



OBIEE Administrators Don't Fear the Cloud

MAY 15 & 16, 2019

CLEVELAND PUBLIC AUDITORIUM, CLEVELAND, OHIO

WWW.NEOOUG.ORG/GLOC

BIO

- Mark Whitlock is a Certified Oracle 8i Database Administrator
- Oracle Business Intelligence Applications for ERP 7 Certified Implementation Specialist, Oracle ERP Project Manager for Department of Defense and Global Decision Support Analyst.
- Currently a Senior BI Architect for Aleris International Inc. in Beachwood, OH a leading Aluminum manufacturer of Rolled Aluminum Products.
- Mark has been working with Oracle products for 24 years, Oracle Business Intelligence technologies for the past 13 years as a Developer, Administrator or Architect and working with OBIEE starting with version 10.1.3. He has been involved in four OBIEE custom and three OBI Applications implementations and has been an Oracle Analytics Cloud Administrator since November 2017.
- Speaker at Northeast Ohio Users Groups, Collaborate 11 and BI Data and Analytics User conferences.
- Mark received his Bachelor's Degree from Kent State University in Business and Technology and MBA from Jones International University with a specialization in IT Management.

ABSTRACT

This is a case study of how Aleris International migrated their on premise 12c OBIEE instance to the Cloud in order to do a side by side comparison and the lessons learned along the way

How it started

- This is a case study of how Aleris International piloted its migration from OBIEE 11.1.1.7 to 12.2.1.4 using a laptop, Virtual Box and Sample applications for OBIEE.
- Having been put on hold by the IT Infrastructure team while planning the upgrade from 11g to 12c rather than wait around and have the project timeline slip away the team decided to find a creative way to plan, design, and test and debug to prepare for when the production environment was ready. Also during this time an opportunity to port some of the environments to the cloud materialized.
- Not having any hands on experience with OBIEE 12c and not sure how all pieces and part were all going to fit together, we were able to successful deploy OBIEE 12c with all the connections to their source and target TEST environment so they could construct a project plan and timeline for the actual production implementation.
- They were also able to become familiar with the new directory structures and utilize the new Migration and Baseline Validation tools.

Steps:

- Install Virtual Box
- Install Sample Apps
- Setup your OBIEE 12c Instance
- Migration Tool to get from 11g to 12c
- Consider Cloud options
- Port to Cloud

Welcome to the Oracle Cloud

- Oracle Analytics Cloud (OAC) Implementation
- Working with Marc Friedman our sales rep
- and Oracle specialist:

Shashank Kothapalli

Cloud Customer Success Specialist | Oracle Public Cloud

Phone: +91 80 67862844

Prestige technology Park III Velocity, Bangalore, Karnataka INDIA 560103

Welcome to the Oracle Cloud

- Which Cloud did you buy?
 - Oracle Managed
 - Customer Managed

Oracle Cloud Success Team

Organizer:

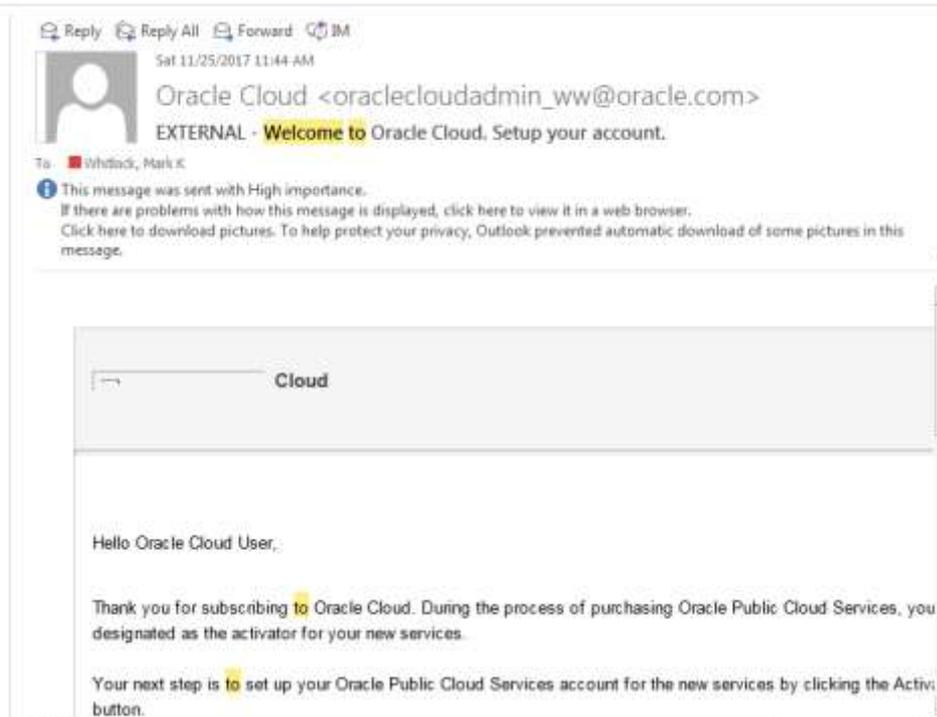
Shashank Rao Kothapalli Sundarraja

Attendees:

Whitlock, Mark K; Vishwanath

Venkatachalaiah; Shashank Rao Kothapalli Sundarraja;
Marc Friedman

Welcome to the Oracle Cloud



Welcome to the Oracle Cloud

Welcome to Oracle Cloud!

Hello Oracle Cloud User,

Thank you for subscribing to Oracle Cloud. This is a reminder to activate your Oracle Cloud Service(s).

Your next step is to set up your Oracle Public Cloud Services account for the new services by clicking the **Activate My Services** button.

The Services Period for the Services commences on the date stated in this order. If no date is specified, then the "Cloud Services Start Date" for each Service will be the date that you are issued access that enables you to activate your Services, and the "Consulting/Professional Services Start Date" is the date that Oracle begins performing such services.

