Workshop

Upgrade para Oracle Database 19c

DBA Brasil - 2023

Diamante

AGGRANDIZE

COMMVAULT

TD SYNNEX

Platina

GOLDENGATEBR
Consultoria & Treinamentos

DISCOVER

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GRUPO POSEIDON DIGITAL

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High performance. Delivered.

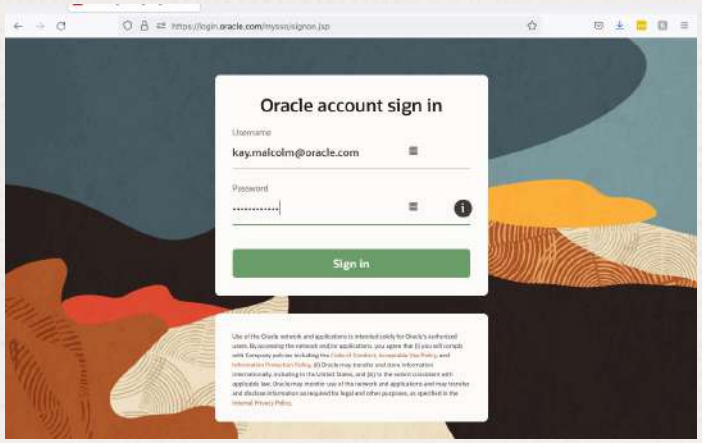
ORACLE

AGENDA

13:20	Intro and labs provisioning
13:35	Upgrade to Oracle Database 19c
14:05	Labs - part 1 & part 2
15:05	Wrap-up

Requirements for running this HOL

Laptop / Tablet



Oracle Account

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Lab Provisioning

➔ Open a web browser

➔ Type in this link below to get access to the workshop page

https://tinyurl.com/dbabrasil23hol

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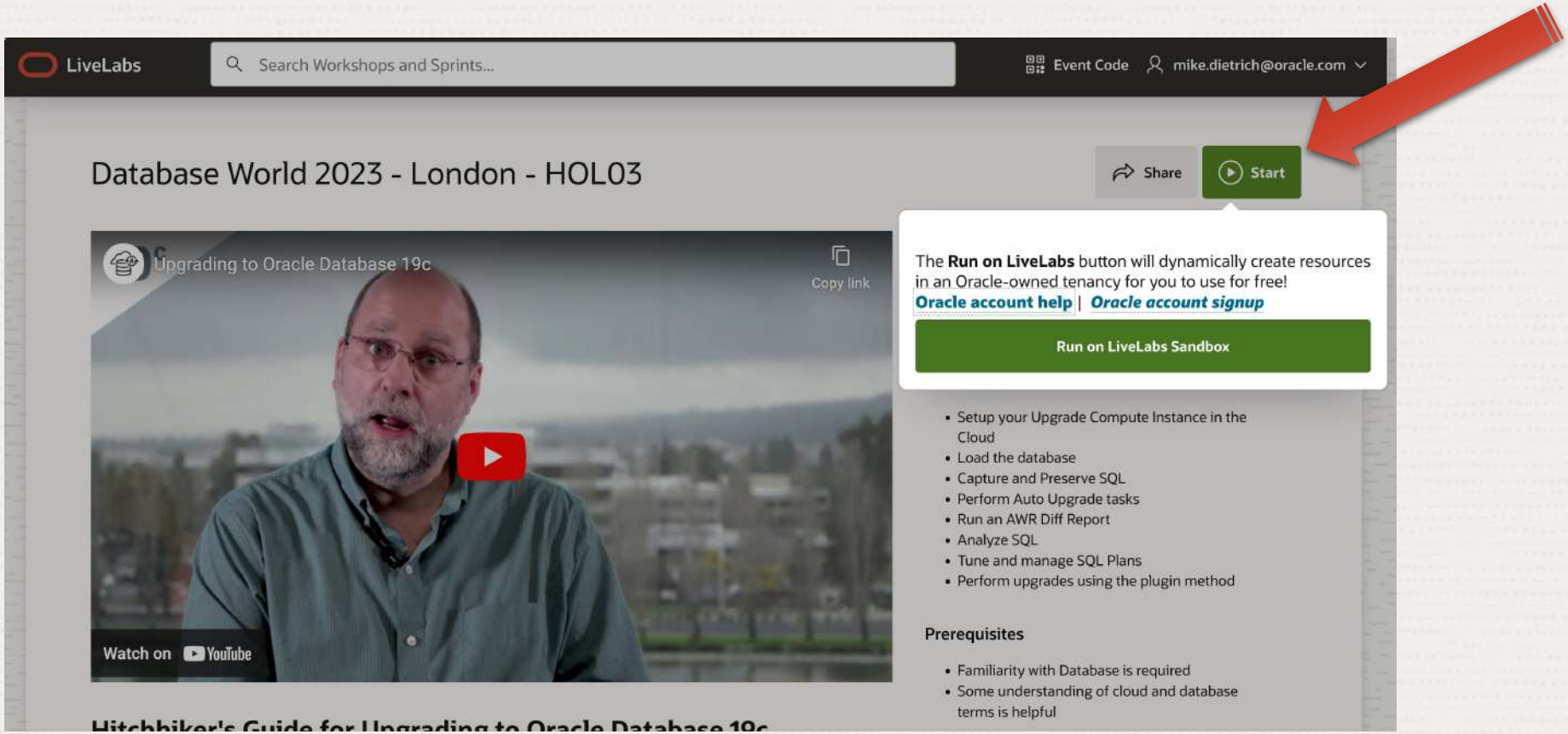
Lab Provisioning

Click on the Green Button "Start"



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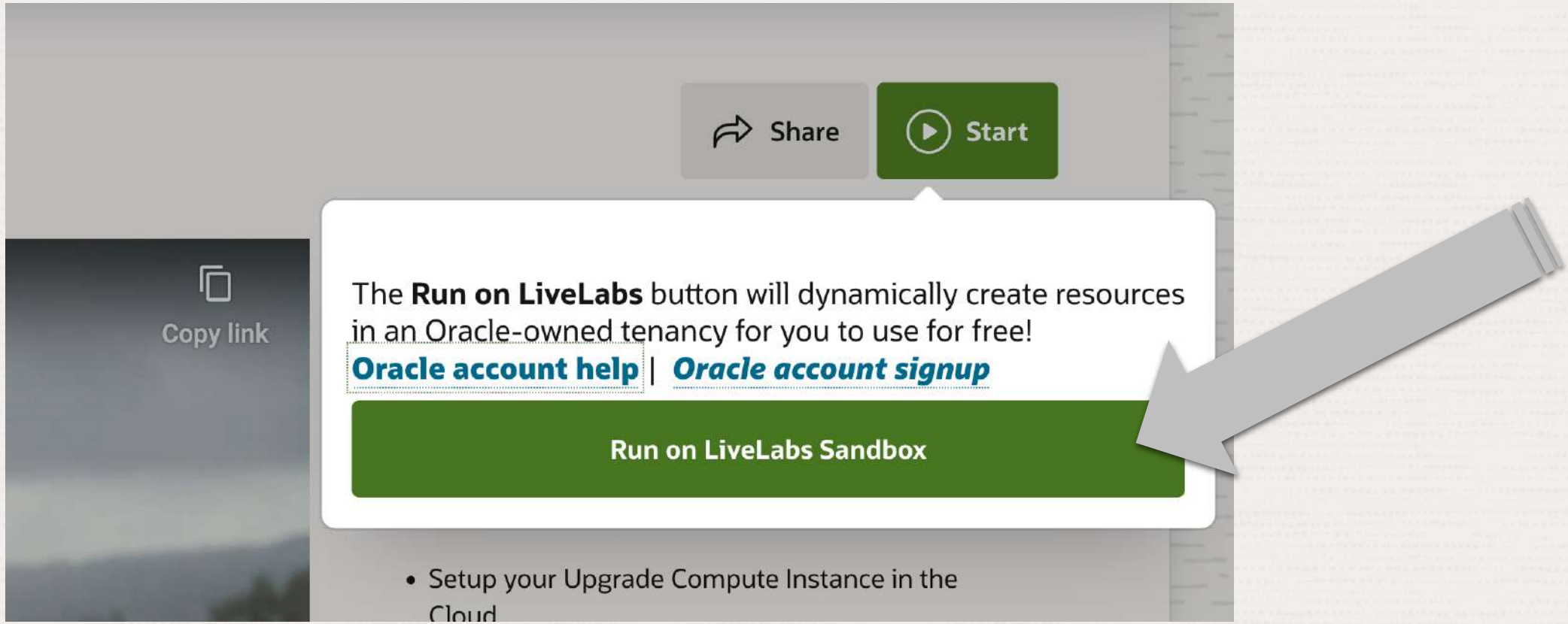
Lab Provisioning

