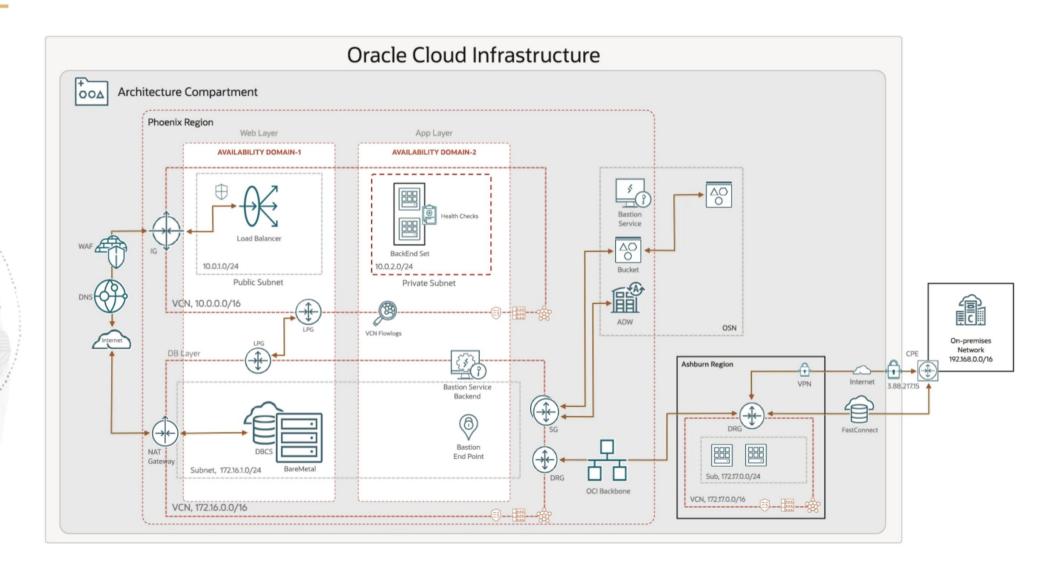
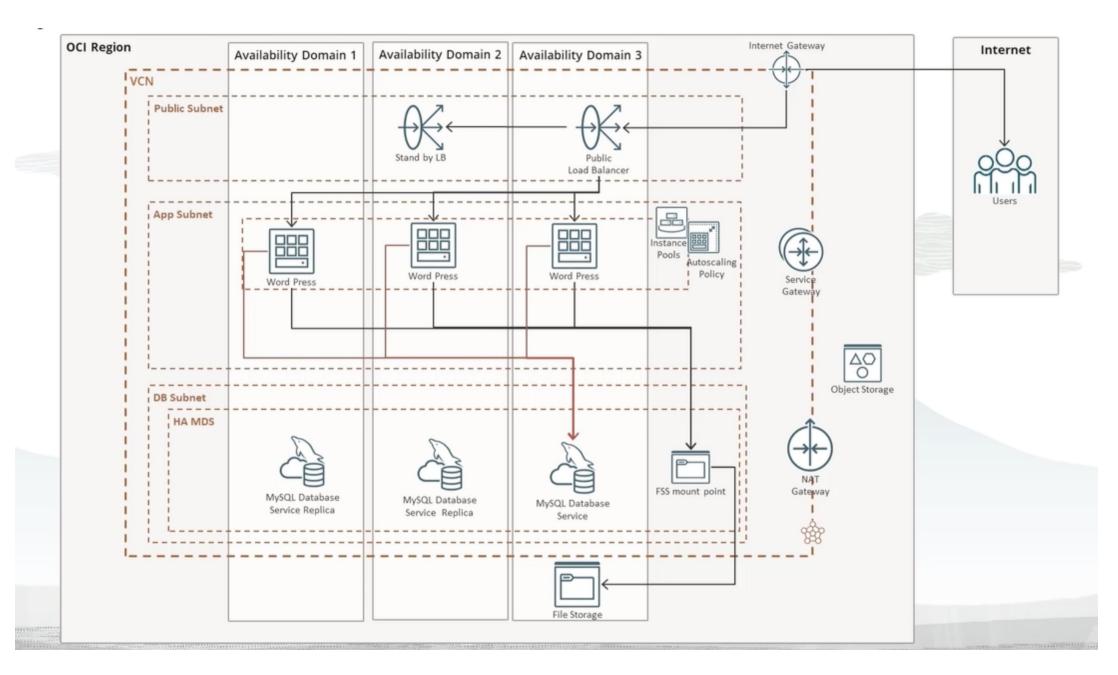