Activate My Services

Order Details

Order ID:

Welcome to the Oracle Cloud

added to your Oracle Cloud Account.

1 Account Details

* Cloud Account Name ⓘ
Choose a unique name to identify your Oracle Cloud Account and use when accessing cloud services.

* Email Address
Enter the address at which you received the email to setup the Cloud Account.

Call in 0rec_1

2 Administrator Details

Enter the email address of the initial cloud account administrator and service administrator for your services. This administrator can create other administrators or users.

* Email

* User Name

* First Name

* Last Name X

Welcome to the Oracle Cloud

You are sharing monitor 2.

https://myservices.us.oraclecloud.com/mycloud/faces/setupExtAccount.jspx?orderId=1001_38087458c1

File Edit View Favorites Tools Help

ORACLE[®] CLOUD

Activate My Services!

Congratulations!

Your new Oracle Cloud services are being activated in your Cloud Account: aleris. You will receive a Welcome email in a few minutes.

Close

Welcome to the Oracle Cloud

Set a new password for your user account

* User Name

* New Password

* Confirm New Password



Password Criteria:

- ✔ The password must have at least 12 characters.
- ✔ The password cannot exceed 40 characters.
- ✔ The password cannot contain the First Name of the user.
- ✔ The password cannot contain the Last Name of the user.
- ✔ The password cannot contain the user name.
- ✔ The password must have at least 1 lowercase characters.
- ✔ The password must have at least 1 uppercase characters.
- ✔ The password must have at least 1 numeric characters.
- ✔ Cannot repeat last 4 passwords

Welcome to the Oracle Cloud



The screenshot shows the Oracle Cloud My Services console. At the top, it says "ORACLE Cloud My Services" and "Compute Classic Site: 604174161 - uscom-east-1". The "Network" tab is selected in the top navigation bar. On the left, a sidebar menu lists various network services, with "VPN Connections" highlighted. The main content area shows a breadcrumb "VPN > VPNaaS > VPN Connections" and a table of VPN connections. The table has columns for "Name" and "Tunnel / Life Cycle Status". One connection is listed: "VPNaaSDEV" with a status of "Down / Ready".

ORACLE Cloud My Services

Compute Classic Site: 604174161 - uscom-east-1

Instances **Network** Storage Orchestration Images

IP Network

Shared Network

Load Balancers

SSH Public Keys

VPN

VPNaaS

VPN Connections

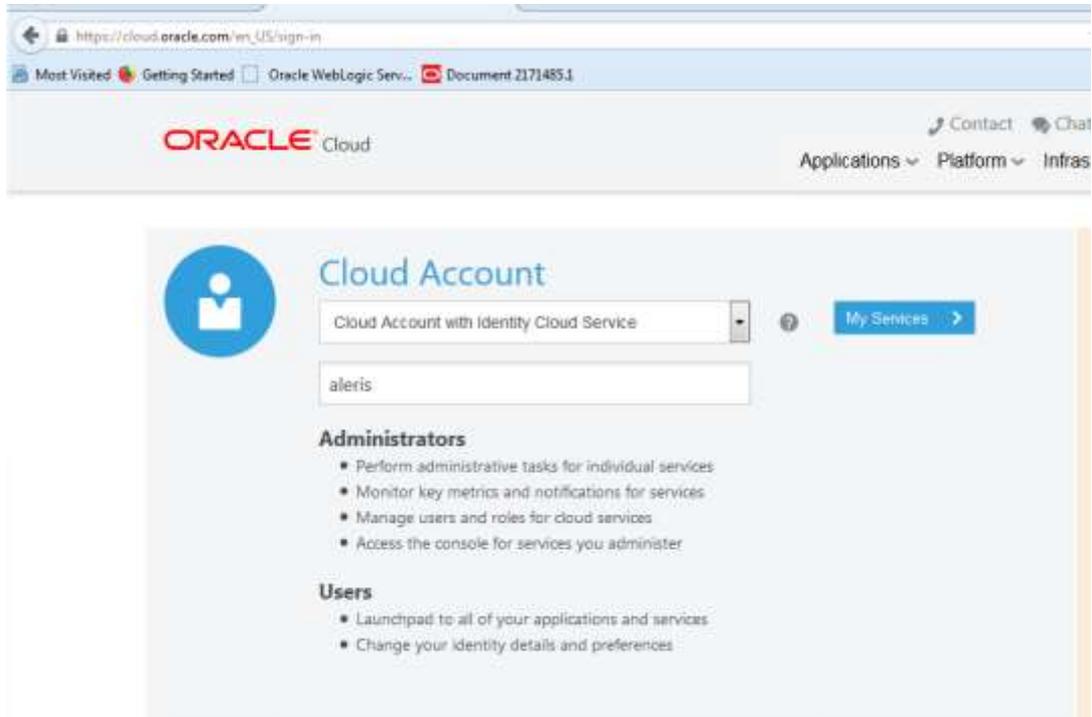
VPN > VPNaaS > VPN Connections

You can create VPN connections from your data center to instances at

Search... Show: All

Name	Tunnel / Life Cycle Status
VPNaaSDEV	Down / Ready

Welcome to the Oracle Cloud



The screenshot shows a web browser window with the URL `https://cloud.oracle.com/en_US/sign-in`. The browser's address bar and tabs are visible. The Oracle Cloud logo is prominently displayed in the top left of the page. In the top right, there are links for 'Contact' and 'Chat', and a navigation menu with 'Applications', 'Platform', and 'Infras'. The main content area is titled 'Cloud Account' and features a user profile icon, a dropdown menu showing 'Cloud Account with Identity Cloud Service', and a 'My Services' button. Below this, there are two sections: 'Administrators' and 'Users', each with a list of bullet points describing their roles.

