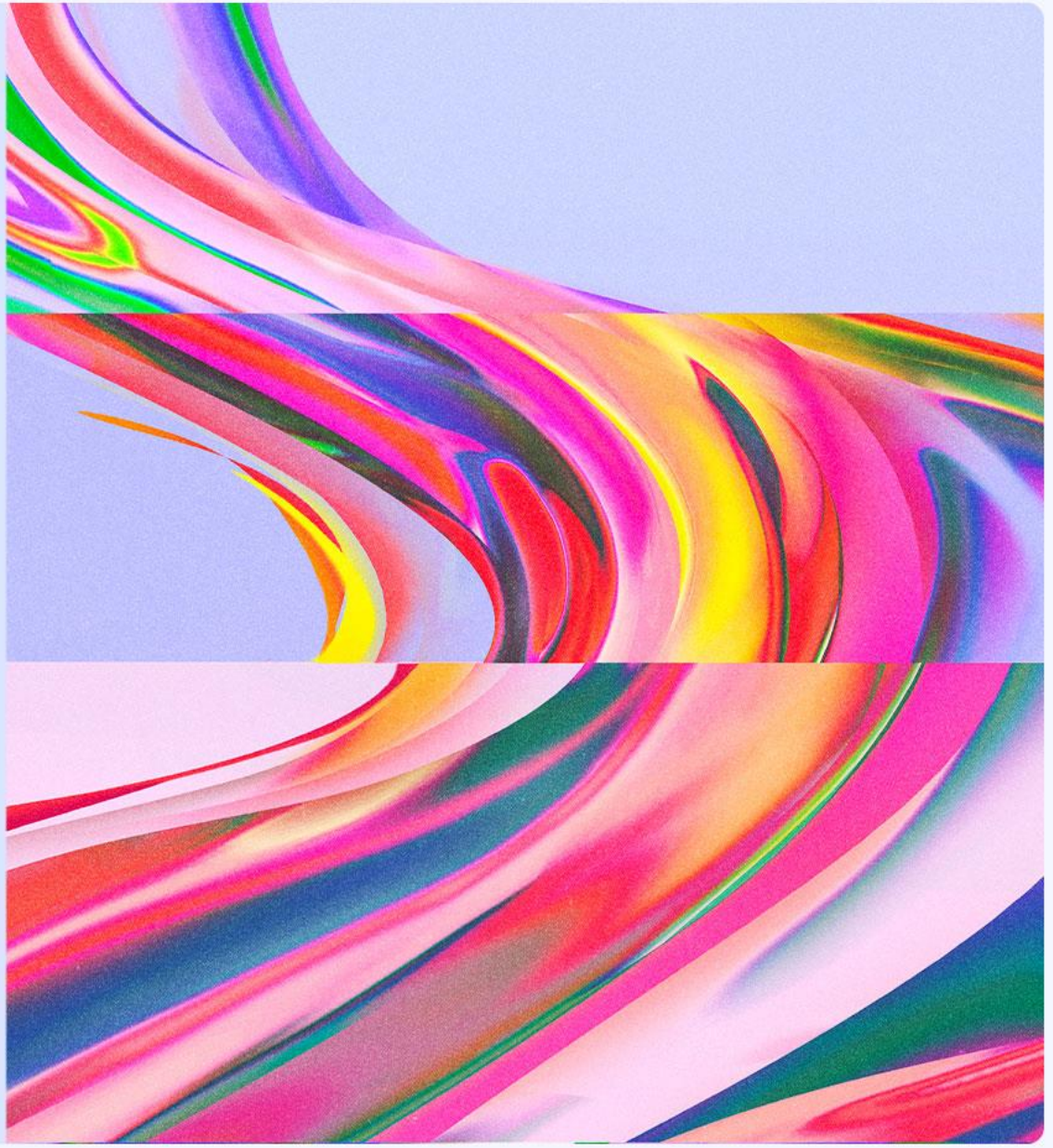
INNOVATE

MIGRATE AND MODERNIZE



INNOVATE
MIGRATE AND MODERNIZE

aws

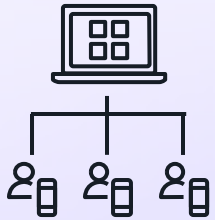
An overview of your options for migrating Oracle Database workloads to AWS

