

Demystify Oracle 23ai for EBS and Oracle EBS Natural Language Query

What E-Business Suite
Clients Need To Know



A23A Is Huge And IS On A Collision Course!



Giant iceberg on crash course with island, putting penguins and seals in danger

22 January 2025

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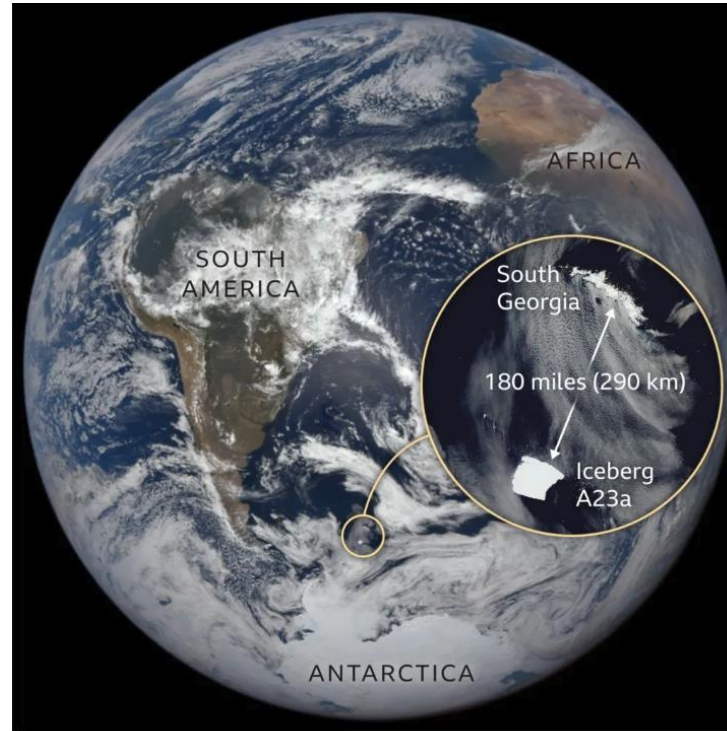
Georgina Rannard
Climate and science reporter

Erwan Rivault
Data journalist



The world's largest iceberg is on a collision course with a remote British island, potentially putting penguins and seals in danger.

The iceberg is spinning northwards from Antarctica towards South Georgia, a rugged British territory and wildlife haven, where it could ground and smash into pieces. It is currently 173 miles (280km) away.



Source: Nasa Dscovr Epic, 15 January 2025 / Nasa Modis, 15 January 2025 BBC

Syntax's Post



Syntax

95,597 followers
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Discover the potentials of Oracle Database 23ai

Join our expert, [Mike Miller](#), to explore how this certification unlocks AI capabilities, enhances performance, and optimizes your Oracle investments.

Feb 13 | 1-2 PM ET

Register now: <https://lnkd.in/gvzMEibs>



Mike Miller

1w · Edited

A23A is enormous and on a collision course, but it is also the world's largest iceberg (<https://lnkd.in/ef9J5JaM>). Oracle 23ai is likewise huge and on a collision course. For Oracle E-Business Suite customers, Oracle 23ai is not just the certification of the latest Oracle database server in the E-Business Suite's 30-year history. Oracle 23ai, with its vector search, will have an enormous impact on EBS reporting, trending, and forecasting (think A23A!).

<https://www.bbc.com/news/articles/cd64vvg4z6go>

OATUG

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Speaker – Moderator



Mike Miller

Syntax Senior Solution Architect

- Over 25 years of working with enterprise software and information security technologies
- Experience with enterprise software implementation and support, cloud operations, and executing compliance and risk management programs.
- A CISSP, Certified Information Systems Security Professional
- Oracle ACE Associate



Syntax



- Founded in 1972 in Montreal, Canada, Syntax is a global company with 3,600+ employees across 15 countries
- Syntax provides full-stack, full-lifecycle Cloud Managed Services and Application Managed Services focused on leading ERP solutions such as JD Edwards, Oracle E-Business Suite, and SAP
- Syntax is a multicloud partner and supports OCI, AWS, Azure, GCP, and Syntax Enterprise Cloud®
- Our ERP solutions include an array of value-add services, including our AI-driven monitoring and automation platform, CxHub customer experience portal, security management, and FinOps



Expertise in
**Cloud Service Solution
OCI Migration**
in NAMED-North America



Expertise in
**Oracle E-Business Suite
Applications to Oracle Cloud**
in North America



Expertise in
**JD Edwards Applications
to Oracle Cloud**
in North America



Expertise in
**Oracle Cloud Platform -
Oracle Cloud Platform Integration**
in North America



Expertise in
**CSPE: Oracle Cloud Platform -
Oracle Cloud Platform
Data Management**
in North America



Expertise in
**CSPE: Oracle Cloud Platform -
Oracle Database to Oracle Cloud**
in North America

Speaker



Mike Rulf

Americas CTO

- Over 2 decades managing large technology organizations
- Hands-on involvement in the design, installation, maintenance and extension of large distributed software solutions
- Multi-cloud and SaaS platform architect with a strong focus on information security for large organizations



What is the mission? How Does Oracle 23ai Impact It?



Empower decision-making and drive innovation by gathering, accurately identifying and harnessing the power of your data to unlock opportunities and enhance growth



Data Analytics

Supports the identification, collection, optimization and centralization of data from across the enterprise.

Enables your organization to undergo a cultural shift that encourages data literacy to gain insights and make better decisions.



Generative AI

Enhances interpretation of large, complex data sets & present findings in a more accessible way so non-technical stakeholders can understand & act on insights.

Generate predictive insights based on historical data so your organization can anticipate trends, forecast outcomes and make proactive decisions.



Hyperautomation

Empowers organizations to optimize their processes, enhance their capabilities and maintain a competitive edge in this rapidly evolving business landscape.

Data-driven companies are growing at an average of more than 30% annually
-Forrester Research

By 2022, 90% of corporate strategies will explicitly mention information as a critical enterprise asset and analytics as an essential competency
-Gartner

By 2023, organizations that promote data sharing will outperform their peers on most business value metrics
-Gartner

Oracle 23ai Will Impact Your Journey to Become a Data-Driven Enterprise



1

Plan

- Strategy
- Expectations
- Investment Alignment

2

Governance

- Publish Dos & Don'ts
- Publish Policies

3

Establish COE

- Setup internal board
- Communication

4

Identify Use Cases

- Workshops (top down)
- Contests (bottom up)
- Identify pilots

5

Tech Stack

- Select stack
- Hyperscaler
- Select Model(s)

6

Deploy Chat Agent

- Deploy private virtual agent
- Implement guardrails
- Ingest private data

7

Execute Pilots

- Controlled groups
- Measurable outcomes

8

Train Employees

- End-users / Consumers
- All Employees

9

Leverage

- Add GenAI & Analytics to existing solutions
- Build new solutions

10

Disrupt

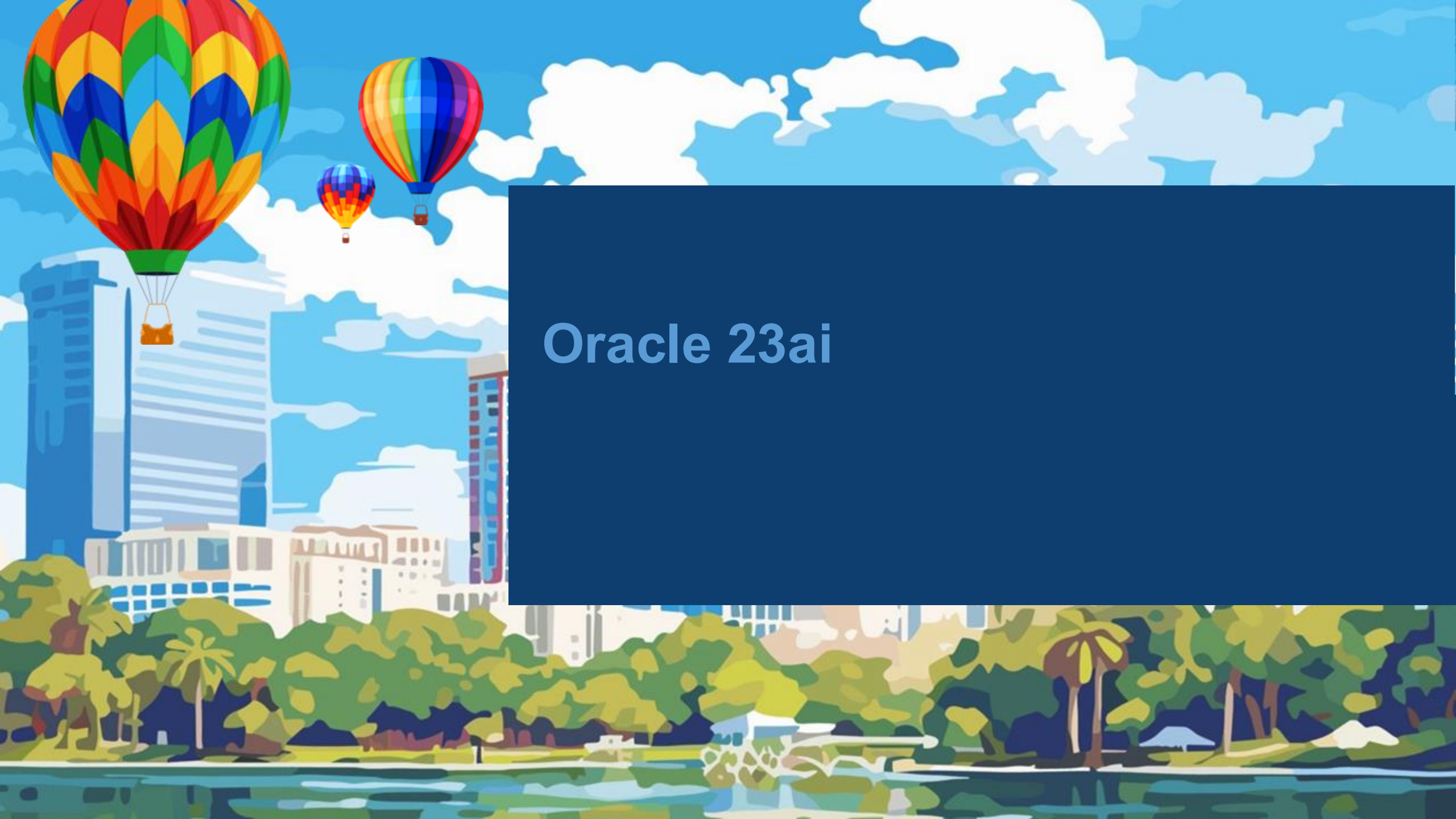
- Hyperautomation
- Intelligent Workflows
- GenAI & Data Agents