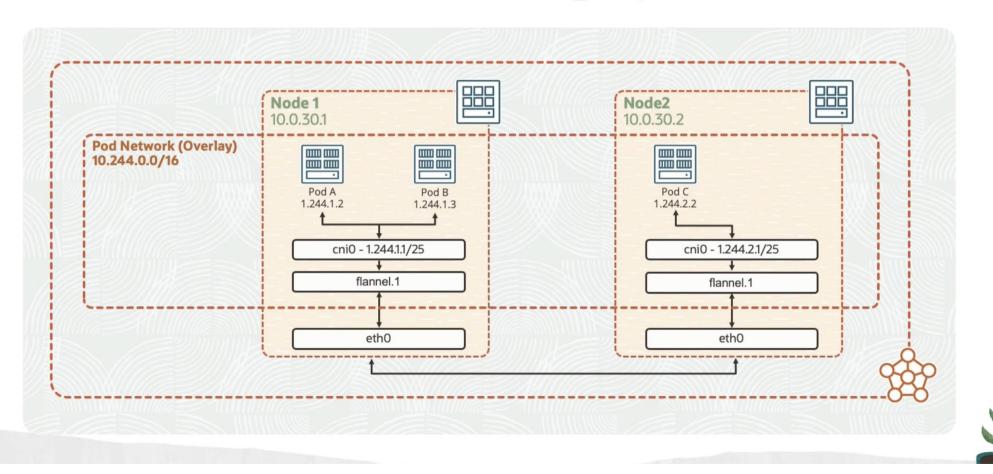
### **OCI Networking Architecture**



