

UNIVERSIDAD AUTONOMA DE SINALOA

UNIDAD ACADEMICA FACULTAD DE INGENIERIA MOCHIS

LICENCIATURA EN INGENIERIA DE SOFTWARE



ASIGNATURA:

ADMINISTRACION DE SISTEMAS



TAREA:

**TAREA 1: ENTORNO DE VIRTUALIZACIÓN E INFRAESTRUCTURA
BASE**

DOCENTE:

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GRUPO 3-01

ALUMNO:

PACHECO MEZA ANGEL GUSTAVO

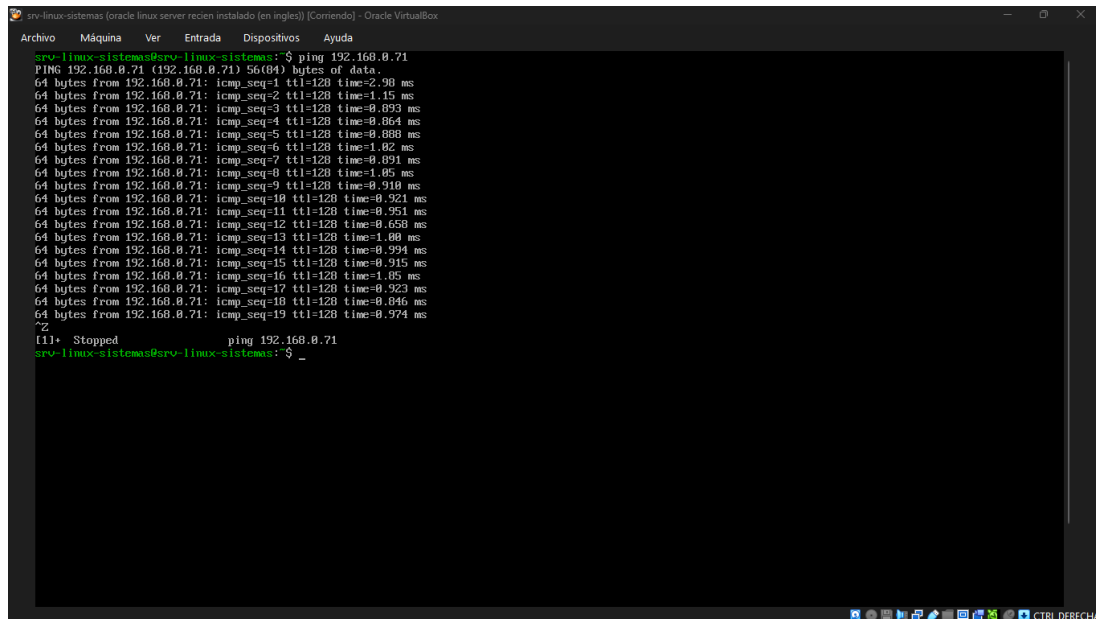
30/ENE/2026

Tabla de direccionamiento IP propuesto

Nodo	Distribución	Nombre del equipo	IP
Servidor Linux	Oracle Linux Server	srv-linux-sistemas	192.168.0.70
Servidor Windows	Windows Server 2019	srv-win-sistemas	192.168.0.71
Cliente	Ubuntu Desktop	ubuntu-linux-sistemas	192.168.0.72

