ORACLE

Oracle Data Management Solution and Distributed Cloud
甲骨文數據管理解決方案與分散雲

Bringing all the services, the economics, and operations of the Oracle public cloud on-premises

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PROFET AI
One day to start
One week to results

Safe harbor statement

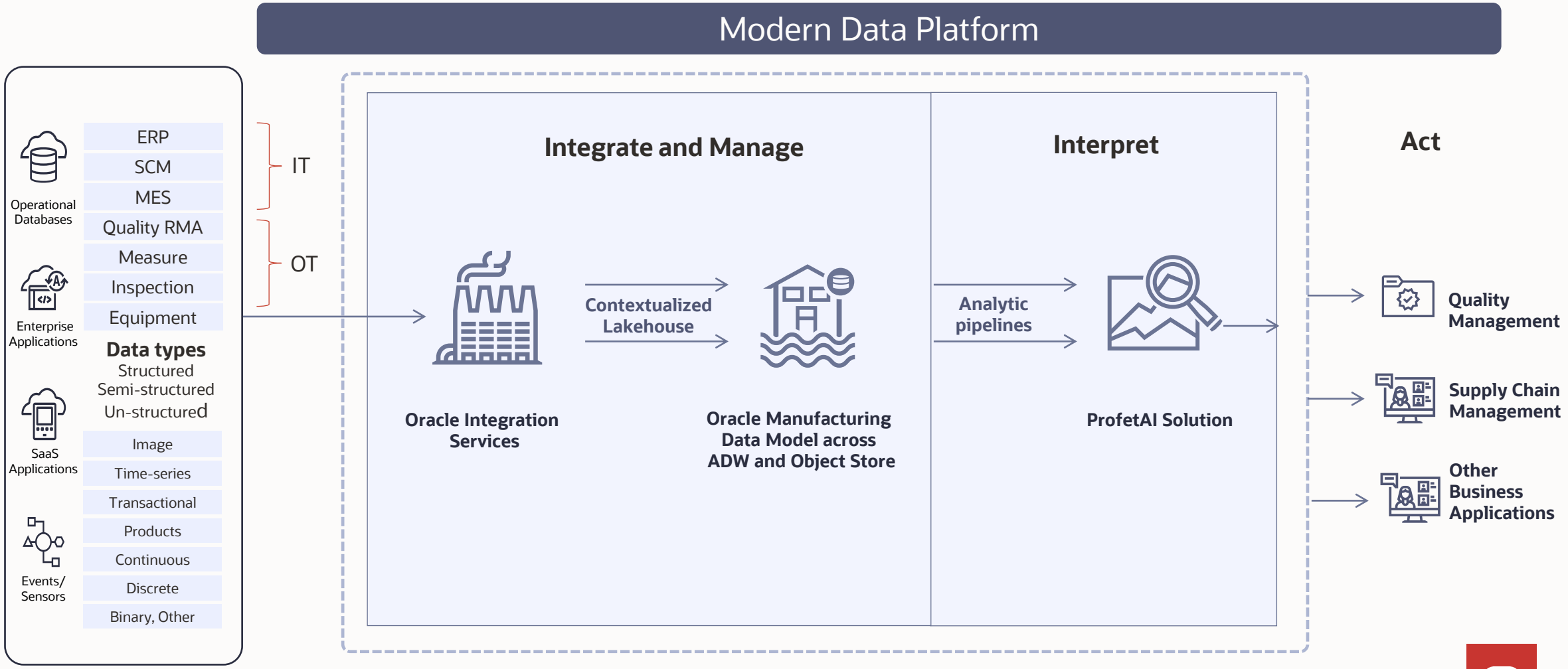
The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, timing, and pricing of any features or functionality described for Oracle's products may change and remains at the sole discretion of Oracle Corporation.

議程大綱

- Practices with Oracle and ProfetAI
- Oracle Data Management Solution
- Distributed Cloud Offering for your choice.

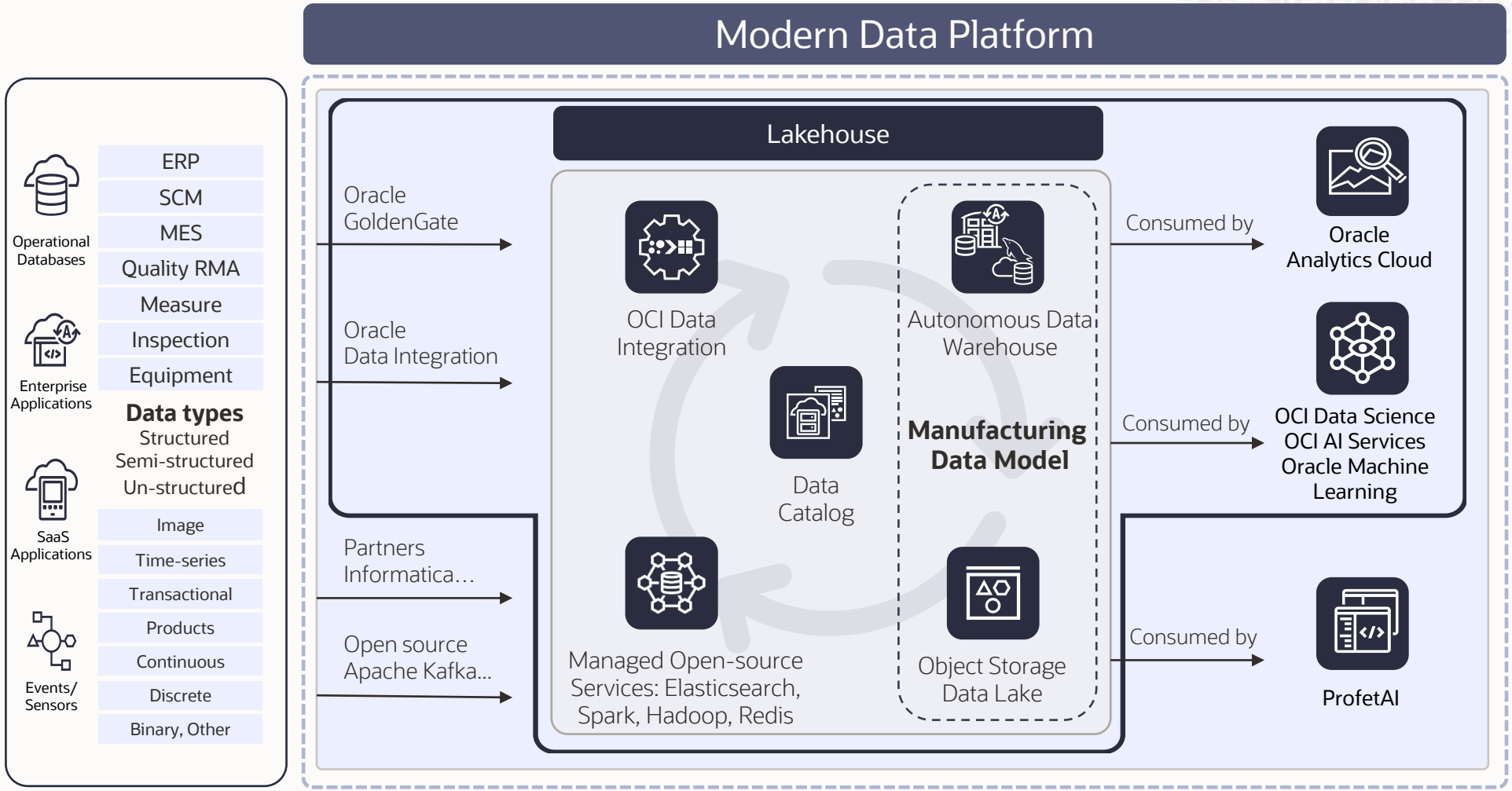
Lakehouse for Manufacturing Industry Solution with ProfetAI

