

ORACLE

ADB Cloud Database Professional 2023

Get Started – Exam 1Z0-931-23

Marcel Lamarca

Exadata Cloud Specialist

Oracle, Alliances and Channels LAD

April, 2024



SQL> select * from person where name = 'Marcel Lamarca'




MARCEL LAMARCA

Exadata Cloud Specialist

Upgrade, Utilities, Patching, Performance & Migrations

 [marcel-lamarca](https://www.linkedin.com/in/marcel-lamarca)

 marcel.lamarca@oracle.com

About My Career

- 22 Years dedicated to study and support Oracle Databases.
- 12 Years working with Exadata (On-prem, C@C and Cloud Services) .
- 5 Year working for Oracle do Brasil
- 2 Year on Alliances LAD knowledge Team

Certifications

Oracle Cloud Specialist (OCS)

- Exadata Database Machine X9M Certified Specialist
- OCI Foundation 2020 / 2023
- Oracle Autonomous Database Administrator Professional 2019 / 2023
- Oracle Cloud Database Migration and Integration 2021
- OCI Cloud Certified Architect Associate 2022
- OCI Cloud Certified Architect Professional 2022
- OCI Multi-Cloud Architect Professional 2023
- Oracle Database Services Certified Professional 2023

Oracle Certified Professional (OCP)

- Oracle Database certified professional 10g, 11g, 12c and 19c.
- Mysql 8.0 Database Administrator Certified Professional

Oracle Certified Specialist (OCE)

- Grid/RAC Database Administrator 11g
- Oracle Golden Gate 12c Certified Implementation Specialist



Agenda

1

Oracle database 23c! What is new ?

2

Upgrade to 23c

3

Resources

4

Demos





1Z0-931-23 : Autonomous Database 2023 Cloud Professional



- Number of Questions **60**
- Format **Multiple Choice**
- Duration **90 minutes**
- Passing Score **65%**



Autonomous Database 2023 Cloud Professional exam topics

Autonomous Database Technical Overview

- Describe Autonomous Database architecture, integrations, and license types
- Articulate the key features of Autonomous Database
- Understand the Oracle Cloud Infrastructure
- Describe the Different Autonomous Database offerings

Managing and Maintaining Autonomous Database

- Manage Autonomous Database instances: REST APIs, OCI CLI, moving resources
- Use Access Control List (ACL) and Private End Points
- Monitor ADB performance and set up service notifications
- Monitor ADB auto-scaling
- Use services in ADB: auto-indexing, data safe, compartment quotas
- Use ADB connectivity: Wallets, service handles
- Use Marketplace Developer image to connect to ADB, use ADW with third-party tools
- Configure Disaster Recovery (Data Guard) - both Shared and Dedicated

Autonomous Database (ADB) Shared

- Create Autonomous Database Shared Instances - provisioning, scaling OCPU and storage, start, stop, and cloning and moving refreshable clones
- Manage users
- Monitor Autonomous Database Shared instances - events and alarms
- Manage Autonomous Database Shared Backups and Restores

Autonomous Database Tools

- Describe Autonomous Database Tools
- Use Autonomous Database with Oracle Machine Learning, APEX, and SQL DeveloperWeb (Database actions)
- Use Data Load and Data Transforms
- Create Business Models
- Apply Data Insights
- Explore Catalog



Autonomous Database 2023 Cloud Professional exam topics

Developing an Autonomous Database

- Use Autonomous JSON Database
- Use Oracle Text
- Use Oracle Spatial
- Use Graph Studio
- Integrate Object Storage data

Migrating to Autonomous Database

- Describe the options and considerations for migrating to Autonomous Database
- Migrate to Autonomous Database using Data Pump

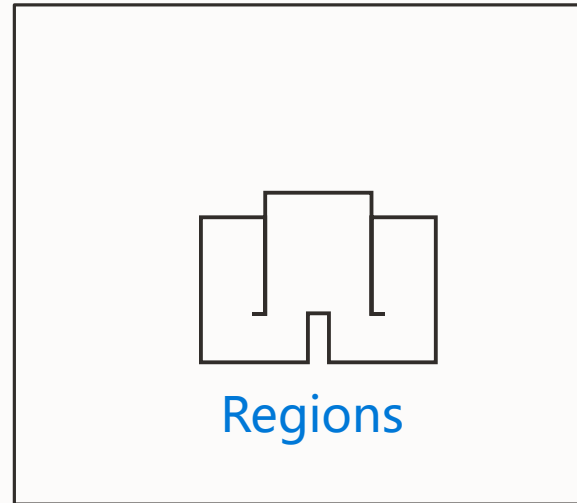
Autonomous Database Dedicated & Autonomous Database Cloud @ Customer

- Describe ADB Dedicated and ADB Cloud@Customer resources, workflows, and functionality
- Provision Dedicated ADB (ADB, Exadata, Container DB, VM Cluster for Cloud @ Customer)
- Monitor Dedicated Infrastructure
- Manage maintenance scheduling (patching)
- Manage encryption keys

OCI Basic Concepts



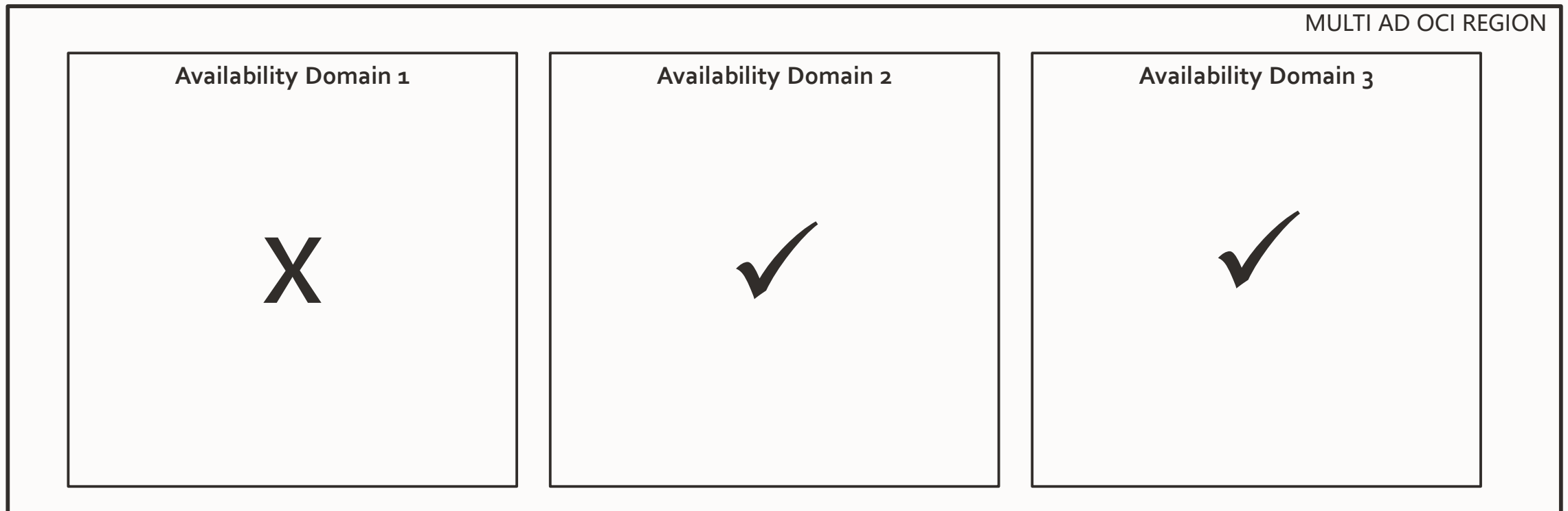
OCI Regions



Localized geographic area, comprised
of one or more Availability Domains
(AD)

AD – Availability Domain

- Availability domains are **isolated from each other**, fault tolerant, and very unlikely to fail simultaneously.
- Because availability domains **do not share physical infrastructure, such as power or cooling, or the internal availability domain network**, a failure that impacts one AD is unlikely to impact the availability of the others



OCI Policy



- Authorization specifies various actions an authenticated Principal can perform
- OCI Authorization = Policies
- Policies are written in human-readable format:

OCI Policy



- Allow Ex:<identity_domain_name>/<subject> to <verb> <resource-type> in <location> where <conditions>
- Allow group <group_name> to <verb> <resource-type> in tenancy Allow group <group_name> to <verb> <resource-type> in compartment compartment_name> [where <conditions>]

OCI Policy



- Allow Ex:<identity_domain_name>/<subject> **to <verb>** <resource-type> in <location> where <conditions>
- Allow group <group_name> to **<verb>** <resource-type> in tenancy Allow group <group_name> to <verb> <resource-type> in compartment compartment_name> [where <conditions>]

Verbs Are : Use, Inspect, Manage, Read

OCI Policy




- Allow Ex: `<identity_domain_name>/<subject> to <verb> <resource-type> in <location>` where `<conditions>`
- Allow group `<group_name>` to `<verb> <resource-type> in tenancy` Allow group `<group_name>` to `<verb> <resource-type> in compartment compartment_name>` [where `<conditions>`]
- Allow group `adb-admins` to `manage autonomous-database` family in tenancy

Autonomous Deploy Options



Autonomous Database on OCI Menu

 **ORACLE** Cloud [Cloud Classic >](#)

- Home
- Compute
- Storage
- Networking
- Oracle Database**
- Databases
- Analytics & AI
- Developer Services
- Identity & Security
- Observability & Management

