



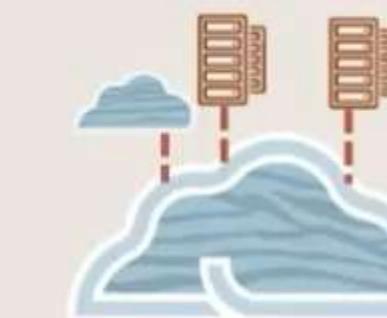
# Nicholas Cusato

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ORACLE

# Oracle Database Cloud Migration: Why Migrate?



New Application  
Development Projects  
(including APEX, Java)



Lift and Shift



Move and Improve



Capex to Opex

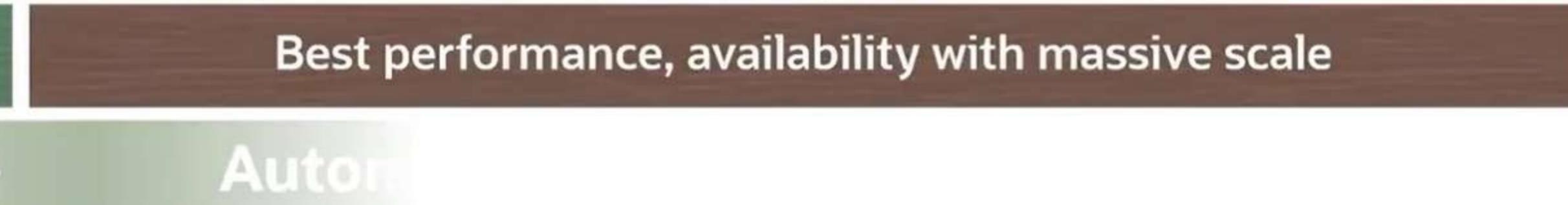
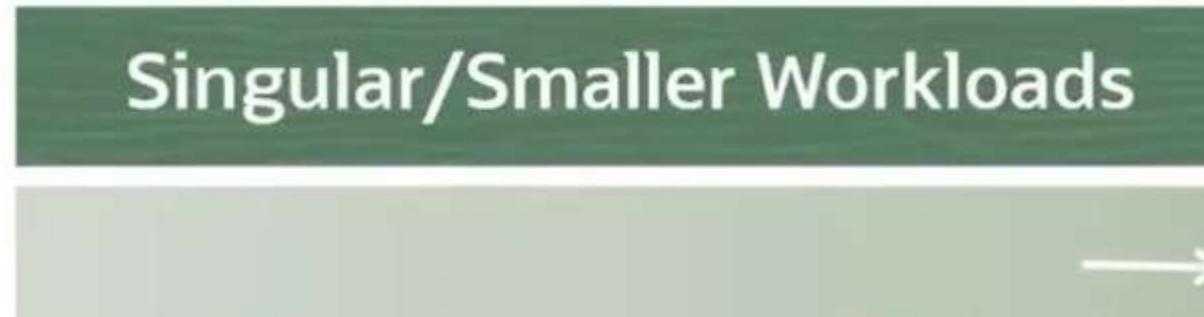
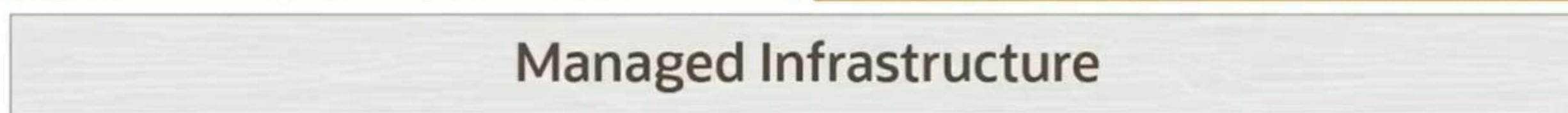
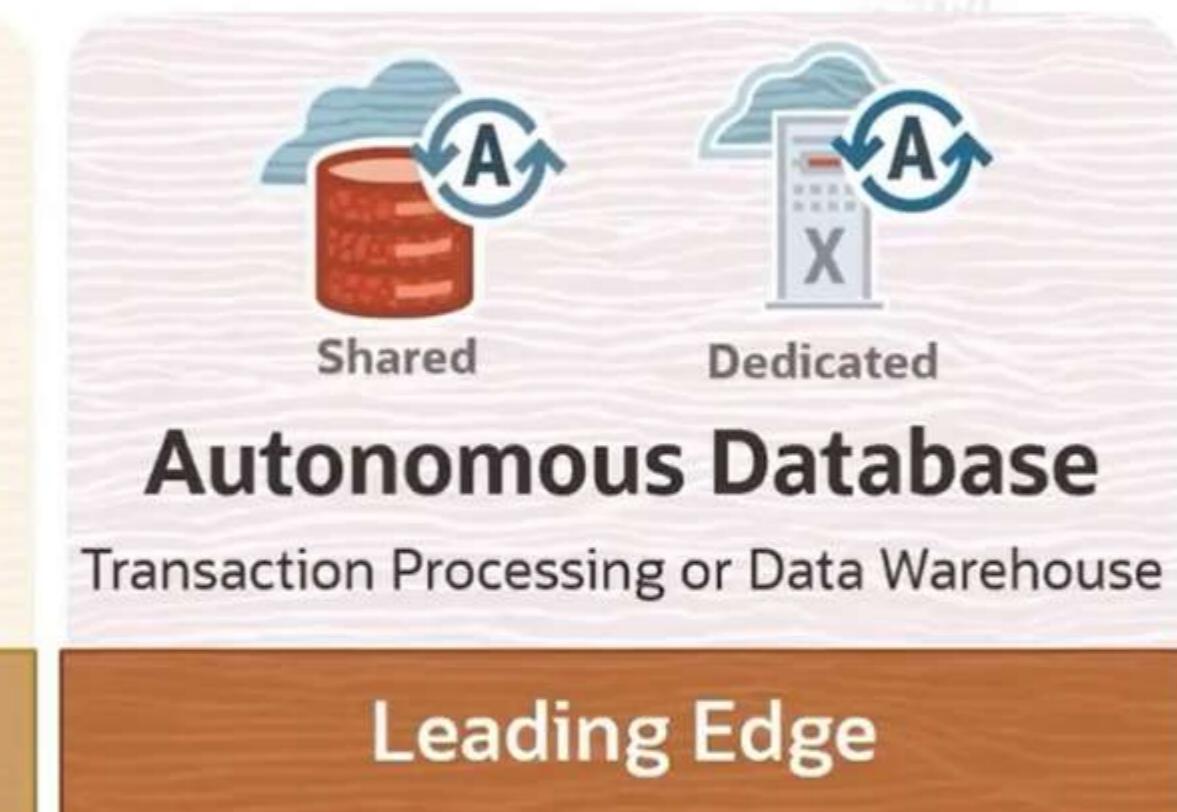