Eugene Stepanov
Sr. Manager, Database Solution Architecture
AWS

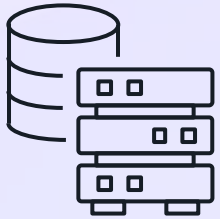
Agenda

- Business drivers for migrating to AWS
- Workload assessment
- Options for Oracle workloads on AWS
- Which deployment option is right for you?
- Migration techniques
- Customer journey to the cloud

Business drivers for migrating Oracle databases to AWS



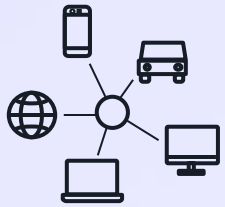
Agility and staff productivity



Data center consolidation

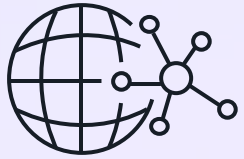
Cost reduction

Digital transformation



New services (Generative AI, AI/ML, IoT)

Improved security and operational resilience

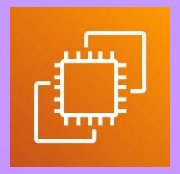


Going global quickly

Oracle Database workload assessment

- **Technical requirements**
  - Performing discovery without impacting business critical environments
  - Capturing workload utilization metrics at the database level
  - Understanding the architecture of the applications and their requirements
  - Capturing detailed configurations that provide potential for right-sizing
- **Aligning with business objectives**
  - Recovery Time Objective (RTO) and Recovery Point Objective (RPO) considerations
  - Commitment to Oracle and appetite for alternatives
  - Application maturity–whether is it actively developed, on a sustained trajectory, or going to be retired
  - How much downtime can I afford for migration
- **Licensing requirements**
  - Cost and license optimization

Options for Oracle Databases in AWS



Oracle on Amazon EC2

Amazon RDS for Oracle

Amazon RDS Custom for Oracle

NEW OFFERING

Oracle Database@AWS

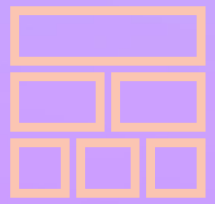
Choice of relational database engines and deployment options

Oracle Database on EC2

BYOL licensing

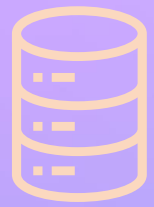
'Bring-your-own-license' (BYOL) licensing model

No upfront fees or long-term commitment with pay-as-you-go or reserved pricing options



Full Control

Full unrestricted control over OS and file system



Lift & Shift

No application changes

Bring your third-party and packaged applications

Migrate with minimal downtime using native database tools or the Amazon Database Migration Service

Amazon RDS for Oracle

Set up, operate and scale managed Oracle database in a few clicks

Fully managed

Automated administrative tasks like provisioning, patches, backup and recovery

Access the latest major and minor versions

Flexible licensing

Choice of 'license included' or 'bring-your-own-license' (BYOL) licensing models

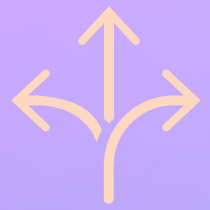
No upfront fees or long-term commitment with pay-as-you-go or reserved pricing options

Highly available

Customize your workload for the availability that you need with security and durability

Access to Amazon RDS Multi-AZ with one standby

Read replicas and automated cross-region backups for disaster recovery



Easy migration

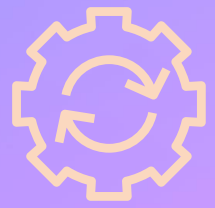
Reduce the complexity of migrating with like-to-like migration

Deploy using the familiar code, features, and tools of your favorite database

No schema conversion, simply migrate to and from

Amazon RDS Custom for Oracle

Managed database service for applications that require operating system and database customization



Managed Experience

Pause/resume RDS Custom automation

Automatic provisioning, monitoring, backup, restore, point in time recovery, and scale storage