Capturas de pantalla del comando ping exitoso entre los 3 nodos

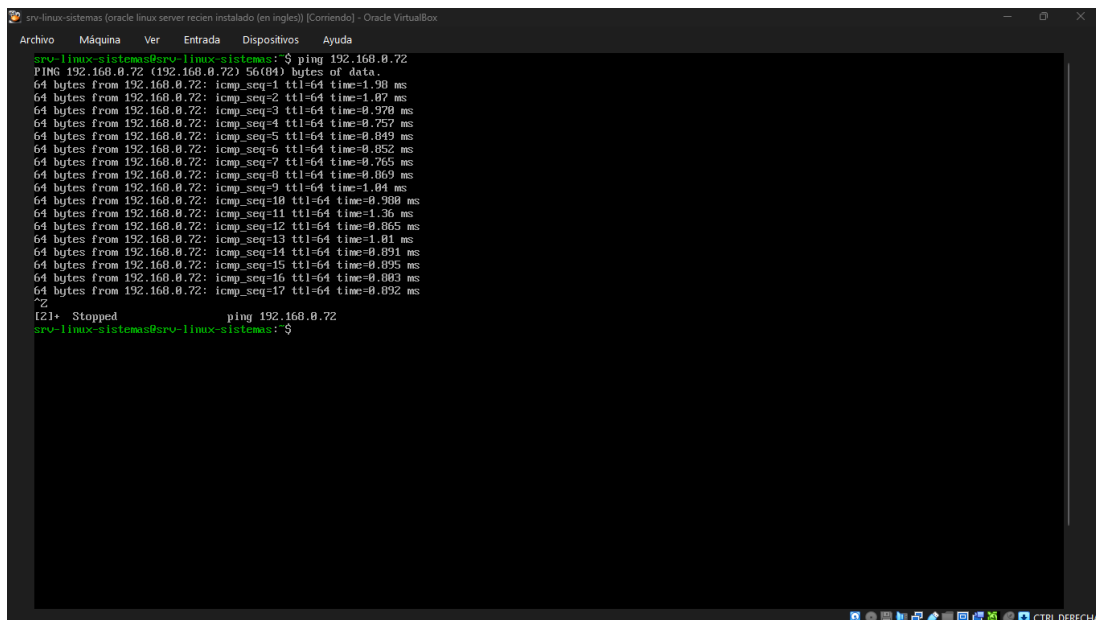
- Ping de srv-linux-sistemas a srv-win-sistemas



```
srv-linux-sistemas [oracle linux server recién instalado (en inglés)] [Corriendo] - Oracle VirtualBox
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda

srv-linux-sistemas@srv-linux-sistemas:~$ ping 192.168.0.71
PING 192.168.0.71 (192.168.0.71) 56(84) bytes of data.
64 bytes from 192.168.0.71: icmp_seq=1 ttl=128 time=2.98 ms
64 bytes from 192.168.0.71: icmp_seq=2 ttl=128 time=1.15 ms
64 bytes from 192.168.0.71: icmp_seq=3 ttl=128 time=0.893 ms
64 bytes from 192.168.0.71: icmp_seq=4 ttl=128 time=0.864 ms
64 bytes from 192.168.0.71: icmp_seq=5 ttl=128 time=0.888 ms
64 bytes from 192.168.0.71: icmp_seq=6 ttl=128 time=1.02 ms
64 bytes from 192.168.0.71: icmp_seq=7 ttl=128 time=0.991 ms
64 bytes from 192.168.0.71: icmp_seq=8 ttl=128 time=1.05 ms
64 bytes from 192.168.0.71: icmp_seq=9 ttl=128 time=0.910 ms
64 bytes from 192.168.0.71: icmp_seq=10 ttl=128 time=0.921 ms
64 bytes from 192.168.0.71: icmp_seq=11 ttl=128 time=0.951 ms
64 bytes from 192.168.0.71: icmp_seq=12 ttl=128 time=0.658 ms
64 bytes from 192.168.0.71: icmp_seq=13 ttl=128 time=1.00 ms
64 bytes from 192.168.0.71: icmp_seq=14 ttl=128 time=0.994 ms
64 bytes from 192.168.0.71: icmp_seq=15 ttl=128 time=0.915 ms
64 bytes from 192.168.0.71: icmp_seq=16 ttl=128 time=1.05 ms
64 bytes from 192.168.0.71: icmp_seq=17 ttl=128 time=0.923 ms
64 bytes from 192.168.0.71: icmp_seq=18 ttl=128 time=0.846 ms
64 bytes from 192.168.0.71: icmp_seq=19 ttl=128 time=0.974 ms
^Z
[1]+  Stopped                  ping 192.168.0.71
srv-linux-sistemas@srv-linux-sistemas:~$ _
```

