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# Why Oracle Cloud Infrastructure over Google Cloud Platform

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Oracle Cloud infrastructure combines the elasticity and utility of public cloud with the granular control, security, and predictability of on-premises infrastructure. Customers choose Oracle Cloud Infrastructure over Google Cloud Platform for several reasons: First, customers can migrate every workload and build faster in Oracle Cloud. Second, customers can consume their cloud services in the public cloud or within their own data center with Oracle Dedicated Region Cloud@Customer. Third, customers can easily implement security best practices, controls, and automation to prevent misconfiguration errors. Fourth, customers have lower risks with Oracle’s end-to-end SLAs covering performance, availability, and manageability of services. Finally, their workloads achieve better performance at a significantly lower cost with Oracle Cloud Infrastructure. Take a look at what makes Oracle Cloud Infrastructure a better cloud platform than Google Cloud.

## 1. Migrate every workload and build faster in the cloud

Customers are increasingly migrating business-critical enterprise applications and databases running on-premises to the cloud to achieve operation efficiency and improve application performance and availability. On-premises physical servers enable customers to run workloads directly on bare metal server hardware when performance, latency, or security require it, and they want the same options in the public cloud. Most enterprises also run VMware vSphere in their data centers. They want to migrate the workloads running on these physical servers and VMware environments without rearchitecting applications, change familiar software or IT processes, or introduce complexity to their operations. Oracle makes this migration easy; Google Cloud Platform does not.

Oracle Cloud provides the best deployment options, highest performance, best availability, and lowest costs for Oracle databases and workloads. In the case of enterprise applications such as ERP, CRM, HCM, and others, Oracle offers customers the ability to ramp-up to a SaaS model, something not possible with Google Cloud as it does not offer any enterprise SaaS application.

CAPABILITY	OCI	GCP	EVIDENCE
Native bare metal servers suitable for any enterprise application?	Yes	No	<p>OCI offers the <a href="#">largest bare metal servers in the public cloud</a> – up to 128 cores, 2 TB of RAM, and 1 PB of storage. These native servers are accessible with the same portal and tools, and live on the same networks with direct access to other Oracle Cloud resources.</p> <p>Google Cloud Platform offers bare metal servers in <a href="#">isolated regional data centers</a> that are connected to the corresponding Google Cloud regions by a cloud interconnect. This offering has <a href="#">severe limitations and does not come</a> with access to Google Cloud services, networking services, or the internet, and it requires customers to work with a third-party service provider for network connectivity.</p>
VMware solution with full administrative control?	Yes	No	<p><a href="#">Oracle Cloud VMware Solution (OCVS)</a> provides a native VMware-based cloud environment, installed within a customer’s tenancy. In OCVS, customers own the ESXi root credentials, as they do with on-premises deployments. Customers control whether—and when—to upgrade their VMware software. They have complete control with the same VMware tools they’re accustomed to, and can keep the same VMware provisioning, storage, and lifecycle policies in the cloud as they do on-premises. OCVS supports up to 64-node VMware clusters.</p> <p>Google Cloud VMware Engine solution <a href="#">does not allow customers to control patches, upgrades or updates to their VMware environment</a>—this can potentially break certification and support for applications running in Google Cloud VMware environments. Additionally, Google</p>