Integrate, Manage, Interpret and Act – Key capabilities of data-driven manufacturing



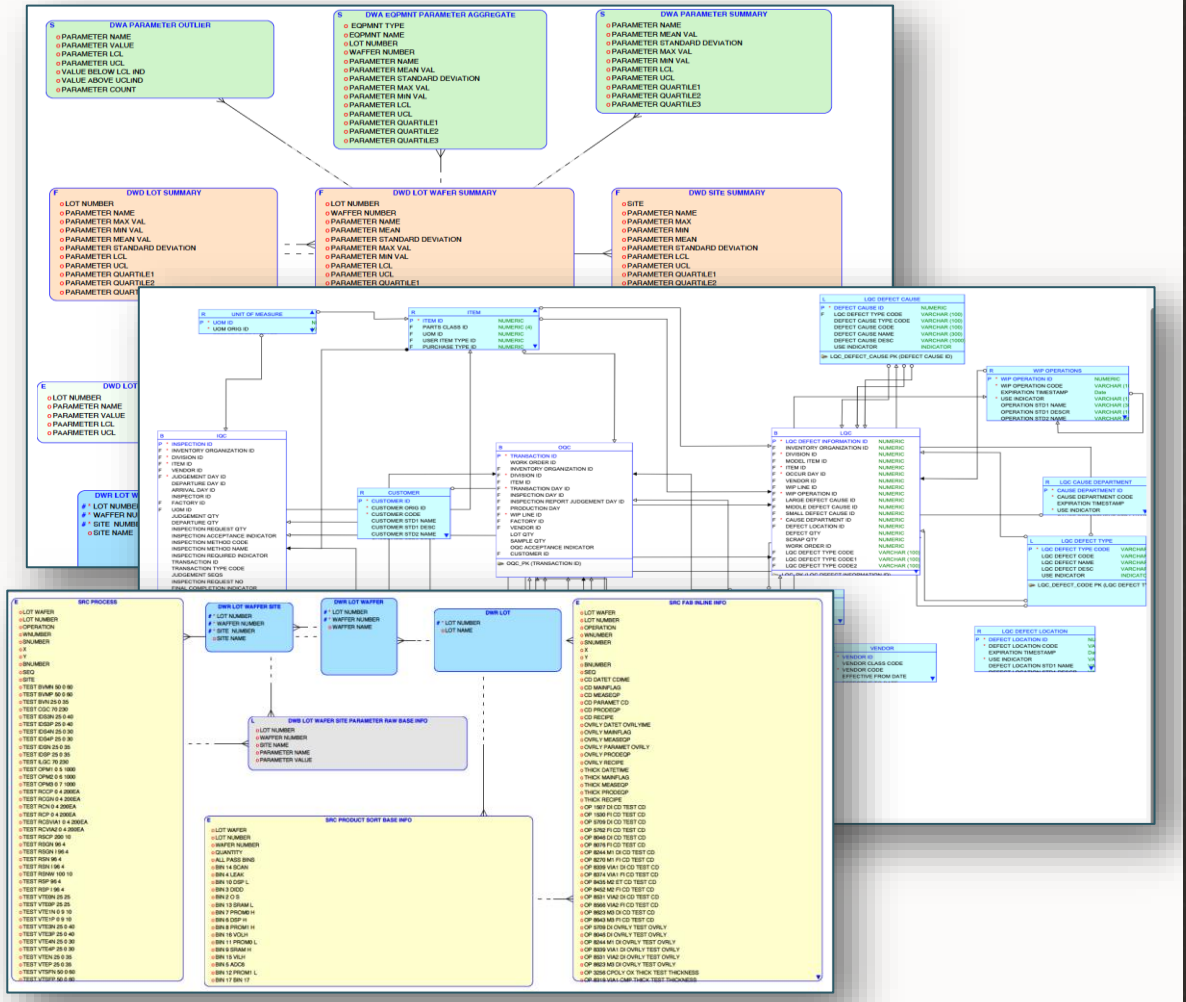
Lakehouse for Manufacturing Industry Solution with ProfetAI

Data-driven manufacturing to improve operational efficiency, supply chain visibility & product quality



Manufacturing Industry Data Model

Comprehensive model to accelerate change



Manufacturing Data Model Features

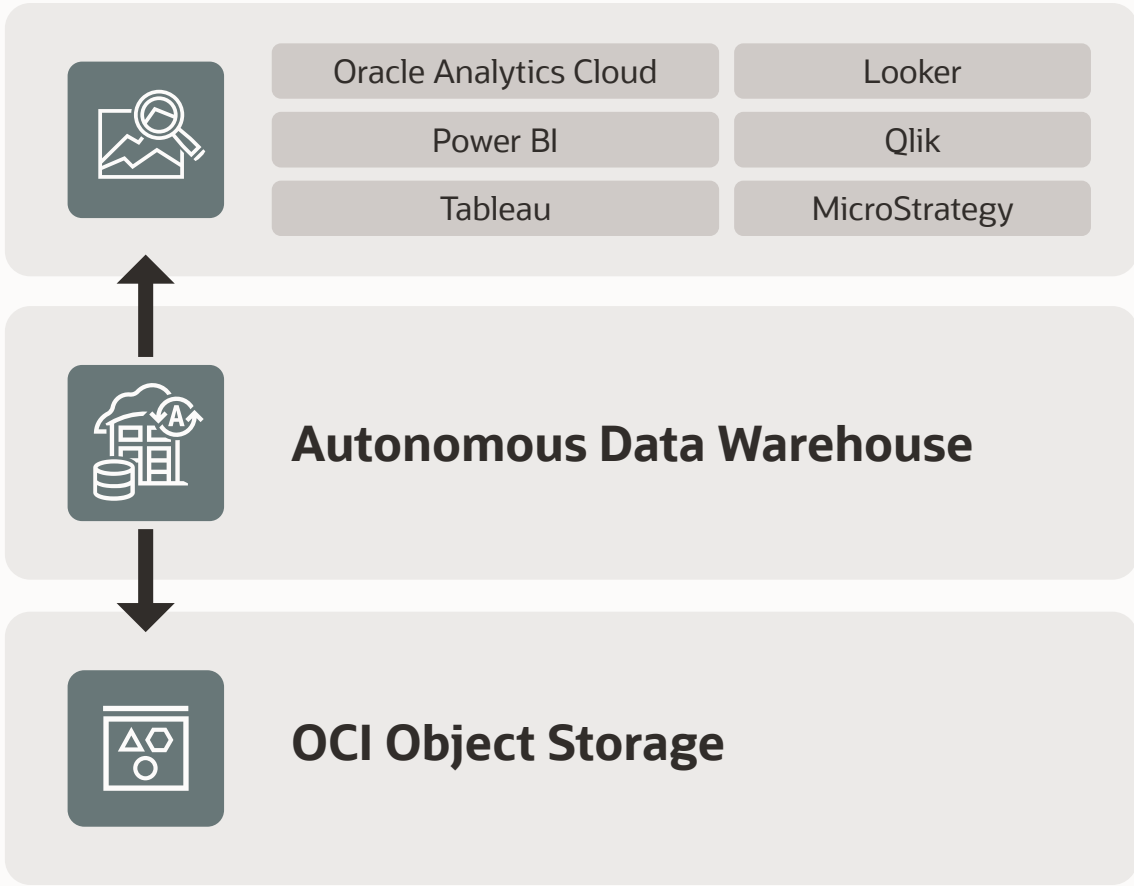
- 30+ Subject Areas
- Logical model , Physical Model Optimized.
- 520+ Entity, 7800+ Attributes
- Expanded to support other data types such as Time Series, JSON, Hadoop
- Aggregate and Analytic Views
- 250+ industry measures and KPI with Business & Technical definition
- Industry standard (ISO 9001-2015) & ISA-95 Compliant.
- Easily extensible