Multi-model,  
multi-workload  
converged database



# Oracle Database Cloud Services Portfolio in Oracle Cloud Infrastructure

Broad service offering at every scale to meet diverse business requirements

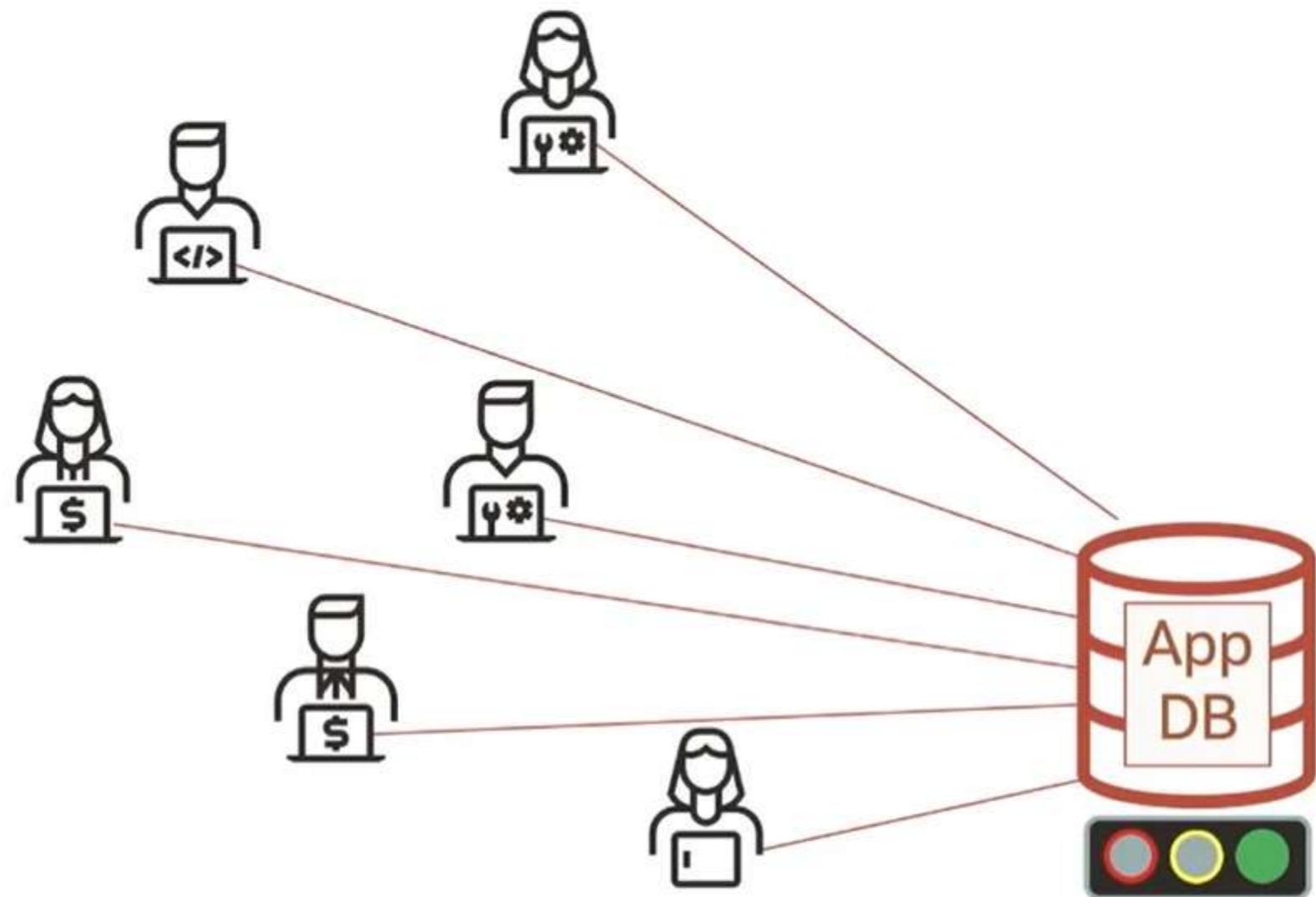


