

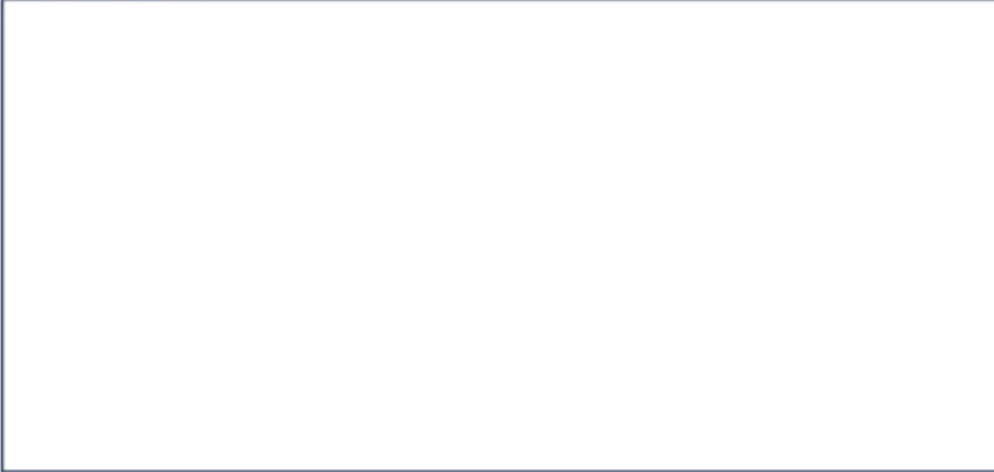
5 - HANDS ON: CRIANDO UMA VPC PARA SUA EMPRESA - PARTE 1

VPC LAB

1 - vamos desenhar a topologia e depois colcoar em pratica.

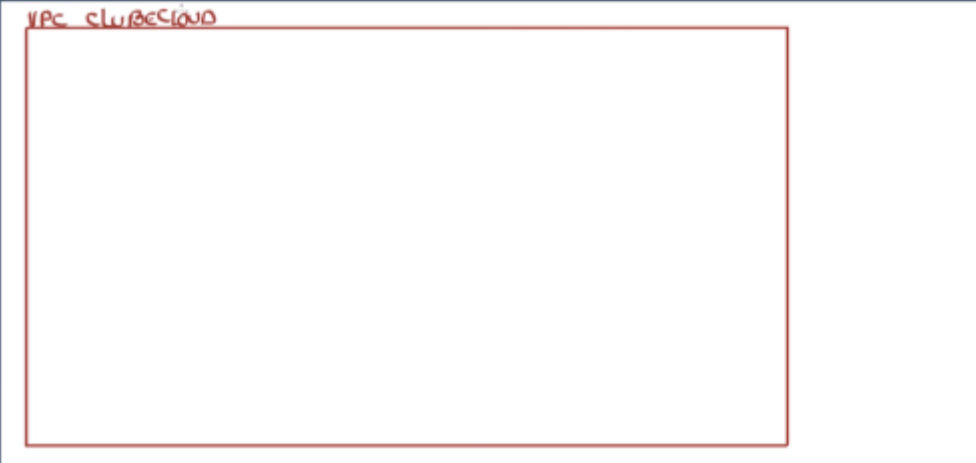
1.1 - vamos criar a empresa com 2 departamentos e inicalmente ela precisa estar dentro de uma regioao.

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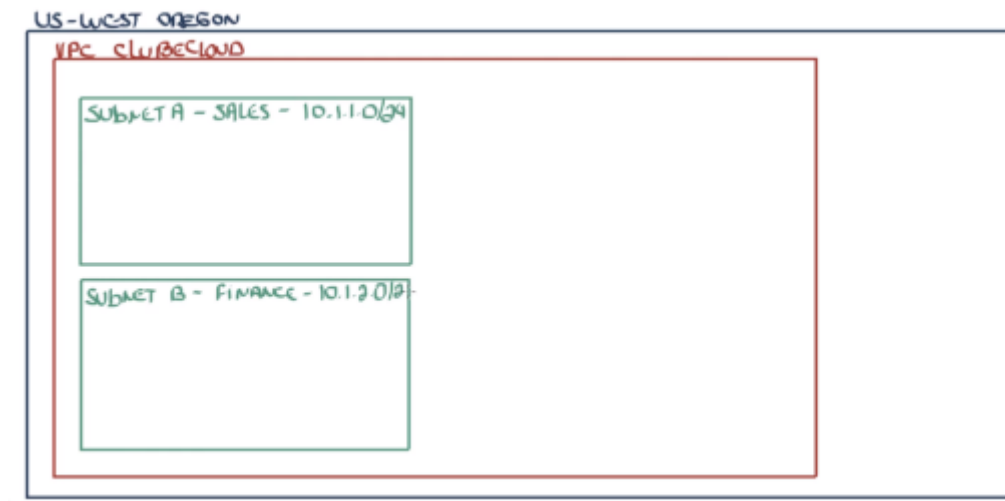
2 - vamos criar o vpc em si

