

ORACLE

IT Executive's Guide to Oracle Cloud Infrastructure

Run any workload—from AI to enterprise apps—faster and for less, in the cloud or in your data center.



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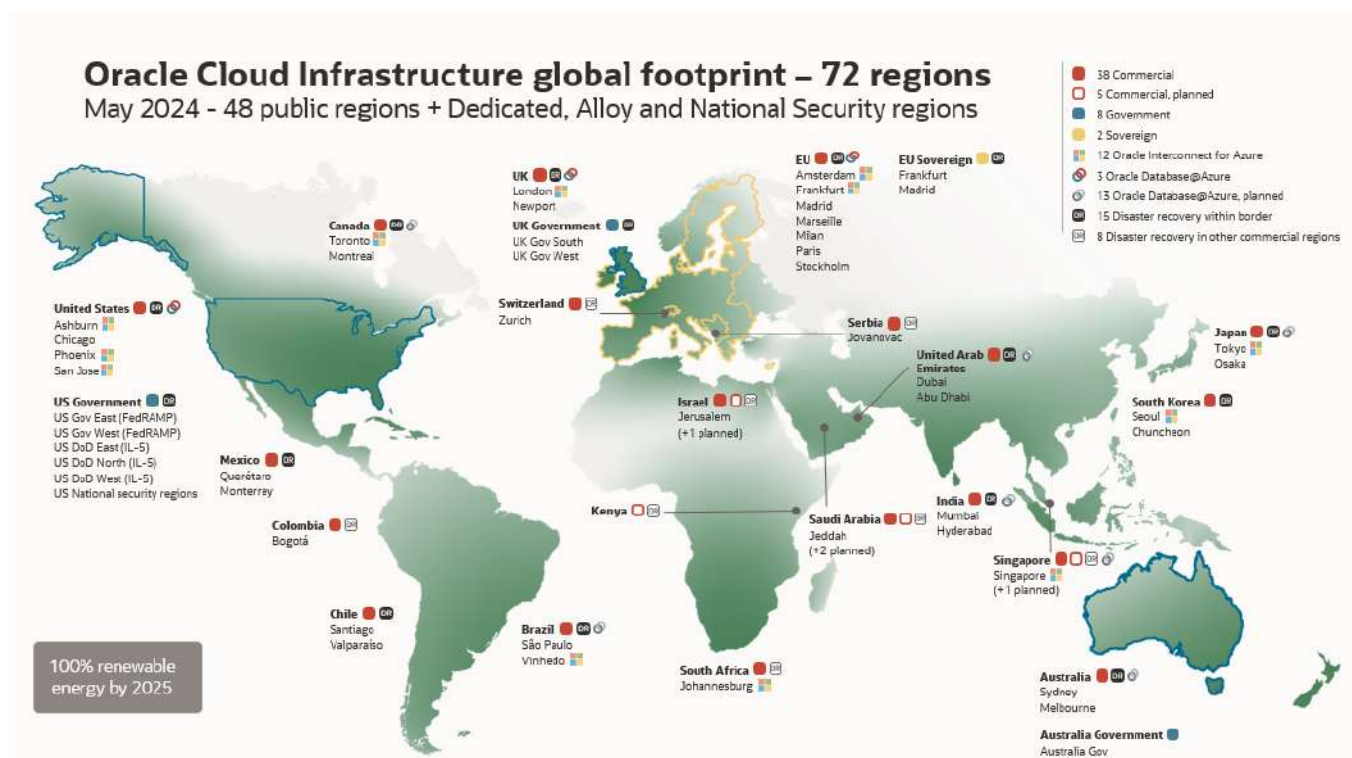
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Introduction

Oracle Cloud Infrastructure (OCI) offers services that enable you to build and run any workload in a high-availability, consistently high performance environment that costs less than offerings from other hyperscalers. [Customers](#) are growing new lines of business, improving their user experiences, speeding up their operations, and lowering risk and costs with OCI.

OCI launched in October 2016 with a single region and core services across compute, storage, and networking. Since then, OCI has expanded, with more than 100 services available in 48 public cloud regions worldwide, and 72 cloud regions managed overall. OCI offers the breadth and depth of cloud services necessary for nearly any workload. While other clouds were originally designed to support only web and "scale-out" cloud native applications and came with difficult-to-understand pricing, we saw an opportunity to build our cloud differently.



With OCI, we leveraged our industry-leading knowledge of databases, ERP systems, and enterprise application management to build a better cloud that gets you to your data more quickly and for a lower price than any alternative hyperscaler. And we did this with [simple, transparent pricing](#) that eliminates the need for tedious and time-consuming discount program negotiations. We took it a step further by providing the same infrastructure (compute, storage, and networking) and enabling the same SLAs for every customer in any



region across the globe. Then we made it easy to both migrate to OCI, and, if desired, to leave at any time, with 10 TB of free data egress and then 10X lower egress charges than the other hyperscalers. With OCI, there are also no hidden support fees tacked on to contracts; OCI's base service fees include enterprise-ready support. Lastly, we're the only hyperscaler to provide a rewards program for consumption—customers can accrue US\$0.25 to \$0.33 in rewards for every US\$1 spent. These rewards can be applied to reduce your technology software license support bill, even down to zero. We've already saved customers US\$200 million in support costs over just a few years. In short, we architected and priced OCI to prevent lock-in and minimized cost and complexity to improve your time to value.