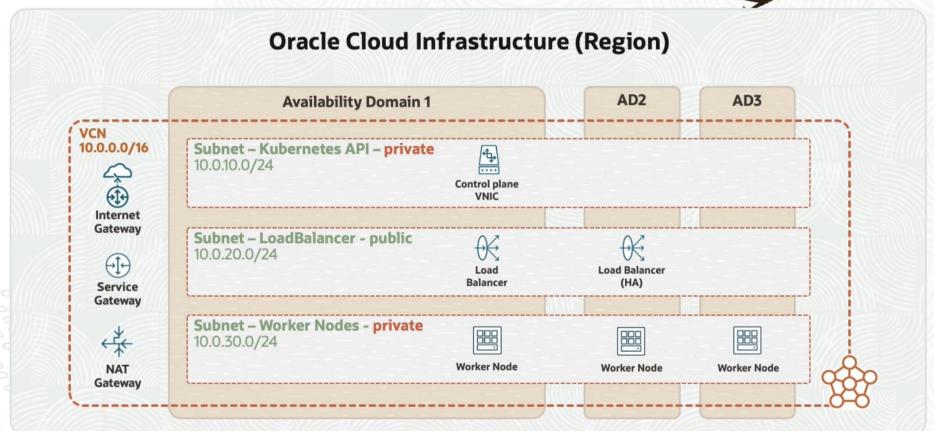


# Network Resource Configuration for Cluster Creation and Deployment

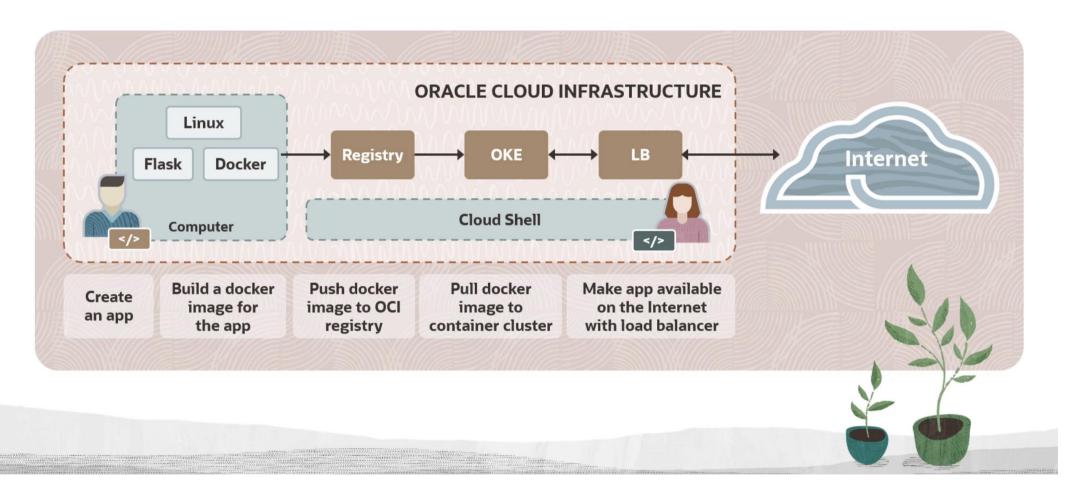


# Network Resource Configuration for Cluster Creation and Deployment





# Deploy a Python Flask Application



## **Functions Integrations**



**Events Service** 

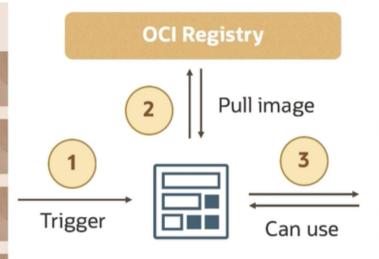
**Notifications** 

Service Connectors (Logs, Data Streams)