Manufacturing Analytics
Visibility

- 250+ KPIs Available
- 24+ Pre-built Dashboard
- Extendable and configurable
  - Trending
  - Clustering
  - Outlier Detection
  - Forecasting
  - Other
- Critical KPI's
  - Monthly Production and Yield analysis.
  - Quality Lot Inspection
  - Planned Downtime (by date)
  - Unplanned Downtime (by date)
  - Reasons for Planned and Unplanned Downtime.

Manufacturing Industry Data Model
Comprehensive model to accelerate change

Analyze data warehouse and data lake data at scale with the same query



Automated data warehouse management

Run a high-performance, highly available, and secure data warehouse while reducing cost

Auto-provisioning

Deploys mission-critical databases (RAC on Exadata infrastructure) which are fault-tolerant and highly available.

Auto-configuration

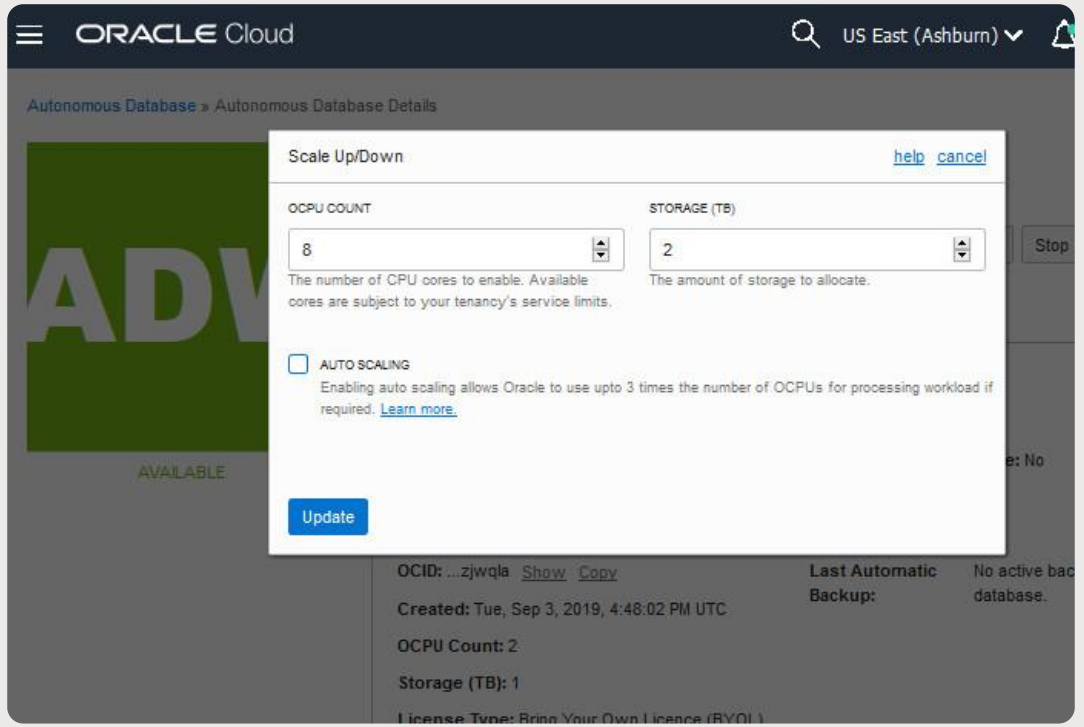
Automatically configures the database to optimize for data warehouse workloads.

Auto-scaling

Automatically scales compute resources when needed. Precision scaling occurs while applications is running–without downtime. Enables true pay per use.

Automated security

Automatic encryption for the entire database, backups and all network connections.



A complete solution with built-in data integration and analytics

Empower innovators with self-service data management tools

Converged database
Multi-model, multi-workload and multi-tenant

Data tools
Self-service tools for data loading, transformation, insights and business models

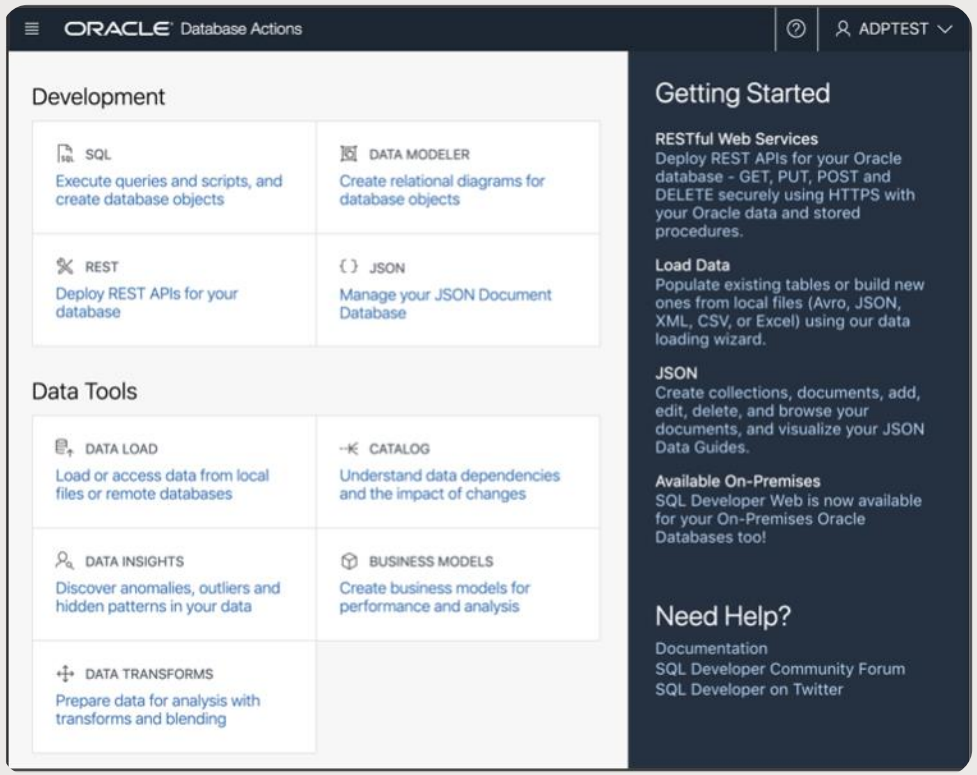
Oracle machine learning
High-performance in-database algorithms