Oracle Database

Overview

Autonomous Database

- Autonomous Data Warehouse
- Autonomous JSON Database
- Autonomous Transaction Processing

Globally Distributed Autonomous Database

Autonomous Dedicated Infrastructure

Oracle Base Database Service

Oracle Exadata Database Service on Dedicated Infrastructure

Oracle Exadata Database Service on Cloud@Customer

Exadata Fleet Update

External Database

Data Safe - Database Security

- Overview
- Security Assessment
- User Assessment
- Data Discovery
- Data Masking
- Activity Auditing
- SQL Firewall

Database Backups

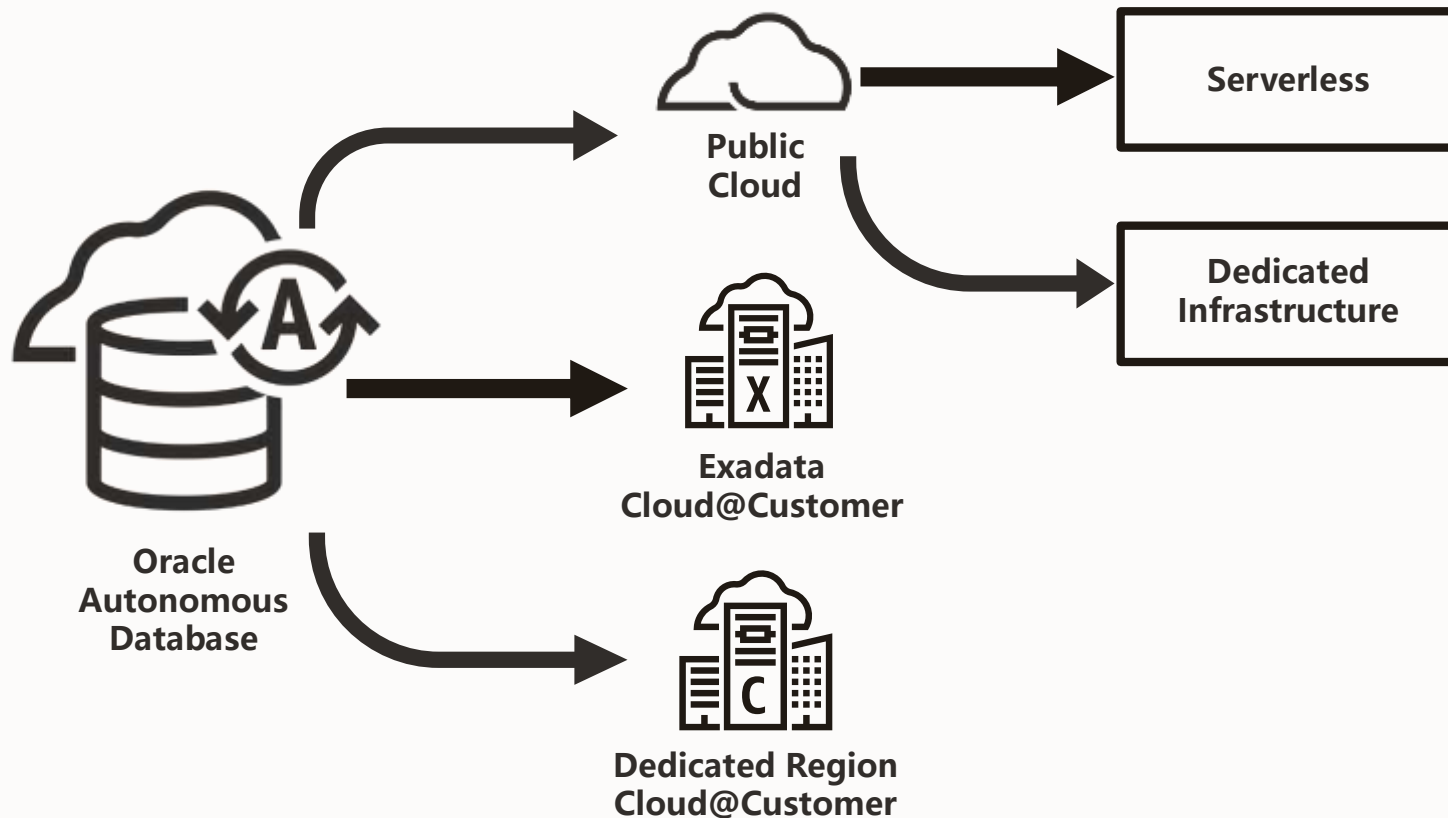
GoldenGate

Operator Access Control



Multiple deployment choices

The most complete support for hybrid cloud strategies



Oracle Public Regions

Hyperscale cloud regions in more than 40 worldwide locations



Dedicated Regions

All OCI services, running in customer data centers



Exadata Cloud@Customer

Cloud Autonomous Databases, running in your data center

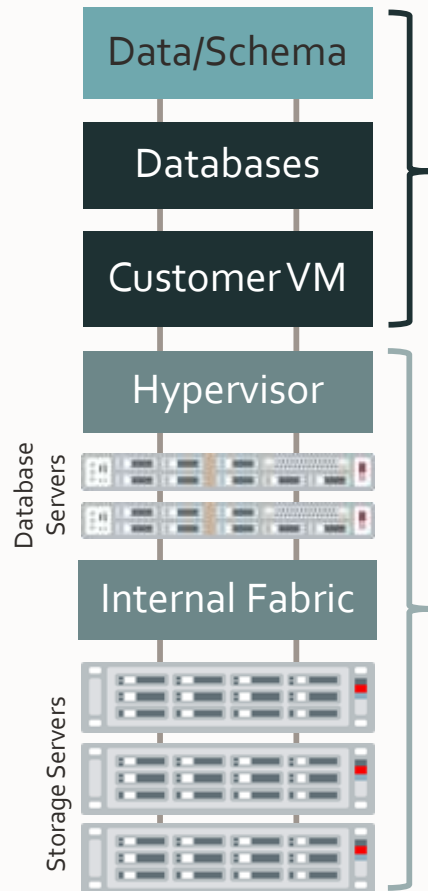


Understanding Serverless and Dedicated concepts is crucial to have to this exam !

Autonomous Database Dedicated



Simple Cloud Management Model in at Customer Cloud



Customer owns everything inside database

- Data, schema, encryption keys

Customer subscribes to database services

- Customer manages VMs and Databases using Cloud Automation (UI / APIs)
- Automation to create, delete, patch, backup, scale up/down, etc.
- Runs all supported Oracle Database versions 12.1.0.2, 12.2.0.1, 19c and 21c
- Customer controls access to customer VM
- Customer can install and manage additional software in customer VM
- Oracle staff are not authorized to access customer VM

Oracle owns and manages infrastructure

- Hypervisor, database and storage servers, storage network
- Patching, security scans, security updates
- Monitoring and maintenance
- Customer not authorized to access Oracle infrastructure

Exadata Cloud Domo Patching

DOMo - ORACLE RESPONSIBILITY

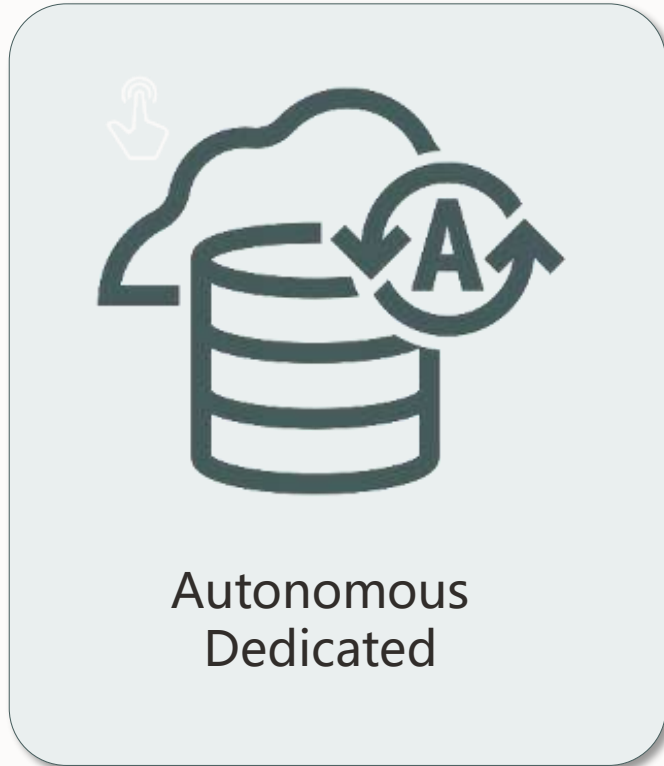
Oracle manages quarterly infrastructure maintenance updates of all other infrastructure components:

- Patching Database Servers (Dom0).
- Patching Storage servers.
- Patching Network switches.
- Patching Control Planes.

Quarterly maintenance updates may require a restart of the customer-managed guest virtual servers.

