ORACLE

Exadata Database Service on Exascale Infrastructure (ExaDB-XS)

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

Overview

Exadata Database Service on Exascale Infrastructure (ExaDB-XS) provides a cloud service where customers can start with a small virtual machine (VM) cluster, and easily scale as needs grow. The user experience is similar to Exadata Database Service on Dedicated Infrastructure. Oracle manages all of the physical infrastructure in a shared multitenancy infrastructure service model.

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, Distributed Database, Database Consolidation Pool
Management Model	Co-managed PaaS
Supported Cloud Environments	Oracle Cloud Infrastructure and Oracle Database@Azure
SKUs for starting configuration	B109356 (ECPU) or B109357 (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 23ai (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 Oracle Fusion Middleware 14.1.2.0.0 PeopleSoft PeopleTools 8.62 and later Siebel Enterprise Server 25.2 and later

Capacity

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.
CPU Range	16 to 2000 ECPUs
Shapes	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

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 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, Frankfurt - FRA (A, G), Jeddah - JED, Johannesburg - JNB (A), London - LHR (A, G), Marseille - MRS, Paris - CDG, Zurich - ZRH (G)

LAD: Bogota - BOG, 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

EMEA: Germany West Central, Italy North, UK South

LAD: Brazil South

North America: Canada Central, East US

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	No

SLO	

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	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

Cost Estimator
ExaDB-XS Customer References
Exadata Cloud Service on oracle.com
Oracle Database Cloud Migration
Oracle Exadata Database Service on Exascale Infrastructure Overview
What's New in Exadata Exascale