243-[LX]-Lab - Administración del software

Datos Generales:

Nombre: Tomás Alfredo Villaseca Constantinescu

País: Chile

Fecha: 08/09/2023

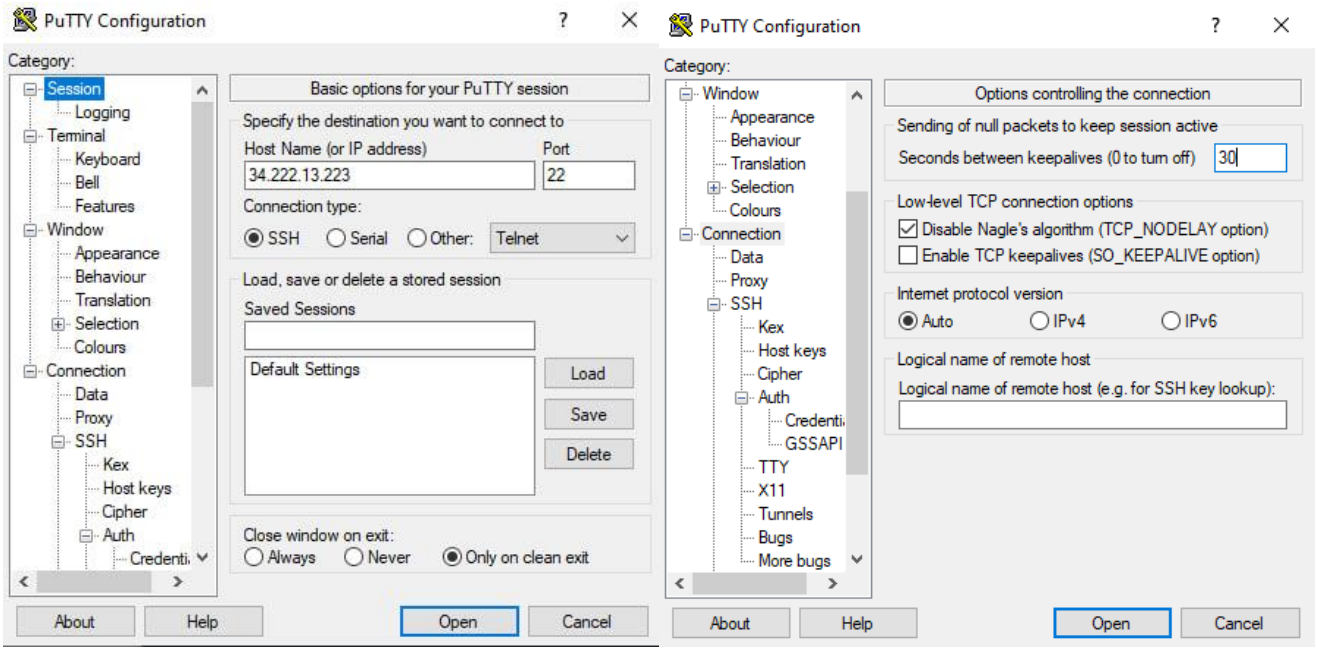
Contacto: tomas.villaseca.c@gmail.com

En este laboratorio, hará lo siguiente:

- Actualizar la máquina de Linux mediante el administrador de paquetes
- Recuperar o revertir a una versión anterior un paquete previamente actualizado mediante el administrador de paquetes
- Instalar la AWS Command Line Interface (AWS CLI)

Tarea 1: conectarse a una instancia EC2 de Amazon Linux mediante SSH

1. Abrir Putty.exe: Se ingresa dirección IPv4 de la instancia EC2 en la sección Session.
2. En la sección Connection → SSH → Auth → Credentials se ingresa el archivo PPK descargado anteriormente.
3. En la sección Connection se establece **Seconds between keepalive en 30 (el valor predeterminado es 0).**