Graph database
Complete graph database and analytics with scalability

Spatial
Native spatial data storage and analysis

Data safe

Unmatched security in the cloud keeps your data safe



Consistent high performance and scaling

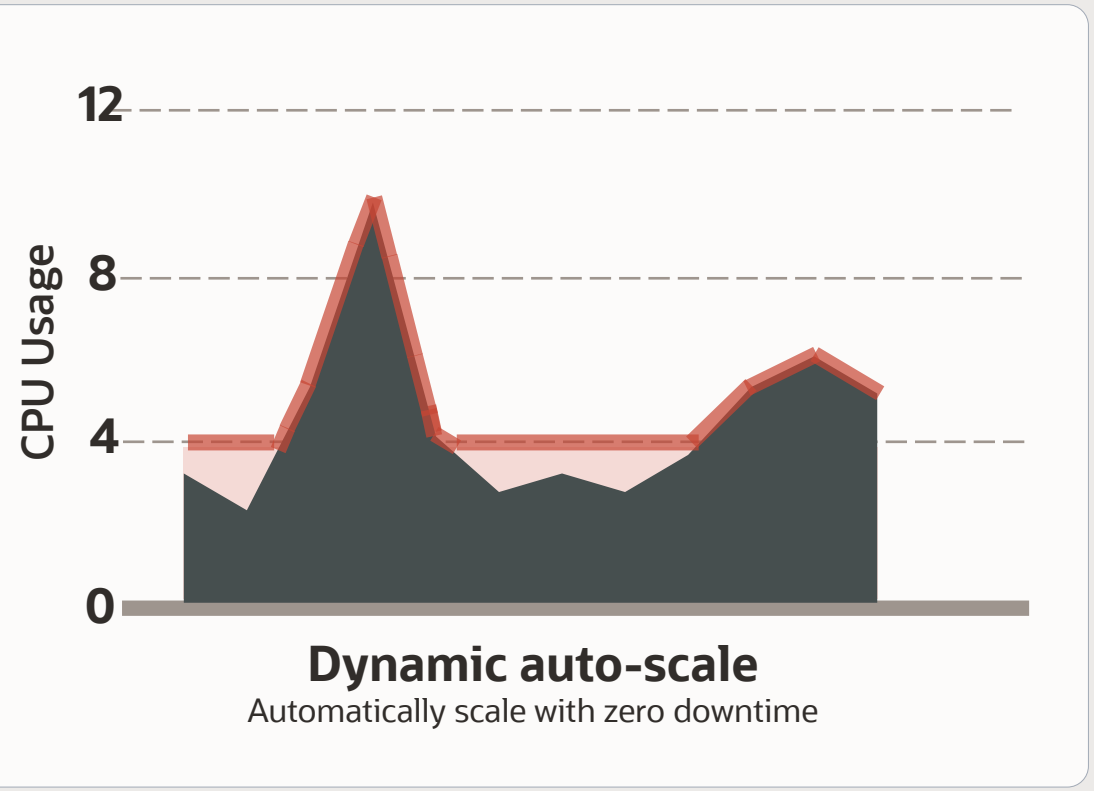
Unmatched elasticity for lower costs in the cloud

Size to number of OCPUs and TBs required

- Not constrained by fixed shape ‘t-shirt’ sizes
- Simple incremental growth
- Lower operating costs

Auto-scaling for changing workloads

- Dynamically adjusts CPU and IO resources based on workload requirements
- Zero delay while scaling up or down
- No ‘cache warm-up’ after scaling



Comprehensive data and privacy protection

Reduce risk with autonomous security and data privacy

Secure database infrastructure

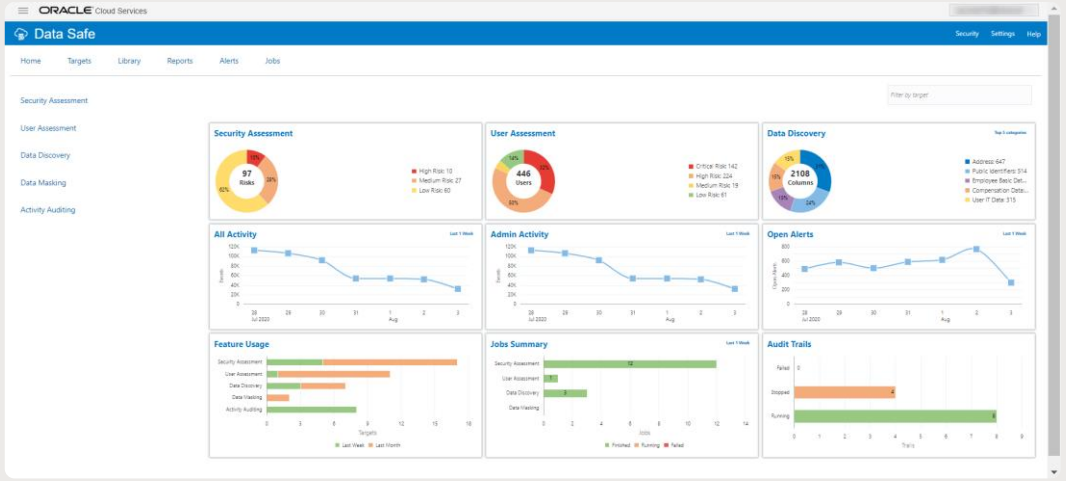
- Always encrypted, always audited, always patched

Understand your users and your data

- Risk assessment and analysis of user privileges
- Automatic discovery of sensitive data

Only the right users can see your data

- Prevents privileged users from accessing others' business data
- Mask sensitive data



Identification	Biography	IT	Financial	Healthcare	Employment	Academic
SSN	Age	IP address	Credit card	Provider	Employee ID	College name
Name	Gender	User ID	CC Security PIN	Insurance	Job title	Grade
Email	Race	Password	Bank name	Height	Department	Student ID
Phone	Citizenship	Hostname	Bank account	Blood type	Hire date	Financial aid
Passport	Address	GPS location	IBAN	Disability	Salary	Admission date
DL	Family data	...	Swift code	Pregnancy	Stock	Graduation date
Tax ID	Date of birth		...	Test results	...	Attendance
...	Place of birth			ICD code		...
	...			...		

