Shared Security Model

On-premises

| Applications |
| Data |
| Runtime |
| Middleware |
| Operating System |
| Virtualization |
| Servers |
| Storage |
| Networking |

You Manage Security

Oracle Cloud Infrastructure

| Applications |
| Data |
| Runtime |
| Middleware |
| Operating System |
| Virtualization |
| Servers |
| Storage |
| Networking |

You Manage

Oracle Manages
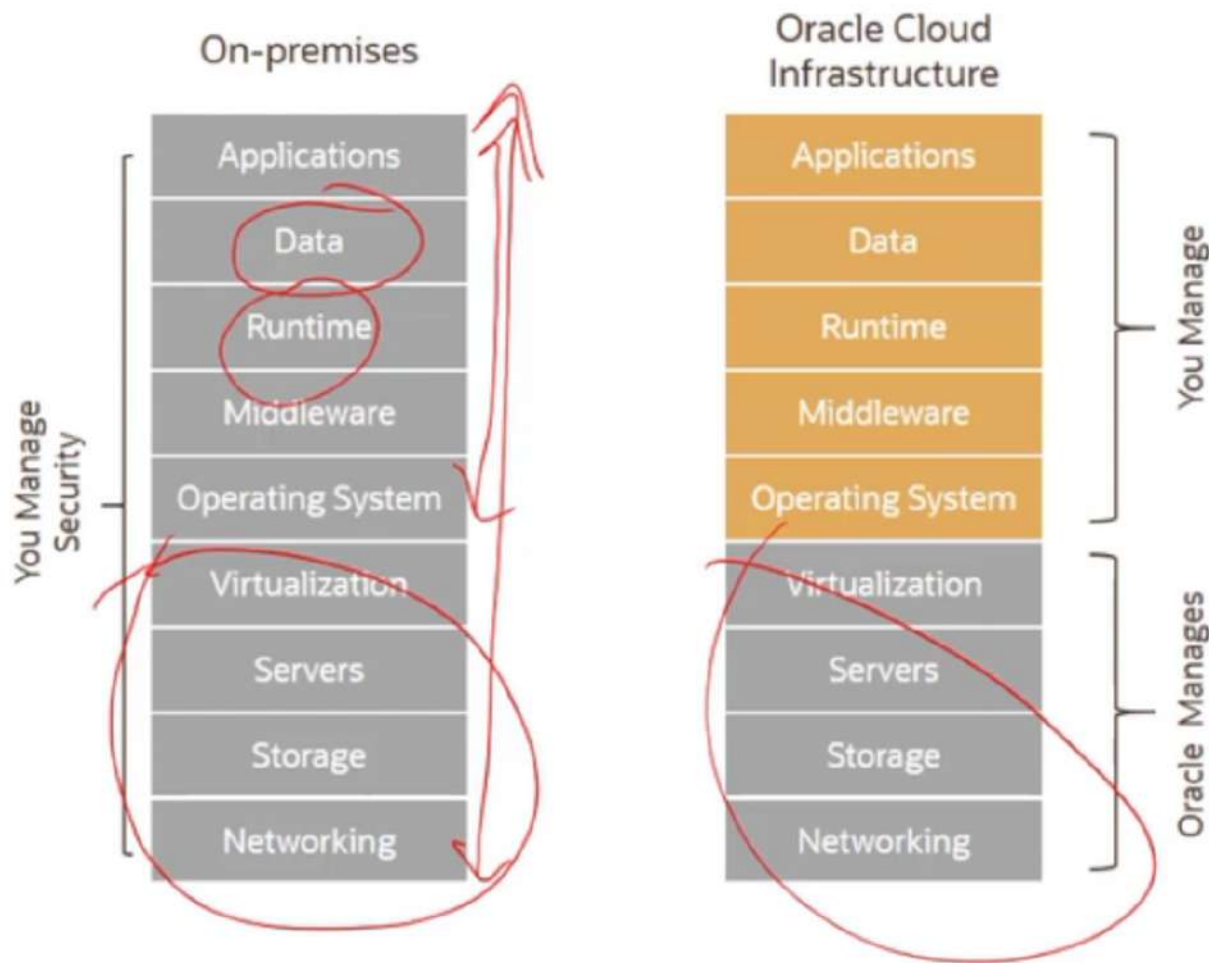
Customer responsible for security in the cloud
- Patching applications and OS, OS configuration
- Identity and access management
- Network security
- Endpoint protection
- Data classification and compliance