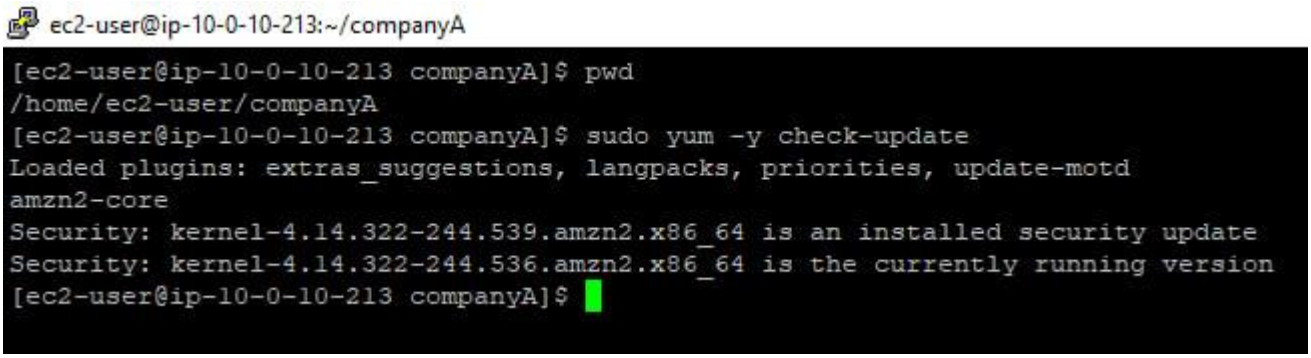
4. Se hace click en “Open” para validar y conectarse al Host.

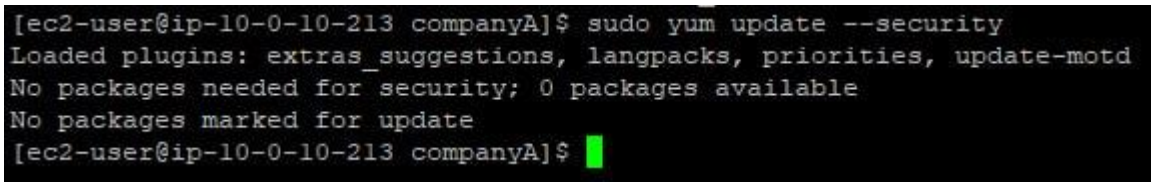
Tarea 2: Actualizar la máquina de Linux

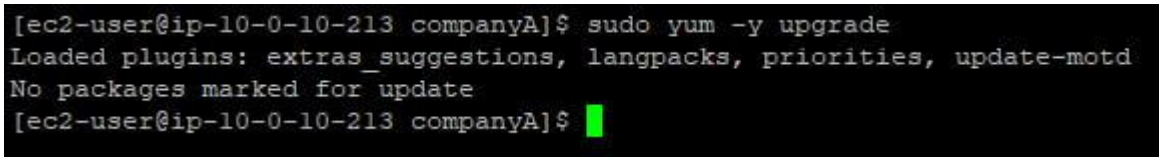
sudo = permite ejecutar comandos con privilegios de superusuario.

yum = administrador de paquetes que se utiliza para instalar, actualizar y eliminar software.

- -y = acepta todas las solicitudes sin preguntar
- install = instala un paquete de software
- update = actualiza un paquete de software
- remove = elimina un paquete de software
- list = lista los paquetes de software instalados
- check-update = verifica las actualizaciones disponibles para los paquetes instalados







En este caso la instancia EC2 ya se encuentra actualizada como se indica en el terminal.

Para ver el historial de actualizaciones de httpd:

ec2-user@ip-10-0-10-185:~

```
[ec2-user@ip-10-0-10-185 ~]$ sudo yum install httpd -y
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
---> Package httpd.x86_64 0:2.4.57-1.amzn2 will be installed
--> Processing Dependency: httpd-tools = 2.4.57-1.amzn2 for package: httpd-2.4.57-1.amzn2.x86_64
--> Processing Dependency: httpd-filesystem = 2.4.57-1.amzn2 for package: httpd-2.4.57-1.amzn2.x86_64
--> Processing Dependency: system-logos-httpd for package: httpd-2.4.57-1.amzn2.x86_64
--> Processing Dependency: mod_http2 for package: httpd-2.4.57-1.amzn2.x86_64
--> Processing Dependency: httpd-filesystem for package: httpd-2.4.57-1.amzn2.x86_64
--> Processing Dependency: /etc/mime.types for package: httpd-2.4.57-1.amzn2.x86_64
--> Processing Dependency: libaprutil-1.so.0()(64bit) for package: httpd-2.4.57-1.amzn2.x86_64
--> Processing Dependency: libapr-1.so.0()(64bit) for package: httpd-2.4.57-1.amzn2.x86_64
--> Running transaction check
---> Package apr.x86_64 0:1.7.2-1.amzn2 will be installed
```

```
Installed:
  httpd.x86_64 0:2.4.57-1.amzn2

Dependency Installed:
  apr.x86_64 0:1.7.2-1.amzn2      apr-util.x86_
  mailcap.noarch 0:2.1.41-2.amzn2 mod_http2.x86

Complete!
[ec2-user@ip-10-0-10-185 ~]$
```

Tarea 3: Revertir un paquete (Roll Back)

yum history = permite ver el historial de las transacciones realizadas con yum.

