Answers to Your Top 10 Questions About Oracle Exadata Cloud@Customer

Frequently asked questions (FAQs)

June 2022, Version 1.0
Copyright © 2022, Oracle and/or its affiliates
Dropdown Options
Regulatory compliance, data residency concerns, integration with other on-premises applications, need for ultra-fast response time, or risk mitigation all stand as legitimate reasons to keep data in the data center rather than the public cloud. At the same time today’s business leaders know the advantages of cloud. Oracle Exadata Database Service on Cloud@Customer and Oracle Autonomous Database Service on Exadata Cloud@Customer offer all the benefits of the cloud inside your data center.

Here are answers to your top 10 questions.

1. What is Oracle Exadata Cloud@Customer?
Exadata is the ideal platform with scale-out, database optimized compute, networking, and storage. With the scale out architecture, as you add more storage and more compute, it automatically adds more cpu compute and more networking allowing for linear scalability. Exadata has built-in database aware system software. It has unique algorithms to vastly improve OLTP, analytics and database consolidation. The Exadata technology is available on-premises, at customer’s data center with cloud@customer, and in the public cloud. This offers flexibility of deployment choice.

2. What’s the difference between Exadata on-premises, Exadata Cloud@Customer, Exadata Cloud Infrastructure?
Exadata Cloud@Customer is built on the same engineered database system as Exadata on-premises and Exadata Cloud Infrastructure. It allows you to move mission-critical workloads to the cloud with no code changes for service level regressions while keeping data secure in your own data center, behind your firewall. With Exadata Cloud@Customer, you can take advantage of architectural identicality across on-premises and the cloud, Exadata users can seamlessly move workloads to the location that best meets their business needs.

3. How would I choose between Exadata on-premises and Exadata Cloud@Customer deployment?
We typically see the same use cases for Exadata Cloud@Customer as we do for Exadata on-premises, which include data warehouse/analytics, mission-critical transaction processing applications, and database consolidation. Organizations that choose Cloud@Customer deployment typically do so to maintain control over data for security, regulatory, or application network latency requirements while still gaining the advantages of the cloud.

You get a choice of cost-effective, subscription-based software licensing models:
- “License included pricing” includes Oracle Database Enterprise Edition (EE) and all database options and management packs.
  - Ideal for those without existing licenses or new workloads needing additional technologies than currently licensed.
• “Bring Your Own License” (BYOL) enables customers to use existing licenses and lower subscription costs.
  o Ideal for moving existing workloads with consistent usage to the cloud.

4. What kind of value can customers expect from Exadata Cloud@Customer?

According to Futurum, “We believe the new Exadata X9M delivers higher performance and a broader range of capabilities across all Oracle DB workloads than anything else in the market that runs on-premises—be it a cloud on-premises or a typical server, ensuring that customers gain significantly more value.”

A Wikibon analysis concluded that “AWS Outposts does not address any of the problems discussed in this research, it actually has a higher total cost, and much lower performance than Exadata Cloud@Customer X9M...there is no comparison. Exadata Cloud@Customer X9M performance changes the game.”

5. What other considerations motivate customers to choose Exadata Cloud@Customer?

Cloud automation, operations, and economics. You can deploy databases in a little as 30 minutes without the hassle of deploying and managing the infrastructure. You can scale OCPUs as needed and keep costs low with an hourly pay per use subscription model. Plus, with Oracle Cloud Infrastructure (OCI), your administrators can add customized isolation and operational policies on top of built-in fine-grained security controls.

Workloads that can’t move to the public cloud. Exadata Cloud@Customer brings a cloud experience to your data center, deployed behind your firewall with an identical operational and financial model that interoperates seamlessly with the public cloud.

Data security. Comprehensive security measures are incorporated throughout the hardware infrastructure, network, Exadata platform, and Oracle Database. The security features segregate customer data access and Oracle Cloud Operations and ensure data that enters or leaves the Exadata Cloud@Customer is secure, data that resides on the system is secure, access to the system is secure, and the code that runs on the system is secure. In addition, Oracle Operator Access Control increases security by enabling organizations to fully supervise which Exadata Cloud@Customer resources Oracle Cloud operators can access and what actions they can take during remote management sessions.

Path to public cloud. With architecture identical to Exadata on-premises and Oracle Public Cloud Services, Exadata Cloud@Customer makes migration to the cloud an easy, low-risk endeavor, with or without downtime, whenever you’re ready. And, if you find out cloud is not for you, then you can move back just as easily.
EOPYY enhances security and performance with Exadata Cloud@Customer

6. What is Autonomous Database on Exadata Cloud@Customer?

It is a dedicated, fully managed database cloud service in your data center. You get Autonomous Database on dedicated infrastructure running on Exadata Cloud@Customer for on-premises deployments. It is the same Autonomous Database dedicated cloud service as on Oracle Cloud Infrastructure except it runs in your data centers.

7. Can customers deploy a mix of Exadata Database Service and Autonomous Database Service on Exadata Cloud@Customer?

Yes, Exadata Cloud@Customer supports using multiple VMs enabling you to create and run isolated, highly available Autonomous Database instances on a group of Virtual Machines that can be deployed alongside Exadata Database Service VM Clusters.

8. Why would I consider Multi-VM Autonomous Database on my current Exadata Cloud@Customer?

Multi-VM support enables you to adopt Oracle Autonomous Database more easily at a lower cost and makes it simpler to deploy cloud-native and mission-critical databases. You can run the fully managed Autonomous Database Service concurrently with Exadata Database Service on the same Cloud@Customer infrastructure, making it easy to utilize for existing workloads, develop new ones, and increase consolidation efficiency.

“We moved our critical health services workloads from a colocation facility to our own data center with Oracle Exadata Cloud@Customer. It was simple to deploy, and we improved performance by 40% as well as availability and security. The cloud automations also simplified our operations so we can be more proactive and productive to plan and execute complex activities.”

Cristina Georgakopoulou, Director of IT, National Organization for the Provision of Health Services
9. Who is responsible for the patching of the Oracle databases on Exadata Cloud@Customer?

Oracle Autonomous Database is responsible for patching both the Exadata Infrastructure (Dom0 and DomU) and user databases; you have the option to override in the default patching schedule with your preferred schedule.

10. What are the shapes of the Exadata Infrastructure racks that are supported on Autonomous Database on Exadata Cloud@Customer?

X7-2, X8-2, X8M-2, and X9-2M Gen 2 Exadata Cloud@Customer Infrastructure Quarter, Half, and Full Racks are supported.

The Bottom Line

Exadata Cloud@Customer gives you the simplicity of cloud coupled with the security and control of an on-premises deployment, co-managed by Oracle and Autonomous Database, both are offered with a subscription model. If moving completely to the Cloud is not an option, Oracle brings the cloud to you.