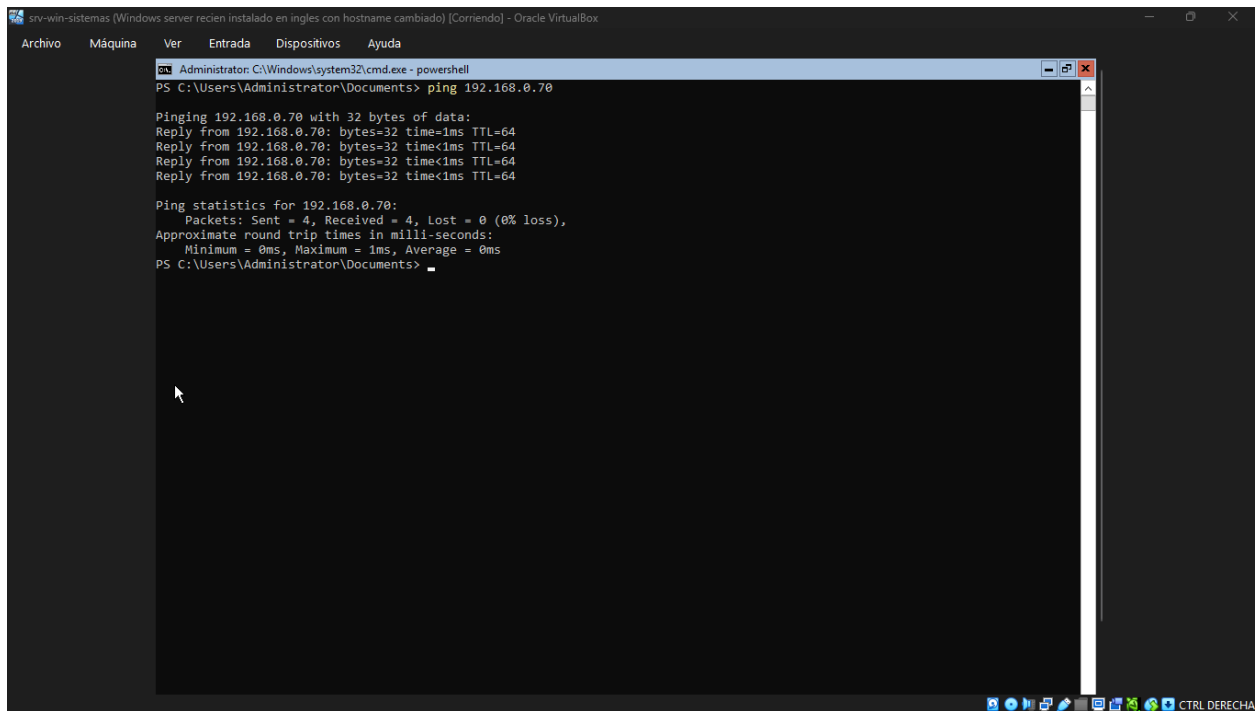
- Ping de srv-linux-sistemas a ubuntu-linux-sistemas



```
srv-linux-sistemas [oracle linux server recién instalado (en inglés)] [Corriendo] - Oracle VirtualBox
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda

srv-linux-sistemas@srv-linux-sistemas:~$ ping 192.168.0.72
PING 192.168.0.72 (192.168.0.72) 56(84) bytes of data.
64 bytes from 192.168.0.72: icmp_seq=1 ttl=64 time=1.98 ms
64 bytes from 192.168.0.72: icmp_seq=2 ttl=64 time=1.07 ms
64 bytes from 192.168.0.72: icmp_seq=3 ttl=64 time=0.970 ms
64 bytes from 192.168.0.72: icmp_seq=4 ttl=64 time=0.757 ms
64 bytes from 192.168.0.72: icmp_seq=5 ttl=64 time=0.849 ms
64 bytes from 192.168.0.72: icmp_seq=6 ttl=64 time=0.852 ms
64 bytes from 192.168.0.72: icmp_seq=7 ttl=64 time=0.765 ms
64 bytes from 192.168.0.72: icmp_seq=8 ttl=64 time=0.669 ms
64 bytes from 192.168.0.72: icmp_seq=9 ttl=64 time=1.04 ms
64 bytes from 192.168.0.72: icmp_seq=10 ttl=64 time=0.980 ms
64 bytes from 192.168.0.72: icmp_seq=11 ttl=64 time=1.36 ms
64 bytes from 192.168.0.72: icmp_seq=12 ttl=64 time=0.865 ms
64 bytes from 192.168.0.72: icmp_seq=13 ttl=64 time=1.01 ms
64 bytes from 192.168.0.72: icmp_seq=14 ttl=64 time=0.991 ms
64 bytes from 192.168.0.72: icmp_seq=15 ttl=64 time=0.895 ms
64 bytes from 192.168.0.72: icmp_seq=16 ttl=64 time=0.803 ms
64 bytes from 192.168.0.72: icmp_seq=17 ttl=64 time=0.892 ms
^Z
[2]+  Stopped                  ping 192.168.0.72
srv-linux-sistemas@srv-linux-sistemas:~$
```