Quarter 1	Quarter 2	Quarter 3	Quarter 4
✓ JANUARY	✓ APRIL	✓ JULY	✓ OCTOBER
✓ FEBRUARY	✓ MAY	✓ AUGUST	✓ NOVEMBER
✓ MARCH	✓ JUNE	✓ SEPTEMBER	✓ DECEMBER

Autonomous Dedicated installation steps



1- Exadata Infrastructure

- Feet Administrator provision Infrastructure



2 - Autonomous Containers

- Partition System by provisioning Clusters and containers



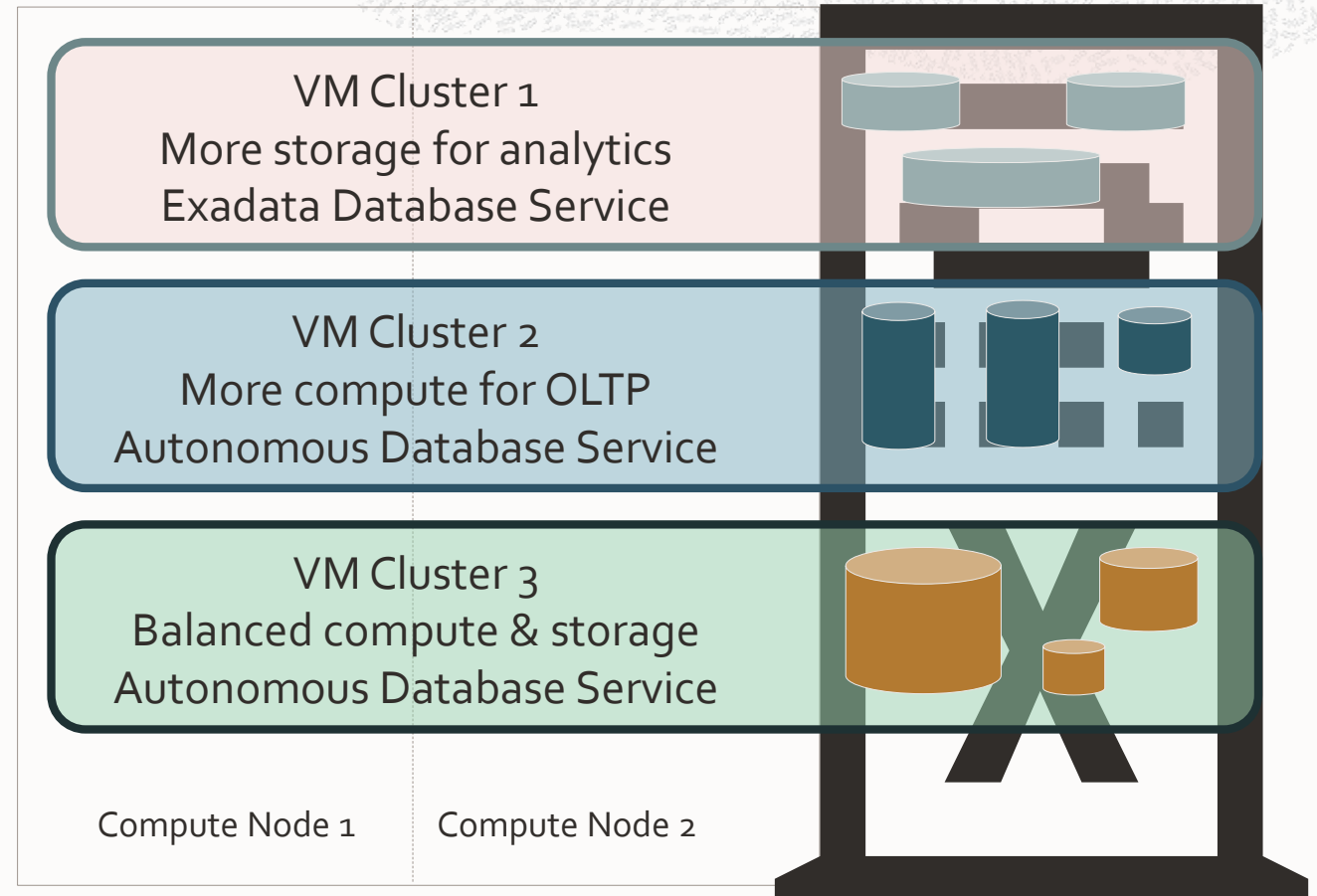
3 –Database Provisioning

DBA's, Devs provisioning database with container Databases



About Autonomous Database Containers On dedicated

1. Autonomous Container isolates Autonomous Databases and Exadata Cloud VM Clusters.
2. Autonomous Container Database maximum of 12 per VM Cluster
3. Each VM cluster can be used for either Autonomous or Exadata Database Service
4. Autonomous CPU scale is limited by Exadata Hardware and shape
5. Auto Scaling enables the database to use up to 3x CPU/IO workloads
6. Auto Scaling is enabled by default



Available on Exadata Cloud@Customer Infrastructure X7 through X10M

Oracle Data Safe

Oracle Data Safe on OCI menu

The screenshot displays the Oracle Cloud console interface. At the top, the Oracle Cloud logo is on the left, followed by a 'Cloud Classic' button and a search bar. Below the header, a left-hand navigation menu lists various services: Home, Compute, Storage, Networking, **Oracle Database** (highlighted with a red dashed box), Databases, Analytics & AI, Developer Services, Identity & Security, and Observability & Management. The main content area is titled 'Oracle Database' and contains several sections: Overview, Autonomous Database (with sub-items: Autonomous Data Warehouse, Autonomous JSON Database, Autonomous Transaction Processing), Globally Distributed Autonomous Database, Autonomous Dedicated Infrastructure, Oracle Base Database Service, Oracle Exadata Database Service on Dedicated Infrastructure, Oracle Exadata Database Service on Cloud@Customer, Exadata Fleet Update, and External Database. On the right side, a sub-menu for 'Data Safe - Database Security' is highlighted with a red solid box. This sub-menu includes: Overview, Security Assessment, User Assessment, Data Discovery, Data Masking, Activity Auditing, SQL Firewall, Database Backups, GoldenGate, and Operator Access Control.

Oracle Cloud Cloud Classic > Search resources, services, documentation, and Marketplace

Search

Home

Compute

Storage

Networking

Oracle Database

Databases

Analytics & AI

Developer Services

Identity & Security

Observability & Management

Oracle Database

Overview

Autonomous Database

Autonomous Data Warehouse

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Oracle Exadata Database Service on Cloud@Customer

Exadata Fleet Update

External Database

Data Safe - Database Security

Overview

Security Assessment

User Assessment

Data Discovery

Data Masking

Activity Auditing

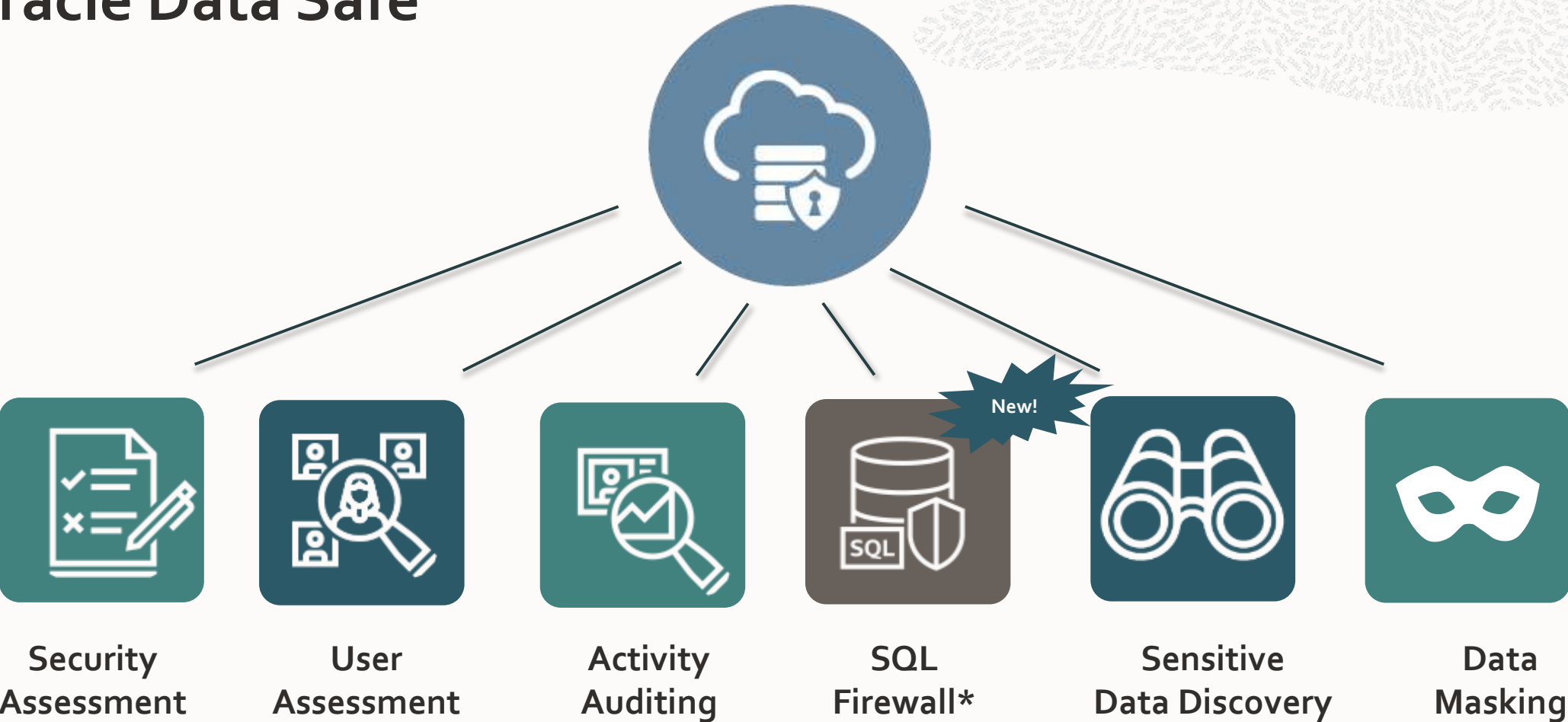
SQL Firewall

Database Backups

GoldenGate

Operator Access Control

Oracle Data Safe



Available for 23c databases only



Sensitive Data Mask

Sensitive Data Discover Dashboard

ORACLE Cloud

Cloud Classic >

Search resources, services, documentation, and Marketplace

US East (Ashburn) v

Data Safe > Data masking > VE61VXRD74RV1G4H > MaskingPolicy_LL_202306141613 > Masking report details

