

Asignatura	Datos del alumno	Fecha
<b>Herramientas DevOps</b>	Apellidos: Romero Astudillo	10/06/2022
	Nombre: Marcelo Vicente	

## Actividad Abierta Laboratorio: despliegue de MEAN multicapa mediante Terraform

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## Objetivos

En esta actividad aprenderás a utilizar Terraform con un ejemplo sencillo pero completo. Para ello, usaremos un *stack* MEAN con dos o más máquinas. A través de esta actividad conseguirás familiarizarte con la herramienta Terraform para desplegar conjuntos de componentes que se comuniquen entre ellos.

## Configuraciones AWS previas.

**Creación de usuario:** Se debe crear un usuario con permisos para conectarse a la consola de AWS

**Creación de Security Group:** Se creó un security group tanto para el servidor web como para mongodb

	Name	ID del grupo de segu...	Nombre del grupo ...	ID de la VPC	Descripción	Propietario
<input type="checkbox"/>	-	sg-09844c704e6ffb33	default	vpc-0b751cd6851d4e825	default VPC security gr...	675469233461
<input checked="" type="checkbox"/>	-	sg-06d199b669a8ae269	mongo_db_sg	vpc-0b751cd6851d4e825	Grupo de Seguridad de...	675469233461
<input checked="" type="checkbox"/>	-	sg-04476b5bd706a9127	launch-wizard-7	vpc-0b751cd6851d4e825	launch-wizard-7 create...	675469233461

**Creación de Subredes:** Una subred utilizará el Servidor Web y la otra la utilizará MongoDB. Las direcciones ip serán **172.31.2.0/24** para mongo y **172.31.3.0/24** para el servidor Web

	Name	ID de la subred	Estado	VPC	CIDR	Propietario
<input type="checkbox"/>	-	subnet-0a704222037c0f4eb	Available	vpc-0b751cd6851d4e825	172.31.16.0/20	4091
<input checked="" type="checkbox"/>	mongo_db_subred	subnet-02783539eec48139f	Available	vpc-0b751cd6851d4e825	172.31.2.0/24	250
<input type="checkbox"/>	-	subnet-02da548669b8a0050	Available	vpc-0b751cd6851d4e825	172.31.64.0/20	4091
<input type="checkbox"/>	-	subnet-0df81b479b717cf05	Available	vpc-0b751cd6851d4e825	172.31.32.0/20	4091
<input checked="" type="checkbox"/>	web_server_subred	subnet-0e20c56ea93d78ec5	Available	vpc-0b751cd6851d4e825	172.31.3.0/24	251

Se tiene la siguiente configuración:

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USUARIO CONSOLA AWS: **mterraform**

USUARIO ACCESO EC2 SSH

KeyName: **mromero**

Claves PEM: **mromero.pem**

SECURITY GROUP

mongo\_sg: sg-06d199b669a8ae269

app\_sg: sg-04476b5bd706a9127

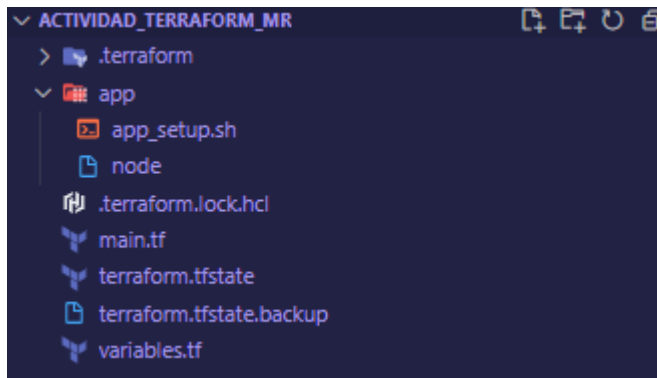
SUBREDES

mongo\_subnet: subnet-02783539eec48139f

app\_subnet: subnet-0e20c56ea93d78ec5

## Instancias y Despliegue.

A continuación, se muestran los ficheros utilizados para terraform.



## Ficheros de configuración

**main.tf:** Este es el archivo de configuración principal que define y despliega los recursos.

Definir la versión requerida tanto del provider como de terraform.

```
terraform {
  required_providers {
    aws = {
      source  = "hashicorp/aws"
      version = "~> 3.27"
    }
  }
}
```

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```
}
required_version = ">= 0.14.9"
}
```

Configuración del provider de "aws"

```
#Credenciales para conectarse a AWS
provider "aws" {
  profile      = "default"
  region      = "us-east-1"
  access_key  = var.aws_access_key
  secret_key  = var.aws_secret_key
}
```

**Recurso de configuración de MongoDB.** Se utilizan las variables de ami, las security group, las subnets y he definido una ip privada.

```
#Desplegando la instancia de MONGO DB
resource "aws_instance" "mongodb" {
  ami            = var.mongo_ami
  instance_type  = "t2.micro"

  vpc_security_group_ids = var.mongo_sg
  subnet_id             = var.mongo_subnet
  private_ip            = var.mongo_priv_ip
  tags = {
    Name = "MongoDB"
  }
}
```

Datasource para obtener la versión más reciente de la IAM (AMI) de Ubuntu que fue la que se utilizó en esta práctica

```
#Usamos una AMI del catalogo de AWS
data "aws_ami" "ubuntu" {
  #Usamos la version reciente
  most_recent = true
  #Colocamos el ID de la AMI
  owners = ["099720109477"]

  #Un filtro ya que el owner puede tener varias versiones de ubuntu.
  filter {
```

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```

name    = "name"
values  = ["ubuntu/images/hvm-ssd/ubuntu-xenial-16.04-amd64-server-*"]
}
}

