Move and modernize your custom and third-party applications to Oracle Cloud Infrastructure (OCI)
Your challenge

Custom applications are deployed by organizations to support unique business processes. They can range from homegrown IT applications to departmental applications and are frequently built on application servers, such as Oracle WebLogic Server®, Apache Tomcat®, Red Hat® JBoss®, and IBM WebSphere®. Custom applications may be difficult and inefficient to deploy and maintain on-premises. Additionally, custom applications often require specialized clustering, networking, dedicated resources, and low latency. Because of this, IT and line-of-business leaders consider migrating these applications to the cloud to ensure that they can efficiently support organizations. However, not all vendors offer migration solutions that can be executed without business interruption and result in agility, improved performance, and greater cost savings.

Our solution

Custom applications can be migrated to Oracle Cloud Infrastructure (OCI) with minimal re-architecture, re-integration, or business process changes. This results in a flexible and reliable solution that delivers higher performance and agile development at a lower cost than deployments running on-premises or with other cloud providers. By migrating custom applications to OCI, you can:

- Achieve superior economics: >3x better price-performance than Amazon Web Services (AWS)
- Protect yourself with industry-first, comprehensive SLAs for availability, performance, and manageability
- Support major application platforms, including Java EE, Apache Tomcat and WebLogic Server
- Use the Oracle Cloud Marketplace for Oracle and third-party applications for a one-click deploy from OCI across cloud management, networking, security, and several other categories
- Leverage Oracle Cloud Native services for Kubernetes, serverless, and Kafka, in addition to platform offerings such as Integration and Digital Assistant
- Innovate with the most comprehensive database service options in the industry, including Autonomous Database, that is only available on OCI
- Leverage Oracle's "Bring-Your-Own-License" (BYOL) policy to protect your investment in on-premises databases and Oracle WebLogic
- Protect your data with security-first design from the core to the edge
- Enhance infrastructure and application monitoring with Oracle Cloud Observability & Management
- Enable multi-cloud with the Oracle and Microsoft strategic partnership

Maritz improves performance by 10X moving to Oracle Cloud Infrastructure

Maritz migrated sandbox, dev/test, production, and disaster recovery (DR) environments for E-Business Suite and an additional 26+ custom applications to Oracle Cloud Infrastructure over a two-day period without impacting operations.

- Reduced DR window from 72 hours to 4 hours
- Improved security since all data is encrypted at rest
- Enabled IT staff to focus on more customer-facing, revenue-generating, and value-added efforts rather than maintaining legacy environments
- Performance for back-office (internal facing) workloads improved by 10X
- Concurrent financial processes that used to take 2 hours now take 10 minutes

“The story with Oracle Cloud Infrastructure is that it’s better, cheaper, and faster than what we had on-premises. We’re seeing jobs that used to take a couple hours to run, getting completed in minutes now on Oracle Cloud Infrastructure.”

Ron Hunsaker
Vice President of Enterprise Application Services, Maritz
Lower cost
Migrated Oracle & non-Oracle workloads, including Informatica & Cognos, from AWS to OCI at 30% lower TCO.

Greater agility
Nidec Motor moved Oracle and non-Oracle applications to OCI & reduced provisioning time by 70%.

Greater efficiency
Reduced system administration and development costs, while getting a highly available and scalable platform with end-to-end security.

Improved scalability
Zoom went from deployment to live production in just nine hours, transferring upwards of seven petabytes ($10^{15}$ bytes) through Oracle Cloud Infrastructure servers each day.

Start getting cloud benefits without rearchitecting your applications

Move your applications
Gain higher performance, improve scalability, and shift from CapEx to OpEx

Optimize your applications
Reduce manual work with platform services, improve agility with containerization, and automate your application lifecycle

Extend your applications
Improve user experience with new interfaces, expand app use with new APIs, and increase value with integrations to other apps

Comprehensive hybrid choices

Dedicated Region, Exadata Cloud@Customer
Easily run services & apps on-prem, with cloud benefits

Oracle Cloud VMware Solution
Native VMware in public cloud, government cloud, or dedicated regions

Lower cost

Flex Infrastructure
Precisely provision compute resources with no waste

Lowest Cost Bandwidth
Move significant volumes of data at up to 80% lower cost vs other clouds

Easy cloud migration

Oracle Cloud Lift Services
Cloud experts help you move at no additional cost

Consulting and Advanced Support
Use Oracle’s paid offerings for the toughest migrations and most demanding operational needs

Improved performance

Oracle Exadata Cloud Service, Database RAC
Best cloud platform for running Oracle Database

Bare Metal Compute
Dedicated bare metal servers provide maximum performance, isolation, & control
Migration scenarios

Depending on business priorities, customers may choose from a few different approaches for migrating on-premises applications to the cloud. Oracle Cloud Infrastructure provides reference architectures that support a broad spectrum of options.