MR

ACTIVE

Generate report

Download report

Download masking logs

Masking report information

Target database: VE61VXRD74RV1G4H

Masking policy: [MaskingPolicy_LL_202306141613](#)

Masking report OCID: ...ab7gqq [Show](#) [Copy](#)

Masking started: Wed, 14 Jun 2023 23:21:15 UTC

Masking finished: Wed, 14 Jun 2023 23:22:36 UTC

Masked sensitive types: 19

Masked schemas: 1

Masked tables: 8

Masked columns: 27

Masked values: 1.9K

Masking options: [View details](#)

Masked values summary chart

The masked value percentages/distribution shown in the graph for each of the sensitive types is with respect to its parent sensitive category.

Resources

Masked columns

Masking logs

Masked columns

+ Add filter

Apply

Schema	Table	Column	Masking format	Sensitive type	Parent column	Total masked values
HCM1	EMP_EXTENDED	PAYMENTACCOUNTNO	Credit Card Number	Card Number	-	107
HCM1	EMP_EXTENDED	TAXPAYERID	US Social Security Number	Tax ID Number (TIN)	-	107
HCM1	LOCATIONS	STATE_PROVINCE	Random Name	Province	-	17

Terms of Use and Privacy

Cookie Preferences

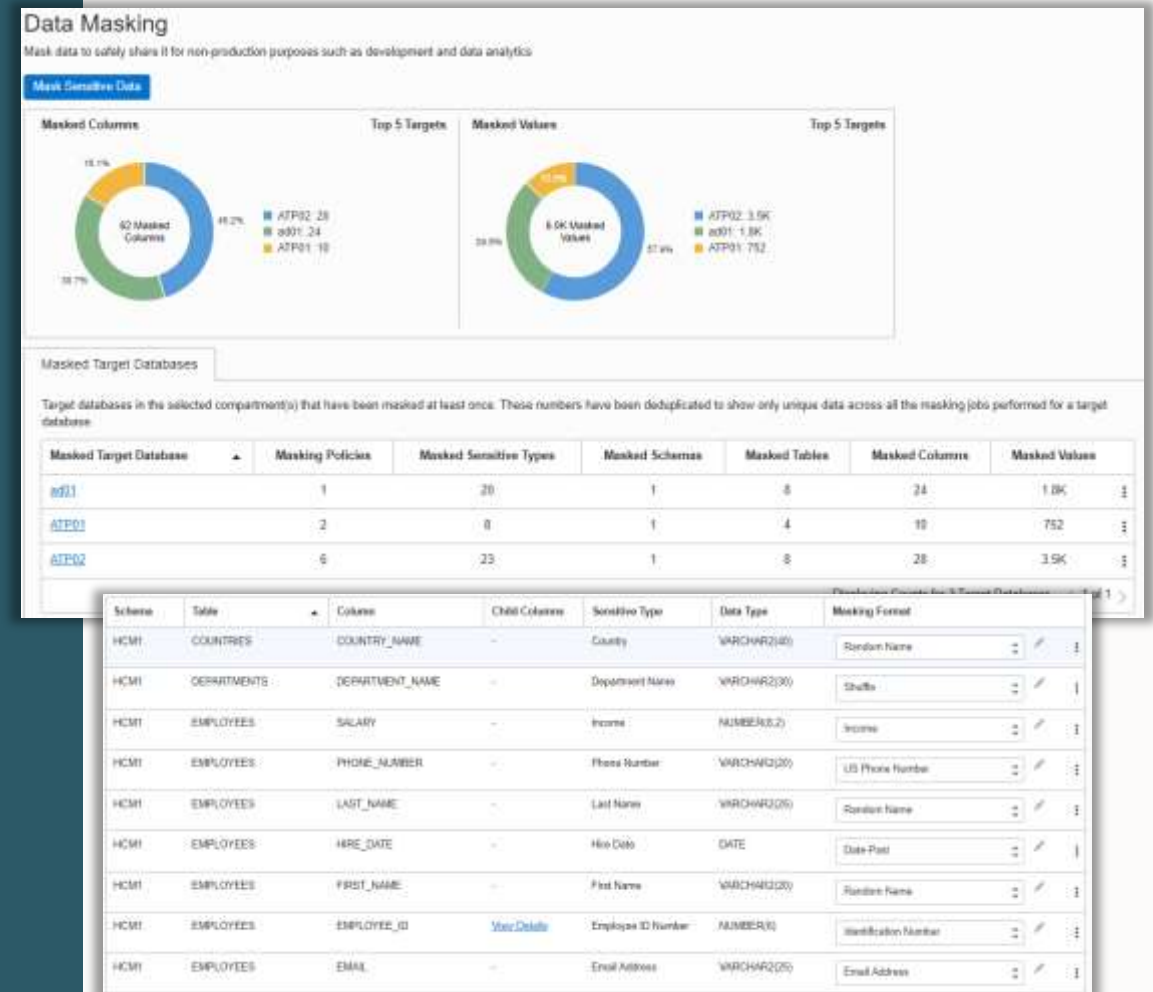
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Sensitive Data Mask

- Mask data identified as sensitive
 - 50+ predefined masking formats
 - Automated format selection based upon sensitive type
 - Optional user-defined masking formats
- Rich masking transformations for complex cases
- Masking report
- Minimize sensitive data exposure for dev & test, partners, analytics databases





Sensitive Data Mask

- Pre-defined masking formats
- **Specific masking formats** like
 - social security number
 - credit card number
 - email address
 - etc.
- As well as **generic masking formats**
 - random date, number, name, ...
 - fixed number, fixed string
 - format preserving randomization
 - regular expression
 - truncate data
 - group masking
 - etc.

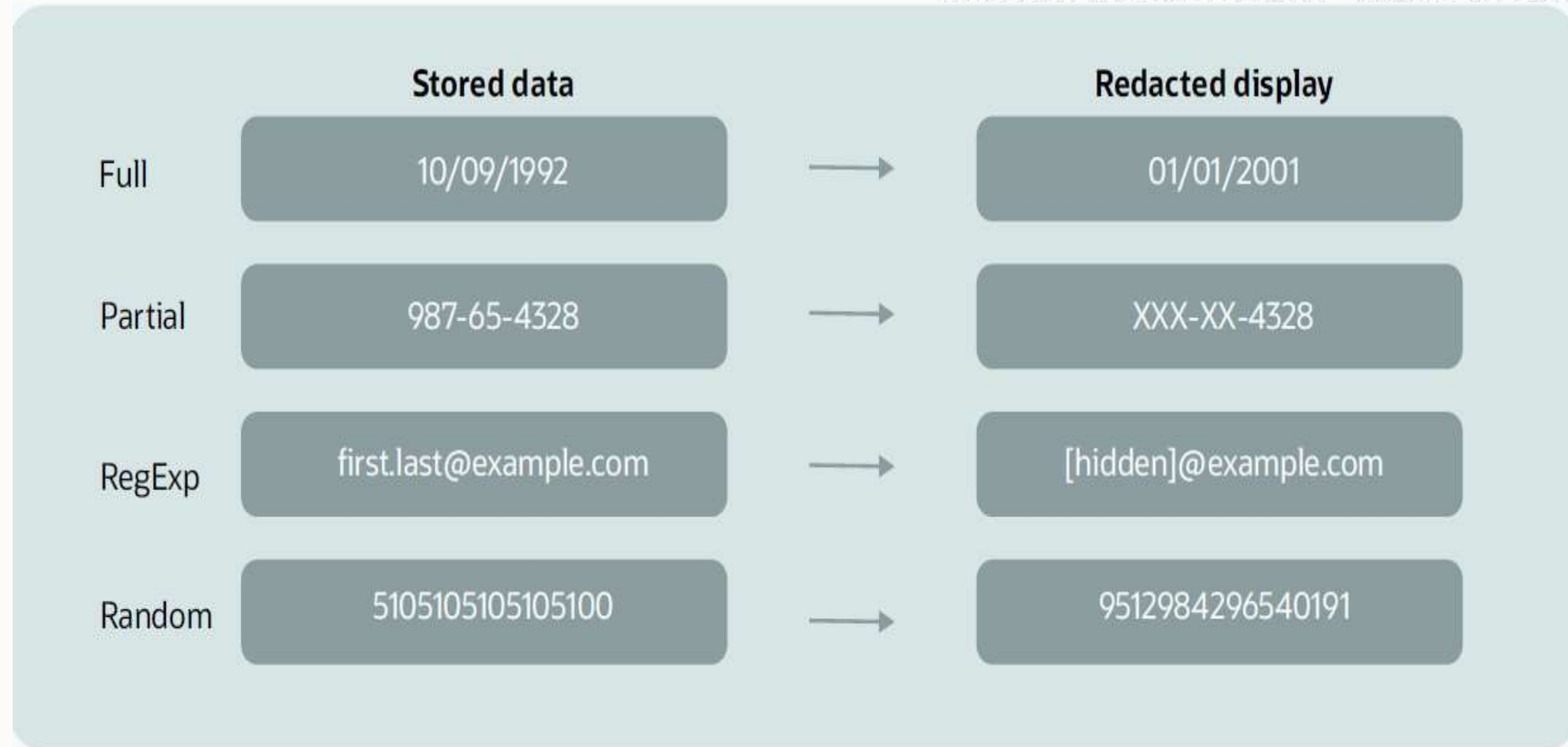
Masking Formats

Masking formats define the logic for masking data. This page lists the user-defined masking formats in the selected compartment, along with all the predefined masking formats. [Learn More](#)