```

**Recurso de Web Server:** Las configuraciones iniciales son primero, referenciamos a la ami de Ubuntu creada. Seteamos las variables del key\_name, la subnet, la ip privada, el security group y pedimos una ip pública a la instancia

```

#Despliegue del servidor web
resource "aws_instance" "app_server" {
  ami                = data.aws_ami.ubuntu.id
  instance_type      = "t2.micro"
  key_name           = var.key_name
  subnet_id         = var.app_subnet
  private_ip        = var.app_priv_ip
  vpc_security_group_ids = var.app_sg
  associate_public_ip_address = true
  tags = {
    Name = "WebServer"
  }
}

```

### Provisioners:

**Primer Provisioner:** La conexión se realiza mediante SSH a la consola AWS con la clave .pem ya definida. Este provisioner es de tipo "file", donde enviará el contenido de nuestro fichero **hello.js** a la carpeta de destino /tmp de la instancia creada.

Además contiene el contenido que queremos mostrar en el servidor y utiliza la ip privada de nuestra instancia de MongoDB para colocarlo en el Connection string.

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*# hello.js paso como parametro la ip privada para el conecction string hacia mongoDb*

```

provisioner "file" {
  content = <<-EOT
  const http = require('http');

  const hostname = 'localhost';
  const port = 8080;

  const server = http.createServer((req, res) => {
    res.statusCode = 200;
    res.setHeader('Content-Type', 'text/plain');
    res.end("HOLA UNIR! Soy Marcelo Romero! \nConnection string to
MongoDb: mongodb://${aws_instance.mongodb.private_ip}:27017");
  });

  server.listen(port, hostname, () => {
    console.log("Server running at http://" + hostname + ":" + port + "/");
  });
EOT
#Destino del fichero
destination = "/tmp/hello.js"

connection {
  type      = "ssh"
  user      = "ubuntu"
  private_key = file("~/Downloads/credentials/mromero.pem")
  host      = self.public_ip
}
}

```

**Segundo Provisioner:** Este provisioner toma y copia todo el contenido del script app\_setup.sh a la ruta de la instancia /tmp

Este archivo app\_setup.sh contiene los pasos necesarios para configurar nuestra app de node.js

*#En la instancia desplegada copiamos el fichero app\_setup que tiene los comandos necesarios para desplegar la aplicacion*

```

provisioner "file" {
  source      = "app/app_setup.sh"
}

```

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```

destination = "/tmp/app_setup.sh"

connection {
  type      = "ssh"
  user      = "ubuntu"
  private_key = file("~/Downloads/credentials/mromero.pem")
  host      = self.public_ip
}
}

```

**Tercer Provisioner:** En este provisioner se copia el contenido del archivo de node a la ruta /tmp de la instancia, además este archivo contiene la configuración de puertos de escucha que la aplicación necesita para mostrarse y se coloca en nuestro servidor nginx para su despliegue

```

#copiando el archivo node en la configuracion de nginx
provisioner "file" {
  source      = "app/node"
  destination = "/tmp/node"

  connection {
    type      = "ssh"
    user      = "ubuntu"
    private_key = file("~/Downloads/credentials/mromero.pem")
    host      = self.public_ip
  }
}

```

**Cuarto Provisioner:** Este provisioner, realiza la ejecución remota de comandos en la instancia, primero da permisos al fichero app\_setup.sh y luego lo ejecuta

```

#modificando los permisos del script y ejecutamos
provisioner "remote-exec" {
  inline = ["chmod +x /tmp/app_setup.sh", "/tmp/app_setup.sh", ]

  connection {
    type      = "ssh"
    user      = "ubuntu"
    private_key = file("~/Downloads/credentials/mromero.pem")
  }
}

```

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```

        host      = self.public_ip
    }
}

```

**Archivo variables.tf:** El siguiente archivo tiene definidas todas las variables que se utilizan en el archivo principal

```

# Credenciales AWS
variable "aws_access_key" {
    type = string
    default = "AKIAZ2RI2RU2TPQNIFHE"
}

variable "aws_secret_key" {
    type = string
    default = "5sbo4MKbDc/cipeQsLIIfZKcq7DP1Am9+BX73S31Q"
}

variable "key_name" {
    type = string
    default = "mromero"
}

# VARIABLES DE MONGODB

variable "mongo_ami" {
    type = string
    default = "ami-0019f1e85386a77e1"
}

variable "mongo_sg" {
    type = list(string)
    default = ["sg-06d199b669a8ae269"]
}

variable "mongo_subnet" {
    type = string
    default = "subnet-02783539eec48139f"
}

variable "mongo_priv_ip" {
    type = string
    default = "172.31.2.25"
}

```



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```
# Application variables
variable "app_priv_ip" {
  type    = string
  default = "172.31.3.15"
}

variable "app_sg" {
  type    = list(string)
  default = ["sg-04476b5bd706a9127"]
}

variable "app_subnet" {
  type    = string
  default = "subnet-0e20c56ea93d78ec5"
}
```

### Contenido del archivo node

```
server {
    listen 80;

    server_name example.com;

    location / {
        proxy_set_header    X-Forwarded-For $remote_addr;
        proxy_set_header    Host $http_host;
        proxy_pass            http://127.0.0.1:8080;
    }
}
```

**Archivo app\_setup.sh:** Este archivo script contiene los pasos necesarios para configurar el servidor y desplegar nuestra aplicación