ORACLE Cloud

Contact Chat

Applications Platform Infras

Cloud Account

Cloud Account with Identity Cloud Service

My Services

aleris

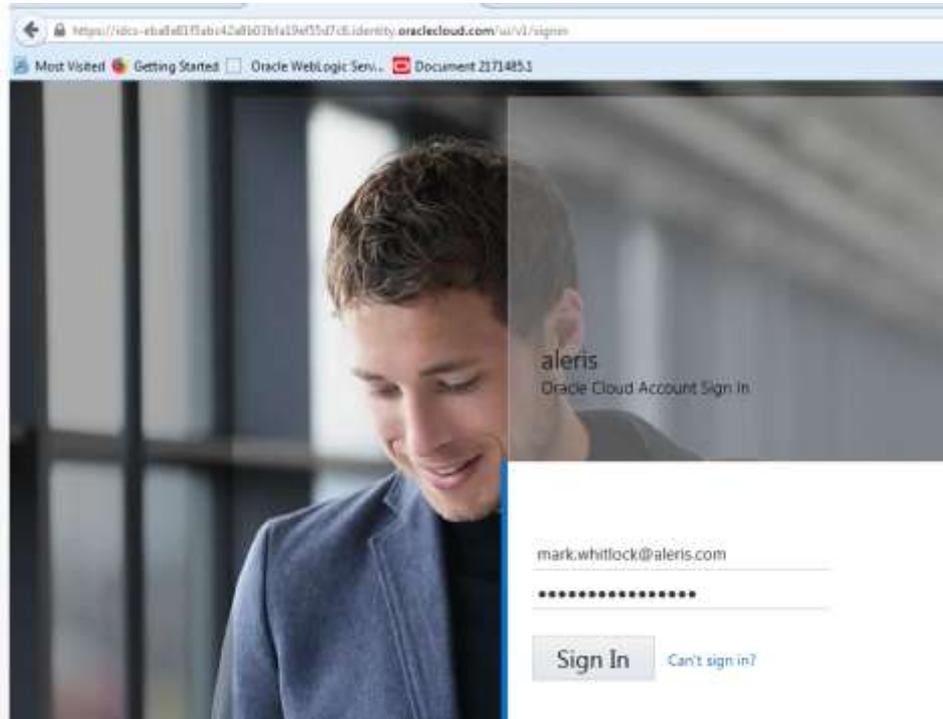
Administrators

- Perform administrative tasks for individual services
- Monitor key metrics and notifications for services
- Manage users and roles for cloud services
- Access the console for services you administer

Users

- Launchpad to all of your applications and services
- Change your identity details and preferences

Welcome to the Oracle Cloud



Welcome to the Oracle Cloud

The screenshot shows the Oracle Cloud My Services dashboard. The browser address bar displays `https://my services.oraclecloud.com/mycloud/#cloudportal/dashboard`. The dashboard header includes the Oracle logo and "Cloud My Services". The main content area features three primary action cards: "Create Instance" (with subtext "Provision a new service in minutes"), "Account Management" (with subtext "Administer account and billing"), and "Customize Dashboard" (with subtext "Search for your services and resources"). Below these is a "Cloud Services" section showing "0 Important Notifications" and a "\$1,900 Remaining" balance. A modal dialog titled "Set Preferences" is overlaid, containing the text: "In order to use this application, you need to save your preferences for this session." The dialog includes a "Languages" dropdown set to "English" and a "Timezone" dropdown set to "United States (UTC-08:00) Los Angeles". A blue "OK" button is at the bottom right of the dialog. A tooltip points to the language dropdown with the text: "Select the language you want Oracle to use when sending notifications and for My Account and My Services." Below the modal, a "New services" section states: "You have access to new services not currently displayed on your Dashboard. Services with instances are automatically shown. Click on Create Instance to add an instance to a service."

Welcome to the Oracle Cloud

The screenshot shows the Oracle Cloud My Services dashboard in a web browser. The browser address bar displays the URL `https://myoracle-alerts.oraclecloud.com/mycloud/cloudportal/dashboard`. The page header includes the Oracle logo, the text "ORACLE Cloud My Services", and user information for "alerts" (mark.whitlock@alerts.com). The main content area features a "Dashboard" title and an "Identity Domain" dropdown set to "alerts - US Commercial 2". Three primary action cards are visible: "Create Instance" (with subtext "Provision a new service in minutes"), "Account Management" (with subtext "Administer and manage your account and orders"), and "Customize Dashboard" (with subtext "Specify which services appear on the dashboard"). Below these is a "Cloud Services" section showing "0 Important Notifications" and a balance of "\$1,960 of \$1,980 USD Remaining". A notification banner at the bottom states "New services" and provides instructions on how to view services with instances.

Welcome to the Oracle Cloud

The screenshot shows a web browser window with the Oracle Cloud User Management console. The browser's address bar displays the URL `https://myservices-aleris.cp.mole.oraclecloud.com/mycloud/cloudportal/userManagement`. The page header includes the Oracle logo and "Cloud My Services", along with navigation links for "Dashboard", "Users", and a user profile for "aleris mark.whitlock@aleris.com". The main content area is titled "User Management" and features a blue header with a user icon and an "Identity Console" button. Below this, there are tabs for "Users", "Groups", and "My Profile". A search bar is present on the left, and a "Sort By" dropdown menu is set to "Last Name (Ascending)". A blue "Add" button is located on the right side of the interface. The page footer shows "Page 1 (0 of 0 items)" and a pagination control with the number "1" highlighted.

Migration file

- The instance we are going to create is EUR12C_DEV
- This is our custom OBIEE Instance.
- Unfortunately, I do not have a migration file from the EUR TEST server but I do have a 12.2.1.4 migration file from the EUR DEV server

Virtual Box to the Rescue

- Oracle reported that their test environment wasn't the same version to the file did not import and gave me their version of the migration tool to recreate, but I don't want the EU DEV instance I want the EU TEST instance, but it does not have the correct version of java on it.
- So, the next thing I tried was to go to my virtual box and create a bar file

Need to create public and private encryption keys

ORACLE[®] CLOUD My Services

Create Instance

← Previous Cancel

Instance Details

Provide details for this Oracle Database

Database Configuration

* DB Name ORC
* PDB Name PDB

Instance Details Confirm

SSH Public Key for VM Access

Provide a value for VM Public Key, or the file containing the VM Public Key. Alternatively, select the option to generate private/public key pair - if selecting that option, you must save your private key.