Click on the next Green Button "Run on LiveLabs Sandbox"



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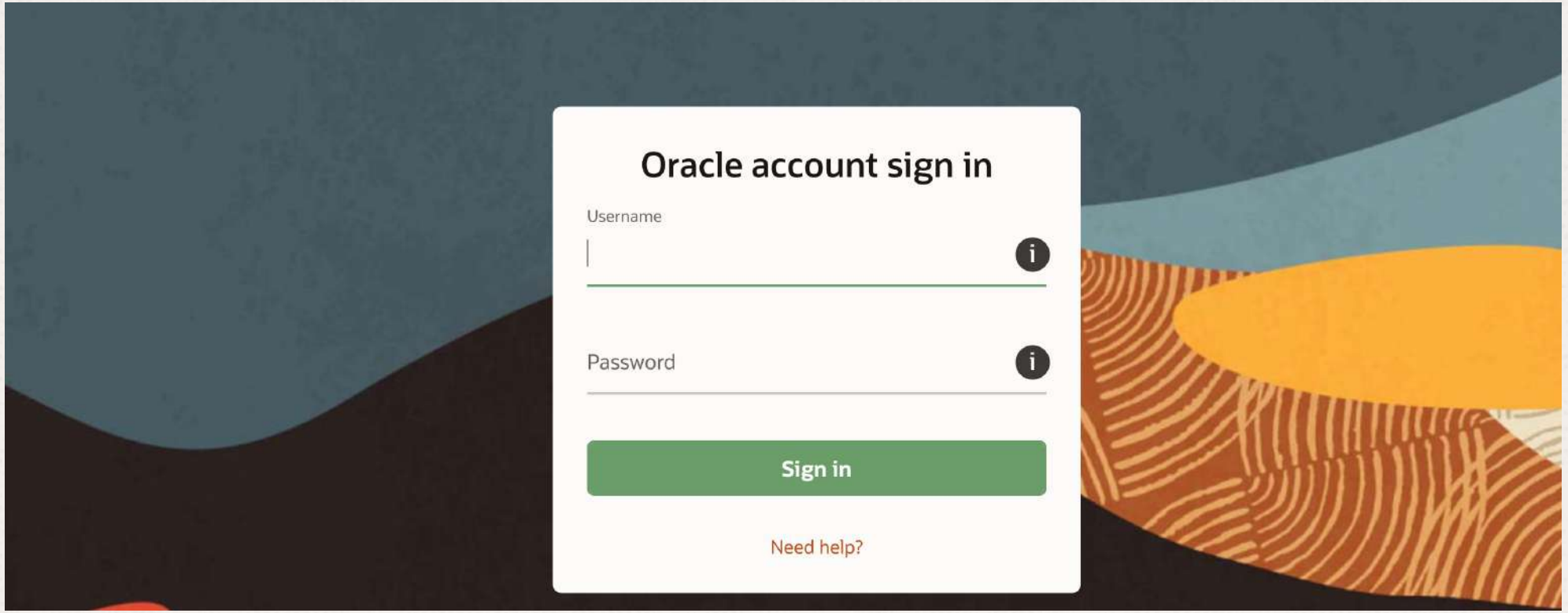
Lab Provisioning

Logon with your Oracle SSO user



- If you don't have an Oracle SSO User yet, please create one: `https://tinyurl.com/OracleSSO`

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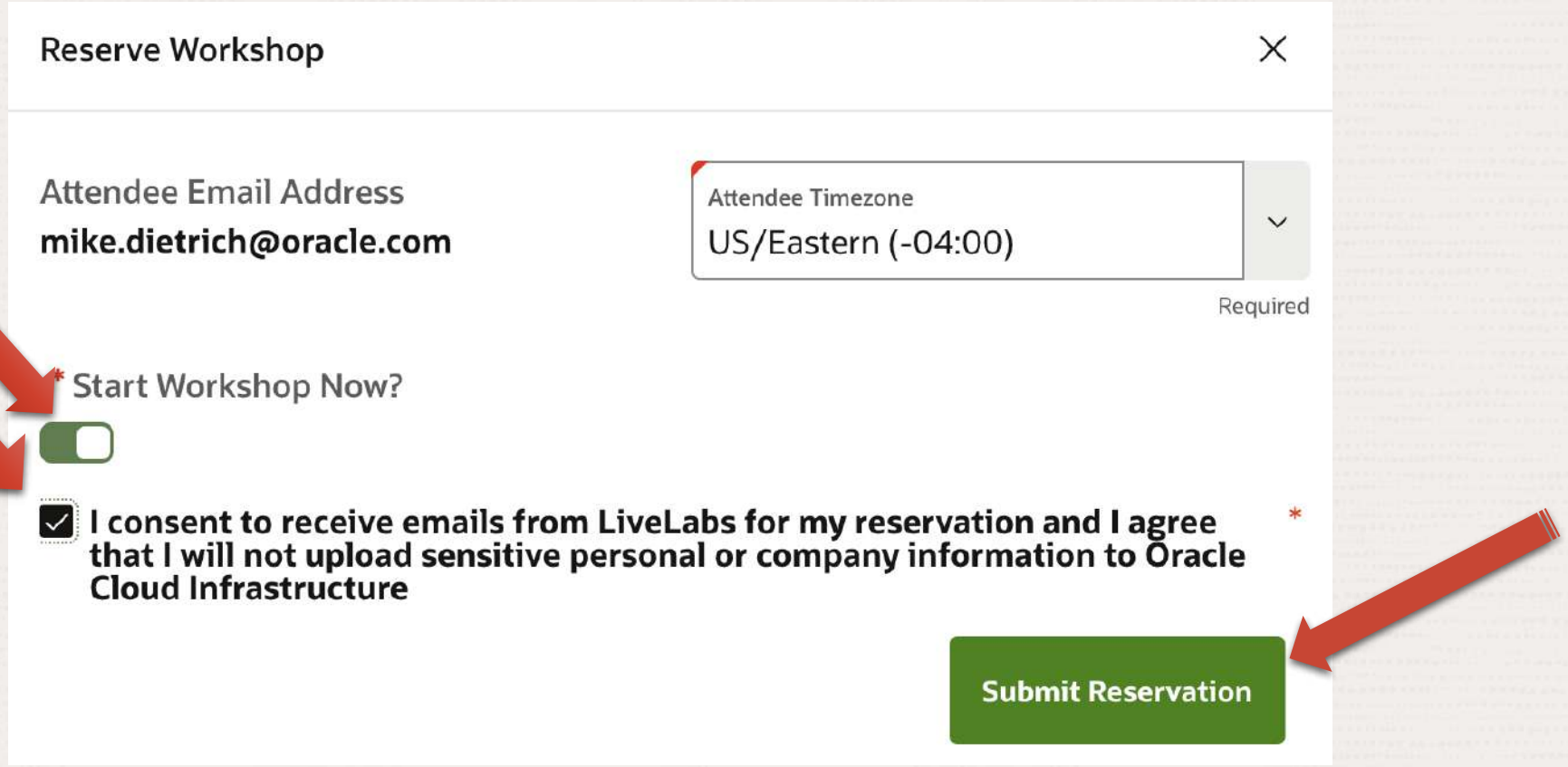
Lab Provisioning