```
#!/usr/bin/env bash
sleep 30

# Install node js
curl -fsSL https://deb.nodesource.com/setup_15.x | sudo -E bash -
sudo apt-get install -y nodejs
sudo apt install build-essential -y
```

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```
# Install pm2
sudo npm install -g pm2

# Install NGINX
sudo apt update -y
sudo apt-get install nginx -y
systemctl enable nginx
sudo rm /etc/nginx/sites-enabled/default
sudo mv /tmp/node /etc/nginx/sites-available/node
sudo ln -s /etc/nginx/sites-available/node /etc/nginx/sites-enabled/node
# sudo systemctl restart nginx
service nginx restart

# Setup firewall
sudo ufw allow ssh
sudo ufw allow http
sudo ufw allow https
ufw enable

# Configure pm2 to run hello on startup
mkdir -p ~/code/app-dist
mv /tmp/hello.js ~/code/app-dist/hello.js
cd ~/code/app-dist/
sudo pm2 start hello.js
sudo pm2 startup systemd
sudo pm2 save
sudo pm2 list

sudo shutdown -r now
```

## Logs

El primer comando que se utiliza para inicializar nuestro proyecto es **terraform init**

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```
C:\Users\marcv\Downloads\unir\Herramientas DevOps\actividad_terraform_mr>terraform init

Initializing the backend...

Initializing provider plugins...
- Reusing previous version of hashicorp/aws from the dependency lock file
- Using previously-installed hashicorp/aws v3.75.2

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
```

El siguiente comando que se debe hacer por buena práctica es **terraform validate** el cual revisa que todo lo de nuestro archivo main.tf esté correcto.

```
C:\Users\marcv\Downloads\unir\Herramientas DevOps\actividad_terraform_mr>terraform validate
Success! The configuration is valid.
```

El siguiente comando que se debe realizar es **terraform plan** para comprobar lo que vamos a desplegar en AWS, además que permite comprobar que todos los recursos tengan los parámetros necesarios para crearlos. Indica que se va a crear una instancia llamada app\_server y una llamada mongodb

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```
C:\Users\marcv\Downloads\unir\Herramientas DevOps\actividad_terraform_mr>terraform plan
data.aws_ami.ubuntu: Reading...
data.aws_ami.ubuntu: Read complete after 0s [id=ami-0b0ea68c435eb488d]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create

Terraform will perform the following actions:

# aws_instance.app_server will be created
+ resource "aws_instance" "app_server" {
  + ami                        = "ami-0b0ea68c435eb488d"
  + arn                       = (known after apply)
  + associate_public_ip_address = true
  + availability_zone         = (known after apply)
  + cpu_core_count            = (known after apply)
  + cpu_threads_per_core      = (known after apply)
  + disable_api_termination   = (known after apply)
  + ebs_optimized              = (known after apply)
  + get_password_data          = false
  + host_id                   = (known after apply)
  + id                       = (known after apply)
  + instance_initiated_shutdown_behavior = (known after apply)
  + instance_state            = (known after apply)
  + instance_type             = "t2.micro"
  + ipv6_address_count         = (known after apply)
  + ipv6_addresses            = (known after apply)
  + key_name                   = "mromero"
  + monitoring                 = (known after apply)
  + outpost_arn               = (known after apply)
  + password_data              = (known after apply)
  + placement_group           = (known after apply)
  + placement_partition_number = (known after apply)
  + primary_network_interface_id = (known after apply)
  + private_dns                = (known after apply)
  + private_ip                 = "172.31.3.15"
  + public_dns                 = (known after apply)
  + public_ip                  = (known after apply)
  + secondary_private_ips      = (known after apply)
  + security_groups            = (known after apply)
  + source_dest_check          = true
  + subnet_id                  = "subnet-0e20c56ea93d78ec5"
  + tags                       = {
    + "Name" = "WebServer"
  }
  + tags_all                   = {
    + "Name" = "WebServer"
  }
  + tenancy                    = (known after apply)
  + user_data                   = (known after apply)
  + user_data_base64           = (known after apply)
  + vpc_security_group_ids     = [
    + "sg-04476b5bd706a9127",
  ]
}

+ capacity_reservation_specification {
  + capacity_reservation_preference = (known after apply)

  + capacity_reservation_target {
    + capacity_reservation_id = (known after apply)
  }
}
```

Al momento de aplicar el comando **terraform apply -auto-approve** el despliegue de nuestra app iniciará y no necesita pedir cofirmación

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```
Note: You didn't use the -out option to save this plan, so Terraform can't guarantee to take exactly these actions if you run "terraform apply" now.
C:\Users\marcv\Downloads\unir\Herramientas DevOps\actividad_terraform_mr>terraform apply --auto-approve
data.aws_ami.ubuntu: Reading...
data.aws_ami.ubuntu: Read complete after 0s [id=ami-0b0ea68c435eb488d]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create

Terraform will perform the following actions:

# aws_instance.app_server will be created
+ resource "aws_instance" "app_server" {
  + ami                    = "ami-0b0ea68c435eb488d"
  + arn                   = (known after apply)
  + associate_public_ip_address = true
  + availability_zone      = (known after apply)
  + cpu_core_count         = (known after apply)
  + cpu_threads_per_core   = (known after apply)
  + disable_api_termination = (known after apply)
  + ebs_optimized          = (known after apply)
  + get_password_data      = false
  + host_id                = (known after apply)
  + id                    = (known after apply)
  + instance_initiated_shutdown_behavior = (known after apply)
  + instance_state         = (known after apply)
  + instance_type          = "t2.micro"
  + ipv6_address_count     = (known after apply)
  + ipv6_addresses         = (known after apply)
  + key_name               = "mromero"
  + monitoring             = (known after apply)
  + outpost_arn            = (known after apply)
  + password_data          = (known after apply)
  + placement_group        = (known after apply)
  + placement_partition_number = (known after apply)
  + primary_network_interface_id = (known after apply)
  + private_dns            = (known after apply)
  + private_ip             = "172.31.3.15"
  + public_dns             = (known after apply)
  + public_ip              = (known after apply)
  + secondary_private_ips  = (known after apply)
```

## LOGS DE DESPLIEGUE