Key File Name:

The value of an existing SSH public key.

Create the database instance

ORACLE CLOUD My Services

Create Instance

Cancel Instance Details Confirm Next >

Instance
Provide basic service instance information.

* Instance Name: ⓘ

Description: ⓘ

Notification Email: ⓘ

Region: ⓘ

IP Network: ⓘ

Assign Public IP: ⓘ

Type: ⓘ

Bring Your Own License: ⓘ

* Software Release: ⓘ

* Software Edition: ⓘ

* Database Type: ⓘ

Create the database instance

ORACLE CLOUD My Services

Oracle Database Cloud Service

QuickStarts Welcome

Instances Activity SSH Access

As of Jun 26, 2018 4:02:01 PM UTC

Summary	1	1	7.5 GB	185 GB	1
	Instances	OCPU's	Memory	Storage	Public IPs

Instances

Search by instance name or tags

[Create Instance](#)

AlertsDB	Status	Submitted On	OCPU's
	Creating instance...	Jun 26, 2018 4:21:52 PM UTC	1
	Version: 12.2.0.1		Memory: 7.5 GB
	Edition: Enterprise Edition		Storage: 185 GB

Service Create and Delete History

Last 24 Hours Show only failed attempts

AlertsDB	Create In Progress
	Jun 26, 2018 4:21:52 PM UTC
Details	
Jun 26, 2018 4:21:52 PM UTC: Availability Selected	
Jun 26, 2018 4:21:52 PM UTC: Availability Selected	
Jun 26, 2018 4:21:52 PM UTC: SSH access to DB_Cloud_1 succeeded...	

Create the Analytics instance

ORACLE[®] CLOUD My Services

Oracle Analytics Cloud

Welcome!

Instances Activity

As of Jun 26, 2018 5:08:18 PM UTC ↻

Instances

[Create Instance](#)

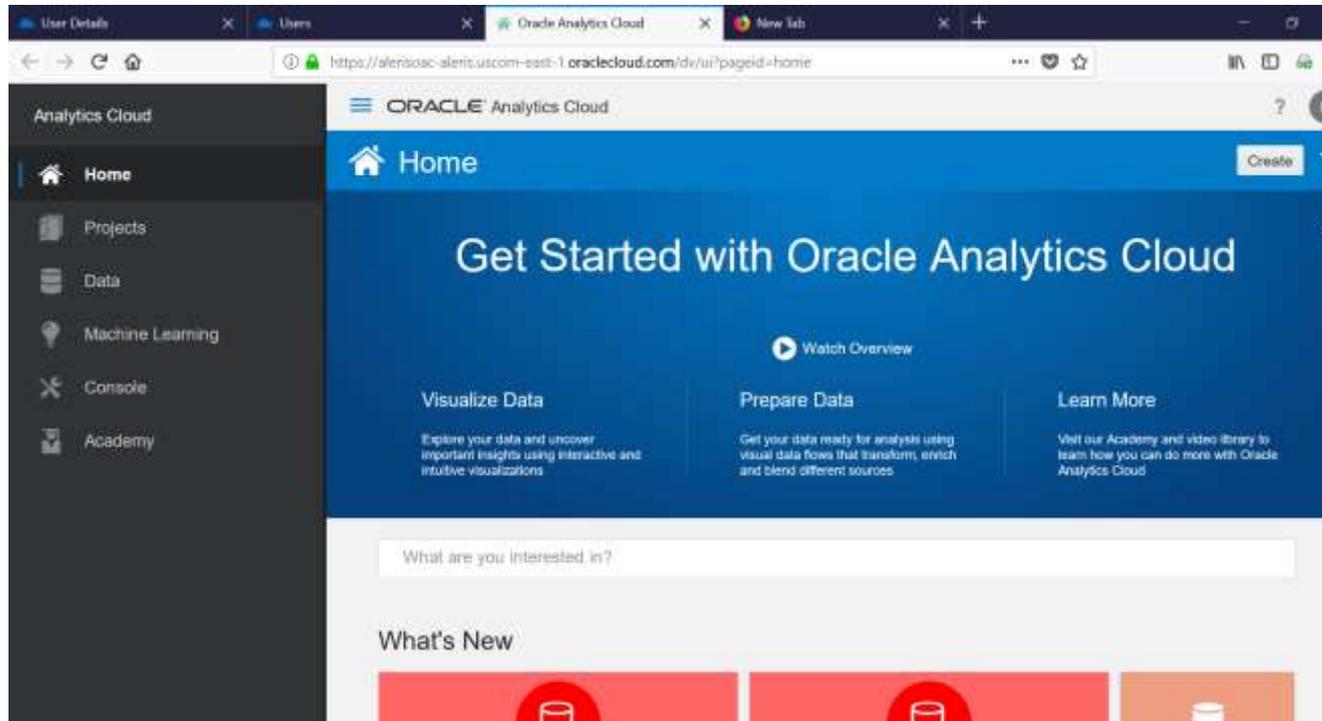
You don't have any instances. After meeting the prerequisites, use this button to create an instance.

Need help creating the instance?