Oracle responsible for security of the cloud
- Physical security for the data centers
- Hardware, software, networking

Security Services

	Use case	Service
Identity and Access Management	Manage user access and policies	OCI IAM
	Manage multi-factor authentication	MFA
	Single sign-on to identity providers	Federation
Data Protection	Encryption for data at rest, in-transit	Storage and DB services
	Discover, classify and protect your data	Data Safe
	Hardware based key storage	Key Management
	Centralized key management	Key Management
OS and workload management	Patch Management	OS Management service
	Workload isolation	Bare Metal, Dedicated VM Hosts
Infrastructure Protection	Network security controls	VCN NSG, SL
	Filter Malicious web traffic	Web Application Firewall
	DDoS Protection	In-built

Compliance certifications

Global	AICPA SOC **SOC 1 : SOC 2 : SOC 3**	ISO **27001 : 27017 : 27018**	CSA cloud security alliance **Level 1**	Privacy Shield Framework **US Privacy Shield**	
Government	DoD DISA SRG IL2	DoD DISA SRG IL5	FedRAMP **Moderate – Agency ATO**	**VPAT – Section 508**	HM Government G-Cloud 11 Supplier **G-Cloud 11 - UK** **Model Clauses - EU**
Industry	HIPAA **HIPAA**	PCI DSS COMPLIANT Level 1 **PCI DSS**	FISC **FISC - Japan**	NHS **IG Toolkit - UK**	finma **FINMA - Switzerland**
Regional	General Data Protection Regulation **GDPR - EU**	Federal Office for Information Security C5 **BSI C5 - Germany**	TISAX ENX ASSOCIATION **TISAX - Germany**	**PIPEDA - Canada** CYBER ESSENTIALS PLUS **Cyber Essentials Plus - UK** My Number - Japan	National Cyber Security Centre **Cloud Security Principles - UK**

Pricing Models

Pay as you go (PAYG)

- Charged only for the resource consumed
- No upfront commitment
- No minimum service period
- Usage metered hourly
- Consumption based model for services like Oracle Functions

PaaS

UC Price list, https://www.oracle.com/cloud/ucpricing.html
BYOL FAQs, https://www.oracle.com/cloud/bring-your-own-license/faq/

Pricing Models

Pay as you go (PAYG)	Monthly Flex (Universal Credits)	Bring Your Own License (BYOL)
• Charged only for the resource consumed • No upfront commitment • No minimum service period • Usage metered hourly • Consumption based model for services like Oracle Functions	• A minimum of $1000 monthly charge and a minimum 12 month fixed commitment • Observed 33%-60% savings vs PAYG • Discounts based on size of deal and term of deal • Usage is consumed from monthly prepaid commitment	• Apply your current on-premises Oracle licenses to equivalent, highly automated Oracle IaaS & PaaS services in the cloud • Complete license mobility with on-premises

UC Price list, https://www.oracle.com/cloud/ucpricing.html
BYOL FAQs, https://www.oracle.com/cloud/bring-your-own-license/faq/

Factors that impact Pricing

Resource Size

Bigger resources cost more!

Resource Type *func*

VMs v/s BMs
VMs v/s Functions
BYOL v/s managed DBs..

Data Transfer

No Ingress cost
Careful with Egress cost

All OCI regions have the
same pricing!

Resource Size

Bigger resources cost more!

