# *Oracle Autonomous Transaction Processing (ATP)*

# Oracle Autonomous Transaction Processing (ATP)

## Introduction

- Cloud Database with high performance and high availability.
- eliminates the complexity of operating
- automates provisioning, configuring, tuning, scaling, patching, encrypting, and repairing of databases.
- includes all of Oracle's advanced database options, such as real application clusters (RAC), multitenant, partitioning, in-memory, advanced security, and advanced compression
- Available both on Oracle Public Cloud and as well Customer premises as Exadata Cloud@Customer

## Autonomous Operations

- Auto-Provisioning – Deploys highly available and fault tolerant Database instance within few minutes
- Auto-Scaling - Dynamic scaling where compute resources are scaled automatically to enhance the performance
- Auto-Tuning – Since Data and Schema changes over time, hence the memory configuration, data formats, indexes, structures are automatically optimized to improve performance.
- Auto-Backups – Performs weekly full and daily incremental backup in the object storage an retained for 60 days to restore and recover at any point in time
- Auto-Repairing – Fixes hardware and software faults by continuously monitoring and predicting failures. Circuit break to a healthy device to ensure high availability.
- Auto-Failover – Maintains a real-time remote copy of the production database and can automatically switch over to remote copy using Autonomous Data Guard and that eliminates

# Oracle Autonomous Transaction Processing (ATP)

## ATP vs Oracle DBaaS vs Oracle On-premise Database

**Oracle ATP**

- Autonomous, managed by Oracle
- Hosting comes with two flavors
  - Hosted on Public Cloud with two types – Shared and Dedicated.
  - Exadata Cloud hosted on Client's data center.
- Highly Available
- Doesn't have access to backend DB file server
- Data Files are imported/ exported from Object storage

**Oracle DBaaS**

- Automated
- Hosting comes with three flavors
  - Hosted on VM/ Bare Metal servers in OCI. Customer Managed
  - Hosted on Oracle Managed on VM/ Bare Metal servers in OCI
  - Sensitive and Highly available data hosted on Exadata CS in Public Cloud
- Does have access to backend DB file server
- Data Files are imported/ exported from backend DB file server

**Oracle On-Prem Database**

- Customer managed
- Hosted on Customer Data center (Traditional H/W or Exadata Machines)
  - Can be Private
  - Can be made Public
- Exadata Cloud hosted on Client's data center, managed by Oracle (*On-premise version of Oracle ATP*)
- Does have access to backend DB file server
- Data Files are imported/ exported from backend DB file server