Move as-Is (Lift and Shift)

This approach makes as few changes to the application as possible. It reduces the chances of introducing differences in behavior, while still delivering the cloud benefits of improved performance from using the best hardware, storage and networking, as well as the financial benefits of moving from CapEx to an OpEx model. This includes overall lower TCO than on-premises infrastructure (up to 50% lower), enhanced security, compliance, and >3x better compute price-performance.

Move and Optimize

This approach uses Cloud Native and DevOps technologies such as containers, serverless, and event streaming to refactor the existing application. With Oracle Container Engine for Kubernetes (OKE), Oracle’s managed Kubernetes service, it is easy to build highly resilient, scalable infrastructure, while leveraging existing application code. Additionally, this approach can provide greater efficiency through services such as Autonomous Database, MySQL with Heatwave, Infrastructure-as-Code, and security technologies such as Cloud Guard and Security Zones.

Move and Extend

Multicloud customers can move their workloads to OCI and extend them to Microsoft Azure using the Oracle Azure interconnect. AI technologies such as Digital Assistant, Data Science, and Machine Learning help build smarter applications and drive innovation. End-users can get more value from their data through services for data analytics and data management. Integration is simpler with Oracle Integration Cloud and API Gateway.

Oracle Cloud Infrastructure supports all migration scenarios

Gonzaga University IT estimates 25% savings by migrating to OCI

Gonzaga migrated an on-premises 700 GB Oracle Database and Ellucian’s Banner Campus Solutions software system running on Tomcat application server to OCI

Improved performance by running on bare metal servers in the cloud

Lowered infrastructure costs by 25% and reduced time spent on maintaining hardware by 75% compared to on-premises

“We were 95% moving to AWS. [But] at the end of the day, our Infrastructure team, our ERP team, our Project Management team voted – it was unanimous for OCI.”

Darren Owsley
CTO, Gonzaga University
The most successful customers engage with cloud specialists from the start. Oracle Cloud Lift Services provide guidance from cloud engineers on planning, architecting, prototyping, and managing cloud migrations. Clients can move critical workloads in weeks, or even days, instead of months by leveraging these included services for customer tenancies.

**Dedicated engineering resources**

A comprehensive cloud solution includes infrastructure, software, processes, and people. As part of the Oracle Cloud Lift program, Oracle dedicates its top engineers that will help customers with their adoption of Oracle Cloud, including guidance on business value and TCO analysis, architecture design, networking/security review, onboarding and migration assistance, training resources, and go-live support.

**Support from planning through go-live**

A dedicated group of Oracle Cloud Infrastructure experts will assist customers from inception through go-live activities, including assessment, designing, and prototyping, migration, and management to accelerate your time to value.

**Program access is included with tenancy**

The Oracle Cloud Lift program includes available services globally and is a part of the customer’s tenancy on Oracle Cloud Infrastructure.

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**Supported workload migrations**

<table>
<thead>
<tr>
<th>Oracle Packaged Applications</th>
<th>Custom Apps on Oracle Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Business Suite, JD Edwards, PeopleSoft, Siebel, Hyperion, and others</td>
<td>Custom applications built on an Oracle Database or Exadata</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cloud Native Applications</th>
<th>HPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud Native integration including OKE, Data Science, Streaming, Functions, etc.</td>
<td>High performance computing (HPC) applications</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VMware</th>
<th>Data Warehouse &amp; Analytics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Cloud VMware Solution</td>
<td>Oracle Data Warehouse, Oracle Analytics Cloud, or 3rd party analytics workloads</td>
</tr>
</tbody>
</table>
OCI offers the lowest prices in almost every category

