Oracle Brings the Cloud to You
Implement a Fully Managed Instance of Oracle Cloud Behind Your Firewall
Cloud Essentials
Executive Summary

Organizations everywhere are migrating their software applications, databases, and IT infrastructure to public clouds, driven by three fundamental goals:

• Reduce the cost and complexity of owning and operating on-premises information systems

• Accelerate IT delivery by adopting the cloud for specific initiatives

• Create versatile business models that disrupt less nimble competitors.

Although most of these organizations see the benefits of migrating enterprise workloads to the cloud, some are constrained by business, legislative, and regulatory requirements that require them to keep their data on premises.

If you can’t move your data to the public cloud because of data privacy concerns, industry regulations, or unique security requirements, you can still take advantage of the scalability, affordability, and ease of public cloud technology by using Oracle’s cloud at customer portfolio. Each part of the portfolio provides a local instance of the public Oracle Cloud—one that physically resides in your data center, behind your firewall.

Read on to learn about this unique public cloud solution, which will help you:

• Address data sovereignty, control, compliance, and latency concerns

• Migrate enterprise-critical IT workloads and databases to a flexible cloud environment

• Run public cloud SaaS applications in your data center

• Utilize a fully managed IT service, based on a subscription model

• Protect your investment in Oracle databases.
Overcoming Barriers to Cloud Adoption

While cloud adoption is on the rise, the percentage of workloads deployed in the cloud is still relatively low. Roughly 70 percent of all workloads are still deployed on premises today, versus 21 percent in a hybrid-cloud and on-premises combination.¹

One of the reasons for this low adoption rate is the strict data sovereignty regulations that apply in heavily regulated industries, which dictate where data must reside. For example, financial institutions that store customer account data must comply with security frameworks such as the Payment Card Industry Data Security Standard (PCI DSS) and International Organization for Standardization (ISO) 27001. Healthcare organizations that deal with sensitive patient data must uphold Health Insurance Portability and Accountability Act (HIPAA) privacy and security regulations. And all organizations that do business in the European Union must observe General Data Protection Regulations (GDPR) governing the use of personal data. These regulations are dynamic and regularly updated—and the fines for noncompliance are severe: as high as €20 million for GDPR mishaps and in excess of US$1.5 million per HIPAA violation.²

The Oracle Cloud at Customer portfolio is a fully managed public cloud service that enables all of the innovations you’d expect, while meeting business and regulatory requirements, by keeping the storage of data behind your firewall. You gain all of the benefits of the public cloud, such as fast provisioning and elastic scalability, along with tight control over your data to alleviate any data sovereignty or governance concerns. It’s an ideal solution for highly regulated industries such as public sector, utilities, telecommunications, financial services, healthcare, and more.

With the cloud at customer portfolio, you benefit from:

- A complete Oracle Cloud experience in your data center
- The ability to conform to all regulatory, privacy, and legal frameworks
- Tight control over data sovereignty and governance concerns
- Single-vendor cloud accountability and management for database, and SaaS capabilities
- Seamless flexibility to move workloads between cloud at customer and Oracle Cloud infrastructure
- Full integration with your network security capabilities
- Low-latency interaction with other on-premises applications and data.

The Smart Cloud Alternative

Oracle’s cloud at customer portfolio combines the elasticity and utility of the public cloud with the control, security, performance, and predictability of on-premises computing environments.
Minimize Administration, Maximize Control

Oracle’s unique cloud at customer services take the same hardware and software that Oracle uses in its own cloud data centers and puts it into an instance that resides behind your firewall. Rather than procuring hardware, installing software, and managing a complex IT environment, you can consume Oracle Cloud services on your premises. Oracle supplies the hardware, installs the software, and handles day-to-day operations—including cloud infrastructure management, updates, monitoring, support, and cloud administration. Oracle patches, maintains, and updates its cloud at customer technology remotely.

This offering is available in the following configurations:

**Oracle Database Exadata Cloud at Customer:**
This solution combines the simplicity, agility, and elasticity of a cloud-based database deployment with Oracle Exadata performance. It is identical to Oracle Database Exadata Cloud Service and Oracle Exadata as a dedicated on-premises machine, but the infrastructure is managed by Oracle Cloud experts and resides in your data center.

**Oracle SaaS applications on your premises**
This is a complete software-as-a-service portfolio, managed by Oracle, that resides in your data center. It includes Oracle enterprise resource planning, human capital management, customer relationship management, supply chain management, and other popular SaaS capabilities, all available on premises.