```
Plan: 2 to add, 0 to change, 0 to destroy.
aws_instance.mongodb: Creating...
aws_instance.mongodb: Still creating... [10s elapsed]
aws_instance.mongodb: Still creating... [20s elapsed]
aws_instance.mongodb: Still creating... [30s elapsed]
aws_instance.mongodb: Creation complete after 37s [id=i-07e04037c7740dbae]
aws_instance.app_server: Creating...
aws_instance.app_server: Still creating... [10s elapsed]
aws_instance.app_server: Still creating... [20s elapsed]
aws_instance.app_server: Still creating... [30s elapsed]
aws_instance.app_server: Still creating... [40s elapsed]
aws_instance.app_server: Still creating... [50s elapsed]
aws_instance.app_server: Still creating... [1m0s elapsed]
aws_instance.app_server: Still creating... [1m10s elapsed]
aws_instance.app_server: Provisioning with 'file'...
aws_instance.app_server: Still creating... [1m20s elapsed]
aws_instance.app_server: Provisioning with 'file'...
aws_instance.app_server: Provisioning with 'file'...
aws_instance.app_server: Provisioning with 'remote-exec'...
aws_instance.app_server (remote-exec): Connecting to remote host via SSH...
aws_instance.app_server (remote-exec): Host: 18.212.123.143
aws_instance.app_server (remote-exec): User: ubuntu
aws_instance.app_server (remote-exec): Password: false
aws_instance.app_server (remote-exec): Private key: true
aws_instance.app_server (remote-exec): Certificate: false
aws_instance.app_server (remote-exec): SSH Agent: false
aws_instance.app_server (remote-exec): Checking Host Key: false
aws_instance.app_server (remote-exec): Target Platform: unix
aws_instance.app_server (remote-exec): Connected!
```

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```

aws_instance.app_server (remote-exec): Still creating... [1m30s elapsed]
aws_instance.app_server (remote-exec): Still creating... [1m40s elapsed]
aws_instance.app_server (remote-exec): Still creating... [1m50s elapsed]

aws_instance.app_server (remote-exec): =====
aws_instance.app_server (remote-exec): =====
aws_instance.app_server (remote-exec): DEPRECATION WARNING
aws_instance.app_server (remote-exec): Node.js 15.x is no longer actively supported!
aws_instance.app_server (remote-exec): You will not receive security or critical stability updates for this version.
aws_instance.app_server (remote-exec): You should migrate to a supported version of Node.js as soon as possible.
aws_instance.app_server (remote-exec): Use the installation script that corresponds to the version of Node.js you
aws_instance.app_server (remote-exec): wish to install. e.g.
aws_instance.app_server (remote-exec): * https://deb.nodesource.com/setup_12.x - Node.js 12 LTS "Erbium"
aws_instance.app_server (remote-exec): * https://deb.nodesource.com/setup_14.x - Node.js 14 LTS "Fermium" (recommended)
aws_instance.app_server (remote-exec): * https://deb.nodesource.com/setup_16.x - Node.js 16 "Gallium"
aws_instance.app_server (remote-exec): Please see https://github.com/nodejs/Release for details about which
aws_instance.app_server (remote-exec): version may be appropriate for you.
aws_instance.app_server (remote-exec): The NodeSource Node.js distributions repository contains
aws_instance.app_server (remote-exec): information both about supported versions of Node.js and supported Linux
aws_instance.app_server (remote-exec): distributions. To learn more about usage, see the repository:
aws_instance.app_server (remote-exec): https://github.com/nodesource/distributions
aws_instance.app_server (remote-exec): =====
aws_instance.app_server (remote-exec): =====
aws_instance.app_server (remote-exec): Continuing in 20 seconds ...
aws_instance.app_server: Still creating... [2m0s elapsed]
aws_instance.app_server: Still creating... [2m10s elapsed]
aws_instance.app_server (remote-exec): ## Installing the NodeSource Node.js 15.x repo...
aws_instance.app_server (remote-exec): ## Populating apt-get cache...

