



# Autonomous AI Lakehouse on Dedicated Infrastructure Cloud@Customer

All-in-One Datasheet Produced by DB Services Explorer

## Overview

Oracle Autonomous AI Lakehouse on Dedicated Infrastructure Cloud@Customer (LAK-C@C) is a fully automated, high-performance, and elastic service. It delivers all of the performance of the market-leading Oracle Database in a fully automated environment that is tuned and optimized for data warehouse workloads, hosted on a dedicated Exadata - compute, storage, network and database service for a single tenant. Dedicated deployment provides for the highest levels of security isolation and governance. The customer has customizable operational policies for Autonomous Operations: workload placement, workload optimization, update scheduling, availability level, over-provisioning and peak usage. Oracle Autonomous AI Lakehouse on Dedicated Infrastructure Cloud@Customer (LAK-ExaC@C) brings all the power and capabilities of Oracle Autonomous AI Database to your data center.

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

## Deployment

<b>Database Type</b>	Single Database, Database Consolidation Pool
<b>Management Model</b>	Fully Managed PaaS
<b>Supported Cloud Environments (*)</b>	Cloud@Customer
<b>SKUs for starting configuration</b>	B95708 (ECPU) or B95710 (ECPU BYOL) Rack - X11M - B110635 (comes with 2 DB servers, 0 storage servers (of which at least three must be added)) 3* Storage Server - X11M - B110647 Backup storage -B91628
<b>Oracle AI Database BYOL Support</b>	BYOL Standard Edition (SE) and Enterprise Edition (EE)
<b>DB Versions Supported</b>	Oracle AI 26ai (Long-term release), Oracle 19c (Long-term release)
<b>Hardware Infrastructure</b>	Dedicated Engineered System

## Usage Models

<b>Recommended Workloads</b>	Analytics
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	Blockchain Data Lake Data Science / Machine Learning Data Warehouse / Data Mart Data and IoT Event Streams Graph Vector
<b>Recommended Data Models</b>	Document Store (JSON) Document Store (XML) Spatial Text Vector
<b>Certified Oracle Applications</b>	Oracle APEX AI Application Generator Oracle Fusion Middleware - Data Access Only 14.1.2.0.0

## Capacity

<b>Configuration Options</b>	Flexible shapes start with 2 database and 3 storage servers, and can be expanded up to 16 total servers in a single rack and up to 32 database and 64 storage servers across multiple racks to meet a variety of processing and storage requirements. Each database server provides 720 ECPUs, and each storage server provides 64 TB of database storage (no local backup). Elastic configuration example 2 and elastic configuration example 3 are examples of typical elastic configurations that provide the highest Flash Read IOPS and Flash Bandwidth in a single rack, respectively.
<b>CPU Range</b>	2 to 21504 ECPUs
<b>Shapes</b>	Exadata Cloud@Customer X11M - Elastic Configuration Example 1 ECPUs: 16 to 1520 Max DB TB: 192 Exadata Cloud@Customer X11M - Elastic Configuration Example 3 ECPUs: 16 to 1520 Max DB TB: 896 Exadata Cloud@Customer X11M - Elastic Configuration with Maximum Storage ECPUs: 16 to 1520 Max DB TB: 4096 Exadata Cloud@Customer X11M - Elastic Configuration Example 2

	ECPU: 16 to 6080 Max DB TB: 512 Exadata Cloud@Customer X11M - Elastic Configuration with Maximum ECPU ECPUs: 16 to 24320 Max DB TB: 192
<b>CPU scaling</b>	Online, Auto scale up, Auto scale down
<b>Storage scaling</b>	Online
<b>Max IOPs</b>	flash 8k: 2.8M read + 1M write (per storage server)
<b>Max Throughput</b>	100 GB/s
<b>Max Memory</b>	1.35TBx32 = 44 TB

## Availability

<b>Nines of availability (may require configuration)</b>	99.995 SLO (with Autonomous Data Guard)
<b>Oracle DB Maximum Availability Architecture medals (for OCI / Cloud@Customer deployments)</b>	Silver, Gold, Platinum
<b>Automated backups max retention</b>	up to 95 days
<b>Long-term backup retention (up to 10 years)</b>	Yes

## Functionality Included

<b>Included Oracle DB Options for license-included service (**)</b>	Active Data Guard Advanced Compression Advanced Security Database In-Memory Database Vault Label Security Multitenant Partitioning Real Application Clusters (Oracle RAC) Real Application Testing Spatial and Graph
<b>Included Oracle EM Packs for license-included service (**)</b>	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
<b>Free Add-Ons (no extra licensing required)</b>	Eligible target for loading data using Oracle

	<p>Data Integrator, available on Cloud Marketplace (No license required if ADB is the target. Compute resources are charged.)</p> <p>Managed Oracle REST Data Services (ORDS) for ADB-D</p> <p>Oracle APEX AI Application Generator</p> <p>Oracle Analytics Desktop</p> <p>Oracle Cloud Observability and Management Service (O&amp;M)</p> <p>Oracle Data Safe</p> <p>Oracle Database Actions</p> <p>Oracle GoldenGate 1) Limited Use Term License Promotion and 2) Oracle GoldenGate Database Migration Term (both available on Oracle Cloud Marketplace)</p>
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## Security and Compliance

<b>Recommended for hosting sensitive data and candidate for compliance with non-audited programs (customer responsibility)</b>	Yes
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## Operational Controls

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

## Additional Information

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

(\*) Capabilities may vary between cloud platforms. Please visit [Oracle Multicloud Capabilities](#) for more detailed information.

(\*\*) Check service documentation for feature availability and limitations

## Compliance Programs Achieved / Planned for Azure

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

## Compliance Programs Achieved / Planned for Google Cloud

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

## Compliance Programs Achieved / Planned for AWS

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

## Locations

### Oracle Cloud Infrastructure

Customer Data Center

### Azure

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

### Google Cloud

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

### AWS

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

[Multicloud Updates](#)

## Reference Links

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### General

[Multicloud Interconnect](#)

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

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

[Service Level Objectives](#)

[Oracle Database Maximum Availability Architecture](#)

[Oracle Cloud Infrastructure Compliance](#)

[Oracle Database Releases Support Note](#)

[BYOL FAQ](#)

[OCI Locations and Status](#)

## **Service Specific**

[ADB FAQ](#)

[ADB-D: Feature Parity Between Oracle Cloud and Exadata Cloud@Customer Deployments](#)

[Autonomous AI Database on Dedicated Exadata Infrastructure X11M Datasheet](#)

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

[LAK-ExaC@C Customer References](#)

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

[Oracle Database Cloud Migration](#)

[What's new in Autonomous AI Database - Dedicated](#)

[Why Oracle Autonomous AI Lakehouse over Snowflake](#)

## 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.