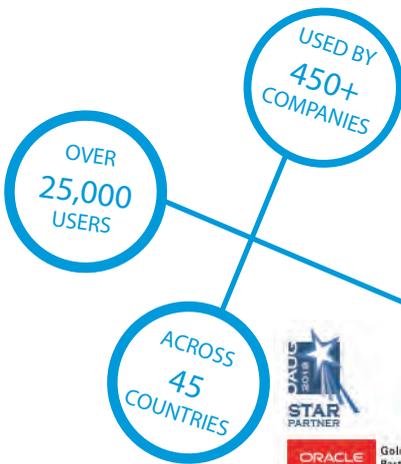
1. A previous bad experience with a cloud product.



Tusar Das, Worthington Industries



Working with inventory items, material transactions, cost updates, bill of materials and routing data is now easier!



Using Excel to Oracle E-Business Suite integration create, update, maintain, validate and upload all your data into Oracle Manufacturing and Engineering.

Updating item categories is now a simple process, data improvements are that great that other improvement programs such as cycle counting have been introduced to our 70 retail stores.
 - Joseph Rief, James Avery

More4Apps.com | inquiry@more4apps.com

PLANNING A MIGRATION FROM ORACLE EBS TO ORACLE ERP CLOUD?

TIPS AND TRICKS TO HELP YOU

DAVID WRIGHT, GLOBAL PRE-SALES MANAGER, MORE4APPS

All migrations have impacts, not just to your source and target systems. The impact will be substantial with various touch points within your organization. Your project team will need to take into consideration costs, process impacts and resource requirements. Regular communication to business, data security and general IT staff are paramount in your migration project plan.

A key aspect of any migration is what data to take across and what is the most efficient way to make this happen? Key questions include:

- Are there scripts that I can just execute and extract all the data from my EBS legacy system?
- What data cleansing tasks should I perform?
- Where's the best place to clean the data?

Figure out your approach. Will you migrate or re-implement?

Before making a start, you need to step back and perform an assessment on both your current EBS and proposed Cloud ERP setup.

- How will you create the key data for your system (accounts, customers, suppliers, items etc.)?
- How you will extract the data from EBS?
- Will you import only open transactions or take the entire history to the new system?
- Is there any data to reorganize or clean up?

Do you keep your old system live or migrate all the history to the cloud?

Data is the life blood for any organization. With migrations, you have multiple options and combinations, each one with benefits and disadvantages.

OPTION 1: NEW SETUP AND ONLY UPLOADING BALANCES AND OPEN TRANSACTIONS

This is your opportunity to adopt a new chart of accounts, categories and even a new inventory item master.

OPTION 2: SIMILAR SETUP, ALL DATA

Perform a full migration and do a like-for-like setup; there will be some mapping involved, especially for custom data. Moving anything "non-standard" will be a drain on your project resources and likely increase the cost of the project.

OPTION 3: HYBRID MIGRATION AND TRANSFORMATION

You can also decide to upload only a portion of the data for some modules (i.e., only open transactions for AP and PO and just tax years on GL detail) if you are also transforming your chart of accounts. Then this will likely be a combined effort between cleaning your data and also the consulting effort of the migration itself.

HOT TIP: When you are migrating open transactions, it's always good to try to pay most of your pending invoices and receive all the items still not received on the Purchase Orders.

Cleanse your data now!

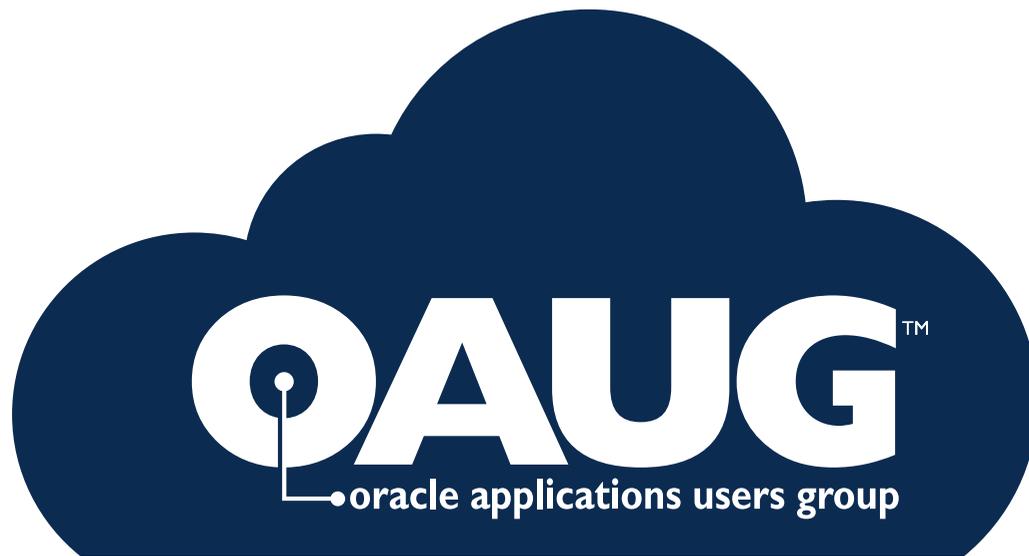
Now is a great time for you to clean up what you can before the migration even starts. Your users know and understand the current system and what needs to be cleansed. Cleaning up your current data is a low impact way of preparing for migration that will help de-risk your project and provide your organization with quality data.