Resource Type

VMs v/s BMs
Intel v/s AMD
GPU, HPC

Product	Pay As You Go	Monthly Flex	Part Number	Metric
Windows OS	$0.0204	$0.0204	B88318	OCPU Per Hour
Virtual Machine Standard - X5	$0.0638	$0.0638	B88317	OCPU Per Hour
Compute - Virtual Machine Dense I/O - X7	$0.1275	$0.1275	B88516	OCPU Per Hour
Compute - Virtual Machine Standard - X7	$0.0638	$0.0638	B88514	OCPU Per Hour
Compute - Virtual Machine GPU Standard - X7	$1.275	$1.275	B88518	GPU Per Hour
Compute - Virtual Machine Standard - E2 Micro - Free			B91444	OCPU Per Hour
Compute - Standard - E2	$0.03	$0.03	B90425	OCPU Per Hour
Compute - HPC - X7	$0.075	$0.075	B90398	OCPU Per Hour
Compute - BM Standard - B1	$0.0638	$0.0638	B91119	OCPU Per Hour
Compute - VM Standard - B1	$0.0638	$0.0638	B91120	OCPU Per Hour
Compute - Microsoft SQL Enterprise - OCPU Per Hour	$1.47	$1.47	B91372	OCPU Per Hour
Compute - Microsoft SQL Standard - OCPU Per Hour	$0.37	$0.37	B91373	OCPU Per Hour

Block Volume Pricing

Block Volume Pricing
1. Storage cost (GB/month): $0.0255
   +
2. Performance cost (VPU/GB):
   - NA for Basic
   - 10 VPUs at $0.0017 for Balanced
   - 20 VPUs at $0.034 for Higher Performance

	VPUs/GB	IOPS/GB
Basic	NA	2
Balanced	10	60
Higher Performance	20	75

100 GB of BV

Basic
200 IOPS
Storage (S) : $0.0255 x100
Performance (P) : $0
Total (S) + (P) : $2.55

Balanced
6000 IOPS
Storage (S) : $0.0255 x100
Performance (P) : $0.17
Total (S) + (P) : $2.72

100 X 60
.0017 X 100

Higher Performance
7500 IOPS
Storage (S) : $0.0255 x100
Performance (P) : $3.4
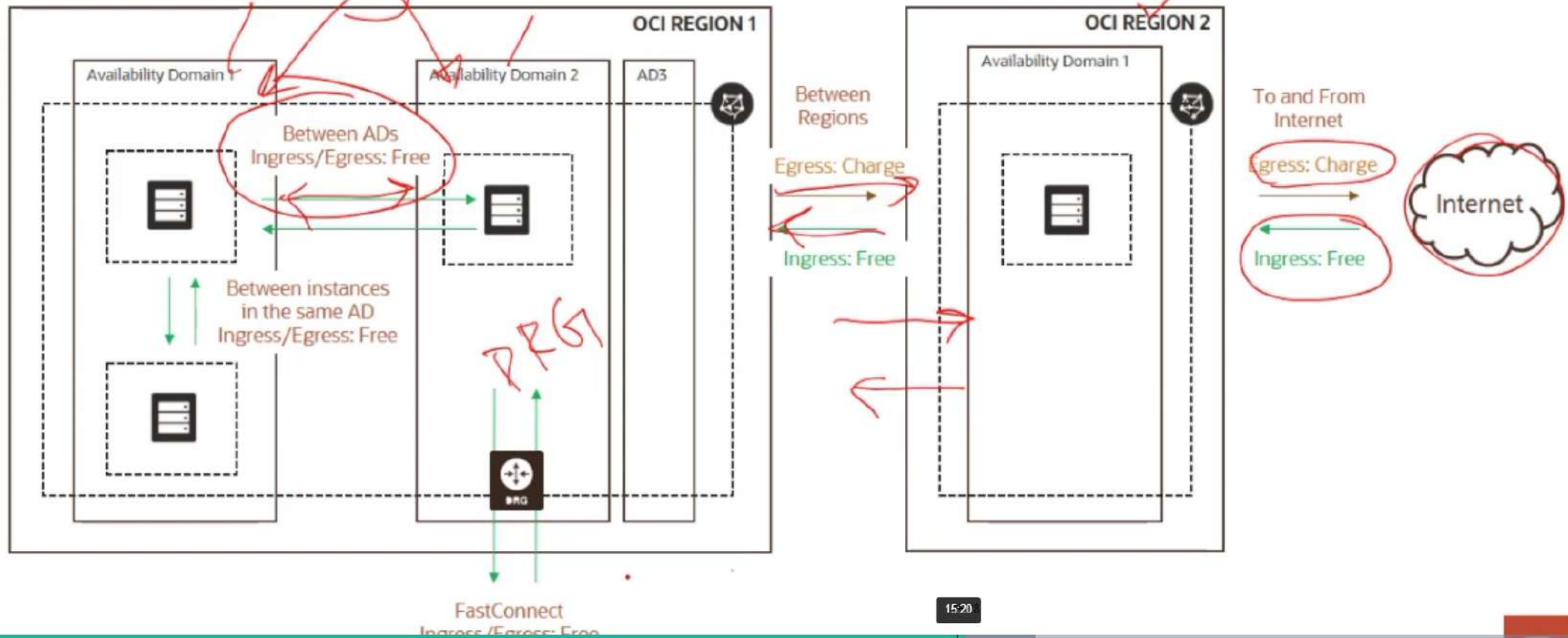Total (S) + (P) : $5.95

