
ORACLE

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App Dev Portfolio @ Oracle

One provider for all your development requirements

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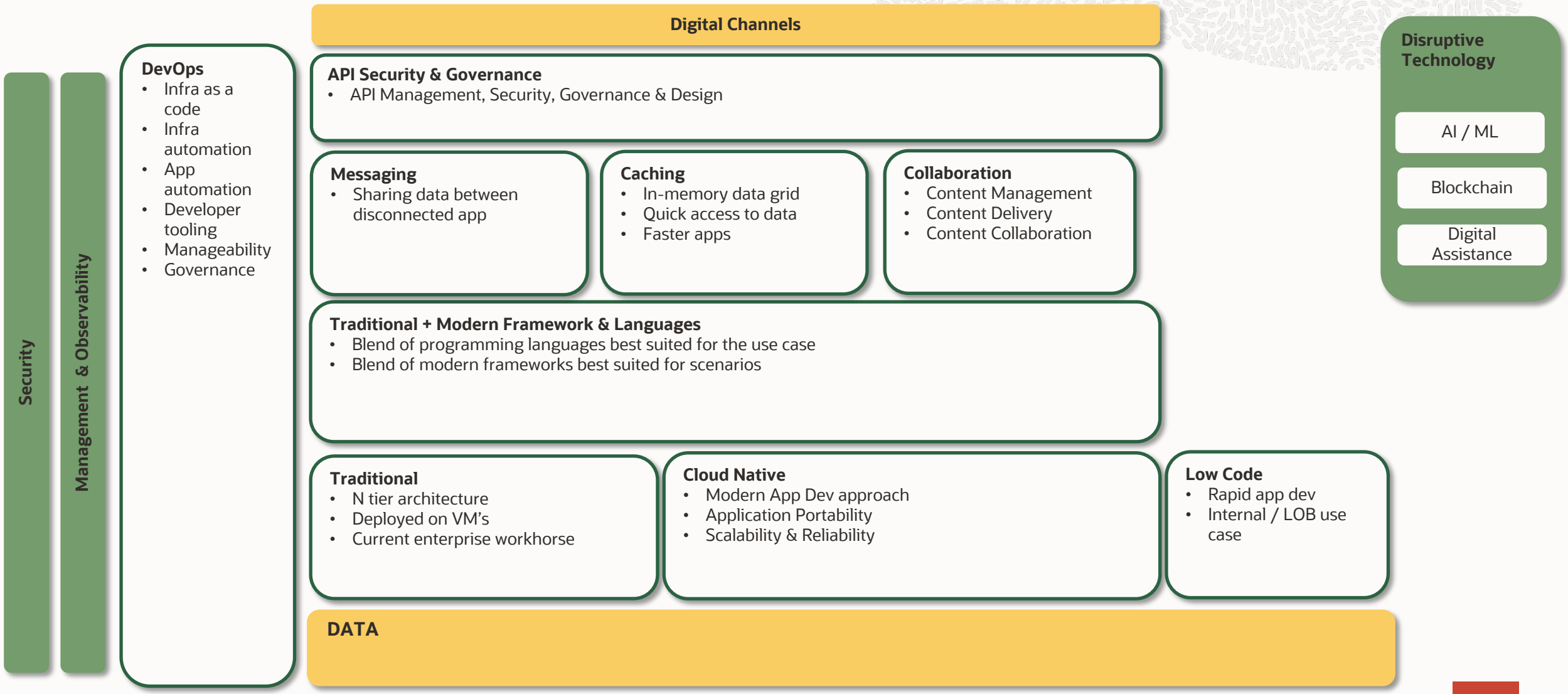
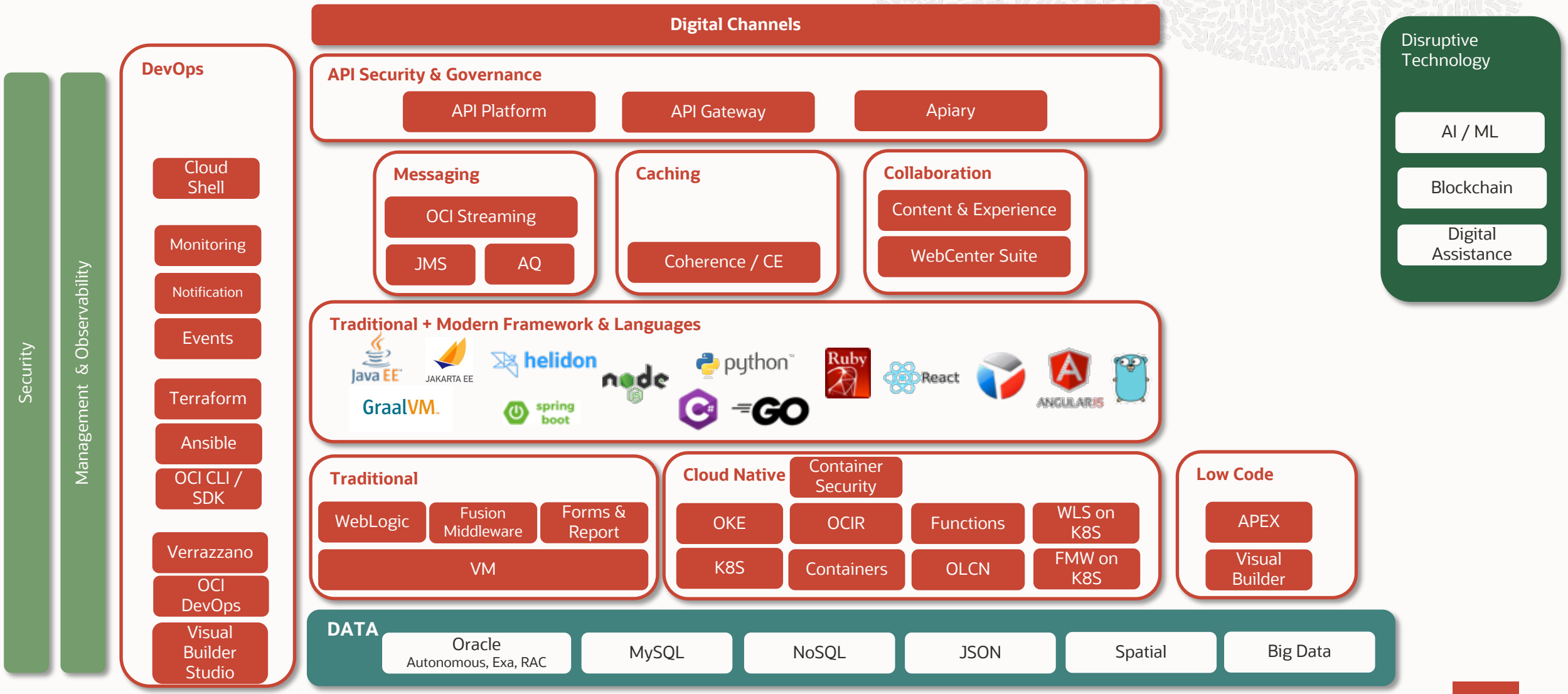
App Dev Capabilities Requirement



https://docs.oracle.com/en-us/iaas/Content/home.htm
https://otube.oracle.com/media/Application%20Development%20%40%20Oracle/1_jlto2mnr

App Dev @ Oracle



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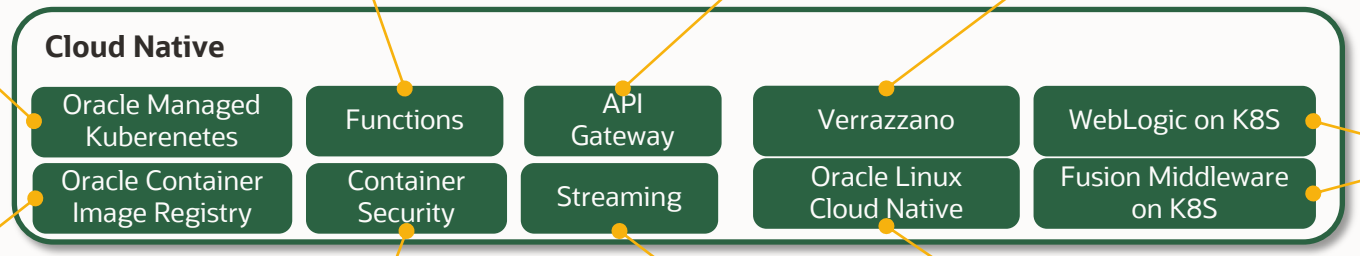
App Dev @ Oracle : Cloud Native

Fully managed, certified, Kubernetes service available in all commercial regions

Serverless platform that lets developers create, run, and scale applications without managing any infrastructure

A highly available virtual network appliance that can receive to protect and manage your API

Hybrid Cloud Native management & observability platform combines the best of both worlds: a curated, standards-based suite of open source software technologies that is tested, integrated, and supported on-premises or in the cloud by Oracle for your enterprise– Details



Certified docker container Images – Container Registry

Docker standard-based registry to reliably and securely store & share container images

Scanning Service to create recipes and targets that scan images in Oracle Cloud Infrastructure Registry for potential security vulnerabilities

Apache Kafka-compatible data flow at-scale for web/mobile, logs, infrastructure/apps, and more

Oracle Cloud Native Environment combines the best of both worlds: a curated, standards-based suite of open source software technologies that is tested, integrated, and supported on-premises or in the cloud by Oracle for your enterprise– Details

