

**NCOAUG**  
NORTH CENTRAL ORACLE APPS USER GROUP  
**TRAINING DAY**  
**AUGUST 1, 2019**



# 5 Steps to Move On-Premise Oracle BI Applications to the Cloud

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# Agenda

1. About Me
2. Why move Oracle BI Applications to the cloud?
3. Before you start
4. Different paths to the cloud
5. Implementing different paths
6. What has changed in the past year
7. About HEXstream

# About Me

- Director of HEXstream's Analytics Practice
  - Co-author of *Oracle BI Applications – Deliver Value Through Rapid Implementation*
  - Over 30 years in decision support, data warehousing, BI, analytics, and whatever else it is called.
  - Expert in business case development for Analytics, both ROI and TCO.
  - Expert in Analytics Roadmaps and Centers of Excellence
- 
- Twitter: @wphutch



# Why move Oracle BI Applications to the cloud?

1. Take advantage of new features
  - In OAC
  - In Autonomous Data Warehouse
2. Your organization wants you to go to the cloud
3. You don't have extensive DBA or OBIEE configuration resources
4. Your organization has capital constraints or prefers operating expenses
5. You have Fusion Applications and need the cross-functional analytics that BI Applications provide that approaches like OTBI do not

# Before you start

1. Plan. Plan. Plan some more.
2. Manage this as a project.
3. Clean up your RPD and Webcat. Don't pave the cow path.
  1. Identify seldom used and duplicate dashboards, reports, etc.
  2. Standardize color schemes, report layouts, etc.
  3. Standardize folder structures, filter layouts.
  4. Have you changed the underlying data model?
  5. Clean up your security.
4. Develop a training program around new features.
  1. For end users, new visualizations
  2. For administrators, training on the material in OAC 5.1
  3. For DBA's, how their job will change if and when an autonomous database arrives
5. Get someone to help who has done this before.

# Different paths to the cloud

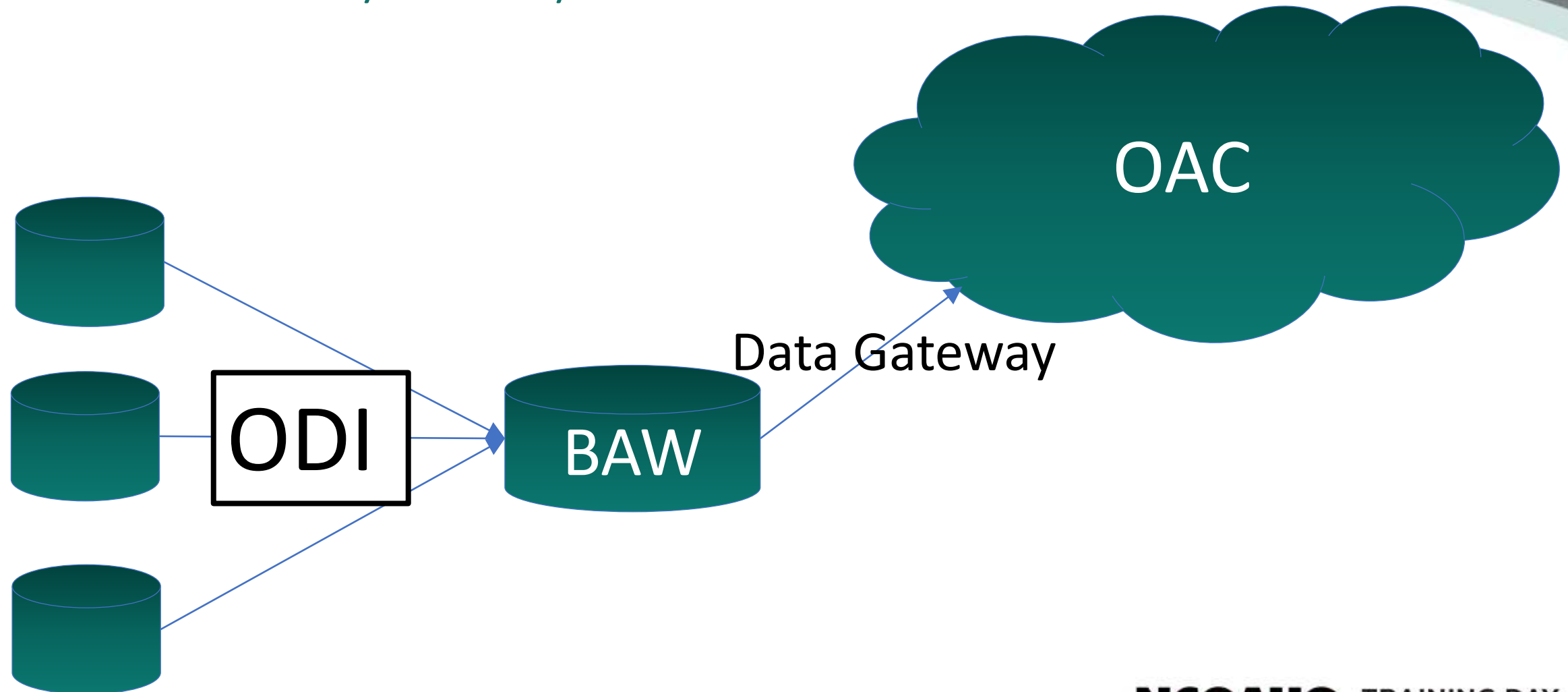
- Visualization only
- Visualization and database
- Visualization, database, and integration
- Source system, integration, database, and visualization
  - Source system is Apps Unlimited on IaaS
  - Source system is SaaS

