Documento 4.1: Describe Autonomous Database Architecture and Integration

Página 1: Portada
ORACLE
University
Oracle Autonomous Database
Getting Started with Autonomous Database
Architectural Components and Key Features
Kamryn Vinson
SENIOR PRODUCT MANAGER, DATABASE ORACLE

Página 2: Objetivos

Objectives

- Defining the architectural components of Autonomous Database
- Articulating the key features of Autonomous Database

Página 3: Visión General

Oracle Autonomous Database delivers the best data experience

With the lowest total cost of ownership

- Mission-Critical Database
- High Performance Engineered System
- Automation, Best Practices and Data Tools
- Autonomous Database

Oracle Autonomous Database

Automates the Entire Database Stack

Página 4: Automatización
Uses Machine Learning plus advanced and proven technologies

- Provisioning
- Scale-Up and Scale-Out
- Tuning
- Security and Patching

- Fault Tolerance
  Tecnologías utilizadas: RAC, Data Guard, Database Vault, Parallel SQL, In-Memory, Multitenant, etc.
  Resultado: Complete Database Automation. Mission Critical, Simple, Low Risk, Low Cost.

Página 5: Solución a Problemas

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

Página 6: Alta Disponibilidad

Autonomous Database Is Highly Available

Failures

- Automatically protects from all types of downtime
- Site Outages

Maintenance

- User Errors
- Changes
  No ridiculous exclusions to availability in fine print
  Comparación: Amazon excludes planned downtime, database bugs, regional outages, etc.

Página 7: Tecnologías de Disponibilidad

Oracle Autonomous Database

Key Availability Technologies

Scale-Out Fault-Tolerant

Database Engines	Servers
Storage	Network
Remote Replica	

Página 8: Título

Articulating the Key Features of Autonomous Database

Página 9: Características (1/2)

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

Página 10: Características (2/2)

Oracle Autonomous Database. What and How

Protect

- Recovers from any failure without downtime
- Automates backup, restore, **application transparent*** failover within a cluster or to a remote standby

Scale

- Scales online for highest performance and lowest cost
- **Instant, automatic, online scaling*** of compute and storage enables **true pay-per-use***

Optimize

- Optimally runs workloads without human direction
- Automatically optimizes **data formats, indexes, *parallelism*, and plans*** for each workload

---

Unique to Oracle

Documento 4.2: Describe the Different ADB offerings and license types

Páginas 1-2: [Vacías]

Página 3: Portada
ORACLE
University
Oracle Autonomous Database
Licensing
Kamryn Vinson
SENIOR PRODUCT MANAGER, DATABASE ORACLE

Página 4: Métrica de Precios ECPU

ECPU pricing metric

What are ECPUs?

- They are an abstract compute metric of cloud resources that is performance based.
- Elastically allocated from ADB's shared pool of Exadata database and storage servers.
- Not physical core or threads.
- Default compute model for all new ADB instances.

Benefits for ECPUs

- Provides a durable pricing metric that is not tied to the exact make, model, and clock speed of the underlying processor.
- Delivers competitive advantages for ADW.
- Finer-granularity system sizing.
- Reduced storage costs for ADW instances using ECPU.

Página 5: Puntos Clave de ECPU

ECPU key points

- ECPU pricing is available for ADW and ATP with a minimum configuration of 2 ECPUs.
- Beyond 2 ECPUs, scaling is in single-step increments.
- Licensing for ECPUs can be:
    - Pay-as-You-Go
    - BYOL (Bring-Your-Own-License for existing Oracle Database customers)

Página 6: Modelo de Licencias

Autonomous Database Licensing – ADW and ATP

Universal Credit Model (UCM)

No on-premises licenses required.	**Advantages**	**Leverage existing licenses in the cloud.**
All capabilities included in one price.		All of the service at a fraction of the cost.

