

ORACLE

# Move your data to ADW

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15-JAN-2020





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## Migration to ADB

How to move your data and databases into Autonomous

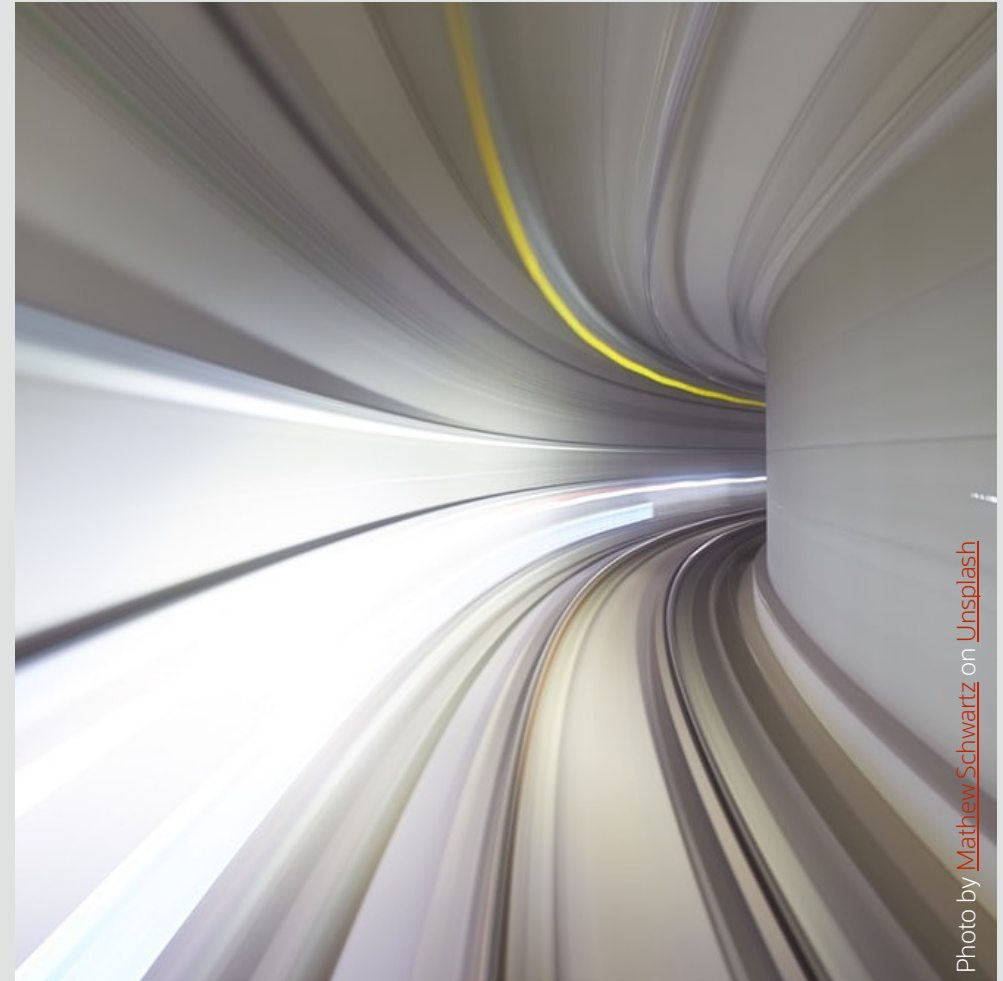
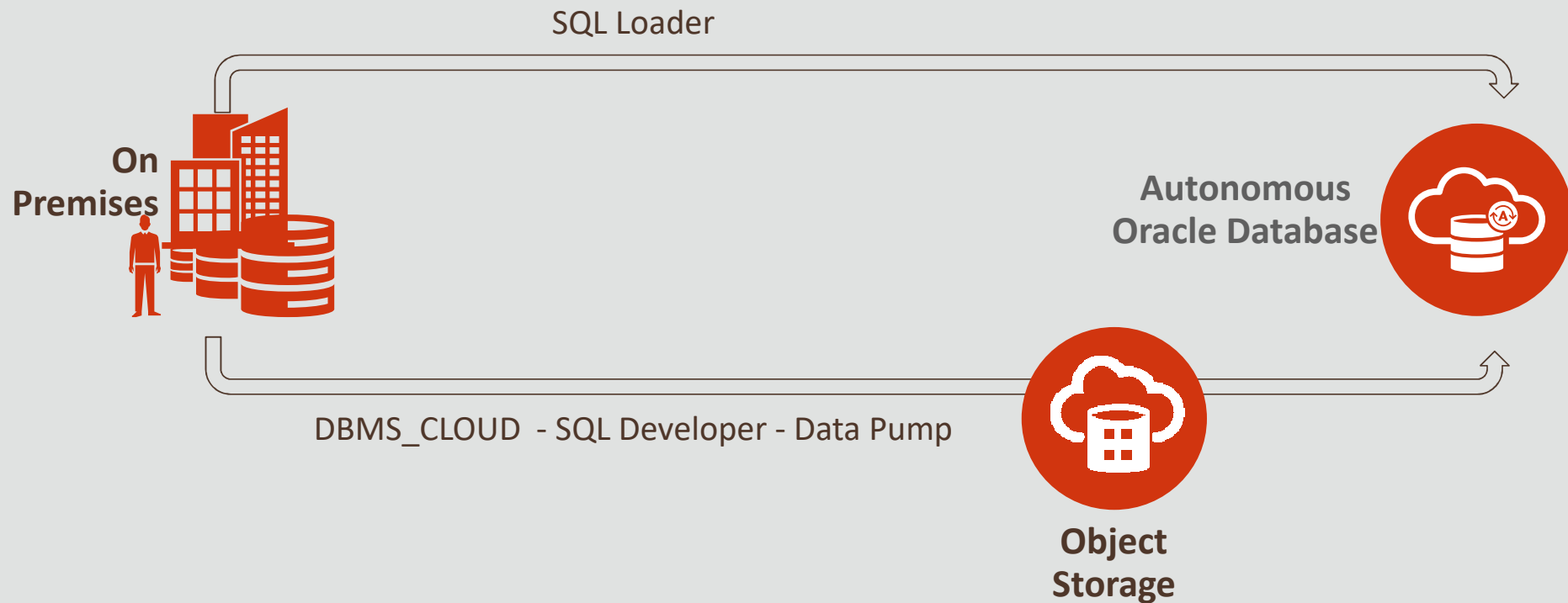