			Cloud VMware Engine <a href="#">does not provide host-level access</a> to customers for ESXi management.
The highest scalability for enterprise workloads?	Yes	No	<p>Oracle Databases can scale up to 1,600 database server cores and up to 2.5 PB database size (without compression) with Oracle <a href="#">Exadata Cloud Service X8M</a>. Exadata Cloud Service X8M provides 1.6 PB PCI NVMe flash storage and up to 96 TB persistent memory.</p> <p><a href="#">Oracle software is not authorized for Google Cloud environment</a> and Google Cloud Platform does not offer a managed Oracle Database service. Google recommends customers to use <a href="#">Google Cloud bare metal solution</a> for Oracle workloads, but it has severe limitations, including no support for Oracle databases and applications, no HA/DR capability, no backup or patching etc.</p>
Options to run a managed Oracle Database?	Yes	No	<p>OCI offers fully managed services for Oracle Database, including bare metal and VM database systems, Oracle Exadata database systems, and Oracle Autonomous Database.</p> <p><a href="#">Oracle software is not authorized for Google Cloud environment</a>. Running Oracle Database on a Google Cloud bare metal solution is <a href="#">manual and customer managed</a>, which can be significantly more expensive to set up, run, and maintain.</p>
The highest performance for Oracle workloads?	Yes	No	<p>Oracle workloads have the highest performance running on OCI. Exadata Cloud Service X8M supports an industry-leading <a href="#">12 million read and 5.6 million write IOPS</a>.</p> <p><a href="#">Oracle software is not authorized for Google Cloud environment</a>. Customers need to deploy a Google Cloud virtual machine and perform <a href="#">manual setup</a> to create an Oracle database. They also need to properly size the VMs to get the best performance: the current <a href="#">maximum limit for IOPS</a> on Google Cloud VMs is 60,000.</p>
The lowest TCO for Oracle Database and applications?	Yes	No	<p>OCI provides the <a href="#">lowest TCO for Oracle Databases and applications</a>. Oracle offers Universal Credits and BYOL2PaaS to help customers bring their existing Oracle software licenses to OCI. Oracle provides automation tools to ease the migration of Oracle Applications, Database, and Middleware to OCI.</p> <p><a href="#">Oracle software is not authorized for Google Cloud environment</a>. Google Cloud does not offer Universal Credits or BYOL2PaaS for Oracle software. Automation tools (such as Oracle EBS Cloud Manager and PeopleSoft Cloud Manager) are not available on Google Cloud.</p>
Oracle Real Application Clusters (Oracle RAC) and Exadata for mission-critical workloads?	Yes	No	<p>OCI is the only cloud where customers can run fully supported advanced database options, such as Exadata and Oracle RAC, for scalability and high availability. Exadata Cloud Service offers the highest performance of any cloud database service. Oracle RAC offers capabilities that include multicasting, UDP for networking, and shared host access to single block volumes for the storage layer.</p> <p>Google Cloud has no offering that's similar to Exadata Cloud Service and Oracle RAC.</p>

Customer Reference	<a href="#">Link</a>	<p>“Our 30-day trial of Oracle Database Cloud Service confirmed its potential to move our customers quickly and easily to a SaaS model. We also evaluated various scenarios with Google, AWS, and Azure, but found that Oracle offered lower risk, stronger application performance, and less complexity when scaling.”</p> <p>— Oscar Glennon, Commercial Manager, Kagool Ltd.</p>
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## 2. Deploy the same public cloud power on-premises

Enterprises choose on-premises infrastructure to help meet their regulatory and data sovereignty requirements, to minimize latency, and to ensure local control of resources. They want to leverage the attributes and benefits of the public cloud while combining them with the isolation and security of on-premises infrastructure.

With [Oracle Dedicated Region Cloud@Customer](#), Oracle gives customers the choice to consume their cloud services in the public cloud or within their own data center. Unlike Google Anthos, Oracle brings its complete portfolio of public cloud services into your data center so you can reduce costs, upgrade legacy applications with modern services, and help address your most demanding data sovereignty and latency requirements. Dedicated Region Cloud@Customer gives customers the best of both worlds.

CAPABILITY	OCI	GCP	EVIDENCE
Does your provider’s public cloud offer the exact same services in your data center?	Yes	No	<p>Oracle offers Dedicated Region Cloud@Customer, a completely managed cloud region that brings all of Oracle’s public cloud services (and Oracle Fusion SaaS applications) into a customer’s data center and runs them, allowing you to eliminate your data sovereignty concerns. It enables autonomous operations that eliminate human error and help maximize the security of your data, delivers elastic services with the highest performance, and reduces costs with low, consumption-based cloud subscription pricing—all while helping you meet your stringent latency, regulatory, and sovereignty goals when connecting to data center resources.</p> <p>In contrast, you cannot run the complete set of Google Cloud services in your own data center. Google offers Google Container Engine (GKE) to be <a href="#">installed on-premises as a prerequisite for its hybrid offering</a>, Anthos. Other than a <a href="#">few services</a>, none of the other Google Cloud services are available on-premises.</p>
Is your operations and security model for on-premises the same as the public cloud?	Yes	No	<p>OCI operations teams remotely manages Oracle Dedicated Region Cloud@Customer; customers get new capabilities and security updates the moment they are available in OCI public regions.</p> <p>In contrast, <a href="#">Anthos is not managed</a> by Google, but by customers. Customers do not get new capabilities and security updates when available in Google Cloud public regions.</p>
Is your billing model for on-premises deployment the same as the public cloud?	Yes	No	<p>With Oracle Dedicated Region Cloud@Customer, the billing model is the same as public OCI, where customers only pay for what they use. Oracle manages capacity at no additional cost, as long as customers meet their spend commitment.</p> <p>Google Anthos charges based on the number of <a href="#">Anthos cluster vCPUs</a>. Running Anthos on-premises or in VMware is 8X more expensive than running it on Google Cloud or another supported cloud platform.</p>