Create Masking Format		
Name	Description	Oracle Predefined
Age	Replaces values with random numbers between 0 and 110	Yes
Bank Account Number	Replaces values with random 9 to 16 digit numbers	Yes
Bank Routing Number	Replaces values with random 9-digit numbers	Yes
Birthdate	-	No
Blood Type	Replaces with values picked randomly from a list. Possible values are A+, A-, B+, B-, AB+, AB-, O+, and O-	Yes
Canada Postal Code (Space-Separated)	Replaces values with random Canada postal codes. Postal codes are in A9A9A9 format, where A signifies a letter and 9 a digit	Yes
Canada Social Insurance Number	Replaces values with random Canada Social Insurance Numbers	Yes
Canada Social Insurance Number (Hyphenated)	Replaces values with random Canada Social Insurance Numbers. Social Insurance Numbers are in 999-999-999 format, where 9 signifies a digit	Yes
Credit Card Number	Replaces values with random credit card numbers. Card types covered are American Express, Diners Club, Discover, enRoute, JCB, Mastercard, and Visa	Yes
Credit Card Number (Hyphenated)	Replaces values with random hyphenated credit card numbers. Card types covered are American Express, Diners Club, Discover, enRoute, JCB, Mastercard, and Visa	Yes
Credit Card Number (Type and Format Preserving)	Replaces values with random credit card numbers while preserving their type and format. Card types covered are American Express, Diners Club, Discover, enRoute, JCB, Mastercard, and Visa. For other card types, preserves the number of digits and Luhn's check but may not preserve the card type	Yes
Credit Card Number American Express	Replaces values with random 15-digit American Express credit card numbers	Yes



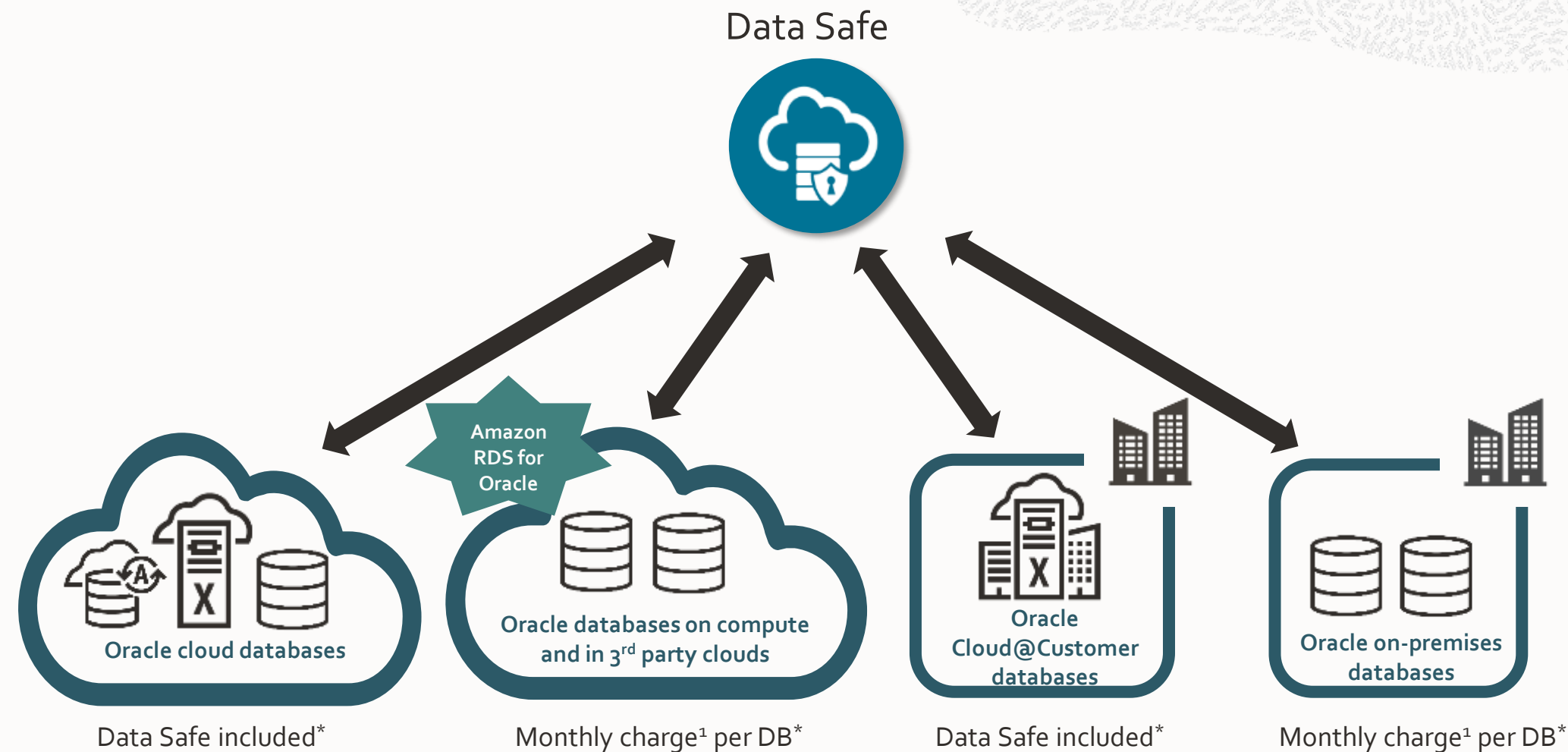
Data Redaction format sample



Oracle Data Available to all Oracle Databases



Data Safe is available for all your Oracle Databases



**Includes 1M audit records per database per month; \$0.10 per 10K records over the limit*
¹ tiered pricing applies ([price list](#))

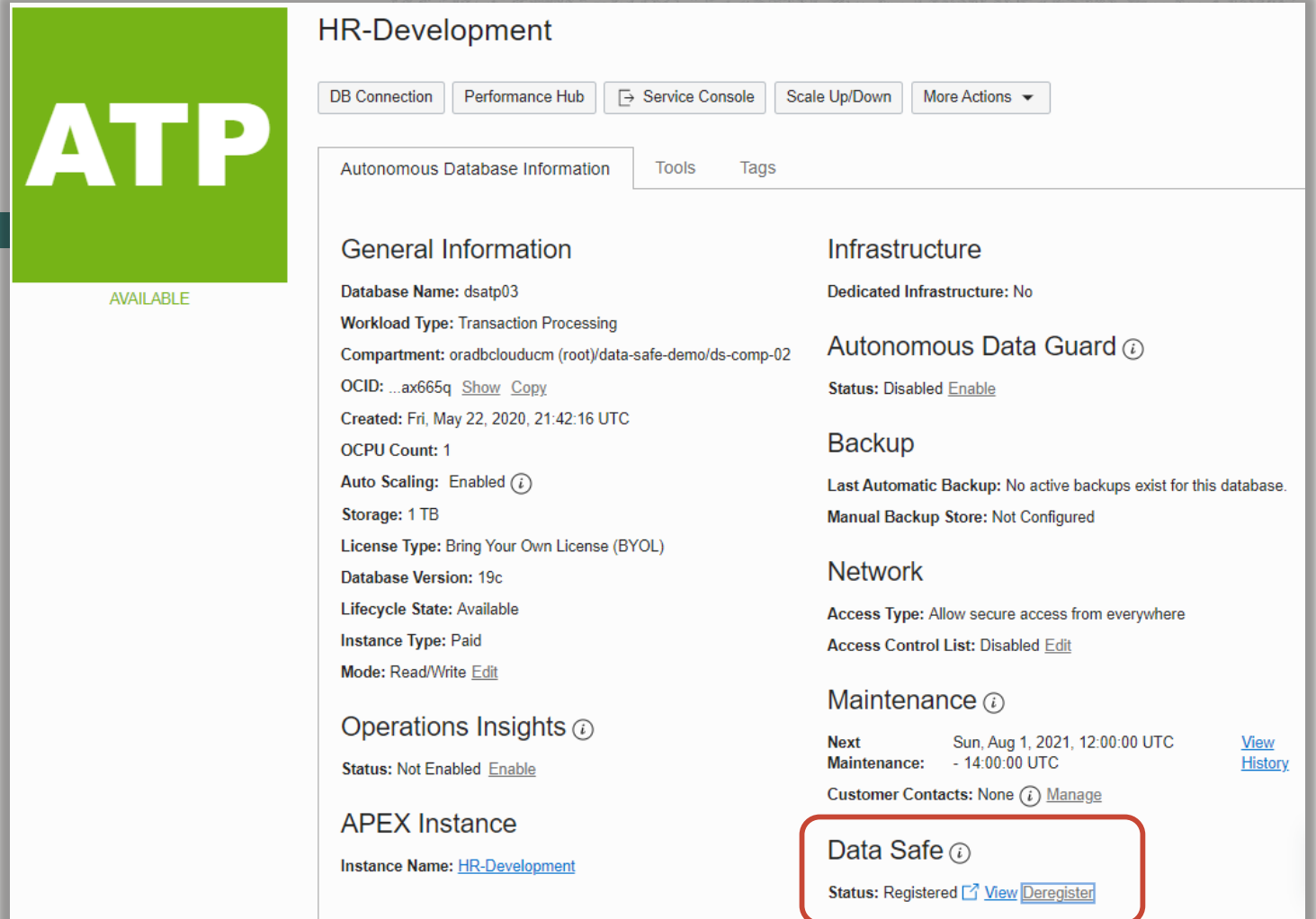


Three options to register databases with Data Safe

in the DB console
(Autonomous only)