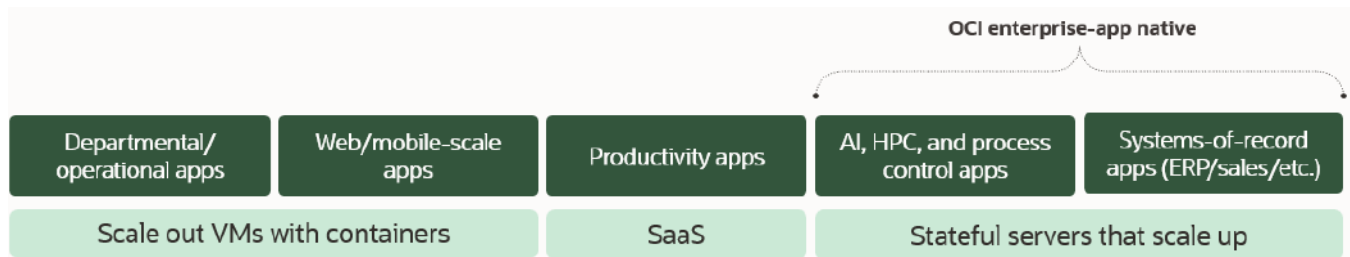
We took our deep experience in enterprise applications and data management and architected a new distributed cloud, with infrastructure to meet you where you are and help you get where you want to be—in the public cloud, hybrid cloud, on-premises, or even in environments from other cloud providers. This enables you to access your information and derive insights how you want to (through an industry-leading enterprise application portfolio), via the infrastructure topology you prefer. As one of only four Leading Hyperscaler Vendors recognized as a Leader in the 2023 [Gartner's Magic Quadrant™ for Strategic Cloud Platform Services](#), we believe OCI offers the speed, scale, and cost-effectiveness you need for any workload.

OCI offers full-stack, enterprise-focused AI where you need it. In the same distributed cloud model, you can run the AI service of your choice, with Oracle's unique data insights and industry knowledge baked in, with high performance, high-availability infrastructure, and at a much lower cost ([OCI's AI infrastructure](#) delivers consistent high performance while providing up to 41% cost savings compared with other hyperscaler offerings). OCI achieves this by providing bare metal compute instances that allow you to run latency-sensitive specialized workloads (for example, generative AI workloads, including large language models (LLMs), computational fluid dynamics, and simulations) and train models faster through tens of thousands of GPUs coupled with high performance cluster networking. OCI lets you run AI workloads just like you would on-premises, but it also lets you scale up and down as needed and saves you costs versus running the same workloads in your own data center or in another public cloud.

1. Enterprise application expertise

Other hyperscaler infrastructure stacks were built to focus on three classes of applications: departmental (operational) apps, web/mobile-scale apps, and productivity apps. When we architected and launched OCI, we built it to support not only those three application families but also two additional classes: (1) enterprise applications (database, ERP, sales systems of record, and so on) and (2) AI, high performance computing (HPC), and process control applications. Enterprise systems of record require consistent sub-millisecond latency

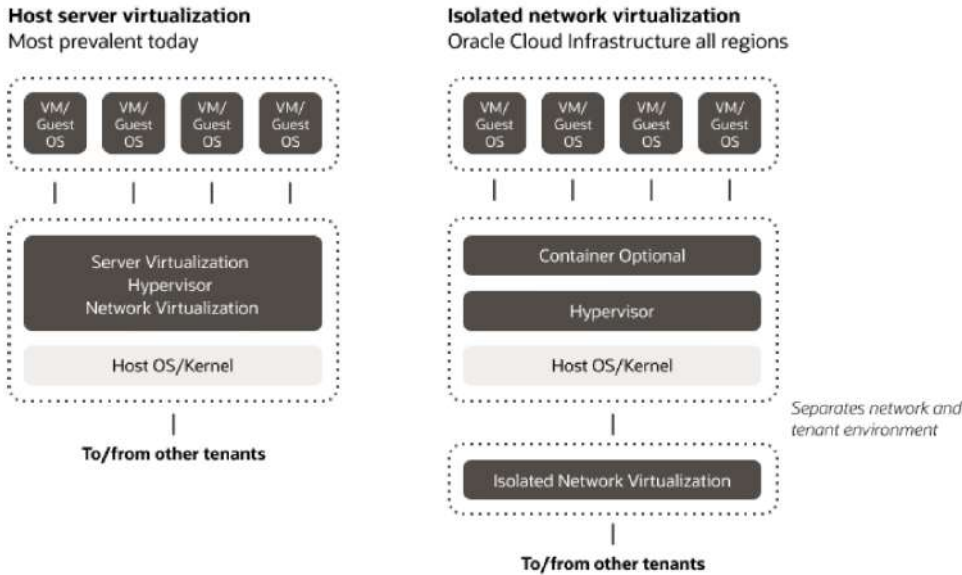
between the app tier and database tier. AI workloads require microsecond latency between compute nodes. We designed OCI to support both from the start. Now customers can easily run all five classes of applications in OCI's single modern cloud.



To address the requirements of all five major classes of applications in a single cloud, we made design choices and innovated at every layer. We built our cloud regions with [greater resiliency down to the individual node](#) to make it easier to run enterprise applications with high availability (HA). We minimized hops and protocol translations in the physical network to achieve sub-millisecond latency within availability domains.

At the virtual networking layer, we don't oversubscribe, so every resource gets maximum bandwidth without contention from other tenants. We're the first cloud provider to [implement layer 2 network virtualization](#), which enables customers to natively run VMware underneath enterprise applications in our cloud and supports other key requirements such as clustered databases for HA. Oracle Cloud Infrastructure is also the first major cloud to implement "off-box" or isolated network virtualization, which takes network and I/O virtualization out of the server stack and compute hypervisor and puts it in the network. As a result, customers can provision self-service, dedicated hosts with no hypervisor overhead, noisy neighbors, or shared resources. Virtual machines (VMs) also benefit from this technology, with reduced hypervisor overhead and improved isolation. All Oracle Cloud services that use compute—including our container engine and MySQL service—also benefit with consistent high performance.





Off-box network virtualization enables running bare metal instances side by side with any class of systems—including VMs, containers, and optimized database systems such as Oracle Exadata—all using the same set of APIs. With Oracle Cloud, customers can leverage unique Exadata capabilities (including tens of millions of IOPS, I/O prioritization, and columnar compression) to run Oracle databases with cloud native security and advanced governance capabilities.

