

Regulatory compliance, data sovereignty 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 the cloud. Oracle Gen 2 Exadata Cloud at Customer offers an alternative: all the benefits of public cloud inside your data center. And with Gen 2 Cloud at Customer, the benefits are better than ever.

Here are answers to your top 10 questions.

### 1. What is Oracle Gen 2 Exadata Cloud at Customer?

Gen 2 Exadata Cloud at Customer is the newest generation of Oracle's Exadata —installed, deployed, and managed by Oracle. It delivers database as a service (DBaaS) behind our firewall using the same hardware, software, and APIs as in the Oracle Public Cloud, giving you an identical operational and financial model that works seamlessly with the public cloud.

# 2. What's the difference among Exadata on-premises, Exadata Cloud at Customer, Exadata Cloud Service?

Gen 2 Exadata Cloud at Customer is built on the same engineered database system as Exadata on premises and Exadata Cloud Service. It allows businesses to move critical data workloads to the cloud with no code changes or service level regressions while still keeping data secure in the data center, behind the firewall. With Gen 2 Exadata Cloud at Customer, you can take advantage of a consolidated management interface for databases across public cloud and Cloud at Customer.



## 3. What is "architectural equivalency" across the different deployment models and what are the benefits to the customer?

Architectural equivalency with Oracle Cloud provides you with an identical user experience and programming APIs between on-premises and Oracle Cloud, resulting in more rapid application development, deployment, and data portability.

Because the architecture is identical with the Oracle Public Cloud and Oracle Cloud Service, you don't have to make any application changes and can develop once and run everywhere. And, as you migrate workloads to the public cloud, you can do so quickly and easily—without disruption to operations.

# 4. How would I choose between on-premises and Cloud at Customer deployment?

We typically see the same use cases for Exadata Cloud at Customer as we do for Exadata On-Premises, which include data warehouse/analytics, mission-critical transaction processing applications, database consolidation, and DBaaS. Organizations that choose Cloud at Customer deployment typically do so to maintain control over data for security, regulatory, or network latency requirements while still gaining the advantages of the cloud.

Current customers are in industries such as healthcare, financial services, public sector, technology, travel and transportation, communications, natural resources, engineering and construction, and retail.

# 5. What kind of value can organizations expect to realize from Gen 2 Exadata Cloud at Customer?

According to Carl Olofson, Research VP, Data Management Software IDC research, "...organizations realized average benefits worth \$1.93 million per organization per year, a 356% ROI, and a break-even point of 6 months when using Exadata Cloud at Customer."

A Wikibon analysis determined the value of Gen 2 Exadata Cloud at Customer at \$331 million over 4 years, or \$103 million (45%) more than the traditional best-of-breed DIY IT data center base case. When compared with the Microsoft Azure Stack, the Oracle Cloud at Customer advantage is \$90 million (37%) over Azure Stack over 4 years.

# 6. What other considerations motivate organizations to choose Gen 2 Exadata Cloud at Customer?

Cloud automation, operations, and economics. You can deploy, databases in as little as 30 minutes while Oracle experts deploy and manage the infrastructure. Capacity can scale as needed, and you benefit from a subscription model with hourly pay per use. Plus with Oracle Cloud Infrastructure (OCI), your administrators get Oracle's fine-grained security controls as well as customizable isolation and operational policies.

**Data security.** Comprehensive security measures are incorporated throughout the hardware infrastructure, network, Exadata platform, and Oracle Database. The

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Our analysis concludes that there is no equivalent to the Oracle Gen 2 Exadata Cloud at Customer offering available currently from other vendors. Wikibon believes that the functionality, bandwidth and ultra low latency integrated with the Oracle Database 19c code is second to none.

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David Floyer, CTO



security features segregate customer data access and Oracle Cloud Operations, and ensure that data that enters or leaves the Oracle Gen 2 Exadata Cloud at 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, you have the physical security inherent in your own data center. Exadata Cloud at Customer Database Security is based on enterprise security features such as, Transparent Data Encryption (TDE) and network security to protect all the components that are the building blocks of the system.

