

# **Exadata Database Service on Dedicated Infrastructure**



All-in-One Datasheet (Beta) Produced by DBExpert

## **Overview**

Exadata Cloud Infrastructure runs Exadata Database Service, where infrastructure is managed by Oracle and the customer has control over most aspects of their database service. This provides customers with an easy path to migrate applications to the cloud by using the same Exadata capabilities available on premises but without having to modify operational procedures.

Visit the <u>DB Expert Services Taxonomy page</u> 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, Database Consolidation Pool
Management Model	Co-managed PaaS
Supported Cloud Environments	Oracle Cloud Infrastructure, Oracle Database@Azure, Oracle Database@Google Cloud and Oracle Database@AWS (Limited Availability)
SKUs for starting configuration	B110631 (ECPU) or B110632 (ECPU BYOL)  2* Database Server X11M - B110627  3* Storage Server X11M - B110629  Backups - Oracle Database Autonomous  Recovery Service - B95240 or Oracle  Database Zero Data Loss Autonomous  Recovery Service - B95241
DB Versions Supported	Oracle 23ai (Long-term release), Oracle 19c (Long-term release), Oracle 12.2.0.1 (with Upgrade Support), Oracle 12.1.0.2 (with Upgrade Support), Oracle 11.2.0.4 (with Upgrade Support)
Hardware Infrastructure	Dedicated Engineered System

# **Usage Models**

Recommended Workloads	Analytics
	Blockchain
	Data Lake
	Data Science / Machine Learning



	Data Warehouse / Data Mart 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	Enterprise Performance Management (Hyperion) 11.2 FLEXCUBE 14.7 JD Edwards EnterpriseOne Tools 9.2.6 and later Oracle APEX Oracle E-Business Suite 12.1.3 Oracle E-Business Suite 12.2.3 and later Oracle E-Business Suite 12.2.7 and later Oracle Fusion Middleware 14.1.2.0.0 Oracle Primavera P6 EPPM Version 23 Oracle Value Chain Planning 12.2.7 and above PeopleSoft PeopleTools 8.62 and later Siebel Enterprise Server 25.2 and later

# Capacity

	Configuration Options	Elastic X11M infrastructure configuration shapes range from 2 database and 3 storage servers, up to a total of 32 database and 64 storage servers to achieve the exact ratio of compute to storage required. Each database server provides 720 ECPUs, and each storage server provides 64 TB of database storage (no local backup).  Elastic configuration example 1 is the minimum size elastic configuration with 2 database and 3 storage servers. Elastic configuration example 2 with 8 database and 8 storage servers and elastic configuration example 3 with 2 database and 14 storage servers are example elastic configurations that provide the highest SQL Read IOPS and Bandwidth in a theoretical single rack, respectively.
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CPU Range	16 to 24320 ECPUs
Shapes	Exadata Cloud Infrastructure X11M - Elastic Configuration Example 1 ECPUs: 8 to 1520 Max DB TB: 192 Exadata Cloud Infrastructure X11M - Elastic Configuration Example 3 ECPUs: 8 to 1520 Max DB TB: 896 Exadata Cloud Infrastructure X11M - Elastic Configuration with Maximum Storage ECPUs: 8 to 1520 Max DB TB: 4096 Exadata Cloud Infrastructure X11M - Elastic Configuration Example 2 ECPUs: 8 to 6080 Max DB TB: 512 Exadata Cloud Infrastructure X11M - Elastic Configuration with Maximum ECPU ECPUs: 8 to 24320 Max DB TB: 192
CPU scaling	Online
Storage scaling	Online
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)	99.95 SLO
Oracle DB Maximum Availability Architecture medals (for OCI / Cloud@Customer deployments)	Bronze, Silver, Gold, Platinum
Automated backups max retention	up to 95 days
Long-term backup retention (up to 10 years)	Yes

# **Functionality Included**

Included Oracle DB Options for license-included	Active Data Guard
service (*)	Advanced Compression
	Advanced Security
	Database In-Memory



	Database Vault Label Security Multitenant 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 Data Masking and Subsetting Pack Database Lifecycle Management Pack for Oracle Database Diagnostics Pack Tuning Pack
Free Add-Ons (no extra licensing required)	Exadata Fleet Update OCI service Oracle APEX Oracle Data Safe Oracle GoldenGate 1) Limited Use Term License Promotion and 2) Oracle GoldenGate Database Migration Term (both available on Oracle Cloud Marketplace) Oracle REST Data Services (ORDS) SQL Developer Web

<sup>\*</sup>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), 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, Australia Southeast, 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, South Central US, West US

## **Google Cloud**

APAC: asia-northeast1

**EMEA:** europe-west2, europe-west3

North America: us-east4

#### **AWS**

North America: us-east-1 (3/31/25 (GA - IAD73) )

#### **Multicloud Updates**

# **Operational Controls**

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

#### **Additional Information**

Open Source DB	No
Delta Sharing / Cloud Links	No



Select AI to Generate SQL from Natural Language Prompts	No
Mongo-compatible API	Yes
Supports non-CDB home	Yes

# **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**

Azure documentation: Overview - Oracle Database@Azure

**Cost Estimator** 

**ExaDB-D Customer References** 

**Exadata Cloud Service on oracle.com** 

Getting Started with Exadata Database Service on Oracle Database@AWS

Oracle Database Cloud Migration

Oracle Database@AWS Documentation

Oracle Database@AWS documentation on aws.amazon.com

Oracle Database@AWS on AWS Marketplace

Oracle Database@AWS on oracle.com

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