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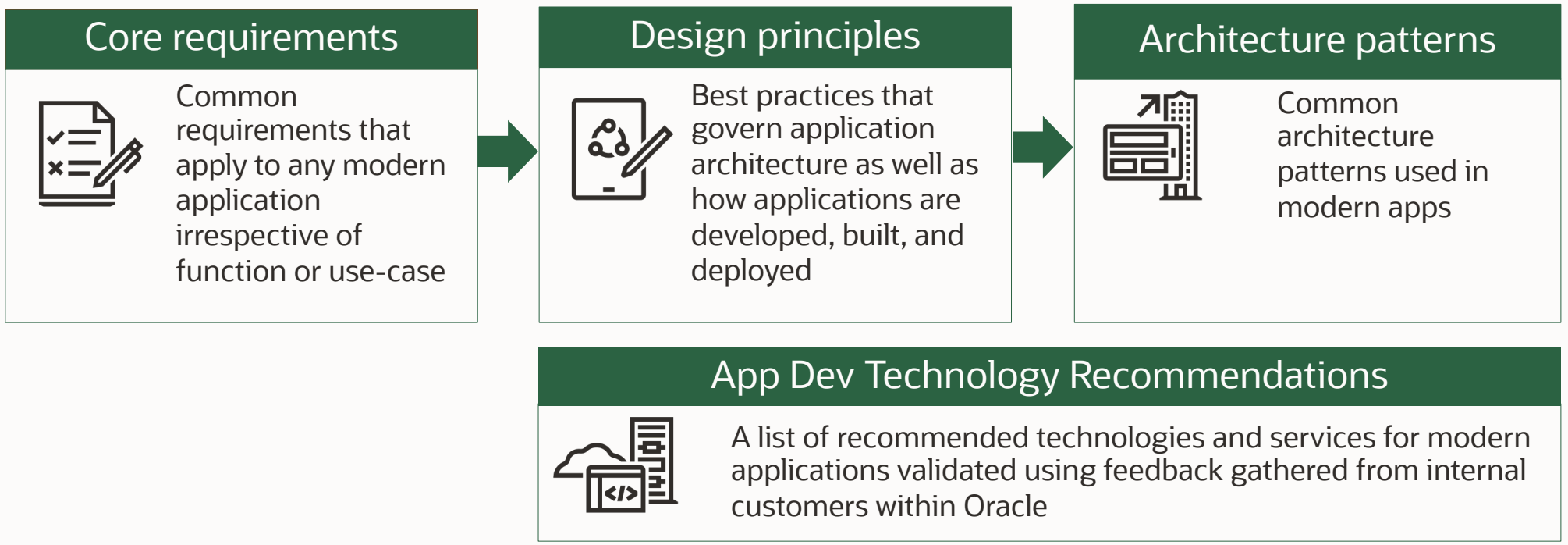
Build New Cloud Native Apps

Simplify the architectural decision-making

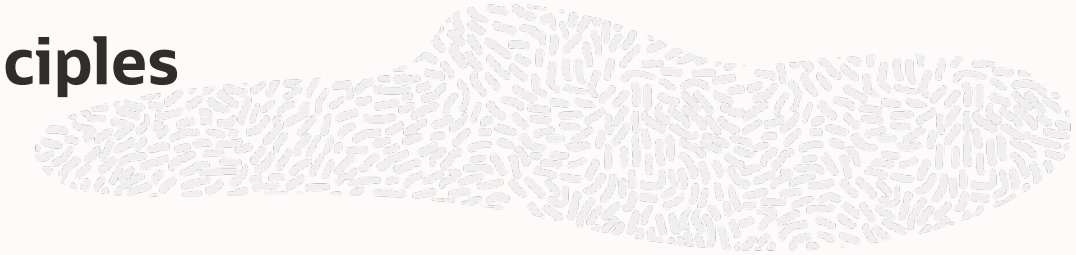
Oracle's Modern Application Development approach



https://www.oracle.com/cloud/architecture-center/modern-app-development/

Build New

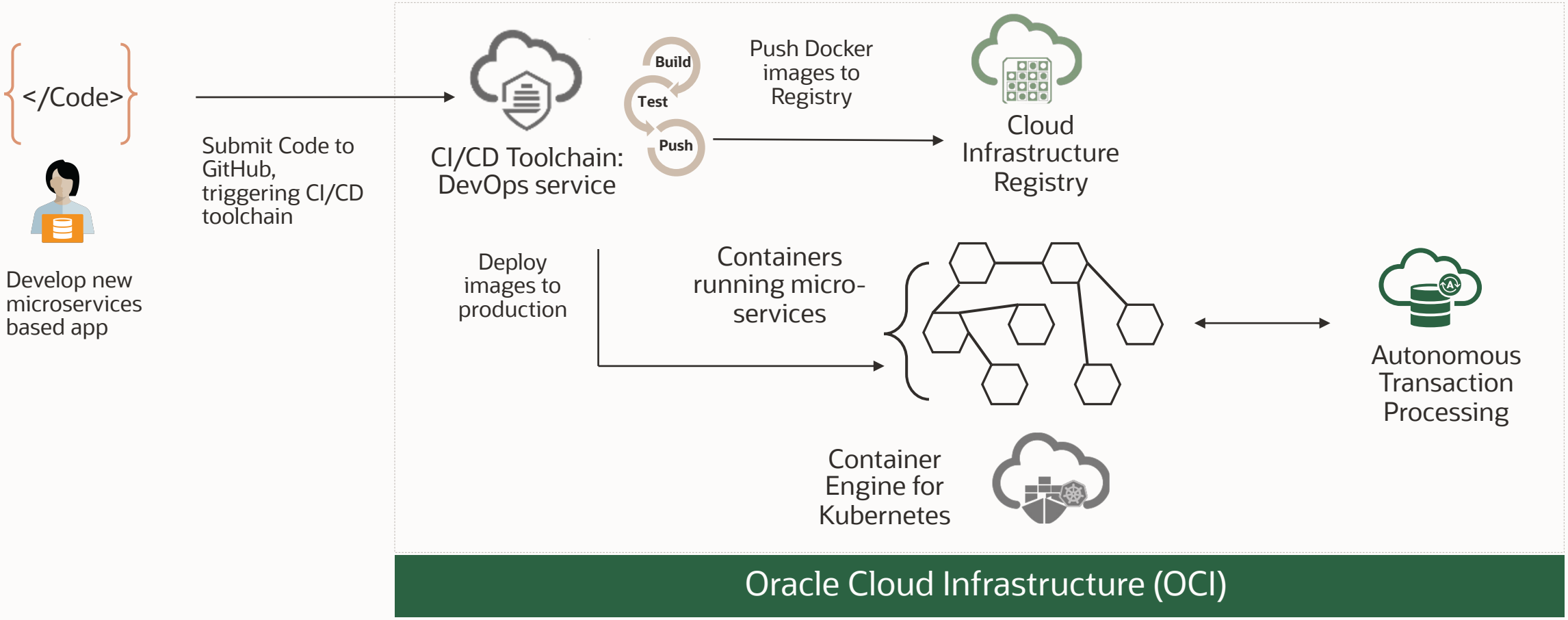
Oracle's Modern Application Design Principles



- Use lightweight open-source frameworks and mature programming languages
- Build apps as services that communicate through APIs
- Package and ship apps as containers
- Automate build, test, and deployment
- Use fully managed services to eliminate complexity across application development, runtimes and data management
- Keep application tier stateless
- Use converged databases with full featured support across all data
- Instrument end-to-end monitoring and tracing
- Eliminate single points of failure through automated data replication and failure recovery
- Implement a defense-in-depth approach to secure the app lifecycle

Build New

Creating & deploying cloud native applications



Oracle's Open Source Projects

- Verrazzano
- Kubernetes Toolkit for WebLogic & Coherence
- GraalVM
- Helidon.io
- Coherence CE
- Fn project
- Glassfish
- Open JDK
- MySQL
- NoSQL
- Dredd
- OCI clients and SDK's
- OCI Service Broker
- VirtualBox

Many more at https://github.com/oracle and https://opensource.oracle.com/

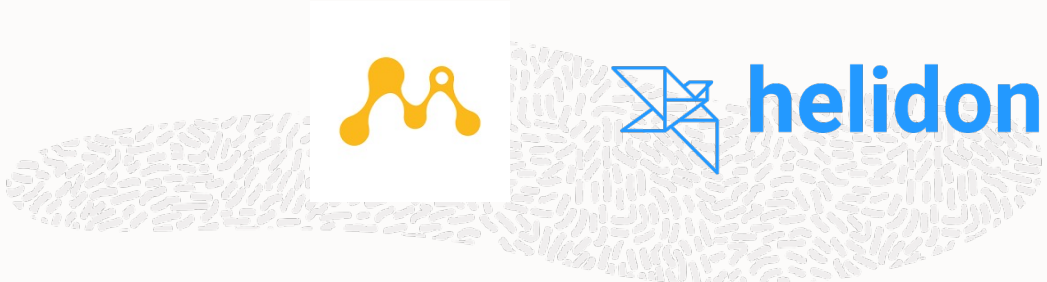
What is GraalVM Enterprise?