Click on "Start Workshop Now", on the CONSENT checkbox, and then "Submit Reservation"



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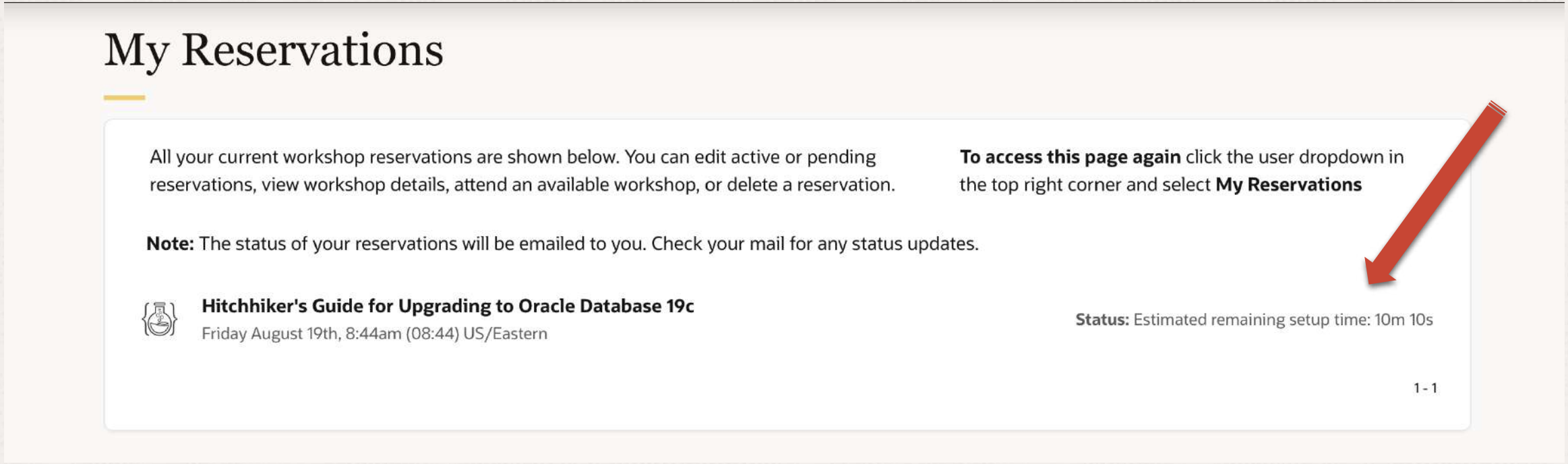
Lab Provisioning

This will take you to "My Reservations" – now we have 11 mins to explain the exercises



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Introduction into the Lab: Hitchhikers Guide to Oracle Database 19c

Upgrade to Oracle Database 19c and ensure performance stability

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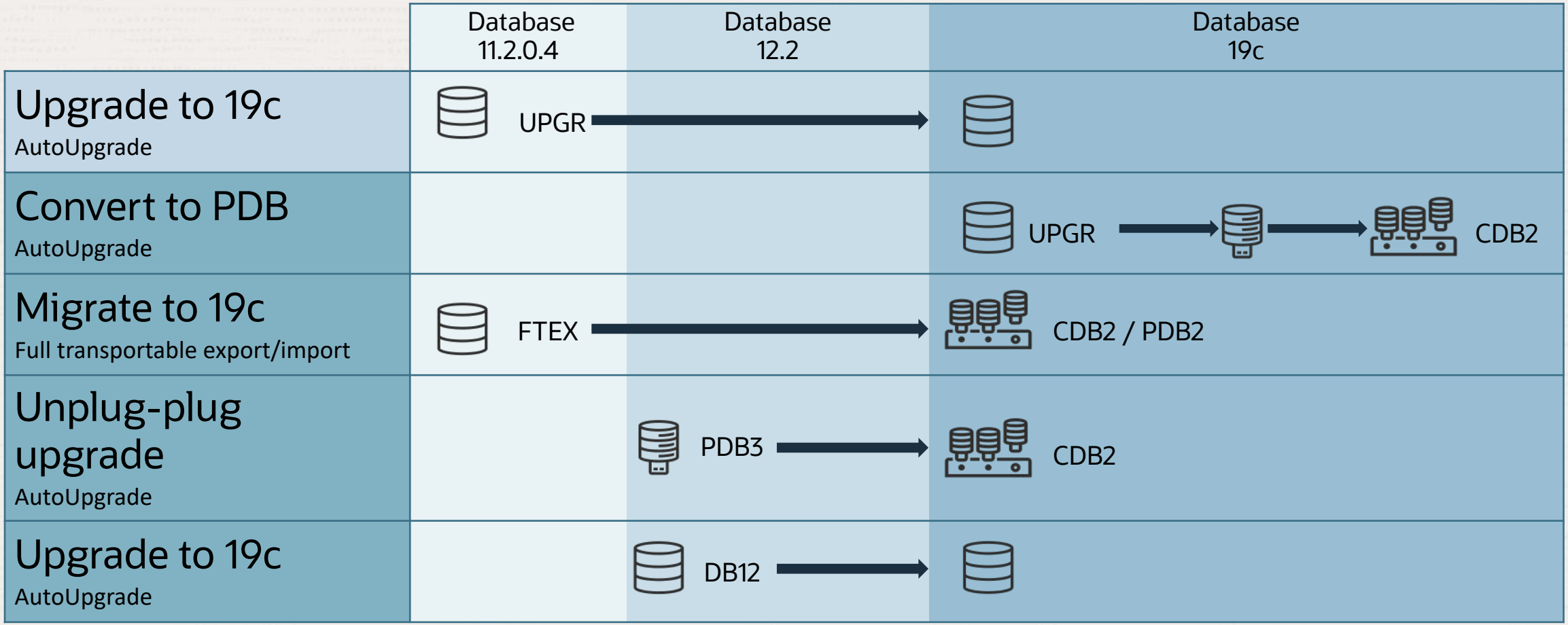
Lab Overview