Are the on-premises services covered by the same SLAs as public cloud?	Yes	No	Oracle Dedicated Region Cloud@Customer offers the same exact SLAs for availability (99.95% uptime), manageability (API error rate) and performance (disk IOPS, network) as the OCI public cloud.  Google does not offer any SLAs for Anthos.
Customer Reference	<a href="#">Link</a>		“The choice was pretty simple – there was no other provider that provided the range of services that comes with the Oracle Dedicated Region. We believe we can deliver a modern, scalable and secure solution to help address the Australian government’s needs.”  Rob Kelly, Managing Director, Australian Data Centers

### 3. Simplify and automate security with our zero-trust approach

OCI is designed with a zero-trust, security-first architecture. Unlike Google Cloud, OCI provides you with easy-to-implement security controls and automation to prevent misconfiguration errors and implement security best practices. You can secure your workloads and applications in OCI through a diverse portfolio of security services, including identity and access management, data protection and encryption, unified security controls, infrastructure protection, incident identification, remediation, and compliance services.

CAPABILITY	OCI	GCP	EVIDENCE
Secure enclaves within accounts for the most sensitive workloads?	Yes	No	<a href="#">OCI Security Zones</a> provide a secure enclave within customer tenancies for the most sensitive workloads, where security is mandatory and always on. This helps ensure compute, networking, storage, and database resources comply with security principles, such as always-on encryption, no public access, and automated backups.  Google Cloud Platform does not offer any service or feature equivalent to OCI Security Zones.
Do built-in security posture management capabilities provide prescriptive and automated remediation of findings?	Yes	No	Most cloud security failures result from misconfigurations and human error. <a href="#">Oracle Cloud Guard</a> automatically detects security configuration issues across OCI services and can automatically alert administrators or act directly to remediate issues. Cloud Guard is provided at no additional cost.  Google Cloud Security Command Center provides capabilities like scanning and detecting configuration errors and automated alerts but <a href="#">does not provide automated remediation of security findings</a> —customers are responsible for developing custom response and remediation workflows. This manual effort leads to additional operational overhead.
Security services are included without additional costs?	Yes	No	Unlike OCI Cloud Guard and Security Advisor, only the Google Security Command Center Standard tier is free of charge. Security Command Center Premium tier is available as either a one year or multiyear fixed price subscription. <a href="#">The annual cost of the subscription is 5%</a> of the customer committed annual or actual annual Google Cloud spend, with a minimum charge of \$25,000.

Are you able to enforce role-based access control (RBAC) policies, including applying RBAC policies to tagged resources?	Yes	No	<p><a href="#">OCI Identity and Access Management</a> (OCI IAM) supports granular, role-based access control through policies. It uses a simple SQL-like syntax that is easily understandable, making it easy to manage access across large environments where it is typical to have thousands of security policies. Additionally, OCI IAM supports applying RBAC policies to tagged resources.</p> <p>Google Cloud Identity and Access Management services supports granular role-based access controls but <a href="#">does not support applying RBAC policies to tagged resources</a>. In addition, Google Cloud security policy syntax is more complex than OCI policy syntax and is not easily understandable by humans.</p>
Does the provider offer a DDoS protection service to mitigate application-layer attacks using traffic-scrubbing capabilities?	Yes	No	<p>OCI provides an anti-DDoS service to mitigate application-layer attacks. It also includes capabilities such as <a href="#">traffic scrubbing and actionable reporting</a>.</p> <p>Google Cloud provides an anti-DDoS service called Cloud Armor to mitigate application-layer attacks, but it <a href="#">does not support</a> traffic scrubbing or actionable reporting.</p>
Customer Reference	<a href="#">Link</a>		<p>“As part of Oracle Cloud Infrastructure, we found Oracle Cloud Guard to be very powerful to help us discover complex security issues. We were able to easily identify posture-based security concerns and learn how to solve the issues to avoid future concerns. As a managed service provider, Oracle Cloud Guard helped ALEF anticipate the right security posture for upcoming compliance regulations for our customers and implement them quickly using existing tools and APIs. Oracle Cloud Guard is a great tool to anticipate security and compliance concerns before they have even occurred!”</p> <p>— <i>Pietro Lascari, Delivery Manager for ALEF</i></p>

#### 4. Reduce risk with Oracle’s unique SLAs

Enterprises demand more than just availability from their cloud infrastructure. Mission-critical workloads also require consistent performance, and the ability to manage, monitor, and modify resources running in the cloud at any time. Only Oracle offers end-to-end SLAs covering performance, availability, manageability of services.