“By adopting Oracle Exadata Cloud at Customer, we gained an enterprise-level cloud platform coupled with the security and control of an on-premises deployment. This provided a proven database platform and enabled easy migration of existing databases.

Andrew Gregory, Senior Unix and DBA Lead, Pacific National
Not only does the Oracle cloud at customer portfolio help you fulfill unique security and compliance regulations, it also provides the most powerful and versatile cloud environment available. First-generation cloud providers simply cannot offer a public cloud environment purpose-built to provide the performance, consistency, reliability, and manageability required for Oracle enterprise workloads.

Oracle is the only cloud provider to offer a full public cloud in the customer’s data center. Cloud at customer has been optimized to run Oracle databases— with unmatched scalability, performance, and reliability.

**Integrate with Your Existing Infrastructure**
Oracle’s cloud at customer portfolio integrates with your existing infrastructure and data center services including DNS, LDAP, and many types of network firewalls. Your IT staff can stop worrying about routine IT maintenance and focus on strategic projects that move your business forward.

“The key to optimizing the cloud’s agility lies in finding cloud services that ease bottlenecks without increasing operational risk. These best-of-both-worlds services include deploying public-cloud instances within company’s own data center. In this way, the organization can still work within existing compliance mechanisms, but also consume services via a public-cloud model.”

—*Harvard Business Review*
Gain Portability with a Consistent Technology Stack

Assembling a hybrid cloud in your data center won’t give you the same level of flexibility, compliance, and control that you get from Oracle’s cloud at customer offering. For example, while you may be able to virtualize environments and create virtual machines (VMs), you won’t gain the seamless deployment flexibility that comes from Oracle’s consistent technology stack.

Oracle offers the same integrated technology set, no matter where you wish to keep your data: in your own data center, in a managed services partner’s data center, or in the Oracle data center.

With Oracle’s cloud at customer portfolio, you gain the ability to:

- Fulfill data sovereignty, governance, and regulatory requirements
- Leave system management and administration to tasks Oracle
- Enjoy the same subscription-based pricing model as Oracle Cloud
- Integrate seamlessly with your network security architecture
- Establish low-latency connections with on-premises applications and data
- Simplify licensing by working with a single cloud vendor.
Exadata Performance, With Cloud Simplicity

Oracle started a revolution when it unveiled Oracle Exadata as a complete and fully integrated database system—and it has steadily upgraded the platform ever since. Today’s Oracle Exadata customers can enjoy this enterprise-proven, robust database machine through a cloud-based consumption model. As part of the Oracle Cloud at Customer portfolio, Oracle Database Exadata Cloud at Customer can be located in your data center, and also billed and metered through a cloud consumption model. You’ll gain the simplicity, agility, and elasticity of a cloud-based database deployment, with all hardware and software managed by Oracle Cloud experts.

Customers that already own Oracle Database licenses can use them with Oracle Database Exadata Cloud at Customer to minimize costs. Customers that do not have existing database licenses can choose to use Oracle Database Enterprise Cloud Service - Extreme Performance, which enables every Oracle Database feature and option, ensuring the highest performance, best availability, and most effective security. Databases deployed on Oracle Database Exadata Cloud at Customer are 100 percent compatible with all other Oracle Database deployments, delivering a consistent experience whether you choose to deploy Oracle Exadata on premises or in Oracle Cloud Infrastructure data centers.

• Utilize an enterprise-proven, robust database machine in a cloud-based consumption model, located in your data center.

• Consolidate all database workloads including online transaction processing, data warehousing, in-memory analytics, and mixed/hybrid workloads into a single Oracle Exadata system.

• Access the world’s highest-performing, most cost-effective, and most highly available platform for deploying Oracle databases.

• Transfer existing Oracle databases and applications to the cloud without a complex lift-and-shift process, enabling an easy and low-risk transition.

Oracle Exadata Cloud Solutions: Compatible, Scalable, Available, Secure

Decades of Database Innovation, Proven by Millions of Mission-Critical Deployments

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Companies adopt SaaS applications to better serve their employees, partners, and customers, as well as to reduce IT costs and simplify operations. Oracle SaaS applications with Cloud at Customer removes one of the obstacles to SaaS cloud adoption—adhering to data residency laws that require certain data to be stored in-country. These first-of-a-kind services enable you to choose where SaaS applications reside. Oracle fully manages and maintains the infrastructure at your premises so that you can focus on making the most of your SaaS apps rather than just monitoring and maintaining them.