2. Distributed cloud architecture

We architected OCI’s infrastructure and deployment methodologies to enable maximum flexibility for customer use cases and preferences. We believe the rigid structures, unpredictable billing, and security and compliance limitations of alternative hyperscalers are major factors still slowing down cloud adoption across the globe. We designed our cloud to provide the same customer experience, infrastructure, high performance and availability, low cost, and support in any location of the customer’s choosing. Our [distributed cloud](#) reflects the industry-leading array of deployment options we’ve created to maximize customer flexibility, choice, and control.





Instead of requiring customers to migrate to our public cloud locations, we can also deploy entire cloud regions to customer locations, and we offer specific operating models and governance options to suit different needs. Our offerings fall into four main categories.

1. [Our public cloud](#) is delivered through networks of globally distributed cloud regions, which provide the same security and performance while also catering to local environments with separation through individual cloud realms.
2. Dedicated cloud offerings include [Oracle Cloud Infrastructure Dedicated Region](#), which allows you to modernize your infrastructure through the deployment of a full OCI region in your own data center; Oracle Cloud Isolated Region, which takes it a step further and enables complete air-gapping; and Oracle Alloy, which allows our service provider partners to run their own branded cloud service offerings.
3. [Multicloud](#) is where we're investing heavily to ensure that customers can run their workloads in any cloud of their choosing, including Microsoft Azure, Amazon Web Services, and Google Cloud Platform. Examples of our multicloud offerings include Oracle Database@Azure, Oracle Interconnect for Microsoft Azure, Oracle MySQL HeatWave on AWS, and OCI FastConnect, which offers connection options via more than 90 partners.
4. [Hybrid cloud](#) offerings allow you to control the location and access of all your data and applications from the edge to your data center to the cloud. Oracle Exadata Cloud@Customer and Oracle Compute Cloud@Customer bring the automation and flexible consumption pricing of Oracle databases and compute infrastructure, respectively, into your data center. Oracle Roving Edge Infrastructure lets you move key workloads outside your data center through ruggedized devices with cloud compute and storage services that can be deployed at the edge of networks and even in disconnected locations.



3. AI-optimized performance

OCI offers the highest value and performance for bare metal and virtual machine compute instances powered by the [best GPUs available today](#). OCI's ultralow-latency [cluster networking](#), based on Remote Direct Memory Access (RDMA), provides microsecond-level latency. Without compromising on performance, customers can host clusters with up to 512 GPUs and use [OCI Supercluster](#) to scale up to 32,768 GPUs. OCI's AI infrastructure powers some of the largest-scale models today (including those with more than 100 billion parameters).

It's not just our infrastructure's performance and price that enable OCI to provide you with superior AI model training and application development and deployment capabilities; Oracle takes a full-stack approach to AI. Following the announcement of our generative AI services, [dbInsight shared their take on our approach](#) and stated: "Oracle has a broad strategy addressing four tiers of the stack, from applications to data, prepackaged AI services, and infrastructure, where it leverages high-performance, OCI topology for offering NVIDIA GPUs as "superclusters." For databases and applications in its sweet spot, Oracle has already begun adding Gen AI capabilities such as vector data support in Oracle Database 23c and MySQL HeatWave, along with the beginnings of generative support at the SaaS tier with Oracle Fusion Cloud CX and HCM." [Oracle Database 23ai](#) represents the next generational leap – bringing AI to your data, making it simple to power app development and mission critical workloads with AI.

Through this full-stack approach, Oracle [artificial intelligence](#) enables our customers to achieve a wide array of AI-related objectives, including building and training models, modifying existing application suites to introduce new AI features and functionality, and leveraging OCI AI offerings off the shelf to perform better search and retrieval and provide chatbot-like UI/UX experiences for the consumption and analysis of information. Customers can customize our AI services using their own data to optimize model quality, maximizing the return of valid business insights while maintaining the highest enterprise-grade security, privacy, and governance and benefiting from predictable performance and pricing, whether on-premises or in the cloud.

4. Oracle Cloud Infrastructure benefits

4.1 Superior performance

Oracle Cloud Infrastructure is designed for applications that require consistent high performance, offering stateful connections to databases, raw processing through CPUs or GPUs, millions of storage IOPS, and gigabytes per second of throughput. Nonblocking



networks guarantee that each resource gets predictable high performance and low latency. Oracle Cloud Infrastructure leverages the latest CPUs, GPUs, networking, and storage technology, such as NVMe SSD drives. OCI bare metal instances scale up to 192 cores (the most in the industry), up to 2.3 TB of RAM, up to 61 TB of internal storage, and up to 1 PB of block storage. Based on third-party testing, Oracle's compute and storage offer [two to five times the I/O performance](#) of comparable on-premises or AWS products, with more consistently low latency.

4.2 Superior economics

Oracle Cloud Infrastructure's compute offerings [cost roughly 50% less than comparable AWS or Azure products](#). Flexible compute shapes enable customers to tailor and pay for instances with the exact number of cores and amount of memory they need, allowing them to save over coarser-grained "T-shirt-sized" instances. Oracle's block storage and database storage are as much as 95% less expensive than comparable offerings from other cloud providers. We don't charge for outbound bandwidth for up to 10 TB per month, and beyond that, we charge a fraction of what other cloud providers charge. We offer the same everyday low prices in every global region, including our US, UK, and Australia government regions. The only price that varies globally is the cost of outbound bandwidth, yet we still offer substantial savings over other cloud providers. Our lower product costs translate to 20% to 60% lower TCO across a range of workloads versus comparable on-premises or AWS infrastructure. Many Oracle Cloud Infrastructure services are metered on a per-second basis, so you can scale resources when you need them and only pay for those you consume. The Oracle [Universal Credits](#) program enables even more control by providing a predictable, consistent way to pay for any OCI service in any region.