A high-performance optimizing Just-in-Time (JIT) compiler

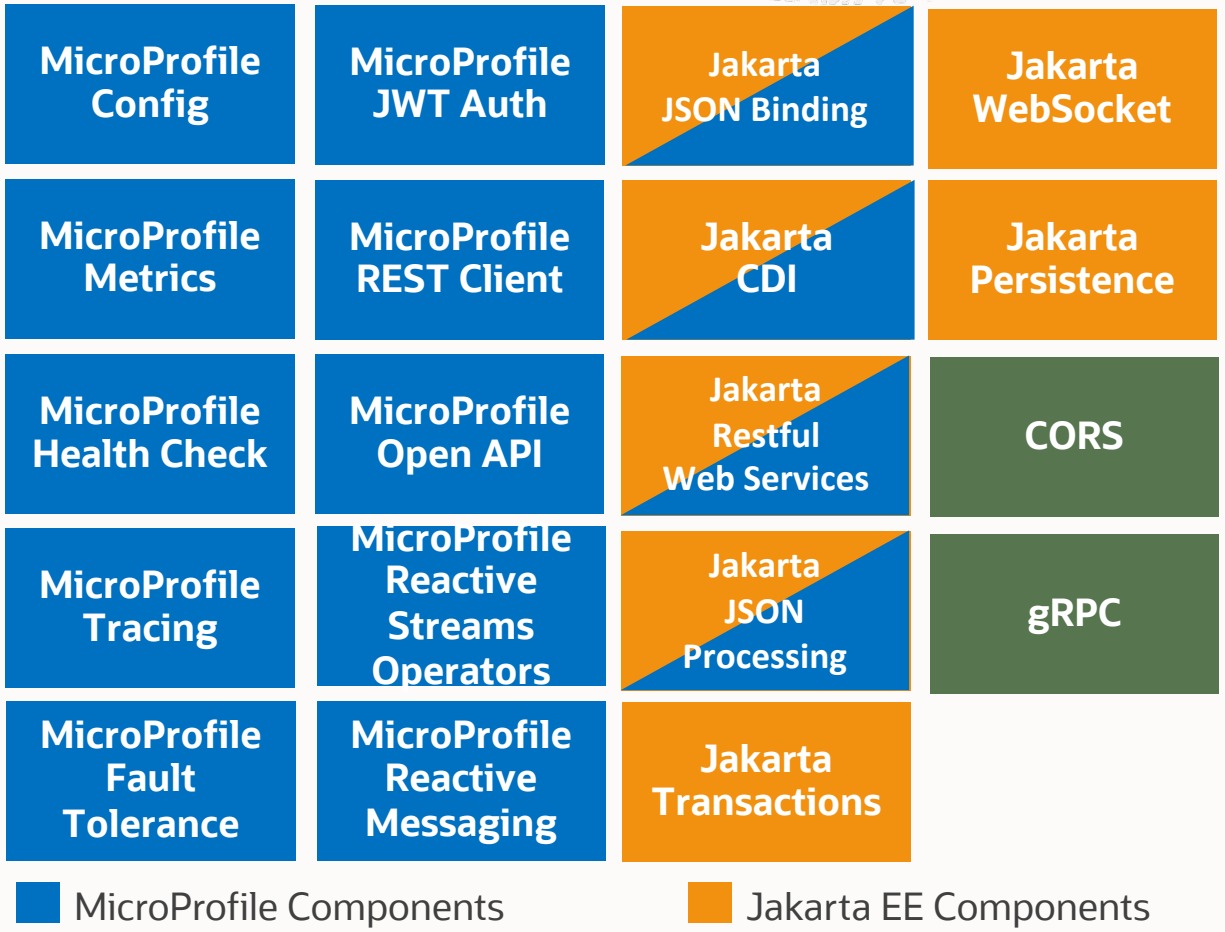
An Ahead-of-Time (AOT) “native image” compiler

Multilingual Virtual Machine

Java Microservices with MicroProfile



- Helidon - Java libraries for microservices Standards-based, open source, cloud native, Support included with WebLogic, Coherence
- Helidon SE
  - Functional style, Reactive, Transparent
- Helidon MP (MicroProfile 3.3)
  - Declarative, Dependency Injection
  - Familiar to Jakarta EE Developers
- Extend, evolve or migrate Jakarta EE apps
  - “Strangler” pattern and other patterns
- GraalVM Native Image support



VERRAZZANO

Enterprise Container Platform

A Complete, opinionated and secure container platform

- ✓ **Deploy, manage and secure** container-based applications in Kubernetes with support for Helidon, Spring Boot and Micronaut
- ✓ **Unify application lifecycle management** across microservices and traditional WebLogic Server applications.
- ✓ **Standardize management** across Kubernetes on premises, on Oracle Cloud Infrastructure, and on other public clouds.

More info:

- ✓ https://www.oracle.com/java/verrazzano/
- ✓ Video Tour: https://youtu.be/DDhHBTkC3PQ
- ✓ Try it out: https://github.com/verrazzano

VERRAZZANO

Enterprise Container Platform

Traditional Applications

Java Microservices

Polyglot Microservices

RANCHER

Istio

KEYCLOAK

kibana

elastic stack

Prometheus

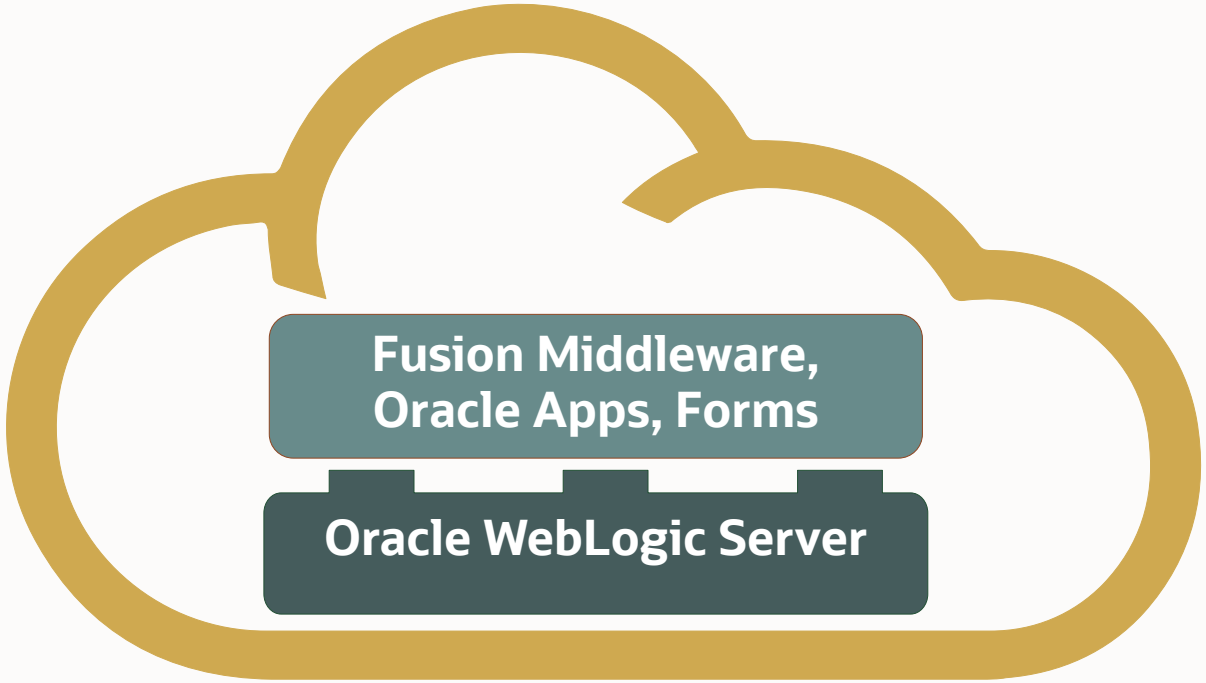
Grafana

JAEGER

Kubernetes	Kubernetes	Kubernetes
Public Cloud	On-Premise	Multi-Cloud

Oracle WebLogic Server
Proven, Industry-Leading Application Server

- Standards – Thru Jakarta EE 8 and Java 8/11
- Core – Performance, Data Integrity, Upgrade
- Data Tier Support – RAC, EBR, Coherence
- Manageability – Console, WLST, REST, WLDF
- Availability – Clusters, DR, Migration, ZDT
- Modernization – Kubernetes, Cloud, Migration

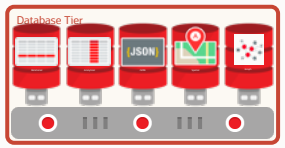


ORACLE
WebLogic Server

WebLogic for Cloud Native

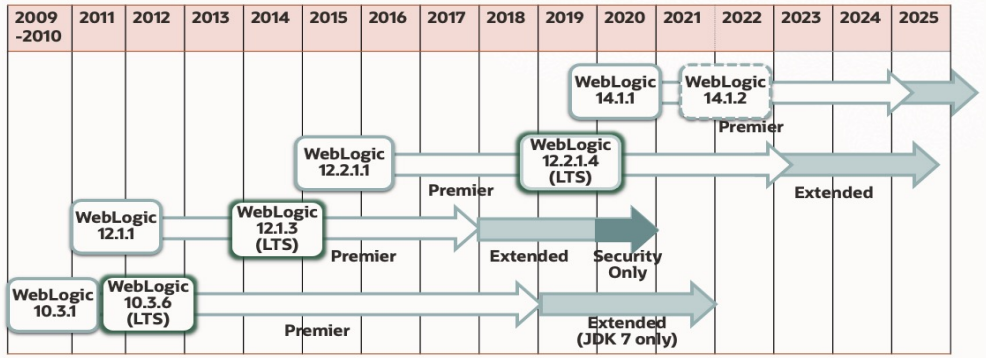
- **Embrace Cloud Native**
  - Key trend in Application Development
  - Modernize your existing applications without code changes
  - Large Opensource toolset to embrace modern development automation (CI/CD)
  - Enable Modern Monitoring and Logging tooling

- **Ongoing evolution in 14.1.x**
  - WebLogic Java EE 8 and Jakarta EE 8 Support
  - Coherence, Tracing, GraalVM polyglot
  - Java SE 8 and Java SE 11 Support
  - Generic, slim and quick installers