# Migration Strategies

With down time or with continuous operations

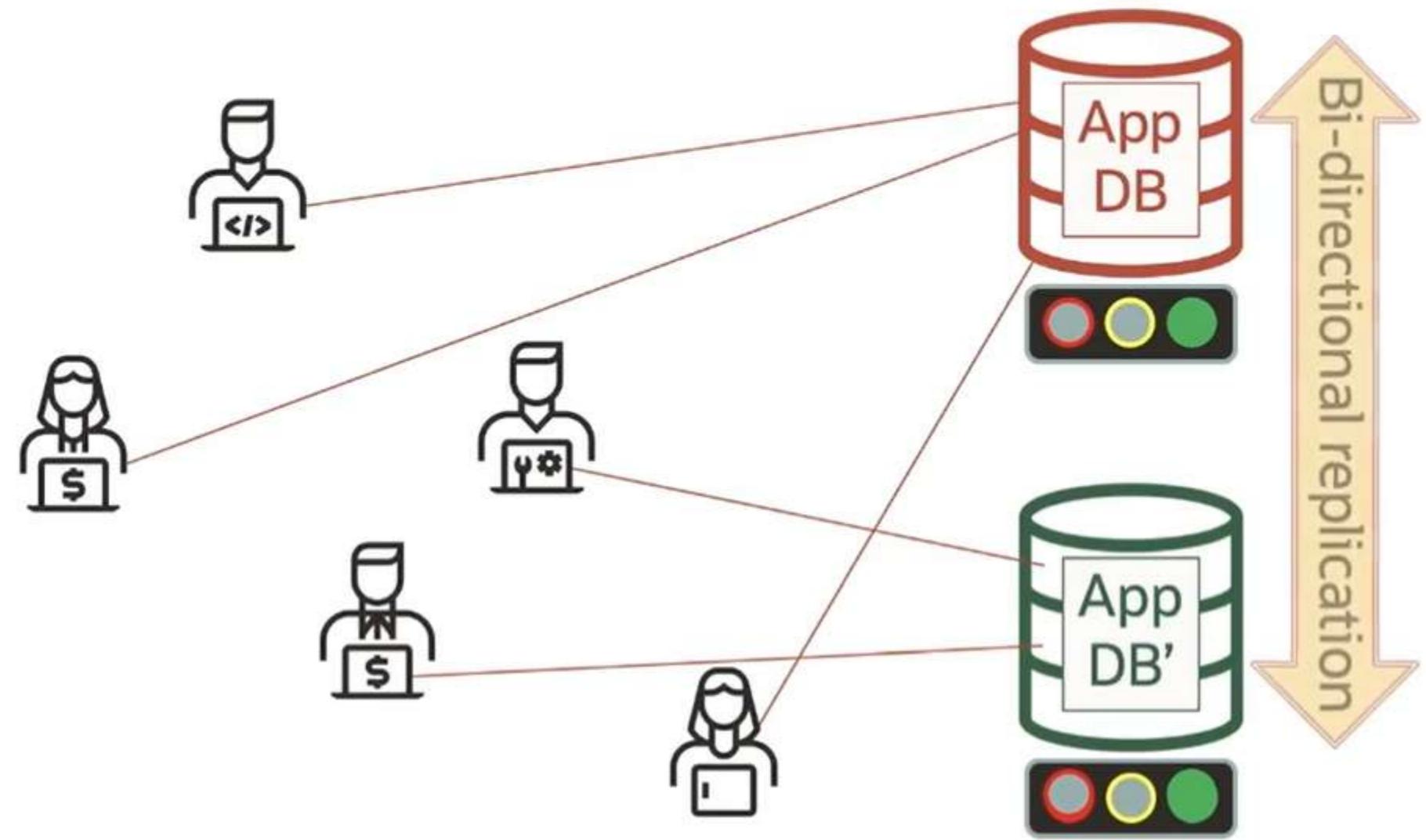
## 8x5 operations – Outage scheduled for migration

- Application is unavailable to regular users.
- Admins perform migration while app is offline.
- Users reconnect to app after migration.