4.3 Built-in security

Oracle Cloud Infrastructure starts with a zero trust architecture. This means that not only are tenants isolated from one another, but they're also isolated from Oracle and vice versa. The isolated network virtualization mentioned earlier plays a role in this clean separation, as does [a custom hardware root of trust](#) to reimage every instance prior to a new customer receiving it. Above Oracle Cloud's core infrastructure are layer upon layer of defenses, including default data encryption, least-privilege identity and access management, and granular resource and network control all the way out to the edge. Oracle Cloud also has strict code security development and deployment processes, a full compliance team that is constantly auditing new regions and services, and a round-the-clock security operations center to guard against threats. Oracle Cloud Infrastructure is compliant with more than [80 global, regional, and industry standards](#), including SOC, ISO, PCI-DSS, HIPAA, FedRAMP, IL-5, GDPR, and more.



The combination of secure architecture, technology, development, and processes provides a more secure environment than most on-premises facilities, as well as other clouds.

4.4 Distributed cloud

Oracle Cloud has cloud regions around the world and can be deployed through public, dedicated, multicloud, and hybrid approaches. [Oracle Government Cloud](#) regions are geographically separate from commercial public cloud regions, but they still offer the same complete set of more than 100 OCI services after official localized certification processes. They provide the flexibility to support multiple deployment topologies, including air-gapped regions for highly sensitive workloads and cloud vaulting capabilities for classified, restricted-access materials. [Oracle EU Sovereign Cloud](#) regions offer the same services, pricing, and experience as Oracle's public cloud, but they also help organizations address both EU data sovereignty requirements and the local requirements of individual countries, where necessary. This includes providing sensitive data and application security through physical and logical isolation via region-based infrastructure. In some cases, this also means that Oracle manages and applies all the same updates, patches, and provisioning as it would in a public cloud, but it also works closely with the customer to ensure that only in-country human resources certify and deploy them.

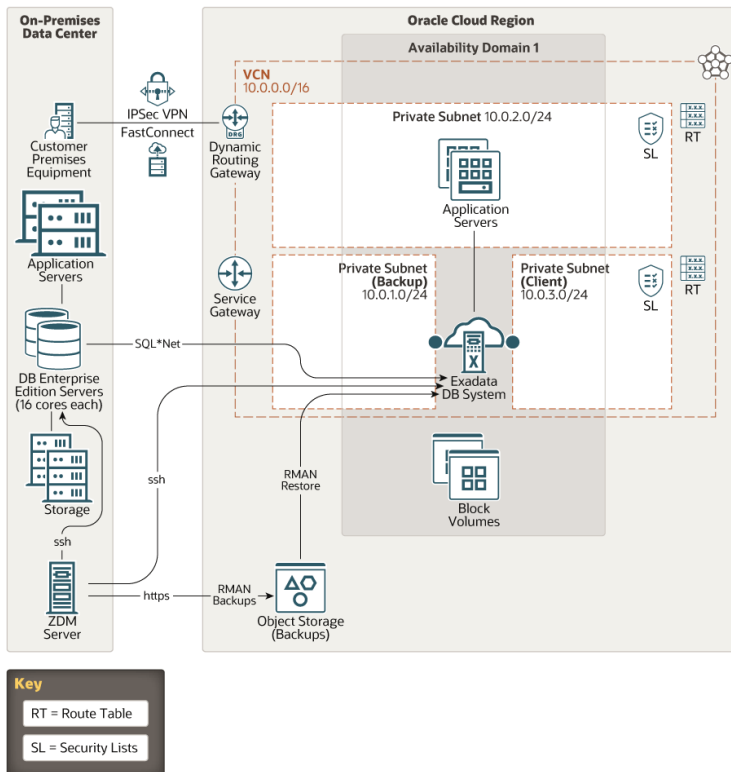
In addition to multitenant public regions and limited-tenancy government regions, Oracle has multiple dedicated cloud options. [OCI Dedicated Region](#) is a completely managed cloud region that brings all Oracle's public cloud infrastructure services and Oracle Fusion Cloud Applications into your data center, keeping your data and the control plane on your premises. It delivers cloud services with the highest performance and reduces your costs with consumption-based cloud subscription pricing—all while meeting stringent latency requirements.

Oracle Alloy takes the dedicated region concept further and enables partners to deploy an Oracle Cloud region under their brand and their control. It allows Oracle customers to become cloud service providers themselves. [Oracle Autonomous Database on Exadata Cloud@Customer](#) combines all the benefits of having Exadata in your data center with the simplicity of a cloud service. It helps you meet strict data sovereignty and security requirements and eliminates many manual database and infrastructure management tasks while supporting on-premises enterprise applications with the highest Oracle Database performance.

5. Workloads best suited to run on OCI

5.1 Enterprise applications that use relational databases

Oracle [Real Application Clusters \(RAC\)](#) are a feature of Oracle Database that enables multiple clustered instances to simultaneously access a single shared database. This provides the low latency, high-availability, and zero-downtime online maintenance that many traditional enterprise applications require. Oracle RAC uses Oracle Clusterware for the infrastructure to bind the interconnected servers so they appear as a single system to end users and applications. Additionally, it uses a dedicated, high-speed, low-latency, private network known as a cluster interconnect to synchronize activity and share information between instances. Managing Oracle RAC on-premises can be cost prohibitive. Customers can instead leverage [Oracle Cloud Infrastructure Database](#) service to create a two-node managed Oracle RAC instance (or Exadata service to create quarter-, half-, or full-rack Exadata systems with Oracle RAC), which provides all the benefits of Oracle RAC on-premises. The following reference architecture shows [an Exadata environment, including Oracle RAC, on OCI](#).