**API Gateway** 

**Oracle Integration** 

CLI/SDK



**Object Store** 

**Autonomous DB/DW** 

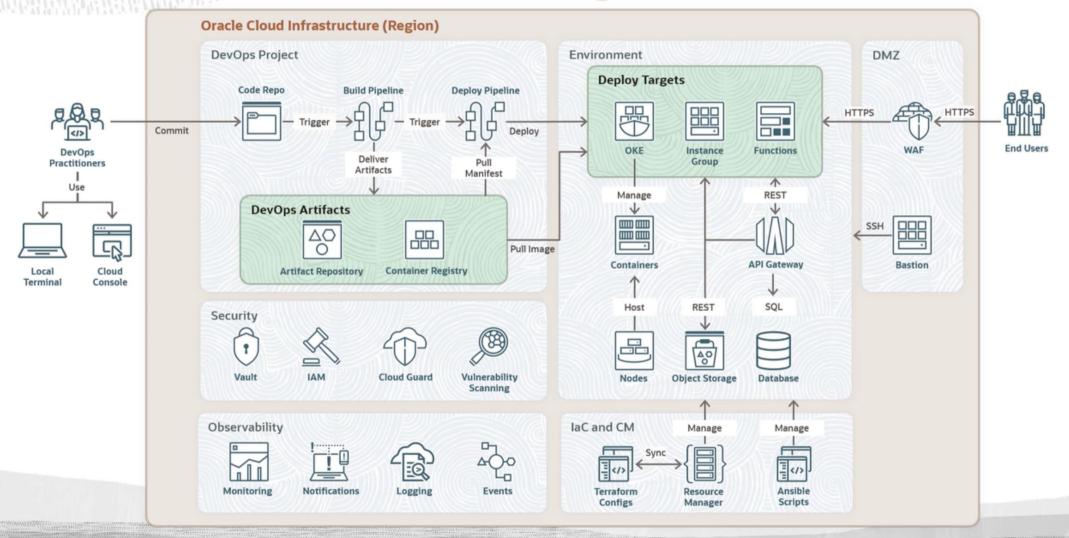
**Secrets** 

Compute

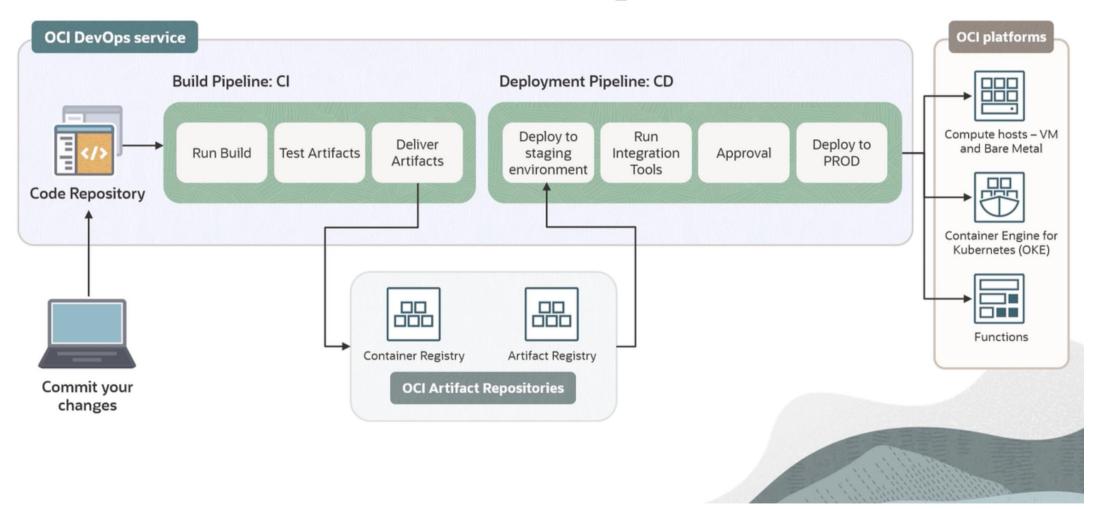
Network

... other services

### OCI DevOps



## OCI DevOps



# Autonomous Database

**Architecture and Supported Ecosystem** 



Oracle Java Cloud Service

Developer Cloud Service

Container Clusters (OKE)

Registry

#### **Developer Tools**



SQL Developer

#### Applications

3rd Party DI Applications on Oracle Cloud Infrastructure

3rd Party DI Applications On-Premise

#### Autonomous Database for Transaction Processing and Mixed Workloads

Built-in Query and Application Development Tools



Machine Learning



Database Actions



REST Data Services



Oracle APEX



Oracle Autonomous Database

#### **Oracle Object Storage Cloud**

Data Files for Loading and External Access

#### Business Intelligence Services

Oracle Analytics Cloud

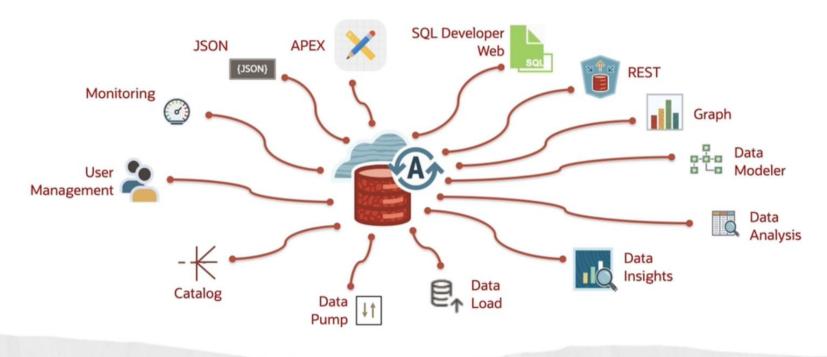
3rd Party Bl on Oracle Cloud Infrastructure