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AutoUpgrade

Upgrade to Oracle Database 19c and ensure performance stability

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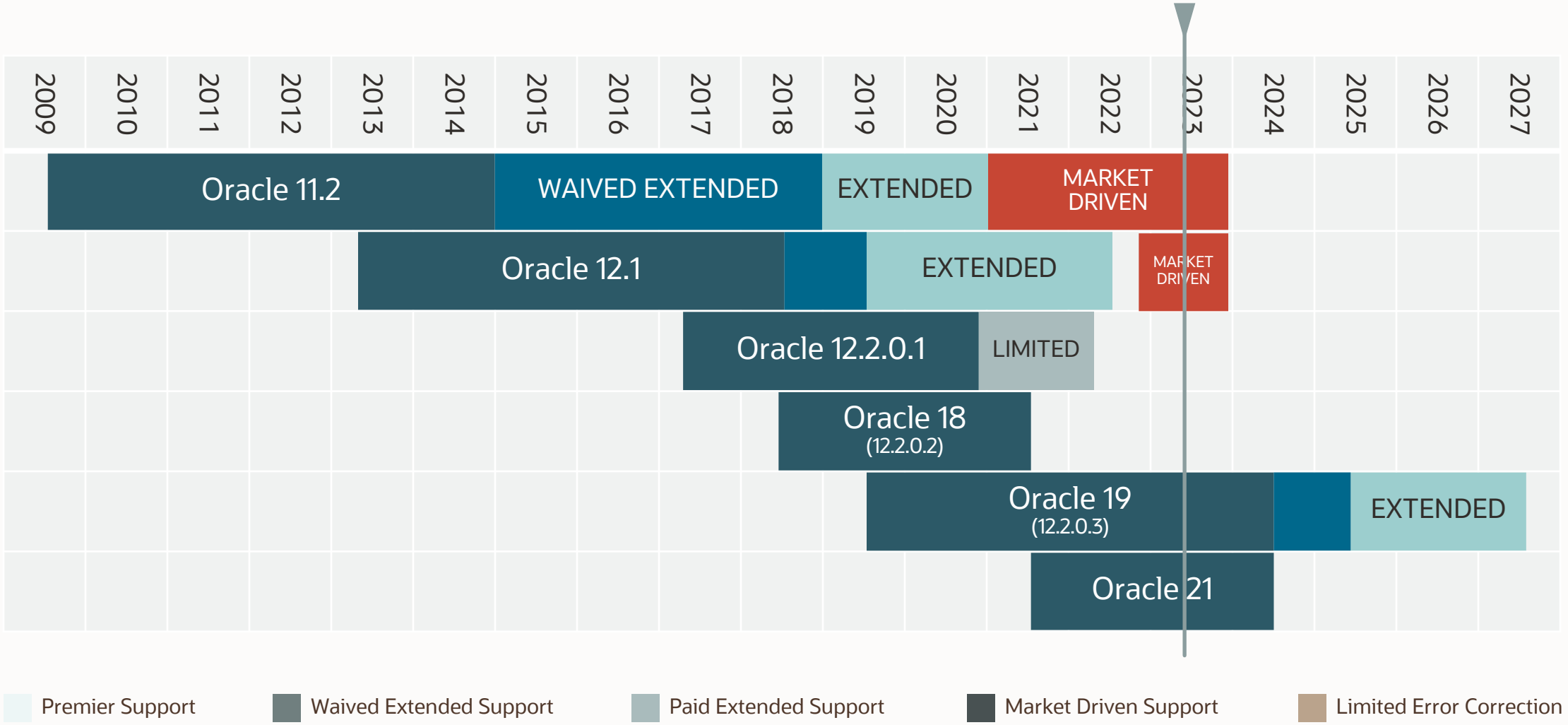
Lifetime Support Policy



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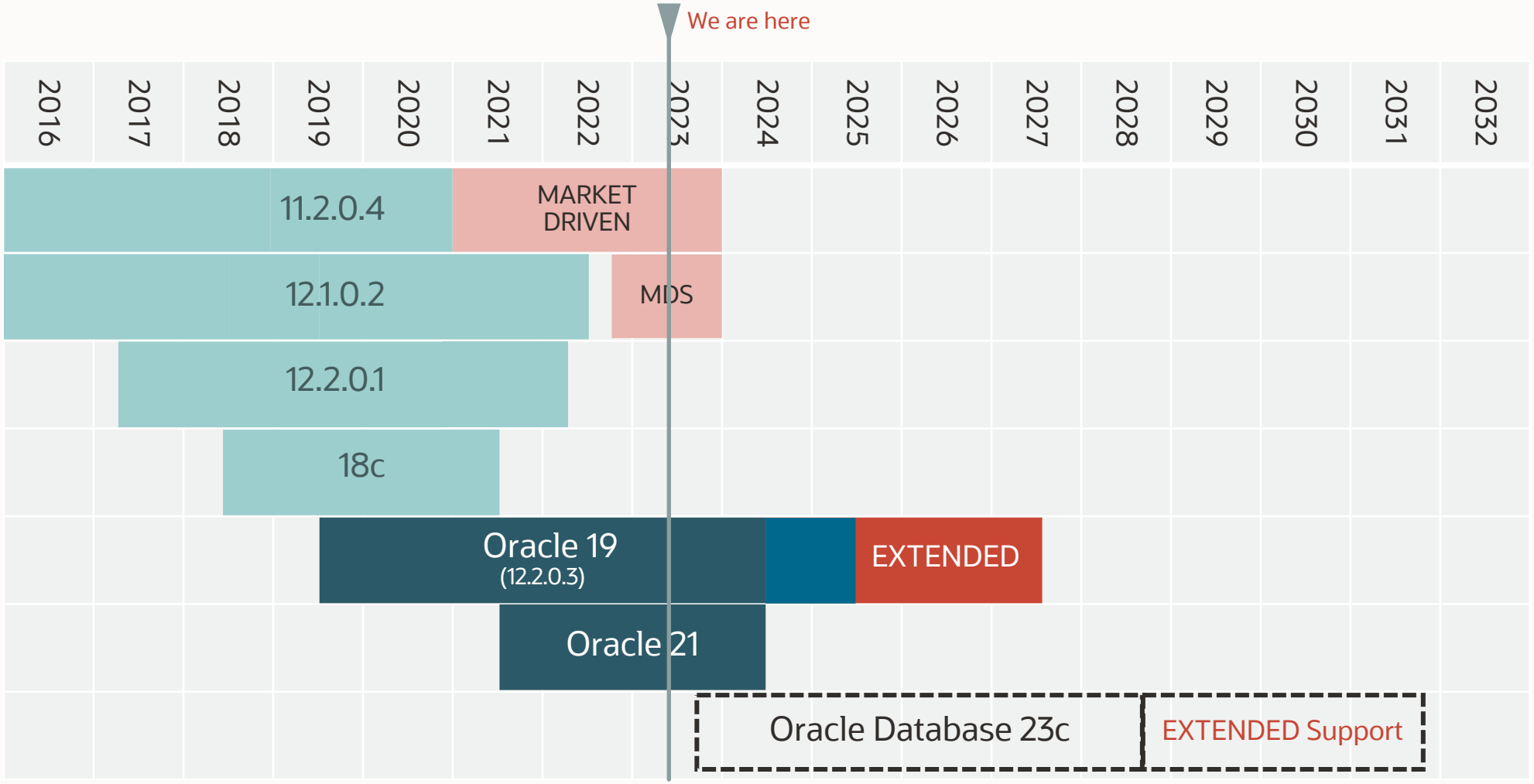
Release Strategy | Make Your Plan



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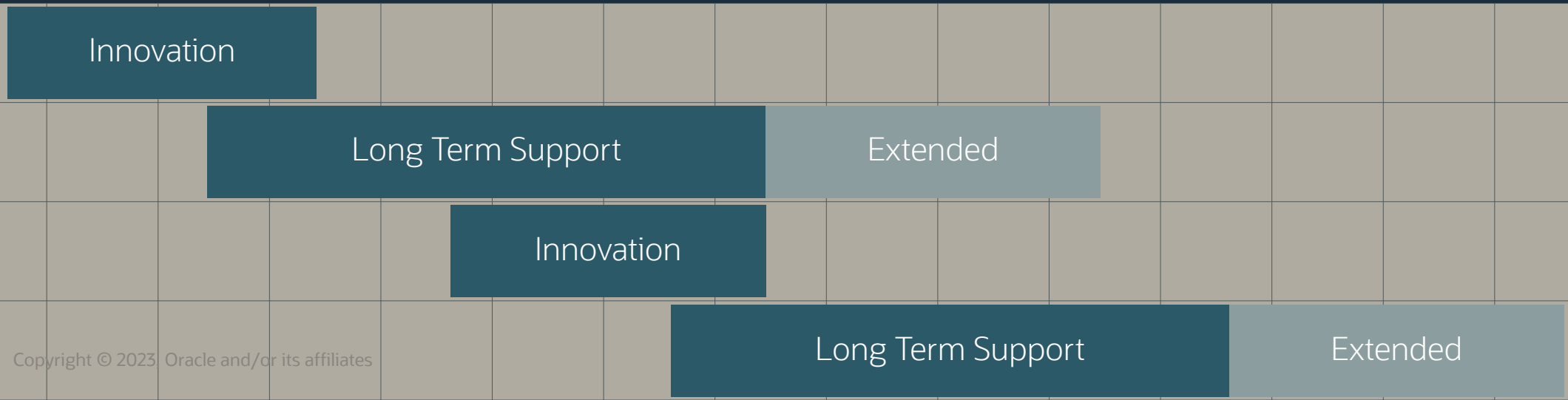
Release Types