Target registration wizards/
manually in Data Safe

via REST APIs / other interfaces



ATP
AVAILABLE

HR-Development

DB Connection Performance Hub Service Console Scale Up/Down More Actions

Autonomous Database Information Tools Tags

General Information

Database Name: dsatp03
Workload Type: Transaction Processing
Compartment: oradbclouducm (root)/data-safe-demo/ds-comp-02
OCID: ...ax665q [Show](#) [Copy](#)
Created: Fri, May 22, 2020, 21:42:16 UTC
OCPU Count: 1
Auto Scaling: Enabled ⓘ
Storage: 1 TB
License Type: Bring Your Own License (BYOL)
Database Version: 19c
Lifecycle State: Available
Instance Type: Paid
Mode: Read/Write [Edit](#)

Infrastructure

Dedicated Infrastructure: No

Autonomous Data Guard ⓘ

Status: Disabled [Enable](#)

Backup

Last Automatic Backup: No active backups exist for this database.
Manual Backup Store: Not Configured

Network

Access Type: Allow secure access from everywhere
Access Control List: Disabled [Edit](#)

Maintenance ⓘ

Next: Sun, Aug 1, 2021, 12:00:00 UTC [View](#)
Maintenance: - 14:00:00 UTC [History](#)
Customer Contacts: None ⓘ [Manage](#)

Operations Insights ⓘ

Status: Not Enabled [Enable](#)

APEX Instance

Instance Name: [HR-Development](#)

Data Safe ⓘ

Status: Registered [View](#) [Deregister](#)

Three options to register databases with Data Safe

in the DB console
(Autonomous only)

Target registration wizards/
manually in Data Safe

via REST APIs / other interfaces

Register Databases with Data Safe



Autonomous Databases

[Learn more](#)

- Autonomous Data Warehouse, Autonomous Transaction Processing and JSON databases

Start Wizard



Oracle Cloud Databases

[Learn more](#)

- Bare Metal, VM and Exadata databases

Start Wizard



Oracle On-Premises Databases

[Learn more](#)

- Installed database running on-premises



Oracle Databases on Compute

[Learn more](#)

- Databases in the Oracle Cloud Infrastructure

Register Autonomous Databases

- 1 Select Database
- 2 Connectivity Option
- 3 Add Security Rule
- 4 Review and Submit
- 5 Registration Progress

Data Safe Target Information

SELECT DATABASE IN DATA-SAFE-DEMO (CHOOSE COMPARTMENT)

dsatp05

DATA SAFE TARGET DISPLAY NAME

dsatp05

COMPARTMENT

data-safe-demo

oracledemo (root)/data-safe-demo

DESCRIPTION (OPTIONAL)

Three options to register databases with Data Safe

in the DB console
(Autonomous only)

Target registration wizards/
manually in Data Safe

via REST APIs / other interfaces

CreateTargetDatabase DATASAFE

POST /20181201/targetDatabases

Registers the specified database with Data Safe and creates a Data Safe target database in the Data Safe Console.

Request

CreateTargetDatabase

Parameters

Name	Where	Description
opc-retry-token	header	<ul style="list-style-type: none">• Required: no• Type: string• Min Length: 1• Max Length: 64 <p>A token that uniquely identifies a request so it can be retried in case of a timeout or server error without risk of executing that same action again. Retry tokens expire after 24 hours, but can be invalidated before then due to conflicting operations. For</p>

Data Safe API

Version 20181201

Search...

Autonomous Database Features

Spatial Studio

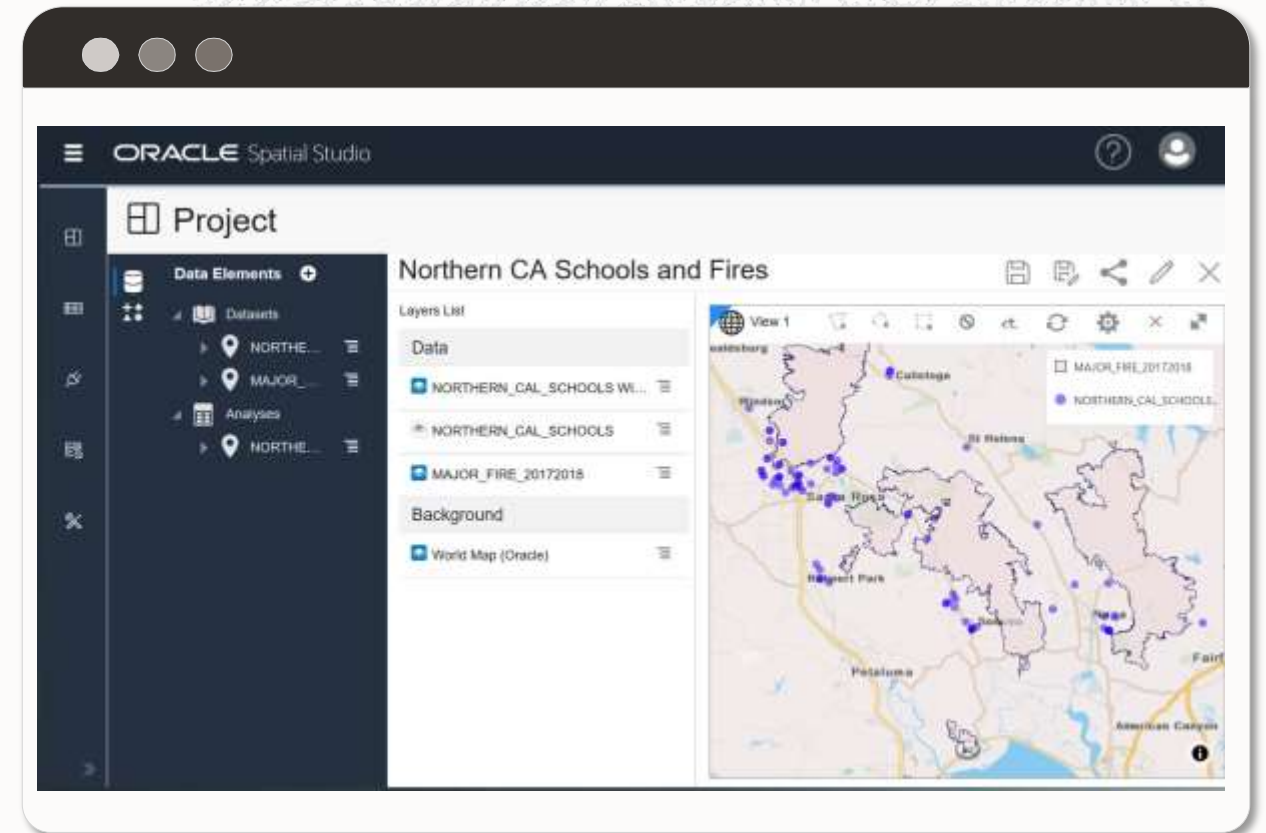
Spatial Studio is a browser-based, self-service application to create interactive maps and perform spatial analysis on business data quickly and easily.