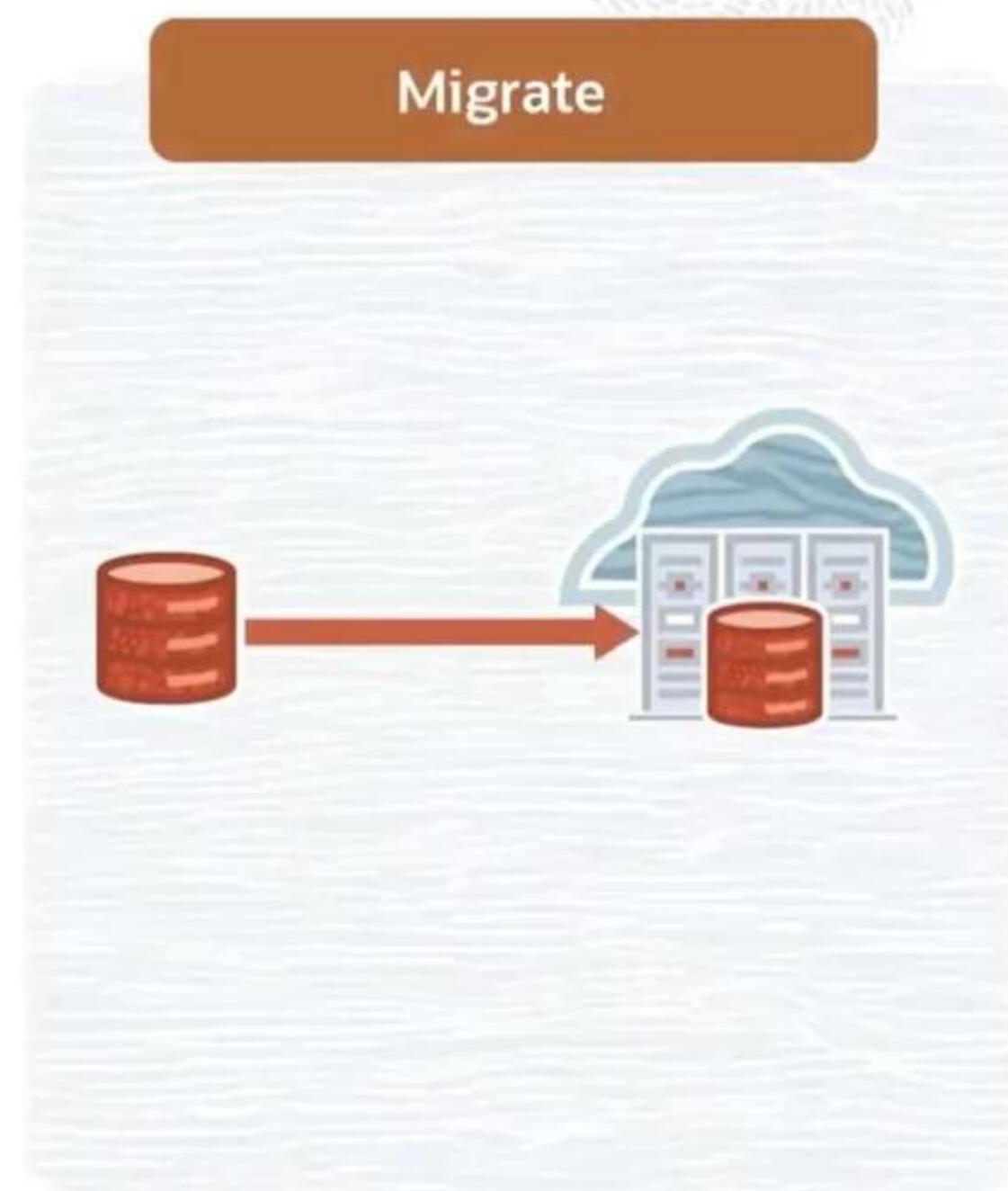