<table>
<thead>
<tr>
<th>Service</th>
<th>Oracle</th>
<th>AWS</th>
<th>Azure</th>
<th>GCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flex Virtual Machine (Hourly, 2 core, 16 GB RAM)</td>
<td>$0.074</td>
<td>+132%</td>
<td>+159%</td>
<td>+104%</td>
</tr>
<tr>
<td>Bare Metal Standard ($/OCP/Hour)</td>
<td>$0.0638</td>
<td>+82%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Bare Metal Dense IO ($/OCP/Hour)</td>
<td>$0.1275</td>
<td>+64%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Kubernetes Cluster (Monthly, 50 cores, 750 GB RAM)</td>
<td>$2,297</td>
<td>+56%</td>
<td>+47%</td>
<td>+31%</td>
</tr>
<tr>
<td>Block Storage High IO (Monthly, 400 GB, 25K IOPS)</td>
<td>$23.80</td>
<td>70X</td>
<td>54X</td>
<td>77X</td>
</tr>
<tr>
<td>Public Bandwidth Transferred Out (50 TB/Month)</td>
<td>$340</td>
<td>12X</td>
<td>12X</td>
<td>12X</td>
</tr>
<tr>
<td>Private Line Network (Monthly, 1 Gbps, 100 TB data)</td>
<td>$155</td>
<td>14X</td>
<td>36X</td>
<td>14X</td>
</tr>
<tr>
<td>Managed MySQL (Monthly, 100 OCPUs, 1 TB data)</td>
<td>$5,486</td>
<td>3X</td>
<td>3X</td>
<td>2.5X</td>
</tr>
</tbody>
</table>

*Green = Lowest cost*  
*Based on published pricing as of May 13, 2021*

Security from core-to-edge

Oracle Cloud Infrastructure employs a security-first design that is resilient to firmware-based attacks and offers a comprehensive set of security solutions from core all the way to edge services. Architected from the ground up for maximum isolation and protection, Oracle Cloud Infrastructure re-envisioned security with:

**Isolated network virtualization**  
In OCI, Oracle can't see customer data and customers can't see Oracle management code. Oracle uses custom hardware to guarantee clean resources for each customer.

**Maximum security zones**  
Preconfigured mandatory security best practices for critical production workloads, which helps eliminate customer misconfiguration.

**Zero-trust architecture**  
OCI offers identity and access management, data and application security, visibility into data movement, and automated threat response.

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**1st generation clouds**  
Most prevalent today

- VM/Guest OS
- Server Virtualization
- Hypervisor
- Network Virtualization
- Host OS/Kernel

To/From Other Tenants

**2nd generation clouds**  
Oracle cloud infrastructure-wide

- Container (Optional)
- Separates Network and Tenant Environment
- Host OS/Kernel
- Isolated Network Virtualization

To/From Other Tenants
Everything you need to build modern cloud native applications

**Greater efficiency**

- **Autonomous services**
  Automate database and Linux tasks & improve operational efficiency w/ ML

- **Infrastructure-as-Code**
  Improve DevOps productivity with open standard Terraform

**Greater agility**

- **Container Engine for Kubernetes**
  Reduce the time and cost to deploy modern applications

- **DevOps**
  Streamline your software development and deployment

**Higher performance**

- **MySQL with Heatwave**
  Adds high performance analytics to MySQL apps, reducing costs and time to insights

- **Ampere A1 Compute**
  Best price-performance compute in the market, and a strong ecosystem to build new apps

**Simpler security**

- **Cloud Guard**
  Quickly/continuously monitor & report on security posture at no extra cost

- **Security Zones**
  Easily enforce maximum infrastructure security with all your applications

**Deep tools ecosystem**

- **Terraform**
- **GitHub**
- **paloalto**
- **FORTINET**
- **cybereason**
- **JFrog**
- **RANCHER**
- **Grafana**
- **DATADOG**
Resources

Learn more about the solution

- Migrate Custom and Third-Party Applications to OCI Webpage
- OCI: Purpose-built for the Enterprise
- Oracle Cloud Infrastructure customer successes
- 7 roads to cloud success with Oracle Cloud Infrastructure

Demos & Workshops

- OCI Move and Improve Workshop
- Move Custom Applications Overview Demo
- Live Labs for Application Developers

Industry Reports

- IDC Report: OCI’s Value for Heterogeneous Workloads
- Omdia Report: All Clouds Are Not the Same
- Gartner Report: It’s Time to Include Oracle as a Viable Option When Evaluating Public Cloud Providers
- Dao Report: Securing Data and Applications in the Cloud

Technical Assets

- Database Migration Reference Architectures
- Migrate your On-Premises Oracle WebLogic Server Workloads to the Cloud
- Migrate a WebLogic Server Instance to OCI
- Oracle Architecture Center

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