# Moving the visualization layer to OAC

- Architecture
- Starting with OBIEE 12c
- Starting with OBIEE 11g



# Visualization Layer-Only Architecture





# Starting with OBI EE 12c

1. Create BAR file of RPD and Webcat
2. Download it to your file system
3. Import it as a snapshot into OAC
4. Install Data Gateway from OTN into WebLogic
5. Connecting the pieces together
  - Validate your users, roles, groups
  - Validate that your data source connections were imported correctly

# Starting with OBI EE 11g

1. Create JAR file containing RPD and Webcat using the Migration Utility
2. Use the tool to capture the RPD, Webcat, users, roles
3. Use the Manage Snapshots feature of OAC to import the JAR file into OAC.
4. Install Data Gateway from OTN into WebLogic
5. Connecting the pieces together
  1. Validate your users, roles, and groups
  2. Validate that your source data connections came over properly
  3. Verify that you can access your dashboards, reports, and other content

# Moving the database layer

- Architectures
- Starting with DB EE 11g
- Starting with DB EE 12c
- DB CS EE, Exadata, or autonomous data warehouse?

# Database plus Visualization Architecture



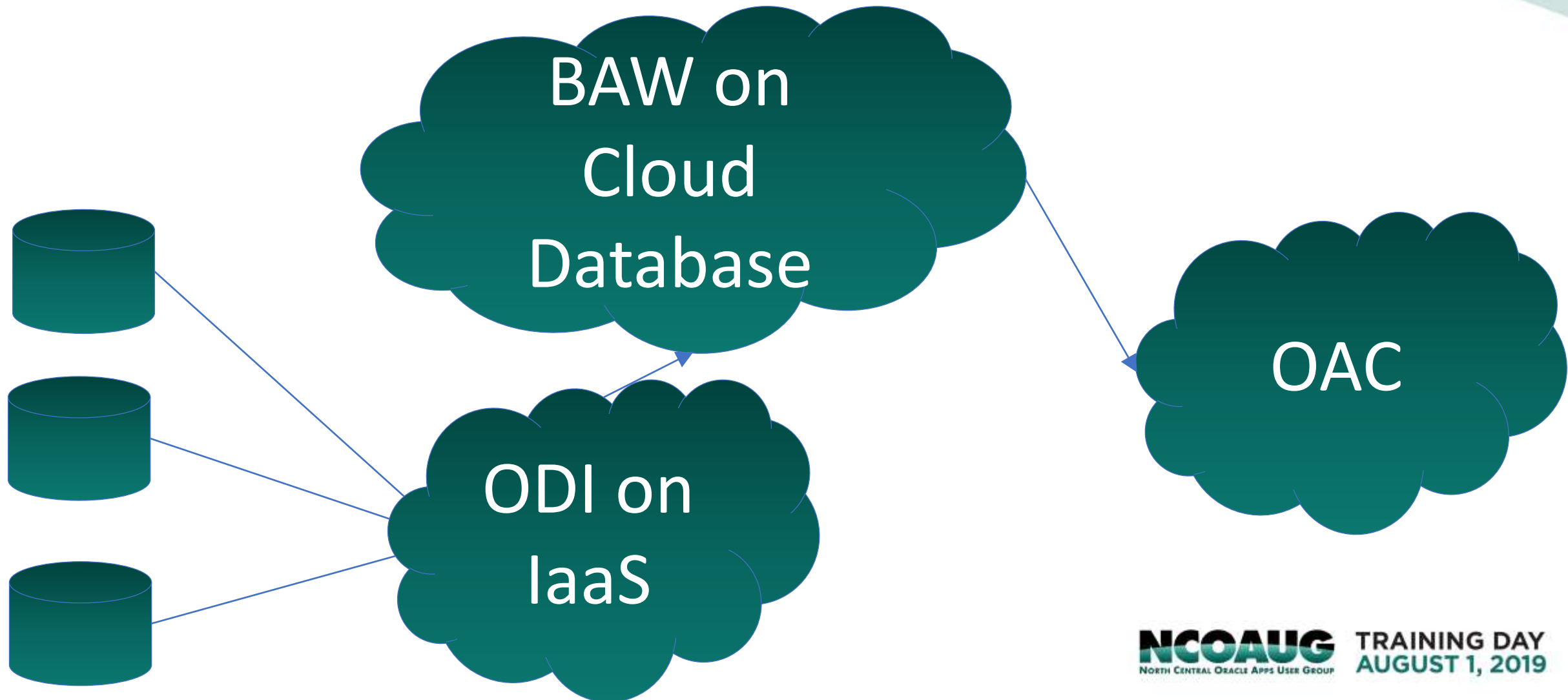
# Migrating to Cloud Database

1. There are many ways to do so. Here's a relatively easy one.
  1. Take a dump of your current database using Data Pump Export.
  2. Move the dump file to cloud object store file system
  3. Load cloud database using Data Pump Import
  4. Oracle recommends you use schema mode
  5. You can use SQL\*Developer in conjunction with Data Pump
2. Make the target of the ODI mappings the URL of your Cloud database
3. Modify OAC connection pool to point to cloud database
  - Use a wallet to set up secure credentials

# Target database types – DB CS EE, Exadata CS, or Autonomous Data Warehouse

- If you need a customer-managed environment, you will need DB CS EE High Performance. Price your configuration accordingly.
- Check the costs. Oracle changes prices frequently.
  - Sometimes it pays to use DB CS EE. Other times it pays to use Autonomous DW.
  - Don't forget to put DBA costs into your DB CS EE calculations.
- For very large databases, will your database fit into the largest compute shape?
  - Largest today is 24 OCPU's and 320 GB RAM.
  - If not, you will have to use bare metal X7 or Exadata CS.