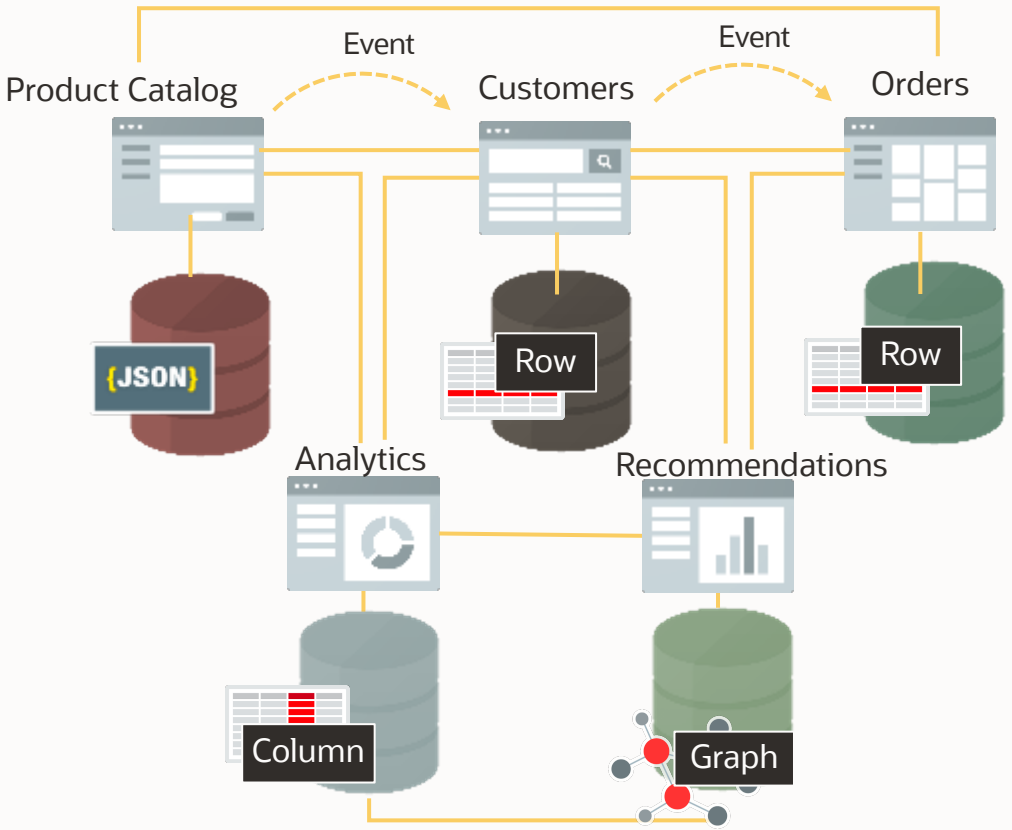
- **Micro Service Ready**
  - Easy adoption of Java Microservices with Helidon
  - Hybrid applications: WebLogic + Helidon combined
  - Coherence: interaction between microservices
- **Converged Database**
  - Relational, Columnar, JSON, Spatial, …

- **Extensive (long-term) Support Roadmap**

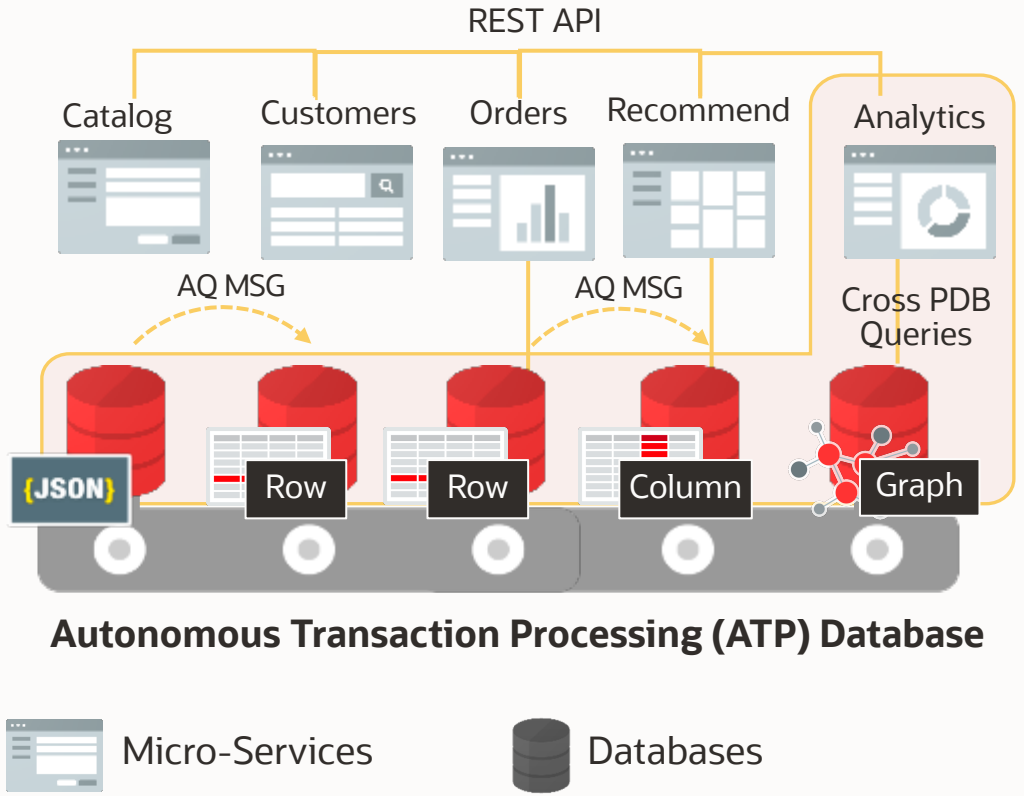


Simplifying Data Management for Cloud Native

Micro-Services with Multiple Self-Managed Databases

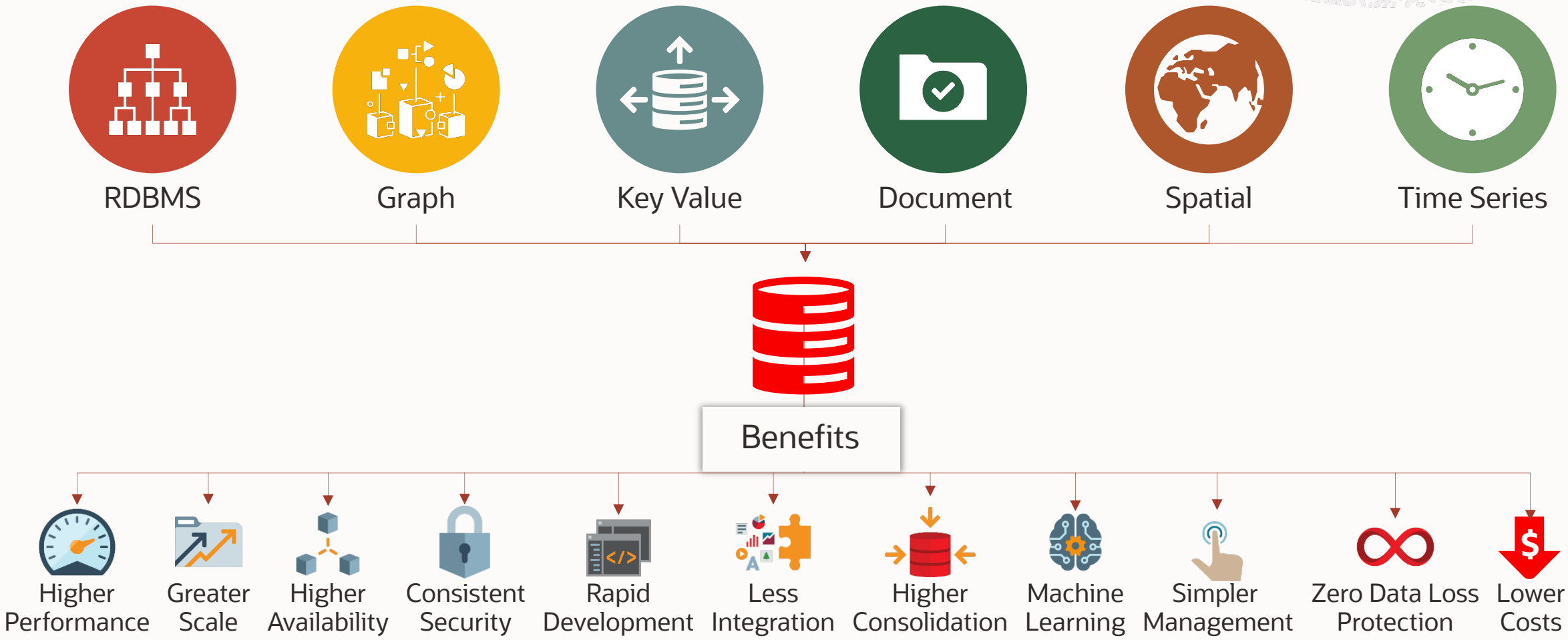


Micro-Services with One Autonomous Database



Oracle Database Supports All Data Management Needs

Standardize on converged database to dramatically reduce complexity and cost



App Dev @ Oracle : Low Code

APEX

APEX is Oracle's strategic low code tool for creating data-driven applications

When to use:

- Build apps on Oracle Database, data from spreadsheets or RESTful web services
- Responsive Web and mobile apps
- Oracle Cloud, on-premises, 3rd party clouds

Who uses:

- Often familiar with SQL
- Back-end first. Start with data schema.