CAPABILITY	OCI	GCP	EVIDENCE
Manageability SLAs?	Yes	No	<p>The elasticity and configurability of infrastructure is part of why people move applications to the cloud. Your services need to be manageable at all times to deliver this benefit. Oracle provides <a href="#">manageability SLAs</a> to ensure your ability to manage, monitor, and modify resources.</p> <p>Google Cloud does offer any manageability SLA.</p>
Performance SLAs?	Yes	No	<p>It's not enough for your IaaS resources to be merely accessible. They should consistently perform the way you expect them to. Oracle is the first cloud vendor to <a href="#">guarantee performance</a>, so you can rely on our infrastructure for enterprise applications.</p> <p>Google Cloud does not offer any financially-backed performance SLA.</p>

## 5. Optimize spend over Google Cloud Platform

Oracle Cloud Infrastructure provides better performance at a significantly lower cost than Google Cloud. Our pricing structure is simple, predictable, and transparent, with none of surprises associated with Google Cloud. Additionally, OCI charges the same flat rate for all regions worldwide, which means there are no hidden cost variances if your business expands globally.

Oracle also provides [Universal Credits](#), which enable customers to use any Oracle Cloud Infrastructure or platform service in any region at a significant savings, with a predictable monthly spend commitment. But just because your cloud spend is monthly, doesn't mean your usage has to be: These credits don't expire at the end of the month—they can be used at any time during the 12-month contract window.

CAPABILITY	OCI	GCP	EVIDENCE
Is the cloud platform designed to deliver consistent and predictable performance?	Yes	No	<p>OCI provides near bare metal performance for compute, storage and networking. In addition, OCI does not oversubscribe network, compute, or memory resources. As a result, customers can benefit from reduced jitter, lower latency, higher packets per second, and lower CPU overhead. OCI enables customers to run their most important enterprise workloads, knowing that they will get consistent and predictable performance.</p> <p>Google Compute Engine Persistent Disk has far lower IOPS/throughput performance than equivalent OCI Block Volumes. For example, a 500 GB GCE Zonal SSD Persistent Disk supports <a href="#">15,000 IOPS and 240 MB/s</a>, while OCI Block Volume Higher Performance option supports 35,000 IOPS and 280 MB/s throughput.</p>
Are cloud compute, storage, and network prices lower than competitors?	Yes	No	<p>OCI offers consistent, transparent, and low pricing globally. OCI standard Intel-based VMs are 38% cheaper than equivalent Google Compute Engine instances, OCI Block Storage is 77% cheaper than GCE persistent disk and OCI data egress is 95% cheaper than Google Cloud data egress.</p> <p>Cost compared between a <a href="#">GCE e2-highmem-2</a> (2 vCPU, 16 GiB RAM) Linux, on-demand, US-east4 and <a href="#">OCI VM.Standard2.1</a> (1 OCPU, 15 GB RAM), Linux, on-demand VM.</p> <p>Cost compared between 500 GB GCE Zonal Persistent Disk, US-east4 and OCI Block Volume 500 GB Balanced Performance disk.</p>
Does the cloud vendor have low, consistent pricing globally?	Yes	No	<p>OCI has globally consistent pricing. Oracle designed OCI for a consistent experience, both in performance and cost, wherever you want to deploy. For customers who have applications and workloads running in multiple regions, it is easy to plan and budget for cloud expenditure.</p> <p>In contrast, Google charges for the same compute instances <a href="#">differently in different regions</a>, causing higher costs when running their applications in multiple regions, especially outside of the US. For example, the Google Compute Engine E2 high-memory instances are 10% more expensive in asia-southeast1 region and 40% more expensive in southamerica-east1 region.</p>

Are data egress charges low?	Yes	No	OCI has very <a href="#">low data egress charges</a> , as the first 10TB is free, and low cost per GB thereafter.  Google Cloud <a href="#">Premium Tier egress charges</a> are much higher. E.g. 100 TB egress from us-east4 region would cost \$8622, while for OCI, the same 100 TB egress would be \$783, a savings of 90%.
Rewards program for cloud consumption?	Yes	No	OCI is already a great cost saver against Google Cloud Platform. <a href="#">Oracle Support Rewards</a> make OCI even more affordable. For every dollar spent on OCI, Oracle reimburses up to 33 cents on license support. The program is valid for the duration of the customer's contract and can be extended upon renewal. Many customers have the potential to wipe out their support bill completely by migrating a handful of workloads.  Google Cloud Platform has no similar offering to Oracle Support Rewards.
Customer Reference	<a href="#">Link</a>		“As video meetings quickly became the connective tissue of today’s new world, we saw our user count soar. To support that exponential growth, we looked at several platforms and chose Oracle Cloud infrastructure for its strong security, outstanding price/performance, and world-class support”.  — Vik Verma, CEO, 8x8

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