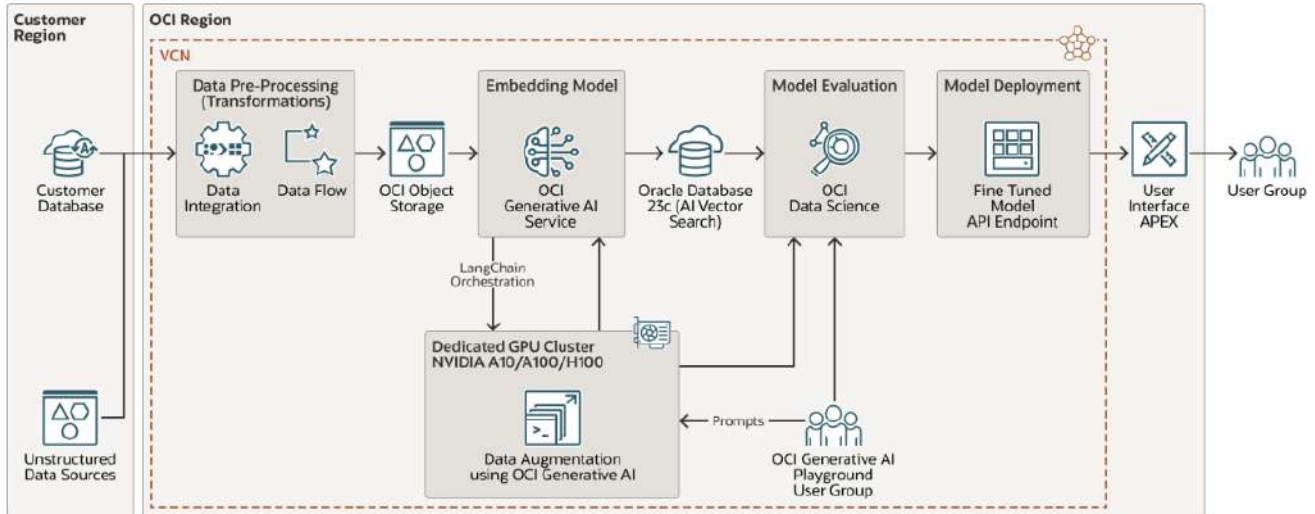


5.2 Artificial intelligence and high performance computing workloads

Oracle Cloud Infrastructure is a natural fit for multiple high performance and I/O-intensive computing workloads, such as large language model training and inference, crash and aerodynamic simulations, risk modeling, and digital twins. These workloads involve huge data sets that need to be analyzed using large-scale compute jobs, which demand high performance, high throughput, and low variability. On-premises environments are difficult to size properly. It's easy to overprovision and underutilize or to build too small of an environment and slow down projects. High performance can be attained, but components such as GPUs can become out of date quickly, and large-scale HPC networks can be difficult to maintain. There's also a long provisioning cycle for AI and HPC clusters on-premises. Other hyperscaler cloud offerings typically have hypervisor overhead and performance variability (often referred to as noisy neighbors), which OCI's architecture and single-tenant deployment model eliminates.

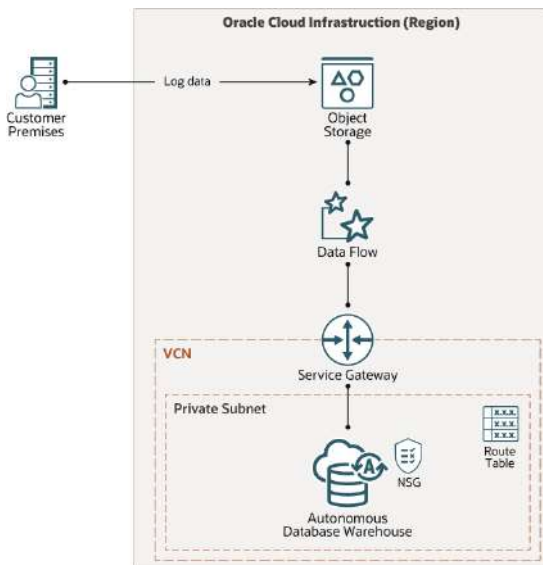
With Oracle, you can provision HPC clusters on demand and spin up single or hundreds of instances in minutes. [OCI's bare metal instances](#) come with 50 Gb/sec network throughput (and dual 50 Gb/sec network interface cards), which helps move massive amounts of data quickly. OCI also offers [cluster networking as a service](#), which allows you to deploy clusters of high-frequency CPU or GPU instances, and is the industry's first public cloud with bare metal HPC computing. This capability natively supports message passing interface workloads that were once only possible on-premises. This creates a revolution in cloud-based HPC and AI workload processing.

Superior performance, cluster networking, and the ability to provision bare metal servers in minutes make Oracle Cloud Infrastructure an ideal choice for running highly intensive HPC and LLM training and inference workloads. The following reference architecture shows [a typical generative AI LLM training model](#) running on OCI.