Visual Builder

Visual Builder is Oracle's strategic low code tool for creating and extending Oracle SaaS apps

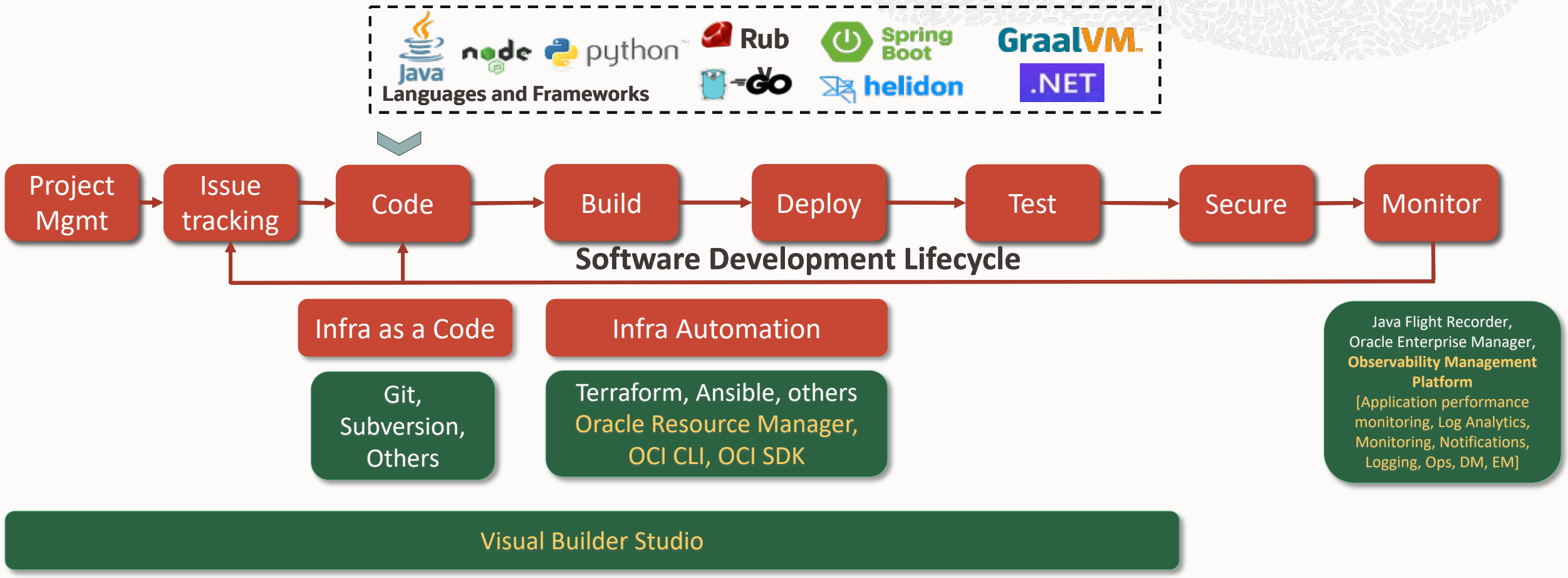
When to use:

- Extend Oracle SaaS functionality and channels using SaaS data
- Responsive Web apps, native mobile/PWA, chatbots
- Oracle Cloud

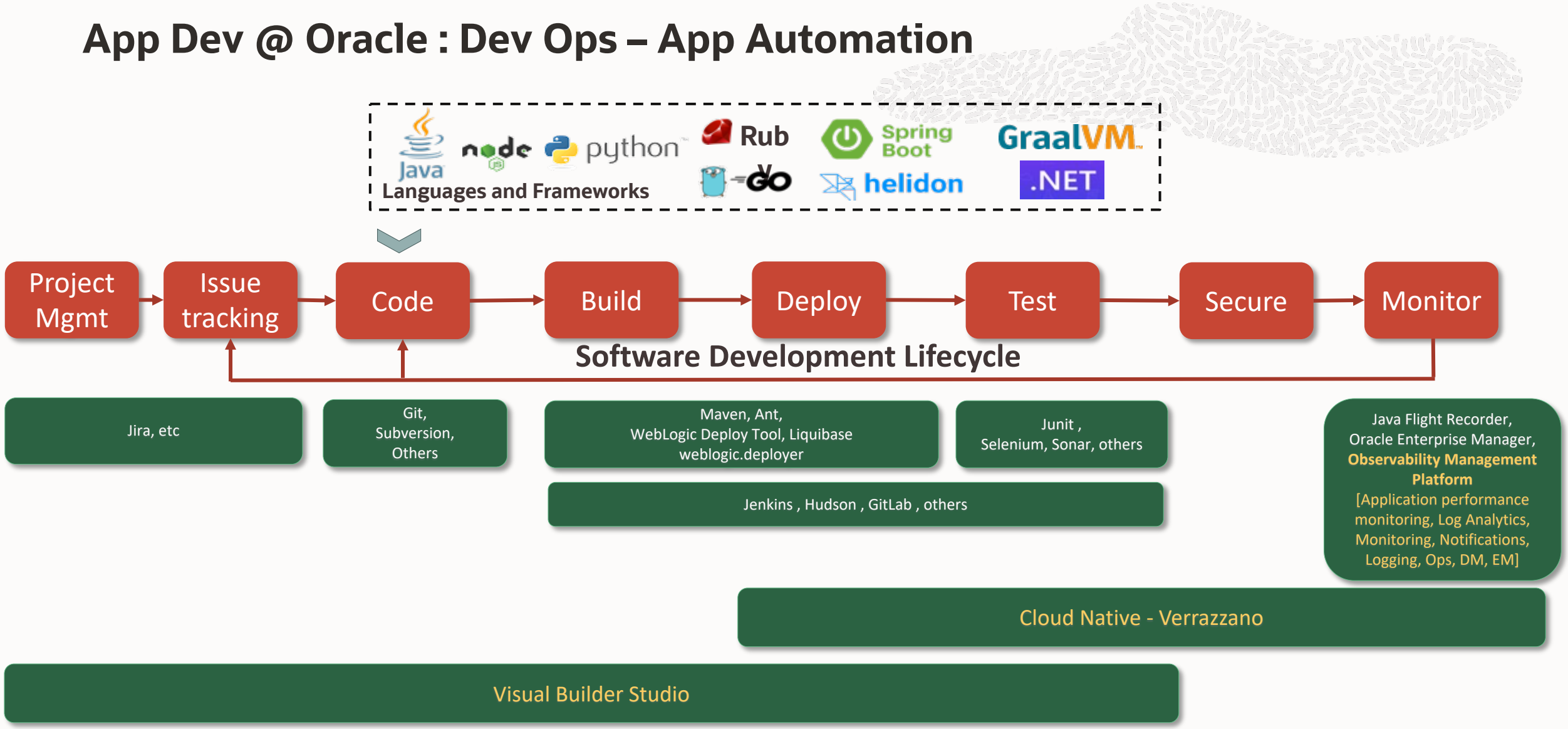
Who uses:

- Often familiar with JavaScript
- Front-end first. Start with the UI.

App Dev @ Oracle : Dev Ops – Infra Automation



App Dev @ Oracle : Dev Ops – App Automation



Security

* Free Security Services

Oracle Cloud Observability and Management Platform

Cross-stack visibility and rapid performance insights for any technology, deployed anywhere

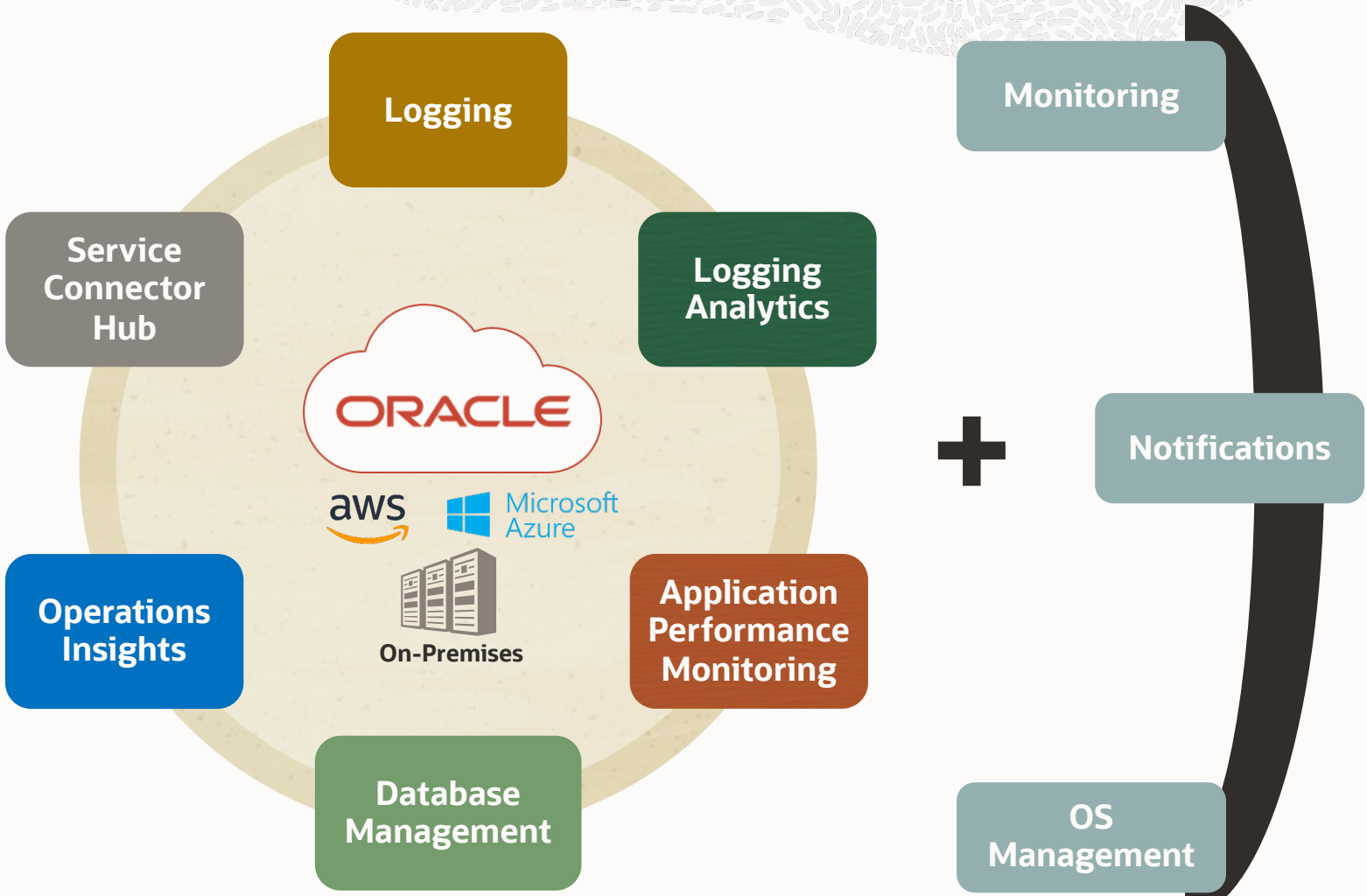
Integrated platform enables seamless analysis across all software components and types of telemetry