100 X ?

Pricing Example
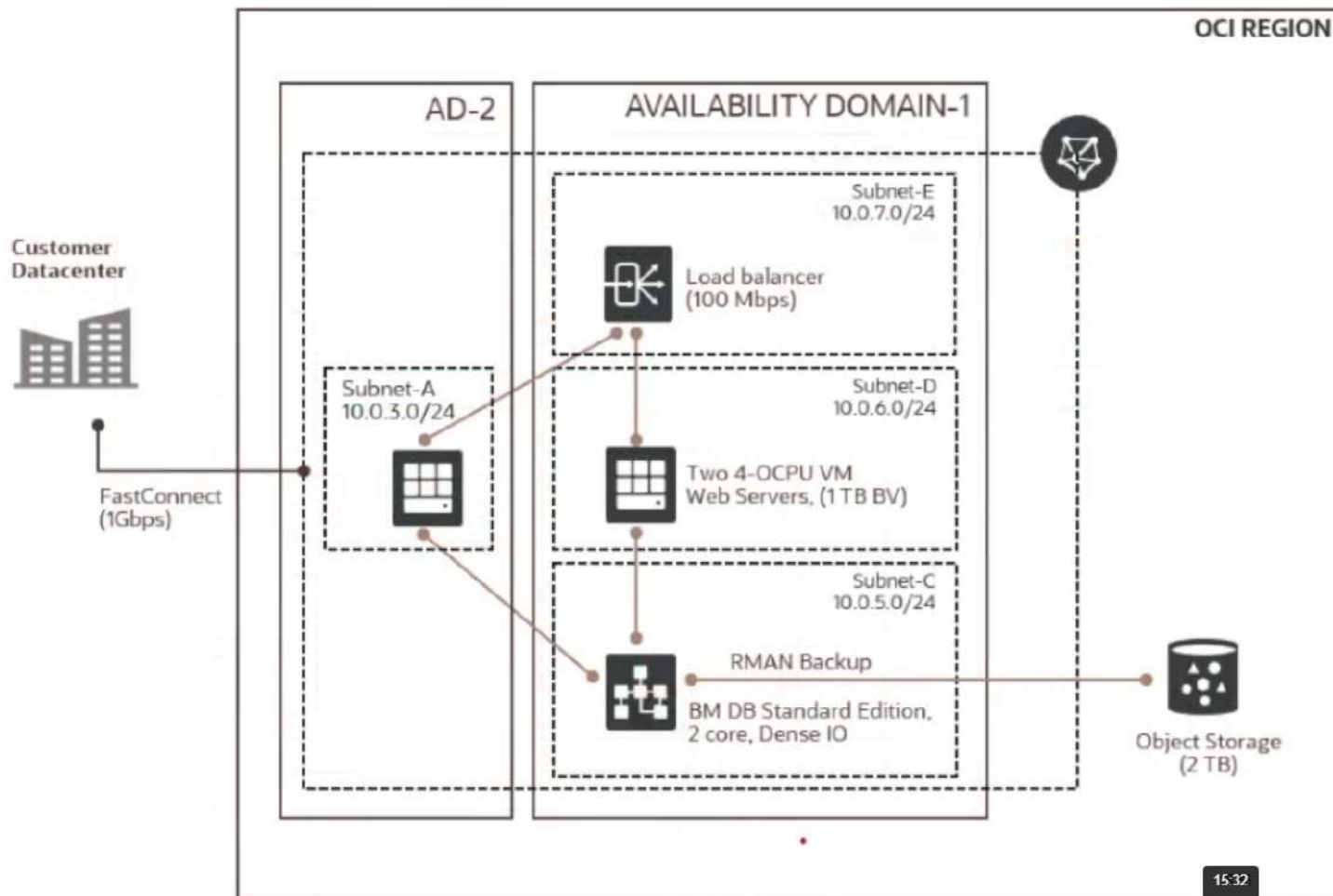
- Two 4-OCPU Virtual Machine instances
- Total Block Volume Storage: 2 TB
- Object Storage Service: 2 TB
- Database Cloud Service: Standard Edition - Dense I/O
- Virtual Cloud Network: 10TB Outbound Data Transfer
- FastConnect: 1 Gbps*
- Load Balancer Service: 100 Mbps