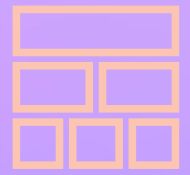
Flexibility

Bring your own media

Custom patches or patching schedules

Ability to mount shared storage volumes, such as Amazon EFS

Run older Oracle Database versions



Granular Control

Full database and operating system access

All resources are in customer's AWS account

Fine-grained access management and control

Lift & Shift

Make little to no application changes

Bring your third-party and packaged applications

Migrate with minimal downtime using native database tools or the Amazon Database Migration Service

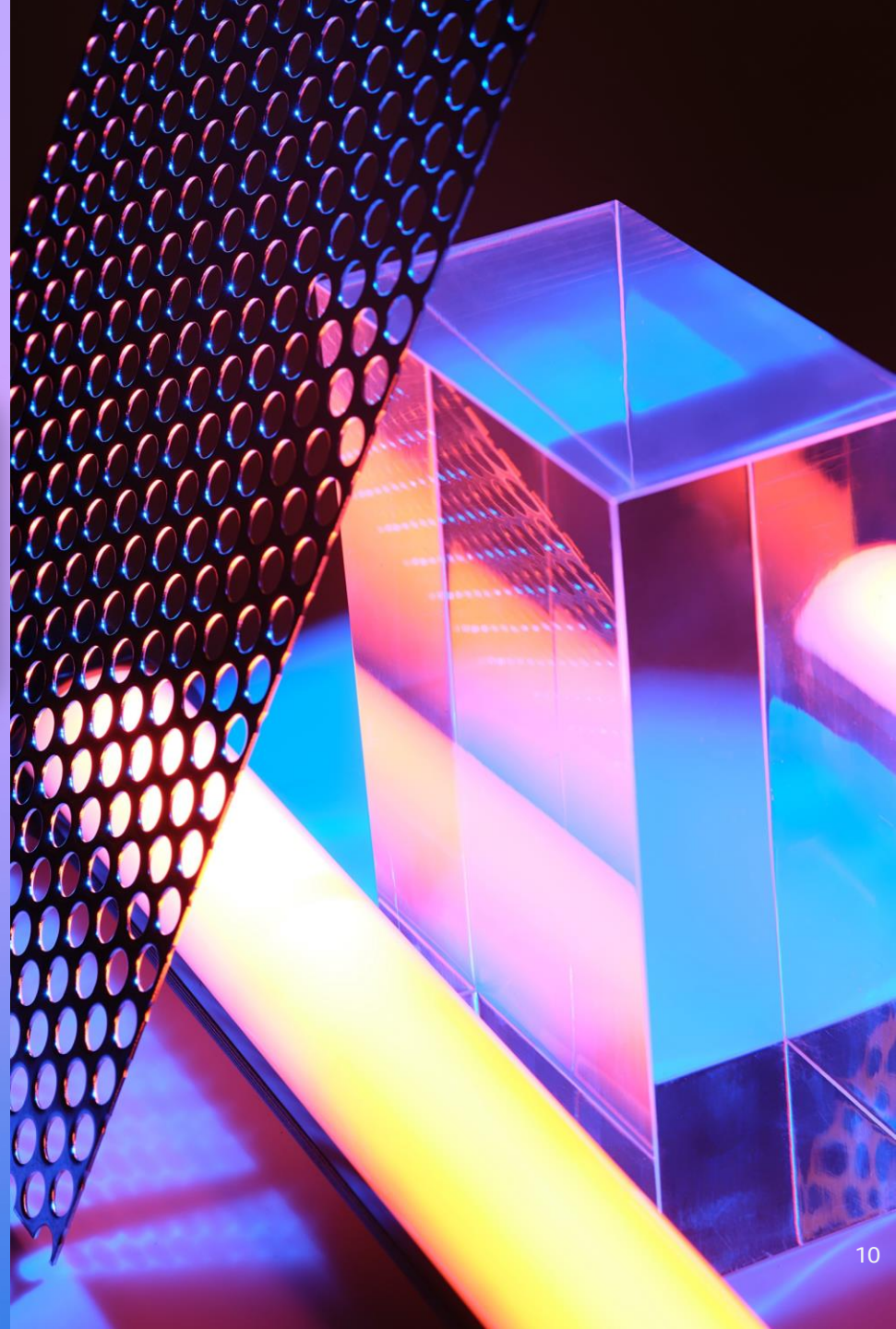
What is Oracle Database@AWS?