- Watch a video
- Step through a tutorial

▶ Instance Create and Delete History

Create the Analytics instance



The screenshot shows a web browser window with the Oracle Analytics Cloud interface. The browser's address bar displays the URL: `https://alenisosc-alenit.us.com-east-1.oraclecloud.com/dv/ui?pageid=home`. The page features a dark sidebar on the left with navigation options: Home, Projects, Data, Machine Learning, Console, and Academy. The main content area has a blue header with the Oracle Analytics Cloud logo and a 'Home' button. Below the header, the main heading reads 'Get Started with Oracle Analytics Cloud'. A 'Watch Overview' button is positioned below the heading. Three columns of content are displayed: 'Visualize Data' (with a sub-description: 'Explore your data and uncover important insights using interactive and intuitive visualizations'), 'Prepare Data' (with a sub-description: 'Get your data ready for analysis using visual data flows that transform, enrich and blend different sources'), and 'Learn More' (with a sub-description: 'Visit our Academy and video library to learn how you can do more with Oracle Analytics Cloud'). At the bottom, there is a search bar labeled 'What are you interested in?' and a 'What's New' section with three red and orange cards.

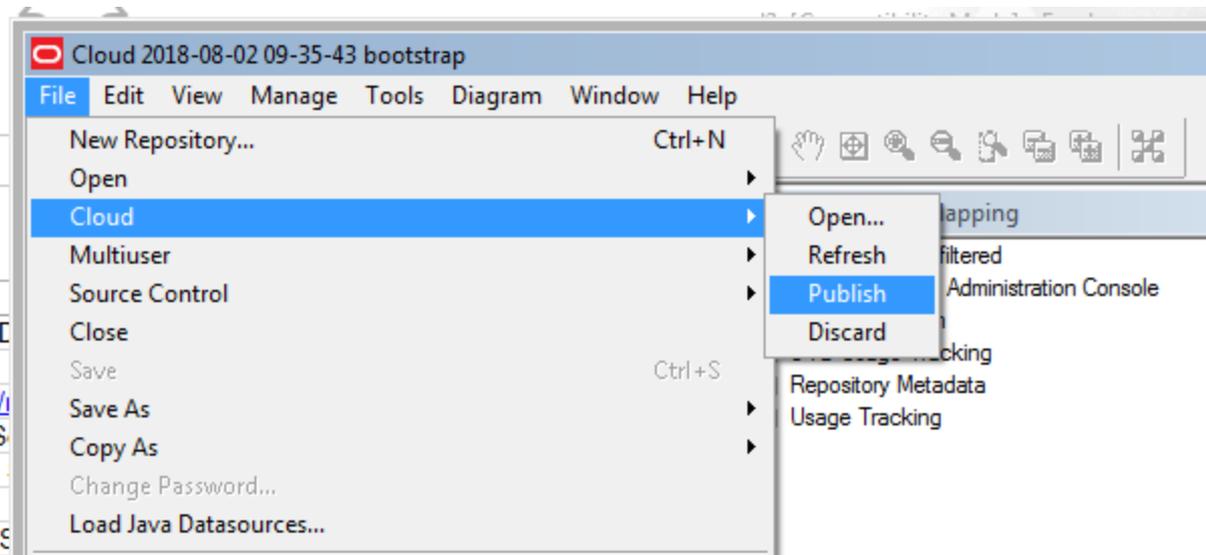
Administration

The screenshot displays the Oracle Analytics Cloud Console interface. The top navigation bar includes the Oracle logo and the text "ORACLE Analytics Cloud". Below this is a blue header with a wrench icon and the word "Console". A left-hand sidebar contains a list of navigation items: "Users & Roles", "Snapshots", "Connections", "Data Replication", "Safe Domains", "Social", "Virus Scanner", "Custom Plugins", and "Sessions & Query Cac...". The main content area is titled "Snapshots" and contains instructions: "To create a snapshot of your Oracle BI Enterprise Edition 11g environment, download and run the migrat". Below the instructions are three buttons: "New Snapshot", "Upload Snapshot", and "Replace Data Model". A table of snapshots is visible, with two entries: "27 Jul 2018 (15:34:31)" and "03 Jul 2018 (1...". A warning dialog box is overlaid on the right side of the console, with the title "Warning." and the text: "Your BI service is now synchronizing in the background. It can take a few more minutes for all your metadata to be fully available." The dialog box has a close button (X) in the top right corner and an "OK" button at the bottom right.

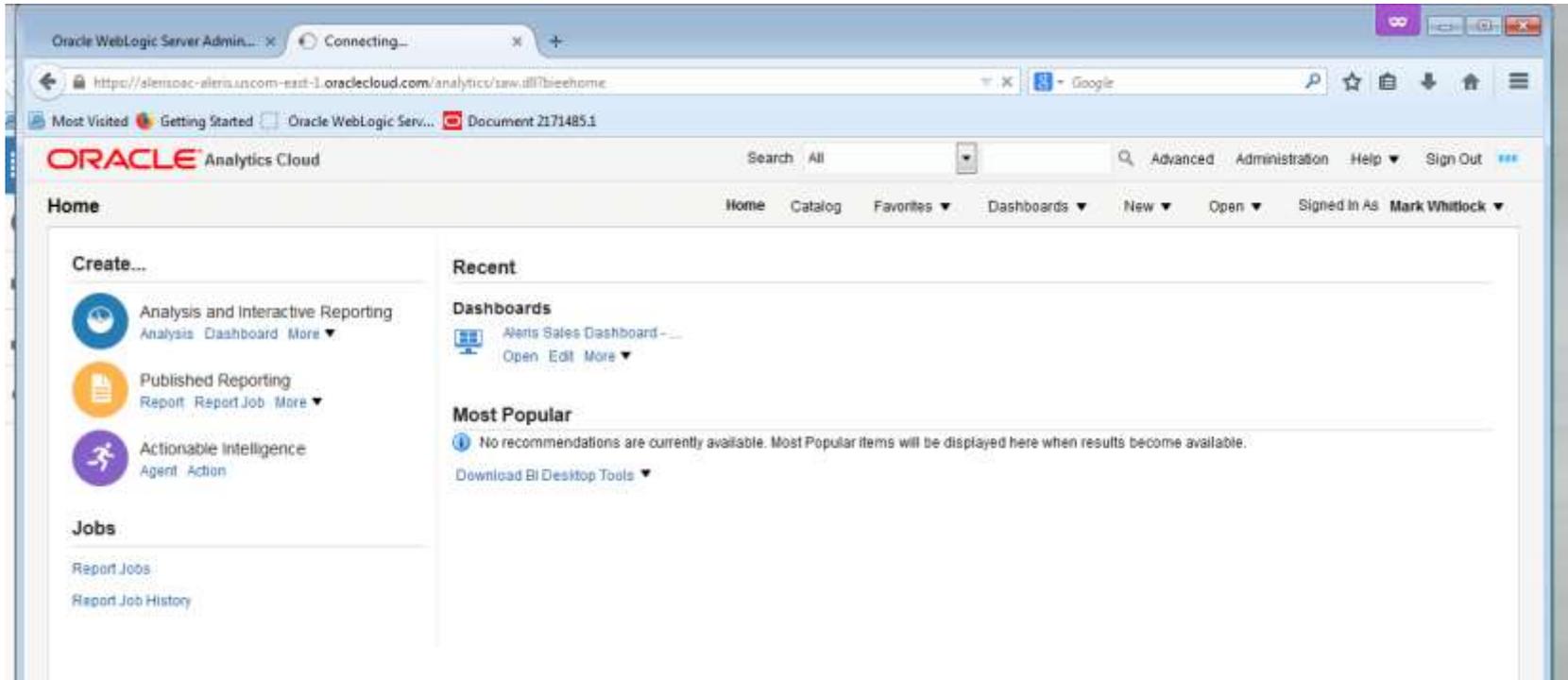
Download the cloud on premise development client admin tool