Cross-tier view of application, database and infrastructure performance

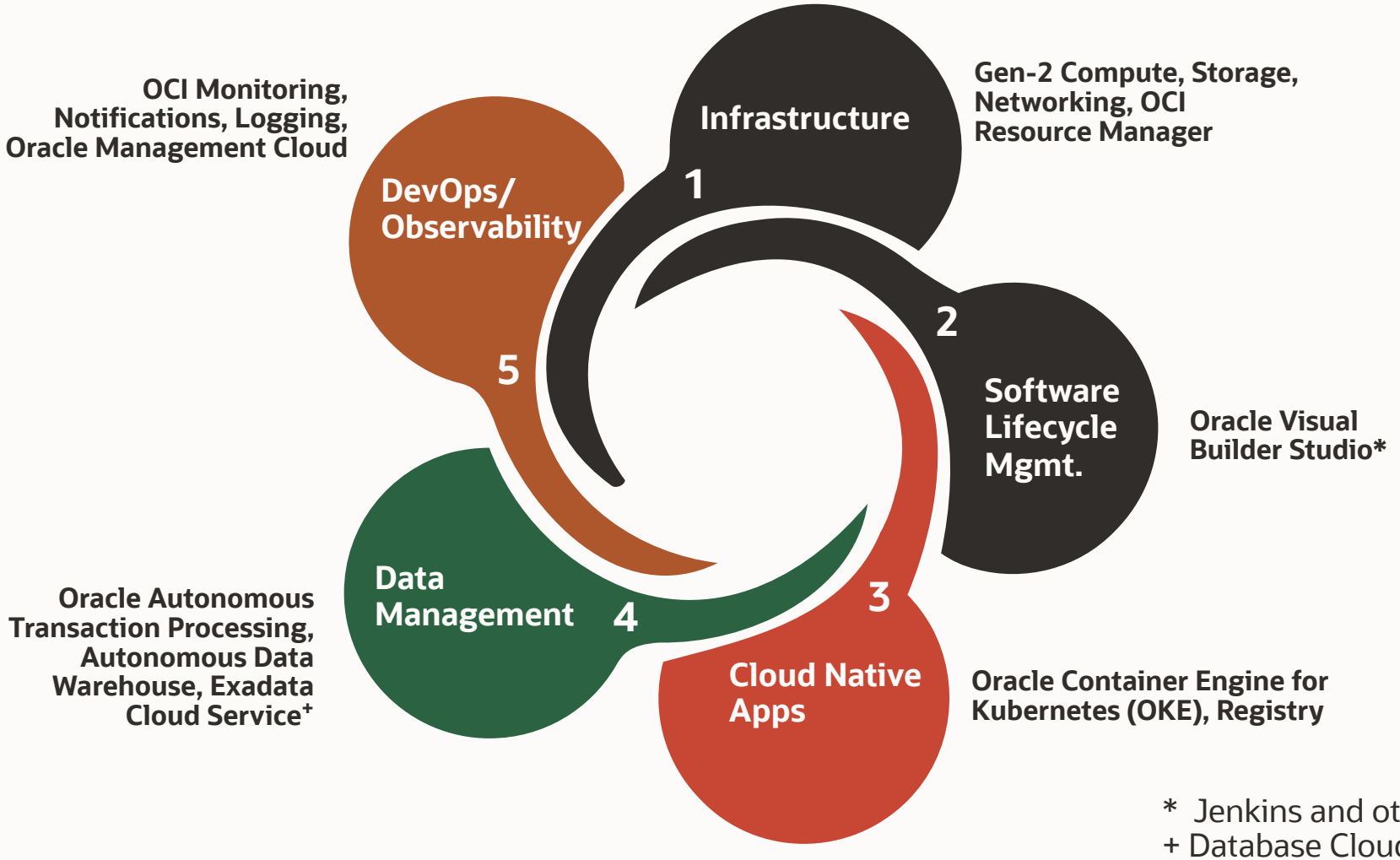
Cloud-native and traditional technology stack support

Enterprise-wide visibility across Oracle Cloud, third-party clouds and on-premises

Ecosystem interoperability through standards-based data exchange and collection



An end-to-end solution



Lifecycle management
from infrastructure setup
to software build & test
to production deployment
with databases
to DevOps/observability

* Jenkins and other CI/CD tools can also be used
\+ Database Cloud Service can also be used

Customer examples : Cloud Native Apps

Simplifying online shopping with AI and cloud native

- Provides world-class visual search cloud native tools for retailers, publishers, and social media companies
- Using OCI resulted in **40% reduction** on hosting costs and **5X reduction** in deployment time

Precision agriculture with AI and Kubernetes

- Leverages Oracle Cloud for AI and aerial imaging technologies that detect and eliminate crop disease
- OCI provided **30X** app performance improvement over the previous vendor
- OCI reduced software delivery time from **24 hours to minutes**

Improving developer and end-user experience with microservices

- Deployed microservices on Kubernetes with Autonomous Database
- Delivered end-to-end system on OCI in just 75 days
- Achieved fast scalability, in minutes, to keep up with peak loads.

Oracle makes it easy to move to the cloud: from design to go-live

Maximize TCO, minimize risk, accelerate your success

Flexible licensing, Volume discounts

Bring Your Own License

BYOL from on-prem to OCI

Extend your Oracle apps support to the cloud

Universal Credits

Credits that can be used for any infrastructure or platform services worldwide

Volume discounts

Ability to ramp consumption, and increase predictability

Easy to migrate, no re-architecture, strong SLAs

No Re-Architecture

Application and data move as-is

Keep customizations, integrations

No retraining required

Availability, Performance, and Manageability SLAs

Including high performance compute, block volume, object storage, and FastConnect

The first major cloud vendor to guarantee performance

Oracle Cloud Lift

White glove services to help you move and go-live at no additional cost

Business Case Development

Architecture Design

Network/Security Review

Onboarding

Migration

Training

Go-Live Support

Oracle Support Rewards

Earn rewards to reduce your tech license support bill, even down to zero

Earn 25 cents for every $1 you spend on OCI

No limits to rewards you can earn, or how much you can apply

Oracle Always Free Cloud Service + 30 Day free trial

https://www.oracle.com/uk/cloud/free/#always-free

Always Free cloud services

Infrastructure

2 AMD based Compute VMs with 1/8 OCPU and 1 GB memory each.

4 Arm-based Ampere A1 cores and 24 GB of memory usable as one VM or up to 4 VMs.

2 Block Volumes Storage, 200 GB total.

10 GB Object Storage.

10 GB Archive Storage.

Resource Manager: managed Terraform.

5 OCI Bastions.

Databases

Your choice of Oracle Autonomous Transaction Processing, Autonomous Data Warehouse, Autonomous JSON Database, or APEX Application Development. Two databases total, each with 1 OCPU and 20 GB storage.

NoSQL Database with 133 million reads per month, 133 million writes per month, 25 GB storage per table, up to 3 tables.

Observability and Management

Monitoring: 500 million ingestion datapoints, 1 billion retrieval datapoints.

Application Performance Monitoring: 1000 tracing events per hour.

Notifications: 1 million sent through https per month, 1000 sent through email per month.

Service Connector Hub: 2 service connectors.

Additional services

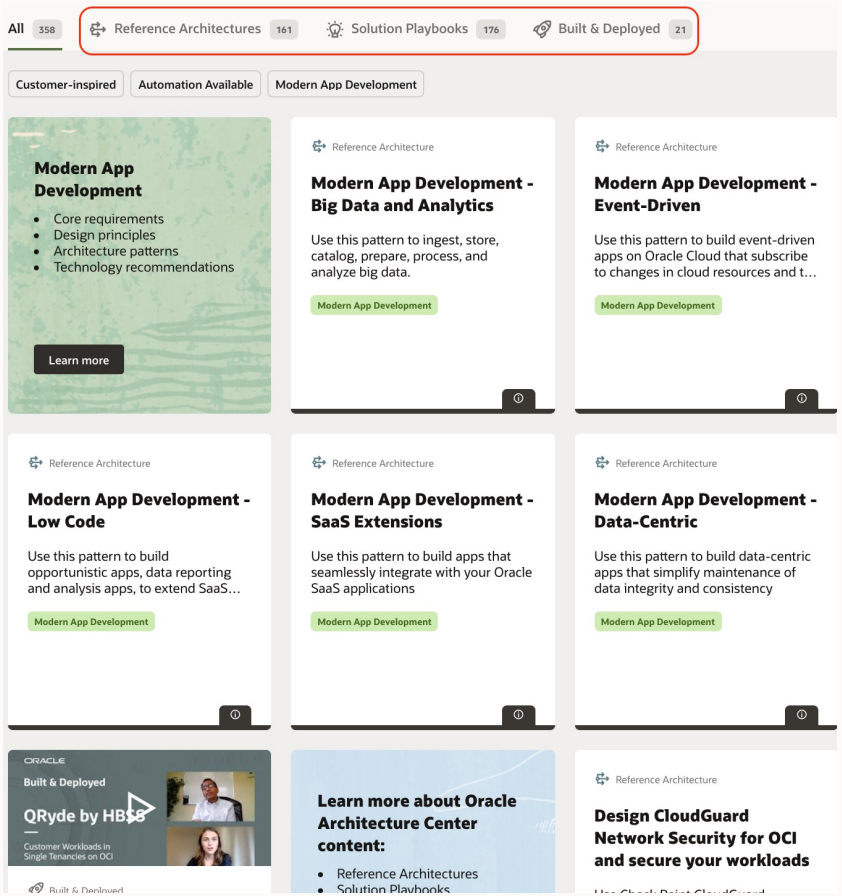
Flexible Load Balancer: 1 instance, 10 Mbps.