The main challenges for executives are identifying where and how generative AI fits into existing and future business and operating models, how to experiment productively with GenAI use cases, and how to prepare for the longer-term disruptions and opportunities resulting from GenAI trends. - *Gartner*

Agenda



- Oracle 23ai
 - 23c, 23ai and 23.5
 - Themes and Features
 - Vector Tutorial
- EBS and 23ai
 - EBS 23ai Certification
 - Vectors for EBS
 - Impact on analytics, BI, and reporting
 - Project Plan to Upgrade to 23ai
- EBS Natural Language Query (you don't need 23ai)
- Closing Comments



Oracle 23ai

Oracle 23ai Perspective and History

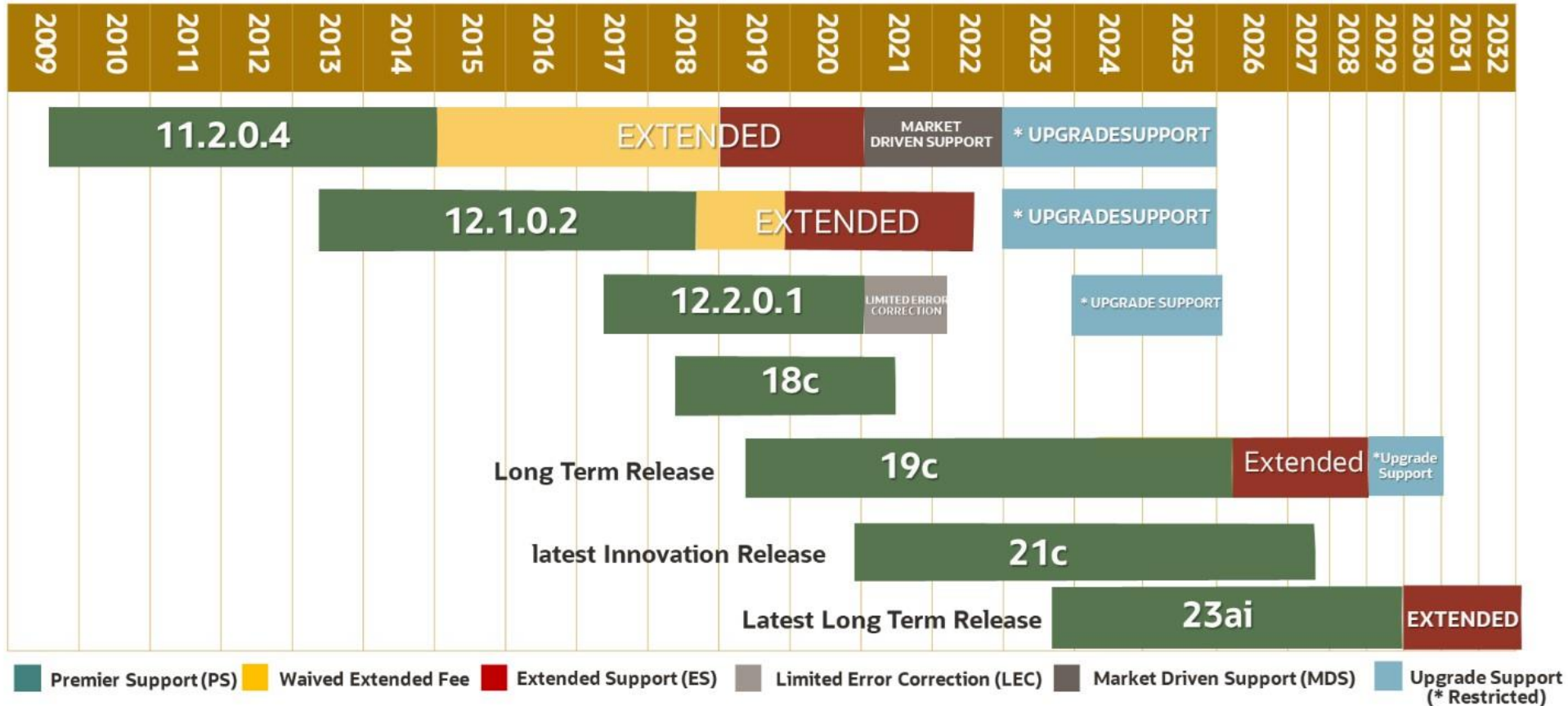


- Oracle database server versions
 - Oracle 8i (1999) delivered JVM in the database and Java Stored Procedures
 - Oracle 9i (2001) delivered Real Application Cluster (RAC)
 - Oracle 10gR2 (2005) delivered TDE
 - Oracle 12c (2013) delivered multi-tenant PDBs
 - *Oracle 23ai (2024) delivers vectors, ML, AI, and more!*
- 23c was first, and with 23.4 was renamed 23ai
 - 23.4 (ai) delivered vector datatypes, 23.6 is the current release
 - 300 new features and thousands of enhancements
 - Currently only available at OCI (this will change)
 - OCI Exadata as a Service or OCI Database as a Service
 - Exadata at AWS, Azure, GCP
 - Cloud@customer/Exadata@customer

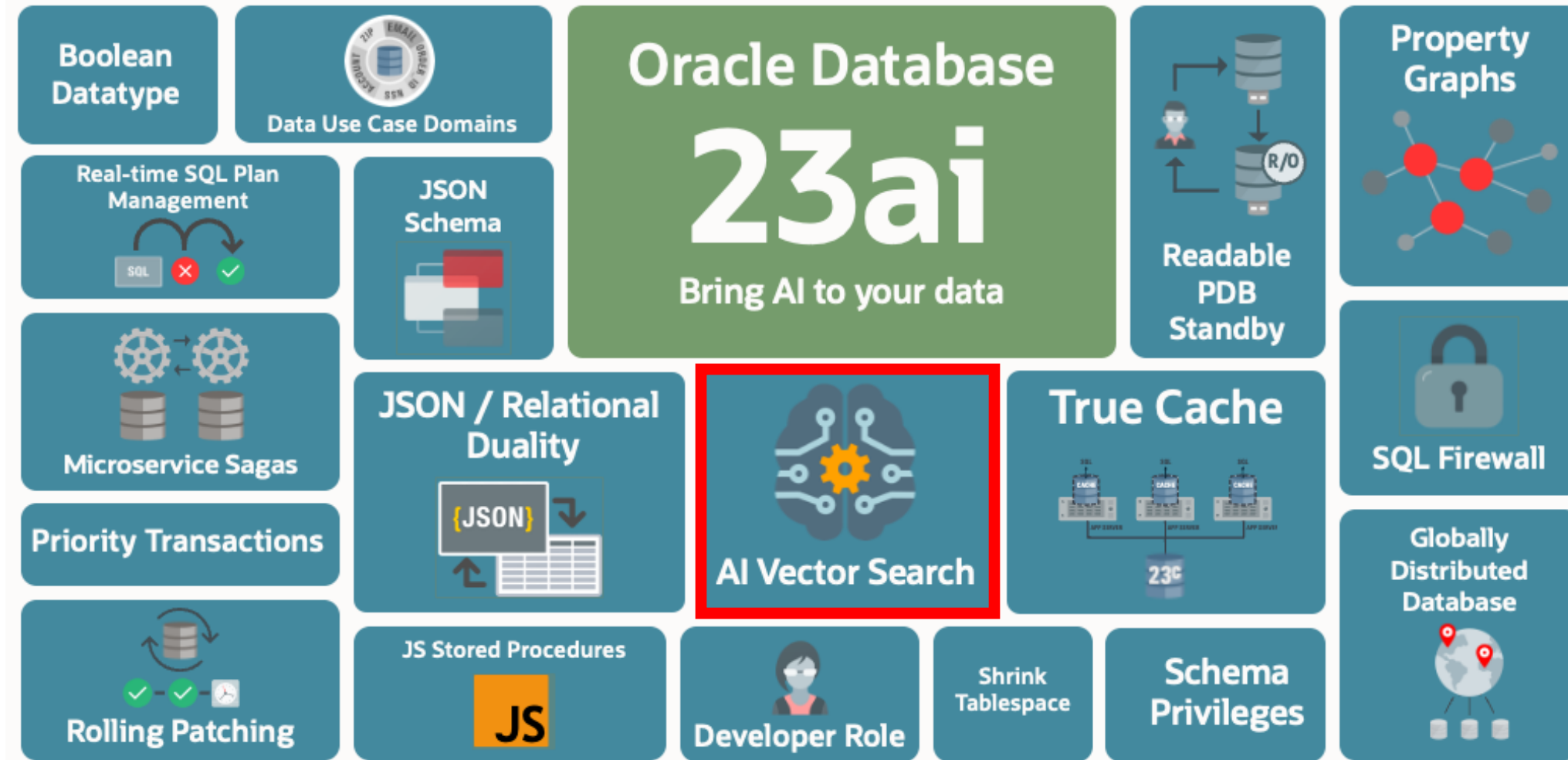
Oracle 23ai Is the Latest Long Term Support Version