- Ping de srv-win-sistemas a srv-linux-sistemas



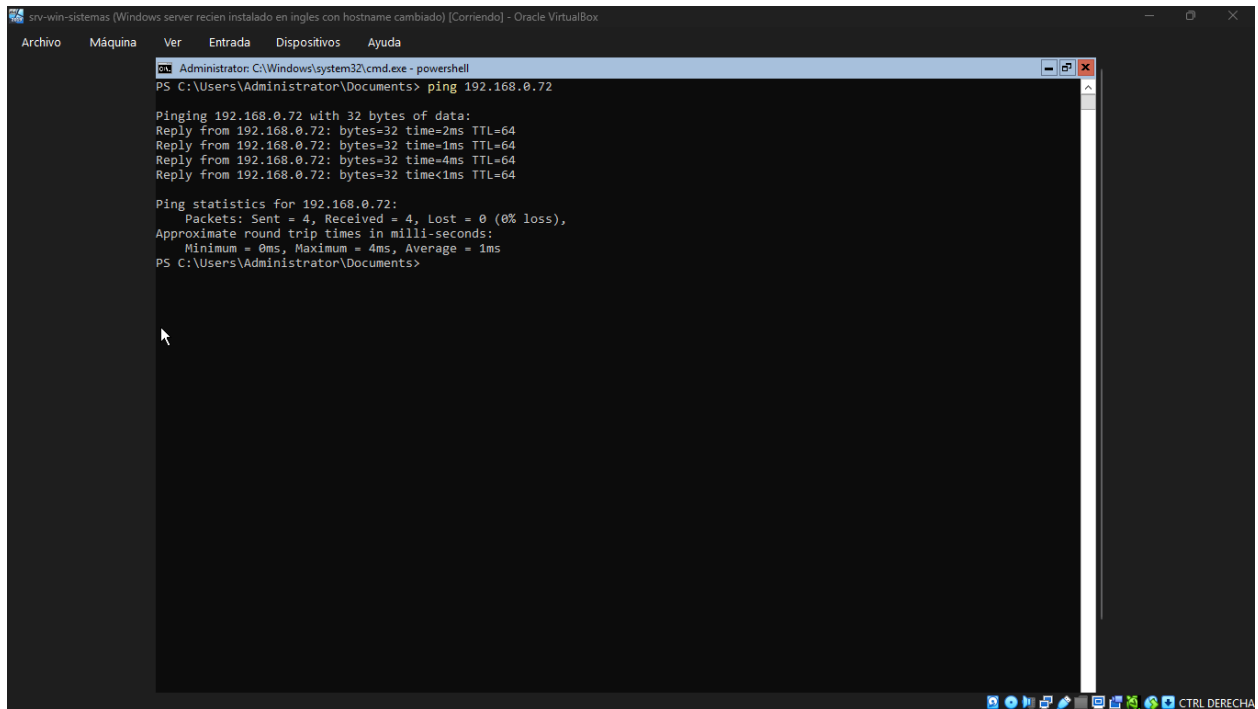
The screenshot shows a Windows PowerShell window titled "Administrator: C:\Windows\system32\cmd.exe - powershell". The command prompt shows the user typing "ping 192.168.0.70". The output displays four successful replies from 192.168.0.70, each with a time of less than 1ms and a TTL of 64. The ping statistics show 4 packets sent, 4 received, and 0% loss.

```
Administrator: C:\Windows\system32\cmd.exe - powershell
PS C:\Users\Administrator\Documents> ping 192.168.0.70

Pinging 192.168.0.70 with 32 bytes of data:
Reply from 192.168.0.70: bytes=32 time<1ms TTL=64
Reply from 192.168.0.70: bytes=32 time<1ms TTL=64
Reply from 192.168.0.70: bytes=32 time<1ms TTL=64
Reply from 192.168.0.70: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.0.70:
    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\Documents>
```