By having Oracle SaaS applications delivered as an Oracle Cloud at Customer offering, customers can adopt the following components:

- **Oracle Sales Cloud**—A unified, mobile-friendly customer experience (CX) platform with capabilities that include sales force automation, customer relationship management, sales performance management, partner relationship management, and customer data management.

- **Oracle Enterprise Resource Planning (ERP) Cloud**—A unified ERP cloud that includes financial, procurement, project portfolio, and enterprise performance management.

- **Oracle Human Capital Management (HCM) Cloud**—Intelligent, personal, and adaptable capabilities that support the entire workforce lifecycle to help customers streamline HR processes and create a connected enterprise.

- **Oracle Supply Chain Management (SCM) Cloud**—Supply chain management software that helps you streamline operations, connect people and processes, and simplify user activities.

All Oracle Cloud at Customer deployments of Oracle SaaS applications ensure tight control of application data to mitigate data sovereignty and governance concerns.
AT&T Migrates Mission-Critical OLTP Databases to Oracle Cloud

Organization: AT&T is a world leader in communications, media and entertainment, and technology. As a Fortune 10 company, AT&T has recorded 34 consecutive years of quarterly dividend growth.

Challenge: AT&T needed a cloud-based solution to run approximately 2,000 mission-critical Oracle databases, each greater than 8 TB in size. Although the company’s general-purpose private cloud provides an agile, automated IT environment, it cannot provide the required performance for these large, transaction-intensive databases, many of which contain customer data and must remain on premises for regulatory, privacy, and security reasons.

Solution: Oracle Cloud at Customer enables AT&T to run mission-critical databases up to 100 TB in size in an Oracle-managed cloud that’s as flexible and scalable as a public cloud—but is located in AT&T’s own facilities. These databases run on Oracle Database Exadata Cloud at Customer, the world’s most scalable and reliable platform for running Oracle Database. Having an elastic, shared environment facilitates scaling and allows resources to be easily reallocated, based on demand.

Results: AT&T has halved the time required to implement large, complex databases. The telecommunications giant can quickly increase capacity to meet peaks in demand, and cut usage when demand falls. Oracle Database Exadata Cloud at Customer provides the performance necessary for large, transaction-intensive databases. And because those databases run at AT&T facilities—behind the company’s firewall—they also meet regulatory, privacy, and security needs.

“We believe that the future of the network is to be data-powered, to be software-centric, and to be fast and responsive. This collaboration with Oracle accelerates our network transformation and migration to the cloud to expand efficiency, [increase] performance, and reduce cost while improving overall customer service.”

John Donovan, CEO, AT&T Communications
JTB Adopts Oracle Cloud for International Travel Processing System

**Organization:** JTB Group was founded in 1912 as the Japan Tourist Bureau, with the objective of contributing to the Japanese economy by bringing foreign visitors to Japan. Today, JTB sells international and domestic travel packages for Japanese tourists and also offers services for organizations including school excursions, corporate trips, meetings, conferences, events, and other travel services.

**Challenge:** Previously, JTB deployed IT infrastructure on premises, often in distinct private clouds for each system, which led to mounting infrastructure costs. JTB sought to reduce IT costs, bolster security, and improve efficiency by consolidating its disparate infrastructure into a more cohesive cloud environment.

**Solution:** JTB selected Oracle Exadata Cloud at Customer to revamp its database infrastructure. They were attracted to the Oracle Cloud services because they could be deployed in JTB’s own data center, delivering lower TCO, flexible IT resource allocation, and security enhancements.

**Results:** JTB has a versatile cloud infrastructure that minimizes capital investments and enables flat-rate pricing, backed by comprehensive management services from Oracle. The new infrastructure combines the flexibility of the public cloud with the control, security, performance, and predictability of JTB’s previous on-premises computing environments. Customers receive consistent, dependable service levels even during busy seasons and events thanks to the proven performance of Oracle Exadata in a cloud environment.

“Travel agency systems tend to be susceptible to high workloads in certain seasons and during events. Oracle Cloud at Customer has enabled us to strengthen security and performance while using the cloud service at a flat rate, regardless of seasonal fluctuations, enabling JTB to run its systems in a cost-efficient manner.”

Kenichi Yajima, Senior Manager, Corporate Strategy, JTB
Sentry Data Systems Innovates with Exadata Cloud at Customer

Organization: Sentry Data Systems is a pioneer in automated pharmacy procurement, utilization management, and 340B compliance. More than 11,000 hospitals, clinics, integrated delivery networks, and pharmacies rely on Sentry’s unique proprietary data set for their analytics, procurement, drug utilization and compliance solutions.