Publish to the cloud



Analytics login



The screenshot shows a web browser window with the Oracle Analytics Cloud interface. The browser's address bar displays the URL: `https://alerisoc-aleris.us.com-east-1.oraclecloud.com/analytics/saw.dll?biiehome`. The page header includes the Oracle logo and the text "Analytics Cloud". A search bar is present with the text "Search All". Navigation links include "Advanced", "Administration", "Help", and "Sign Out". The user is identified as "Signed In As Mark Whitlock".

The main content area is titled "Home" and features several sections:

- Create...**
 - Analysis and Interactive Reporting (Analysis Dashboard More)
 - Published Reporting (Report Report Job More)
 - Actionable Intelligence (Agent Action)
- Jobs**
 - Report Jobs
 - Report Job History
- Recent**
 - Dashboards
 - Alerts Sales Dashboard (Open Edit More)
 - Most Popular
 - No recommendations are currently available. Most Popular items will be displayed here when results become available.
 - Download BI Desktop Tools

We made it to the Cloud

Oracle WebLogic Server Admin... x Oracle Analytics Cloud x Oracle BI Interactive Dashboard... x

https://alerisoac-aleris.uscom-east-1.oraclecloud.com/analytics/saw.dll?Dashboard&portalPath=%2fshared%2fAleris Sales Dashboard%2f_per

ORACLE Analytics Cloud Search All Advanced Administration Help Sign Out

Aleris Sales Dashboard Home Catalog Favorites Dashboards New Open Signed In As Mark Whitlock

Go to DWCN China
Go to EIC dashboard

Aleris Data warehouse Sales Europe

*** KO ROL 2018 fixed cost update ---> scroll down for more info ***

Cost and margin evolution

click on this link to go to the Cost & Margin Evolution Graphics based on Standard costs @ commercial exchange rate
click on this link to go to the Cost & Margin Evolution Graphics based on Actual costs @ Fair value exchange rate -> only valid for Koblenz

Cost evolution

Start the instance up - database

The screenshot shows the Oracle Cloud console interface. The browser address bar displays `https://psm-aleris.console.oraclecloud.com/dbaas/faces/dbRunner.jspx`. The page title is "Oracle Database Cloud Service". The navigation bar includes "Instances", "Activity", and "SSH Access". The "Instances" section shows a summary with the following data:

Metric	Value
Instances	1
OCPUs	0
Memory	0 GB
Storage	185 GB

Below the summary is a search bar for instances: "Search by instance name or tags". A dropdown menu is open on the right side of the page, listing "Platform Services" and "Cloud Stack". The "Platform Services" list includes: Database, Analytics, Autonomous Analytics, Big Data Cloud, Event Hub, and Event Hub - Dedicated.

Start the instance up - Analytics

The screenshot shows the Oracle Analytics Cloud console interface. At the top, there is a navigation bar with the Oracle logo and 'ORACLE CLOUD My Services'. Below this is a blue header with the 'Oracle Analytics Cloud' logo and a 'Welcome!' message. A secondary navigation bar contains 'Instances', 'Activity', and 'SSH Access', with 'Instances' being the active tab. The main content area shows a summary of resources: 1 Instance, 0 GB Memory, 310 GB Storage, and 1 Public IP. Below the summary is a section for 'Instances' with a search bar and a 'Create Instance' button. A specific instance named 'AlertsDAC' is highlighted, showing its status as 'Service Stopped' and a 'Start' button. A dropdown menu is open over the 'Start' button, listing options: Start, Stop, Restart, Access Rates, SSH Access, and Add Tags. A note at the bottom states: '* The configured values for CPU and memory are shown here. Because this instance is stopped, these resources are currently not used.' Below the note is a link for 'Instance Create and Delete History'.

ORACLE CLOUD My Services

Oracle Analytics Cloud

Welcome!

Instances Activity SSH Access

As of Aug 8, 2018 12:57:07 PM UTC

Summary

1	0 GB	310 GB	1
Instances	Memory	Storage	Public IPs

Instances

Search by Instance name or tags

Create Instance

AlertsDAC

Status: Service Stopped

Version: 18.2.1-1506

Edition: Oracle Analytics Cloud...