Photo by [Matthew Schwartz](#) on [Unsplash](#)

# Migration to ADB

- 1 Introduction
- 2 SQL Developer
- 3 SQL Loader
- 4 Data Pump

# Autonomous Cloud | Migration Techniques



# Autonomous Cloud | Restrictions

- Please see an always up-to-date list here:

<https://docs.oracle.com/en/cloud/paas/autonomous-data-warehouse-cloud/user/experienced-database-users.html#GUID-58EE6599-6DB4-4F8E-816D-0422377857E5>

- Data types
- Parameters
- Database features
- Some database commands

## Topics

- **About the Autonomous Data Warehouse Database**
- **Restrictions for Database Initialization Parameters**
- **Restrictions for SQL Commands**
- **Restrictions for Data Types**
- **Managing Partitions, Indexes, and Materialized Views**
- **Restrictions for Database Features**

# Autonomous Cloud | Create an Always Free ADB

- Make sure **Always Free** toggle is **ON**

Choose a workload type

**Data Warehouse**  
Configures the database for a decision support or data warehouse workload, with a bias towards large data scanning operations. ✓

**Transaction Processing**  
Configures the database for a transactional workload, with a bias towards high volumes of random data access.

Choose a deployment type

**Serverless**  
Run Autonomous Database without provisioning infrastructure. ✓

**Dedicated Infrastructure**  
Run Autonomous Database on dedicated Exadata infrastructure.

Configure the database

**Always Free** ⓘ  
 Show only Always Free configuration options

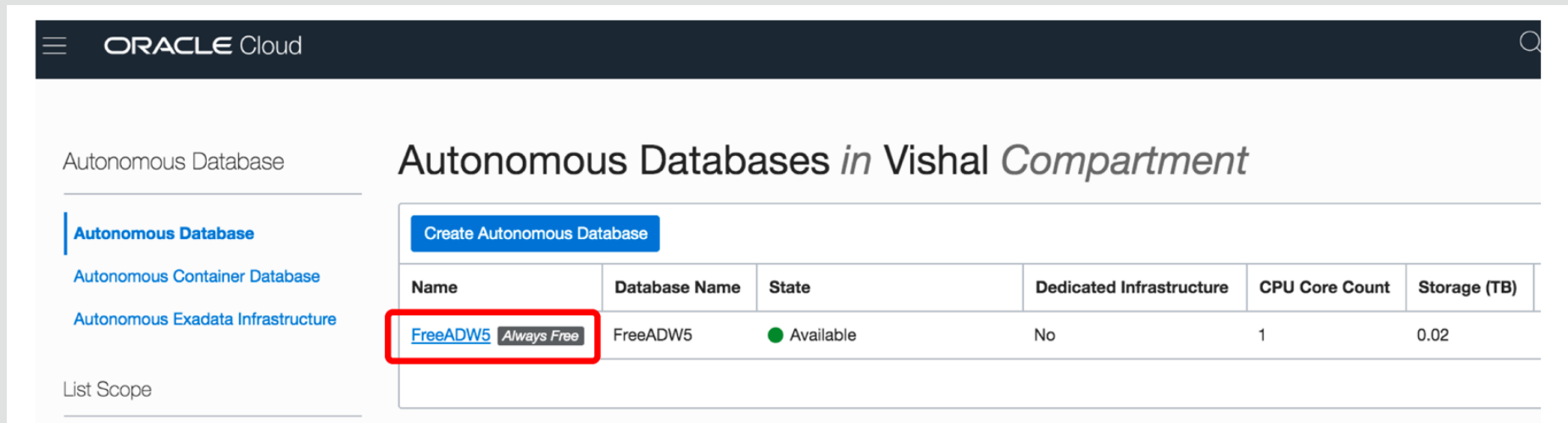
**CPU core count**  
1  
Always Free Autonomous Databases can utilize up to 1 core. The CPU core count cannot be adjusted.