Database Releases and Support Timelines



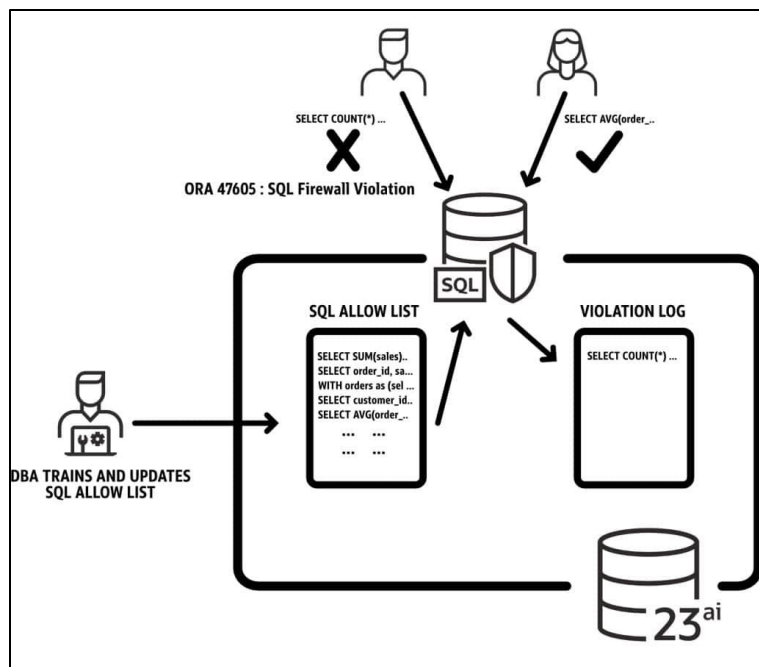
Oracle Database 23ai – Long-term Support Release



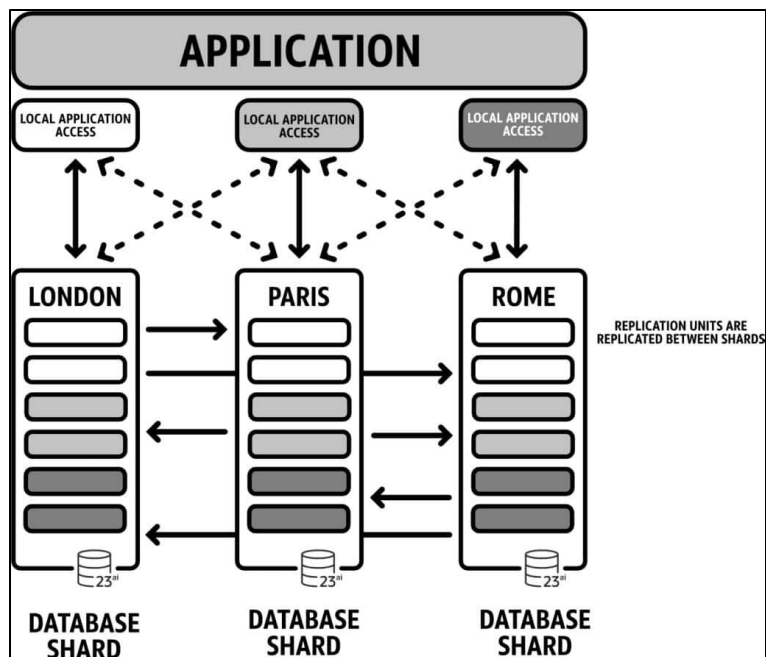
23ai Features That Hopefully we will see Oracle EBS Development deliver new functionality using

<https://blogs.oracle.com/database/post/oracle-23ai-now-generally-available>

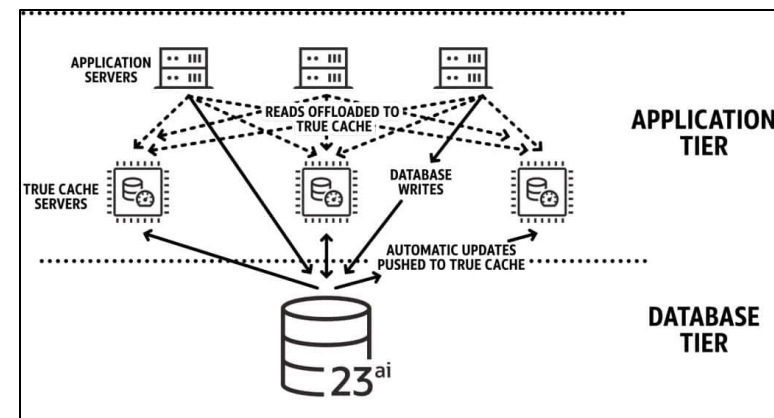
1. Vectors (more on this later)
2. SQL Firewall within the Database Kernel
3. RAFT Replication for data sovereignty and DR
4. True Cache for performance



Security: SQL Firewall In The Kernel



RAFT: Logical Sharding



Performance: True Cache

23ai Allows SQL to Access ML Models Written in Python and R



With 23ai Machine learning models produced using native Python and R packages: These can be produced using Python and R environments, possibly leveraging GPU resources, or by using [Oracle Machine Learning for Python](#) (OML4Py) and [Oracle Machine Learning for R](#) (OML4R) embedded execution.

Your data scientists will love this!

Use Python and R models stored in your database

Using Oracle Machine Learning, you can instead bring these models to your database and store them using the datastore feature of OML4Py and OML4R. See [How to store R and Python objects in Oracle Database](#) to learn more about this capability.

Further, you can invoke your user-defined Python or R functions that load these models directly from the database for inferencing or other purposes. Using OML4Py or OML4R embedded execution, such user-defined functions can be run in database-spawned and managed Python or R engines. Apart from using Python or R APIs, you can invoke these functions from SQL, and on Autonomous Database, also from REST endpoints. Further, you can use third-party Python and R packages with your user-defined functions.

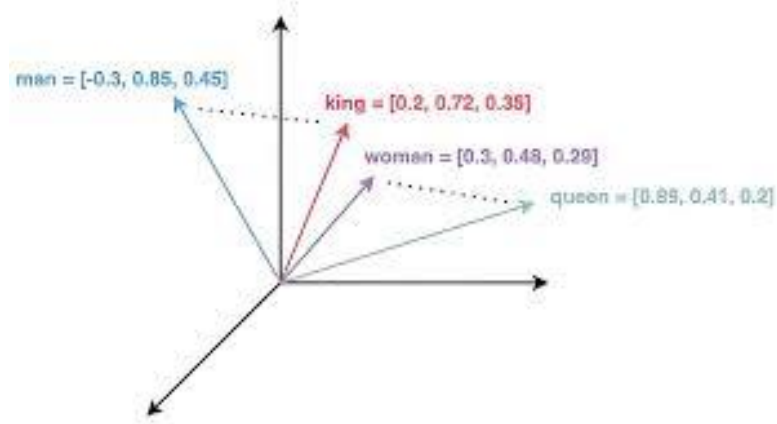
<https://blogs.oracle.com/machinelearning/post/enhance-your-ai-ml-apps-with-flexible-byom-options>



Vectors

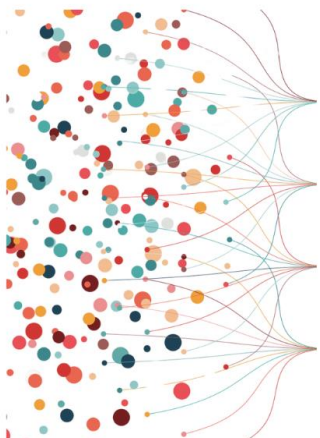
Bigger than RAC or TDE!

What Are Vectors?