Key features

- Access data in Oracle Database, or load from several popular formats (Excel, Shapefiles, GeoJSON, KML)
- Prepare data (geocode addresses and create indexes), and create maps to visualize and explore data
- Analyze data using 100s of spatial operators

Key benefits

- Analysts and business users can easily visualize, explore, and analyze geospatial data - with no coding
- Developers can easily prepare data and create spatial analyses and analytic workflows
- Share map projects and spatial analyses with other applications such as Oracle Analytics Cloud, for further analysis and insight



Autonomous Database's Data Studio in action

Quick demo



AutoML UI

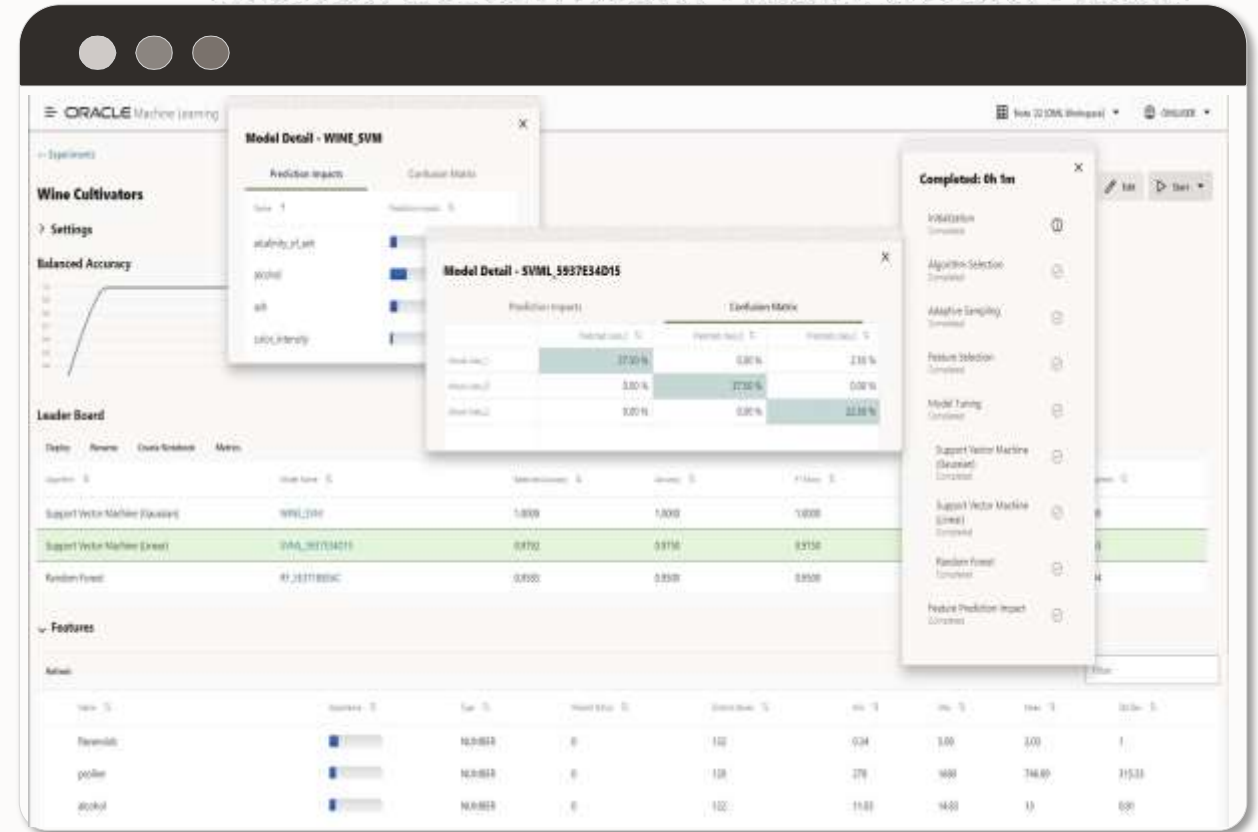
AutoML UI automates Machine Learning model building and evaluation through user interface.

Key features

- Building and evaluative ML models without writing code and with minimal muser input (data and target)
- Leverages in-database algorithms from Oracle Machine Learning (OML) – Classification and regression functions
- Deploy models as REST endpoints in a few clicks

Key benefits

- **Enables non-experts to produce machine learning models without individual algorithm expertise**
- Enhances data scientist productivity
- Automates time-consuming and repetitive tasks for algorithm and feature selection and hyperparameter tuning



Oracle APEX

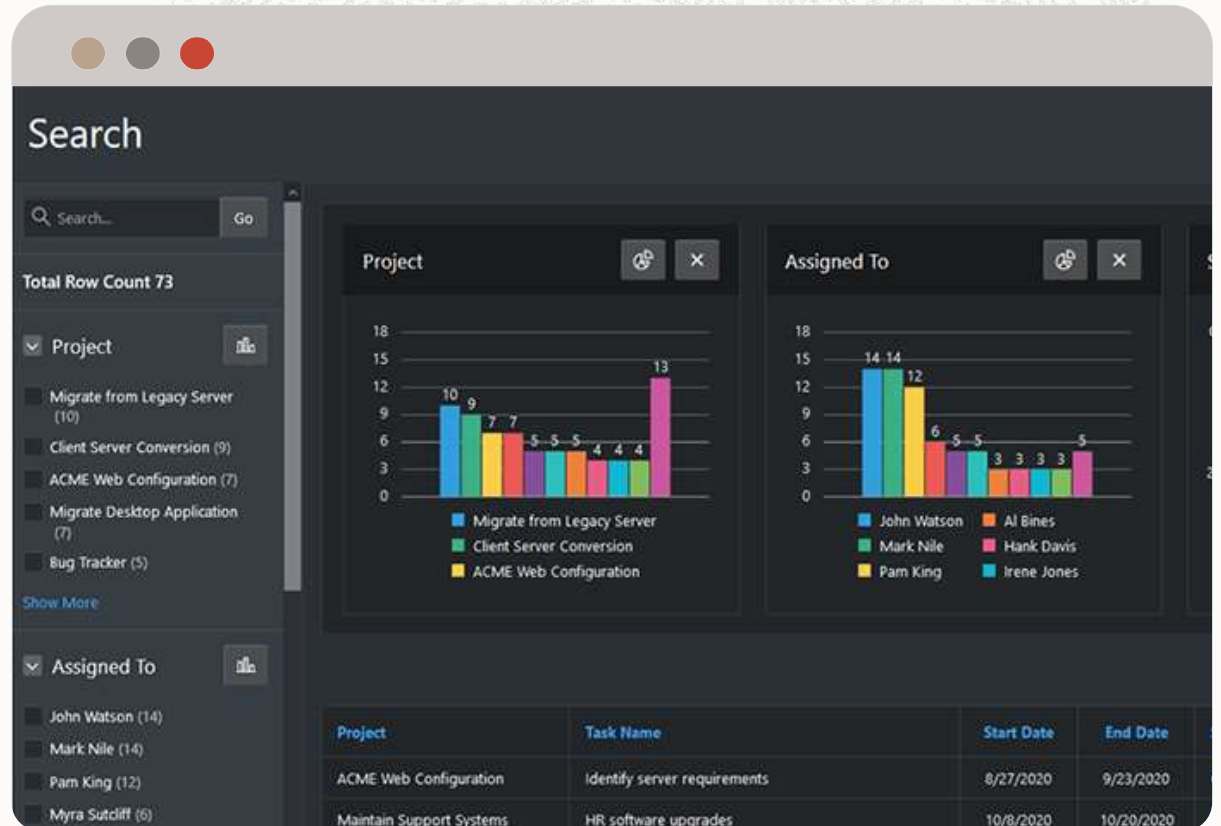
The world's most popular enterprise low-code application platform

Key features

- Pre-built sample apps and drag-and-drop UI components to jump start development
- Data-centric apps to visualize and manage relational, JSON, and spatial data
- Integration of local app data with data from REST endpoints, Excel spreadsheets, and more

Key benefits

- Easy-to-learn and get started without being an expert in a variety of technologies
- Build using a web browser—no additional tools required
- Can develop app experiences for any device, including mobile, without coding



Licensing Autonomous

Cost-Effective Software Licensing Models

Subscribe to infrastructure and choose License Included or Bring Your Own License (BYOL)

License Included Pricing

Ideal for organizations with new workloads and dynamic utilization

- Includes Oracle Database Enterprise Edition with all options and management packs at one low price
- Consumption-based pricing for software and vCPUs, includes software support and paid for with Universal Credits



Bring Your Own License Pricing

Ideal for organizations moving existing workloads with consistent usage to the cloud

- Utilize existing on-premises licenses and pay software support for them
- Very-low, compute-only consumption pricing, paid for with Universal Credits
- Includes Transparent Data Encryption, Data Safe, Oracle Machine Learning, and select management packs at no additional cost

You can change license type using OCI Console


Update license and Oracle Database edition

[Help](#)

Choose a license type

Bring your own license (BYOL)

Bring your organization's Oracle Database software license to Oracle Cloud Infrastructure. [Learn more.](#)




License included

Subscribe to a new Oracle Database software licenses and the Oracle Database Service.

Choose an Oracle Database edition

Oracle Database Enterprise Edition (EE)

User-selected OCPU limit. [Learn more.](#)




Oracle Database Standard Edition (SE)

Up to 8 OCPUs, including auto scale. [Learn more.](#)

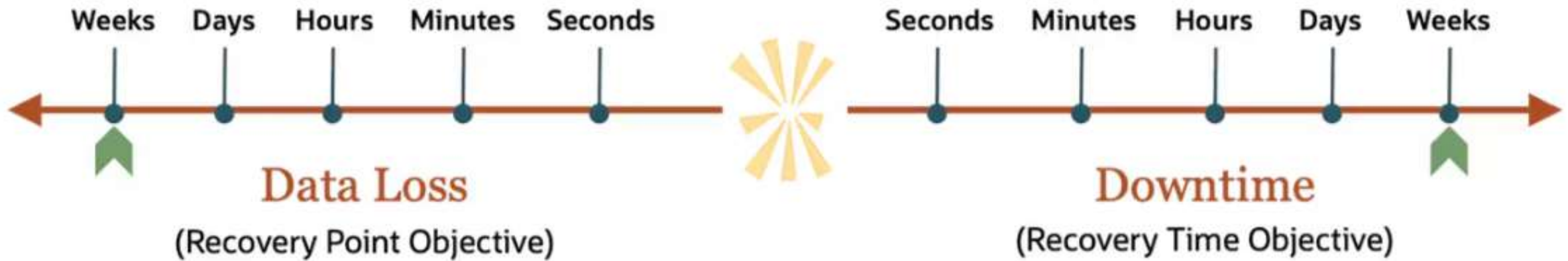
Save

[Cancel](#)