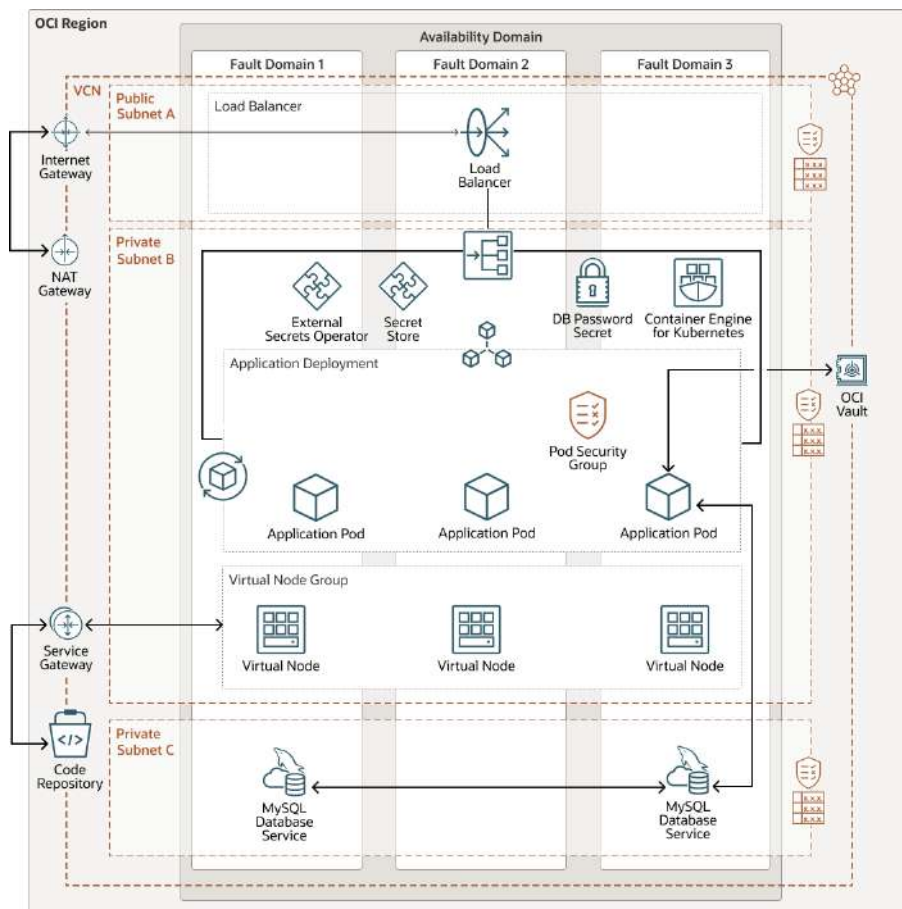
5.3. Data warehouse and data lake workloads

Oracle Cloud Infrastructure provides a flexible data platform to enable you to build data lake applications at massive scale. You can ingest nearly any type of data in a broad range of data formats with native tools for Oracle Database, our [OCI Data Integration service](#), or our [Kafka Connector-enabled OCI Streaming service](#). You can create data pipelines to store and process the data using any combination of OCI Object Storage, OCI Data Flow with Apache Spark, Oracle Big Data with Apache Hadoop, MySQL HeatWave Lakehouse, or Oracle Autonomous Data Warehouse. Then you can analyze or train models with this data using Oracle Analytics Cloud, OCI Data Science, Oracle Database Machine Learning, or a range of third-party tools. This reference architecture shows [a data pipeline using OCI Data Flow, OCI Object Storage, and Oracle Autonomous Data Warehouse services](#).



5.4 Web and cloud native applications

Creating scalable and high-availability web apps can be complex and time-consuming. Moreover, it's hard to predict traffic patterns in advance for web apps, which often results in capacity overprovisioning and low utilization of expensive on-premises hardware and data center resources. Oracle Cloud Infrastructure provides a robust, scalable, highly available, and cost-effective infrastructure platform for hosting your most demanding web applications. OCI supports a broad range of application infrastructures, including bare metal instances, VMs, containers, and functions, with many different runtimes and managed data persistence options. OCI can uniquely deliver on the rigorous demands web and cloud native applications require. The following reference architecture shows [how to deploy serverless Kubernetes with Oracle Container Engine](#) for Kubernetes Virtual Nodes.

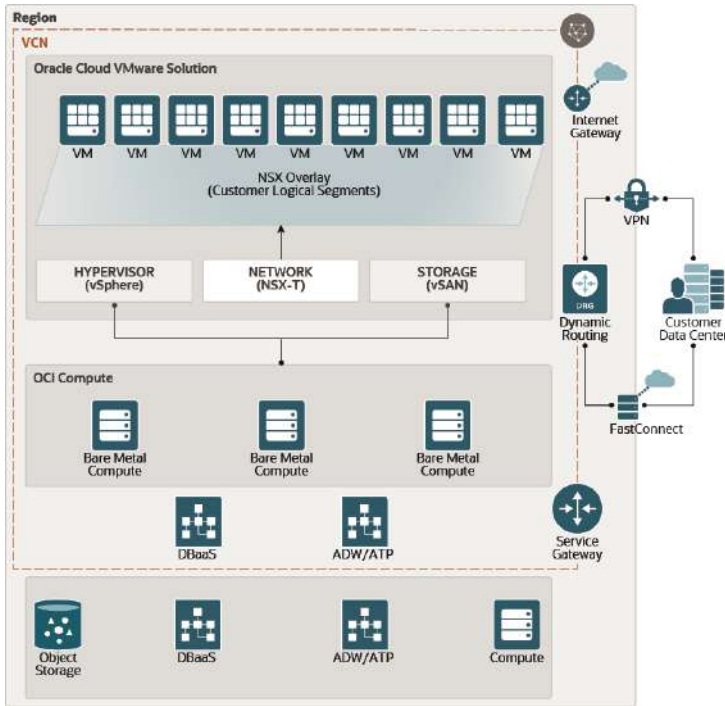


5.5 VMware workloads in the cloud or in a hybrid configuration

Many companies, particularly large enterprises, use VMware vSphere to run and manage their applications in their data centers. They want to migrate these applications to the cloud without incurring the cost and risk of re-architecture and without changing familiar IT