Data Transfer costs

Pricing Example

SKU Name	Part #	PAYG (USD)	Monthly Flex (USD)	Metric	Qty	PAYG Annual cost (USD)	Flex Annual cost (USD)
Oracle Cloud Infrastructure – Block Volume	B91961	$0.0255	$0.0255	GB/month	2000	$612.00	$612.00
Oracle Cloud Infrastructure – Block Volume Performance Units (High Performance)	B91962	$0.034	$0.0017	VPUs/GB/month	2000	$816.00	$816.00
Oracle Cloud Infrastructure – Object Storage - Storage	B88324	$0.0255	$0.0255	GB/month	2000	$612.00	$612.00
Oracle Cloud Infrastructure – Object Storage - Requests	B88323	$0.0034	$0.0034	10K req/month	100	$0.34	$0.34
Oracle Cloud Infrastructure – Compute - Virtual Machine Standard - X7	B88514	$0.0638	$0.0638	OCPU/hour	8	$4,556.80	$4,556.80
Oracle Cloud Infrastructure – Outbound Data Transfer	B88327	$0.0085	$0.0085	GB/month	10	0	0
Oracle Cloud Infrastructure – Database Standard Edition - Dense I/O - X7	B89621	$10.746	$7.164	Hosted/Hr.	1	$95,940.24	$63,960.19
Oracle Cloud Infrastructure – FastConnect 1 Gbps	B88325	$0.2125	$0.2125	Port Hour	1	$1897.20	$1897.20
Oracle Cloud Infrastructure – 100 Mbps Load Balancer	B88319	$0.0213	$0.0213	Load Balancer Hour	1	$190.16	$190.16
				Total		$104,624	$72,644

Cost Analysis

- Visualization tools Help understand spending patterns at a glance
- Filter costs by Date, Tags and Compartments
- To use Cost Analysis you must be a member of the Administrators group

Filtering the usage by tags will show you only the costs generated by the resources tagged with "Finance.CostCenter=Marketing"