```

```

aws_instance.app_server (remote-exec): + apt-get update
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial InRelease
aws_instance.app_server (remote-exec): 0% [Connecting to security.ubuntu.com (
aws_instance.app_server (remote-exec): Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates InRelease [99.8 kB]
aws_instance.app_server (remote-exec): 0% [Waiting for headers] [Connecting to
aws_instance.app_server (remote-exec): Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-backports InRelease [97.4 kB]
aws_instance.app_server (remote-exec): 0% [3 InRelease 25.8 kB/97.4 kB 26%] [W
aws_instance.app_server (remote-exec): 0% [1 InRelease gpgv 247 kB] [3 InRelea
aws_instance.app_server (remote-exec): 0% [1 InRelease gpgv 247 kB] [Waiting f
aws_instance.app_server (remote-exec): Get:4 http://security.ubuntu.com/ubuntu xenial-security InRelease [99.8 kB]
aws_instance.app_server (remote-exec): 0% [1 InRelease gpgv 247 kB] [4 InRelea
aws_instance.app_server (remote-exec): 0% [1 InRelease gpgv 247 kB]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [2 InRelease gpgv 99.8 kB] [Waiting
aws_instance.app_server (remote-exec): Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/universe amd64 Packages [7,532 kB]
aws_instance.app_server (remote-exec): 0% [2 InRelease gpgv 99.8 kB] [5 Packag
aws_instance.app_server (remote-exec): 0% [2 InRelease gpgv 99.8 kB]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [Waiting for
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [3 InRelease
aws_instance.app_server (remote-exec): Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/universe Translation-en [4,354 kB]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [3 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [3 InRelease
aws_instance.app_server (remote-exec): Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/multiverse amd64 Packages [144 kB]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [3 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [3 InRelease
aws_instance.app_server (remote-exec): Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/multiverse Translation-en [106 kB]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [3 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [3 InRelease
aws_instance.app_server (remote-exec): Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 Packages [2,049 kB]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [3 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [3 InRelease
aws_instance.app_server (remote-exec): Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates/main Translation-en [461 kB]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [3 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [3 InRelease
aws_instance.app_server (remote-exec): Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates/universe amd64 Packages [1,219 kB]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [3 InRelease
aws_instance.app_server (remote-exec): Get:12 https://esm.ubuntu.com/infra/ubuntu xenial-infra-security InRelease [7,518 B]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [3 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [11 Packages
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates/universe Translation-en [358 kB]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates/multiverse amd64 Packages [22.6 kB]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates/multiverse Translation-en [8,476 B]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-backports/main amd64 Packages [9,812 B]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-backports/main Translation-en [4,456 B]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-backports/universe amd64 Packages [11.3 kB]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease

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Asignatura	Datos del alumno	Fecha
Herramientas DevOps	Apellidos: Romero Astudillo	10/06/2022
	Nombre: Marcelo Vicente	

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aws_instance.app_server (remote-exec): Get:20 https://esm.ubuntu.com/infra/ubuntu xenial-infra-updates InRelease [7,475 B]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [4 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [12 InRelease
aws_instance.app_server (remote-exec): Get:21 http://security.ubuntu.com/ubuntu xenial-security/main Translation-en [360 kB]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [12 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [12 InRelease
aws_instance.app_server (remote-exec): Get:22 http://security.ubuntu.com/ubuntu xenial-security/universe amd64 Packages [785 kB]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [12 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [12 InRelease
aws_instance.app_server (remote-exec): Get:23 http://security.ubuntu.com/ubuntu xenial-security/universe Translation-en [225 kB]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [12 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [12 InRelease
aws_instance.app_server (remote-exec): Get:24 http://security.ubuntu.com/ubuntu xenial-security/multiverse amd64 Packages [7,864 B]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [12 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [12 InRelease
aws_instance.app_server (remote-exec): Get:25 http://security.ubuntu.com/ubuntu xenial-security/multiverse Translation-en [2,672 B]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [12 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [12 InRelease
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [20 InRelease
