Universidad Autónoma de Sinaloa

ADMINISTRACIÓN DE SISTEMAS

Nombre de la práctica:

Tarea 1: Entorno de Virtualización e Infraestructura Base

Grupo:

3-02

Alumno:

Montes Vázquez Adrián Tadeo

Profesor:

Herman Geovany Ayala Zuñiga

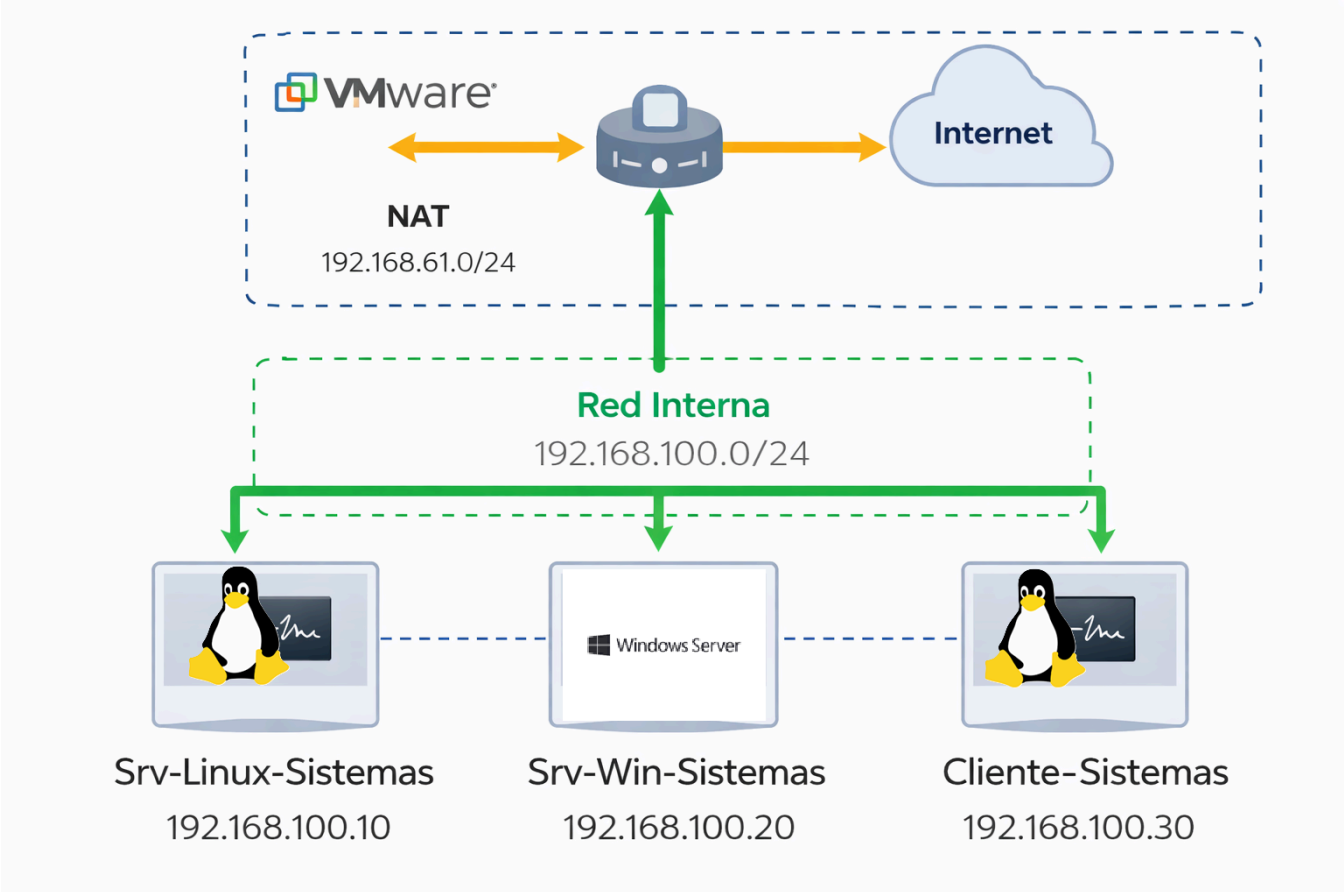
Repositorio de GitHub:

https://github.com/ADNTD1/Administracion-de-Sistemas-T1

TABLA DE DIRECCIONAMIENTO DE IP PROPUESTO:

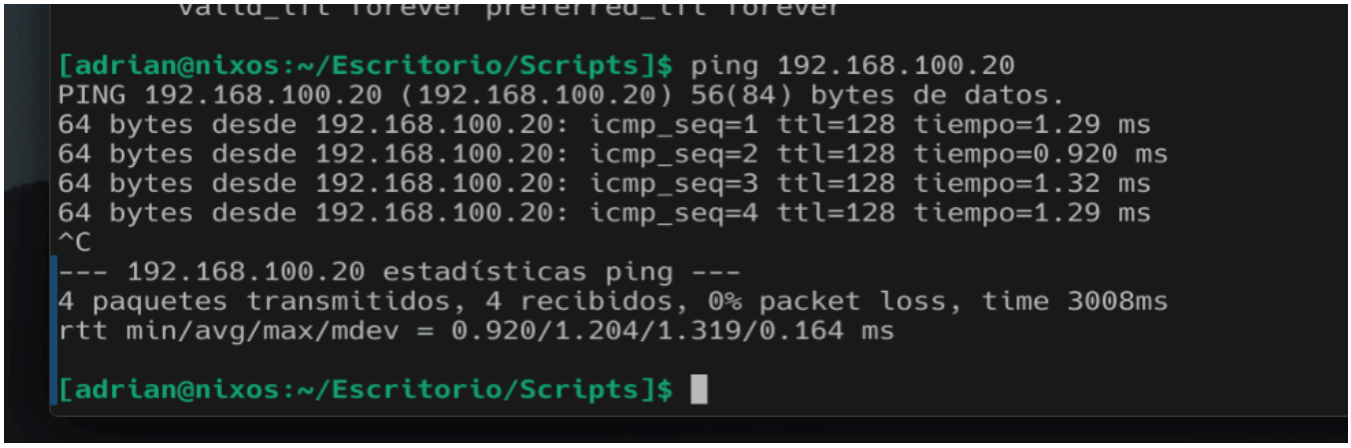
Nodo	Sistema Operativo	Dirección IP	Máscara de Red
Srv-Linux-Sistemas	NixOS Server	192.168.100.30	255.255.255.0
Srv-Win-Sistemas	Windows Server 2022	192.168.100.20	255.255.255.0
Cliente-Sistemas	NixOs	192.168.100.10	255.255.255.0

DIAGRAMA DE TOPOLOGÍA DE RED:

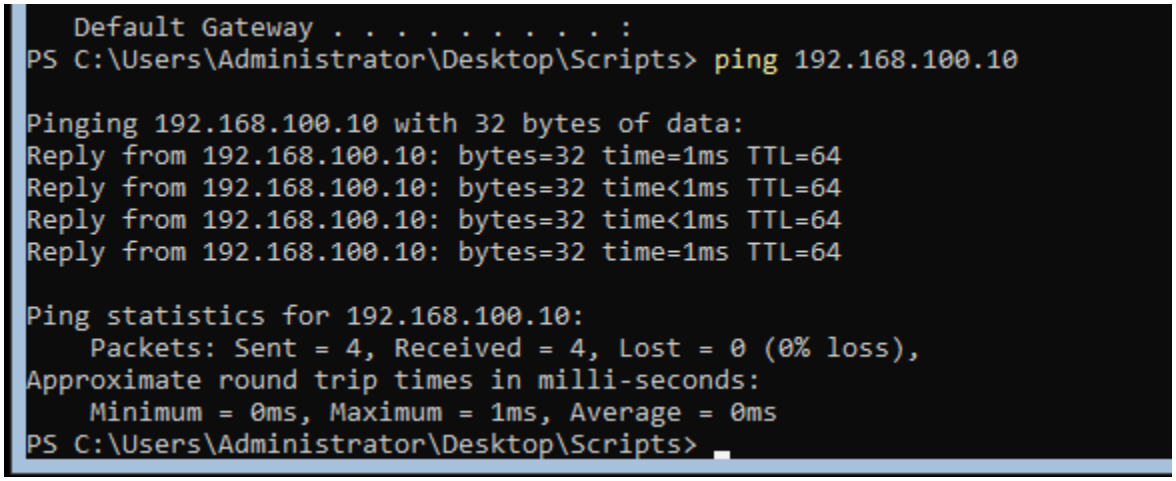


CAPTURA DEL COMANDO PING:

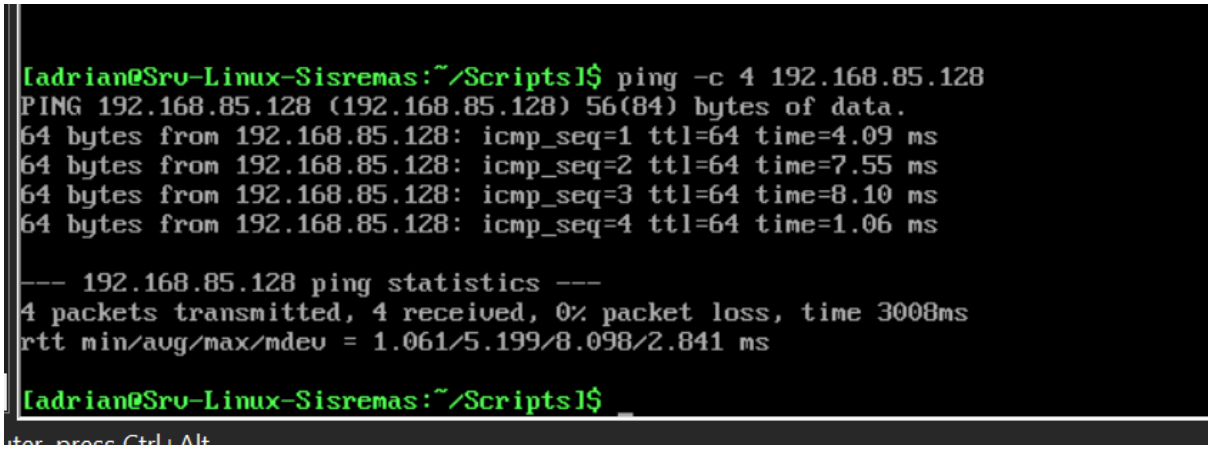
Ping entre NixOs Cliente y Windows Server 2022:



Ping entre Windows Server 2022 y NixOs Cliente:



Ping entre NixOs server y NixOs cliente:



Ping entre NixOs cliente y NixOs server:

```
rtt min/avg/max/mdev = 0.920/1.204/1.319/0.164 ms

[adrian@nixos:~/Escritorio/Scripts]$ ping 192.168.100.30
PING 192.168.100.30 (192.168.100.30) 56(84) bytes de datos.
64 bytes desde 192.168.100.30: icmp_seq=1 ttl=64 tiempo=0.966 ms
64 bytes desde 192.168.100.30: icmp_seq=2 ttl=64 tiempo=1.20 ms
64 bytes desde 192.168.100.30: icmp_seq=3 ttl=64 tiempo=0.652 ms
64 bytes desde 192.168.100.30: icmp_seq=4 ttl=64 tiempo=0.886 ms
^C
--- 192.168.100.30 estadísticas ping ---
4 paquetes transmitidos, 4 recibidos, 0% packet loss, time 3011ms
rtt min/avg/max/mdev = 0.652/0.926/1.201/0.196 ms

[adrian@nixos:~/Escritorio/Scripts]$
```

Ping entre WindowsServer y NixOS server:

```
   Default Gateway . . . . . . . . . :
PS C:\Users\Administrator\Desktop\Scripts> ping 192.168.100.30

Pinging 192.168.100.30 with 32 bytes of data:
Reply from 192.168.100.30: bytes=32 time=1ms TTL=64
Reply from 192.168.100.30: bytes=32 time<1ms TTL=64
Reply from 192.168.100.30: bytes=32 time=1ms TTL=64
Reply from 192.168.100.30: bytes=32 time=1ms TTL=64

Ping statistics for 192.168.100.30:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
PS C:\Users\Administrator\Desktop\Scripts>
```

Ping entre NixOs Server y Windows Server 2022:

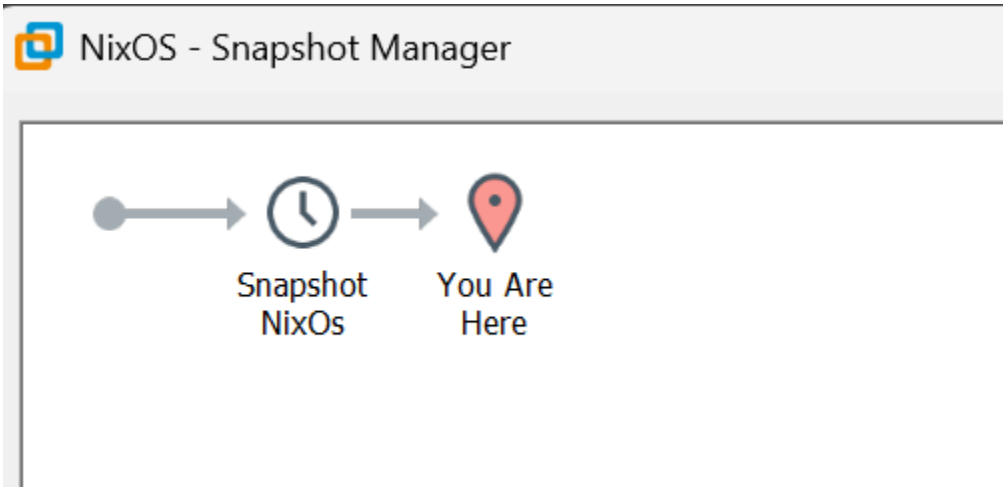
```
[adrian@Srv-Linux-Sisremas:~/Scripts]$ ping -c 4 192.168.100.20
PING 192.168.100.20 (192.168.100.20) 56(84) bytes of data.
64 bytes from 192.168.100.20: icmp_seq=1 ttl=128 time=1.49 ms
64 bytes from 192.168.100.20: icmp_seq=2 ttl=128 time=1.47 ms
64 bytes from 192.168.100.20: icmp_seq=3 ttl=128 time=1.08 ms
64 bytes from 192.168.100.20: icmp_seq=4 ttl=128 time=0.967 ms

--- 192.168.100.20 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3011ms
rtt min/avg/max/mdev = 0.967/1.252/1.493/0.234 ms

[adrian@Srv-Linux-Sisremas:~/Scripts]$ _
```

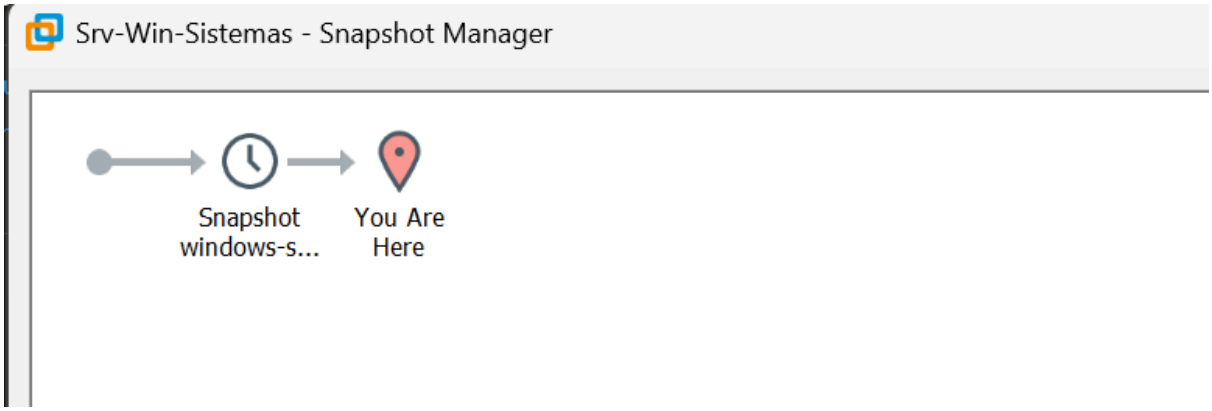
CAPTURA DE LOS “SNAPSHOTS”:

Snapshot de Linux Cliente (NixOS):



Snapshot de Linux Server(NixOs Server):

Snapshot de Windows Server 2022:



Pruebas de funcionamiento de check_status.sh y check_status.ps1

```
[adrian@Srv-Linux-Sisremas:~/Scripts]$ chmod +x chech_status.sh
chmod: cannot access 'chech_status.sh': No such file or directory

[adrian@Srv-Linux-Sisremas:~/Scripts]$ chmod +x check_status.sh

[adrian@Srv-Linux-Sisremas:~/Scripts]$ ./chech_status.sh
-bash: ./chech_status.sh: No such file or directory

[adrian@Srv-Linux-Sisremas:~/Scripts]$ ./check_status.sh
Maquina:
Srv-Linux-Sisremas
Direccion IP:
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    altname enp2s1
    altname enx000c294b5616
    inet 192.168.61.129/24 brd 192.168.61.255 scope global dynamic noprefixroute ens33
       valid_lft 1294sec preferred_lft 1294sec
Espacio del disco:
Filesystem      Size  Used Avail Use% Mounted on
/dev/sda1        20G  2.1G   16G  12% /

[adrian@Srv-Linux-Sisremas:~/Scripts]$
To direct input to this VM, click inside or press Ctrl+G.
```

```
[adrian@nixos:~/Escritorio/Scripts]$ chmod +x Check_status.sh

[adrian@nixos:~/Escritorio/Scripts]$ ./Check_status.sh
Maquina:
nixos
Direccion ip:
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    altname enp2s1
    altname enx000c297a0c60
    inet 192.168.61.128/24 brd 192.168.61.255 scope global dynamic noprefixroute ens33
       valid_lft 1302sec preferred_lft 1302sec
Espacio del disco:
S.ficheros     Tamaño Usados  Disp Uso% Montado en
/dev/sda1         20G   9.8G  8.8G  53% /

[adrian@nixos:~/Escritorio/Scripts]$
```

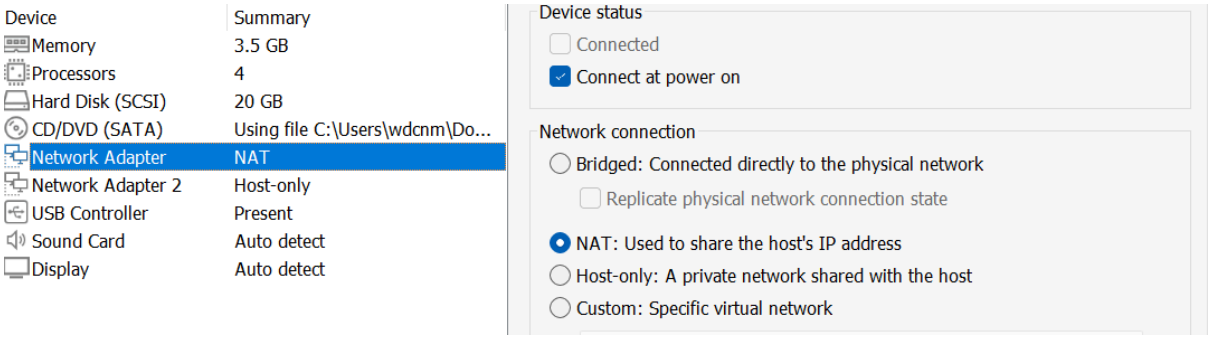
```
PS C:\Users\Administrator\Desktop\Scripts> notepad check_status.ps1
PS C:\Users\Administrator\Desktop\Scripts> ./check_status.ps1
Maquina:
WIN-9M8V3M39GMK

Direccion IP:
169.254.183.107
Espacio del disco:

Name           Used (GB)     Free (GB) Provider      Root                                                CurrentLocation
----           ---------     --------- --------      ----                                                ---------------
C                   6.78         52.59 FileSystem    C:\                                 Users\Administrator\Desktop\Scripts
D                   4.70          0.00 FileSystem    D:\


PS C:\Users\Administrator\Desktop\Scripts> S
```

Configuración de los adaptadores de red:



Repositorio de GitHub:

https://github.com/ADNTD1/Administracion-de-Sistemas-T1