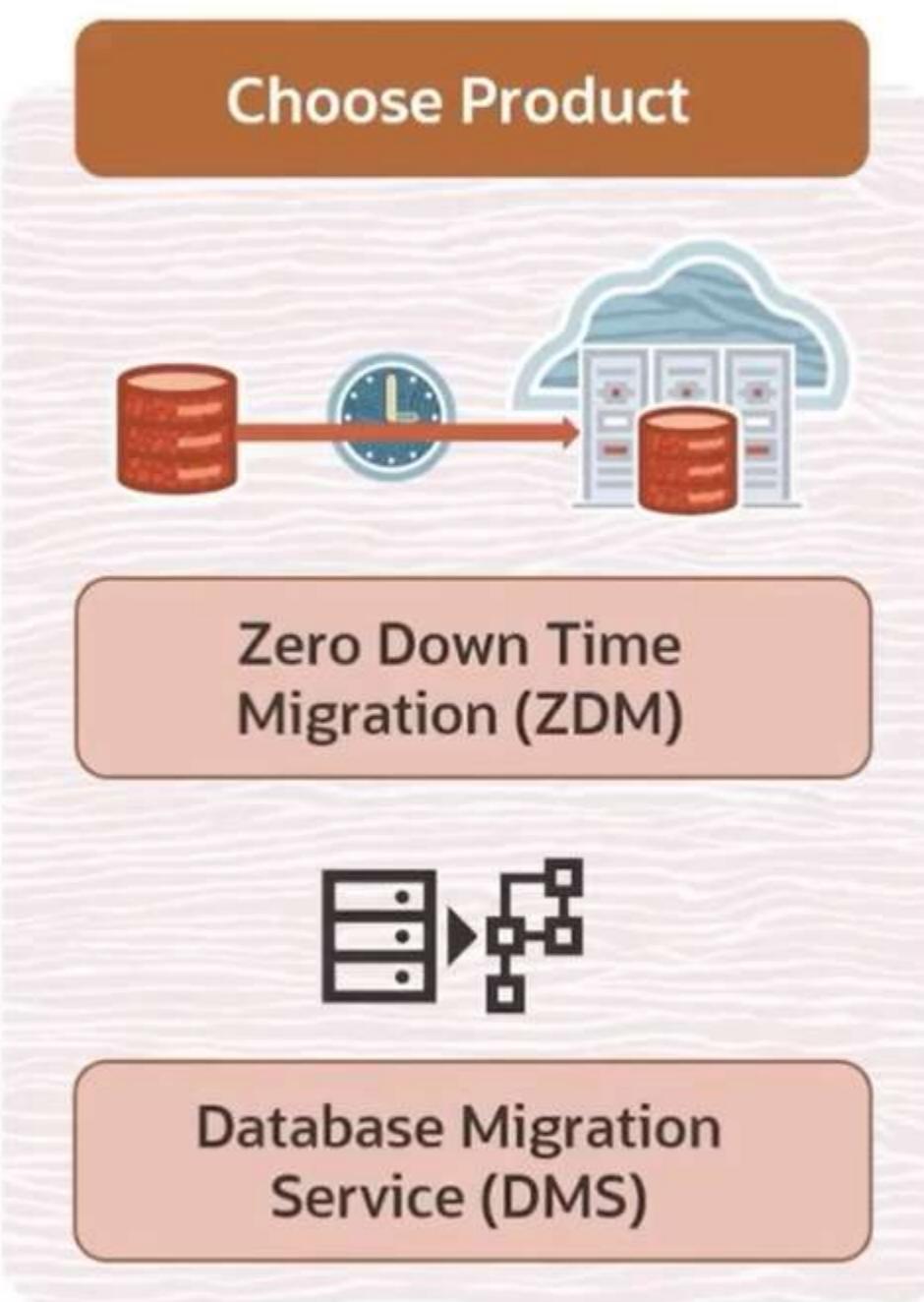