Autonomous MAA

Recovery Point Objective Vs Recovery Time Objective








Recovery Point Objective (RPO)

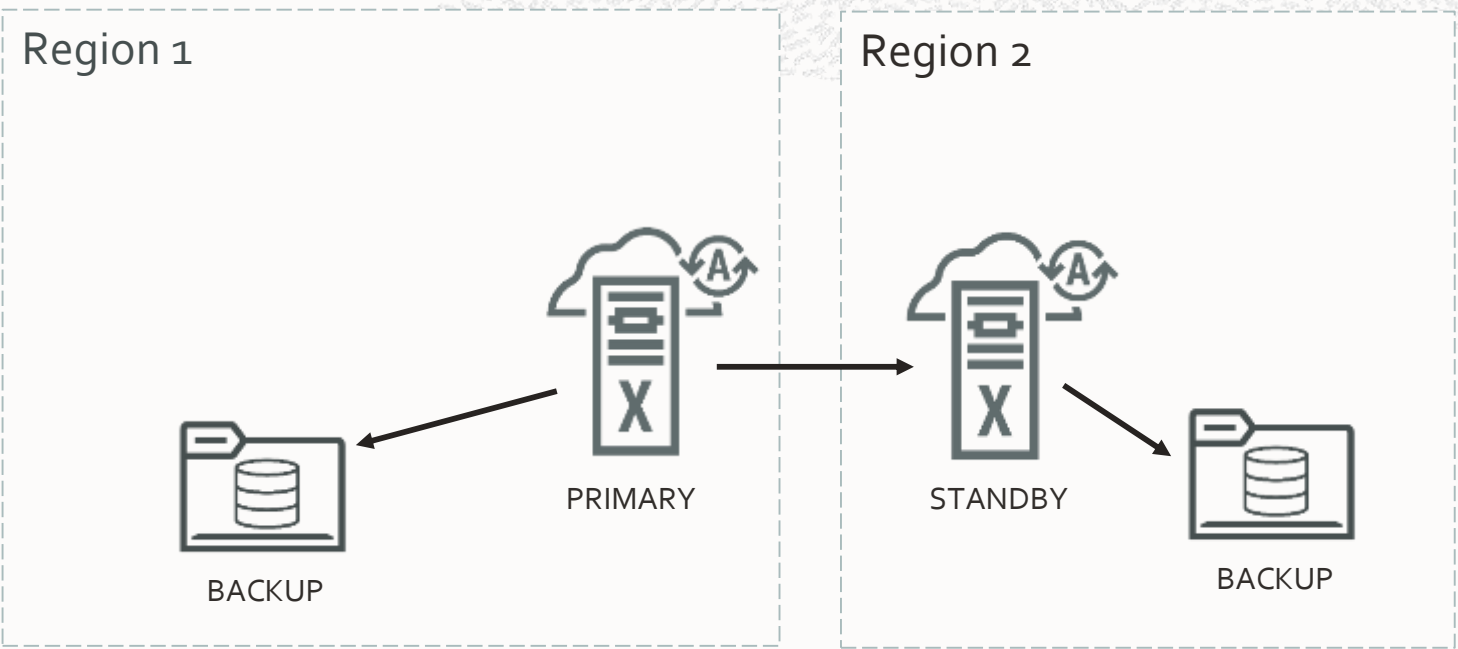
Tolerance for data loss (seconds, hours, days); determines frequency of backups and replication approaches









Recovery Time Objective (RTO)

The shorter the Recovery Time Objective (RTO) the quicker you get back to business

Broad choice for delivering highest levels of business continuity

AVAILABILITY / AUTOMATION CHOICES	
 RMAN	<ul style="list-style-type: none">Cannot be used for migration
 DATA PUMP	<ul style="list-style-type: none">Can be used for migrationData Pump Files can be stored on Object Storage and Classic Object Storage
 ACTIVE DATA GUARD	<ul style="list-style-type: none">RPO is 0 minutes for Auto FailoverRTO is 2 minutes for Auto Failover
 GOLDENGATE	<ul style="list-style-type: none">Can be used for Migration
 SQL LOAD	<ul style="list-style-type: none">Can be used for Migration



Outage Matrix		
	PLANNED MAINTENANCE	ZERO  ZERO
	RECOVERABLE FAILURE	ZERO  SECONDS
	UNRECOVERABLE FAILURE	SECONDS  SECONDS
	UPGRADE	ZERO  MINUTES



Datapump recommendations

- **Remap** any tablespace to **DATA** tablespace
- Applies to import only
- Just in case moving to Autonomous

```
$ more export.par
```

```
DIRECTORY=my_data_pump_dir  
DUMPFILE=dumpfile%U.dmp  
LOGFILE=logfile.log  
SCHEMAS=HR  
EXCLUDE=STATISTICS  
LOGTIME=ALL  
METRICS=YES  
FLASHBACK_TIME=SYSTIMESTAMP  
PARALLEL=4  
FILESIZE=5G  
COMPRESSION=ALL  
COMPRESSION_ALGORITHM=MEDIUM  
REMAP_TABLESPACE=%:DATA
```

```
expdp parfile=export.par
```

Resources



- **Autonomous Database Product Page**

<https://www.oracle.com/autonomous-database/>

- **Autonomous Database Cloud Professional 2023 Training (University)**

<https://mylearn.oracle.com/ou/learning-path/become-an-oracle-autonomous-database-cloud-professional-2023/122183>

- **Oracle Machine Learning Associate (using Autonomous Database) (2023) (University)**

<https://mylearn.oracle.com/ou/learning-path/become-an-oracle-machine-learning-associate-using-autonomous-database-2023/119951>

- **FAQs For Autonomous Database**

<https://www.oracle.com/database/technologies/datawarehouse-bigdata/adb-faqs.html>

- **Become An OCI Foundations Associate (2023) (University)**

<https://www.oracle.com/database/technologies/datawarehouse-bigdata/adb-faqs.html>

- **OCI compartment quotas**

<https://docs.oracle.com/en-us/iaas/Content/Quotas/Concepts/resourcequotas.html#GUID-Bo6202D2-0597-41AA-9481-3B174F75D4B1>

- **Developing .NET Applications for Oracle Autonomous Database**

<https://www.oracle.com/database/technologies/appdev/dotnet/adbdotnetquickstarts.html>



- **Developing .NET Applications for Oracle Autonomous Database**

<https://www.oracle.com/database/technologies/appdev/dotnet/adbdotnetquickstarts.html>

- **Connect to Autonomous Database Using a Client Application**

<https://docs.oracle.com/en-us/iaas/autonomous-database-serverless/doc/connect-preparing.html>

- **Backup and Restore Autonomous Database on Dedicated Exadata Infrastructure**

<https://docs.oracle.com/en/cloud/paas/autonomous-database/dedicated/adbcm/#GUID-2E1A32Do-6B34-440E-9FE9-CAD39894269E>

- **Manage Optimizer Statistics on Autonomous Database**

<https://docs.oracle.com/en/cloud/paas/autonomous-database/serverless/adbsb/manage-optimizer-stats.html#GUID-69906542-4DF6-4759-ABC1-1817D77BDB02>

- **Database Service names for Autonomous**

<https://docs.oracle.com/en-us/iaas/autonomous-database-serverless/doc/service-names-transaction-processing.html>

- **Autonomous Service Concurrency**

<https://docs.oracle.com/en/cloud/paas/autonomous-database/serverless/adbsb/manage-service-concurrency.html>

- **Autonomous Service Concurrency**

<https://docs.oracle.com/en/cloud/paas/autonomous-database/serverless/adbsb/manage-service-concurrency.html>

- **Autonomous database Service: Autonomous Database Event Types**

<https://docs.oracle.com/en-us/iaas/Content/Events/Reference/eventsproducers.htm#dbaasevents> AutoDB

- **DBMS_CLOUD Package Avro, ORC, and Parquet Complex Types**

<https://docs.oracle.com/en/cloud/paas/autonomous-database/serverless/adbsb/complex-types-orc-avro-parquet.html>

- **Access Control Within Autonomous Database on Dedicated Exadata Infrastructure**

<https://docs.oracle.com/en/cloud/paas/autonomous-database/dedicated/adbcx/index.html#GUID-B61853F3-13AD-43F5-9A12-36B7E3B2058B>

- **Autonomous Use Auto Scaling**

<https://docs.oracle.com/en/cloud/paas/autonomous-database/serverless/adbsb/autonomous-auto-scale.html>

- **Create Users on Autonomous Database**

<https://docs.oracle.com/en/cloud/paas/autonomous-database/serverless/adbsb/manage-users-create.html#GUID-DDoD847B-0283-47F5-9EF3-D8252084FoC1>

- **IAM Policies for Autonomous Database**

<https://docs.oracle.com/en-us/iaas/autonomous-database-serverless/doc/autonomous-database-iam-policies.html#GUID-8F82FCB4-A130-447F-97FC-0C2FCADCEB42>

- **IAM Policies for Autonomous Database on Dedicated Exadata Infrastructure**

<https://docs.public.oneportal.content.oci.oraclecloud.com/en-us/iaas/autonomous-database/doc/iam-policies-autonomous-database-dedicated-exadata-infrastructure.html>



Thank you

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