

Conexión SSH Windows como cliente y Linux como servidor

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Ambas maquinas deben estar en una misma red LAN

Desde el cliente Windows ejecutar los comandos

sudo apt update

sudo apt upgrade

para actualizar con el repositorio de linux y obtener las ultimas actualizaciones

```
university@university-NJx0MU: ~  
university@university-NJx0MU:~$ sudo apt update && sudo apt upgrade  
[sudo] password for university:  
Hit:1 http://bo.archive.ubuntu.com/ubuntu jammy InRelease  
Hit:2 https://dl.google.com/linux/chrome/deb stable InRelease  
Get:3 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]  
Get:4 http://bo.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]  
Hit:5 https://packages.microsoft.com/ubuntu/20.04/mssql-server-2022 focal InRelease  
Hit:6 https://download.docker.com/linux/ubuntu focal InRelease  
Hit:7 http://apt.postgresql.org/pub/repos/apt jammy-pgdg InRelease  
Hit:8 https://packages.microsoft.com/ubuntu/22.04/prod jammy InRelease  
Hit:9 https://packages.microsoft.com/ubuntu/22.04/mssql-server-2022 jammy InRelease  
Hit:10 https://packages.microsoft.com/ubuntu/22.04/mssql-server-preview jammy InRelease
```

Instalar SSH con el comando sudo apt install openssh-server

```
university@university-NJx0MU: ~  
university@university-NJx0MU:~$ sudo apt install openssh-server  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
openssh-server is already the newest version (1:8.9p1-3ubuntu0.10).
```

Verificamos que se haya instalado correctamente con el comando `ssh -V`, ya demas verificamos que el servicio este activo

```
university@university-NJx0MU: ~  
  
university@university-NJx0MU:~$ ssh -V  
OpenSSH_8.9p1 Ubuntu-3ubuntu0.10, OpenSSL 3.0.2 15 Mar 2022  
university@university-NJx0MU:~$ sudo systemctl status ssh  
● ssh.service - OpenBSD Secure Shell server  
   Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: en  
   Active: active (running) since Thu 2024-10-10 17:56:58 -04; 4h 58min ago  
     Docs: man:sshd(8)  
           man:sshd_config(5)  
  Process: 1112 ExecStartPre=/usr/sbin/sshd -t (code=exited, status=0/SUCCESS)  
 Main PID: 1163 (sshd)  
    Tasks: 1 (limit: 18834)  
   Memory: 3.3M  
      CPU: 30ms  
   CGroup: /system.slice/ssh.service  
           └─1163 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"  
  
oct 10 17:56:57 university-NJx0MU systemd[1]: Starting OpenBSD Secure Shell serv  
oct 10 17:56:58 university-NJx0MU sshd[1163]: Server listening on 0.0.0.0 port >  
oct 10 17:56:58 university-NJx0MU sshd[1163]: Server listening on :: port 22.  
oct 10 17:56:58 university-NJx0MU systemd[1]: Started OpenBSD Secure Shell serv  
lines 1-17/17 (END)
```

Si el firewall de Linux esta activo debemos agregar una regla que permita el acceso al puerto 22 que es el puerto por defecto de SSH:

```
university@university-NJx0MU: ~  
  
university@university-NJx0MU:~$ sudo ufw allow ssh  
Skipping adding existing rule  
Skipping adding existing rule (v6)  
university@university-NJx0MU:~$
```

Verificamos la IP que tiene el cliente:

```
File Machine view Input Devices Help
Símbolo del sistema
Microsoft Windows [Versión 10.0.19045.4894]
(c) Microsoft Corporation. Todos los derechos reservados.

C:\Users\Daynor>ipconfig

Configuración IP de Windows

Adaptador de Ethernet Ethernet:

    Sufijo DNS específico para la conexión. . . : UMSA.BO
    Dirección IPv6 . . . . . : ::53df:e17d:ac3b:9c65
    Dirección IPv6 temporal. . . . . : ::e441:e8b6:7520:1cd
    Vínculo: dirección IPv6 local. . . : fe80::7ea6:e382:d4fb:9d20%9
    Dirección IPv4. . . . . : 192.168.0.13
    Máscara de subred . . . . . : 255.255.255.0
    Puerta de enlace predeterminada . . . . . : 192.168.0.1

C:\Users\Daynor>
```