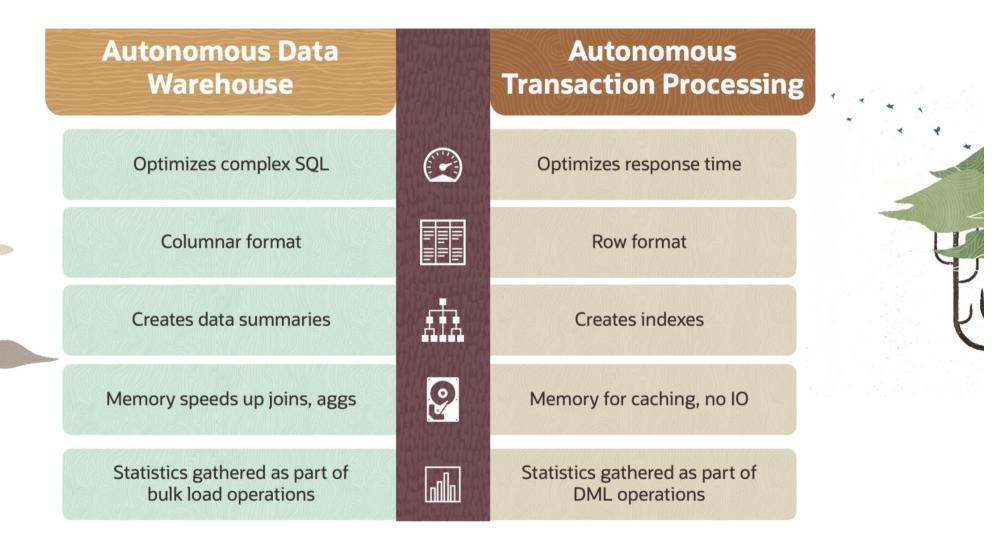
3rd Party Bl On-Premises

## Oracle Autonomous Database

### **Database Actions**

- Self-services tools for development, data, administration and Monitoring
- Web-based interface using REST Data Services





One Autonomous Database: Optimized by Workload

## Oracle Autonomous Database (Shared)

Autonomous Data Guard: RPO and RTO

### **Recovery Time Objective**

Maximum time to restore connectivity to standby(new primary) after an automatic or manual failover is initiated

### **Recovery Point Objective**

Maximum duration (minutes) of potential data loss that can be tolerated during an automatic or manual failover

Local Standby	Failover Type	RTO (Minutes)	RPO (Minutes)
	Automatic	2	0
	Manual	2	Up to 1
Cross-region Standby			
	Failover Type	RTO (Minutes)	RPO (Minutes)
	Automatic	NA	NA
	Manual	15	Up to 1
	((1938))2/(1938)(177		0



## Autonomous Database Disaster Recovery

Backup-based: RPO and RTO

### **Recovery Time Objective**

Maximum time to restore connectivity to standby(new primary) after an automatic or manual failover is initiated

### **Recovery Point Objective**

Maximum duration (minutes) of potential data loss that can be tolerated during an automatic or manual failover

l a sal Da aluus	Failover Type	RTO	RPO (Minutes)
Local Backup	Manual	1 Hr + 1 Hr Per 5 TB	1
copy	MANTE THE COLUMN	MANAGER STEELS	
	CAROLETTA CONTRACTOR CONTRACTOR	CALIFORNIA CARABANTAN ALAMA ALAMA	- C C C C C C C C C C C C C C C C C C C
Cross-region Backup copy	Failover Type	RTO	RPO (Minutes)



# Upgrade a DB System

A database is a collection of data stored on a computer.

A database system is a computer program that allows one to access, interact with, and manipulate a database.





Updating the DB System does not update the operating system.

After launch a DB system, must apply required OS security updates

- IAM Policy
  - Access compartments in Oracle Cloud Infrastructure
- Required for DB system
  - Oracle Linux
  - Use Oracle Grid Infrastructure
  - Complete standalone backup
- Plan and Schedule Upgrade
  - Involves some downtime (even on RAC DB systems)
- To update grid infrastructure on systems with Grid Infrastructure/ASM storage management, must update the DB System

## Shapes for Virtual Machine Database Systems

Platform	OCPU	Memory	Storage	Network	Nodes
VM	1-64	15 GB -1 TB	256 GB – 80 TB	1 – 40 Gbps	1–2

 A VM shape determines the OCPU, Memory, and Network resources allocated to the DB system.

Shape	Туре	ОСРИ	Memory
VM.Standard2.1	Fixed	1	15 GB
VM.Standard2.2	Fixed	2	30 GB
VM.Standard2.4	Fixed	4	60 GB
VM.Standard2.8	Fixed	8	120 GB
VM.Standard2.16	Fixed	16	240 GB
VM.Standard2.24	Fixed	24	320 GB
VM.Standard.E4.Flex	Flex	1 to 64	16GB to 1 TB