# 1.1 Sumario

- 1 Introdución
- 2 Comandos/ferramentas que se usaran nesta sección
  - ♦ 2.1 ssh
  - ♦ 2.2 scp
  - 2.3 putty
  - ♦ 2.4 wget
- 3 Conexión ssh dende o host ao servidor dserver00
  - 3.1 Conexión remota dende MS Windows: putty
  - 3.2 Copia segura entre equipos: scp

## 1.2 Introdución

- Neste apartado verase como administrar remotamente un equipo, neste caso o servidor.
- O explicado aquí tamén vale para os clientes Linux.
- Vaise redirixir un porto en VirtualBox para poder conectarse dende o equipo host ou calquera equipo da LAN física á MV dserver00 a través de ssh.

## 1.3 Comandos/ferramentas que se usaran nesta sección

Á parte dos seguintes comandos:

- aptitude
- dpkg

Usaranse os seguintes comandos:

### 1.3.1 ssh

**ssh: secure shell** baséase en que con openssh podemos iniciar sesións remotas no servidor Gnu/Linux de forma segura (xa que o protocolo ssh cifra toda a información transmitida incluíndo os contrasinais introducidos para a autenticación do usuario).

Nun servidor só teremos que instalar o paquete **openssh-server** para instalar o servidor ssh se este non foi instalado no momento da instalación do sistema.

Deste xeito xa teremos instalado o servizo **ssh**, e podemos conectarnos a el dende outro equipo da rede no que teñamos instalado o cliente ssh (paquete **openssh-client**) usando a seguinte sintaxe:

ssh usuario@enderezo\_ip\_equipo

Se non se especifica o usuario, tomará por defecto o usuario co que se está no cliente.

Como se pode ver na seguinte imaxe:

```
administrador@servidorcurso: ~
Ficheiro Editar Ver Terminal Axuda
antonio@portatil:~$ ssh administrador@10.0.0.51
administrador@10.0.0.51's password:
Linux servidorcurso 2.6.31-14-generic-pae #48-Ubuntu SMP Fri Oct 16 15:22:42 UTC
2009 i686
To access official Ubuntu documentation, please visit:
http://help.ubuntu.com/
 System information as of Xov Xan 14 03:04:56 CET 2010
 System load: 0.09
                                 Memory usage: 54%
                                                    Processes:
                                                                      80
 Usage of /: 9.2% of 10.18GB
                                Swap usage:
                                               0%
                                                     Users logged in: 1
 Graph this data and manage this system at https://landscape.canonical.com/
Last login: Thu Jan 14 01:41:02 2010 from 10.100.0.1
administrador@servidorcurso:~$
```

#### • IMPORTANTE:

- Nas versións recentes dos SOs vén deshabilitado iniciar sesión remota como root usando ssh. Se desexa habilitar o acceso remoto ao usuario root é preciso:
  - Modificar a entrada PermitRootLogin a yes no ficheiro /etc/ssh/sshd\_config.
  - Reinicar o servizo: systemctl restart ssh

#### 1.3.2 scp

scp: secury copy baséase no protocolo ssh e permite realizar copias seguras entre equipos. A sintaxe é:

```
scp usuario@host:directorio/ArquivoOrixe ArquivoDestino -- de remoto a local.
scp ArquivoOrixe usuario@host:directorio/ArquivoDestino -- de local a remoto.
```

### 1.3.3 putty

Putty é un cliente ssh para:

- Windows: Hai que descargalo de http://www.putty.org/.
- Linux: apt-get install putty
- Para copiar/pegar debemos seleccionar e co botón dereito xa se copia directamente ao portapapeis. Para pegar tamén se usa o botón dereito.

#### 1.3.4 wget

wget permite realizar descargas da web en modo liña de comandos. A sintaxe máis usada é:

wget <url do paquete a descargar>

### 1.4 Conexión ssh dende o host ao servidor dserver00

- Os problemas que se teñen co servidor dserver00 son:
  - que para que administralo hai que ir fisicamente a traballar nel.
  - que se desexamos pegar algunha instrución ou ficheiro de configuración non podemos.
- Solución: conectarse por ssh a dserver00.
- Problema: dserver00 está detrás dun router, por tanto haberá que abrir portos nese router, isto é na configuración da **Rede NAT** de VirtualBox, neste caso.
- Con ssh poderase facer o mesmo que dende a consola do servidor pero remotamente e temos as vantaxes anteriores.



Editar a Rede NAT NatDominios

.

Nombre de red:	NatDominios	
Red <u>CIDR</u> :	172.16.5.0/24	
Opciones de red:	Soporta DHCP	
	Soporta IPv6	
	🔲 Anunciar ruta por defecto IPv6	
	Reenvío de puertos N	

Premer en Reenvío de portos.



Engadir unha regra.

0

Indicar o porto ao cal nos conectaremos dende o exterior (10022, neste caso. Pode ser calquera por enriba de 1024) e indicar a que MV e porto vai ser redirixido (ao porto 22 de dserver00 neste caso).



### ladmin@base:~\$

No host (equipo físico) podemos ver esa primeira regra coa instrución VboxManage list natnetworks.

ladmingbase:~
ladmingbase:~
ladmingbase:~
ladmingbase:~
sh rootg192.168.1.135 -p 10022
The authenticity of host '[192.168.1.135]:10022 ([192.168.1.135]:10022)' can't b
e established.
ECDSA key fingerprint is b2:b0:67:e8:5e:4a:00:96:8b:00:1f:f9:f8:5c:ea:36.
Are you sure you want to continue connecting (yes/no)?

E dende o host (equipo físco) abrimos un terminal e atacamos ese porto con **ssh usuario@IP do host -p porto externo** (neste caso 10022). Pídenos aceptar a chave do servidor ssh dserver00. Aceptamos con **yes**.



Usar o usuario administrador no canto de root, porque por defecto nas versións recentes vén deshabilitado o acceso por ssh para root. Na imaxe pide o contrasinal do usuario do equipo dserver00. Lembrar que o porto 10022 redireccionábase a dserver00.

Se se desexa habilitar o acceso remoto para o usuario root lembrar:

Modificar a entrada PermitRootLogin a yes no ficheiro /etc/ssh/sshd\_config.



Con exit pechamos a conexión ao servidor dserver00.

• Se o host é Windows pódese realizar o mesmo con putty. Putty pódese instalar tamén en Linux.

## 1.4.1 Conexión remota dende MS Windows: putty

- Outras veces o administrador deséxase administrar dende un equipo MS Windows: para iso úsase o comando putty
- NOTA IMPORTANTE: Para esta ocasión ilústrase cun servidor Ubuntu noutro equipo, noutra IP e noutro porto.

Conexión dende MS Windows: putty
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Aceptar a chave pública do equipo server00, igual que no caso de ssh.



Sesión iniciada en server00 como administrador.

### 1.4.2 Copia segura entre equipos: scp

- scp: secure cp, ou secure copy, permite realizar copias seguras entre entre equipos Linux.
- Usamos para ilustrar este comando un exemplo con Ubuntu.



No cliente aproveitamos un arquivo calquera ou creamos un novo facendo uso da redireción >. echo crear ficheiro para copiar>fich.txt crea o ficheiro fich.txt co texto anterior ó >.



Dende unha consola do cliente: **scp fich.txt administrador@10.0.0.100:/home/administrador**: vai copiar o ficheiro *fich.txt* dende o cliente a carpeta home do administrador do servidor. O comando pide que se autentique o usuario do servidor que vai realizar a copia ao destino.



No servidor: ficheiro copiado.

-- Antonio de Andrés Lema e Carlos Carrión Álvarez