Included Licensing

- **Oracle Enterprise Edition**
- **Oracle Standard Edition**

Included 64+ ECPUs Licensing

- Oracle Enterprise Edition
- Oracle Real Application Clusters. max. 32 ECPUs with or without compute auto scaling enabled
- 99.995% SLA Included

Included

- 99.995% SLA
- Oracle Enterprise Edition
- Real Application Clusters
- Active Data Guard
- Standard Edition
- Active Data Guard

Página 7: Estructuras de Pago

Oracle Universal Credit Payment structures

Pay As You Go (PAYG)

- Structure: No upfront payment, On-demand pricing
- Benefits: No payment commitment, Minimizes customer risk

Annual Universal Credits

- Structure: Minimum one year term
- Benefits: Maximizes cost reduction with predictable annual spend, Flexibility of on-demand access with the benefit of prepaid instance pricing

Página 8: [SCREENSHOT - Panel de Control de OCI para una instancia ATP]

Autonomous Database licensing

ORACLE Cloud

- Server resources, services, documentation, and technologies
- ICE East (Additions)
  Overview - Autonomous Database + Autonomous Database details

---

ATP

- ATM/UABE
- ATPDEMO
- Database actions
- Database connection
- Performance hubs
- Manager resource allocation
- Main actions

General information

- Database name: ATPDEMO
- Network type: Transaction Processing
- Group partners: contact 1 page
- GOD: ...Kippen Stoss Corp

- Created: Now, Aug 21, 2023, 18:44:48 UTC
- Content type: Storage can license IPPOS Enterprise Edition
- Database version: VPC
- Network type: Router Check database available?
- Network type: Pack
- Operator set: ALSO/TPS
- Method character set: ALTO/TPS
- Also: user/visor software: Docker Scalable
- Main: Incubator: Edit

Dataset recovery

- Relax Privacy
- Local backup server
- Uploadable Autonomous Data Guard
- Realization:
- Create negative host values

Backup

- Automate backup retention periods (0 days) [22]
- Total backup storage:
- Last automatic backups to active backups until for this database.
- Next long-term backups:
- Long-term backup schedule: Schedule

Network

- Access input allows secure access from everywhere
- Access control links Channel [22]
- Return TLS printTS authentication Request [23]

Resource allocation

- ECPV count: 2

Página 9: [SCREENSHOT - Panel de Configuración de Licencias y Edición de Base de Datos]

Autonomous Database licensing

CRACLE Cloud

- **Search** - Customer service, documentation, and bibliography
  Overview - Autonomous Database - Autonomous Database status
ATP	Updated license and Oracle Database Edition
	Bygg War Open License (BYOL)
	Enable
	Choose an Oracle Database edition
	Oracle Database Enterprise Edition (EE)
	Use selected ECFU Intel. Learn more.

General inform

- **Database name**: ATPOS
- **Workload type**: Internet
- **Component name**: Google
- **Code**: ...Crypto
- **Created date**: Aug 11-8
- **License type**: Bygg war
- **Database version**: File
- **License index**: Android
- **Internet type**: iPad
- **Generator set**: A3207F
- **Material character set**: Auto shortening virtual
- **Mode**: Illustration List

Resource alloc

- **ECRW source 2**
- **Server**
- **Critical**

BYOL flexibility

BYOL ECRW limits allow you to maintain your new ECRW as the current SAP BYOL. Increase jobs like last when the number of dataers recovery peers, and distribute traffic.

Profile BYOL ECRW lines

Página 10: [SCREENSHOT - Panel de Detalles de la Base de Datos]

Autonomous Database licensing

CRACLE Cloud

Search resources, services, documentation, and biosensors
Overview - Autonomous Database - Autonomous Database details

ATP

- **ATPDEMO**
  Database address
- **ADMINISTRATOR**
  Database address
- **General inform**
  Database address: ATP/SC
  Web-based type: Terminal Component Name: Google_Adapter Status:
  General Editor: Aug 21.4
  License type: Bring your Database websites: No
  License type: Android
  Instance type: Pack
  Generator set: A123/DT
  Material character size: Auto distribution values:
  Mode: Illustration List

Resource alloc

[CEN] count: 2

Update license and Oracle Database Edition

[Data Sign] Open Licensed (IPDO)
[Inside]

Página 11: [SCREENSHOT - Panel de Información General de ATPDEMO]

Autonomous Database licensing

CRACLE Cloud

Search resources, services, documentation, and instructions
Overview - Autonomous Database + Autonomous Database details

ATP

- **ATPDEMO**
  ● Privacy
Database schema	Database connection	Performance hub	Urology resource allocation	More actions
Autonomous Database Information	Tool configuration	Tags		