Submitted On: Jul 2, 2018 1:46:11 PM UTC

Oracle Analytics Cloud URL

- Start
- Stop
- Restart
- Access Rates
- SSH Access
- Add Tags

* The configured values for CPU and memory are shown here. Because this instance is stopped, these resources are currently not used.

▶ Instance Create and Delete History

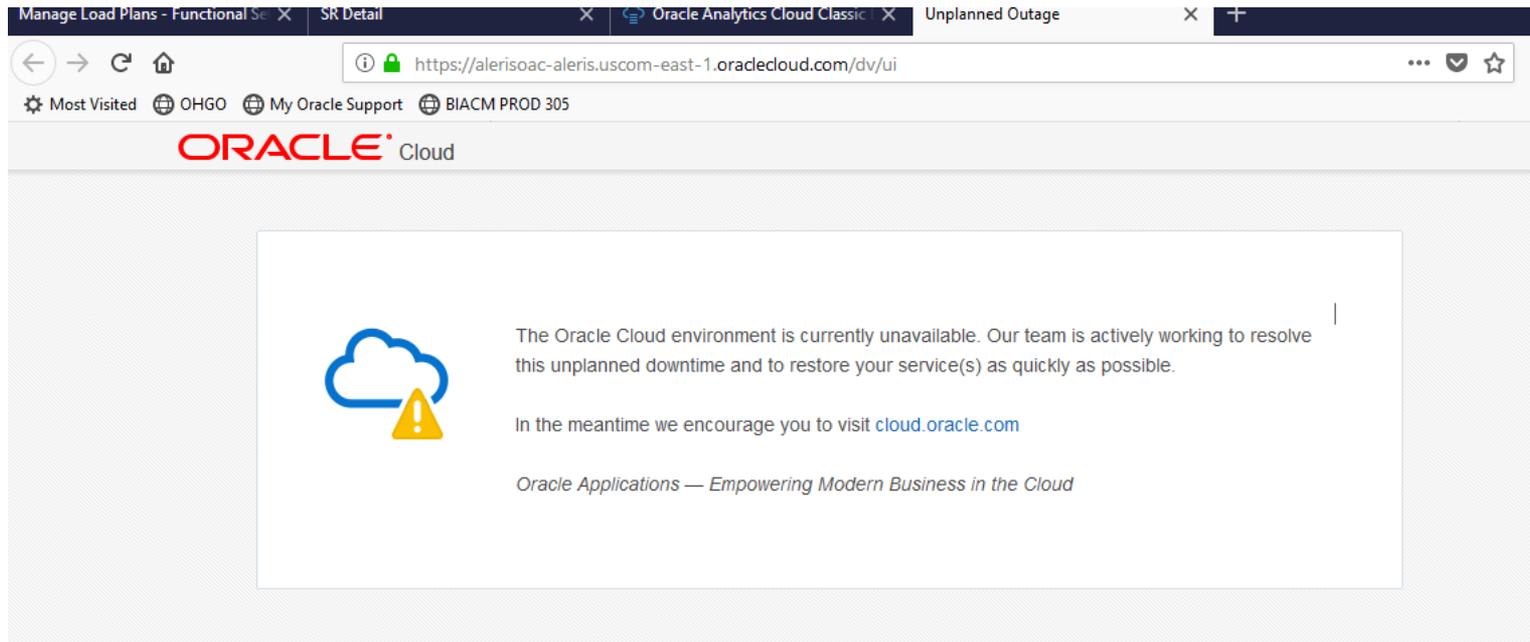
Patching

The screenshot shows the Oracle Cloud My Services interface for AlerisOAC. At the top, there is a navigation bar with the Oracle logo and 'CLOUD My Services'. Below this, the page title is 'Platform Services / AlerisOAC'. A notification banner indicates 'Precheck is in progress for patch Monthly Update 18.2.1-1510'. The main content area is divided into two tabs: 'Overview' and 'Patching'. The 'Patching' tab is active, showing 'Available Patches' as of Aug 13, 2018 5:11:10 PM UTC. A single patch is listed: '18.2.1-1510' with a release date of 'Aug 3, 2018 12:00:00 AM UTC' and 'Requires Restart: No'. There are links for 'Readme', 'Release Notes', and 'Precheck in progress'. Below the patches, there is a section for 'Patch and Rollback History'. On the left side, there is a sidebar with 'Administration' and 'Patches Available: 1'. At the bottom of the sidebar, it shows 'Aug 13, 2018 11:58:27 AM UTC' and 'Last Successful Backup'.

Passwords

- In older version needed reset in three places
 - Console
 - Database
 - Analytics
- Caused issue with lockouts
- Resolved in newer version

Unplanned downtime



The screenshot shows a web browser window with the following elements:

- Browser Tabs:** "Manage Load Plans - Functional Se...", "SR Detail", "Oracle Analytics Cloud Classic", and "Unplanned Outage".
- Address Bar:** "https://alerisoac-aleris.uscom-east-1.oraclecloud.com/dv/ui".
- Navigation:** Back, forward, refresh, and home icons.
- Bookmarks:** "Most Visited", "OHGO", "My Oracle Support", and "BIACM PROD 305".
- Header:** "ORACLE Cloud" logo.
- Message Box:**
 - 
 - The Oracle Cloud environment is currently unavailable. Our team is actively working to resolve this unplanned downtime and to restore your service(s) as quickly as possible.
 - In the meantime we encourage you to visit cloud.oracle.com
 - Oracle Applications — Empowering Modern Business in the Cloud*

Active Directory Tie in

Need to create a bridge:

Manage the bridge from Oracle Identity Cloud Service

The Oracle Identity Cloud Service UI allows you to manage the connection between Oracle Identity Cloud Service and the Identity Bridge agent.

1. In the Oracle Identity Cloud Service console, expand the Navigation Drawer , click Settings, and then click Directory Integrations.
2. Review the bridge page:
Tip: This is the same page you review after downloading the Bridge Agent.
 - o The bridge `example.com` status is Active.
3. You can click the bridge and modify the configurations. You can also run an import.
4. Optionally, explore the options for the bridge agent row. Oracle Identity Cloud Service offers options for deactivating, activating, and deleting a bridge.