aws_instance.app_server (remote-exec): Get:26 https://esm.ubuntu.com/infra/ubuntu xenial-infra-security/main amd64 Packages [450 kB]
aws_instance.app_server (remote-exec): 0% [5 Packages store 0 B] [20 InRelease
aws_instance.app_server (remote-exec): 93% [5 Packages store 0 B] [26 Packages
aws_instance.app_server (remote-exec): 95% [5 Packages store 0 B]
aws_instance.app_server (remote-exec): 95% [5 Packages store 0 B]
aws_instance.app_server (remote-exec): 95% [Working]
aws_instance.app_server (remote-exec): 95% [6 Translation-en store 0 B]
aws_instance.app_server (remote-exec): 95% [6 Translation-en store 0 B]
aws_instance.app_server (remote-exec): 95% [Working]
aws_instance.app_server (remote-exec): 95% [7 Packages store 0 B]
aws_instance.app_server (remote-exec): 96% [Working]
aws_instance.app_server (remote-exec): 96% [8 Translation-en store 0 B]
aws_instance.app_server (remote-exec): 96% [Working]
aws_instance.app_server (remote-exec): 96% [9 Packages store 0 B]
aws_instance.app_server (remote-exec): 96% [Working]
aws_instance.app_server (remote-exec): 96% [10 Translation-en store 0 B]
aws_instance.app_server (remote-exec): 96% [Working]
aws_instance.app_server (remote-exec): 96% [11 Packages store 0 B]
aws_instance.app_server (remote-exec): 97% [Working]
aws_instance.app_server (remote-exec): 97% [13 Translation-en store 0 B]
aws_instance.app_server (remote-exec): 97% [Working]
aws_instance.app_server (remote-exec): 97% [14 Packages store 0 B]
aws_instance.app_server (remote-exec): 97% [Working]
aws_instance.app_server (remote-exec): 97% [15 Translation-en store 0 B]
aws_instance.app_server (remote-exec): 97% [Working]
aws_instance.app_server (remote-exec): 97% [16 Packages store 0 B]
aws_instance.app_server (remote-exec): 98% [Working]
aws_instance.app_server (remote-exec): 98% [17 Translation-en store 0 B]
aws_instance.app_server (remote-exec): 98% [Working]
aws_instance.app_server (remote-exec): 98% [18 Packages store 0 B]
aws_instance.app_server (remote-exec): 98% [Working]
aws_instance.app_server (remote-exec): 98% [19 Translation-en store 0 B]
aws_instance.app_server (remote-exec): 98% [Working]
aws_instance.app_server (remote-exec): 98% [21 Translation-en store 0 B]
aws_instance.app_server (remote-exec): 99% [Working]
aws_instance.app_server (remote-exec): 99% [22 Packages store 0 B]
aws_instance.app_server (remote-exec): 99% [Working]
aws_instance.app_server (remote-exec): 99% [23 Translation-en store 0 B]
aws_instance.app_server (remote-exec): 99% [Working]
aws_instance.app_server (remote-exec): 99% [24 Packages store 0 B]
aws_instance.app_server (remote-exec): 99% [Working]
aws_instance.app_server (remote-exec): 99% [25 Translation-en store 0 B]

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aws_instance.app_server (remote-exec): Reading package lists... Done
aws_instance.app_server (remote-exec): ## Confirming "xenial" is supported...
aws_instance.app_server (remote-exec): + curl -sif -o /dev/null 'https://deb.nodesource.com/node_15.x/dists/xenial/Release'
aws_instance.app_server (remote-exec): ## Adding the NodeSource signing key to your keyring...
aws_instance.app_server (remote-exec): + curl -s https://deb.nodesource.com/gpgkey/nodesource.gpg.key | gpg --dearmor | tee /usr/share/keyrings/nodesource.gpg >/dev/null
aws_instance.app_server (remote-exec): ## Creating apt sources list file for the NodeSource Node.js 15.x repo...
aws_instance.app_server (remote-exec): + echo 'deb [signed-by=/usr/share/keyrings/nodesource.gpg] https://deb.nodesource.com/node_15.x xenial main' > /etc/apt/sources.list.d/nodesource.list
aws_instance.app_server (remote-exec): + echo 'deb-src [signed-by=/usr/share/keyrings/nodesource.gpg] https://deb.nodesource.com/node_15.x xenial main' > /etc/apt/sources.list.d/nodesource.list
aws_instance.app_server (remote-exec): ## Running 'apt-get update' for you...
aws_instance.app_server (remote-exec): + apt-get update
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial InRelease
aws_instance.app_server (remote-exec): 0% [Waiting for headers] [Connecting to
aws_instance.app_server (remote-exec): Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates InRelease
aws_instance.app_server (remote-exec): Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-backports InRelease
aws_instance.app_server (remote-exec): Hit:4 http://security.ubuntu.com/ubuntu xenial-security InRelease
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [1 InRelease gpgv 247 kB]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): Get:5 https://deb.nodesource.com/node_15.x xenial InRelease [4,584 B]
aws_instance.app_server (remote-exec): Hit:6 https://esm.ubuntu.com/infra/ubuntu xenial-infra-security InRelease
aws_instance.app_server (remote-exec): Hit:7 https://esm.ubuntu.com/infra/ubuntu xenial-infra-updates InRelease
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [2 InRelease gpgv 99.8 kB]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [3 InRelease gpgv 97.4 kB]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [4 InRelease gpgv 99.8 kB]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [5 InRelease gpgv 4,584 B]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [6 InRelease gpgv 7,518 B]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [7 InRelease gpgv 7,475 B]
aws_instance.app_server (remote-exec): 88% [Working]
aws_instance.app_server (remote-exec): Get:8 https://deb.nodesource.com/node_15.x xenial/main amd64 Packages [762 B]
aws_instance.app_server (remote-exec): 100% [Working]
aws_instance.app_server (remote-exec): 100% [8 Packages store 0 B]
aws_instance.app_server (remote-exec): 100% [Working]