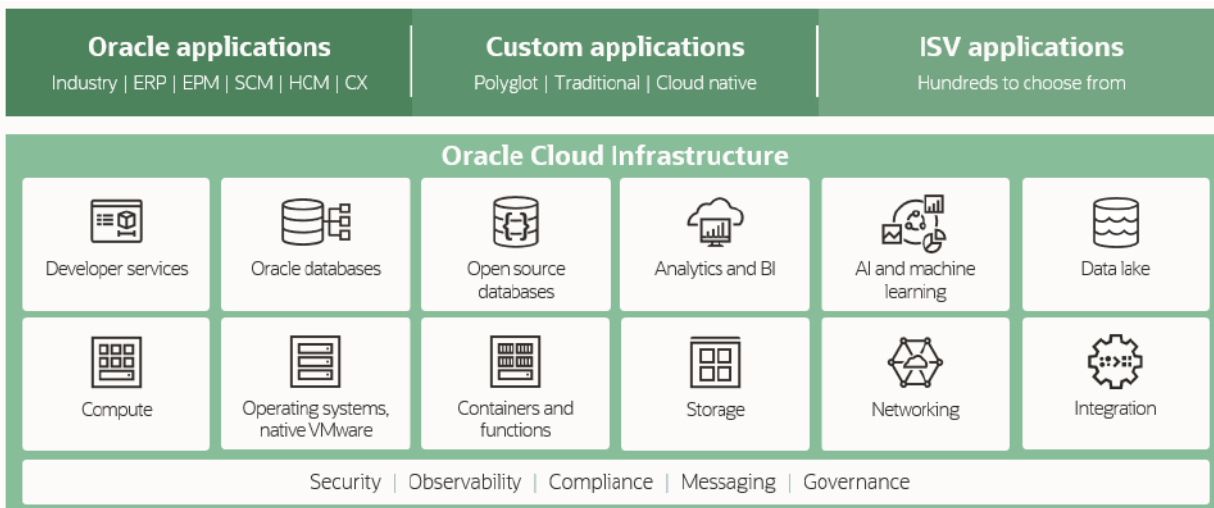


processes. Oracle offers a solution that third-party analysts consider "[the most consistent experience with on-premises vSphere.](#)" With Oracle Cloud VMware Solution, customers maintain full control of their VMware version, patch cycle, and security while benefiting from elastic infrastructure and native access to the rest of OCI's services. The following architecture shows our [VMware solution and provides deployment guidance.](#)



6. Oracle Cloud Infrastructure services overview

Oracle Cloud Infrastructure offers more than 100 cloud services, so we'll cover only the high-level domains.



6.1 Compute and containers

[Oracle Cloud Infrastructure Compute](#) lets you provision and manage single-tenant instances (dedicated bare metal instances), multitenant VMs, or dedicated-host VMs using the same set of APIs. You can spin up truly elastic, self-service, pay-by-the-hour bare metal instances in a few minutes and flexible VMs that let you select exactly the amount of OCPUs (i.e., cores) and memory you need in seconds. Oracle offers Intel, AMD, and Arm-based CPUs and NVIDIA GPUs. [Oracle Cloud Infrastructure Container Engine for Kubernetes](#) is a fully managed, scalable, and highly available service for deploying containerized applications in the cloud. Use OCI Container Engine for Kubernetes when your development team wants to reliably build, deploy, and manage cloud native applications.

6.2 Networking and connectivity

[Oracle Cloud Infrastructure Networking](#) lets you create and manage a software-defined network we call a [virtual cloud network](#) (VCN). A VCN is a virtual version of a traditional on-premises network, where customers can choose their own RFC 1918 IP addresses and define subnets, route tables, gateways, and firewall rules to support the routing of public and private traffic. [Oracle Cloud Infrastructure Load Balancing](#) allows you to create a highly available load balancer within your VCN so you can distribute requests from the internet or within the VCN. OCI Load Balancing also offers flexible capabilities that enable you to scale up and down on demand. [Oracle Cloud Infrastructure FastConnect](#) provides 1, 10, or 100 Gb/sec private line connections between your facilities and Oracle Cloud through more than [90 global network providers](#). Oracle also offers the unique ability to [directly connect to Microsoft Azure](#) in 12 global locations with about two-millisecond latency and federated identity, addressing a number of multicloud use cases.

6.3 Storage

[Oracle Cloud Infrastructure Block Volumes](#) provide an industry first for hyperscalers: a performance auto-tuning feature that dynamically scales performance as demand changes. Other hyperscale cloud vendors currently only offer a performance burst, which is limited to specific storage tiers and isn't comprehensive across multiple tiers. We offer steady, predictable, linearly scaling performance. Set your performance range anywhere between 25,000 IOPS and 300,000 IOPS and cut costs based on your daily performance needs. [Oracle Cloud Infrastructure Object Storage](#) provides high-throughput storage with near infinite capacity for unstructured data such as logs, images, and videos. Workloads such as Spark, Autonomous Database, and MySQL Heatwave can use OCI Object Storage for large-scale persistence. [Learn more about OCI's unique storage capabilities.](#)

6.4 Databases

[Oracle Autonomous Database](#) offers fully automated databases optimized for transaction processing, data warehousing, or document-oriented workloads (for example, JSON workloads). These databases provide higher security and an optimal experience by self-patching, self-tuning, and autoscaling without downtime. Oracle Autonomous Database is built on top of Oracle Exadata and offers shared or dedicated deployment options. The dedicated option isolates the underlying infrastructure resources for a single tenant. [Oracle Base Database Service](#) and [Oracle Exadata Database Service](#) let you easily build, scale, and secure Oracle databases with native licensure or Oracle Bring Your Own License pricing. You can create databases on VMs or Exadata instances. With OCI database services, you can then use your existing tools, Oracle Recovery Manager, and the database command-line interface (CLI) to manage your databases in the cloud the same way you manage them on-premises. Oracle also offers managed [MySQL](#), [PostgreSQL](#), [Redis](#), [OpenSearch](#), and [NoSQL](#) databases and [MySQL HeatWave on AWS](#).

6.5 Data platform

[OCI Data Integration](#), [OCI Streaming](#), [OCI GoldenGate](#), and a range of other tools enable the ingestion of data in nearly any format from on-premises and cloud sources. [OCI Data Catalog](#) enables customers to keep track of their data across multiple OCI data stores. Data scientists have a familiar range of Python-based tools to build, train, and manage machine learning models with [OCI Data Science](#). Business and IT analysts can use [Oracle Analytics Cloud](#), a managed service for self-service analysis of data from within your OCI environment as well as from external data sources.

