

ANALISIS Y DESARROLLO DE SOFTWARE

DESARROLLO DE UN SISTEMA DE CONTROL DE INVENTARIO  
Y VENTAS DEL PET-SHOP  
ENTRE PERROS Y GATOS DE LA CIUDAD DE BOGOTÁ.

## **INFORME DE COSTOS**

**SENA**

**2025**

## Informe de Costos Proyecto:

Para la implementación del sistema de control de inventario y ventas del Pet-Shop "Entre Perros y Gatos" de la ciudad de Bogotá, se determinó que la opción más viable es el uso de servidores en la nube, ya que no se cuenta con infraestructura física (servidores) propia para alojar el sistema.

Se realizaron las debidas cotizaciones en diferentes plataformas que ofrecen este tipo de servicios. En particular, se utilizaron las herramientas Azure Calculator y Amazon Web Services (AWS) para comparar costos y beneficios, con el fin de seleccionar la alternativa más rentable y adecuada a las necesidades del proyecto.

## Microsoft Azure

Virtual Machines

1 B4as v2 (4 vCPUs, 16 GB RAM) x 730 Hours (Pay a...

Upfront: \$0.00

Monthly: \$129.94

Virtual Machines

Get \$200 credit plus free monthly amounts of popular services for 12 months—including Virtual Machines. [See free amounts](#)

Region:  
West US

Operating system:  
Linux

Type:  
Ubuntu

Tier:  
Standard

Category:  
All

Instance Series:  
All

INSTANCE: [\(Need help finding the right VM?\)](#)  
B4as v2: 4 vCPUs, 16 GB RAM, 0 GB Temporary storage, \$0.178/hour

1

x

730

Hours

Virtual machines

Savings Options

Explore pricing models to help optimize your Azure costs. [Learn more](#)

Compute (B4as v2)

☒ Pay as you go

Savings plan ⓘ

☐ 1 year savings plan (~31% discount)

☐ 3 year savings plan (~53% discount)

Reservations ⓘ

☐ 1 year reserved (~41% discount)

☐ 3 year reserved (~62% discount)

\$129.94  
Average per month  
(\$0.00 charged upfront)

\$129.94  
Average per month  
(\$0.00 charged upfront)

# AWS CALCULATOR

AWS

pricing calculator

Feedback

Language: English ▾

Contact Sales [?] Create an AWS Account

Tenancy  
Choose the tenancy type to run your Amazon EC2 instances on.  

Shared Instances ▾

Operating system  
Choose the operating system to run your Amazon EC2 instances on.  

Linux ▾

Workloads  
Choose the graph that best represents your monthly workload.  

☒ Constant usage

☐ Daily spike traffic

☐ Weekly spike traffic

☐ Monthly spike traffic

Number of instances  
Please specify the total number of instances that you need each month.  

1

EC2 instances (t2)

Based on your inputs, this is the lowest-cost EC2 instance: t4g.nano

Chosen Instance: x3gd.medium | Family: x3gd | 1vCPU | 16 GiB Memory

Search instance type

Q Search by instance name or filter by keyword

Instance family info

Any Instance family ▾

vCPUs

Any vCPUs ▾

Memory (GiB)

Any Memory (GiB) ▾

Network performance

Any Network Performance ▾

☒ Show only current generation instances.

< 1 ... 10 11 12 13 14 ... 82 > ⓘ

aws

pricing calculator

Feedback

Language: English

Contact Sales

Country: United States

Account: aws-us-east-1

Instance name

vCPU

Memory

Network Performance

Storage

On-Demand Hourly Cost

Current Generation

Potential Effective Hourly Cost (Savings %)

<input type="radio"/> i3.xlarge	2	12 GiB	Up to 25 Gbps	1 x 1875 SSD	0.28815	Yes	0.1091 (62%)
<input type="radio"/> i3.xlarge	2	15.25 GiB	Up to 10 Gbps	EBS only	0.133	Yes	0.0906 (56%)
<input type="radio"/> i3.xlarge	2	15.25 GiB	Up to 10 Gbps	1 x 475 SSD	0.166	Yes	0.0660 (59%)
<input type="radio"/> i3.xlarge	8	15 GiB	High	EBS only	0.358	Yes	0.1551 (51%)
<input checked="" type="radio"/> i3.xlarge	1	16 GiB	Up to 10 Gbps	1 x 330 SSD	0.0855	Yes	0.0346 (59%)
<input type="radio"/> i3.xlarge	2	16 GiB	Up to 10 Gbps	EBS only	0.1066	Yes	0.0739 (56%)
<input type="radio"/> i3.xlarge	2	16 GiB	Up to 12500 Mbps	EBS only	0.1071	Yes	0.0423 (51%)
<input type="radio"/> i3.xlarge	2	16 GiB	Up to 10 Gbps	EBS only	0.113	Yes	0.0433 (51%)
<input type="radio"/> i3.xlarge	2	16 GiB	Up to 12500 Mbps	EBS only	0.1154	Yes	0.0448 (51%)
<input type="radio"/> i3.xlarge	2	16 GiB	Up to 10 Gbps	1 x 118 SSD	0.1153	Yes	0.0453 (51%)

Payment options

Estimated commitment price based on the following selections:  
Instance type: **i3.xlarge** Operating system: **Linux**

Select the container and options to find your best price

Compute Savings Plan

One plan that automatically applies to all usage on EC2, Fargate, and Lambda, up to 50% discount. [Learn more](#)

Reservation term

☐ 1 year
 ☒ 3 year

Payment Options

☒ No upfront
 ☐ Partial upfront
 ☐ All upfront

Upfront: 0.00

Monthly: 34.57/mo

EC2 Instance Savings Plans

Get deeper discounts when you only need one instance family and region. Up to 75% discount. [Learn more](#)

Reservation term

☐ 1 year
 ☒ 3 year

Payment Options

☐ No upfront
 ☐ Partial upfront
 ☒ All upfront

Upfront: 0.00

Monthly: 20.87/mo

On-Demand

Maximum flexibility. [Learn more](#)

Expected utilization: [View the estimated usage of Amazon EC2 instances.](#)

Usage type

Utilization percent per month

Note that for usage less than 100%, the calculator assumes that the attached EBS volume is deleted while the instance is not running. Keep in mind that volume is billed as long as they are provisioned to your account, even while attached to a stopped instance.

Hourly: 0.0855/Hour

Monthly: 48.16/mo

Spot Instances

Minimum and by leveraging EC2's spare capacity. Recommended for fault-tolerant and interruptible instance applications. [Learn more](#)

The historical average discount for i3.xlarge is 80%.

Assume percentage discount for my instance

Assume percentage discount for my instance

Actual spot instance pricing value

With spot instances, you pay the spot price that's in effect for the time period your instance is running.

Hourly: 0.0855/Hour

Monthly: 6.71/mo