- info = permite ver información detallada sobre una transacción especifica realizada con yum
- undo = se utiliza para deshacer una transacción especifica realizada con yum

ec2-user@ip-10-0-10-213:~/companyA

```
[ec2-user@ip-10-0-10-213 companyA]$ pwd
/home/ec2-user/companyA
[ec2-user@ip-10-0-10-213 companyA]$ sudo yum history list
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
ID     | Login user               | Date and time    | Action(s)      | Altered
-------------------------------------------------------------------------------
     3 | EC2 ... <ec2-user>       | 2023-09-08 21:39 | Install        |    9
     2 | System <unset>           | 2023-09-08 21:03 | I, U           |   23
     1 | System <unset>           | 2023-09-08 21:03 | Update         |    4
history list
[ec2-user@ip-10-0-10-213 companyA]$
```

```
[ec2-user@ip-10-0-10-213 companyA]$ sudo yum history info 3
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Transaction ID : 3
Begin time     : Fri Sep  8 21:39:33 2023
Begin rpmdb    : 453:1f515eb4800752f09ae8a8c827570158414a324c
End time       :            21:39:34 2023 (1 seconds)
End rpmdb      : 462:4974786f221949fa02881f65782e75edd10088b8
User           : EC2 Default User <ec2-user>
Return-Code    : Success
Command Line   : install httpd -y
Transaction performed with:
    Installed     rpm-4.11.3-48.amzn2.0.3.x86_64 installed
    Installed     yum-3.4.3-158.amzn2.0.6.noarch installed
Packages Altered:
    Dep-Install apr-1.7.2-1.amzn2.x86_64                  @amzn2-core
    Dep-Install apr-util-1.6.3-1.amzn2.0.1.x86_64         @amzn2-core
    Dep-Install apr-util-bdb-1.6.3-1.amzn2.0.1.x86_64     @amzn2-core
    Dep-Install generic-logos-httpd-18.0.0-4.amzn2.noarch @amzn2-core
    Install     httpd-2.4.57-1.amzn2.x86_64               @amzn2-core
    Dep-Install httpd-filesystem-2.4.57-1.amzn2.noarch    @amzn2-core
    Dep-Install httpd-tools-2.4.57-1.amzn2.x86_64         @amzn2-core
    Dep-Install mailcap-2.1.41-2.amzn2.noarch             @amzn2-core
    Dep-Install mod_http2-1.15.19-1.amzn2.0.1.x86_64      @amzn2-core
history info
[ec2-user@ip-10-0-10-213 companyA]$
```

```
[ec2-user@ip-10-0-10-213 companyA]$ sudo yum -y history undo 3
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Undoing transaction 3, from Fri Sep  8 21:39:33 2023
    Dep-Install apr-1.7.2-1.amzn2.x86_64                  @amzn2-core
    Dep-Install apr-util-1.6.3-1.amzn2.0.1.x86_64         @amzn2-core
    Dep-Install apr-util-bdb-1.6.3-1.amzn2.0.1.x86_64     @amzn2-core
    Dep-Install generic-logos-httpd-18.0.0-4.amzn2.noarch @amzn2-core
    Install     httpd-2.4.57-1.amzn2.x86_64               @amzn2-core
    Dep-Install httpd-filesystem-2.4.57-1.amzn2.noarch    @amzn2-core
    Dep-Install httpd-tools-2.4.57-1.amzn2.x86_64         @amzn2-core
    Dep-Install mailcap-2.1.41-2.amzn2.noarch             @amzn2-core
    Dep-Install mod_http2-1.15.19-1.amzn2.0.1.x86_64      @amzn2-core
Resolving Dependencies
--> Running transaction check
---> Package apr.x86_64 0:1.7.2-1.amzn2 will be erased
---> Package apr-util.x86_64 0:1.6.3-1.amzn2.0.1 will be erased
```

```
Removed:
  apr.x86_64 0:1.7.2-1.amzn2           apr-util
  httpd-tools.x86_64 0:2.4.57-1.amzn2  mailcap.

Complete!
[ec2-user@ip-10-0-10-213 companyA]$
```