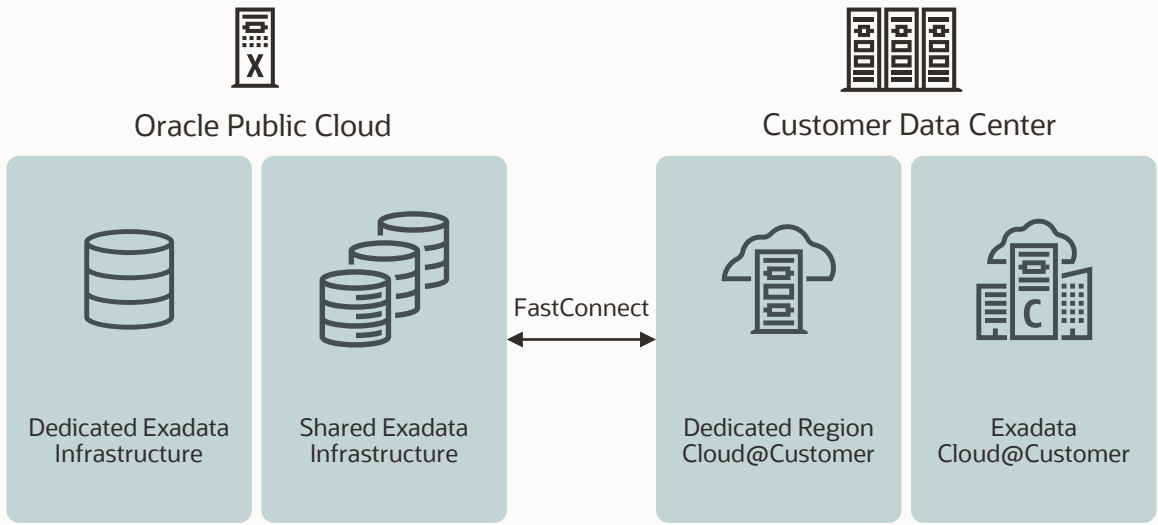
Available in Oracle Public Cloud or in customers' data centers

Reduce risk with autonomous security and data privacy

Shared infrastructure (public cloud)
Elastic on-demand services

Dedicated infrastructure (public cloud)
Complete workload Isolation for guaranteed service levels. Ability to control operational policies

Cloud@Customer infrastructure (customer's data center)
Autonomous data warehouse in customer data center

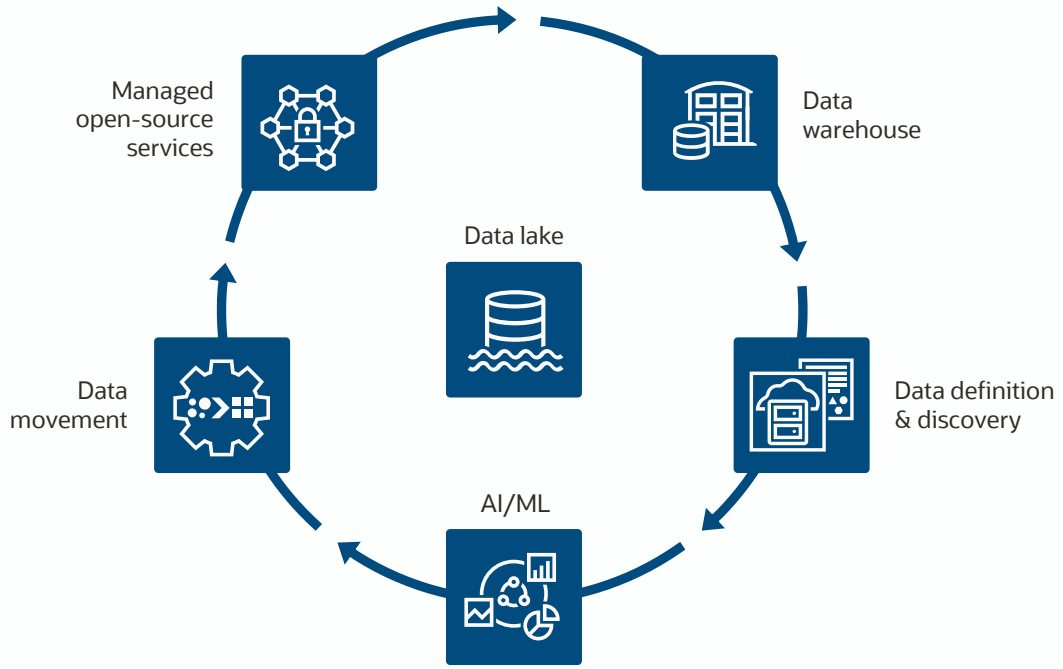


Lakehouse for Manufacturing Industry Solution with ProfetAI

Any Data

- Any database
- Any application
- Any cloud
- Any events/ Any sensors

Data Lakehouse on OCI



Any Data

- Any BI tool
- Any application
- Any cloud

Any Insights

- Customer 360
- Recommendations
- Fraud prevention predictive maintenance
- Payment management
- Decision support
- Demand forecasting
- Risk analytics
- Compliance
- Safety

Any Industry

- Manufacturing healthcare
- Financial services
- Retail
- Telco
- Utilities
- Defense
- Pharma

IT: Platform

Business: Outcomes

Classes of workloads remain on-premises

Data sovereignty

Regulation, and data privacy requirements

Sensitive/IP data can't leave premises

Security and control

Physical security of infrastructure and data

Single tenant, self-contained environment

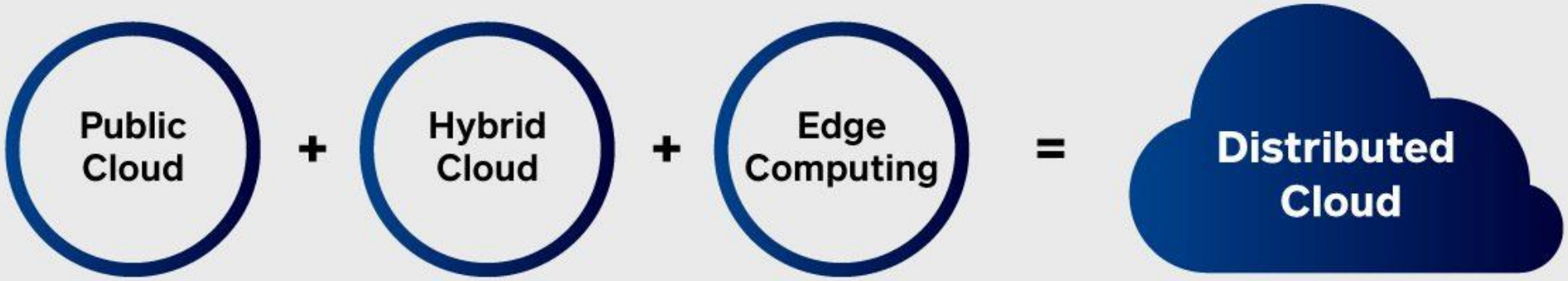
Latency

Stringent latency requirements for high volume applications

Legacy applications tied to on-premises operational systems

What is the Distributed Cloud?