There are products available to help you perform the migration from Oracle (Soar) and companies like DataLynx. However, these aren't end-user-based data cleansing solutions and work best when presented with quality source data.

There are leading, not bleeding edge tools with a proven track record available now for your end users to help improve your chances of a smooth migration. ♦

More4Apps simplifies business processes by providing intelligent data capture and integration solutions. Since 2000, More4Apps has gained more than 20,000 EBS users in over 45 countries, establishing a loyal customer base.





Information. Training. Guidance.

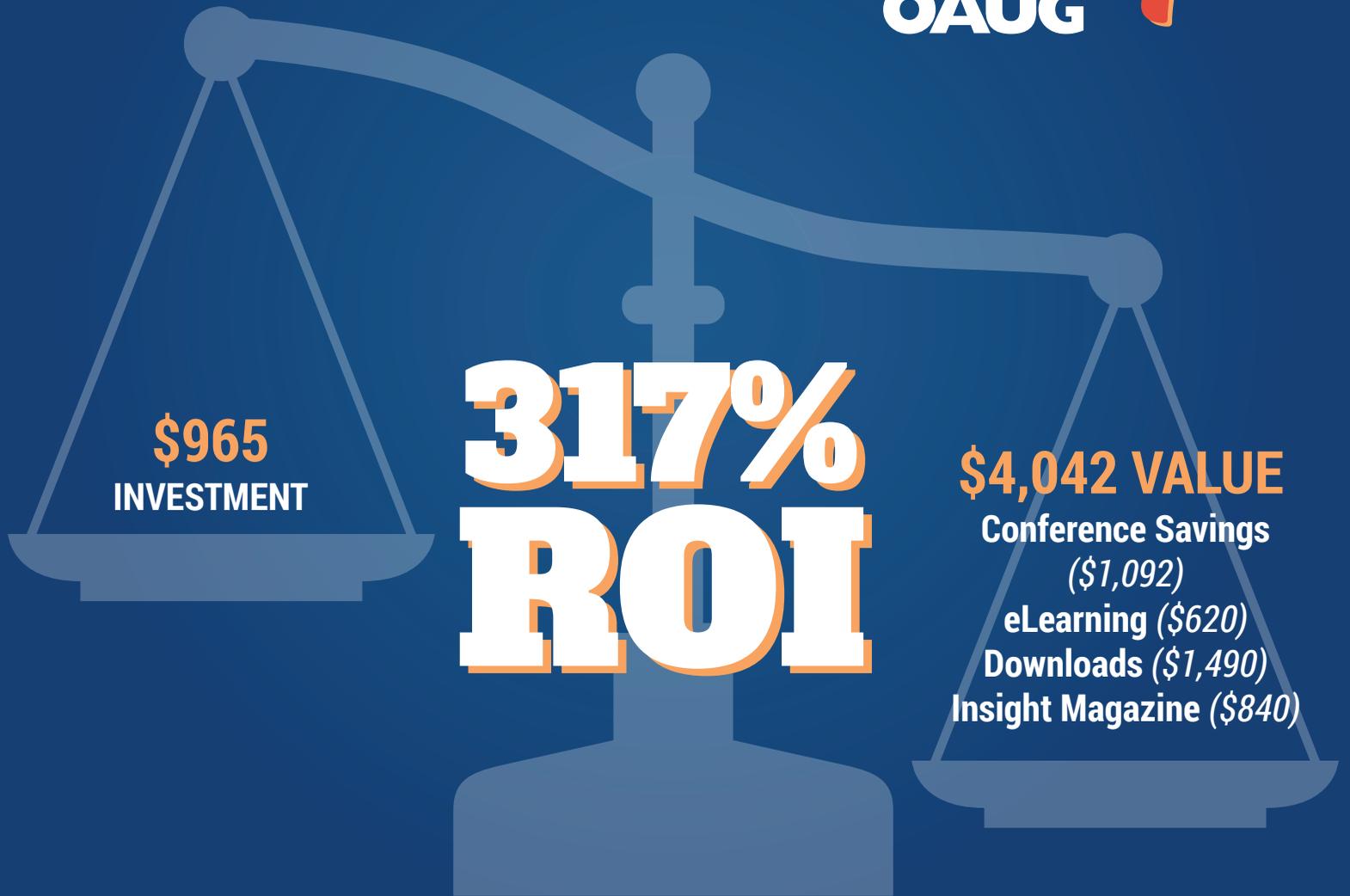
- On-premises Oracle Applications
- Oracle Cloud Solutions
- Hybrid Environments

oaug.org/resources/cloud | cloudinfo@oaug.org

**Rely on the INSIGHTS and EXPERIENCES of other ORACLE APPLICATIONS
USERS to ease and inform your path to the CLOUD.**

SPOTLIGHTING *Membership*

OAUG™



On average, Oracle Applications Users Group (OAUG) members experience a 317% return on their investment through problem-solving resources and networking opportunities. For many, those resources yield incalculable value from insights that help them avoid costly mistakes, gain efficiencies and extend the life of their software investment.

Visit OAUG.ORG/VALUE to download free sample resources and see how OAUG members shine.

Join Today:

membership@oaug.org

+1 404 240 0897

OAUG™
oracle applications users group