General information

- Database name: ATPDEMO
- Workload type: Transaction Processing
- Component: resource1 (root)
- Code...: Crypto: Status: Copy
- Created: New, Aug 21, 2023, 16:54:48 UTC
- License type: License included
- Database version: 10x
- Windows state: Available! Check database available?
- Intrusion type: Pwd
- Character set: AL3007F4
- National character set: AL1007F4
- Auto interface metadata: Detailed Sizable!
- Native Readership: E2I

Resource allocation

(EPU) count 2

Disaster recovery ⓒ

- Basic Primary
- Local: Storage-based. Storage to Autonomous Data Guard. Behaviour: Cross-reports for survival

---

Backup

- Autonomic backup retention periods 60 days E2I
- Flow backup attempts:
- Last automatic backups to active backups sent for this database.
- Next long-term backups:
- Long-term backup schedules: Sizable!

Network

- Access input allow access access from everywhere
- Access control files: Disabled E2I
- Mutual TLS and TLS authentication: Required 5.01 (T).

Documento 4.3: Create Autonomous Database Serverless Instances - Auto Scaling

Página 1: Portada
ORACLE
University
Oracle Autonomous Database
Auto Scaling
Kamryn Vinson
SENIOR PRODUCT MANAGER, DATABASE ORACLE

Página 2: Autoescalado del Servidor

Autonomous Database Serverless: Auto Scaling

ADB autonomously and continuously monitors the overall system performance.

- ADB scales CPU and IO resources.
- Scaling up 3x

- Auto scaling can be enabled when provisioning an ADB instance or any time using **Scale Up/Down** on the Oracle Cloud Infrastructure Console.

Enabling auto scaling does not change the concurrency and parallelism settings for the predefined services.

Página 3: Funcionamiento del Autoescalado

Auto Scaling

- Enabled by default*
- Can be disabled at any time
- 3x base number of active ECPUs
- ECPUs auto scale back down to the base number.
- Changing the setting does not require database downtime.

Note
If you are provisioning an always-free database, auto scaling is not enabled by default.

- Auto scaling
  Allows system to use up to three times the provisioned number of cores as the workload increases. Learn more.

Página 4: [Vacía]

Página 5: [SCREENSHOT - Panel de Detalles de la Instancia ATPDEMO]

Setting Up Auto Scaling: Any Time

ATP

- **Auto-nomous Database Information**
  Tool configuration
  Tags

General information

- **Database name**: ATPDEMO
- **Workload type**: Transaction Processing
- **Compartments**: viscool4211 (web)
- **OCID**: ...digraphs 32cat 52bit

- **Gender**: Fr. Aug 16, 2023, 20:00:04 UTC
- **License type**: License included
- **Database version**: 4
- **Line cycle state**: Available / Check database availability
- **Instance type**: Pied
- **Character set**: AL12UTTP
- **National character set**: AL15UTTHS
- **Auto start/step schedule**: Disabled Scizable
- **Mode**: Requireme 521

Resource allocation

- **ECPU count**: 2
- **Compute auto scaling**: Exeated
- **Storage**: 1 TB
- **Storage auto scaling**: Exeated

Disaster recovery

- **Rule**: Primary
- **Local**: Backup-based Microsite & Autonomous Data Guard Switchover
- **Cross-region**: Not enabled

Backup

- **Automatic backup retention period**: 60 days EoE
- **Total backup storage**: -
- **Last automatic backup**: No active backups exist for this database.
- **Next long-term backup**: -
- **Long-term backup schedule**: Scizable

Network

- **Access type**: Allow secure access from everywhere
- **Access content list**: Detailed ESI

- **Mutual TLS IP11LIB authenticator**: Required ESI

Maintenance

- **Patch level**: Regular

Página 6: [SCREENSHOT - Panel de Gestión de Escalado]

Setting Up Auto Scaling: Any Time

CRACLE Cloud

Search resources, services, documentation, and Marketplace

ATPDEMO

Pirus

Database actions **Data**

Autonomous Database

General Informat
Database name: ATPDEMO
Workload type: Transaction
Compartment: Unicode2111
OCID: ...app.mp. 32bit/ C4
Created: Fri, Aug 18, 2023
License type: License Initial
Database version: Tue
Libicycle state: Available C2
Instance type: Pwd
Character set: AL32UTR8
National character set: A1
Auto start/stop scheduler: f
Mode: Read/write Ecli
Resource allocat
ECPU count: 2
Compute auto scaling: En
Spouse: 1 TB

Manage scaling

- **ECPU count**: 0
  6
    - Based on ECPU count: ECPU counts are multiples of 5.
- **Compute auto scaling**:
    - Allow system to expand up to three times the specified ECPU count as demand increases. Lasts issue direct data scaling.

Storage (TB)

1 **The amount of storage is discrete. Min storage allowed is 30x TB.**
2 Storage auto scaling:
- Allow system to expand up to three times the moment storage. |

Allocated storage:

| Server | Some storage records, that min direction of a significant amount of min. Lasts issue. |

Storage auto scaling: Disk

Documento 4.4: Create Autonomous Database Serverless Instances - Provision

Página 1: Portada
ORACLE
University
Oracle Autonomous Database
Provisioning
Kamryn Vinson
SENIOR PRODUCT MANAGER, DATABASE ORACLE

Página 2: Visión General del Aprovisionamiento

Provisioning the Database

- Private software-defined network
- Fully encrypted database
  Automates provisioning a scalable, secure, and highly available database

---

Scalable RAC Cluster running on Exadata

Configures automatic processes such as backup
You choose the number of CPUs and the storage size in terabytes.

Página 3: [SCREENSHOT - Página de Inicio de OCI (Dashboard)]

Provisioning an Autonomous Database

Oracle Cloud

- Search resources, services, documentation, and Marketplace

Get Started

- Dashboard

Service links

- PINBED
    - Instance Compute
    - Visual Cloud Network Networking

RESORTLY VISITED

- Autonomous Database Autonomous Database Autonomous Account Management
- Restoration Lenses Manager
- Restoration Application Integration
- Autonomous Data Warehouse Autonomous Database

RECOMMENDED - Quizzes

- Policies Identity
- Business Object Storage & Archive Storage
- Users Identity
- Library Language
- Device Identity
- Transient Organization Management

Quickstarts

- FURNARD

- Predict the result of the next race
    - 25-30 mins

APPLICATION CONTROVMENT

- Deploy a WordPress website
    - 4-8 mins

APPLICATION EXPLOREMENT

- Deploy a baseline landing zone
    - 7-9 mins

APPLICATION EXPLOREMENT

- Deploy a low-code app on Autonomous Database using APEX
    - 3-5 mins

QUALITABLE

- Visualize and analyze Straw data on Autonomous Database
    - 2-4 mins

User review

- All services operational
- View health dashboard

Usage

- Usage area
- Subscription 750.073
- $15.00 x$10 ms Test cards
- $5.44 x$14 ms

SGP or IPSI apps

- Cost savings opportunities
- External savings: 0
- View recommendations: 0

OCI mobile app

- Online admin, news billing and usage data,

- and message relevance on the go:
- Install new

Get early access to OCI features

- The OCI application features such as password.

Página 4: [SCREENSHOT - Menú de Navegación de OCI]

Provisioning an Autonomous Database

Oracle Cloud

Search resources, services, documentation, and technologies
US East (Ashburn)

Home

- Compile Storage
- Networking
- Oracle Database
- Databases
- Analytics & AI
- Developer Services
- Identity & Security
- Observability & Management
- Hybrid
- Migration & Disaster Recovery
- Billing & Cost Management
- Governance & Administration
- Marketplace

Overview

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

- Autonomous Dedicated Infrastructure
- Oracle Base Database (VM, DM)
- Exadata on Oracle Public Cloud

Exadata Cloud@Customer

- External Database
- Data Safe
- Overview
- Target Databases
- Security Center
- GoldenGate
- Operator Access Control

Related Services

- APEX Application Development
- SQL Worksheet
- Database Management
- Mysteries
- Data Integration
- Streaming
- MySQL
- Oracle NoSQL Database

Help

- Autonomous Database
- Raw Meta and VM DB Systems
- Exadata Cloud@Customer
- AI Oracle Database Documentation

APPILICATION ECCELOPMENT

Página 5: [SCREENSHOT - Página de Listado de Autonomous Databases]

Provisioning an Autonomous Database

ORACLE Cloud

Search resources, services, documentation, and technologies

Overview - Autonomous Database - Autonomous Databases

Autonomous Database
Autonomous Database delivers fast performance and requires no database administration. It performs all routine database maintenance tasks while the system is running, without human intervention. Autonomous Database located in the Oracle cloud can run on dedicated or shared infrastructure. [Last 2020]

Data Availability Statement

Display Name	State	Dedicated	Compate	Storage	Workload type	Autonomous Data Guard	Created
Autonomous Database							
Autonomous Database VM Cluster							
EndData Infrastructure							Displaying 9 Autonomous Databases

[Last 2020]

Compartment

sablowcatRef (root)

- **Fines**
    - Workload type:
    - All:
    - Same
    - Any state:
    - < 1 of >
      Select a compartment to assign the Database Resource.
      You can view all Autonomous Databases in the compartment or filter by Data Warehouse/Transaction Processing.
      You can also filter the displayed databases by their state.

Página 6: [SCREENSHOT - Primer Paso de Creación: Información Básica]

Provisioning an Autonomous Database

Create Autonomous Database

Provide basic information for the Autonomous Database

- **Compartment**
    - Workshops
    - adec-jom /root/Workshops
- **Display name**
    - Financials
      A user-friendly name to help you easily identify the resource.
- **Database name**
    - findb
      The name must contain only letters and numbers, starting with a letter. Maximum of 30 characters.

Página 7: [SCREENSHOT - Segundo Paso: Configuración de Tipo de Carga, Implementación y Base de Datos]

Provisioning an Autonomous Database

Choose a workload type

- Data Warehouse
  Built for detection support and data warehousing activities. First order new range volumes of data.
- Transaction Processing
  Built for transactional workloads. High accuracy CPU power running duration and transactions.
- JSON
  Built for JSON-centric application development. JSON-centric memory document APIs and native JSON storage.
- APEX
  Built for Oracle APEX application development. Content and deployment of low-cost applications, with database included.

Choose a deployment type

- Serverless
  Run Autonomous Database on serverless architecture.

- Dedicated infrastructure
  Run Autonomous Database on Dedicated Exadata Infrastructure.

Configure the database

- Always Free
  Show any Always Free configuration options

Choose database version

- File:
  [ ]
  [ ]
  [ ]
  [ ]
  [ ]
  [ ]

ECPU count ( )

- 2
  Select or ECPU count, ECPU counts are multiple of 7

Storage (TB)

- 1
  The amount of storage to access files storage allowed is 384 TB.

Storage advanced content

- Compute auto scaling
  Active system timeout up to time times the specified ECPU count is derived increases. Last usage check data config.
- Storage auto scaling
  Active system timeout up to time times the required storage.

Página 8: [SCREENSHOT - Tercer Paso: Retención de Backups, Credenciales y Acceso de Red]

Provisioning an Autonomous Database

Backup retention

- Automatic backup interface period in days
  (6)

Create administrator credentials

Username: Plaut only
Address:
[Autonomous] access to admin
Password:
[Commons] password

Choose network access

Access type:

Secure access from everywhere	Secure access from allowed IPs and VCMs only	Private endpoint access only
Allow you with different credentials to be able to create new IPs relevant.	Provide access to specified IP addresses and VCMs.	Request access to private endpoint within an OXI/OMC.

- **Request request: TLS pht3.0 authentication.**
- **Find user’s file option, nTL5.0 file required to administer connection by your Autonomous Database.**

Página 9: [SCREENSHOT - Explicación Detallada de los Tipos de Acceso de Red]

Provisioning an Autonomous Database

Choose network access

Access type

- Secure access from everywhere
  Allow users with database credentials to access the database from the Internet.

- Secure access from allowed IPs and VCNs only
  Restrict access to specified IP addresses and VCNs.

- Private endpoint access only
  Restrict access to a private endpoint within an OCI VCN.

IP notation type

- IP address

Values

- Example: 192.1.1.1, 192.1.1.2

Request

- Add my IP address

Add access control rule

---

1. When you update a remote peer with separate access control rules, it will no longer follow the access control rule updates from the primary database.

Create Autonomous Database
Save as stack
Cancel

Documento 4.5: Create Autonomous Database Serverless Instances - Start and Stop ADB

Página 1: Portada
ORACLE
University
Oracle Autonomous Database
Start and Stop ADB
Kamryn Vinson
SENIOR PRODUCT MANAGER, DATABASE ORACLE

Página 2: Visión General de Inicio/Parada
Stop your instance on demand to conserve resources and pause billing.
Start your instance instantly on demand.
All can be done by clicking through the Console.
Define a schedule to automatically start-stop your instance
Autonomous Database Starting, Stopping, and Auto-Scheduling

Página 3: [SCREENSHOT - Panel de Detalles de una Instancia ATP en Estado STOPPED]

Starting an Autonomous Database

CRACLE Quiz

Search resources, services, documentation, and templates

Overview - Autonomous Database + Autonomous Database details

ATPDEMO

Database address	Database expression	Performance (Acc)	Category reading	More actions
Autonomous Database Information	Total configuration Tags			

General information

- **Database access**: ATZORTRANSP1.0
- **Workload type**: Transaction Processing
- **Comprehensive:** tableware/unit length:800.datasheets
- **OCR**: 4.000KB_Store_Code
- **Creates**: Ft_User 2.7_2023, NG 5.913 UTC
- **ODPS score**: 9
- **ODPS web scaling**: Evalued
  Storage: 1 TB
  Storage data scaling: Deadline
  License time: License included
  Database version: Yes
  Unicode name: Request Data database available
  Instance type: 64
  Connector file: ALMUTFS
  Reduced character size: ALMUTFS
  Auto start/edge schedule: Endcard Schedule

Infrastructure

- **Dedicated infrastructure**: No
- **Autonomous Data Guard**:
- **Status**: Disabled Guides

- **Backup**: Last automatic backup: Mon, Feb 6, 2023, KK:25:37 UTC
- **Network**: Access type: Allow source access from everywhere
- **Access content list**: Disabled Edit
- **Manual TLS printing authentication**: Revised Edit

Maintenance

- **Patch break Requisite**:

Página 4: [SCREENSHOT - Mismo Panel, Mostrando el Botón "Start"]

Starting an Autonomous Database

CRACLE Cloud

- **System resources, services, documentation, and instructions**
  US East (Audiom) v.

Overview - Autonomous Databases - Autonomous Database details

ATPDEMO	Database address	Database annotation	Documentation file	Message reading	Main address
ATP	Autonomous Database Information	Tool configuration	Tags	Start	
STOPFO	General information				
	Database name: #STOPFORGAPTU.O				
	Workload type: Transaction Processing				
	Computerize: editors/other/prot/threads /admissions				
	OCDs: Admin_Data_CMS				
	Contact: Fr. Jan. of * 2020, NES330 UTC				
	OCDI course 1				
	OCDI out to: testing: English				
	Storage: T10				
	Storage into: testing: English				
	License type: License				

ATPDEMO	Database address	Database annotation	Documentation file	Message reading	Main address
	included Database version: No Manage write: Request Data database available/ Release type: FMI Generate set: ACUSTPS Retrieval character set: ACUSTPS Auto following schedule: Database Schedule				

Notifications

- **User**
- **Name**
- **Date**
- **Address**
- **Address**

Página 5: [SCREENSHOT - Panel de Detalles de una Instancia ATP en Estado AVAILABLE]

Starting an Autonomous Database

CRACLE Cloud

Search resources, services, documentation, and boundaries

Overview > Autonomous Database > Autonomous Database details

ATP

- **Autonomous Database information**
    - Tool configuration:
    - Type:
    - Description:
    - Data:
    - Description:

General Information

- **Business name**: ATEPOTROMSY-TAO
- **Workload type**: Transaction Processing
- **Competitiveness**: submersional proof/FuSOS/Statements
- **OCDs**: Jafariq State Corp
- **Creates**: Ft. A1s 27, 2023, 16:15:13 UTC
- **GCPX space**:
    - GCPX suite scaling: Exclusive
    - Storage: 1 TB
- **Storage auto scaling**: Detailed
    - Uninstall type: License included
- **Database version**:
    - Linkages taken: Start-up Class database available
- **Instance type**: Pwd
- **Classroom file**: AL2V/FFF
- **Network character**: var.A1.VL/TFT4
- **Auto matching schedule**: Enabled: Excluded

Infrastructure

- **Dashboard infrastructure**: No
- **Autonomous Data Guard**:
    - **Marker:** Chassler Estate
- **Backup**:
    - Last automatic backup: Nov. Feb 6, 2023, 06:25:37 UTC
- **Network**:
    - Access type: Alice secure access from everywhere
    - Access content file: Deadlock Edit
    - Mutual TLS (wTLTS) authentication: Required Edit

Maintenance

- **Data level**: Regular

Página 6: [SCREENSHOT - Panel de Detalles de una Instancia ATP en Estado AVAILABLE, Mostrando el Botón "Stop"]

STOPPING an Autonomous Database

CRACLE Cloud

Server resources, services, documentation, and technologies
US East (Ashham) ▼

Overview - Autonomous Database - Autonomous Database details

ATPDEMO

Database actions Database connection Performance hub Manage scaling More actions

---

Autonomous Database Information

- Tool configuration: Tags

General information

Database name: ATZ007EK0469F11A0
Workload type: Executive Processing
Corporate exit: stationmarket proxyF16QL8J6W9FH3
OCID: --Losing Status: Casey
Contact: Fr., Jan 27, 2023, 16:13:13 UTC
OCID/ count: 0
OCID/ auto scaling: Euclideq
Storage: 110
Storage auto scaling: Euclideq
License type: License included
Database version: File
Ultraperk state: Available Cloud database availability
Instance type: Print
Character set: ALS2017B
Network content set: AL10EIT1e
Auto start/step schedule: Databoot S2Cbb5d4

Infrastructure

Dedicated infrastructure: No

Autonomous Data Guard ⚠️

Status: Databoot Euclide

Backup

Last automatic backup: Mon, Feb 6, 2023, 09:25:27 UTC

Network

Access type: Allow secure access from everywhere
Access screen size: Databoot Edit
Mutual TLS pHTLS authentication: Required Edit

Maintenance ⚠️

Plash level: Regular ⚠️

Página 7: [SCREENSHOT - Menú Desplegable "More actions" Mostrando la Opción "Stop"]

STOPPING an Autonomous Database

CRACLE COx1

Sample resources, services, documentation, and technologies.

Overview + Automation Database + Autonomous Database details

ATP	ATPDEMO				
	Database address	Database connection	Performance hub	Manager activity	Home servers
Autonomous Database Information	Tool configuration	Tags			
General information					
Database name: #ZD09YBWMBPTJ0	Infra	Code clone			
Workload type: Transaction Processing					
Complementation: Autonomous Local/FieldDataStatements	Auto	Aeronautics password			

Code: Adobe Stock Inc.

ATP	ATPDEMO	
Creases: Ft_3a-37_2 2025, 16:53:33 UTC		
OCPD name: 8		
OCPD date scaling: Exclusive ⬜	Back	Auto start/tags schedule
Storage: 112		
Internet code scaling: Disabled ⬜	Lasts	Manage encryption key
License type: License included	Netw	Router database
Database version: 19b		
Lifecycle state: Available Cloud database availability	Access	Update display score
Instance type: IPv6		
Character set: AC50/TIFS	Main	Add tags
National character set: AC50/TIFS	Main	Terminal
Auto start/tags schedule: Disabled Schedule		
Peach level: Regular ⬜		

Documento 4.6: Describe Autonomous DB Tools

Página 1: Portada
ORACLE
University
Oracle Autonomous Database Tools
Autonomous Database Tools Overview
Hope Fisher
PRODUCT MANAGER, DB CLOUD TECHNICAL SVCS & USER ASSISTANCE ORACLE

Página 2: Visión General de Herramientas

Oracle Autonomous Database

Using the Cloud to eliminate the complexity of data management

- **Oracle Autonomous Database**
    - Oracle Database reimagined for the Cloud
    - Completely automating the full database management lifecycle
    - Supporting mission-critical databases
    - Enabling you to innovate more, pay less, and ensure data security
- **Complete Infrastructure Automation**

    - Complete Database Automation
- **Automated Data Center Operations**

Página 3: [Vacía]

Página 4: Entorno de Desarrollo

Autonomous as a Development Environment

Developer Tools out of the box with Autonomous

- SQL Developer Web
    - Execute SQL and PL/SQL
    - Build Data Models, generate DDL statements
    - Monitor and manage the DB
- APEX
    - Web-based Function rich, low code development env
    - No client software needed
- Oracle REST Data Services
    - Ability to REST enable a schema and autogenerate REST endpoints for tables, views, and procedures

Página 5: [SCREENSHOT - Icono y Descripción de SQL Developer]
SQL Developer
Run SQL statements
Load data
Database development
Monitor and manage

Página 6: [SCREENSHOT - Panel de Herramientas Mostrando APEX]

APEX

- Access APEX Applications
- Manage workspaces
- APEX Development

---

1. SQL

Data Modeller
REST
Login to APEX, develop and run rfos, low-code web applications.

Logo

- JSON
- Charts
- Scheduling
- Oracle Machine Learning
- APEX
- Graph Studio

Documentation

Get started
Create APEX Developer Accounts

APEX

Página 7: [SCREENSHOT - Panel de Herramientas Mostrando REST]

REST

- Define via PL/SQL API, SQL Dev or APEX
- Auto REST enable tables and views
- Create custom REST services
- Document Store (SODA for REST)
- Database Management REST APIs
- REST Enabled SQL

---

1. Data Modifier

- **SQL**
- **Data Modifier**
  REST
- Creating REST stores, and document REST APIs for your Oracle Database.
- Automatically REST enable access for your database objects, including:

    - Tablets
    - Views
    - PURIX, Functions, Procedures, Packages
- Realty store and user API, saving SQL and PURIX, secure endpoints with GAMBIC Offsets at JSON Web Textiles, quickly save the first time in order to get a new data stream.
- Debugged metadata module:
    - OpenAPI document generation
    - Single XML API export
    - URL command generation for shell and 3rd-party API testing tasks
- Subcaching
- Documentation
- Oracle Machine Learning
- Creating REST APIs
- Security REST APIs
- Work through

Página 8: [SCREENSHOT - Panel de Herramientas Mostrando JSON]
JSON

- Create collection
- Load and edit JSON
- Browse documents
- Create views

Printed & Recently Visited
Development
Data Studio Administration Downloads Monitoring Related Services
SQL
JSON
The Oracle Database is more than a relational system for:

- Tablet
- Maps
- Columns
- SQL
  It also supports your JSON document! This interface allows you to create a collection, load, edit, and browse documents, generate diagrams, and create relations! Views and indexes for your JSON for feature and easier queries.

Gnarts
Scheduling
Osable Machine Learning
APCX
Graph Studio

Página 9: [SCREENSHOT - Ejemplo de Uso de SQLcl Mostrando Salida JSON]

SQLcl

- Modern command-line interface
- Auto complete SQL syntax
- Command history
- Output json, csv, html, inserts, xml...
- Liquibase schema lifecycle integration
- Scripting friendly
- No Oracle Home required
- OCI & OSS Integration

SELECT(*: id* : 18),
"departments_id" : 110,
"column1": ""
}
"employee_id" : 296,
"first_name" : "Billian",
"last_name1": "Gitler",
"main1": "Miller",
"phone_number" : "518.123.8181",
"time_date1": "07-20-24",
"job_id1": "AC_COMMENT",
"value1": 17066.49,
"commission_id": ""
"amount_id": 206,
"department_id1": 110,
"column1": ""
}

---

01 rows selected.

SPARTMENT_ID
SPARTMENT_NAME
EXTRA_COLUM
LOOKTING_ID
MANAGER_ID
SQL select = from departments

Página 14: [SCREENSHOT - Interfaz de Graph Studio Mostrando una Consulta de Grafos]

Graph Studio

Connections between Vertices - Emilio and Floyd's common movies

---

Input-type

As Find movies that both customers are connecting to w/
select ct, t1, n-tiles, d2, c2
run over: (c1.t1)~(c2)~(d2.t1)~(d2.t1)~(c2)
on WORK_REGISTRATION_TYPE:
View C1.FINEST_NAME: "Floyd" and C1.LAST_NAME: "Bryant" and C1.PROFIT_NAME: "RELEASE_HIGH_CELASSET_NAME: "NVIDIA"

Time: 20

Page: 1
of: 1
x: 3