```

Asignatura	Datos del alumno	Fecha
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	Nombre: Marcelo Vicente	

```

aws_instance.app_server (remote-exec): Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 gcc amd64 4:5.3.1-1ubuntu1 [5,244 B]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 65% [22 gcc 0 B/5,244 B 0%]
aws_instance.app_server (remote-exec): 65% [Working]
aws_instance.app_server (remote-exec): Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 libstdc++5-dev amd64 5.4.0-6ubuntu1~16.04.12 [1,428 kB]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 65% [23 libstdc++5-dev 0 B/1,428 kB 0%]
aws_instance.app_server (remote-exec): 69% [Working]
aws_instance.app_server (remote-exec): Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 g++-5 amd64 5.4.0-6ubuntu1~16.04.12 [8,430 kB]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 69% [24 g++-5 0 B/8,430 kB 0%]
aws_instance.app_server (remote-exec): 87% [Working]
aws_instance.app_server (remote-exec): Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 g++ amd64 4:5.3.1-1ubuntu1 [1,504 B]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 87% [25 g++ 0 B/1,504 B 0%]
aws_instance.app_server (remote-exec): 87% [Working]
aws_instance.app_server (remote-exec): Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 make amd64 4.1-6 [151 kB]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 87% [26 make 0 B/151 kB 0%]
aws_instance.app_server (remote-exec): 88% [Working]
aws_instance.app_server (remote-exec): Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 libdpkg-perl all 1.18.4ubuntu1.7 [195 kB]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 88% [27 libdpkg-perl 0 B/195 kB 0%]
aws_instance.app_server (remote-exec): 89% [Working]
aws_instance.app_server (remote-exec): Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 dpkg-dev all 1.18.4ubuntu1.7 [584 kB]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 89% [28 dpkg-dev 0 B/584 kB 0%]
aws_instance.app_server (remote-exec): 91% [Working]
aws_instance.app_server (remote-exec): Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 build-essential amd64 12.1ubuntu2 [4,758 B]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 91% [29 build-essential 0 B/4,758 B 0%]
aws_instance.app_server (remote-exec): 91% [Working]
aws_instance.app_server (remote-exec): Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 libfakeroot amd64 1.20.2-1ubuntu1 [25.5 kB]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 91% [30 libfakeroot 0 B/25.5 kB 0%]
aws_instance.app_server (remote-exec): 92% [Working]
aws_instance.app_server (remote-exec): Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 fakeroot amd64 1.20.2-1ubuntu1 [61.8 kB]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 92% [31 fakeroot 0 B/61.8 kB 0%]
aws_instance.app_server (remote-exec): 93% [Working]
aws_instance.app_server (remote-exec): Get:32 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 libalgorithm-diff-perl all 1.19.03-1 [47.6 kB]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 93% [32 libalgorithm-diff-perl 0 B/47.6]
aws_instance.app_server (remote-exec): 93% [Working]
aws_instance.app_server (remote-exec): Get:33 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 libalgorithm-diff-xs-perl amd64 0.04-4build1 [11.0 kB]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 93% [33 libalgorithm-diff-xs-perl 0 B/1]
aws_instance.app_server (remote-exec): 94% [Working]
aws_instance.app_server (remote-exec): Get:34 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 libalgorithm-merge-perl all 0.08-3 [12.0 kB]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 94% [34 libalgorithm-merge-perl 0 B/12.]
aws_instance.app_server (remote-exec): 95% [Working]
aws_instance.app_server (remote-exec): Get:35 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 libfile-fcntllock-perl amd64 0.22-3 [32.0 kB]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 95% [35 libfile-fcntllock-perl 0 B/32.0]
aws_instance.app_server (remote-exec): 95% [Working]
aws_instance.app_server (remote-exec): Get:36 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 manpages-dev all 4.04-2 [2,048 kB]
aws_instance.app_server (remote-exec): (remote-exec):
aws_instance.app_server (remote-exec): 95% [36 manpages-dev 0 B/2,048 kB 0%]
aws_instance.app_server (remote-exec): 100% [Working]

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Asignatura	Datos del alumno	Fecha
Herramientas DevOps	Apellidos: Romero Astudillo	10/06/2022
	Nombre: Marcelo Vicente	

