

Diplomado en Interoperabilidad de Sistemas de Información mediante X-Road

Sección 2.3

Escenario Básico de Interoperabilidad

5

AWS Educate

Activación de cuenta AWS

1. Tras el correo recibido con la invitación a AWS Educate, realizar el registro correspondiente, con los siguientes datos:

Institution name: Universidad Nacional de Colombia

Country: Colombia

Grad Month: 01

Grad Year: 2021

The screenshot shows the AWS Educate registration interface. At the top, the AWS Educate logo is displayed with the text "Apply to join AWS Educate". Below this, a blue banner indicates "Step 2/3: Tell us about yourself". The form is divided into several sections. The first section contains fields for "Institution Name" (with a hint to start typing and select from a list), "Country" (a dropdown menu), "City" (a text field), "First Name", "Last Name", "Field of Study" (a dropdown menu), "Email" (with a hint to provide a valid institutional email), "Grade Level" (a dropdown menu), "Grad Month" (a dropdown menu), and "Grad Year" (a dropdown menu). The second section contains "Birth Month" (a dropdown menu), "Birth Year" (a dropdown menu), and "Promo Code" (a text field). Below these fields is a CAPTCHA challenge with the text: "Please click the box below to help assure that a person and not an automated program is submitting this application. If a set of letters is displayed enter them on the line. If you have any difficulty with the letters, you can click the reload icon to get a new set of letters, or click the headphones to hear audio of what to enter." The CAPTCHA interface includes a checkbox labeled "I'm not a robot", a reload icon, and a "NEXT" button. A link for "Frequently Asked Questions" is also visible.

2. Tras realizar el registro y recibir el correo de notificación de activación de la cuenta, iniciar sesión en [AWS Educate](#).
3. Ir a la opción **My Classrooms** y aceptar la invitación al curso **X-Road** (botón **Accept Invitation**).

My Classrooms

View your list of Classroom invitations and accept or decline the invitation. Access a Classroom by clicking Go to my classroom.

Course Name ⓘ	Description	Educator ⓘ	Course End Date ⓘ	Credit Allocated Per Student ⓘ	Status
X-Road (G9)	X-Road (G9)	Jeisson Andrés Vergara Vargas	12/10/2020	\$50	Accept Invitation Decline

- Tras la aceptación al curso, hacer clic en el botón **Go to classroom**.

My Classrooms

View your list of Classroom invitations and accept or decline the invitation. Access a Classroom by clicking Go to my classroom.

Course Name ⓘ	Description	Educator ⓘ	Course End Date ⓘ	Credit Allocated Per Student ⓘ	Status
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- Aceptar los términos y condiciones.
- Hacer clic en el botón **AWS Console**.

Welcome to your AWS Educate Account

AWS Educate provides you with access to a wide variety of AWS Services for you to get your hands on and build on AWS! To get started, click on the AWS Console button to log in to your AWS console.

Please read the FAQ below to help you get started on your Starter Account.

- [What are the list of services supported?](#)
- [What regions are supported with Starter Accounts or Classroom Accounts?](#)
- [I can't start any resources. What happened?](#)
- [Can I create users within my Starter or Classroom Account for others to access?](#)
- [Can I create my own IAM policy within Starter Account or Classroom?](#)
- [Can I use marketplace software with my Starter Account or Classrooms?](#)

Your AWS Account Status

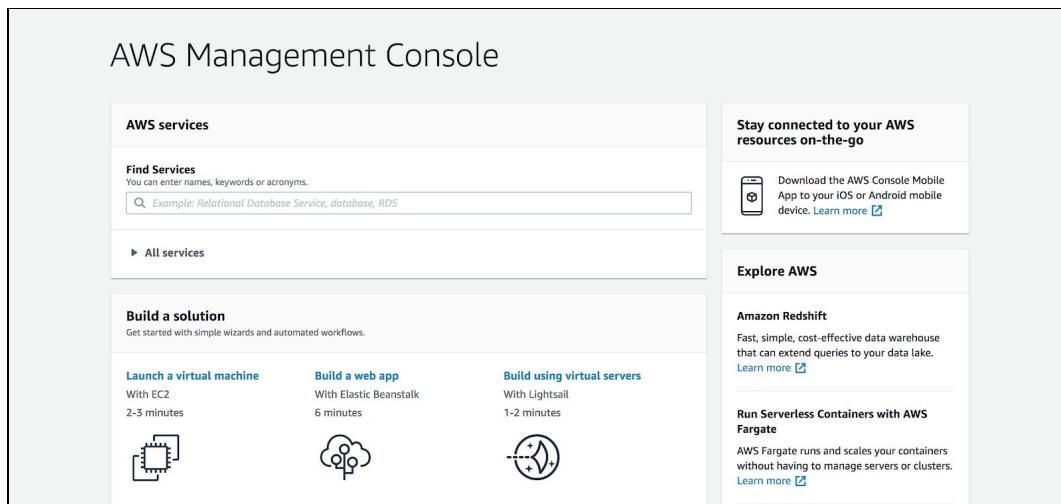
Active
full access ()