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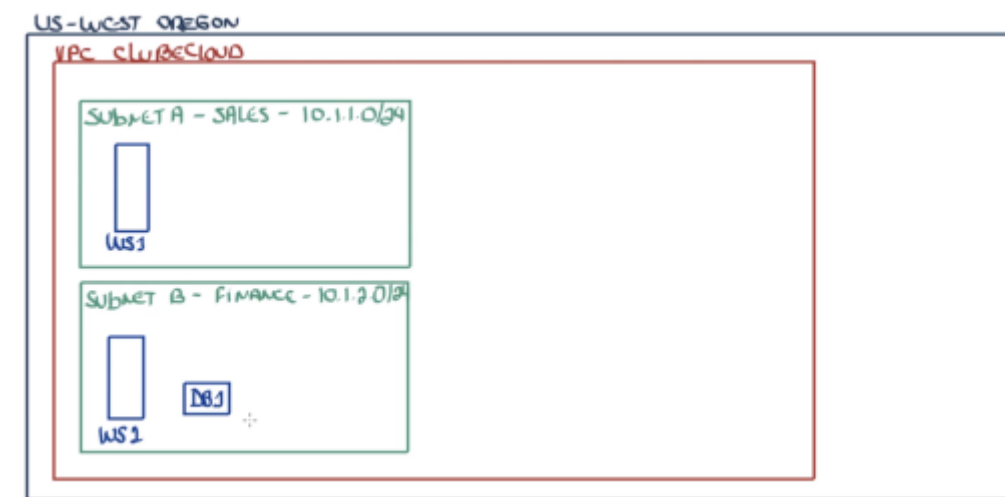


3 - dentro da empresa possuimos departamentos, e cada departamente normalmente fica dentro de uma rede, de uma subnet.

- vamos criar duas subnets



4 - dentro dessas subnets vamos criar dois servidores eb um banco de dados.



HANDS ON

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SERVICES>NETWORKING > VPC

[Launch VPC Wizard](#) [Launch EC2 Instances](#)

Note: Your Instances will launch in the Asia Pacific (Seoul) region.

Resources by Region [Refresh Resources](#)

You are using the following Amazon VPC resources

VPCs See all regions	Seoul 1	NAT Gateways See all regions	Seoul 0
Subnets See all regions	Seoul 4	VPC Peering Connections See all regions	Seoul 0
Route Tables See all regions	Seoul 1	Network ACLs See all regions	Seoul 1
Internet Gateways See all regions	Seoul 1	Security Groups See all regions	Seoul 2
Egress-only Internet Gateways See all regions	Seoul 0	Customer Gateways See all regions	Seoul 0
DHCP options sets See all regions	Seoul 1	Virtual Private Gateways See all regions	Seoul 0
Elastic IPs See all regions	Seoul 0	Site-to-Site VPN Connections See all regions	Seoul 0
Endpoints See all regions	Seoul 0	Running Instances See all regions	Seoul 1
Endpoint Services See all regions	Seoul 0		

- Quando criamos uma instancia EC2 ela cria o vpc default

Create VPC [Info](#)

A VPC is an isolated portion of the AWS cloud populated by AWS objects, such as Amazon EC2 instances.

VPC settings

Name tag - optional

Creates a tag with a key of 'Name' and a value that you specify.

IPv4 CIDR block [Info](#)

IPv6 CIDR block [Info](#)

- ☒ No IPv6 CIDR block
- ☐ Amazon-provided IPv6 CIDR block
- ☐ IPv6 CIDR owned by me

Tenancy [Info](#)

Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your [AWS costs](#).

