

## Hands-On Lab Database Upgrade to Oracle Database 23ai Bern - SOUG, March 2025





#### MIKE DIETRICH

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#### in mikedietrich



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https://mikedietrichde.com

web Seminar

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#### **Recorded Web Seminars**

#### https://MikeDietrichDE.com/videos

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### **Lifetime Support Policy**







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Start

#### SOUG Upgrade Workshop

Oracle Database 23ai: The World's Most Powerful Database ... Database 40

Oracle Database 23ai: The World's Most Powe 

Database for AI

Watch on Voulube

Copy link Organizer: Oracle Outline

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Ø 2 hours Event Date: Wednesday 26 March Upgrade Oracle Database using AutoUpgrade · Convert to multitenant architecture using AutoUpgrade · Convert to multitenant architecture using Refreshable Clone PDBs · Convert to multitenant architecture using Data Pump 0

A Share

- · Ensure performance stability
- Capture workload information





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Details

![](_page_11_Picture_8.jpeg)

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#### **View Login Info**

LiveLabs

![](_page_12_Picture_3.jpeg)

iker's Guide for Upgrading to Oracle Database 23ai + Introduction

![](_page_12_Figure_5.jpeg)

#### Introduction

#### About this Workshop

Oracle Database 23ai is a Long Term Support Release. It is available or will be available on all popular onprem platforms, Oracle Exadata Database Machine, Oracle Database Appliance, and in Oracle Cloud Infrastructure. As the latest Long Term Support Release, it offers customers the highest levels of stability and the longest error correction support. And, by upgrading to Oracle Database 23ai, customers will have Premier Support until the end of April 2029 and Extended Support until end of April 2032. There is a direct upgrade path to Oracle Database 23ai from Oracle Database 19c and 21c, regardless of the Release Update applied.

Estimated Workshop Time: 120 minutes

![](_page_12_Picture_10.jpeg)

![](_page_12_Picture_11.jpeg)

🚟 Event Code 🔍 mike.dietrich@oracle.com 🗸

Time Remaining: 11h 43m 17s

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Architecture

![](_page_13_Figure_1.jpeg)

![](_page_14_Picture_1.jpeg)

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#### **1** Go to https://livelabs.oracle.com

#### 2 Click "Event Code"

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Hitchhiker's Guide for Ungrading to Oracle Database 22ai at the • Start × Enter Event Code gacle If you've been provided with an event code by Oracle, enter it below Database Event Code use using Oracle Required architecture The Wor architecture Database e PDBs Cancel Submit Event Code architecture · Ensure performance stability · Capture workload information · Detect regressing statements using Watch on P YouTube SQL Performance Analyzer  $\circ$ · Fix bad plans using SQL Tuning Advisor

🔡 Event Code 🗦 Sign In

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#### Use your SSO Account to log in

- This is not your Oracle Cloud Tenancy account
- It is your Oracle SSO account

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	Cracle account sign in Uneare	

- 1. Click the **Start** button to access the HOL
- 2. Click **Run** on LiveLabs Sandbox
- 3. Toggle the **Start Workshop Now** radio button
- 4. Check the **consent** box
- 5. Click **Submit**

![](_page_18_Picture_6.jpeg)

#### Your Lab Environment

The environments are available in just a few seconds.

Refresh the page

LiveL	.abs	Q. Search Workshops and Sprints	22 Event Code (八	
	My R	eservations		
	All your view wo	current workshop reservations are shown below. You can edit active or pending reservations, kshop details, attend an available workshop, or delete a reservation.	To access this page again click the user dropdown in the top right corner and select My Reservations	
	Note: Th	e status of your reservations will be emailed to you. Check your mail for any status updates.		
	Hitchhile Database Thursday America/C	er's Guide for Upgrading to Oracle 23ai June 13th, 10.34am (10.54) Micago		
	Estimate	d Time Remaining: 10 mins		

#### Your Lab Environment

- 1. Click *View Login Info* to access your reservation information
- 2. Click the *Launch Remote Desktop* button
- 3. The Oracle Cloud login page will open in a new tab

#### Helpful Tip!

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I	C LiveLabs Q Search Workshops and Sprints
	View Login Info
	If you need to view login information
ľ	later click here

![](_page_20_Picture_6.jpeg)

![](_page_20_Picture_7.jpeg)

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# Introduction

Hitchhiker's guide to Oracle Database 23ai

# Overview

	Database	PDBs	Set environment
<b>Oracle Database 19c</b> /u01/app/oracle/product/19	UPGR FTEX E	ORANGE	. upgr . ftex . cdb19
Oracle Database 21c /u01/app/oracle/product/21			
<b>Oracle Database 23ai</b> /u01/app/oracle/product/23	(CDB23 (한국) CDB23COM	RED, BLUE, GREEN	. cdb23 . cdb23com

![](_page_23_Picture_0.jpeg)

			La	bs					
	Track 1	3	4	5	6	7	8	9	
1 2	Track 2	10	15						14
	Track 3	11	12	13					

![](_page_24_Picture_1.jpeg)

1. Initialize the environment

![](_page_24_Picture_3.jpeg)

2. Explore Multitenant Architecture

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Labs										
		Track 1	3	4	5	6	7	8	9	
1	2	Track 2	10	15						14
		Track 3	11	12	13					

![](_page_26_Figure_1.jpeg)

3. Generate AWR Snapshot

![](_page_26_Figure_3.jpeg)

3a. Run a load generator

![](_page_26_Picture_5.jpeg)

3b. Capture SQL from Cursor Cache

![](_page_26_Figure_7.jpeg)

4. Capture and Preserve SQL

![](_page_26_Picture_9.jpeg)

4a. Capture SQL from AWRs

![](_page_27_Figure_1.jpeg)

5. AutoUpgrade to Oracle 23ai

![](_page_27_Figure_3.jpeg)

6. Compare AWR Diff Reports

![](_page_27_Picture_5.jpeg)

6a. Run load generator again

![](_page_27_Picture_7.jpeg)

7. Analyze with SQL Performance Analyzer

![](_page_28_Figure_1.jpeg)

8. Fix with SQL Plan Management

![](_page_28_Figure_3.jpeg)

9. Fix with SQL Tuning Advisor

![](_page_29_Picture_0.jpeg)

Labs										
		Track 1	3	4	5	6	7	8	9	
1	2	Track 2	10	15						14
		Track 3	11	12	13					

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![](_page_30_Figure_1.jpeg)

11. Upgrade Non-CDB Using Refreshable Clone PDB

![](_page_31_Picture_0.jpeg)

#### You can copy/paste from the instructions

SHIFT + CTRL + C
SHIFT + CTRL + V

## Hands-On Lab

Let's go!!

### YouTube | Oracle Database Upgrades and Migrations

![](_page_33_Picture_1.jpeg)

https://www.youtube.com/@upgradenow

- 300+ videos
- New videos every week
- No marketing
- No buzzword
- All tech

![](_page_33_Picture_8.jpeg)

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## Thank You

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