\$50
remaining credits (estimated)

2:60
session time

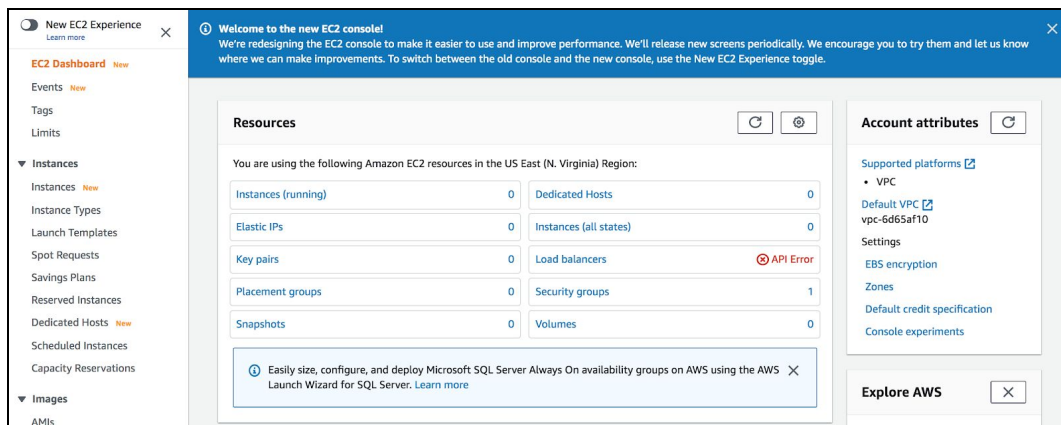
[Account Details](#)
[AWS Console](#)

Please use AWS Educate Account responsibly. Remember to shut down your instances when not in use to make the best use of your credits. And, don't forget to logout once you are done with your work!

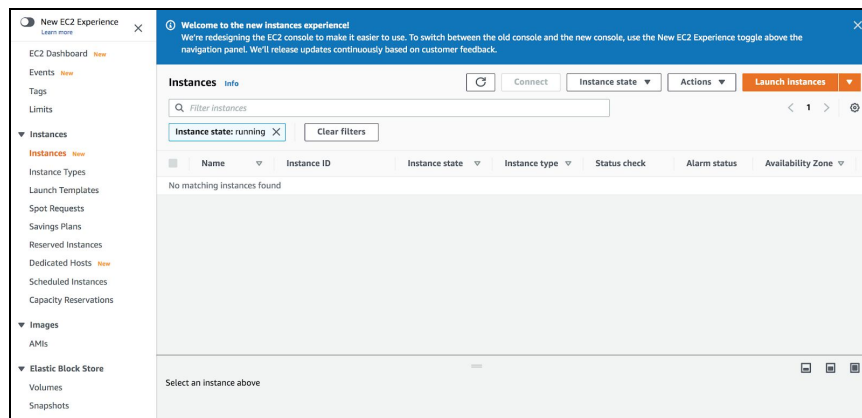


Creación de Máquina Virtual

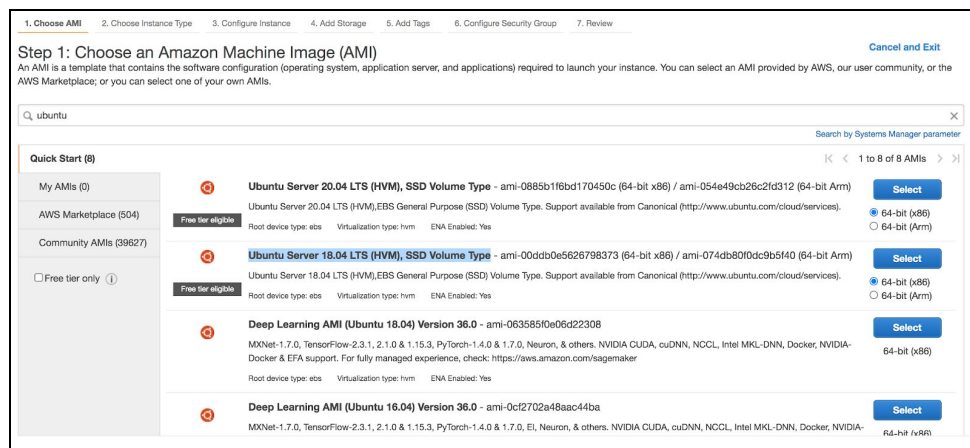
1. Ir al servicio Amazon **EC2**.