LONG TERM SUPPORT

5+ years of Premier Support followed by
3+ years of Extended Support

INNOVATION

2 years of Premier Support
No Extended Support



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Move production databases from one Long Term Support release to the next

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Next Long Term Support release

Oracle Database 23c

Upgrade possible only from:

- Oracle Database 19c
- Oracle Database 21c

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Do you want to upgrade?

Oracle Database 11.2.0.4
Oracle Database 12.1.0.2
Oracle Database 12.2.0.1
Oracle Database 18c

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Oracle Database 11.2.0.4
Oracle Database 12.1.0.2
Oracle Database 12.2.0.1
Oracle Database 18c

Oracle Database 19c

Oracle Database 23c

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Everybody must upgrade to Oracle Database 19c

- With or without Multitenant

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```
--As of Oracle Database 19c you can create up to 3 PDBs without
--having the multitenant license. Applies to SE2 as well

SQL> alter system set max_pdbs=3;
```


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Have at least a few environments in Oracle Database 19c using Oracle Multitenant

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Your path to successful database upgrades

1

Install Oracle Home including RU and MRP

MOS Note: 2118136.2
MOS Note: 555.1
MOS Note: 2781612.2

2

Download and deploy the most recent AutoUpgrade

MOS Note: 2485457.1

3

Collect performance information from current source and test thoroughly

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AutoUpgrade | Overview

11.2.0.4
12.1.0.2
12.2.0.1
18c
19c

ONE BUTTON APPROACH

12.2.0.1
18c
19c
21c

1. CONFIG FILE

2. ANALYZE

3. UPGRADE

Optionally,
convert to PDB

AutoUpgrade Overview

Supported source releases

- 11.2.0.4
- 12.1.0.2
- 12.2.0.1
- 18
- 19

All architectures (CDB and non-CDB)
All supported operating systems
All editions (SE2, EE)
All types (single instance and RAC)

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AutoUpgrade Overview

Always download the newest edition from MOS Note: 2485457.1

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AutoUpgrade Overview

Shortest possible config text file

```
upg1.source_home=/u01/app/oracle/product/12.2.0.1
upg1.target_home=/u01/app/oracle/product/19
upg1.sid=CDB1
```


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AutoUpgrade Overview

One command

