

02

Mão à obra: Criando servidor na Amazon

Agora que já temos o banco de dados funcionando na Amazon e as imagens sendo salvas no Bucket que criamos com o serviço do S3, só falta nós configurarmos um servidor na Amazon para levarmos posteriormente a aplicação da Casa do Código. Para isso, utilizaremos o serviço do **Elastic Compute Cloud (EC2)**, no painel de console, pesquise por esse serviço:



Na sequência, certifique-se que estamos na região **N.Virginia** e clique no botão para subir a instância na Amazon:

The screenshot shows the AWS EC2 Dashboard. In the top navigation bar, the region is set to "N. Virginia". On the left sidebar, there are several tabs: EC2 Dashboard, Instances, Images, and Elastic Block Store. The main area is titled "Resources" and displays summary statistics for the US East (N. Virginia) region: 0 Running Instances, 0 Dedicated Hosts, 0 Volumes, 2 Key Pairs, 0 Placement Groups, 0 Elastic IPs, 0 Snapshots, 0 Load Balancers, and 1 Security Groups. Below this, there is a promotional message about EC2 Spot instances. At the bottom of the main area, there is a "Create Instance" section with a "Launch Instance" button, which is highlighted with a mouse cursor. To the right of the main area, there is a sidebar titled "Account Attributes" and another titled "Additional Information".

A primeira coisa que devemos informar é qual será a imagem base utilizada pelo servidor, no nosso projeto utilizaremos a imagem base do Ubuntu:

The screenshot shows the "Step 1: Choose an Amazon Machine Image (AMI)" screen. On the left, there is a checkbox for "Free tier only". Below it, three AMI options are listed: "Red Hat Enterprise Linux 7.4 (HVM), SSD Volume Type - ami-c998b6b2" (Red Hat, Free tier eligible), "SUSE Linux Enterprise Server 12 SP3 (HVM), SSD Volume Type - ami-6b4cc411" (SUSE Linux, Free tier eligible), and "Ubuntu Server 16.04 LTS (HVM), SSD Volume Type - ami-aa2ea6d0" (Ubuntu, Free tier eligible). The third option, "Ubuntu Server 16.04 LTS (HVM), SSD Volume Type - ami-aa2ea6d0", is highlighted with a red box around its "Select" button. The "Select" button for this AMI is also highlighted with a red box.

Posteriormente, devemos informar as configurações desse servidor na Amazon. Vamos colocar esse servidor no datacenter da localidade **B** do Norte da Virgínia, **us-east-1b**. Esse servidor precisará ser acessado pelos usuários da internet, dessa forma, é preciso que a Amazon forneça um endereço IP público para esse servidor **Auto-assign Public IP: Enable**

Step 3: Configure Instance Details

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the role to the instance, and more.

Number of instances: 1

Purchasing option: Request Spot Instances

Network: vpc-887f28f1 (default) | Create new VPC

Subnet: subnet-35ddae6f | Default in us-east-1b | Create new subnet
4091 IP Addresses available

Auto-assign Public IP: Enable

IAM role: None | Create new IAM role

Shutdown behavior: Stop

Enable termination protection: Protect against accidental termination

Monitoring: Enable CloudWatch detailed monitoring
Additional charges apply.

Cancel Previous

Na sequência, clique em **Next** até aparecer a parte de configuração do grupo de segurança que será vinculado a esse servidor. Dê o nome para esse grupo de segurança como sendo **SG-EC2**. Esse grupo de segurança deverá já ter configurado a liberação da porta 22 utilizada pelo protocolo SSH, mas precisaremos instalar o Tomcat nesse servidor posteriormente que utiliza a porta de comunicação **8080**. Dessa forma, é preciso liberar o acesso a essa porta de comunicação:

Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. Learn more about Amazon EC2 security groups.

Assign a security group: Create a new security group
 Select an existing security group

Security group name: SG-EC2

Description: launch-wizard-1 created 2017-12-06T09:28:49.062-02:00

| Type | Protocol | Port Range | Source | Description |
|------------|----------|------------|------------------------|----------------------------|
| SSH | TCP | 22 | Custom 0.0.0.0/0 | e.g. SSH for Admin Desktop |
| Custom TCP | TCP | 8080 | Custom 0.0.0.0/0, ::/0 | e.g. SSH for Admin Desktop |

Add Rule

Feito isso, clique no botão para criar a instância, uma vez que clicamos nesse botão é necessário nós criarmos uma chave a qual irá acessar esse servidor na Amazon, selecione a opção **Create a new key pair** e dê o nome da chave, por exemplo **chave_EC2_1** e clique no botão **Launch Instances**

Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about removing existing key pairs from a public AMI.

Create a new key pair: chave_EC2_1

Download Key Pair

You have to download the **private key file** (* pem file) before you can continue. **Store it in a secure and accessible location**. You will not be able to download the file again after it's created.

Cancel Launch Instances

Qual é o resultado, o servidor foi criado na Amazon?