# Cloud-Based Integration, Database, and Visualization Architecture

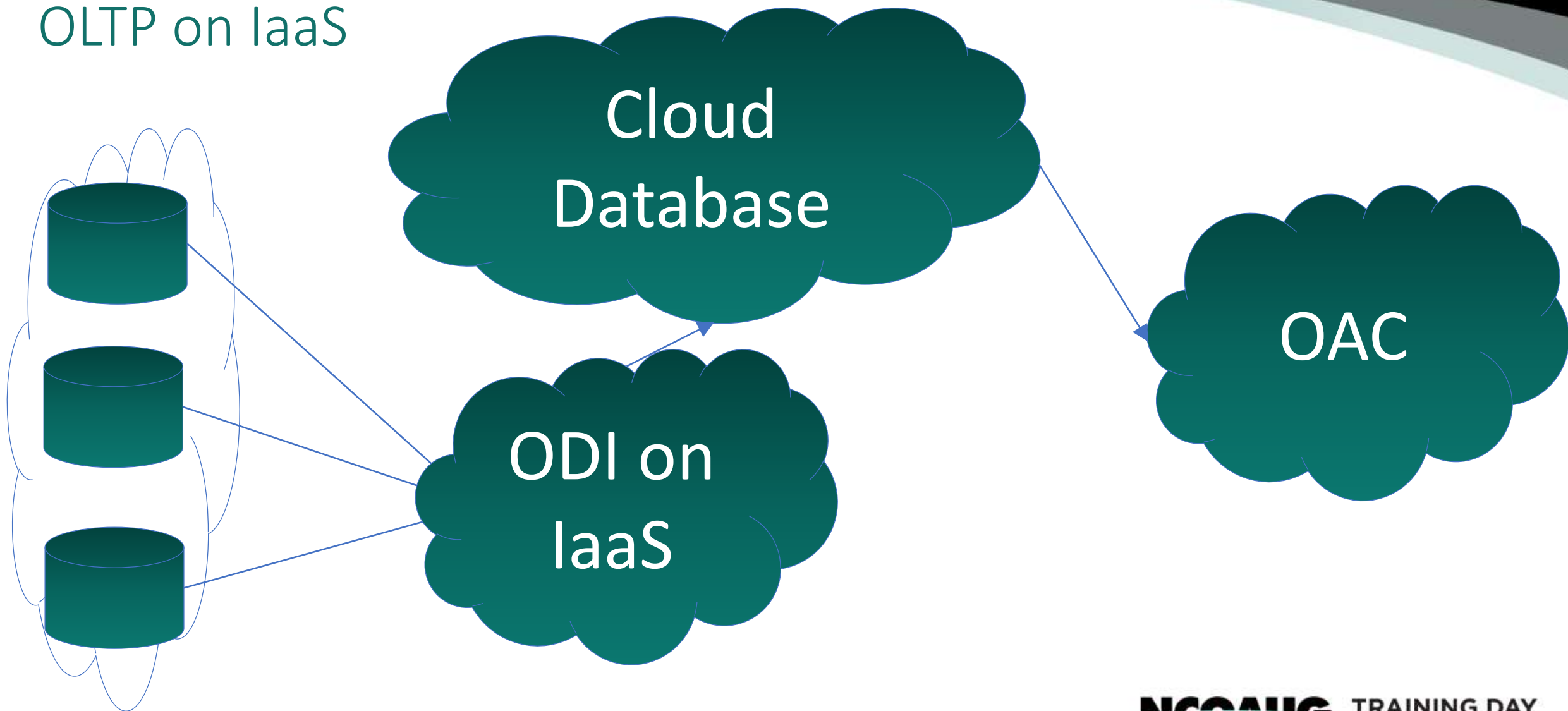




# Adding integration to the mix: it works theoretically, BUT

- Oracle BI Apps are only supported on ODI 11g
  - Therefore, you have to run ODI on IaaS, not ODI Cloud Service
- Having integration in the cloud to pull data means you have to poke holes in your firewall.
  - Poking holes in your firewall will not please your information security people.
  - It requires VPNaaS.
- Therefore, we don't recommend it for Oracle BI Apps.