**Storage (TB)**  
0.02  
Always Free Autonomous Databases can utilize up to 0.02 TB (20 GB) of storage. The storage size cannot be adjusted.



# Autonomous Cloud | Create an Always Free ADB

- It will take a few minutes to provision your ADB instance



The screenshot shows the Oracle Cloud console interface. The top navigation bar includes the Oracle Cloud logo and a search icon. The main content area is titled "Autonomous Databases in Vishal Compartment". On the left, there is a sidebar with navigation links for "Autonomous Database", "Autonomous Container Database", and "Autonomous Exadata Infrastructure". The "Autonomous Database" link is selected. Below the sidebar, there is a "List Scope" section. The main content area features a "Create Autonomous Database" button and a table listing existing instances. The table has columns for Name, Database Name, State, Dedicated Infrastructure, CPU Core Count, and Storage (TB). One instance is listed: "FreeADW5" with the state "Always Free", which is highlighted with a red box. The instance has 1 CPU core and 0.02 TB of storage.

Name	Database Name	State	Dedicated Infrastructure	CPU Core Count	Storage (TB)
FreeADW5 <small>Always Free</small>	FreeADW5	● Available	No	1	0.02

- Quick Start Solution:
  - <https://github.com/oracle/oci-quickstart-cloudnative>



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# Migration into ADB | SQL Developer



ORACLE Cloud eu-frankfurt-1

Autonomous Database » Autonomous Database Details

## MIKEADW

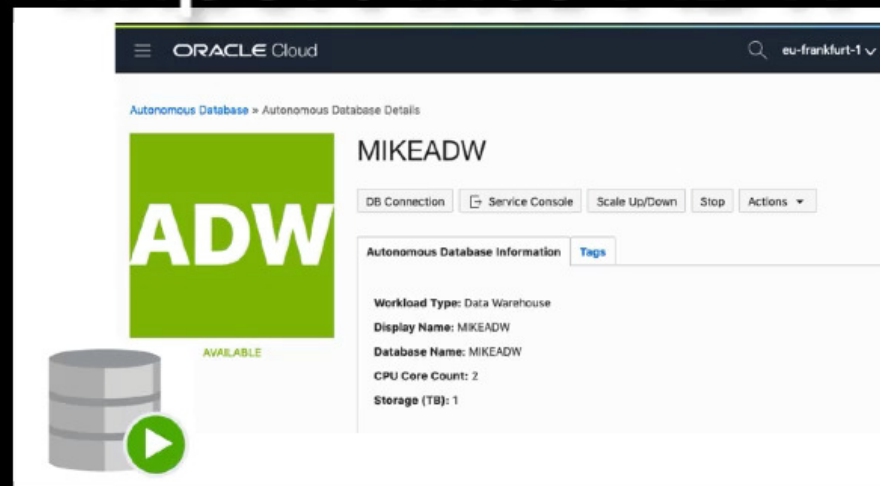
DB Connection Service Console Scale Up/Down Stop Actions

