



# Exadata Database Service on Cloud@Customer

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

## Overview

Exadata Cloud@Customer uniquely combines the world's top database technology and Exadata, the most powerful database platform, with the simplicity, agility and elasticity of a cloud-based deployment. The X10M system (and later) leverages Exadata RDMA Memory (XRMEM) and RoCE capabilities that are co-engineered with Oracle Database to reduce latency and increase performance. The Cloud@Customer service is identical to Oracle's Exadata Cloud Service but located in customers' own data centers and managed by Oracle Cloud experts, providing a consistent Exadata cloud experience, whether on-premises or in the cloud.

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

<b>Database Type</b>	Single Database, Database Consolidation Pool
<b>Management Model</b>	Co-managed PaaS
<b>Supported Cloud Environments</b>	Cloud@Customer
<b>SKUs for starting configuration</b>	ECPU B110662 or ECPU BYOL B110663 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 in Cloud - B91628 (on-premises backups may be to a local filesystem, NFS mount or ZDLRA).
<b>DB Versions Supported</b>	Oracle 23ai (Long-term release), Oracle 19c (Long-term release), Oracle 12.1.0.2 (with Upgrade Support), Oracle 11.2.0.4 (with Upgrade Support)
<b>Hardware Infrastructure</b>	Dedicated Engineered System

## Usage Models

<b>Recommended Workloads</b>	Analytics Blockchain Data Lake Data Science / Machine Learning Data Warehouse / Data Mart Data and IoT Event Streams
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	Graph Mixed Workload (Transaction + Analytics) Transaction Processing (OLTP) Vector
<b>Recommended Data Models</b>	Document Store (JSON) Document Store (XML) NoSQL Spatial Text Vector
<b>Certified Oracle Applications</b>	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

<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>	16 to 24230 ECPUs
<b>Shapes</b>	Exadata Cloud@Customer X11M - Elastic

	Configuration Example 1 ECPUs: 8 to 1520 Max DB TB: 192 Exadata Cloud@Customer X11M - Elastic Configuration Example 3 ECPUs: 8 to 1520 Max DB TB: 896 Exadata Cloud@Customer X11M - Elastic Configuration with Maximum Storage ECPUs: 8 to 1520 Max DB TB: 4096 Exadata Cloud@Customer X11M - Elastic Configuration Example 2 ECPUs: 8 to 6080 Max DB TB: 512 Exadata Cloud@Customer X11M - Elastic Configuration with Maximum ECPU ECPUs: 8 to 24320 Max DB TB: 192
<b>CPU scaling</b>	Online
<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>	99.95 SLO
<b>Oracle DB Maximum Availability Architecture medals (for OCI / Cloud@Customer deployments)</b>	Bronze, Silver, Gold, Platinum
<b>Automated backups max retention</b>	up to 90 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
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	Spatial and Graph
<b>Included Oracle EM Packs for license-included service (*)</b>	Cloud Management Pack for Oracle Database Data Masking and Subsetting Pack Database Lifecycle Management Pack for Oracle Database Diagnostics Pack Tuning Pack
<b>Free Add-Ons (no extra licensing required)</b>	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

\*Check service documentation for feature availability and limitations

## 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.

## 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	Yes
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

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### 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

[ExaDB-C@C Customer References](#)

[Exadata Cloud at Customer on oracle.com](#)

[Oracle Database Cloud Migration](#)

[Oracle Exadata Database Service on Cloud@Customer X11M Data Sheet](#)