6.6 Applications and integration

[Oracle Integration](#) offers broad application integration capabilities across Oracle and third-party SaaS, on-premises applications, and industry standards, such as FTP. Beyond cloud infrastructure, Oracle also offers a large range of business software-as-a-service applications, including applications for enterprise resource planning, customer experience, human capital management, supply chain management, and more. Available in the same global cloud regions, Oracle also offers a wide range of industry-specific solutions for banking, risk management, clinical trial support, billing, and much more. Oracle was named a Leader for the seventh consecutive time in the [2024 Gartner Magic Quadrant for Integration Platform as a Service \(iPaaS\)](#).

6.7 Security and governance

[OCI Identity and Access Management](#) lets you control what type of access a group of users has and to which specific resources. Oracle simplifies governance with capabilities such as compartments (for the logical isolation of resources for usage and billing) and policies with a SQL-like syntax that's easier to create and manage. [Oracle Cloud Infrastructure Vault](#) provides centralized management of data encryption and secrets. You can use OCI Key Management Service to create or import master encryption keys, generate data encryption keys, rotate keys, enable or disable keys for use in cryptographic operations, assign keys to resources, and use keys for encryption and decryption. [Oracle Cloud Infrastructure Audit](#) provides visibility into activities related to your resources and tenancy. Audit log events can be used for security audits, to track usage of and changes to Oracle Cloud Infrastructure resources, and to help maintain compliance with standards or regulations. [Oracle Cloud Observability and Management Platform](#) provides a comprehensive set of management, diagnostic, and analytics services that enables easy diagnostics of cloud native and traditional technologies deployed in the cloud or on-premises. The platform adopts an open, standards-based approach that's vendor-agnostic, supporting ecosystem interoperability out of the box with Slack, Twilio, PagerDuty, and others.

In addition to these security products, features, and capabilities, OCI is uniquely positioned to help you combat ransomware attacks using [Oracle Zero Data Loss Autonomous Recovery Service](#), which enables granular database snapshots for instant recovery. With this service, you can enable sub-second recovery point objectives, set automatic archival backups to the cloud, and generate a full backup at the start of the recovery process, enabling up to 8X faster recoveries. Equally critical is the fact that Zero Data Loss Recovery Service includes automated, incremental forever backups—protecting and recovering databases up to 50X faster than traditional methods. Watch this short video to learn more about [how to protect your organization from ransomware](#) with this service.

6.8 Developer services and open source support

[Oracle DevOps](#) services and tools automate the software development lifecycle, infrastructure operations, observability, and messaging for developers. Customers can use popular open source tools such as Jenkins, Terraform, Cloud-init, Grafana, and Spinnaker to integrate with Oracle Cloud Infrastructure. You can access Oracle Cloud Infrastructure through an intuitive graphical user interface, REST [APIs](#), [SDKs](#), or a [CLI](#). OCI also offers a browser-based terminal called [OCI Cloud Shell](#). In addition, OCI supports multiple open source options for search and database management—we've invested heavily in this area to enable additional flexibility, choice, and control for our customers. We offer [OCI Database with PostgreSQL](#), a fully managed PostgreSQL database service; [OCI Cache with Redis](#), a fully managed Redis solution that accelerates application response times through in-memory data

caching; and [OCI Search with OpenSearch](#), a managed service you can use to build in-application search solutions using OpenSearch to get results from large data sets in milliseconds. OCI lets you provision and manage single-tenant, dedicated physical hosts or multitenant VMs using the same set of APIs. OCI empowers you to develop and test your application with VMs but deploy with dedicated physical hosts or vice versa. You don't need to change your app, as the single-tenant and multitenant models share the same cloud-optimized hardware, firmware, software stack, and networking infrastructure. And all of this has been built with simplicity and UI/UX in mind—all it takes is a couple of clicks in the GUI or API call to run these functions.

Conclusion: Why Customers choose OCI

Oracle Cloud Infrastructure provides a scalable, highly available, and cost-effective cloud platform to meet the needs of the modern enterprise. Customers choose OCI because mission-critical applications are easier to migrate and run, compute-intensive workloads—including AI—run faster, data-intensive workloads are easier to consolidate and manage, and network-intensive workloads cost as much as 80% less to run than with other hyperscalers. Even if you use a different primary cloud provider, OCI is an excellent complement to AWS or Azure. Our distributed cloud allows you to run OCI on your premises and provides the same 100-plus services and SLAs at the same low price.

Get started

- See how customers are leveraging OCI services and solutions today: oracle.com/cloud/customers
- Learn about different workloads that can run on OCI and understand the reference architectures and best practices: docs.oracle.com/solutions
- Enter a new era of productivity with full stack generative AI solutions for your business: oracle.com/artificial-intelligence/solutions
- Access expertise and resources to help you ensure a smooth, fast, and cost-effective cloud migration, whether you're moving just a few applications, a suite of mission-critical workloads, or a full data center: oracle.com/cloud/migration
- Sign up for Oracle Cloud Infrastructure for free, with Always Free Services and additional services available for a 30-day trial: oracle.com/free
- Launch your first Linux or Windows instance: docs.cloud.oracle.com/iaas/Content/Compute/Tasks/launchinginstance
- Test out Oracle Cloud Infrastructure's APIs: docs.cloud.oracle.com/iaas/Content/API/Concepts/usingapi





Gartner, Magic Quadrant for Integration Platform as a Service, Keith Guttridge, Andrew Comes, Shrey Pasricha, Max van den Berk, Andrew Humphreys, 19 February 2024

Gartner, Magic Quadrant for Strategic Cloud Platform Services, David Wright, Dennis Smith, Kevin Ji, Miguel Angel Borrega, Alessandro Galimberti, Stephanie Bauman, 4 December 2023

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