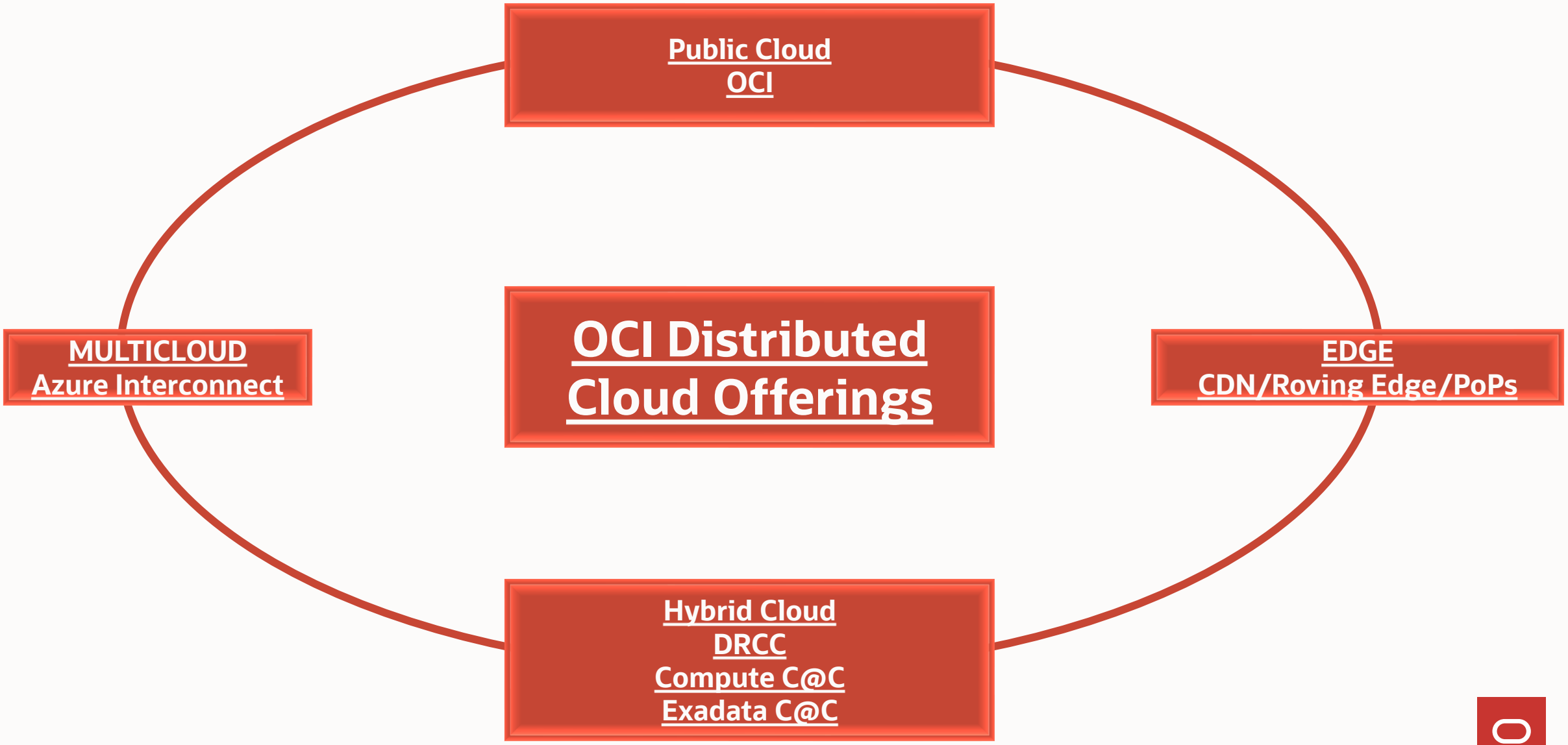
DISTRIBUTED CLOUD SERVICES = DISTRIBUTED TO DIFFERENT PHYSICAL LOCATIONS



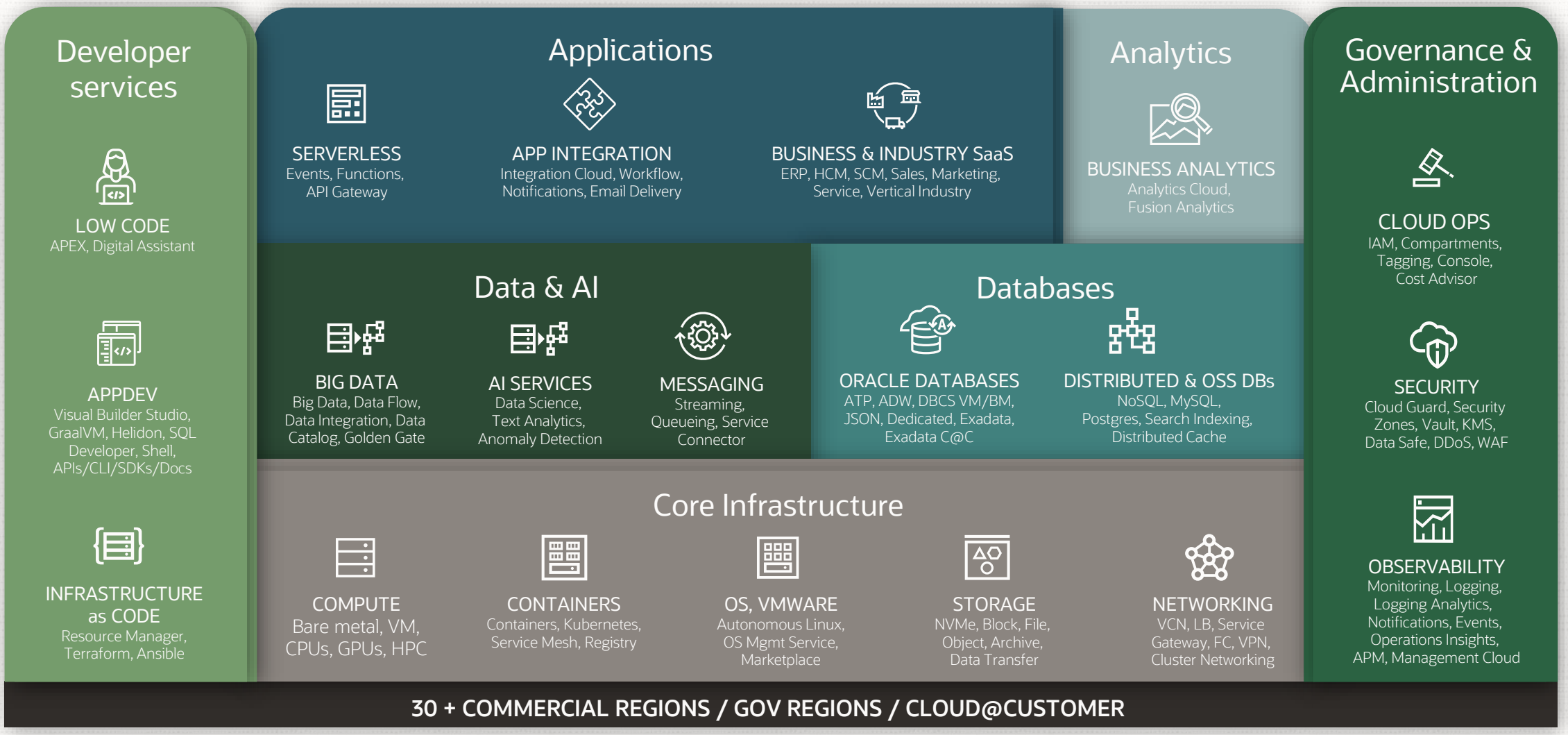
BENEFITS:

- Helps with low-latency scenarios
- Reduces data costs
- Satisfies laws that say data must remain in a specific geographical area