Challenge: Sentry faced a common challenge among healthcare firms: storing high volumes of sensitive patient data. Previously Sentry kept its Oracle data on many standalone servers, but the sheer amount of data was causing processing bottlenecks.

“Sentry wanted the flexibility of a SaaS offering coupled with control over the protection of the data. Oracle had the only product and service on the market that could give us all the components necessary for us to move forward in the industry.”

Travis Leonardi, Founder and CEO, Sentry Data Systems

Solution: The need to have ample capacity on demand, coupled with strict compliance guidelines governing the privacy of patient healthcare data, motivated Sentry to standardize on Exadata Cloud at Customer. Today, 47 states stream data into Sentry’s systems on a real-time or near real-time basis, totaling more than 18,000 data feeds every day.

Results: Sentry has seen big benefits in scalability, with 100 percent ROI in the first six months of use and a 60 percent decrease in its batch-processing window, even as online transactions have increased by 60 percent.

“We get white-glove service from Oracle. I’m very thankful for the support we have received from Oracle, at all different levels. As a smaller company, having the support of Oracle to help us solve our business problems has been phenomenal.”

Kim Jacques, Enterprise Vice President and CIO, Sentry Data Systems
Innovation Aided by Emerging Technologies

The Oracle Cloud at Customer portfolio is a key component of Oracle Cloud Platform, a suite of platform services that dramatically transform how companies innovate by simplifying processes, boosting efficiencies, and freeing IT resources for strategic purposes. The portfolio is anchored by Oracle Autonomous Database, which is characterized by three unique attributes:

- **It’s self-driving,** which means it automatically provisions, secures, monitors, tunes, and upgrades itself—lowering costs and increasing productivity.

- **It’s self-securing,** reducing risks by protecting cloud resources from external attacks and malicious internal users. This includes automatically applying security patches with no downtime, automatically encrypting all data, and intercepting data leaks with preventive controls.

- **It’s self-repairing,** maximizing uptime and productivity with 99.995 percent availability. That’s less than 2.5 minutes of both planned and unplanned downtime per month, and the complete elimination of administrative errors.

**Your Automated Future**

Artificial intelligence (AI) technology is fundamentally altering enterprise computing by transforming how organizations receive, manage, and secure business data. By 2020, Oracle predicts that 90 percent of all applications and services will incorporate AI at some level—and that more than half of all enterprise data will be managed autonomously.

Oracle Autonomous Database represents an entirely new category of software based on machine learning that allows you to focus on your core business, and worry less about day-to-day operations, and enables opportunities for innovation. Oracle Cloud puts these emerging technologies to work by allowing customers to establish new IT capabilities quickly, affordably, and securely.

**Intelligence at Every Layer**

Oracle’s complete, integrated cloud platform includes intelligent solutions that span the SaaS, PaaS, and IaaS layers. For example, Oracle embeds intelligence into all of its apps. Oracle also extends intelligence into the platform, making it available for any developer to build upon. The goal is to make cloud technologies simpler to access, easier to create, and more efficient to secure, manage, and run—so you can achieve real business outcomes.

**Bring Your Own License**

Oracle recently introduced two new programs to make it easier to buy and consume cloud services, helping you get more value from your hardware and software investments.

- **Oracle Universal Credit Pricing** enables you to access current and future Oracle Cloud Platform and Oracle Cloud Infrastructure services under a single umbrella contract.

- **Oracle’s Bring Your Own License** program enables you to apply your on-premises software licenses to equivalent Oracle services in the cloud.

These popular programs alleviate cloud adoption challenges by simplifying the way your organization purchases and consumes cloud services.
Oracle’s Cloud at Customer portfolio enables organizations to remove one of the biggest obstacles to cloud adoption—data privacy concerns related to where the data is stored. While organizations are eager to move enterprise workloads to the public cloud, many have been constrained by business, legislative, and regulatory requirements that prevented them from adopting the technology. Oracle’s unique services provide organizations with the flexibility to choose where their data and applications reside—and a natural, easy path to eventually move business-critical applications to the public cloud. Oracle fully manages and maintains the infrastructure on customer premises so that customers can focus on using database, and SaaS applications to further improve their business.

Cloud Essentials

Learn more about Oracle Cloud at Customer, and find out what sets Oracle apart from other cloud providers. Try Oracle Cloud today. Go to cloud.oracle.com/tryit