```
$ java -jar autoupgrade.jar -config cdb1.cfg -mode deploy
```

Advanced monitoring and logging

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AutoUpgrade Overview

Supported target releases

- 12.2.0.1
- 18
- 19
- 21
- Any future release

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Lab Exercises

Upgrade to Oracle Database 19c and ensure performance stability

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Lab Exercises

Eleven units covering multiple use cases

1. Initialize Environment

2. Pre-upgrade: Generate AWR Snapshot
3. Pre-upgrade: Capture and Preserve SQL

4. Upgrade: AutoUpgrade

5. Post-Upgrade: AWR Compare Report
6. Post-Upgrade: SQL Performance Analyzer
7. Post-Upgrade: SQL Plan Management
8. Post-Upgrade: SQL Tuning Advisor
9. Use Case: Plugin UPGR into CDB2
10. Alternative: Transportable Export/Import
11. Use Case: Unplug Plug Upgrade

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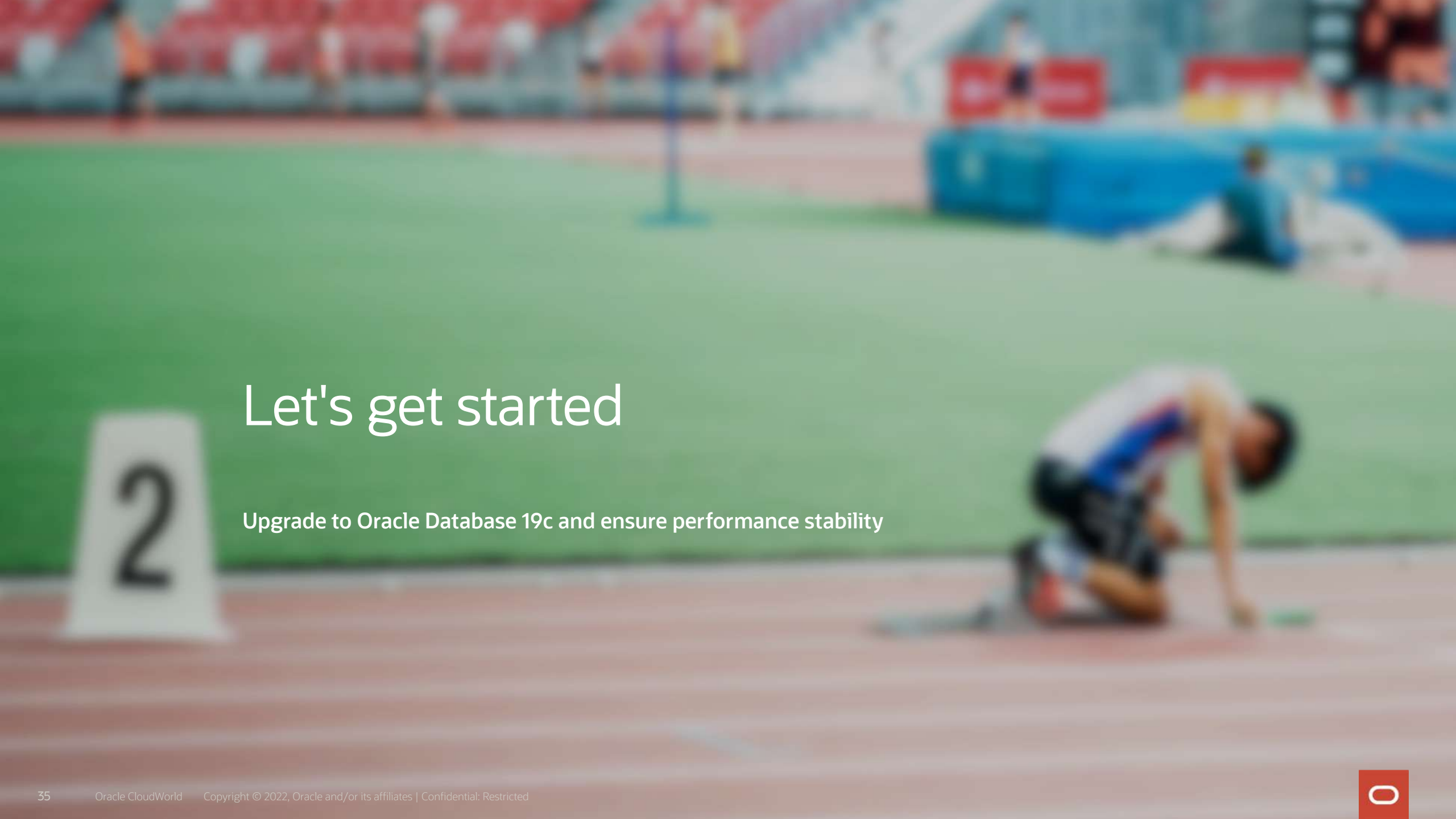

Let's get started

Upgrade to Oracle Database 19c and ensure performance stability

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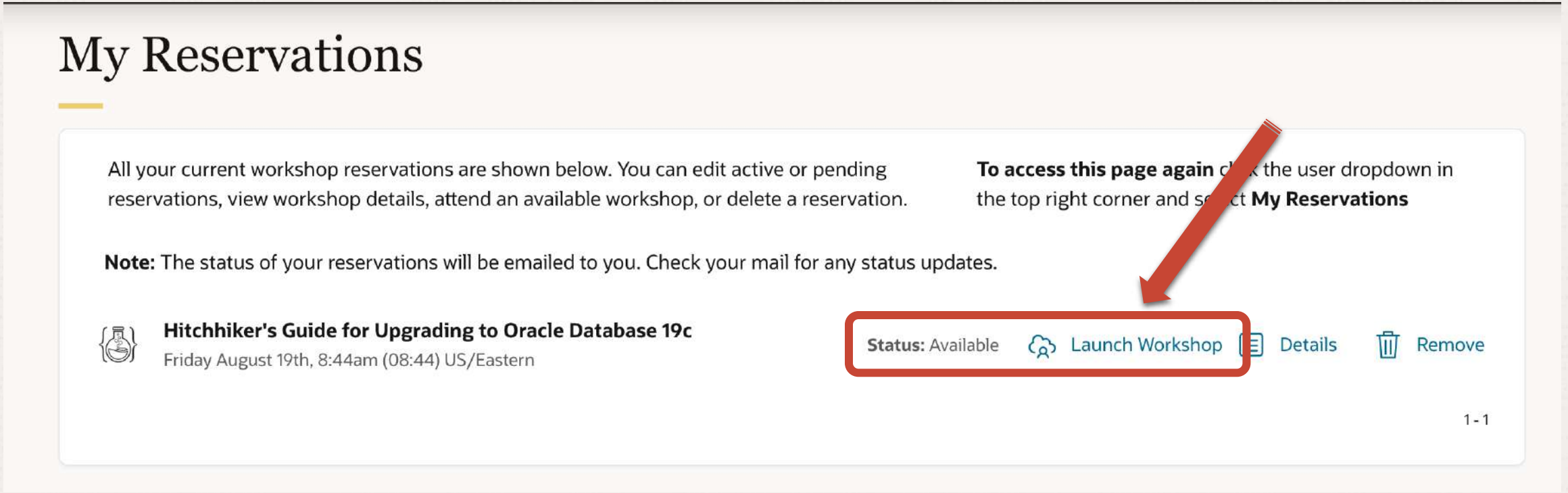
Lab Provisioning

Now you start - click "Launch Workshop"



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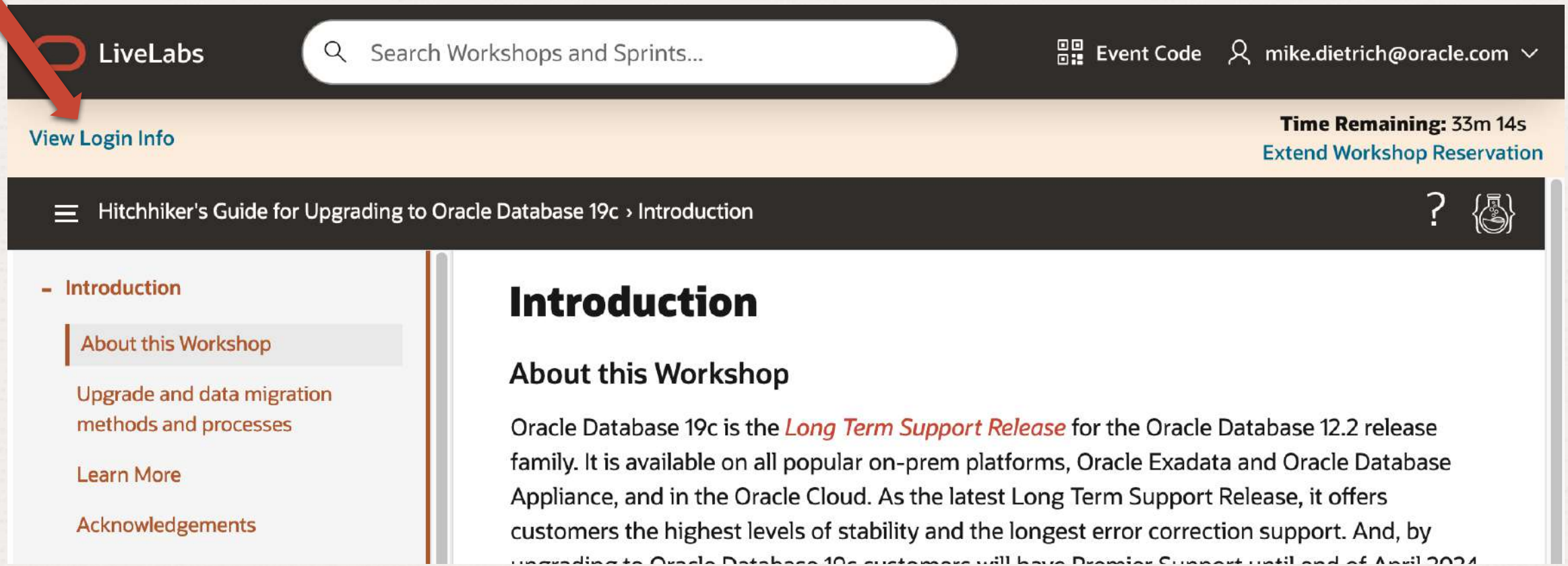
Lab Provisioning

Click on "View Login Info"



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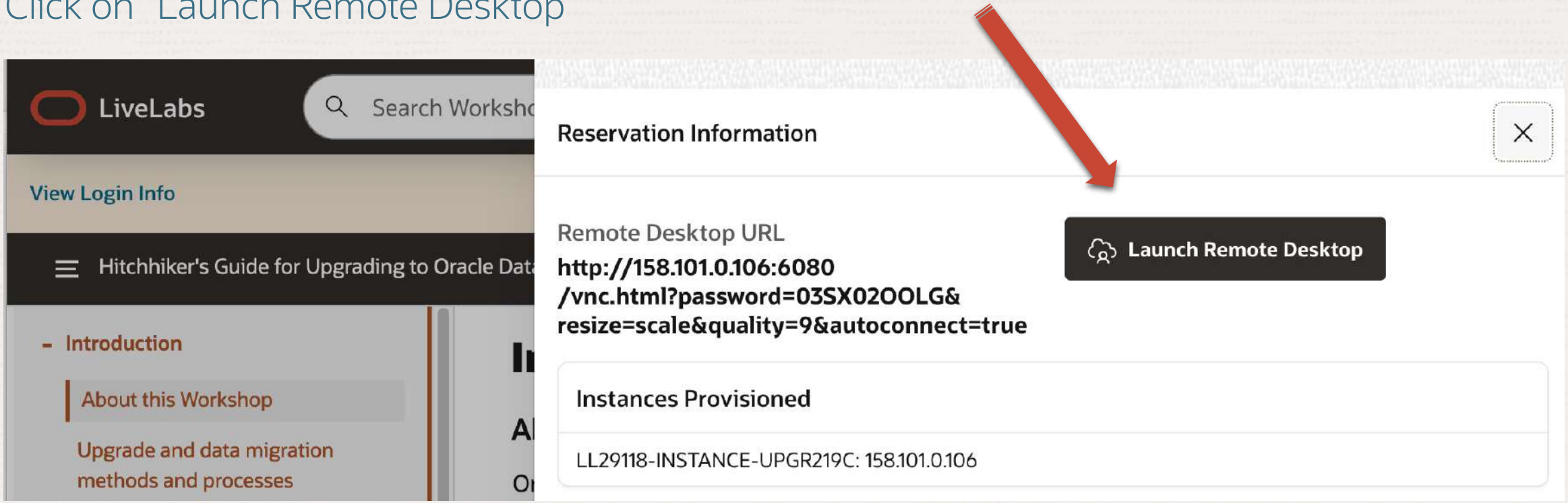
Lab Provisioning

Click on "Launch Remote Desktop"



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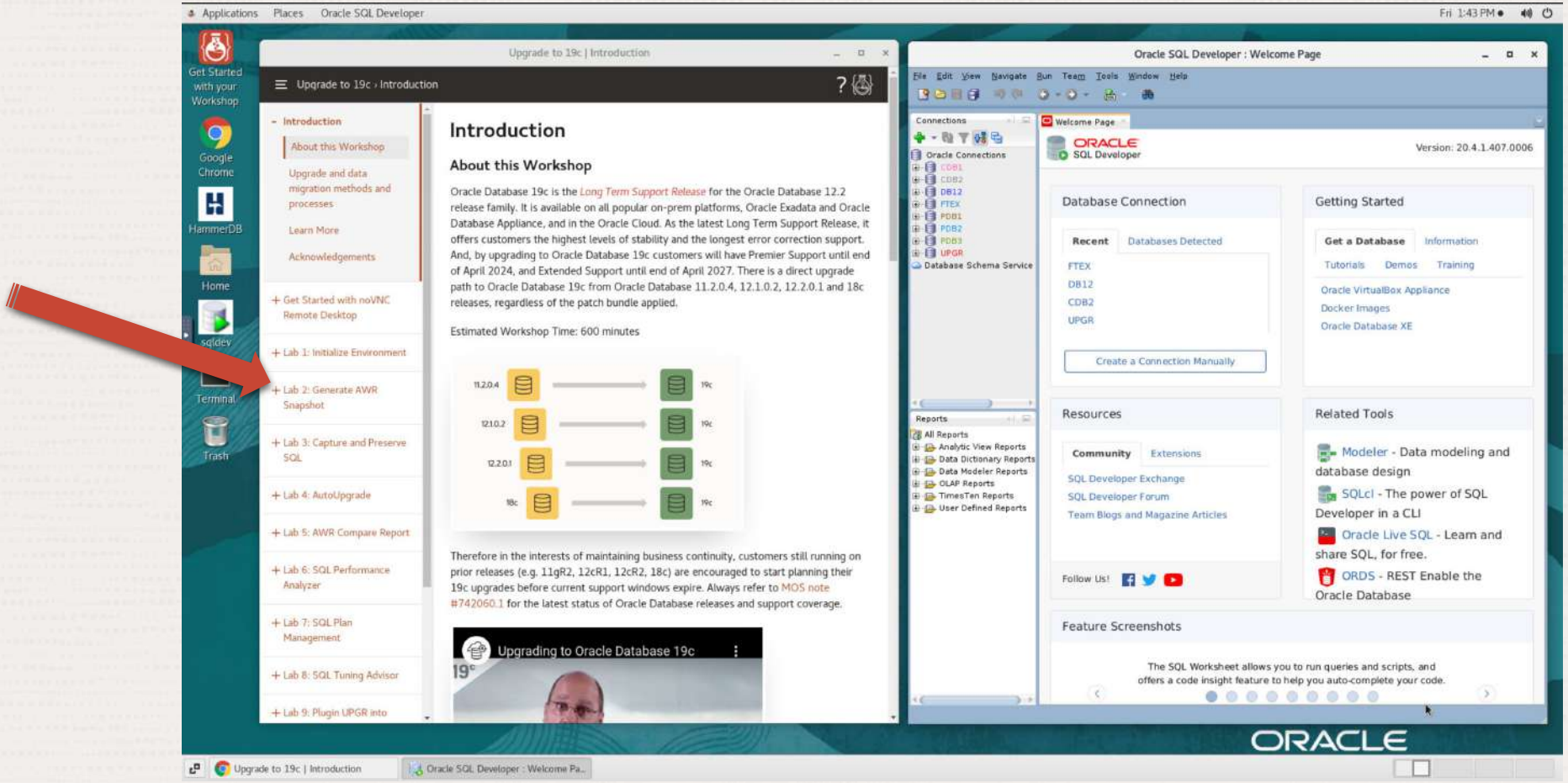
Lab Provisioning

Start with LAB #2 "Generate AWR Snapshot"