Workloads that can't move to the public cloud. Exadata Cloud at Customer delivers Oracle Exadata Public Cloud experience in your data center and behind your firewall with the same hardware, software, and APIs, giving you an identical operational and financial model that interoperates seamlessly with the public cloud.

**Path to public cloud.** With architecture identical to Exadata on-premises and Oracle Public Cloud Services, Gen 2 Exadata Cloud at Customer makes migration to the cloud easy and low-risk, 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.

**Purpose-built enterprise database cloud service.** Exadata was designed from the beginning as a cloud architecture featuring scale-out database servers and intelligent storage servers connected by an ultra-fast network. Built from the ground up for database workloads, other generic converged systems simply can't match its performance.

## 7. Gen 2 Exadata Cloud at customer now houses the control plane in the Gen 2 OCI datacenter. What are the advantages versus having a physical rack control plane in customers' data center?

By incorporating the Oracle Cloud Infrastructure (OCI) control plane, you have a consolidated view of and control over systems and databases whether in the public cloud or Cloud at Customer. The control plane is installed, configured, and managed by Oracle in the nearest Oracle Cloud Infrastructure (OCI) location.

No control plane rack is required in your data center. It is replaced with 2 lightweight control plane servers in the Exadata Cloud at Customer rack. The Gen 2 control plane uses the same UI and APIs across Cloud at Customer and Cloud Service. This allows enterprise cloud management, while also reducing space, power, and cooling requirements in your data center.

## 8. What are the licensing advantages of Gen 2 Exadata Cloud at Customer?

If you have an existing license, Exadata Cloud at Customer Bring Your Own License (BYOL) helps minimize costs when migrating to cloud. In a BYOL model, you can deploy your existing Oracle Enterprise Edition and Database Option licenses on Exadata Cloud at Customer. The Exadata System software is also included in a BYOL subscription, so you don't need a license entitlement for that.

If you don't have existing Oracle Database licenses, Exadata Cloud at Customer Enterprise Edition Extreme Performance is a subscription model that includes all the features of Oracle Database Enterprise Edition, plus all the Oracle Database Enterprise Manager Packs, and all Database Enterprise Edition Options.

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Exadata is the perfect 'Engineered System' to run Oracle Database. It delivers the performance, scalability, availability, and security that users invariably demand for their critical business and consolidated database environments. Offering that same purpose built-application platform for users in their own data centers allows them (when appropriate, by choice and/or constraint) to enjoy the best of both the on premises/private cloud and public cloud worlds. It's a case of 'and,' not 'or'.

Mark Peters, Principal Analyst and Practice Director at Enterprise Strategy Group (ESG)



### 9. What is Oracle Autonomous Database and how does it simplify database management?

Oracle Autonomous Database completely automates patching, upgrades, and tuning; manages its own security needs; and can perform repairs on itself, eliminating human error in the process. It's self-driving, self-securing, self-scaling, and self-repairing. And Gen 2 Exadata Cloud at Customer is Autonomous Database-ready.

## 10. Once I'm ready to go ahead with deployment, how long can I expect it to take?

Because the Control Plane will already be available in the OCI data center, there's no control plane hardware to install in your data center, no large control plane image files that need to be downloaded, and no control plane to configure. Gen 2 Exadata Cloud at Customer uses layer 2 networking to connect database servers to your network; which requires much less configuration.

If your data center is ready to accept the Exadata Cloud at Customer hardware for installation and configuration, once the hardware arrives at your data center you can expect installation, configuration, and activation of the service to take approximately 7 to 10 business days, versus about 8 weeks with the previous generation.

### The Bottom Line

Gen 2 Exadata Cloud at Customer gives you the simplicity of cloud coupled with the security and control of an on-premises deployment, completely managed by Oracle and offered with a subscription model. If moving completely to the Cloud is not an option, Oracle Cloud at Customer brings the cloud to you.

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