Flexible Network Load Balancer.

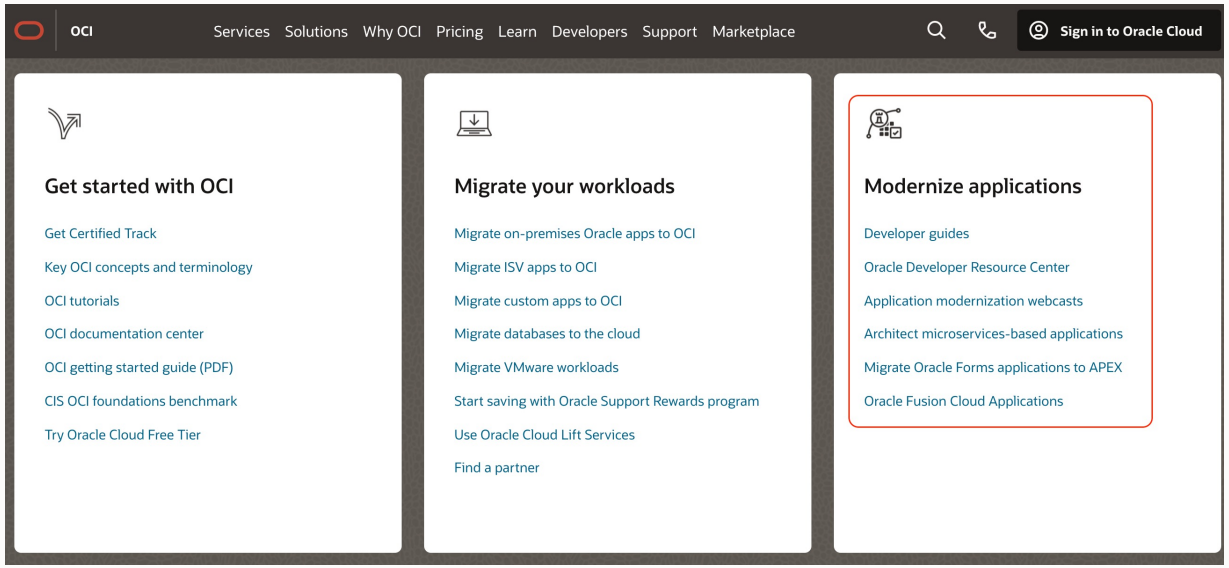
Outbound Data Transfer: 10 TB per month.