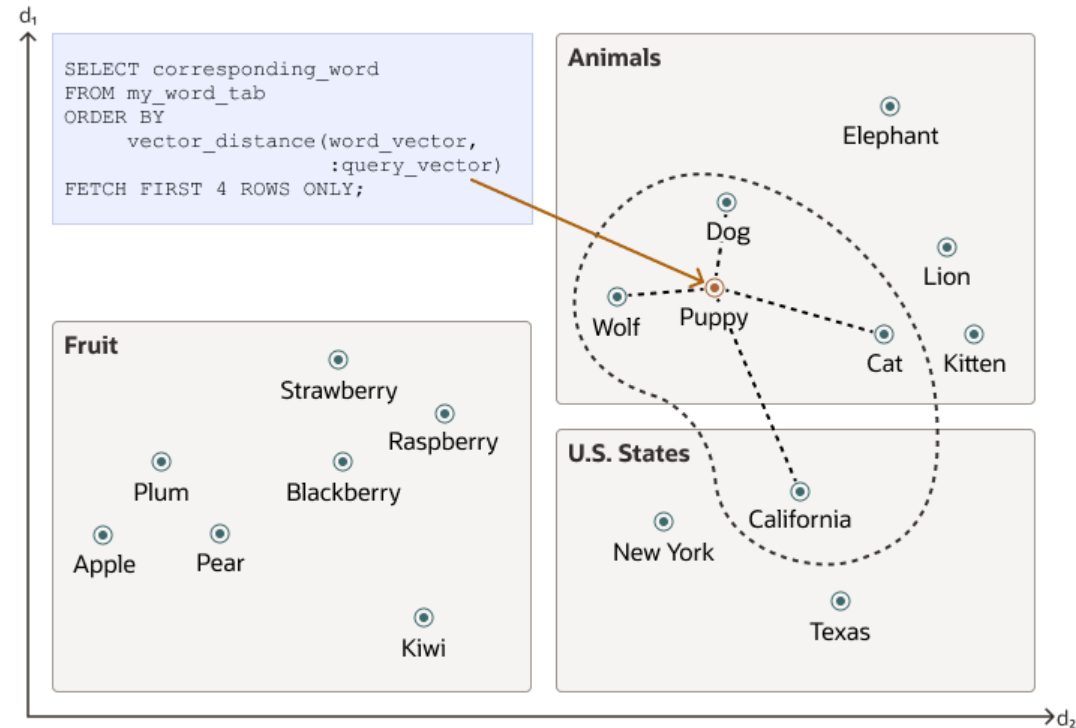


Data

Vector Embeddings/
Vector Data



-0.32643065,
-0.12308089,
-0.2873811 ,
-0.99628943,
-0.2503798 ,
0.24311952,
0.5662387 ,
0.17282294,
-0.1109335 ,
0.15209009,
0.47017908,
-0.19270805,



Think of creating a vector of 1,024 facts or attributes of data about the words 'pear' or 'dog' or 'Texas'

Oracle 23ai Vectors In Action



```
SQL> select id, title, vg_vec1 from VECTOR.VIDEO_GAMES_VEC order by id;
```

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS	JUPYTER	QUERY RESULT	SCRIPT OUTPUT	SQL HISTORY
Fetched 200 rows in 2.687 seconds								
	ID	TITLE	VG_VEC1					
1	1	Super Mario 64 DS	[-6.20727539E-002,-3.57666016E-002,5.04760742E-002,4.42504883E-002,-2.70080566E-002,8.2244873E-003,-6.12792969E-002,-3.58581543E-002,1.73492432E-002,4.7302					
2	2	Lumines: Puzzle Fusion	[-5.98754883E-002,-5.63049316E-002,1.23062134E-002,2.76489258E-002,-1.25274658E-002,-1.73473358E-003,2.95562744E-002,-7.98034668E-003,-6.07299805E-002,1.275					
3	3	WarioWare Touched!	[-1.5625E-002,4.93164062E-002,3.76586914E-002,1.02310181E-002,-2.00805664E-002,-4.56237793E-003,3.02734375E-002,-9.01794434E-003,-1.45721436E-002,7.85522461E					
4	4	Hot Shots Golf: Open Tee	[7.75146484E-002,-2.59552002E-002,-3.96118164E-002,2.24456787E-002,4.51965332E-002,6.35986328E-002,1.33972168E-002,-2.33001709E-002,-5.20629883E-002,-5.3619					
5	5	Spider-Man 2	[-2.10418701E-002,-2.86254883E-002,-4.45251465E-002,-1.00421906E-003,-3.06396484E-002,1.10092163E-002,-8.67462158E-003,1.14974976E-002,-3.39050293E-002,-1.72					
6	6	The Urbz: Sims in the City	[9.61303711E-002,1.35498047E-001,-4.97436523E-002,-1.06582642E-002,-3.31420898E-002,-1.38931274E-002,-6.46972656E-002,1.13525391E-002,-1.01257324E-001,3.94897					
7	7	Ridge Racer	[-9.03930664E-002,3.31726074E-002,1.98364258E-002,3.01513672E-002,-3.82080078E-002,5.94482422E-002,-3.70788574E-002,1.1907959E-001,-3.59191895E-002,-1.24893					
8	8	Metal Gear Ac!d	[-1.50512695E-001,2.84729004E-002,7.52563477E-002,-4.3182373E-002,-1.31530762E-002,1.01074219E-001,4.89425659E-003,-2.40631104E-002,-2.70996094E-002,1.315307					
9	9	Madden NFL 2005	[-1.63726807E-002,2.54669189E-002,-3.88183594E-002,6.39038086E-002,-1.60503387E-003,4.33349609E-002,-9.80224609E-002,7.8918457E-002,-9.96398926E-003,-4.08					
10	10	Pokmon Dash	[8.4777832E-002,2.70080566E-002,-6.33621216E-003,1.3885498E-002,-1.63116455E-002,-4.09851074E-002,2.97698975E-002,4.24194336E-002,-4.28161621E-002,4.1618347					
11	11	Dynasty Warriors	[7.65991211E-003,-3.5369873E-002,3.68041992E-002,-1.49536133E-002,-5.94482422E-002,4.73327637E-002,5.03540039E-002,-6.35623932E-004,-8.06427002E-003,-3.186					
12	12	Feel the Magic XY/XX	[-2.21099854E-002,-3.18908691E-002,1.40380859E-002,-3.38363647E-003,2.21099854E-002,3.72505188E-003,2.97698975E-002,3.9642334E-002,-5.02929688E-002,-4.325					
13	13	Ridge Racer DS	[-1.26953125E-001,2.65655518E-002,5.94787598E-002,8.62121582E-003,-7.02514648E-002,2.88238525E-002,-6.17980957E-002,8.71582031E-002,-8.33892822E-003,3.20129					
14	14	Darkstalkers Chronicle: The Chaos Tower	[-3.96118164E-002,2.68707275E-002,-5.55419922E-002,3.29589844E-002,-8.46099854E-003,4.93774414E-002,-6.31332397E-003,-2.61688232E-002,5.03845215E-002,-3.39					
15	15	Ape Escape Academy	[1.19995117E-001,-4.4342041E-002,8.38470459E-003,-2.53448486E-002,1.51348114E-003,5.10559082E-002,-8.41674805E-002,-7.88574219E-002,-1.46026611E-002,4.003906					
16	16	Polarium	[2.09197998E-002,1.6708374E-002,-1.12380981E-002,1.15234375E-001,-6.06384277E-002,-3.02886963E-002,-7.78198242E-003,5.24902344E-002,-1.25366211E-001,-4.46319					
17	17	Asphalt: Urban GT	[-3.02429199E-002,5.77087402E-002,5.2734375E-002,6.98852539E-002,-7.65228271E-003,-2.34375E-002,-2.26593018E-002,-1.89056396E-002,-7.73925781E-002,-3.1616210					
18	18	Zoo Keeper	[7.14111328E-002,-1.121521E-002,5.22232056E-003,-2.2315979E-003,5.60302734E-002,6.65283203E-002,-1.69677734E-002,4.56848145E-002,1.54418945E-002,2.69927979E-					
19	19	Mr. DRILLER: Drill Spirits	[-3.75976562E-002,-2.25257874E-003,-2.83660889E-002,6.92367554E-004,-3.23486328E-002,-3.58581543E-002,3.67736816E-002,-7.5378418E-002,-9.12475586E-002,-2.72					
20	20	...	...					

More info: <https://www.oracle.com/database/vector-search/>

Vector Tutorial In One Slide

- Vectors are new native database data type, no need for separate vector database (just like BOOLEAN is a new datatype with 23ai)
- Vectors and all new ai functionality is available for free with all versions of the Oracle database
- Exadata offloads VECTOR search queries for performance

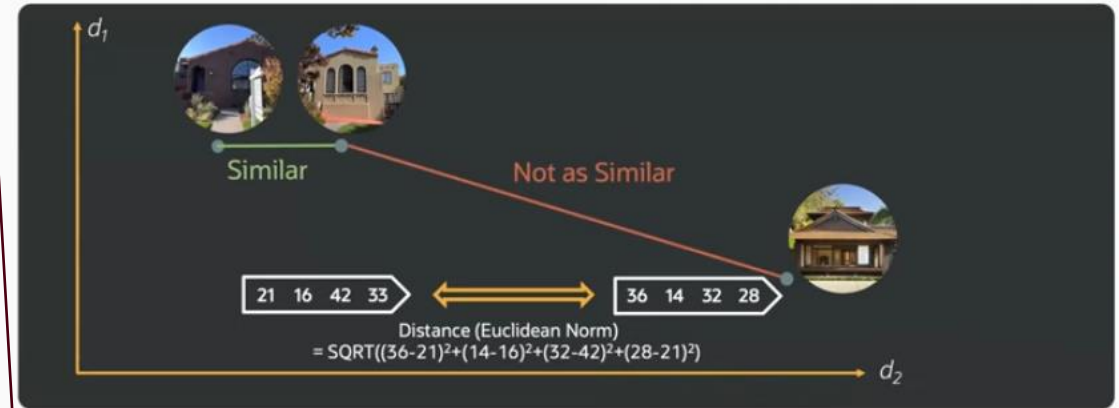
Example: the features for a house image could be



Note: In reality, ML algorithms determine features, so they are not as simple as shown here

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The distance between the vectors is proportional to their semantic similarity



Allows queries that combine AI vector search with business data about customers and products

Combines customer data, product data, and AI search in a few lines of SQL!