The future of Distributed Cloud

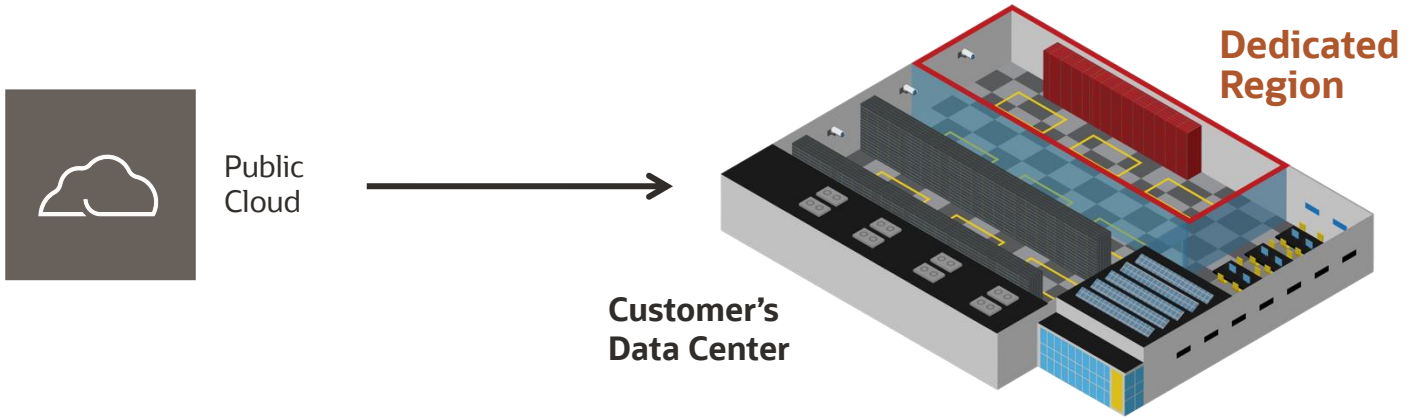


Complete cloud capabilities



What if you can have...

... a cloud experience, managed for you, in your data centers



... with full agility, scalability, and economics of a public cloud

Identical public cloud services

Start small, activate fast, grow on demand

Buy the cloud, rather than build it

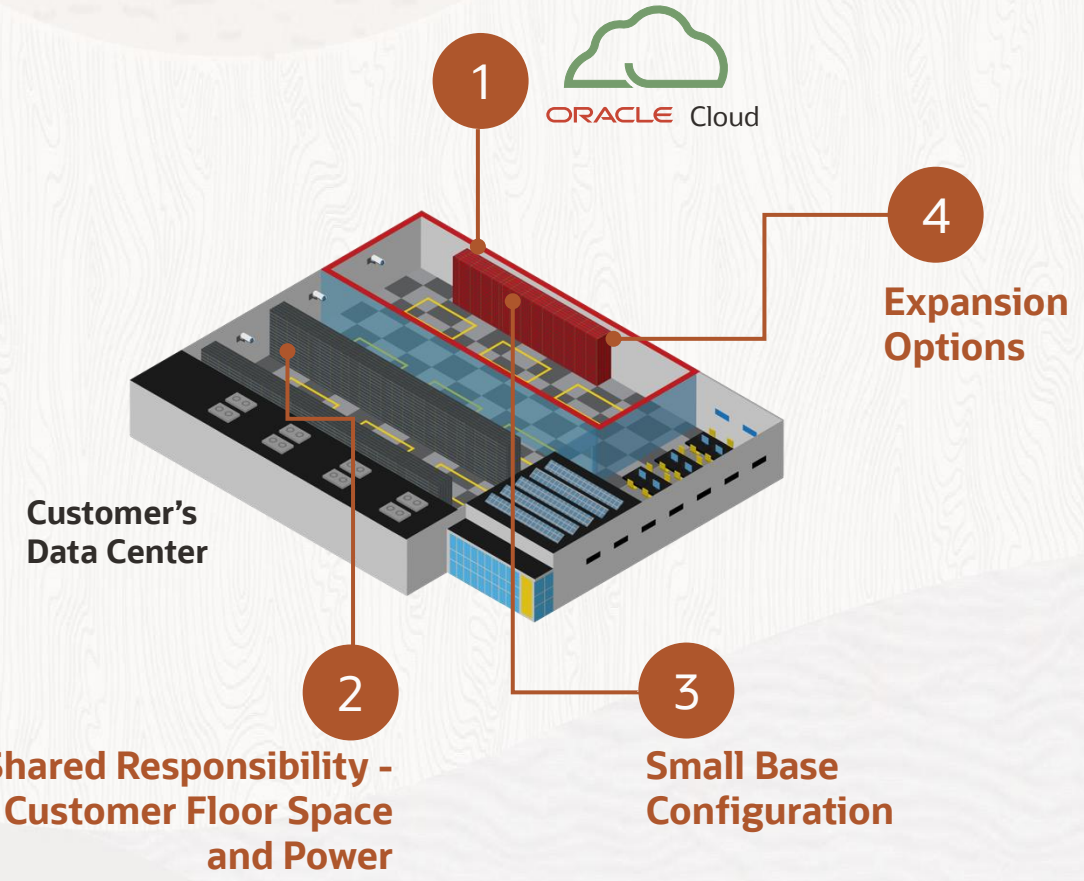
Dedicated Region Cloud@Customer
Introduction

1
Full OCI Public Cloud Services

2
Shared Responsibility

3
Small Base Configuration

4
Multiple Expansion Options



Responsibility Model

CUSTOMER

- Datacenter **space, power, cooling**,...
- **Connectivity** to OCI backbone and between regions if needed
- **Physical security** to support Oracle's and the customer's compliance needs
- OCI capacity or usage forecasts every quarter for growth.

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- **Design, build and run** the region
- **Service updates, patches, and security fixes** on the same timeline and under the same conditions as any other OCI commercial region
- A dedicated Technical Account Manager and 24/7 service support
- DDoS protection

Access the entire set of cloud services from your own facility

Dedicated Region Cloud@Customer
—Over 100+ Cloud Services—

Compute
Bare Metal Compute, Virtual Machines, Container Engine for Kubernetes, +3 more

Storage
Object Storage, Block Volume, File Storage, + 3 more

Management and Governance
Monitoring, Key Management, Resource Manager, + 6 more

Security, Identity, and Compliance
Audit, Identity and Access Management, +3 more

Network, Edge, and Connectivity
DNS, Traffic Management, Load Balancing, +3 more

Application Development
API Gateway, WebLogic + 11 more

Data Management
Autonomous Transaction Processing, Autonomous Data Warehouse, Exadata + 9 more

Analytics and Big Data
Analytics Cloud, Analytics for Applications, Big Data, +5 more

Oracle Fusion SaaS Support
ERP, EPM, HCM, SCM, CX

- Hosted **within customers' data center**
- **Customizable based on workload needs**
- **Fully dedicated, fully featured** cloud
- **Oracle-managed** maintenance and operations
- **Software-defined** infrastructure
- **SLA guarantees** match the public cloud
- Only **pay for cloud service consumption**