OCI services running on Exadata infrastructure in AWS

Low latency connection to AWS services

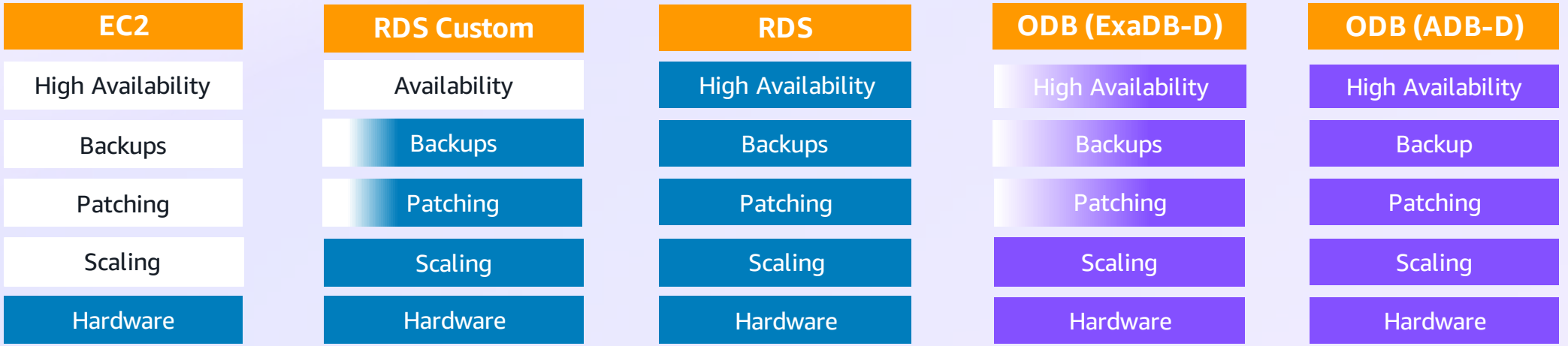
Offering available through AWS Marketplace

Oracle Database@AWS lets you migrate Oracle Exadata workloads to Oracle **Exadata Database Service** or Oracle **Autonomous Database on Dedicated Infrastructure** in AWS data centers.