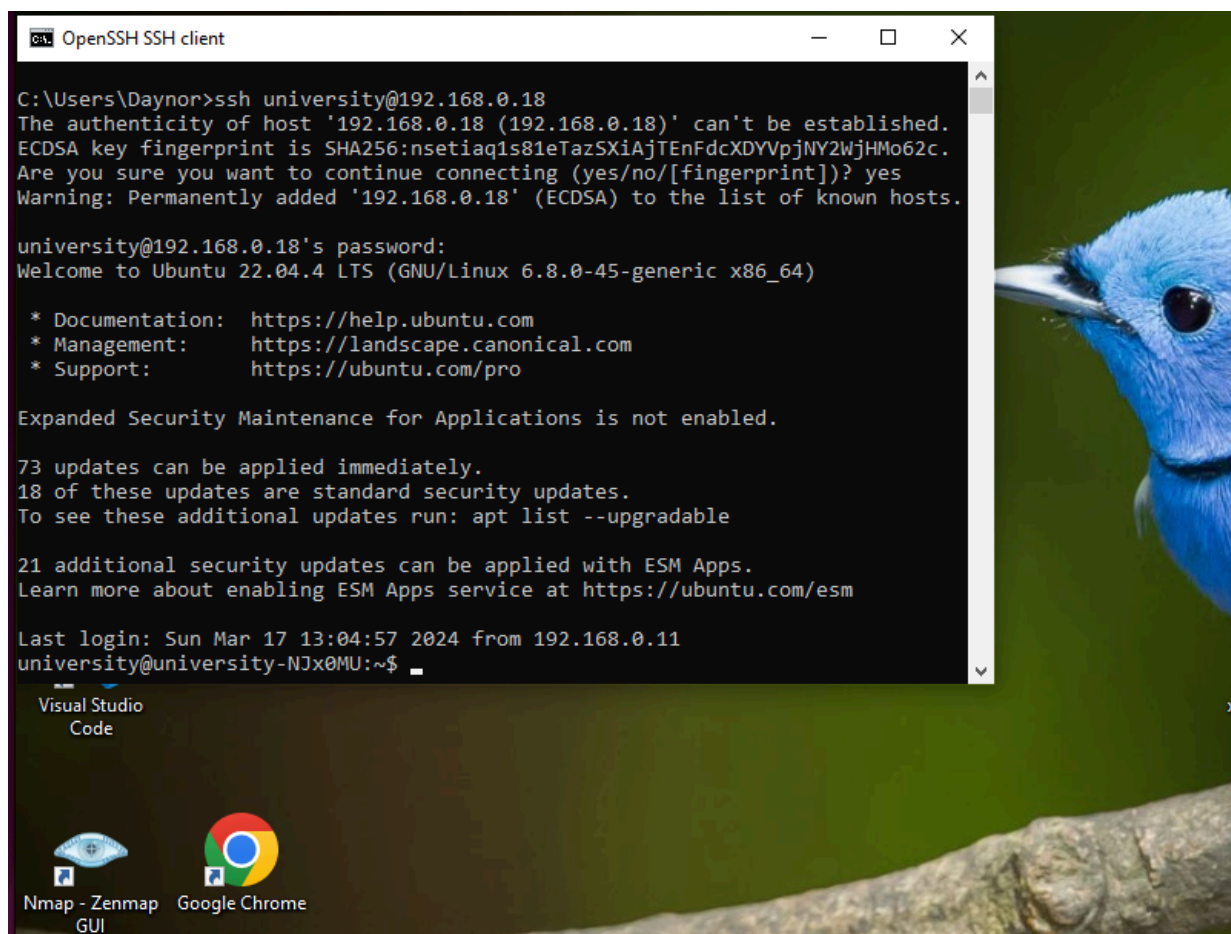
De igual forma verificamos la IP del Servidor Linux

```
university@university-NJx0MU: ~
university@university-NJx0MU:~$
university@university-NJx0MU:~$ ip a
: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
  link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
  inet 127.0.0.1/8 scope host lo
    valid_lft forever preferred_lft forever
  inet6 ::1/128 scope host
    valid_lft forever preferred_lft forever
: enp0s31f6: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc fq_codel state DOWN group default qlen 1000
  link/ether d4:93:90:16:34:ec brd ff:ff:ff:ff:ff:ff
: wlp2s0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default qlen 1000
  link/ether 48:51:c5:f7:0a:21 brd ff:ff:ff:ff:ff:ff
  inet 192.168.0.18/24 brd 192.168.0.255 scope global dynamic noprefixroute wlp2s0
    valid_lft 2068sec preferred_lft 2068sec
  inet6 fe80::136c:eaae:ac47:b55b/64 scope link noprefixroute
    valid_lft forever preferred_lft forever
university@university-NJx0MU:~$
```