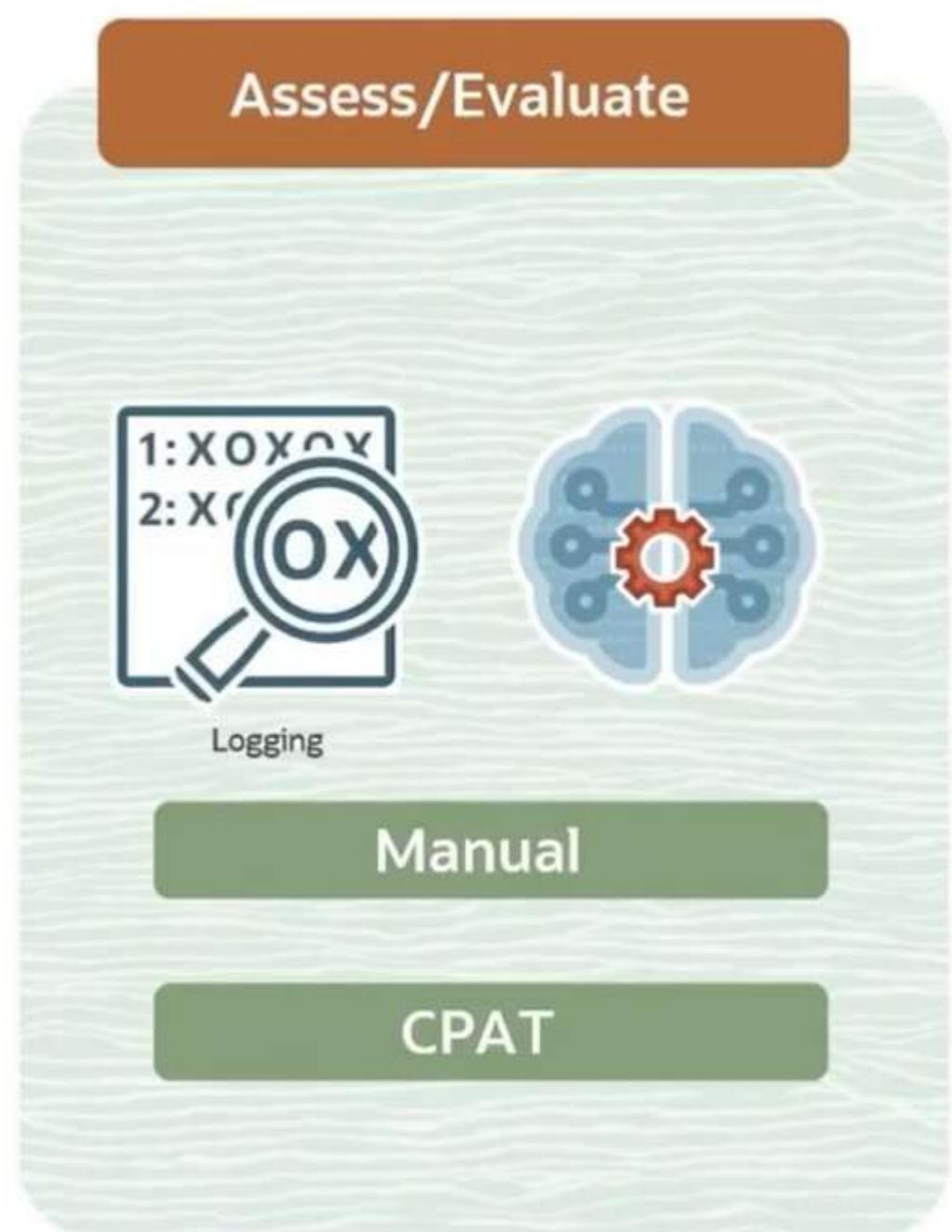