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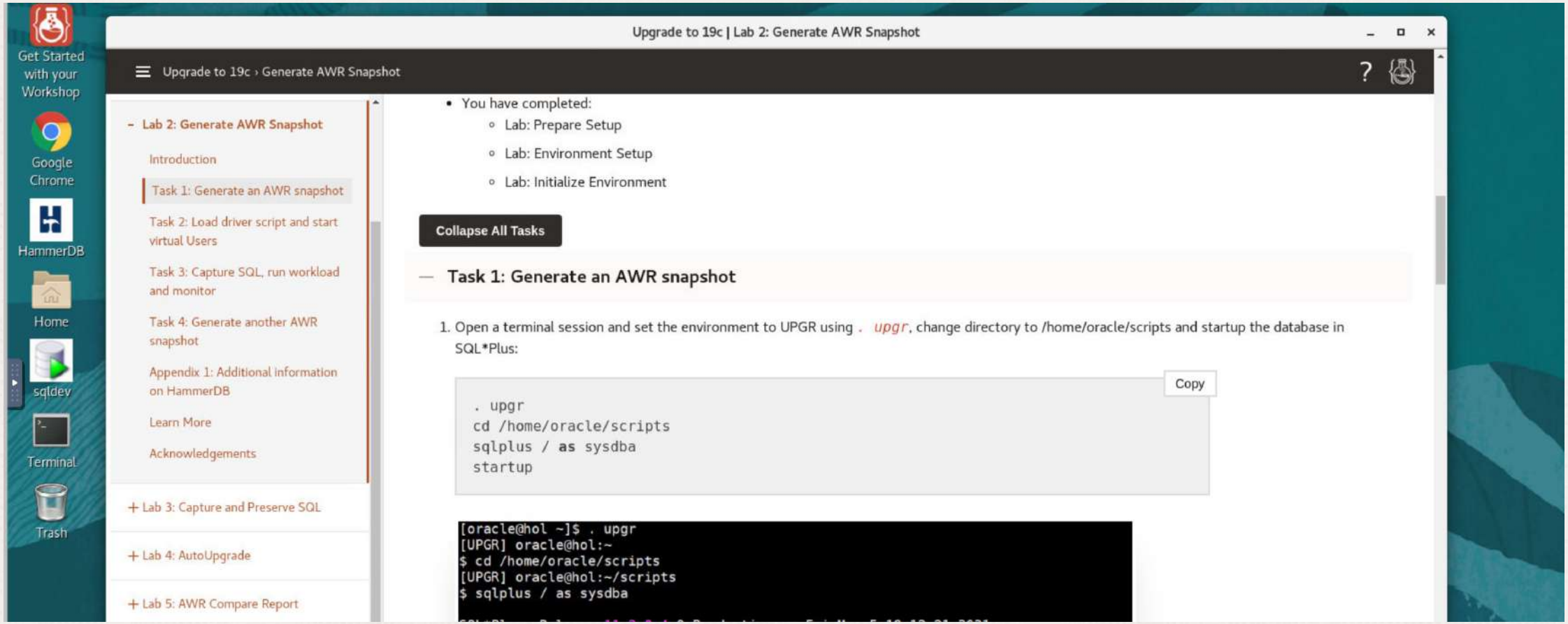
Lab Provisioning

You may want to close SQL Developer – then you have more space to work



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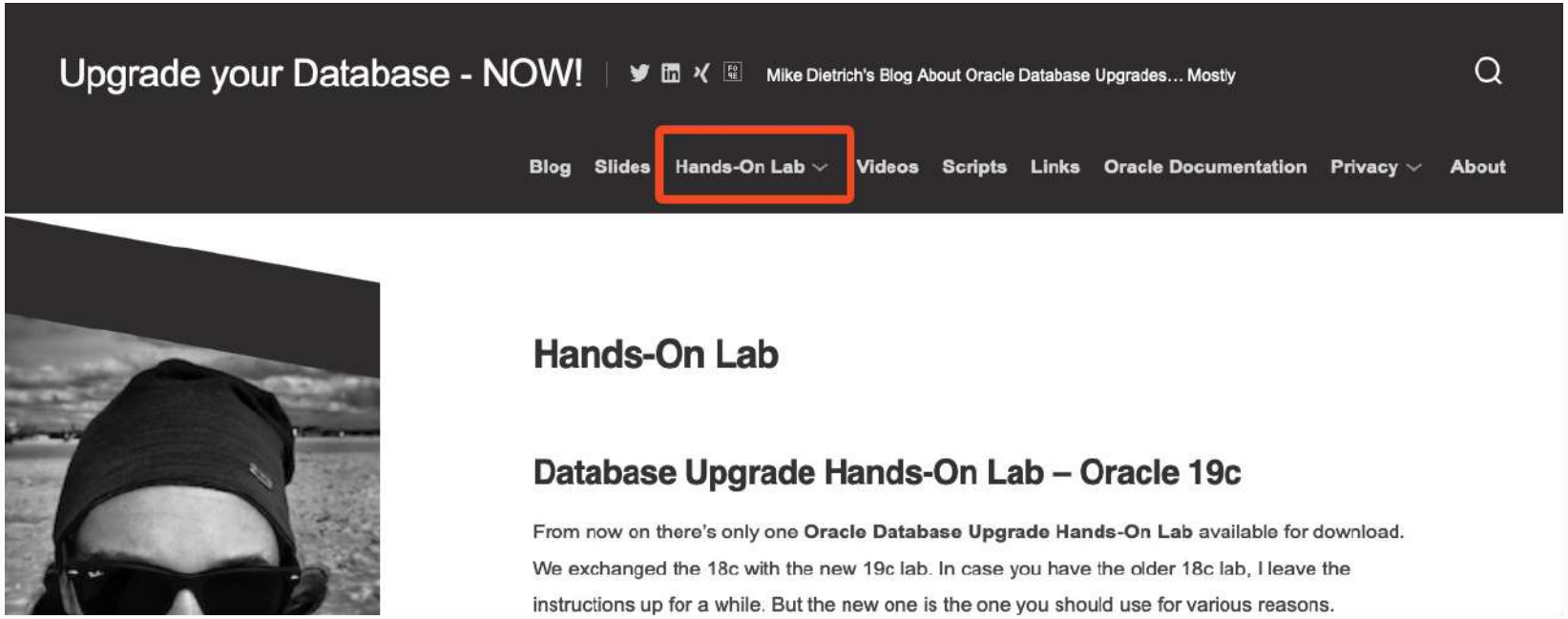
Hands-On Lab | Create Your Lab

On Mike's blog (https://mikedietrichde.com) get

- the lab as Virtual Box image
- the instructions



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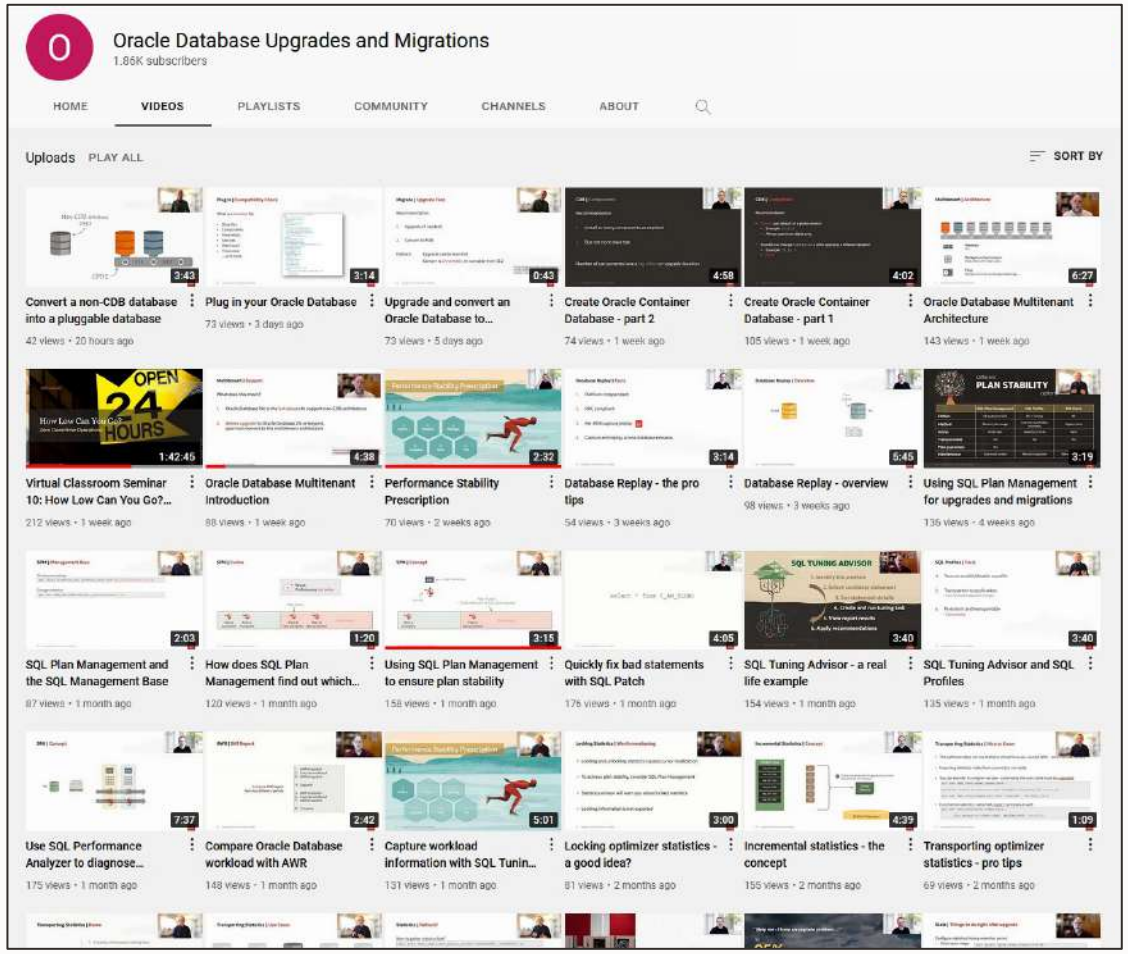
YouTube | Oracle Database Upgrades and Migrations



Link

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

SCAN ME

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From SR to Patch

Insights into the Oracle Database Development Process

June 22, 2023 – 16:00 CEST

SCAN ME

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THANK YOU