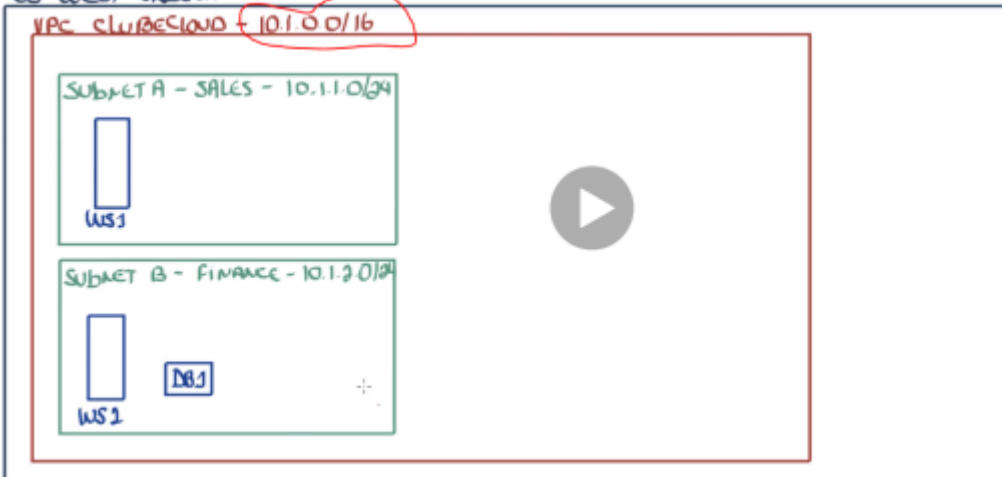
Key

Value - optional

You can add 49 more tags.

ipv4 cidr block -> é o range da subnet do vpc

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/16 é o bloco

-Conseguimos criar 254 departamentos dentro do 10.1.0.0/16

- podemos deixar habilitado o IPv6 da AWS para no futuro se precisarmos fazer a transição ela ja esta habilitada.

- Tenancy

- dedicated -> significa que iremos utilizar servidores fisicos.

VPC settings

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Creates a tag with a key of 'Name' and a value that you specify.

IPv4 CIDR block [Info](#)

IPv6 CIDR block [Info](#)

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Network border group
A network border group is a unique group of Zones from where IPv4 and IPv6 IP addresses are advertised. All Availability Zones in this VPC will use this network border group.

Tenancy [Info](#)

Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key	Value - optional	
<input type="text" value="Name"/>	<input type="text" value="clubcloud-vpc"/>	<input type="button" value="Remove"/>

You can add 49 more tags.

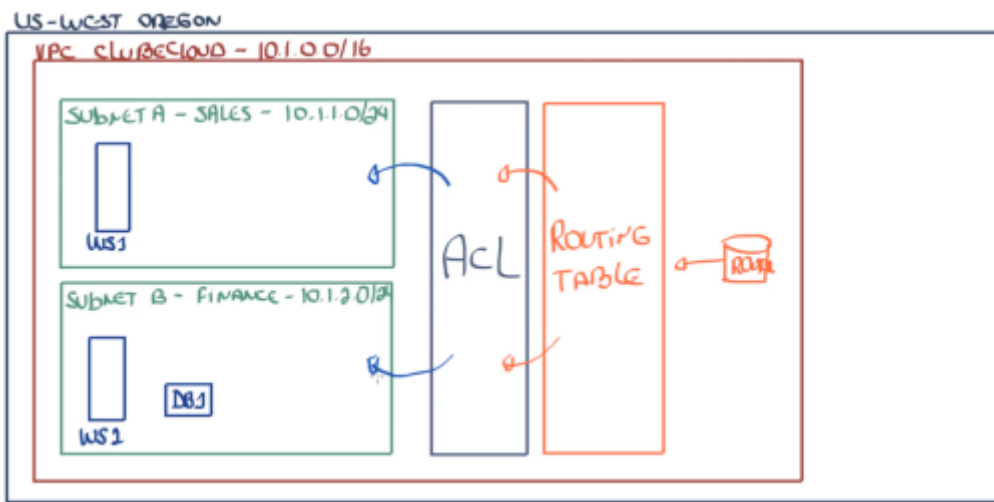
vpc-0bf7ede0f17519b63 / clubcloud-vpc

Details			
VPC ID vpc-0bf7ede0f17519b63	State Available	DNS hostnames Disabled	DNS resolution Enabled
Tenancy Default	DHCP options set default-894062e0	Main route table rtb-075967f1c648647595	Main network ACL acl-02ed85bada7ab6969
Default VPC No	IPv4 CIDR 10.1.0.0/16	IPv4 prefix Amazon Associated	IPv4 CIDR (Network border group) 2600:1f13:c99:5400::/56 (us-west-2) Associated
Route 53 Resolver DNS Firewall rule groups -	Owner ID 06043646045		