## 24x7 operations – Application remains available

- Clone application database to a new location.
- All reconnections are made to the new DB.
- Both DBs are active with transactions replicated.



# Oracle Database Migration to the Cloud: Steps



# Assess/Evaluate a Migration: Cloud Pre-Migration Advisor Tool (CPAT)

## Assess/Evaluate



Logging



## CPAT



## ZDM



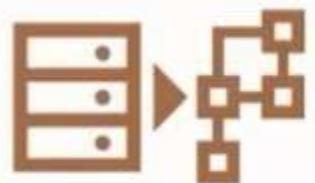
CPAT helps determine the suitability of migrating an Oracle database instance to one of Oracle's Cloud offerings.

- Warns about any features used by source database that aren't supported in the target
- Makes suggestions for remedial changes and/or parameters to use for the Data Pump and GoldenGate operations
- Optionally generates remedial scripts for failing checks that can be run against the source database

# Oracle Database Cloud Migration - Migration Products

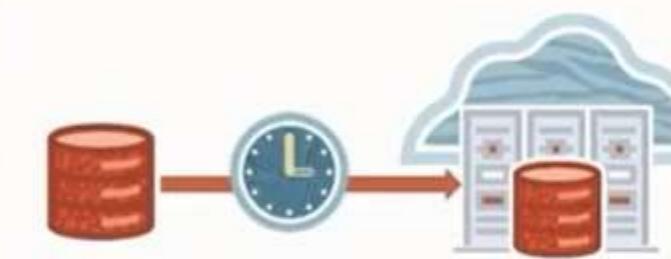
## Choose Product

### OCI Database Migration (DMS)



- Fully managed
- Graphical guidance
- Online and offline migrations
- Autonomous Database target only in first release based on Zero Downtime Migration

### Zero Downtime Migration (ZDM)



- User-managed expert tool
- Fleet migrations
- Logical and physical migrations
- Migrations to ExaCC

### SQL Developer



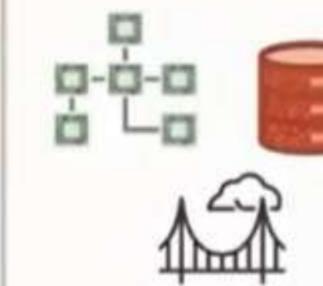
- Developer experience
- Fine-grained transformations