A single integrated solution, all data is fully consistent

```
SELECT ...  
FROM   house_for_sale  
WHERE  price <= (SELECT budget      FROM customer ...)  
AND    city in (SELECT search_city FROM customer ...)  
ORDER BY vector_distance(house_vector, :input_vector)  
FETCH APPROX FIRST 10 ROWS ONLY  
WITH TARGET ACCURACY 95 PERCENT;
```

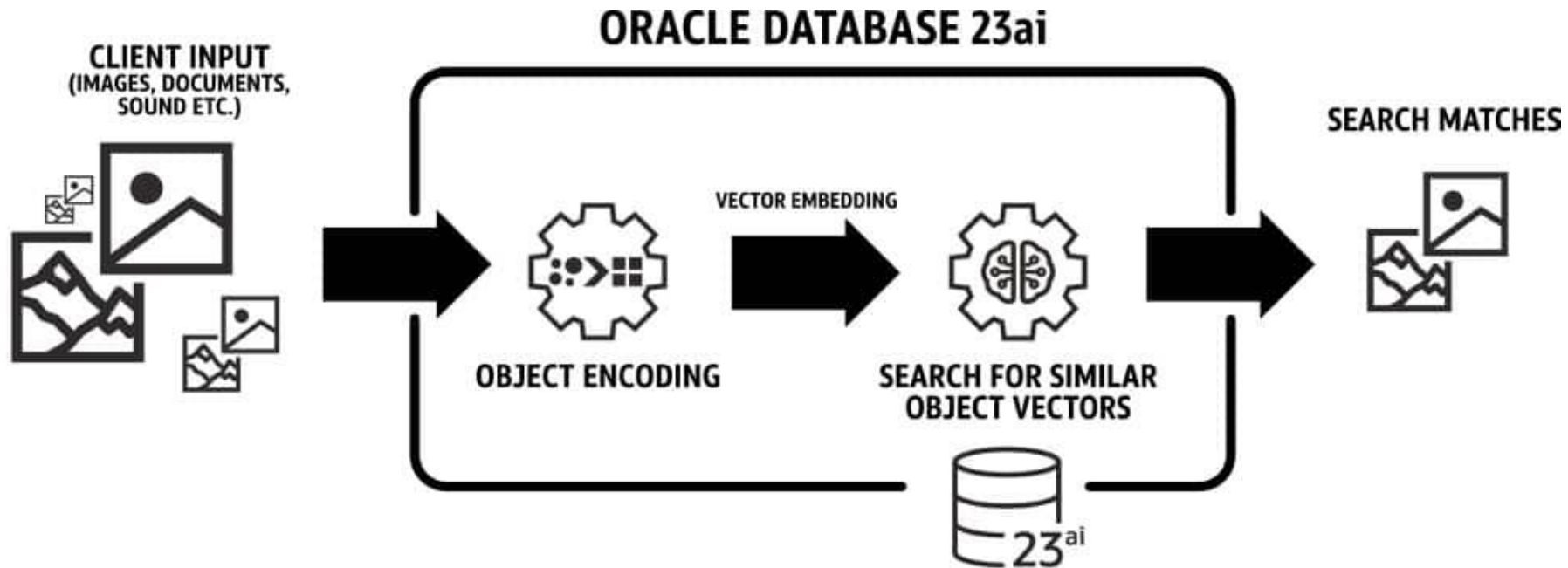
ORACLE

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2025

Oracle 23ai Delivers Vector Functionality Native within the Oracle Database: THIS IS HUGE!



Use AI where your data lives

Think A23A!



Oracle E-Business Suite

What does 23ai Certification Mean?

Oracle 12.2 Certification with Oracle 23ai



- Certified
 - Active Data Guard, Data Guard using Physical Server Names,, In Place Standby Upgrade,, Multi-tenant CBD/PDB, RAC, TDE, Unified Auditing, Network control lists, Data Masking using EM 13cR5
 - Advanced compression, Database In-Memory, Partitioning, Native PL/SQL compilation, Label Security, SecureFile, VPD
 - APEX, ISG SOA Gateway, Access Manager 12c, EBS App management pack
- Pending certification
 - Database Vault using EBS_SYSTEM
 - Transportable Database for data migration processes
 - Transportable Tablespaces for data migration processes
 - GoldenGate 23ai on-premise
- Source material
 - <https://blogs.oracle.com/ebsandoraclecloud/post/ebs-122-now-certified-with-database-23ai-on-database-cloud-services-for-commercial-cloud>
 - <https://blogs.oracle.com/ebstech/post/updated-ebs-122-planned-certification-with-db-23ai-summary-part-7-of-7>

The Case for Upgrading EBS To Oracle 23ai



- Are you already at OCI? If not, why not?
- When-not-if upgrade decision, if you want to keep current with Oracle
 - When is your next planned upgrade? Is it on your 24-month plan? Should you move the upgrade sooner?
 - The sooner you upgrade, the more benefit you will get from long-term support from Oracle
- 23ai vector search will be huge; upgrade now to start learning and playing with it
 - Be ready for the forthcoming EBS product development functionality releases
 - You will probably want to reconsider your Business Intelligence, reporting and predictive analytics strategies
 - Doing nothing will put you behind

Who Will Create The Vectors For E-Business Suite Tables?



- 1) Vectors need to be added to tables. There are several types of Vectors (Binary and Sparse) , as well as the ability to create Vector Indexes. Example:

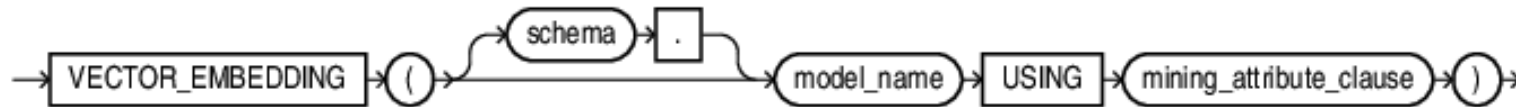
ALTER TABLE PER_ALL_PEOPLE_F ADD COLUMN person_vector VECTOR;

- 2) After creating a VECTOR column in a table, the column will be blank. Like any other column added to a table such as INTEGER or VARCHAR2, it must be then populated. Oracle EBS 12.2 has 25,000+ tables; who will create and populate the VECTORS?
- *Most likely, the same team that has been creating the INDEXES for EBS tables for the past 30 years will also create VECTORS – Oracle's EBS development team*
 - *Any vectors created will need to be maintained and protected from patching*
 - *Creating vectors for 25,000+ tables is a HUGE effort. Should you create them or wait and see what Oracle delivers first?*

How To Vectorize (Populate Vectors) Existing Relational Data?



To vectorize existing relational data, use the DBMS_VECTOR package and VECTOR_EMBEDDING()



Example: Add Vector data type column to the table PER_ALL_PEOPLE_F and populate it with a vector using selected columns in the table

```
ALTER TABLE PER_ALL_PEOPLE_F ADD COLUMN person_vector VECTOR;
```

```
UPDATE PER_ALL_PEOPLE_F SET person_vector = DBMS_VECTOR.vector_embedding( all_MiniLM_L12_v2  
using concat( blood_type, country_of_birth, date_of_birth, first_name, last_name, full_name, known_as,  
local_name, middle_names, sex) as data);
```

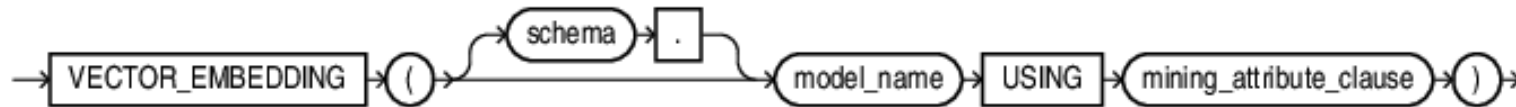
Decision points:

- What tables, what columns warrant VECTORS?
- What LLM to use encode with? all_MiniLM_L12_v2? What best suits your use cases? Will Oracle's LLM selection work best for your use cases?

How To Vectorize (Populate Vectors) Existing Relational Data?



To vectorize existing relational data, use the DBMS_VECTOR package and VECTOR_EMBEDDING()



Example: Add Vector data type column to the table INV.MTL_SYSTEM_ITEMS_TL and populate it with a vector using the Inventory item description column

```
ALTER TABLE INV.MTL_SYSTEM_ITEMS_TL  
ADD ( item_desc_vector VECTOR, item_desc_long_vector VECTOR);
```

```
UPDATE ININV.MTL_SYSTEM_ITEMS_TL  
item_desc_vector = DBMS_VECTOR.vector_embedding( all_MiniLM_L12_v2 using DESCRIPTION) as data);
```

```
UPDATE ININV.MTL_SYSTEM_ITEMS_TL  
item_desc_long_vector = DBMS_VECTOR.vector_embedding( all_MiniLM_L12_v2 using LONG_DESCRIPTION) as  
data);
```

***Now repeat this process for all the remaining
25,000 tables in the E-Business Suite***

Once EBS Data Is Vectorized, How Will Vectors Be Used?