Developer Resources

Reference Architecture and Solutions

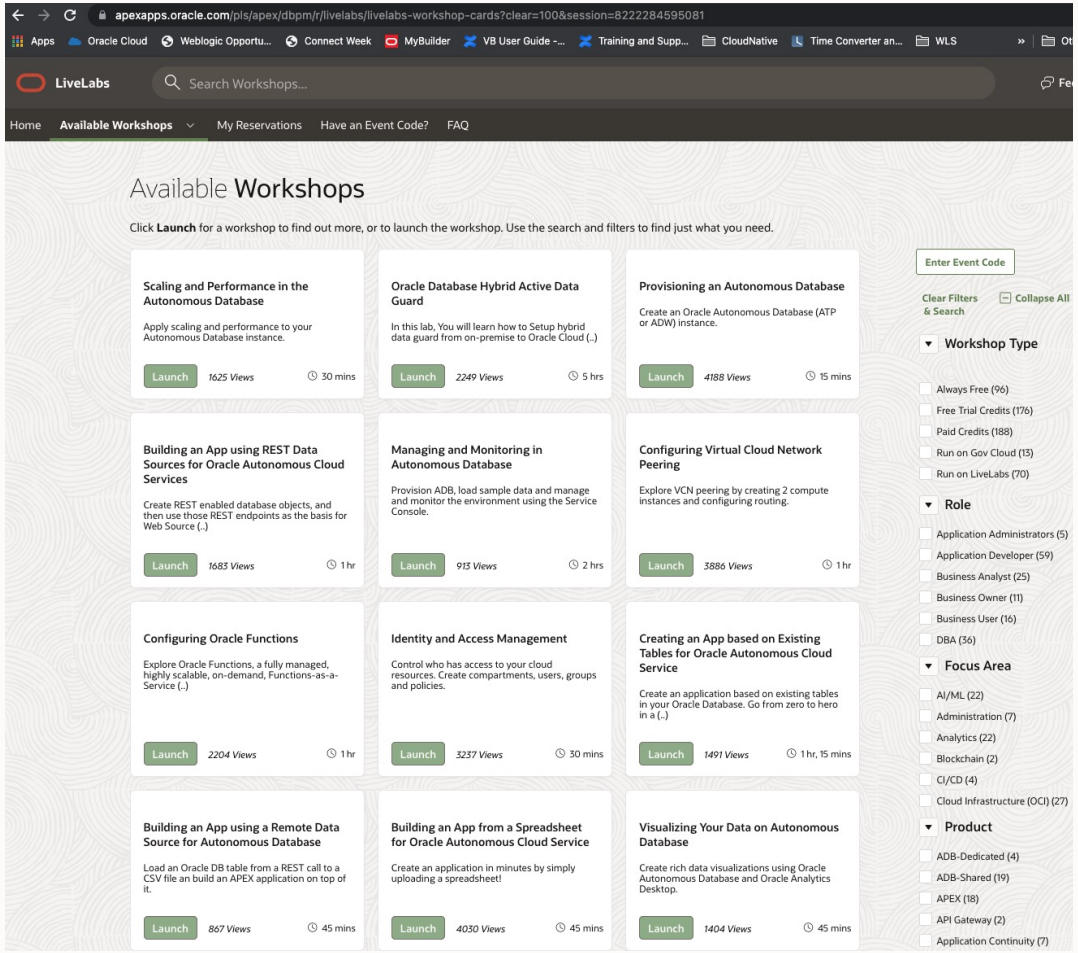


Cloud Adoption Framework

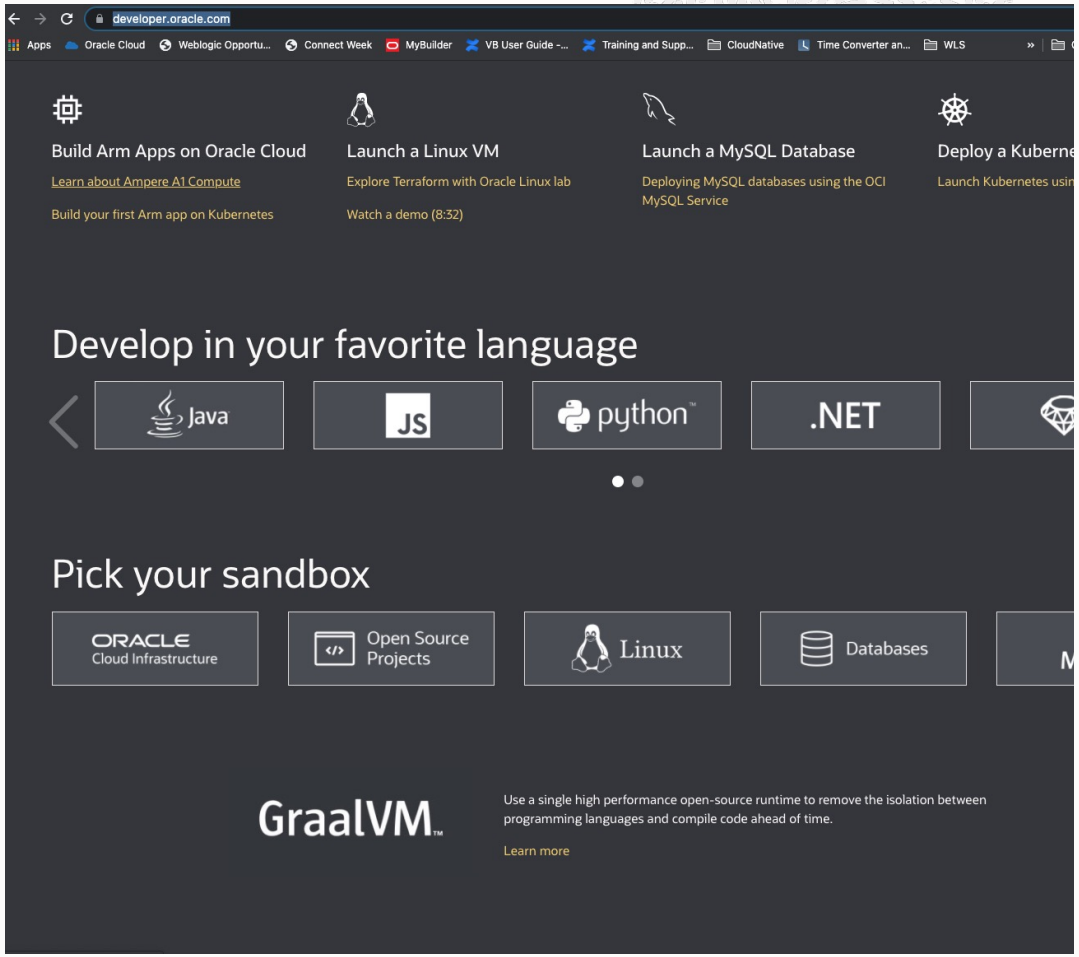


Developer Resources

Oracle Live Labs



https://developer.oracle.com/



Complete cloud services

Developer, DevOps

LOW CODE
APEX, Visual Builder, Digital Assistant

DEVELOPER
Developer, GraalVM, Helidon, SQL Developer, Shell, APIs/SDKs

INFRASTRUCTURE as CODE
Resource Manager, Terraform, Ansible

Applications

SERVERLESS
Events, Functions, API Gateway, Streaming

INTEGRATION
Integration, SOA Service

SAAS
ERP, HC, SC, Sales, Marketing, Service, Vertical Industry

Analytics

ANALYTICS
Analytics, Data Science, Cloud SQL

Data Management

DATA MGMT
Database Migration, Data Integration, Data Catalog

DATA PROCESSING
DataFlow, Big Data

AUTONOMOUS DATABASE
Transactions, Data Warehouse, Dedicated

DATABASE
Bare metal, VMs, Exadata, NoSQL, MySQL

Infrastructure

COMPUTE
Bare metal/VM, CPUs/GPUs/HPC

CONTAINERS
Containers, Kubernetes, Registry

OS / IMAGES
Autonomous Linux, OS Mgmt Service, Marketplace, VMware

STORAGE / IMPORT
NVMe, Block, File, Object, Archive, Data Transfer / Appliance

NETWORKING
VCN, LB, Service Gateway, FC, VPN, Cluster Networking

Governance, Security

GOVERNANCE
IAM, Compartments, Tagging, Cost Analysis

SECURITY
IAM, Audit, KMS, Vault, CASB, Data Safe, DDoS, WAF

OBSERVABILITY
Monitoring, Logging, Notifications, Events, Alarms

MULTICLOUD
Identity, Management

PUBLIC AND GOVERNMENT REGIONS / CLOUD AT CUSTOMER / AZURE

Oracle Cloud Infrastructure: Summary

Price | Performance Advantage

Oracle Cloud Infrastructure Up to 5x faster than AWS

Enterprise SLAs

Availability, Manageability & Performance

Autonomous Data Management

Cut administrative costs by up to 80%

Robust Security

Comprehensive Data & Access Controls, Monitoring & Auditing

Multicloud

Azure InterConnect, VMWare, 50+ connectivity partners

Cloud Deployment Flexibility

Oracle Cloud, Dedicated Region, Roving Edge

Enterprise Customer Base

#1 Enterprise SaaS business
80M daily users,
61B transactions

Complete Portfolio

Gen2 IaaS,
65+ PaaS Services, SaaS

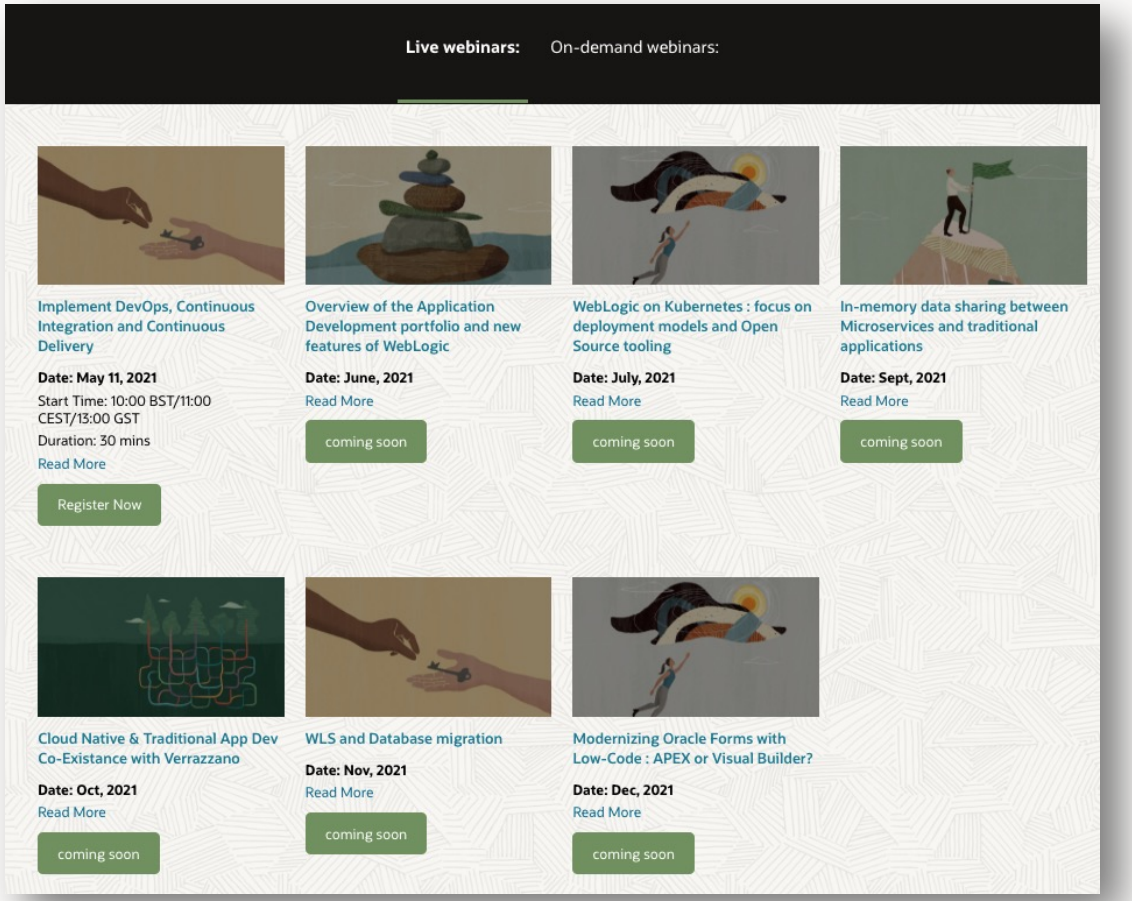
Ease of Purchase

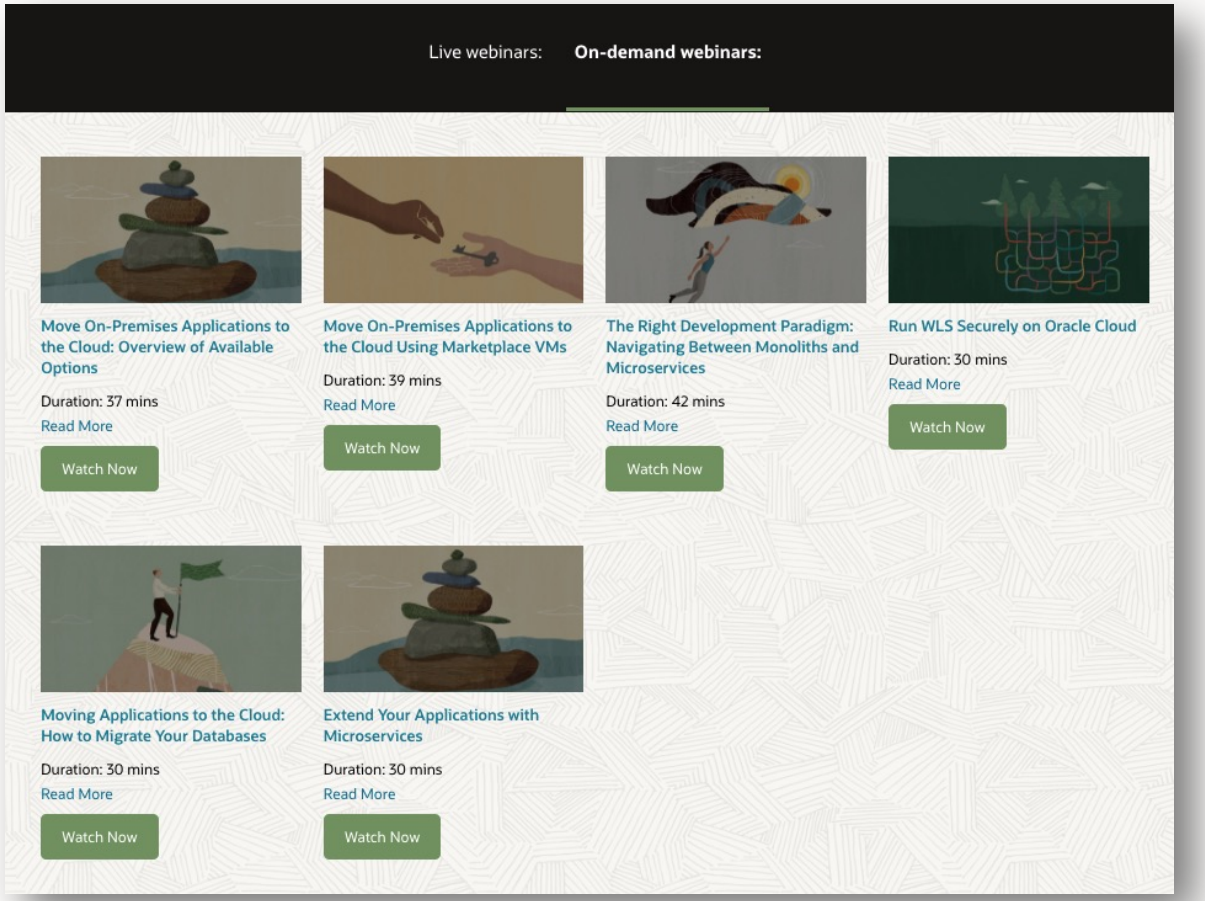
Universal Credits, BYOL

Oracle Support Rewards

Upcoming Events : http://bit.ly/AppDevWebcast

Modernise WebLogic Webinars





Q & A

Thank You!

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