### Enterprise Manager

**ORACLE**  
Enterprise Manager

- Integrated with EM ecosystem
- Used as part of EM automation and monitoring

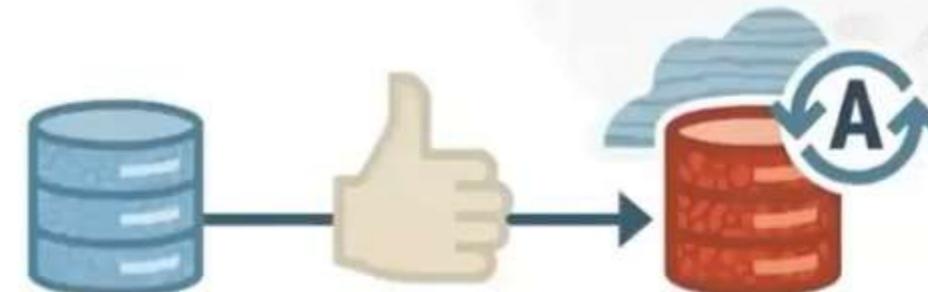
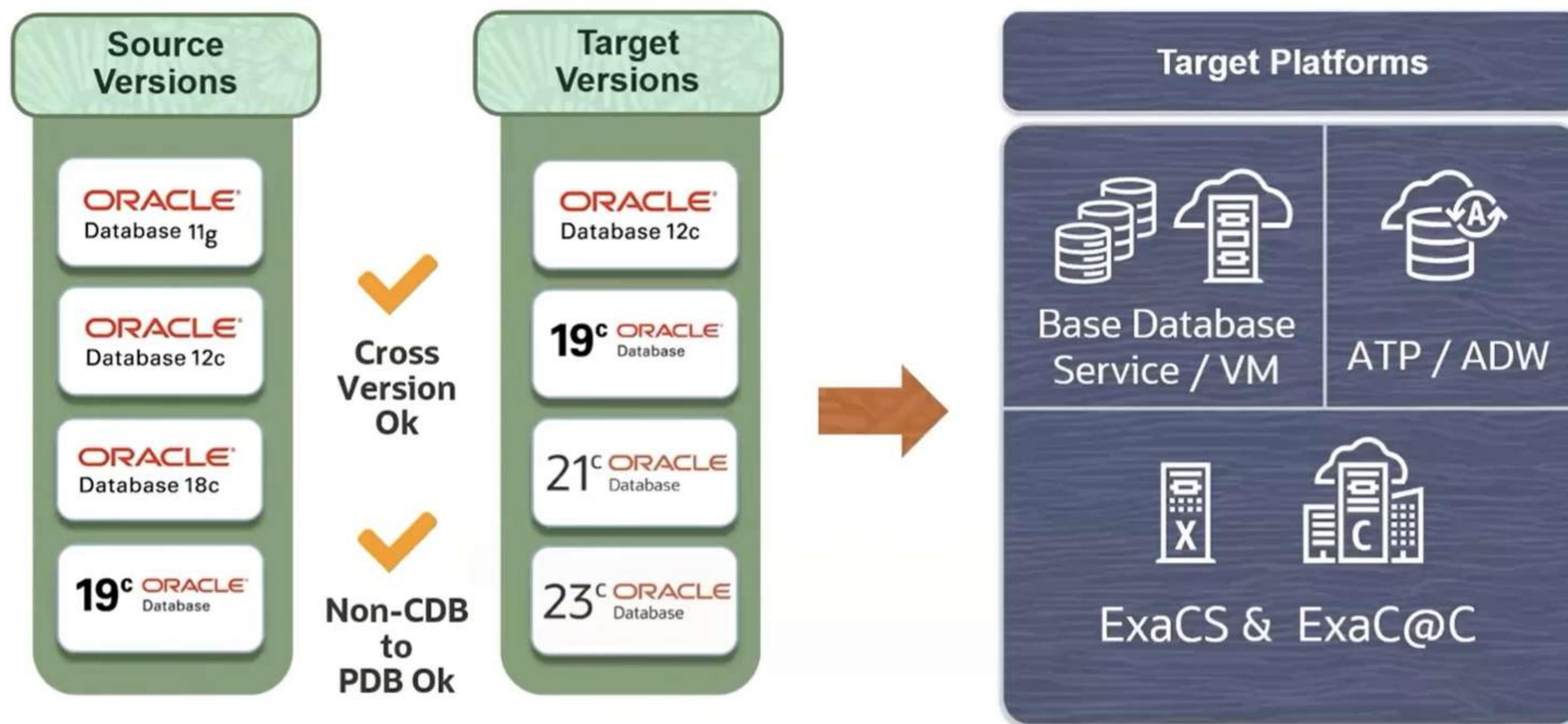
### Database Tools



- Manual use of DB tools (RMAN, Data Guard, Data Pump, GoldenGate)
- Full expert control
- Special use cases (bi-directional replication, and so on)

**Migrate**

## Supported Sources and Targets



# Tools for All Steps of the Migration Process

## Migration Process for Oracle Databases – Standard Practice