Verificar que Python y pip3 (pip packet manager) se encuentran instalados:

ec2-user@ip-10-0-10-213:~/companyA

```
[ec2-user@ip-10-0-10-213 companyA]$ python3 --version
Python 3.7.16
[ec2-user@ip-10-0-10-213 companyA]$ pip3 --version
pip 20.2.2 from /usr/lib/python3.7/site-packages/pip (python 3.7)
[ec2-user@ip-10-0-10-213 companyA]$
```

curl = se utiliza para transferir datos hacia o desde un servidor con URL

- Descargar archivos
- Subir archivos
- -o = almacena la salida en un archivo

ec2-user@ip-10-0-10-213:~/companyA

```
[ec2-user@ip-10-0-10-213 companyA]$ sudo curl "https://awscli.amazonaws.com/awscli-exe-linux-x86_64.zip" -o "awscliv2.zip"
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 55.7M  100 55.7M    0     0   273M      0 --:--:-- --:--:-- --:--:--  274M
[ec2-user@ip-10-0-10-213 companyA]$
```

ec2-user@ip-10-0-10-213:~/companyA

```
[ec2-user@ip-10-0-10-213 companyA]$ ls
absolute_mode_file  awscliv2.zip  CEO  Documents
[ec2-user@ip-10-0-10-213 companyA]$
```

unzip = se utiliza para descomprimir archivos comprimidos en formato .zip

ec2-user@ip-10-0-10-213:~/companyA

```
[ec2-user@ip-10-0-10-213 companyA]$ ls
absolute_mode_file  aws  awscliv2.zip  CEO  Documents  Em
[ec2-user@ip-10-0-10-213 companyA]$ sudo ./aws/install
You can now run: /usr/local/bin/aws --version
[ec2-user@ip-10-0-10-213 companyA]$
```

Verificar que AWS CLI fue instalado correctamente con el comando aws help:

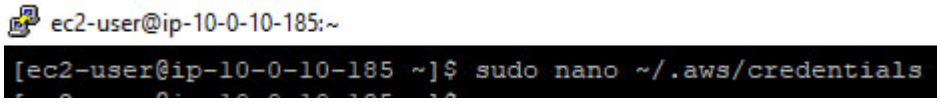
ec2-user@ip-10-0-10-213:~/companyA

```
AWS()                                                                    AWS()



NAME
       aws -

DESCRIPTION
       The  AWS  Command  Line  Interface is a unified tool to manage your AWS
       services.

SYNOPSIS
            aws [options] <command> <subcommand> [parameters]

       Use aws command help for information on a  specific  command.  Use  aws
       help  topics  to view a list of available help topics. The synopsis for
       each command shows its parameters and their usage. Optional  parameters
       are shown in square brackets.
```

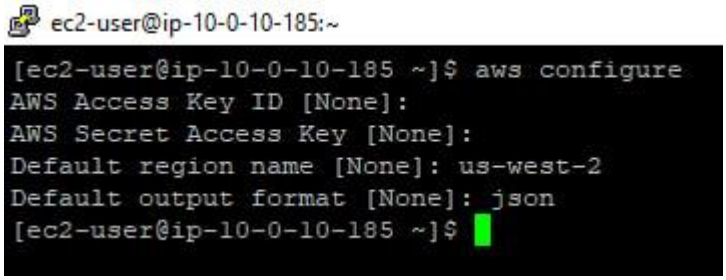
Tarea 5: Configurar la AWS CLI para conectarse a su cuenta de AWS

Credenciales AWS CLI:

Abrir el archivo de credenciales e ingresar el texto copiado anteriormente:

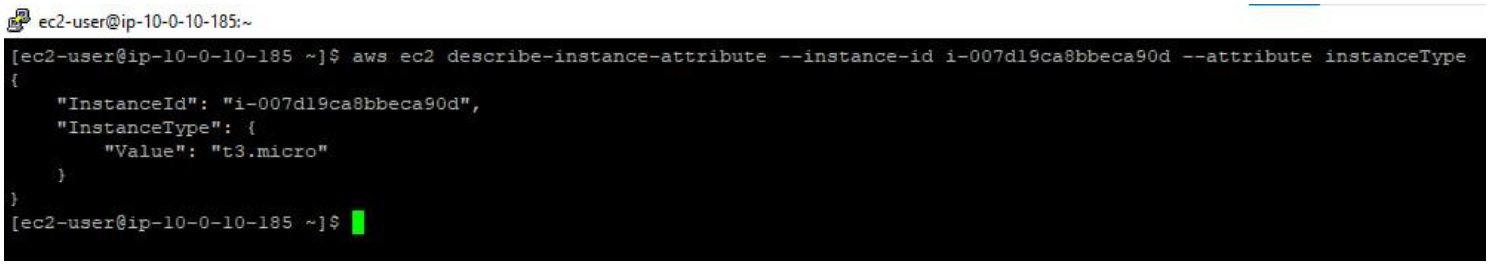


aws config = permite interactuar con AWS Config desde la línea de comandos.



Obtener ID de la instancia:

Comando para describir los atributos de la instancia: (se ingresa el ID de la instancia correspondiente)



Laboratorio Completado