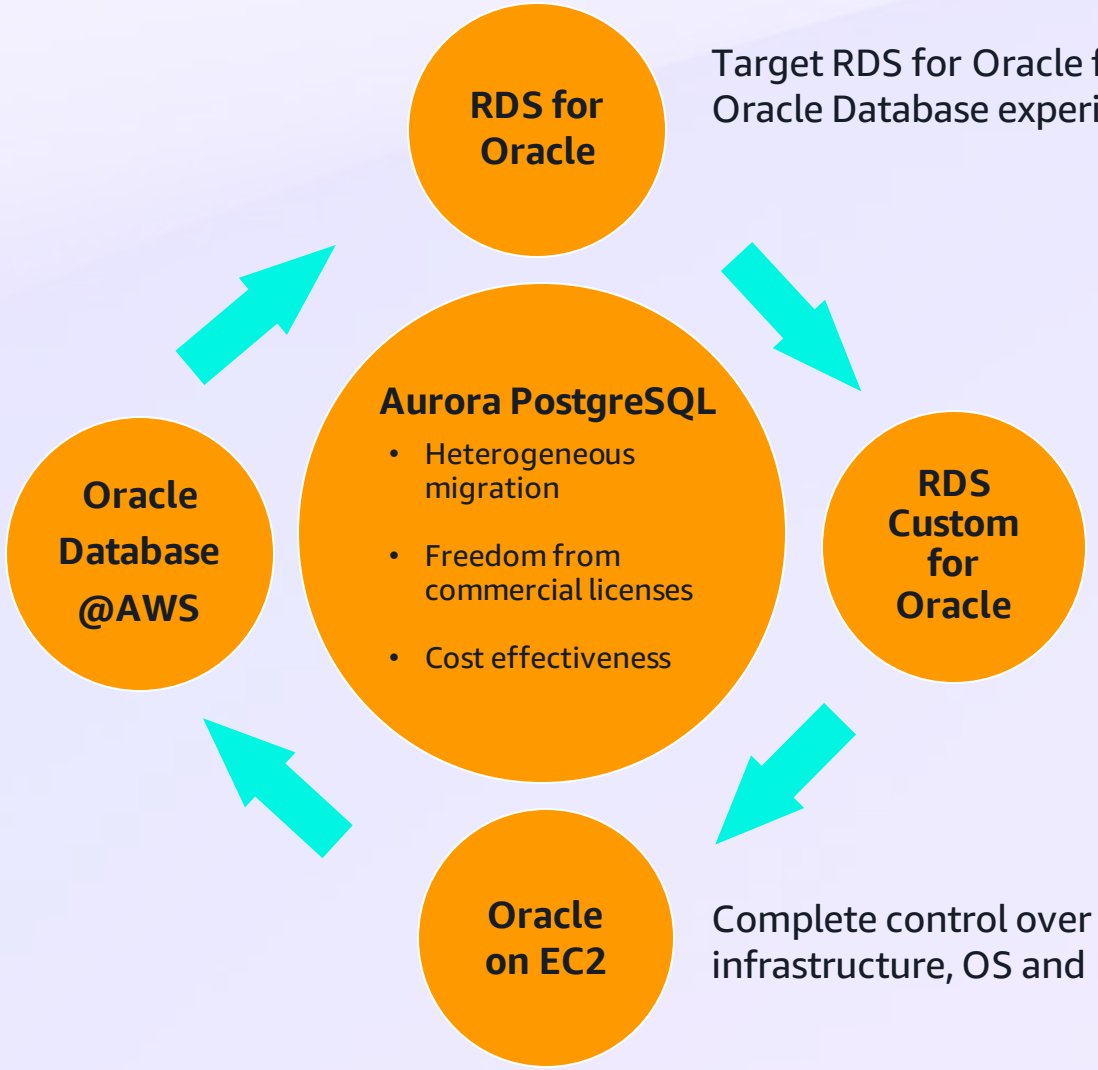


Oracle Database Deployment Options

Shared responsibility model



Which Deployment Model is Right for You?



Target RDS for Oracle for a fully managed Oracle Database experience

Choose ODB for these use cases and more:

- To run Oracle RAC on AWS
- Achieve high performance using storage with high IOPS and throughput
- Rehost workloads with a like-for-like physical migration option
- Run Oracle Applications (E-Business Suite, PeopleSoft, Hyperion) on Oracle certified platform

Choose RDS Custom for Oracle for these use cases and more:

- Full SYSDBA and OS access
- Additional HA and DR configurations
- Legacy Oracle versions
- Custom patches or patching schedules
- Custom software/agent installation

Complete control over all aspects of your infrastructure, OS and Database configuration

Migration techniques

Approach	RDS, RDS Custom, EC2	Physical, logical	Downtime
Data Pump	All	Logical	High
AWS DMS	All	Logical	Minimal
GoldenGate	All	Logical	Minimal
Recovery Manager (RMAN)	RDS Custom / EC2 / ExaDB-D	Physical	High
Data Guard	RDS Custom / EC2 / ExaDB-D	Physical	Minimal
XTTS	RDS / RDS Custom / EC2 / ExaDB-D	Physical + Logical	Minimal
Oracle ZDM	ExaDB-D / ADB-D	Physical + Logical	Minimal
PDB plug-in	ExaDB-D	Physical	High

Cathay Pacific Airways migrated management of PROS to Amazon RDS for Oracle to modernize the way they do business which increases performance by 20%.

“ Cathay Pacific

CATHAY PACIFIC

Challenge
Running its passenger revenue optimization system (PROS) on premises provided suboptimal compute power and created a heavy maintenance burden on Cathay Pacific, which needed to process bookings with efficiency and stability.

Solution
By migrating the management of PROS to the cloud using Amazon RDS for Oracle, Cathay Pacific was able to support more advanced analytics modules and improve its compute capacity and performance.

Result
- Improved security posture through automated security patching
- Increased performance by 20%
- Enabled a focus on innovation, which led to new features of PROS

ORACLE **MOVE TO MANAGED →** Amazon RDS for Oracle

aws

Thank you!

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