Autonomous Database Information Tags

**Workload Type:** Data Warehouse  
**Display Name:** MIKEADW  
**Database Name:** MIKEADW  
**CPU Core Count:** 2  
**Storage (TB):** 1

AVAILABLE

# Import into ADW



ORACLE Cloud eu-frankfurt-1

Autonomous Database » Autonomous Database Details

## MIKEADW

DB Connection Service Console Scale Up/Down Stop Actions

Autonomous Database Information Tags

Workload Type: Data Warehouse  
Display Name: MIKEADW  
Database Name: MIKEADW  
CPU Core Count: 2  
Storage (TB): 1

AVAILABLE

## with SQL Developer

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# Migration into ADB | SQL Loader

- Download the Connection Wallet
- Download and install the Oracle Instant Client (if needed)
- Edit `sqlnet.ora`
- Set `TNS_ADMIN` & `PATH` environment variables



CDE\_OnPrem



Autonomous DB

Excel File Edit View Insert Format Tools Data Window Help

OlympicResults1896-2014

Home Insert Draw Page Layout Formulas Data Review View

Calibri (Body) 18 A A

General

Conditional Formatting Format as Table Cell Styles

AutoSum Fill Clear

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	A	B	C	D	E	F	G	H	I	J	K	L	M
36933	2012	Summer	London	Wrestling	Wrestling Frees	REZAEI, Ghasem Gholamreza	IRI	Men	Wg 96 KG		Gold		
36934	2012	Summer	London	Wrestling	Wrestling Frees	TOTROV, Rustam	RUS	Men	Wg 96 KG		Silver		
36935	2012	Summer	London	Wrestling	Wrestling Frees	ALEKSANYAN, Artur	ARM	Men	Wg 96 KG		Bronze		
36936	2012	Summer	London	Wrestling	Wrestling Frees	LIDBERG, Jimmy	SWE	Men	Wg 96 KG		Bronze		
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Cloud Migration Source 18c (Added trace commands to file) [Running]

Applications Places System en Wed Jan 9, 8:10 PM oracle

My Home - Oracle Services - Mozilla Firefox

File Edit View Search History Bookmarks Tools Help



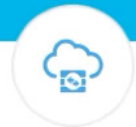



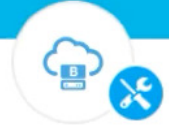
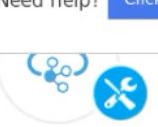
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https://myservices-oradbclouducm.console.oraclecloud.com/mycloud/cloudportal/cloudHome 110% Search

# My Oracle Services

Data Center: North America Search... ☆

Page 1 of 2 (1-30 of 49 items) < >

 My Services	 Oracle Identity Cloud Service identity Admin Console	 Oracle Cloud Infrastructure Object Storage Classic Storage	 Load Balancer LBAAS
 Oracle Cloud Infrastructure	 Oracle Cloud Infrastructure -	 Big Data Cloud	 Oracle Event Hub Cloud

Need help? [Click to chat](#)

oracle@localhost:~ \*Unsaved Document... oracle@localhost:~/... My Home - Oracle Se... 1 2 3 Right





Cloud Migration Source 18c (Generated ASH Report from non-scaled 4CPU) [Running]

Applications Places System en Fri Jan 4, 8:37 PM oracle

Oracle Cloud Infrastructure - Mozilla Firefox

```
File Edit View Search Terminal Help
[UPGR] oracle@localhost:~
$ printenv ORACLE_HOME
/u01/app/oracle/product/11.2.0.4
[UPGR] oracle@localhost:~
$
```

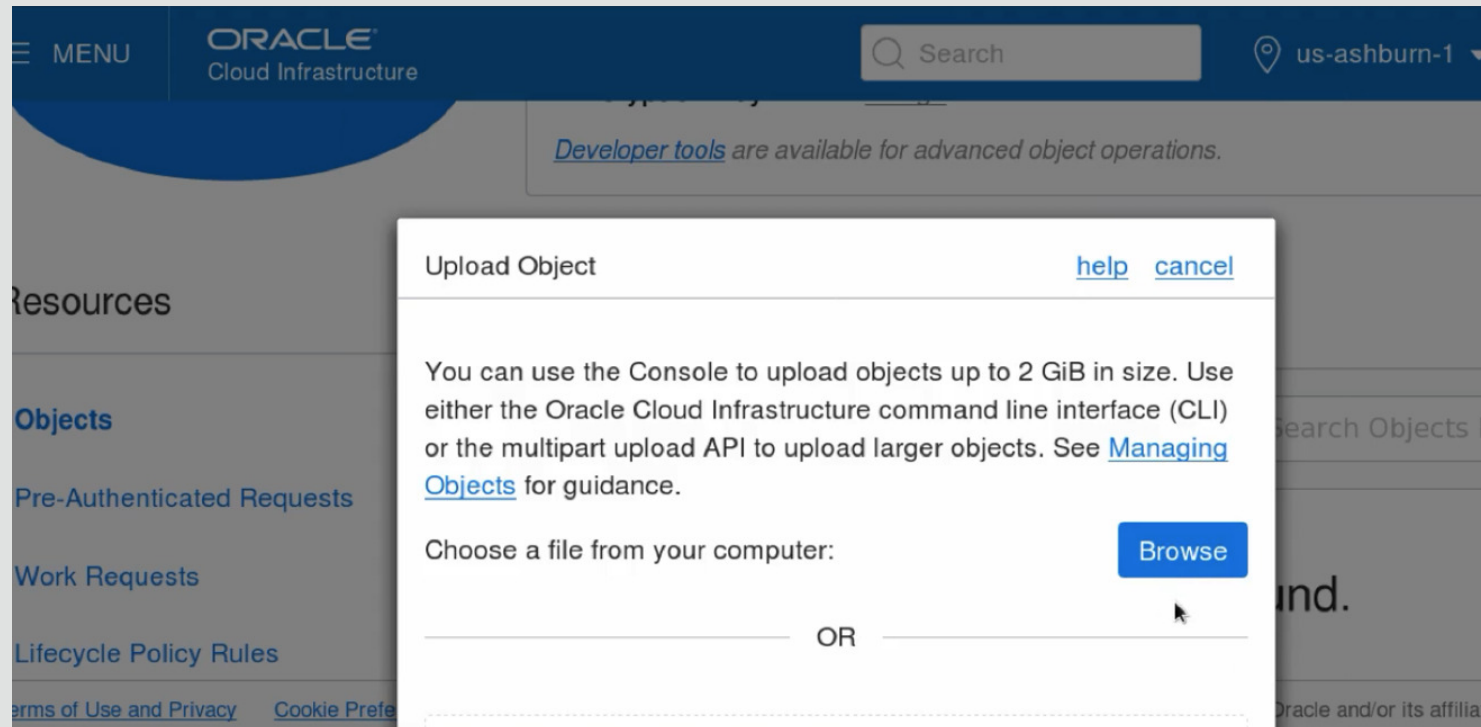
oracle@localhost:~ [cloud\_commands.tx... Oracle Cloud Infrastr... [oracle@localhost:~]

1 - 2 - 3 - Right 96



# Migration into ADB | Data Pump Example

- Upload dump file to the object store:






Lean back and relax!  
It is pretty simple and straight forward



# Slides | <https://MikeDietrichDE.com>

Upgrade your Database - NOW!  Mike Dietrich's Blog About Oracle Database Upgrades... Mostly

Blog **Slides** Har...

## Database Migration from non-CDB to PDB – Various Pitfalls

Posted on August 2, 2019 by Mike.Dietrich Flaws and Pitfalls Single-/Multitenant

There are several pitfalls when you plugin a non-CDB into a CDB environment. I'd like to highlight several potential workarounds as well. This is part of a series of blog posts to make your migration from non-CDB to PDB easier.

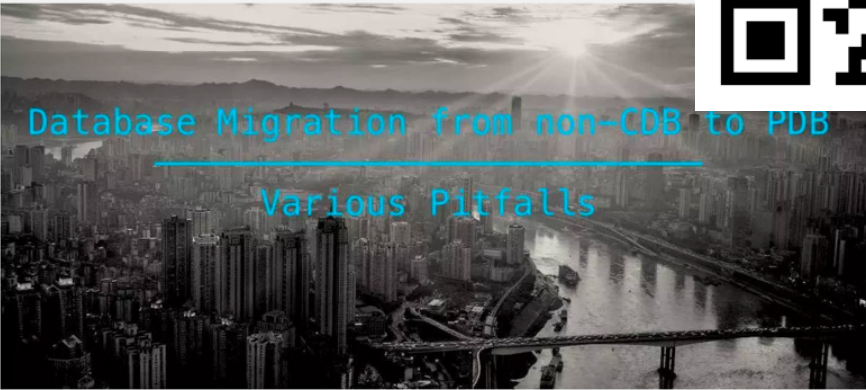


Photo by timJ on Unsplash

### Database Migration from non-CDB to PDB – Various Pitfalls