Ingresamos desde el cliente el comando para conectarnos ssh university@192.168.0.18

```
File Machine view Input Devices Help
Símbolo del sistema - ssh university@192.168.0.18
Cerrai
C:\Users\Daynor>ssh university@192.168.0.18
The authenticity of host '192.168.0.18 (192.168.0.18)' can't be established.
ECDSA key fingerprint is SHA256:nsetiaqls81eTazSXiAjTEnFdcXDYVpjNY2WjHMo62c.
Are you sure you want to continue connecting (yes/no/[fingerprint])?
```

Una vez aceptando las condiciones de llaves de seguridad que se compartiran, ingresamos el password de la maquina servidor en este caso Linux:



```
C:\Users\Daynor>ssh university@192.168.0.18
The authenticity of host '192.168.0.18 (192.168.0.18)' can't be established.
ECDSA key fingerprint is SHA256:nsetiaq1s81eTazSXIAjTEnFdcXDYVpjNY2WjHMo62c.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.0.18' (ECDSA) to the list of known hosts.

university@192.168.0.18's password:
Welcome to Ubuntu 22.04.4 LTS (GNU/Linux 6.8.0-45-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

Expanded Security Maintenance for Applications is not enabled.

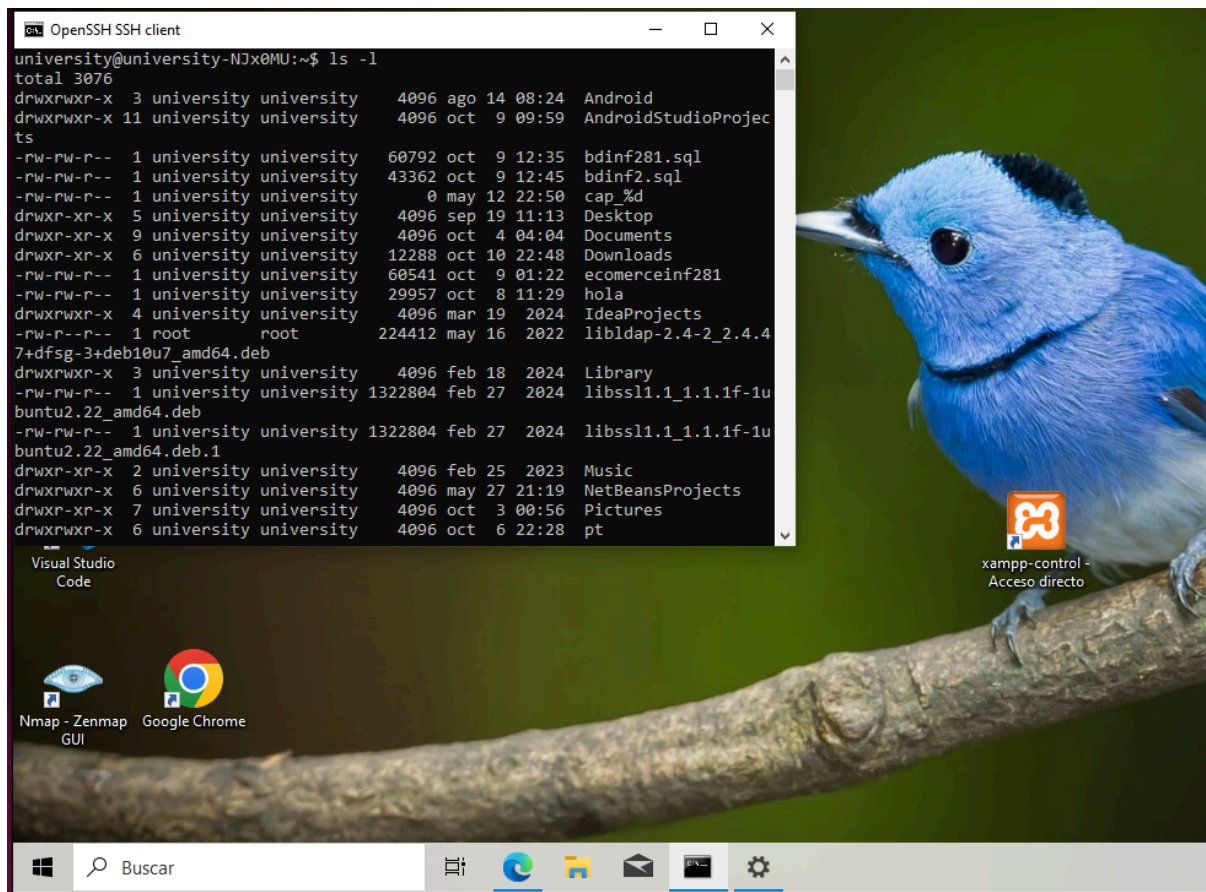
73 updates can be applied immediately.
18 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

21 additional security updates can be applied with ESM Apps.
Learn more about enabling ESM Apps service at https://ubuntu.com/esm

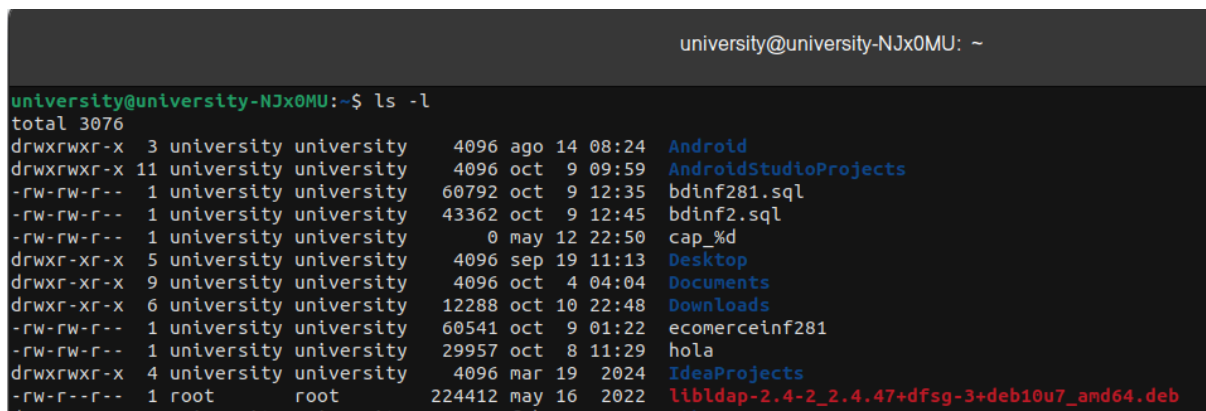
Last login: Sun Mar 17 13:04:57 2024 from 192.168.0.11
university@university-NJx0MU:~$
```

Nos conectara a la terminal del servidor Linux

Verificamos que en efecto la conexión se haya realizado pudiendo acceder desde windows a la interfaz de Linux listando los archivos



Se observan los archivos del servidor si hacemos una comparacion son los mismos



Para finalizar la conexión, desde el cliente ejecutamos exit, nos regresa a la terminal de la máquina windows:

