



Autonomous Transaction Processing Serverless

All-in-One Datasheet Produced by DBExpert

Overview

Oracle Autonomous Transaction Processing Serverless (ATP-S) is fully automated and optimized for transaction processing or mixed workloads. The service delivers a self-driving, self-securing, self-repairing database service that can instantly scale to meet demands of mission critical applications, running on Exadata (non-dedicated).

Visit the [DB Expert Services Taxonomy page](#) to get the latest version of this data sheet and see data sheets for all of the Oracle Cloud Database services.

Deployment

| | |
|---------------------------------|---|
| Database Type | Single Database |
| Management Model | Fully Managed PaaS |
| Supported Cloud Environments | Oracle Cloud Infrastructure, Oracle Database@Azure and Oracle Database@Google Cloud |
| SKUs for starting configuration | B95702 (ECPUs) or B95704 (ECPUs BYOL) B95706 (DB storage) B95754 (backup storage) |
| DB Versions Supported | Oracle 23ai (Long-term release), Oracle 19c (Long-term release) |
| Hardware Infrastructure | Shared Engineered System |

Usage Models

| | |
|-------------------------|---|
| Recommended Workloads | Blockchain Data Science / Machine Learning Data and IoT Event Streams Graph Mixed Workload (Transaction + Analytics) Transaction Processing (OLTP) Vector |
| Recommended Data Models | Document Store (JSON) Document Store (XML) NoSQL Spatial Text Vector |

| | |
|--------------------------------------|---|
| Certified Oracle Applications | <p>FLEXCUBE 14.7</p> <p>JD Edwards EnterpriseOne Tools 9.2.6 and later</p> <p>Oracle APEX</p> <p>Oracle Fusion Middleware 14.1.2.0.0</p> <p>Oracle Primavera P6 EPPM Version 23</p> <p>PeopleSoft PeopleTools 8.62 and later</p> <p>RGBU-Xstore 18.0.1 and later</p> <p>Siebel Enterprise Server 25.2 and later</p> |
|--------------------------------------|---|

Capacity

| | |
|------------------------------|---|
| Configuration Options | <p>Fully elastic scaling: Scale compute and storage independently to fit your database workload with no downtime:</p> <ul style="list-style-type: none"> Size the database to the exact compute and storage required Scale the database on demand: <p>Independently scale compute or storage</p> <ul style="list-style-type: none"> Shut off idle compute to save money <p>Auto scaling: Allows your database to use more CPU and IO resources or to use additional storage automatically when the workload or storage demand requires additional resources:</p> <ul style="list-style-type: none"> Use compute auto scaling to allow the database to use up to three times more CPU and IO resources, depending on workload requirements. Compute auto scaling is enabled by default when you create an Autonomous Database. Use storage auto scaling to allow the database to expand to use up to three times the reserved base storage, depending on your storage requirements. Storage auto scaling is disabled by default when you create an Autonomous Database. |
|------------------------------|---|

| | |
|------------------------|---|
| | |
| CPU Range | 2 to 16128 ECPUs in increments of 1 |
| Shapes | ATP-S ECPUs: 2 to 512 Max DB TB: 384 ATP-S Available with Service Limit Increase Request ECPUs: 513 to 16128 Max DB TB: 3100 |
| CPU scaling | Online, Auto scale up, Auto scale down |
| Storage scaling | Online, Auto scale up |
| Max IOPs | flash 8k: 2.8M read + 1M write (per storage server) |
| Max Throughput | 100 GB/s |
| Max Memory | 1.35TBx32 = 44 TB |

Availability

| | |
|--|---|
| Nines of availability (may require configuration) | 99.995 SLA (with Autonomous Data Guard) |
| Oracle DB Maximum Availability Architecture medals (for OCI / Cloud@Customer deployments) | Silver, Gold |
| Automated backups max retention | up to 60 days |
| Long-term backup retention (up to 10 years) | Yes |

Functionality Included

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|--|--|
| Included Oracle DB Options for license-included service (*) | Advanced Compression Advanced Security Database In-Memory Database Vault Label Security Partitioning Real Application Clusters (Oracle RAC) Real Application Testing Spatial and Graph |
| Included Oracle EM Packs for license-included service (*) | Cloud Management Pack for Oracle Database (functionality provided by service) Data Masking and Subsetting Pack (functionality provided by service) Database Lifecycle Management Pack for |

| | |
|---|---|
| | Oracle Database (functionality provided by service) Diagnostics Pack Tuning Pack |
| Free Add-Ons (no extra licensing required) | Data Transforms (nominal usage charge) Eligible target for loading data using Oracle Data Integrator, available on Cloud Marketplace (No license required if ADB is the target. Compute resources are charged.) Graph Studio (nominal usage charge) Managed Oracle REST Data Services (ORDS) with ADB-S Oracle APEX Oracle Analytics Desktop Oracle Cloud Observability and Management Service (O&M) Oracle Data Safe Oracle Database Actions Oracle GoldenGate 1) Limited Use Term License Promotion and 2) Oracle GoldenGate Database Migration Term (both available on Oracle Cloud Marketplace) Oracle Machine Learning UI (nominal usage charge) |

*Check service documentation for feature availability and limitations

Locations

Oracle Cloud Infrastructure

APAC: AU Gov Southeast - WGA, Chuncheon - YNY, Hyderabad - HYD, Melbourne - MEL (G), Mumbai - BOM (G), Osaka - KIX, Seoul - ICN (A), Singapore - SIN (A, G), Singapore West - XSP, Sydney - SYD (G), Tokyo - NRT (A, G)

EMEA: Abu Dhabi - AUH, Amsterdam - AMS (A), Dubai - DBX, EU Sovereign Central - STR, EU Sovereign South - VLL, Frankfurt - FRA (A, G), Jeddah - JED, Jerusalem - MTZ, Johannesburg - JNB (A), Jovanovac - BEG, London - LHR (A, G), Madrid - MAD (G), Marseille - MRS, Milan - LIN, Newport - CWL, Paris - CDG, Riyadh - RUH, Stockholm - ARN, UK Gov South - LTN, UK Gov West - BRS, Zurich - ZRH (G)

LAD: Bogota - BOG, Monterrey - MTY, Queretaro - QRO, Santiago - SCL, Sao Paulo - GRU (G), Valparaiso - VAP, Vinhedo - VCP (A)

North America: Ashburn - IAD (A, G), Chicago - ORD, Montreal - YUL (G), Phoenix - PHX (A), San Jose - SJC (A), Toronto - YYZ (A, G), US DoD East - RIC, US DoD North - PIA, US DoD West - TUS, US Gov East - LFI, US Gov West - LUF

* New services and hardware generations are rolled out across regions, check your region for current status. (A) = Interconnect to Microsoft Azure available. (G) = Interconnect to Google Cloud available

Azure

APAC: Australia East, Japan East, Southeast Asia

EMEA: France Central, Germany West Central, Italy North, UK South, UK West

LAD: Brazil South

North America: Canada Central, Central US, East US, East US 2, West US

Google Cloud

APAC: asia-northeast1

EMEA: europe-west2, europe-west3

North America: us-east4 (GA (AZ2 August)), us-west3

AWS

None to date. Visit the Multicloud Updates page (link below) to check on potential roadmap items.

[Multicloud Updates](#)

Operational Controls

| | |
|--|-----|
| Allows installing additional software/agents on the host | No |
| Allows installing OS packages | No |
| Allows kernel changes | No |
| Allows OS runtime changes | No |
| Allows sysdba access | No |
| Oracle operator access control | No |
| Control DB patch level | No |
| Control DB release update (RU) level | No |
| Control DB version | Yes |
| Control maintenance window | No |
| Preview and Validate Patches for Zero-Regression SLO | Yes |

Additional Information

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|----------------|----|
| Open Source DB | No |
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| Delta Sharing / Cloud Links | Delta Sharing Provider / Recipient and Cloud Links |
| Select AI to Generate SQL from Natural Language Prompts | Yes |
| Mongo-compatible API | Yes |
| Supports non-CDB home | No |

Reference Links

General

[Oracle PaaS and IaaS Universal Credits Service Descriptions](#)

[Service Level Objectives](#)

[Oracle DB Maximum Availability Architecture medals](#)

[Oracle Cloud Infrastructure Compliance](#)

[Oracle Database Releases](#)

[BYOL FAQ](#)

[OCI Locations and Status](#)

[Oracle Database Multicloud Regions, Capabilities, Compliance, High Availability and Migration](#)

Service Specific

[ADB FAQ](#)

[ATP Serverless Customer References](#)

[Azure documentation: Overview - Oracle Database@Azure](#)

[Certify Applications for Compatibility Between Autonomous Database Serverless and Dedicated](#)

[Cost Estimator](#)

[Oracle Autonomous Database Tools and Applications—Certifications, Compatibility, and Compliance](#)

[Oracle Database Cloud Migration](#)

[Oracle Database@Azure](#)

[Oracle Database@Azure Credits Service Descriptions](#)

[Oracle Database@Google Cloud Credits Service Descriptions](#)

[Oracle Database@Google Cloud documentation](#)

[Regions, capabilities, interoperability and compliance posture for Oracle Database@ACE services](#)

[What's new in Autonomous Transaction Processing Serverless](#)

The Responsibility Model for Oracle Autonomous Database

| Task | Who | Details |
|---|----------|--|
| Provisioning Autonomous Database resources | Oracle | Oracle is responsible for provisioning resources. You the customer are responsible for initiating provisioning requests that specify configuration characteristics of the resource being provisioned. |
| Backing up databases | Oracle | Oracle is responsible for backing up databases on a daily basis and for retaining database backups for 60 days. |
| Recovering a database | Oracle | Oracle is responsible for recovering databases. You the customer are responsible for initiating a recovery request that specifies which existing backup to recover to. |
| Patching and upgrading | Oracle | Oracle is responsible for patching and upgrading all Autonomous Database resources. |
| Scaling | Oracle | Oracle is responsible for scaling Autonomous Databases. You the customer are responsible for initiating scaling requests. |
| Monitoring service health | Oracle | Oracle is responsible for monitoring the health of Autonomous Database resources and for ensuring their availability as per published guidelines. |
| Monitoring application health and performance | Customer | You the customer are responsible for monitoring the health and performance of your applications at all levels. This responsibility includes monitoring the performance of the database queries and updates your applications perform. |
| Application security | Customer | <p>You the customer are responsible for the security of your applications at all levels. This responsibility includes Cloud user access to Autonomous Database resources, network access to these resources, and access to database data.</p> <p>Oracle ensures that data stored in Autonomous Databases is encrypted and ensures that connections to Autonomous Databases require TLS 1.2 encryption and wallet-based authentication.</p> |
| Auditing | Oracle | <p>Oracle is responsible for logging REST API calls made to Autonomous Database resources and for making these logs available to you the customer for auditing purposes.</p> <p>Oracle is responsible for ensuring that Autonomous Databases are provisioned with Oracle Database auditing features enabled. You the customer are responsible for using these features to audit database usage.</p> |
| Alerts and Notifications | Oracle | Oracle is responsible for providing an alert and notification feature for service events. You the customer are responsible for monitoring any database alerts that may be of interest. |