Security

Defense-in-Depth approach with layered security controls

SOC 1, SOC 2, ISO 27001/17/18, HIPPA, PCI-DSS	Compliance, at no additional cost
Observability	Security Automation, Audit logs, Monitoring, and Reporting, SIEM monitoring 24x7x365
Data Security, at rest and in motion	AES 256-bit & AES 128 TDE encryption; TLS 1.2, FIPS 140-2 Level 3 certified hardware for key storage
Application Security	Web Application Firewall (WAF), IAM policies, vault service, Cloud Guard protect cloud resources
Infrastructure Security (Ex. Network, compute, storage security, & Tenant isolation)	Isolate management network from customer network, tenants and compartments
Datacenter Physical Security	Restricted access with multiple levels of authorization, clean hardware and firmware

Oracle Cloud Dedicated Region
Comparing capabilities across vendors

	Oracle DRCC	AWS Outposts	Azure Stack	VMWare 自購硬體
Fully fledged Control Plane with Hyper-Scale Design	✓	✗	✗	✓***
Availability of all public cloud services on-premises	✓	✗	✗	✗
Number of services available on-premises	100+	17****	15****	Limited
No dependency on public cloud region	✓	✗	✓	✓
SLAs for performance, manageability, and availability	✓	✗	✗*	✗
Compliance certifications	✓	✗	✗	✗
Autonomous capabilities	✓	✗	✗	✗
Exact same architecture as in public cloud	✓	✓	✗	✗
Single vendor accountability and support	✓	✓**	✗	✗

- * Hardware comes from OEM vendors, mixed mode support
- ** 24x7 support at extra cost
- *** Cost for CAPEX include H/W and VMWare license
- **** Included all VM types

NRI

NRI runs mission-critical, high-volume business platform on Oracle Dedicated Region Cloud@Customer

- Largest consulting firm and IT solutions provider in Japan
- Moving on-prem SaaS apps to modernize, ensure advanced control, and governance in their own datacenter
- Reduce on-prem operations and invest more to drive digital transformation

Gartner®

Comments from Gartner's most respected cloud analyst: Lydia Leong

"I predict that [Oracle Dedicated Regions] will raise OCI's profile as an alternative to the big hyperscalers, among enterprise customers and even among digital-native customers..."

https://blogs.gartner.com/lydia_leong/2020/07/09/finally-private-cloud-identical-to-public-cloud/
https://www.businessinsider.com/oracle-private-cloud-region-amazon-web-services-outposts-2020-7

Oracle Support Rewards 專案

藉由使用 Oracle 雲 (OCI)，客戶可以將 Database 維護費用降至 0*

依據 Oracle 雲 (OCI) 實際使用量

25%

回饋金額用於抵扣 Database 維護費用

Oracle 雲 (OCI)實際使用量越多 – 回饋越多

- 適用於既有 Database 維護的客戶
- 且有新的 Oracle 雲 (OCI) 訂單的客戶
- 以 25% 累積率給 Oracle 客戶
- 基於 Oracle 雲 (OCI) 實際使用量累積回饋金額
- 超過預定金額的實際使用量持續計入回饋額度
- 取得的回饋金最高以付清維護費用為限

Additional resources

Oracle Cloud@Customer

https://www.oracle.com/cloud/cloud-at-customer/

Oracle Dedicated Region Cloud@Customer

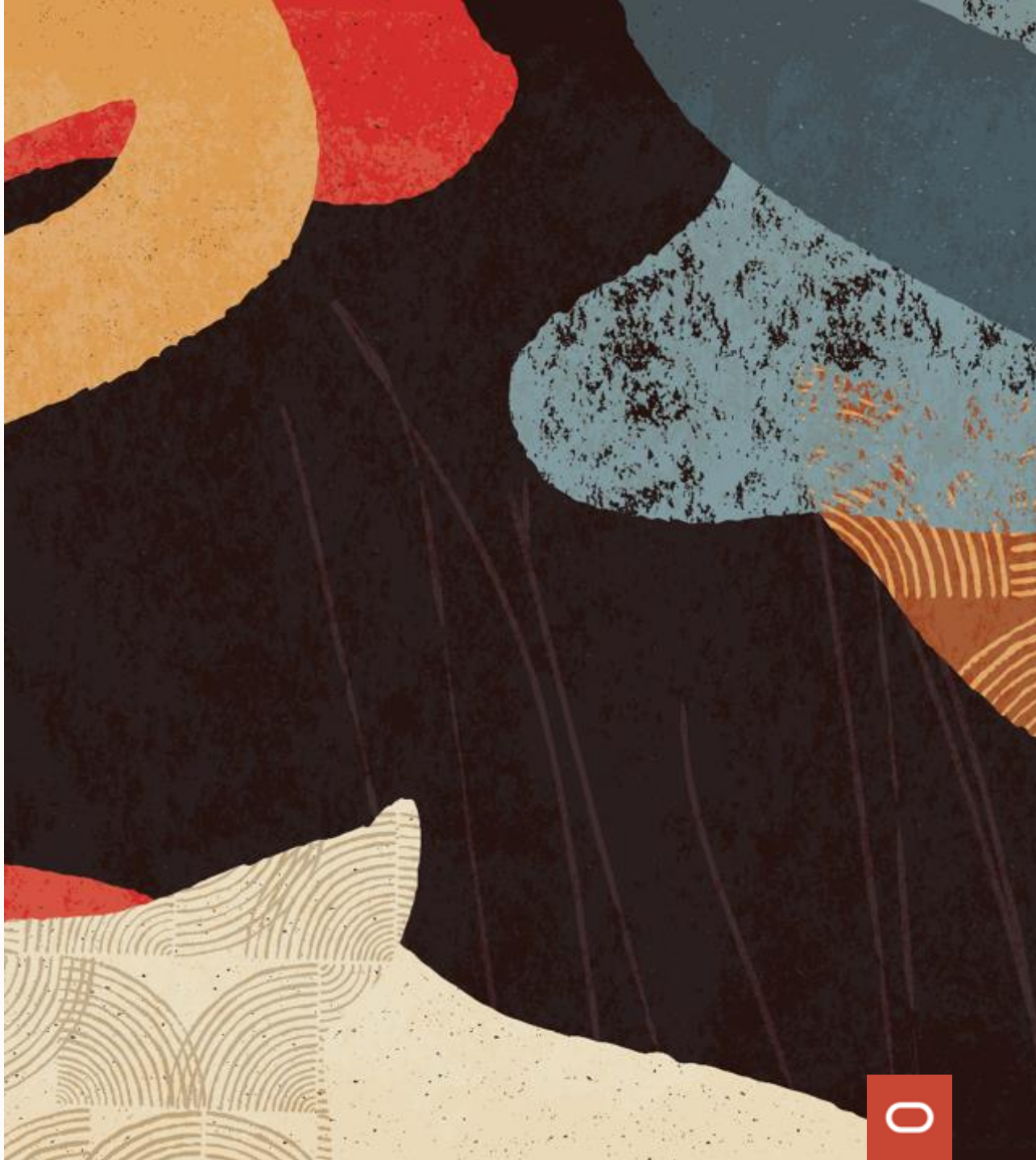
https://www.oracle.com/cloud/cloud-at-customer/dedicated-region/

Blogs

https://blogs.oracle.com/cloud-infrastructure/

Social Media

https://twitter.com/OracleCloud



Thank you

Manish Kapur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