Vectors Will fundamentally change how EBS data will be used. There will be new patterns, usages, and questions, for example using Natural language

Think of the vector just created on PER_ALL_PEOPLE_F. Let's query the database for men in the USA born between 1960 and 1970 named Mike.....

```
SELECT person_id, VECTOR_DISTANCE(person_vector, 'a man named mike born in  
the 1960s', 'COSINE') as distance  
FROM per_all_people_f  
ORDER BY distance ASC
```

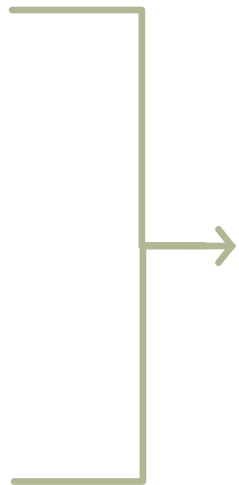
Distance metric or mathematical function used to compute the distance between vectors:

- COSINE (default)
- MANHATTAN
- HAMMING
- JACCARD
- DOT
- EUCLIDEAN
- L2_SQUARED
- EUCLIDEAN_SQUARED

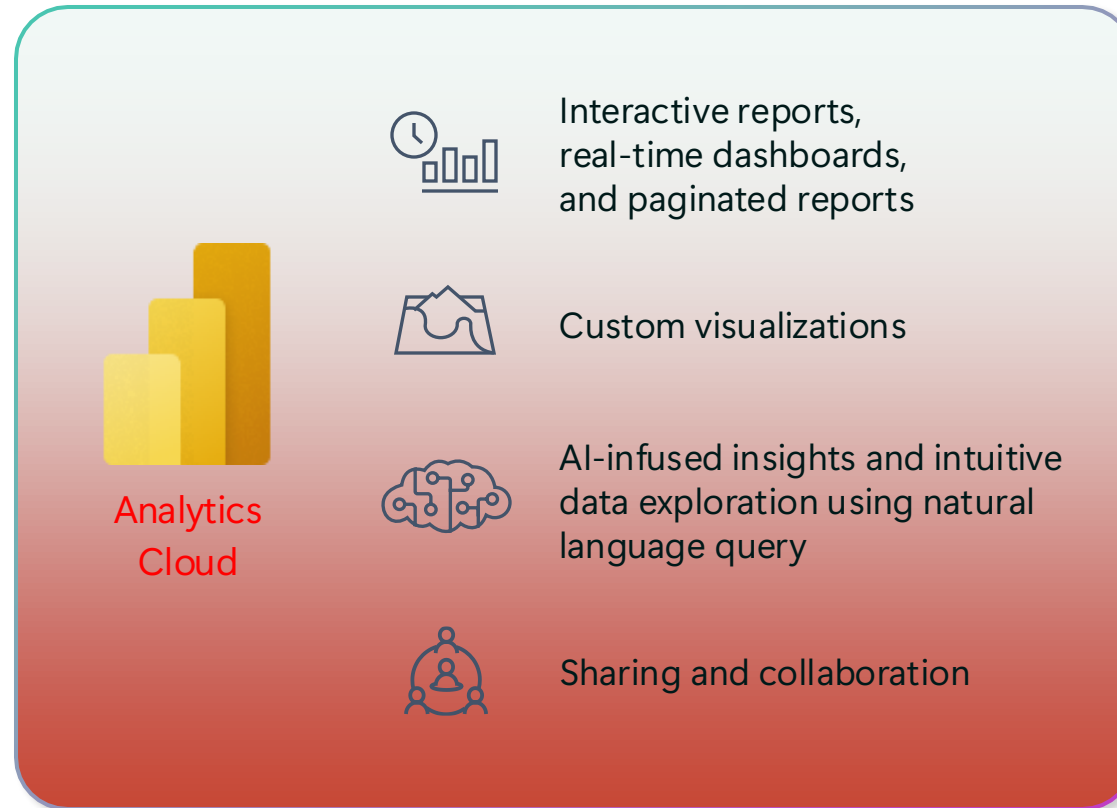
Question: When will Oracle EBS product development be writing 10,000s of new SQL statements to use the 10,000 of new Vector columns?

Where will the new SQL be written: OAC, Reports, Forms?

What Will Be Your Bridge Between Data and Decisions?



Data Intelligence Platform



Consumption

-  Web
-  Mobile
-  Embedded
-  Analytics Cloud
-  Digital Assistant
-  Teams
-  PowerPoint
-  SharePoint
-  Excel
- ∞ "..."

How To Vectorize (Populate Vectors) Existing Relational Data?



Vector User Guide: <https://docs.oracle.com/en/database/oracle/oracle-database/23/vecse/ai-vector-search-users-guide.pdf>

SQL Reference Guide: https://docs.oracle.com/en/database/oracle/oracle-database/23/vecse/vector_embedding.html#GUID-5ED78260-6D21-4B6B-86E0-A1E70EFA11CA

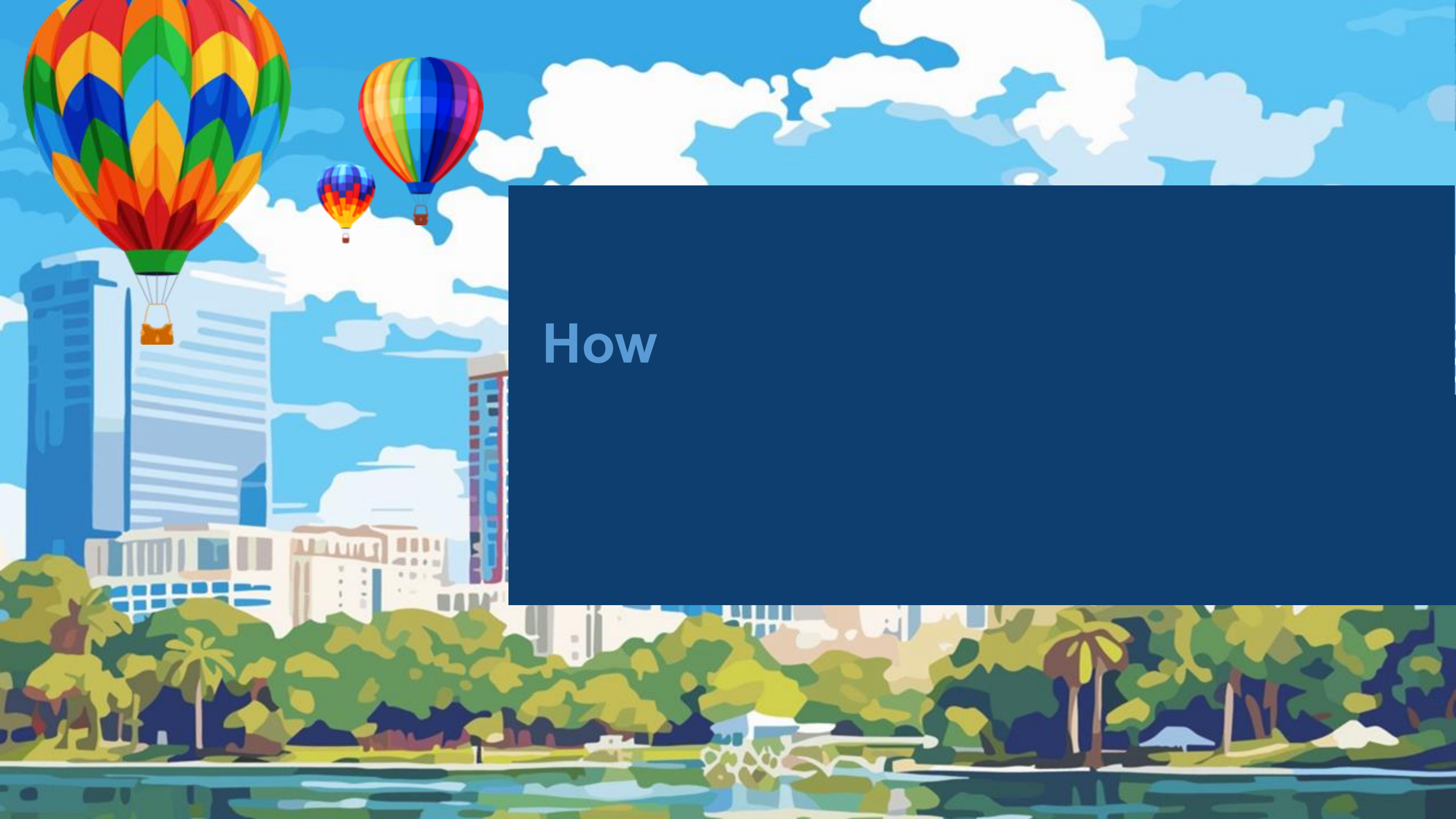
Excellent YouTube:

https://www.youtube.com/watch?v=ZLGnKjDKBWU&t=699s&ab_channel=FahdMirza

DBMS_VECTOR https://docs.oracle.com/en/database/oracle/oracle-database/23/arpls/dbms_vector1.html#GUID-8E615832-F6C0-4435-8F43-3FAF80692D5B

Quick start: <https://docs.oracle.com/en/database/oracle/oracle-database/23/vecse/sql-quick-start-using-vector-embedding-model-uploaded-database.html>

eTRM: https://etrm.live/etrm-12.2.2/etrm.oracle.com/pls/trm1222/etrm_pnav27af.html



How

How to Upgrade Oracle EBS 12.2 To Oracle 23ai



Summary Steps

Upgrade in four steps:

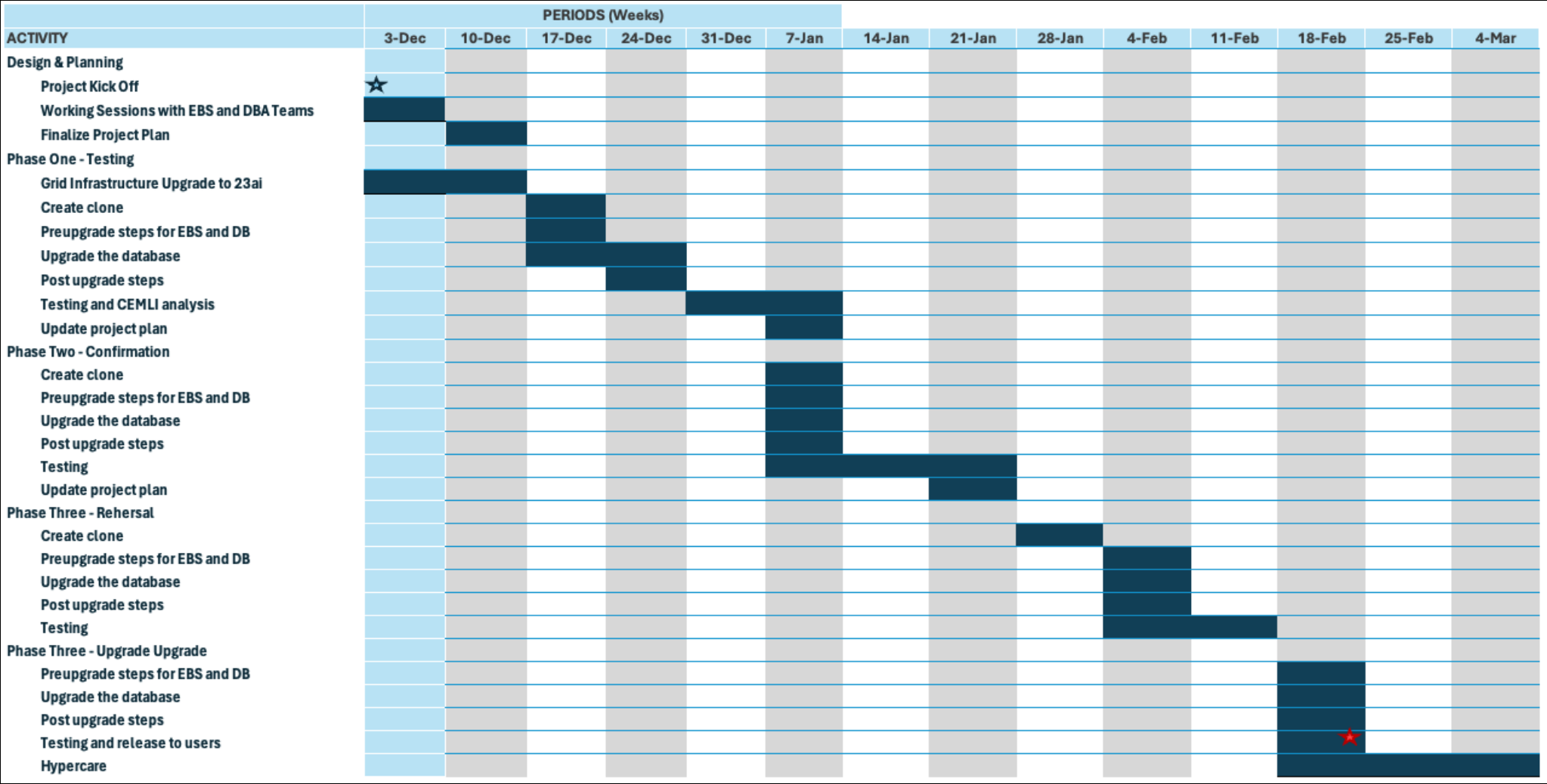
- Test upgrade
- Confirmation
- Rehearsal
- Production

Technical Requirements and Steps

1. Only OCI and only ExaCS or DBaS
2. EBS 12.2.7 (error correction baseline)
3. 19c is the only path to 23ai
4. Grid hosting the target database also must be version 23ai of Grid infrastructure (DBaS and Exadata)
5. Run the 12.2 EBS system schema migration (90% of Syntax's clients have already done this)
6. If using traditional auditing, enable unified auditing
7. Covert to case-insensitive PDB name
8. Apply AD/TXK Delta 16 (or higher)
9. Now upgrade the EBS database to 23ai
10. Apply the EBS 23ai interoperability patch; Interoperability Notes: Oracle E-Business Suite Release 12.2 with Oracle Database 23ai (Doc ID 2962871.1)
11. Try to catch up on CPUs at the same time: EBS, Java, FMW, WebLogic.

<https://blogs.oracle.com/ebstech/post/updated-ebs-122-planned-certification-with-db-23ai-summary-part-7-of-7>

High-level 23ai Upgrade Plan For EBS Clients



Technical Upgrade Tasks For 23ai For Existing Syntax Client



1. 36119925 - R12.AD.C.delta.16
2. 36117775 - R12.TXK.C.delta.16
3. 35876968 - 23ai interoperability patch
4. 36960053 - 23ai interoperability patch
5. 37012872 - 23ai interoperability patch
6. 37442088 - Oracle teleservices patch bug fixes for CS: Jan 24
7. 32360310 - DB 19C :INVALID PACKAGE APPS.OTA_MOBILE_UTILS
8. 36173454: R12.2 - CLE: Israel Open Format
9. ISG Patches
 - 37288906 - 23ai patch for ISG compatibility
 - 37323421 - 23ai patch for ISG compatibility
10. Patch 29949547 - 10.1.2 patch for connecting reports builder to 23 database

*It is all about the interoperability patches for EBS
and how fast will they mature and stabilize.
Syntax plans on testing these patches well into Q3 2025*



EBS Natural Language Query

You Don't Need 23ai To Do it!

EBS Natural Language (NL) Query



Enabling Natural Language Query of Oracle E-Business Suite Release 12.2, Leveraging OCI Generative AI

Oracle Technical Brief

December 2024, Version 1.3
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Public

Ask Oracle E-Business Suite (EBS)

Prompt: show the details of the workorders released in the last 2 weeks which are delayed.

Domain: Discrete Manufacturing

Conversations: Current, Previous

show the details of the workorders released in the last 2 weeks which are delayed.

Job Name	Job Status	Job Open Quantity	Quantity Completed	Wo Delayed Days	Wo Delayed	Wo Start Delayed Days	Wo Start Delayed	Wo Completion Delayed Days	Wo Completion Delayed	Actual Release Date	Actual Completion Date	Sched Start Date	Sched Completion Date	Custo
446916	Released	10	0	2.65466	Yes	.20535	Yes	2.65466	Yes	22-Oct-2024		22-Oct-2024	22-Oct-2024	
446911	Released	5	0	3.35086	Yes		No	3.35086	Yes	20-Oct-2024		21-Oct-2024	21-Oct-2024	
446909	On Hold	2	0	4.65466	Yes	.90722	Yes	4.65466	Yes	20-Oct-2024		20-Oct-2024	20-Oct-2024	
446908	Released	3	0	4.65466	Yes	.90693	Yes	4.65466	Yes	20-Oct-2024		20-Oct-2024	20-Oct-2024	
447907	Released	5	0	1.65466	Yes	.15101	Yes	1.65466	Yes	23-Oct-2024		23-Oct-2024	23-Oct-2024	
446910	Complete	0	4	.92469	Yes	.9078	Yes	.92469	Yes	20-Oct-2024	20-Oct-2024	20-Oct-2024	20-Oct-2024	
446914	Released	5	0	2.1755	Yes	.63826	Yes	2.1755	Yes	21-Oct-2024		21-Oct-2024	22-Oct-2024	

Download

Ask Oracle E-Business Suite (EBS)

Prompt: show me all work orders

Domain: Discrete Manufacturing

show me all

SQL Query

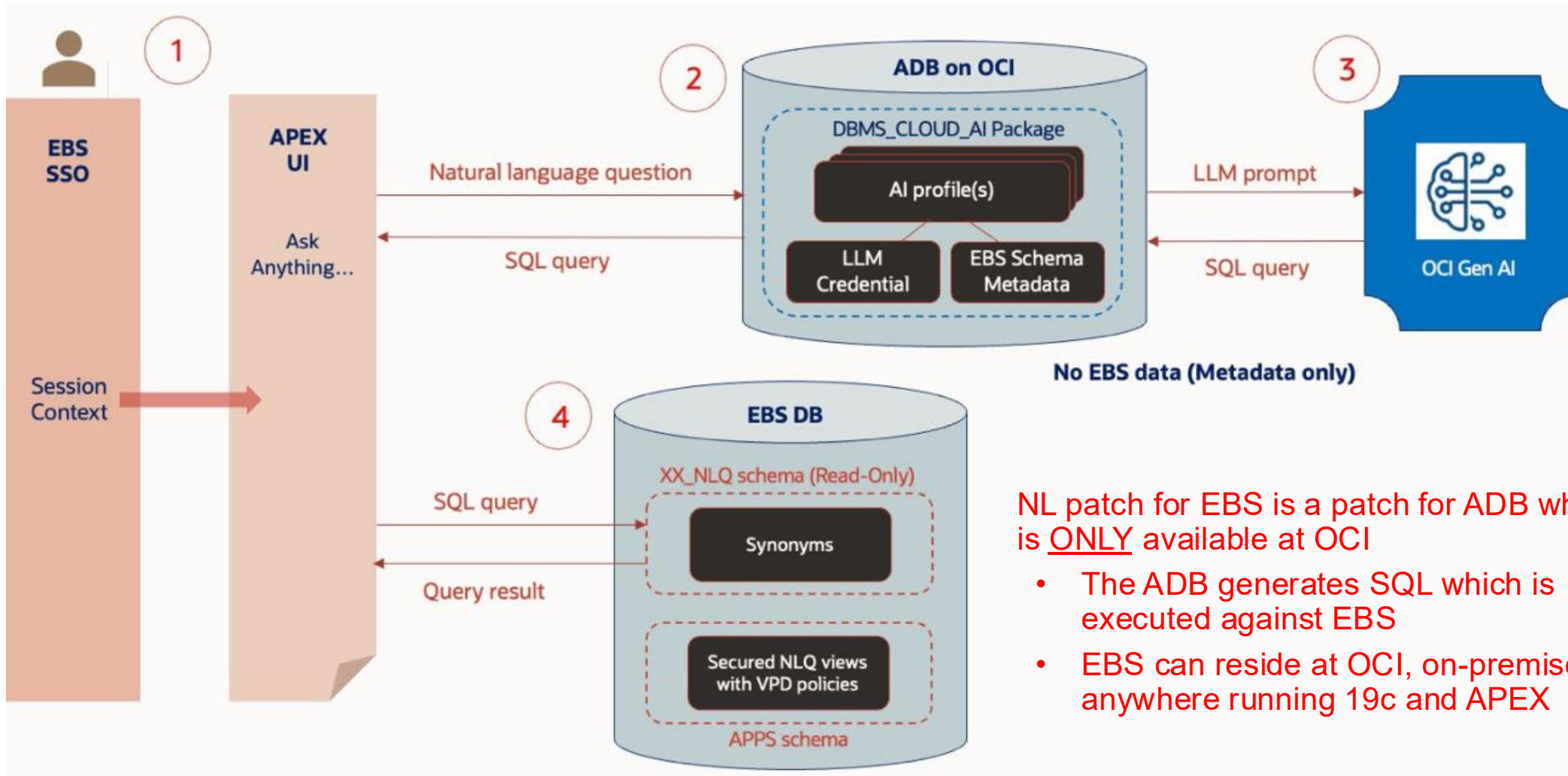
WITH dt as (SELECT JOB_NAME "Job Name", JOB_STATUS "Job Status", JOB_DESCRIPTION "Job Description", SCHED_START_DATE "Scheduled Start Date", SCHED_COMPLETION_DATE "Scheduled Completion Date", ACTUAL_RELEASE_DATE "Actual Release Date", ACTUAL_COMPLETION_DATE "Actual Completion Date", QUANTITY_COMPLETED "Quantity Completed", WO_DELAYED "Workorder Delayed", WO_START_DELAYED "Workorder Start Delayed", WO_COMPLETION_DELAYED "Workorder Completion Delayed", CUSTOMER "Customer", SALES_ORDER "Sales Order", SO_LINE_NUMBER "Sales Order Line Number", SHIP_DATE "Ship Date", ACTUAL_SHIP_DATE "Actual Ship Date" FROM XX_NLG_WIP_NLG_DMO_V) SELECT /*+ FIRST_ROWS(100)*/ DISTINCT dt.* from dt

Job Name	Job Status	Job Description	Scheduled Start Date	Scheduled Completion Date	Actual Release Date	Actual Completion Date	Quantity Completed	Workorder Delayed	Workorder Start Delayed	Workorder Completion Delayed
TEST_KC	Released		2024	2024			0	No		
395909	Released		28-Oct-	31-Oct-	28-Oct-		0	Yes	Yes	No
395911	Released		28-Oct-	31-Oct-	28-Oct-		0	Yes	Yes	No

All results secured using native EBS security complements of EBS ECC functionality patches

<https://blogs.oracle.com/ebstech/post/enabling-natural-language-query-of-ebs-122-using-oracle-generative-ai-now-available>

Natural Language (NL) Query DOES NOT Require 23ai



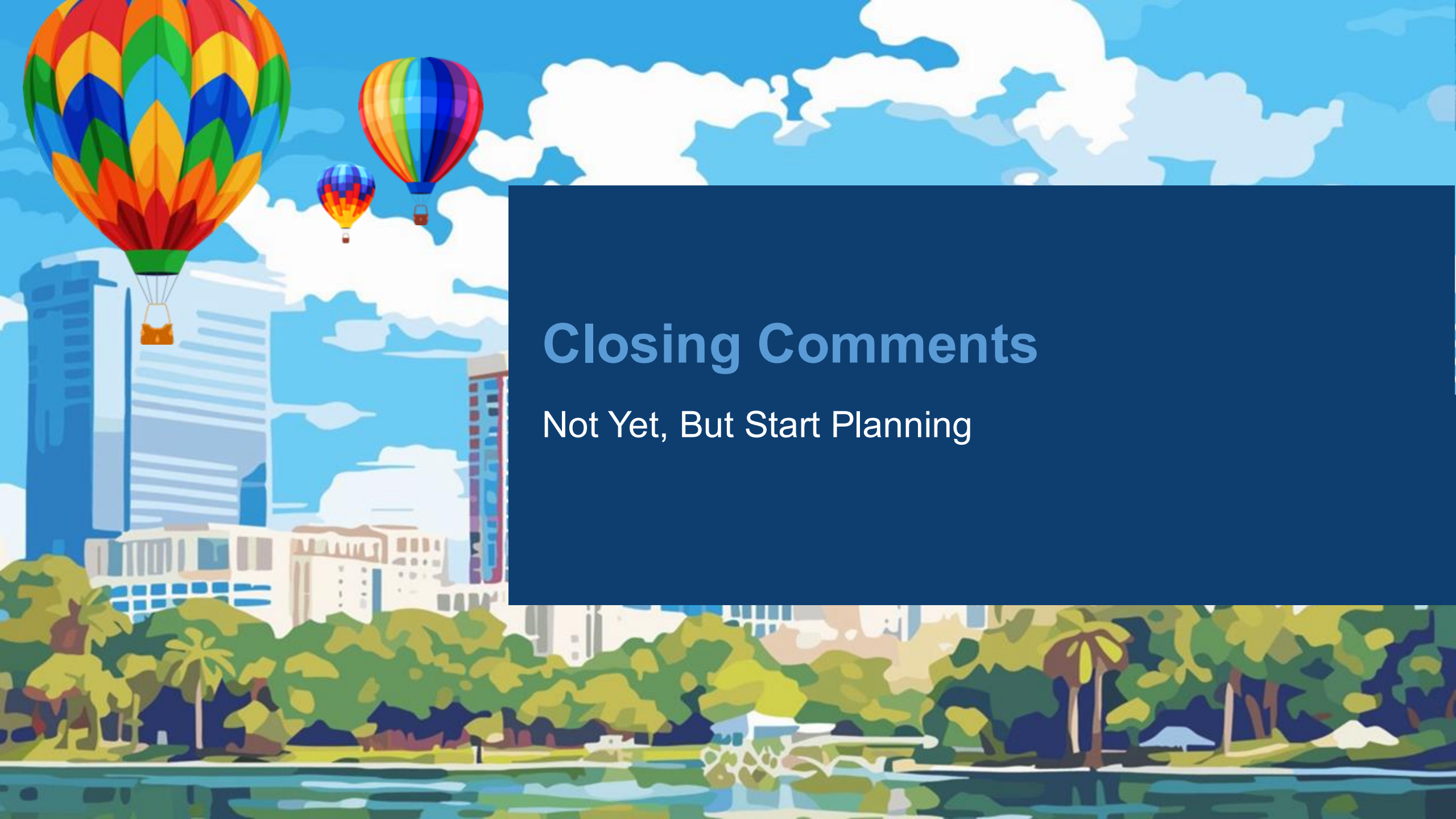
NL patch for EBS is a patch for ADB which is ONLY available at OCI

- The ADB generates SQL which is executed against EBS
- EBS can reside at OCI, on-premise or anywhere running 19c and APEX

Natural Language (NL) Query Observations



- Only ten domains or subject areas
 - Likely that clients will desire to enhance
- Currently does not support EBS KFF/DFF
- The APEX form shipped is a demo form
 - Does not allow for saving of favorite questions
 - Probably will want to customize the APEX “demo” form
- No reason why APEX could be replaced by or complemented with:
 - Digital assistant/bot
 - Power automation (e.g. MS Teams) front end



Closing Comments

Not Yet, But Start Planning

Don't Wait; Start Planning Your 23ai Upgrade Today



- 23ai is Huge and on a collision course
 - Vectors will change how the database WILL be used
 - Start thinking **TODAY** how Vector search will impact your analytics, reporting, and business intelligence strategies
- 23ai is currently available only at OCI on DBaS, ExaCS, Exa@client
 - This may change later in 2025
- For EBS customers
 - Upgrading to 23ai upgrade is a when-not-if decision
 - Natural Language Query does NOT need 23ai and can be done today on 19c regardless of whether EBS is hosted at OCI or on-premise; it requires ADB to be integrated with EBS. ADB runs only at OCI
 - Oracle EBS product development will be:
 - 1) Creating and populating new Vector columns for EBS tables
 - 2) Writing new SQL statements to use the new Vector columns

When Should EBS Customers Upgrade to 23ai?



- **Not Now**

- Interoperability patches for EBS need to stabilize. For 19c, it was only between 19.10 to 19.11 that EBS interoperability patches stabilized for performance and other issues
- No EBS patches are available today from Oracle's EBS product development for new 23ai features (e.g. vectors, RAFT replication, shrinking tablespaces)
- Oracle's EBS product development is working hard; things will change **FAST**
- Now is the time for testing, thinking, and planning

- **When?**

- Most likely Q4 2025 calendar will be a good time to start a project
- If you can, accelerate your 23ai upgrade with testing now through Q3

Thank You For Attending!

Please complete the session survey
in the conference app.



Q&A

Michael.Miller@Syntax.com

mrulf@syntax.com