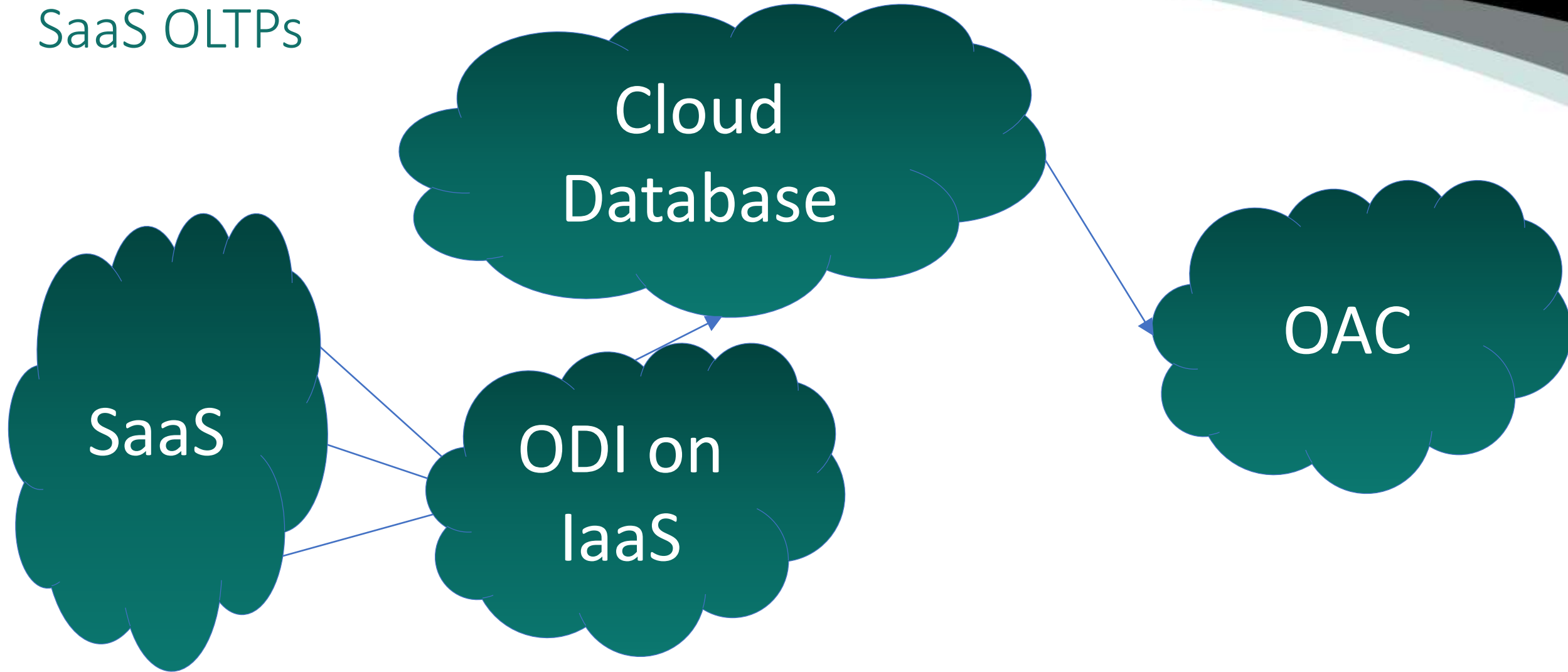
OLTP on IaaS



# Cloud-Based BI with OLTP on IaaS

1. When the OLTP is on the cloud, we avoid the security issues of the prior architecture.
2. From ODI's point of view, it looks exactly like your OLTP database is on premise.
3. The value proposition compared to just database and visualization is small.

SaaS OLTPs



# Connecting OBIA to SaaS Applications

## 1. SaaS connectors exist for 11.1.1.10.x

- Taleo
- Service Cloud (RightNow)
- Sales Cloud
- HCM Cloud
- Financials Cloud
- Procurement Cloud
- Project Cloud

## 2. Oracle talked about a successor to OBIA at the analytics summit in June, they said it is about 12 months out at that time. Initially, it will connect to SaaS apps only.

# What has changed in the past 12 months

- VPNaaS now works reliably to connect to ODI or OAC.
- OAC on OCI has replaced OAC Classic on OCI Classic
  - No need to specify storage, database for OAC
  - More reliable
- Autonomous database is available
  - Much simpler to provision
  - Use a large memory shape
- OAC 5.1's admin features
  - Richer, more flexible snapshots
  - Easier connections to Autonomous TP and DW
  - DSS API's

# What about 11.1.1.10.3?

- Oracle has talked about OBIA 11.1.1.10.3.
  - Ship date “within the next 12 months”, according to Oracle. Usual disclaimers apply.
  - Supports ODI 12c.
- Why should you care?
  - No two headed install of WebLogic
  - ODI CS should work.
  - Therefore, all cloud architectures should be more straightforward.
  - Premier support extended until “at least 2030”
- BUT
  - From what we have heard, the use of reusable objects in ODI 12c will make migrating customized ETL mappings more difficult.

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# About stream

- Global full-service digital transformation company that is highly specialized in Data Fabric and Analytics
- Solutions-oriented consulting company
- Focus on thought leadership beyond implementation capabilities
- Advisory, Implementation, Training, and Managed Services
- Deep industry experience in many verticals



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Thank you!

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