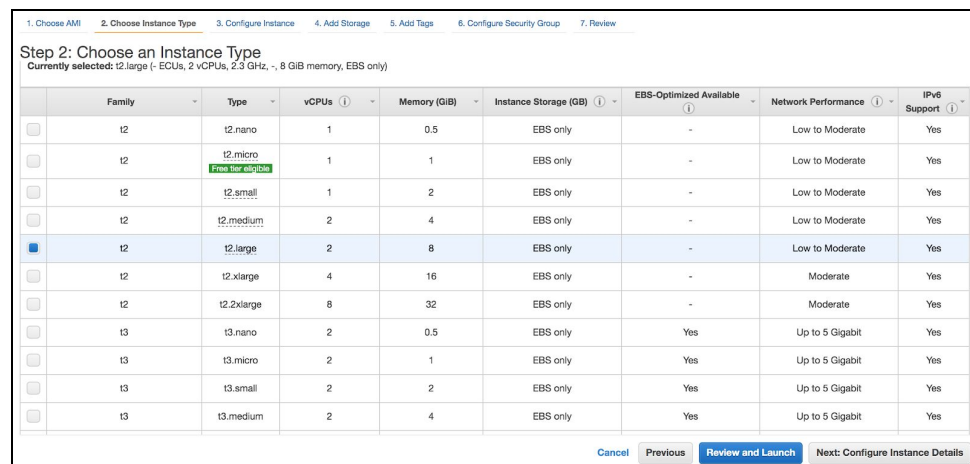
2. Ir a la opción **Instances (running)**.



3. Hacer clic en el botón **Launch Instances**.
4. Seleccionar como tipo de imagen: **Ubuntu Server**.



5. Para el escenario básico, seleccionar una instancia de tipo *t2.large*, y para el escenario avanzado, seleccionar una instancia de tipo *t2.xlarge*.



6. Dejar las configuraciones por defecto.

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

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 lower pricing, assign an access management role to the instance, and more.

Number of instances [Launch into Auto Scaling Group](#)

Purchasing option ☐ Request Spot instances

Network [Create new VPC](#)

Subnet [Create new subnet](#)

Auto-assign Public IP

Placement group ☐ Add instance to placement group

Capacity Reservation

Domain join directory [Create new directory](#)

IAM role [Create new IAM role](#)

CPU options ☐ Specify CPU options

Shutdown behavior

Stop - Hibernate behavior ☐ Enable hibernation as an additional stop behavior

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Add Storage](#)

7. Indicar 20 GB de almacenamiento (**Size (GiB)**).

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

Step 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encryption
Root	/dev/sda1	snap-0b071e09e1285af85	<input type="text" value="20"/>	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

[Add New Volume](#)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Add Tags](#)

8. Dejar las configuraciones por defecto: puerto **80**. Sin embargo, adicionalmente, agregar los puertos de despliegue usados en las guías de implementación: **4000, 4001**, ... (ver [Grupos de Seguridad](#)).

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

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:

Description:

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop

Add Rule

Warning

Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Cancel Previous **Review and Launch**

9. Crear una llave llamada **key**. Este será el elemento necesario para acceder posteriormente a la instancia.

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

Key pair name

key

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

10. Guardar la llave creada (botón **Download Key Pair**).

11. Ir a la opción **View Instances**.

Launch Status

✓ **Your instances are now launching**
The following instance launches have been initiated: i-0a7e440934c820332 [View launch log](#)

ⓘ **Get notified of estimated charges**
Create billing alerts to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier).

How to connect to your instances

Your instances are launching, and it may take a few minutes until they are in the **running** state, when they will be ready for you to use. Usage hours on your new instances will start immediately and continue to accrue until you stop or terminate your instances.

Click **View Instances** to monitor your instances' status. Once your instances are in the **running** state, you can **connect** to them from the Instances screen. [Find out](#) how to connect to your instances.

▼ Here are some helpful resources to get you started

- [How to connect to your Linux instance](#)
- [Amazon EC2: User Guide](#)
- [Learn about AWS Free Usage Tier](#)
- [Amazon EC2: Discussion Forum](#)

While your instances are launching you can also

- [Create status check alarms](#) to be notified when these instances fail status checks. (Additional charges may apply)
- [Create and attach additional EBS volumes](#) (Additional charges may apply)
- [Manage security groups](#)

[View Instances](#)

12. Seleccionar la instancia creada y hacer clic en la opción **Connect**.

The screenshot shows the AWS Management Console interface for EC2 Instances. On the left is a navigation sidebar with options like EC2 Dashboard, Events, Tags, Limits, Instances, Images, and Elastic Block Store. The main panel displays a table of instances. One instance, i-0a7e440934c820332, is listed with a status of 'Running'. Above the table, there are buttons for 'Connect', 'Instance state', 'Actions', and 'Launch Instances'. Below the table, there are tabs for 'Details', 'Security', 'Networking', 'Storage', 'Status Checks', 'Monitoring', and 'Tags'.

13. Conectarse a la instancia, siguiendo alguno de los métodos presentados.

The screenshot shows the 'Connect to instance' dialog box. It has tabs for 'EC2 Instance Connect', 'Session Manager', and 'SSH client'. The 'SSH client' tab is selected. It displays the instance ID i-0a7e440934c820332 and provides a list of steps to connect via SSH: 1. Open an SSH client. 2. Locate your private key file. 3. Run the command, if necessary, to ensure your key is not publicly viewable. 4. Connect to your instance using its Public DNS. It also provides an example command: ssh -i "key.pem" ubuntu@ec2-3-93-74-185.compute-1.amazonaws.com. A note at the bottom states: 'Note: In most cases, the guessed user name is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.'