Tag all resources
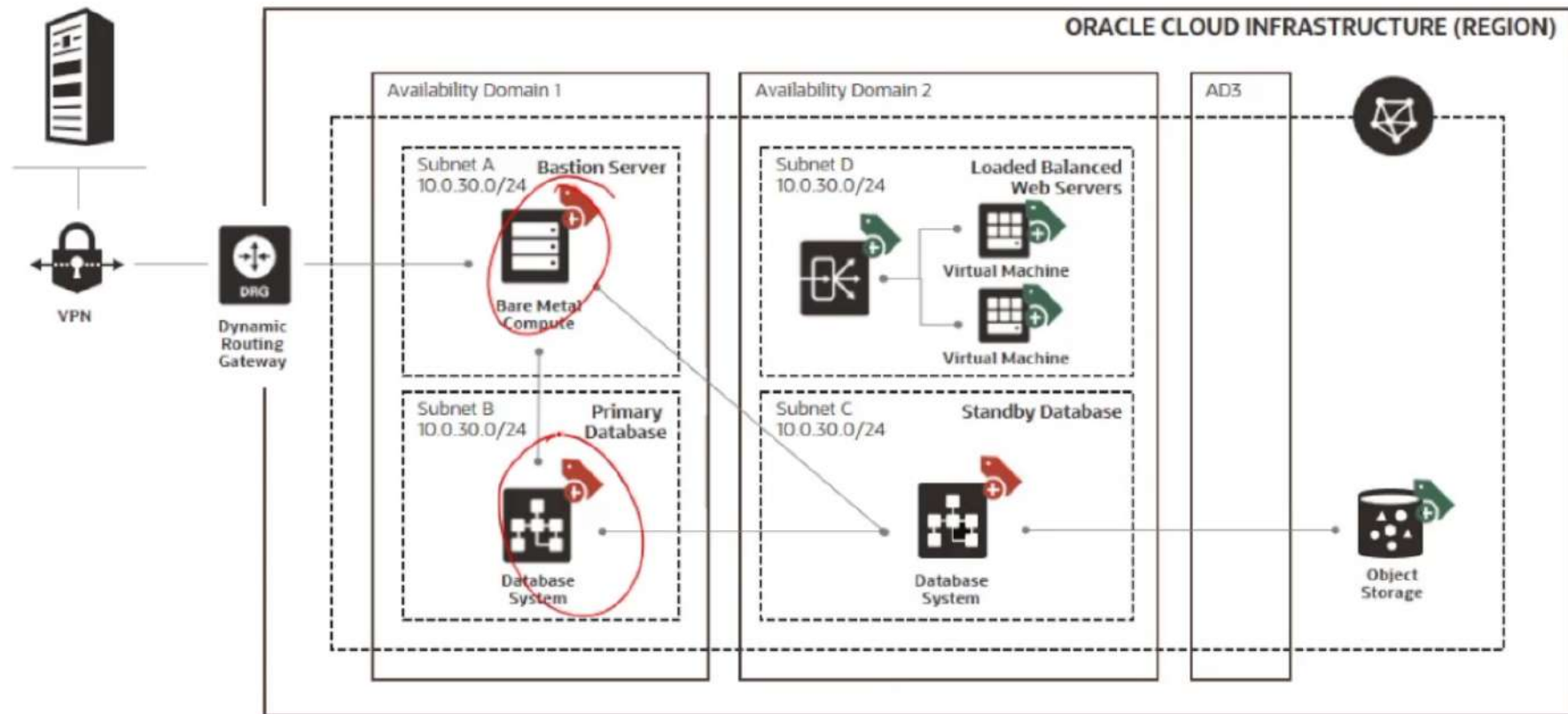
Budgets

- A monthly threshold you define for your OCI spend
- Can be set on cost-tracking tags or compartments and track all spending in the cost-tracking tag or compartment and any child compartments
- Can define email alerts that get sent out for your budget
- Alerts are evaluated every 15 minutes, and can be triggered when your actual or forecasted spending hits either a budget % or a specified amount

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Create Budget

BUDGET SCOPE

○ COMPARTMENT   ○ COST-TRACKING TAG

$100K $2K

NAME

_____

Name can only contain alphanumeric characters, dashes, periods, and underscores.

DESCRIPTION

_____

TARGET COMPARTMENT ⓘ

intoraclerohit (root)

MONTHLY BUDGET AMOUNT

_____

The minimum allowed value is 1; the maximum allowed value is 999,999,999,999

Budget Alert Rule (optional)

You can set up a budget alert rule now, or add it later. You can set up multiple alerts for the same budget.

THRESHOLD METRIC ⓘ

○ ACTUAL SPEND   ○ FORECAST SPEND

+/-

THRESHOLD TYPE ⓘ

○ PERCENTAGE OF BUDGET   ○ ABSOLUTE AMOUNT

THRESHOLD %

_____