



## Oracle Autonomous Database

# Getting Started with Autonomous Database

### Architectural Components and Key Features

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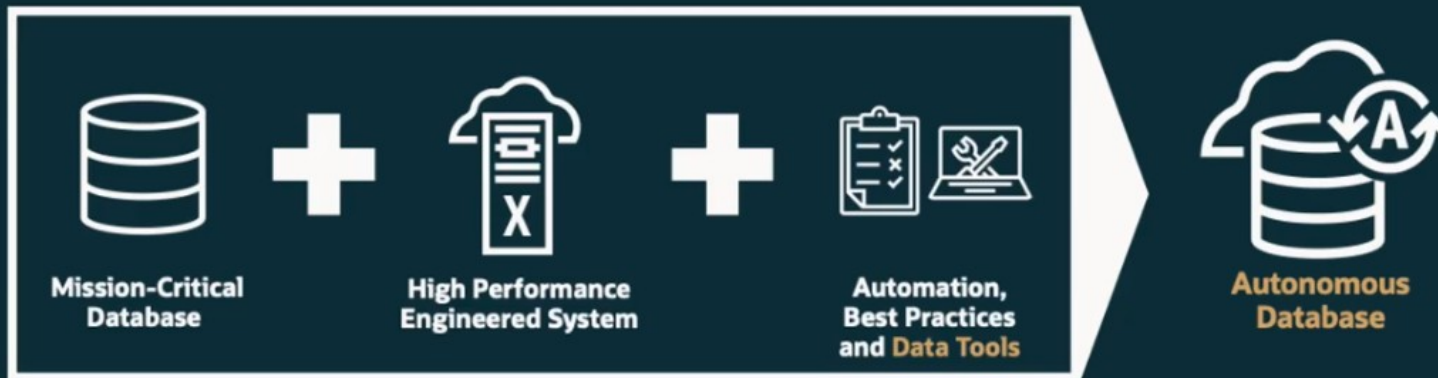
# Objectives



Defining the architectural components of Autonomous Database

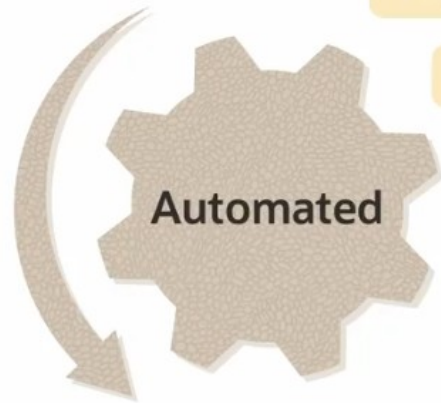
Articulating the key features of Autonomous Database

**Oracle Autonomous Database delivers the best data experience**  
With the lowest total cost of ownership



# Oracle Autonomous Database

**Automates the Entire Database Stack**



Provisioning

Scale-Up and Scale-Out

Tuning

Security and Patching

Fault Tolerance

Uses **Machine Learning**  
plus advanced and proven  
technologies

RAC, Data Guard, Database Vault,  
Parallel SQL, In-Memory,  
Multitenant, etc.

## Complete Database Automation



**Mission Critical, Simple, Low Risk, Low Cost**



Eliminates **fundamental** problems that have existed for decades

Complex administration

Security vulnerabilities

Downtime due to patching or failures

Performance bottlenecks

Static configurations

High costs

# Not an Incremental Improvement



## A New Era of Database



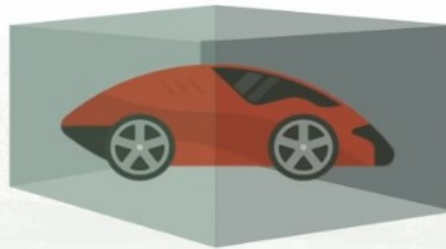
# Autonomous Database Is **Highly Available**

**Failures**

Automatically protects from **all** types  
of downtime

**Site Outages**

**Maintenance**



**Changes**

**User Errors**

**No ridiculous exclusions to availability in fine print**

Amazon excludes planned downtime, database bugs, regional outages, etc.



# Oracle Autonomous Database

Key Availability Technologies



## Scale-Out Fault-Tolerant

Database Engines

Servers

Storage

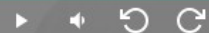
Network

Remote Replica

# Articulating the Key Features of Autonomous Database

Autonomous Database is a cloud database service that provides a fully managed, self-driving database experience. It is designed to simplify database management and reduce operational overhead. Key features include:

- Self-driving database: The database automatically optimizes performance, manages resources, and handles backups and patching.
- Cloud-native architecture: Built on a cloud-native architecture, it offers scalability and flexibility.
- Integration with cloud services: Seamlessly integrates with other cloud services like storage and networking.
- Security and compliance: Provides robust security features and compliance with industry standards.
- Cost optimization: Offers cost-effective pricing models and resource management.



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HD





# Oracle Autonomous Database

## What and How



### Provision

Rapidly and easily creates **mission-critical** databases

Creates **Exadata+** Cloud Infrastructure, **RAC+** scale-out database, and optional+ standby

### Secure

Protects data from all external and internal threats

Applies security **updates online+**, prevents admin snooping with **DB Vault+**, **encrypts** all data

### Manage

Automates all infrastructure and database maintenance

Patches all software **online+**, tunes settings, performs **all OS and SYSDBA** operations, diagnoses **errors+**



+ Unique to Oracle

# Oracle Autonomous Database

## What and How

### Protect

Recovers from any failure without downtime

Automates backup, restore, **application transparent<sup>+</sup>** failover within a cluster or to a remote standby

### Scale

Scales online for highest performance and lowest cost

**Instant, automatic, online scaling<sup>+</sup>** of compute and storage enables **true pay-per-use<sup>+</sup>**

### Optimize

Optimally runs workloads without human direction

Automatically optimizes **data formats, indexes<sup>+</sup>, parallelism<sup>+</sup>, and plans<sup>+</sup>** for each workload



**+ Unique to Oracle**











