



Globally Distributed Exadata Database on Exascale Infrastructure (Globally Distributed ExaDB-XS)

All-in-One Datasheet Produced by DBExpert

Overview

Globally Distributed Exadata Database on Exascale Infrastructure uses a flexible, serverless architecture that can be dynamically scaled up or down to meet the needs of changing workloads without complex setup or management. Organizations with high-volume transaction processing, real-time analytics and variable agentic AI workloads gain the benefits of an always-on architecture, lower costs, simplified operations, and the ability to expand globally with confidence.

Visit the <u>DB Expert Services Portfolio 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	Distributed Database
Management Model	Co-managed PaaS
Supported Cloud Environments	Oracle Cloud Infrastructure
SKUs for starting configuration	B110989 (ECPU) or B110990 (ECPU BYOL) B107952 (Smart DB storage) Backups - Oracle Database Autonomous Recovery Service - B95240 or Oracle Database Zero Data Loss Autonomous Recovery Service - B95241
DB Versions Supported	Oracle Al 26ai (Long-term release)
Hardware Infrastructure	Shared 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	Oracle APEX AI Application Generator

Capacity

CPU Range O to 2000 ECPUs Oracle Exadata Exascale Infrastructure ECPUs: 0 to 2000 Max DB TB: 1500 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	Configuration Options	The basic unit of consumption in ExaDB-XS is a VM cluster. To facilitate VM portability, Exascale hosts storage for VM file systems on shared storage that is fully managed by Oracle. Oracle can migrate VMs across a pool of physical servers, because the VM filesystems that host the database binaries do not reside on local physical servers. VMs are migrated automatically as required for maintenance, or in the event of a system failure. VMs can also be scaled vertically by changing the number of Elastic Compute Processing Unit (ECPU) units, and changing VM memory allocation. An ECPU is an abstracted measure of compute resources. ECPUs are based on the number of cores elastically allocated from a pool of compute servers. You need at least 8 ECPUs per VM to provision a VM Cluster. VMs can be scaled in increments of 4 ECPUs.
ECPUs: 0 to 2000 Max DB TB: 1500 CPU scaling Online Storage scaling Online flash 8k: 2.8M read + 1M write (per storage server) Max Throughput 100 GB/s	CPU Range	0 to 2000 ECPUs
Storage scaling Online Max IOPs flash 8k: 2.8M read + 1M write (per storage server) Max Throughput 100 GB/s	Shapes	ECPUs: 0 to 2000
Max IOPs flash 8k: 2.8M read + 1M write (per storage server) Max Throughput 100 GB/s	CPU scaling	Online
server) Max Throughput 100 GB/s	Storage scaling	Online
	Max IOPs	
Max Memory 1.35TBx32 = 44 TB	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)	Not MAA certified
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 service (*)	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
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)	Oracle APEX AI Application Generator 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

^{*}Check service documentation for feature availability and limitations

Locations

Oracle Cloud Infrastructure

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

EMEA: Abu Dhabi - AUH, Amsterdam - AMS (A), Dubai - DXB, Frankfurt - FRA (A, G), Jeddah - JED, Johannesburg - JNB (A), London - LHR (A, G), Marseille - MRS, Newport - CWL, Paris - CDG, Zurich - ZRH (G)



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

North America: Ashburn - IAD (A, G), Montreal - YUL (G), Phoenix - PHX (A), San Jose - SJC (A), Toronto - YYZ (A, G)

* 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

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

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	No
Prompts	
Mongo-compatible API	Yes
Supports non-CDB home	No

Reference Links

General

Multicloud Interconnect

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

Blog - Announcing General Availability: Oracle Globally Distributed Exadata Database on Exascale

<u>Infrastructure</u>

Cost Estimator

Globally Distributed ExaDB-XS Customer References

Globally Distributed Exadata Database on Exascale Infrastructure Documentation

Oracle Database Cloud Migration

Outbound PM: Globally Distributed Database Cloud