Active Directory

The screenshot displays the Oracle Identity Cloud Service (IDCS) dashboard for user mark.whitlock@alers.com. The interface includes a navigation sidebar on the left with options like Dashboard, Users, Groups, Applications, Jobs, Reports, Settings, Security, and My Services. The main content area features a welcome message and a 'Here's what you can do' section with links for 'Watch the Video', 'Learn More', and 'What's New'. Below this, a 'Filter by Date Range' dropdown is set to 'Last 30 Days'. The dashboard is divided into six data cards:

Category	Total	Created	Removed
Users	1596	1593	0
Applications	17	1	0
Groups	36	34	0
Passwords	0	0	0
Logins	29	29	0
All Reports	5	5	0

Scaling

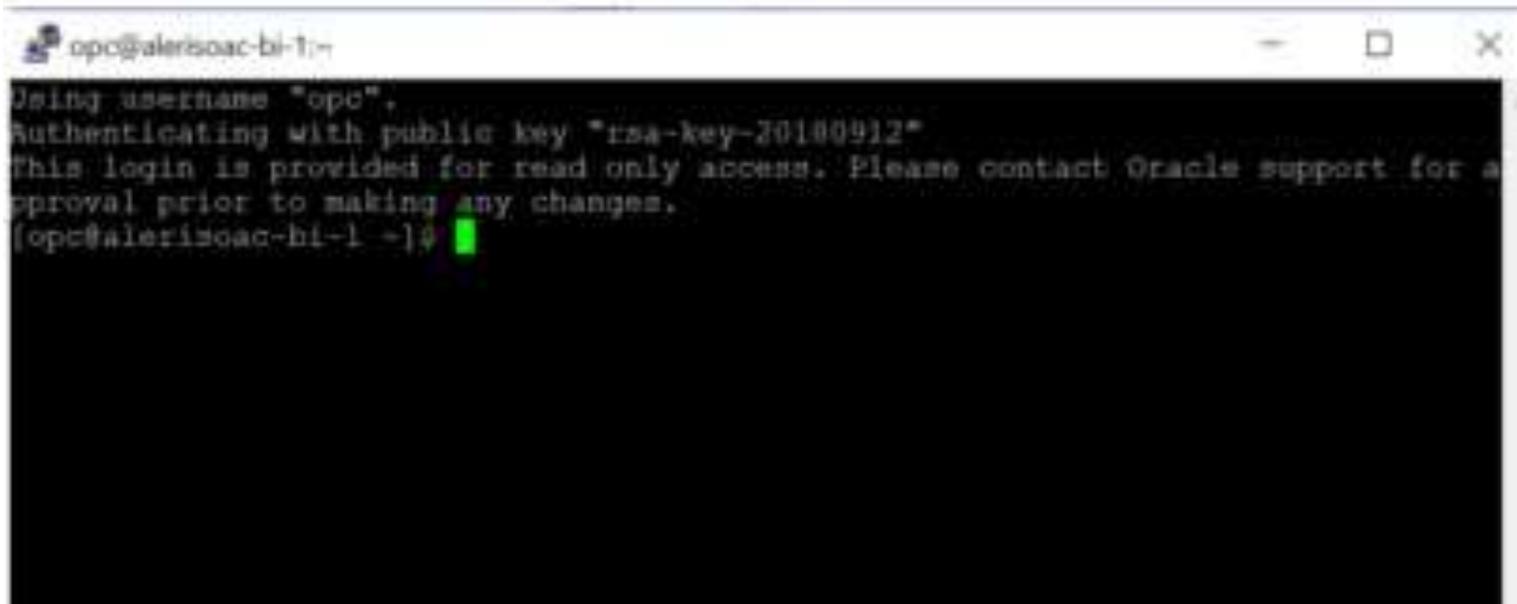
The screenshot shows the Oracle Analytics Cloud (AlerisDAC) Instance Overview page. The instance name is 'aleris2ac-b1-1' and it is currently using the 'OC3' compute shape (1.0 OCPU, 7.5GB RAM). A 'Scale Up/Down' dialog box is open, displaying a list of available compute shapes. The current shape 'OC3' is highlighted in blue. The dialog also includes a warning: 'aleris2ac-b1-1 is currently using shape. out of resources required.' and a note: 'Note that the instance will be unavailable'. The 'Yes, Scale Up/Down VM' button is visible.

Compute Shape	OCPU	RAM
OC3	1.0	7.5GB
OC3m	1.0	15.0GB
OC3n	2.0	30.0GB
OC5	4.0	30.0GB
OC3m	4.0	60.0GB
OC5	6.0	60.0GB
OC4m	6.0	120.0GB
OC7	16.0	120.0GB
OC5m	16.0	240.0GB
OC6	24.0	180.0GB
OC9	32.0	240.0GB
OC3	1.0	7.5GB

Instance Overview Details:

- Nodes: 1
- Status: Ready
- Administration Port: 7001
- Public IP: 129.158.107.160
- Instance: fura-analytics-server-1
- Storage: 310 GB
- Version: 18.2.1-1510
- DB Connect Descriptor: false
- OCPU: 2
- Memory: 15 GB
- Storage: 310 GB

Tools - PUTTY



```
opc@alerisoac-bi-1:~  
Using username "opc".  
Authenticating with public key "rsa-key-20180912"  
This login is provided for read only access. Please contact Oracle support for a  
approval prior to making any changes.  
[opc@alerisoac-bi-1 ~]$
```

Reasons Not to Fear the Cloud

- **It's a lot like on premise environment**
- **Still not ready for Prime Time (Almost)**
- **There is still time to acquire Cloud Skills (free)**

Questions and Answers

mark.whitlock@aleris.com