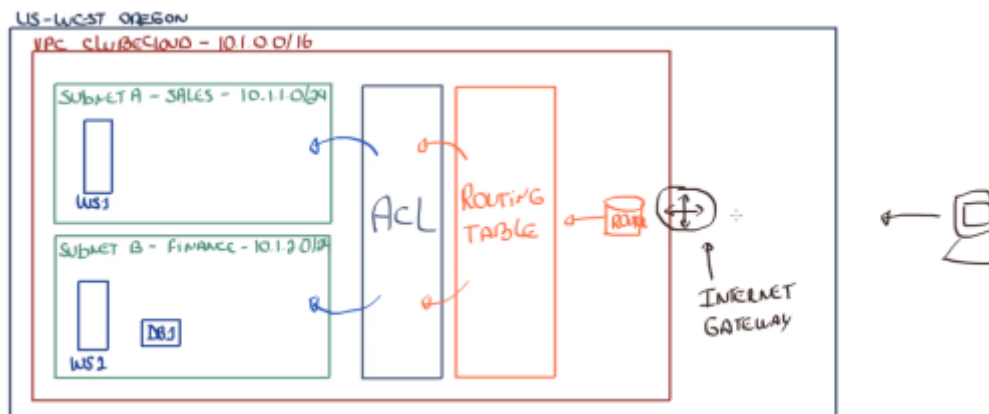
IPv4 CIDRs

CIDR	Status
10.1.0.0/16	Associated

- Ao Criar o VPC, ele acabou criando uma linha de segurança chamada ACL, e alem da ACL ele criou uma tabela de roteamento, ao criar a tabela de roteamento podemos assumir de cara que temos um roteador dentro da VPC



- Quando criamos o VPC ele não cria subnets , mas cria uma tabale de roteamento.
- Depoiis que criarmos a subnet ele ira conseguir fazer o roteamento.
- internet gateway -> seria a conexão do VPC com a internet.



- Conexão do mundo externo para o VPC ou o inverso.

- O internet gateway que temos é do VPC default, criado quando subimos uma maquina

- Na ACL criada por default temos a permissão de trafego para qualquer entrada e saída.

Network ACLs (1/2) info

Filter network ACLs

Name	Network ACL ID	Associated with	Default	VPC ID	Inbound rules count
-	acl-27ab295c	4 Subnets	Yes	vpc-e166c99	2 Inbound rules
<input checked="" type="checkbox"/>	acl-02e8b5ba41abe9969	-	Yes	vpc-08f7ede0f17519b63 / clubecloud...	4 Inbound rules

acl-02e8b5ba41abe9969

Details Inbound rules Outbound rules Subnet associations Tags

Inbound rules (4)

Filter inbound rules

Rule number	Type	Protocol	Port range	Source	Allow/Deny
100	All traffic	All	All	0.0.0.0/0	Allow
101	All traffic	All	All	::/0	Allow
*	All traffic	All	All	0.0.0.0/0	Deny
*	All traffic	All	All	::/0	Deny

- Security group trabalha depois da ACL

Security Groups (1/2) info

Filter security groups

Actions

Create new

<input checked="" type="checkbox"/>	Name	Security group ID	Security group name	VPC ID	Description	Owner	Inbound rules
<input checked="" type="checkbox"/>	sg-07f49661869f831c0	sg-07f49661869f831c0	default	vpc-b6f7ede0f17519b65	default VPC security group	060435466843	1 Permission
<input type="checkbox"/>	sg-625ab783	sg-625ab783	default	vpc-e1efcc39	default VPC security group	060435466843	1 Permission

sg-07f49661869f831c0 - default

Details

Inbound rules

Outbound rules

Tags

Details

Security group name

default

Security group ID

sg-07f49661869f831c0

Description

default VPC security group

VPC ID

vpc-b6f7ede0f17519b65

Owner

060435466843

Inbound rules count

1 Permission entry

Outbound rules count

2 Permission entries