```

Progress: [ 0%] [.....] Unpacking libmpc3:amd64 (1.0.3-1) ...
Progress: [ 1%] [#.....] Selecting previously unselected package binutils.
aws_instance.app_server (remote-exec): Preparing to unpack .../binutils_2.26.1-1ubuntu1~16.04.8_amd64.deb ...
Progress: [ 2%] [#.....] Unpacking binutils (2.26.1-1ubuntu1~16.04.8) ...
Progress: [ 3%] [#.....] Selecting previously unselected package libc-dev-bin.
aws_instance.app_server (remote-exec): Preparing to unpack .../libc-dev-bin_2.23-0ubuntu11.3_amd64.deb ...
aws_instance.app_server (remote-exec): Unpacking libc-dev-bin (2.23-0ubuntu11.3) ...
Progress: [ 4%] [#.....] Selecting previously unselected package linux-libc-dev:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../linux-libc-dev_4.4.0-210.242_amd64.deb ...
Progress: [ 5%] [#.....] Unpacking linux-libc-dev:amd64 (4.4.0-210.242) ...
Progress: [ 6%] [##.....] Selecting previously unselected package libc6-dev:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../libc6-dev_2.23-0ubuntu11.3_amd64.deb ...
Progress: [ 7%] [##.....] Unpacking libc6-dev:amd64 (2.23-0ubuntu11.3) ...
Progress: [ 8%] [##.....] Selecting previously unselected package libisl15:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../libisl15_0.16.1-1_amd64.deb ...
aws_instance.app_server (remote-exec): Unpacking libisl15:amd64 (0.16.1-1) ...
Progress: [ 9%] [##.....] Selecting previously unselected package cpp-5.
aws_instance.app_server (remote-exec): Preparing to unpack .../cpp-5_5.4.0-6ubuntu1~16.04.12_amd64.deb ...
Progress: [ 10%] [##.....] Unpacking cpp-5 (5.4.0-6ubuntu1~16.04.12) ...
Progress: [ 11%] [##.....] Selecting previously unselected package cpp.
aws_instance.app_server (remote-exec): Preparing to unpack .../cpp_4%3a5.3.1-1ubuntu1_amd64.deb ...
Progress: [ 12%] [###.....] Unpacking cpp (4:5.3.1-1ubuntu1) ...
Progress: [ 13%] [###.....] Selecting previously unselected package libcc1-0:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../libcc1-0_5.4.0-6ubuntu1~16.04.12_amd64.deb ...
aws_instance.app_server (remote-exec): Unpacking libcc1-0:amd64 (5.4.0-6ubuntu1~16.04.12) ...
Progress: [ 14%] [###.....] Selecting previously unselected package libgomp1:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../libgomp1_5.4.0-6ubuntu1~16.04.12_amd64.deb ...
Progress: [ 15%] [###.....] Unpacking libgomp1:amd64 (5.4.0-6ubuntu1~16.04.12) ...
Progress: [ 16%] [###.....] Selecting previously unselected package libitm1:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../libitm1_5.4.0-6ubuntu1~16.04.12_amd64.deb ...
Progress: [ 17%] [###.....] Unpacking libitm1:amd64 (5.4.0-6ubuntu1~16.04.12) ...
Progress: [ 18%] [###.....] Selecting previously unselected package libatomic1:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../libatomic1_5.4.0-6ubuntu1~16.04.12_amd64.deb ...
aws_instance.app_server (remote-exec): Unpacking libatomic1:amd64 (5.4.0-6ubuntu1~16.04.12) ...
Progress: [ 19%] [####.....] Selecting previously unselected package libasan2:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../libasan2_5.4.0-6ubuntu1~16.04.12_amd64.deb ...
Progress: [ 20%] [####.....] Unpacking libasan2:amd64 (5.4.0-6ubuntu1~16.04.12) ...
Progress: [ 21%] [####.....] Selecting previously unselected package liblsan0:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../liblsan0_5.4.0-6ubuntu1~16.04.12_amd64.deb ...
Progress: [ 22%] [####.....] Unpacking liblsan0:amd64 (5.4.0-6ubuntu1~16.04.12) ...
Progress: [ 23%] [####.....] Selecting previously unselected package libtsan0:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../libtsan0_5.4.0-6ubuntu1~16.04.12_amd64.deb ...
aws_instance.app_server (remote-exec): Unpacking libtsan0:amd64 (5.4.0-6ubuntu1~16.04.12) ...
Progress: [ 24%] [####.....] Selecting previously unselected package libubsan0:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../libubsan0_5.4.0-6ubuntu1~16.04.12_amd64.deb ...
Progress: [ 25%] [####.....] Unpacking libubsan0:amd64 (5.4.0-6ubuntu1~16.04.12) ...
Progress: [ 26%] [####.....] Selecting previously unselected package libcilkrts5:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../libcilkrts5_5.4.0-6ubuntu1~16.04.12_amd64.deb ...
Progress: [ 27%] [####.....] Unpacking libcilkrts5:amd64 (5.4.0-6ubuntu1~16.04.12) ...
Progress: [ 28%] [####.....] Selecting previously unselected package libmpx0:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../libmpx0_5.4.0-6ubuntu1~16.04.12_amd64.deb ...
aws_instance.app_server (remote-exec): Unpacking libmpx0:amd64 (5.4.0-6ubuntu1~16.04.12) ...
Progress: [ 29%] [####.....] Selecting previously unselected package libquadmath0:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../libquadmath0_5.4.0-6ubuntu1~16.04.12_amd64.deb ...
Progress: [ 30%] [####.....] Unpacking libquadmath0:amd64 (5.4.0-6ubuntu1~16.04.12) ...
Progress: [ 31%] [####.....] Selecting previously unselected package libgcc-5-dev:amd64.
aws_instance.app_server (remote-exec): Preparing to unpack .../libgcc-5-dev_5.4.0-6ubuntu1~16.04.12_amd64.deb ...
Progress: [ 32%] [####.....] Unpacking libgcc-5-dev:amd64 (5.4.0-6ubuntu1~16.04.12) ...

```



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Herramientas DevOps	Apellidos: Romero Astudillo	10/06/2022
	Nombre: Marcelo Vicente	

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aws_instance.app_server (remote-exec):
aws_instance.app_server (remote-exec): added 182 packages, and audited 183 packages in 10s

aws_instance.app_server (remote-exec): 12 packages are looking for funding
aws_instance.app_server (remote-exec):   run `npm fund` for details

aws_instance.app_server (remote-exec): found 0 vulnerabilities
aws_instance.app_server (remote-exec): npm notice
aws_instance.app_server (remote-exec): npm notice New major version of npm available! 7.7.6 -> 8.12.1
aws_instance.app_server (remote-exec): npm notice Changelog: https://github.com/npm/cli/releases/tag/v8.12.1
aws_instance.app_server (remote-exec): npm notice Run `npm install -g npm@8.12.1` to update!
aws_instance.app_server (remote-exec): npm notice
aws_instance.app_server (remote-exec):
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial InRelease
aws_instance.app_server (remote-exec):
aws_instance.app_server (remote-exec): 0% [Connecting to security.ubuntu.com (
aws_instance.app_server (remote-exec): Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates InRelease
aws_instance.app_server (remote-exec): Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-backports InRelease
aws_instance.app_server (remote-exec):
aws_instance.app_server (remote-exec): 0% [Connecting to security.ubuntu.com (
aws_instance.app_server (remote-exec): 0% [1 InRelease gpgv 247 kB] [Connectin
aws_instance.app_server (remote-exec): Hit:4 http://security.ubuntu.com/ubuntu xenial-security InRelease
aws_instance.app_server (remote-exec):
aws_instance.app_server (remote-exec): 0% [1 InRelease gpgv 247 kB]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [2 InRelease gpgv 99.8 kB]
aws_instance.app_server (remote-exec): Hit:5 https://deb.nodesource.com/node\_15.x xenial InRelease
aws_instance.app_server (remote-exec):
aws_instance.app_server (remote-exec): 0% [2 InRelease gpgv 99.8 kB]
aws_instance.app_server (remote-exec): Hit:6 https://esm.ubuntu.com/infra/ubuntu xenial-infra-security InRelease
aws_instance.app_server (remote-exec):
aws_instance.app_server (remote-exec): 0% [2 InRelease gpgv 99.8 kB]
aws_instance.app_server (remote-exec): Hit:7 https://esm.ubuntu.com/infra/ubuntu xenial-infra-updates InRelease
aws_instance.app_server (remote-exec):
aws_instance.app_server (remote-exec): 0% [2 InRelease gpgv 99.8 kB]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [3 InRelease gpgv 97.4 kB]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [4 InRelease gpgv 99.8 kB]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [5 InRelease gpgv 4,584 B]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [6 InRelease gpgv 7,518 B]
aws_instance.app_server (remote-exec): 0% [Working]
aws_instance.app_server (remote-exec): 0% [7 InRelease gpgv 7,475 B]

```



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