- Ping de srv-win-sistemas a ubuntu-linux-sistemas



The screenshot shows a Windows PowerShell window titled "Administrator: C:\Windows\system32\cmd.exe - powershell". The command prompt shows the user typing "ping 192.168.0.72". The output displays four successful replies from 192.168.0.72, with times of 2ms, 1ms, 4ms, and 1ms, all with a TTL of 64. The ping statistics show 4 packets sent, 4 received, and 0% loss.

```
Administrator: C:\Windows\system32\cmd.exe - powershell
PS C:\Users\Administrator\Documents> ping 192.168.0.72

Pinging 192.168.0.72 with 32 bytes of data:
Reply from 192.168.0.72: bytes=32 time=2ms TTL=64
Reply from 192.168.0.72: bytes=32 time=1ms TTL=64
Reply from 192.168.0.72: bytes=32 time=4ms TTL=64
Reply from 192.168.0.72: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.0.72:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 4ms, Average = 1ms
PS C:\Users\Administrator\Documents>
```

- Ping de ubuntu-linux-sistemas a srv-linux-sistemas

The screenshot shows a terminal window titled 'ubuntu-linux-sistemas@ubuntu-linux-sistemas-VirtualBox: ~'. The user has executed the command 'ping 192.168.0.70'. The output shows 11 successful ping requests, each with a 64-byte payload, a TTL of 64, and response times ranging from approximately 0.829 ms to 3.41 ms. The terminal window is part of an Oracle VM VirtualBox interface, with a menu bar at the top (Archivo, Máquina, Ver, Entrada, Dispositivos, Ayuda) and a taskbar at the bottom.

```
ubuntu-linux-sistemas@ubuntu-linux-sistemas-VirtualBox: ~  
$ ping 192.168.0.70  
PING 192.168.0.70 (192.168.0.70) 56(84) bytes of data:  
64 bytes from 192.168.0.70: icmp_seq=1 ttl=64 time=0.954 ms  
64 bytes from 192.168.0.70: icmp_seq=2 ttl=64 time=0.948 ms  
64 bytes from 192.168.0.70: icmp_seq=3 ttl=64 time=0.818 ms  
64 bytes from 192.168.0.70: icmp_seq=4 ttl=64 time=0.892 ms  
64 bytes from 192.168.0.70: icmp_seq=5 ttl=64 time=0.709 ms  
64 bytes from 192.168.0.70: icmp_seq=6 ttl=64 time=0.913 ms  
64 bytes from 192.168.0.70: icmp_seq=7 ttl=64 time=0.829 ms  
64 bytes from 192.168.0.70: icmp_seq=8 ttl=64 time=1.19 ms  
64 bytes from 192.168.0.70: icmp_seq=9 ttl=64 time=0.962 ms  
64 bytes from 192.168.0.70: icmp_seq=10 ttl=64 time=0.953 ms  
64 bytes from 192.168.0.70: icmp_seq=11 ttl=64 time=3.41 ms  
^C  
[2]+  Stopped                  ping 192.168.0.70  
ubuntu-linux-sistemas@ubuntu-linux-sistemas-VirtualBox: ~
```

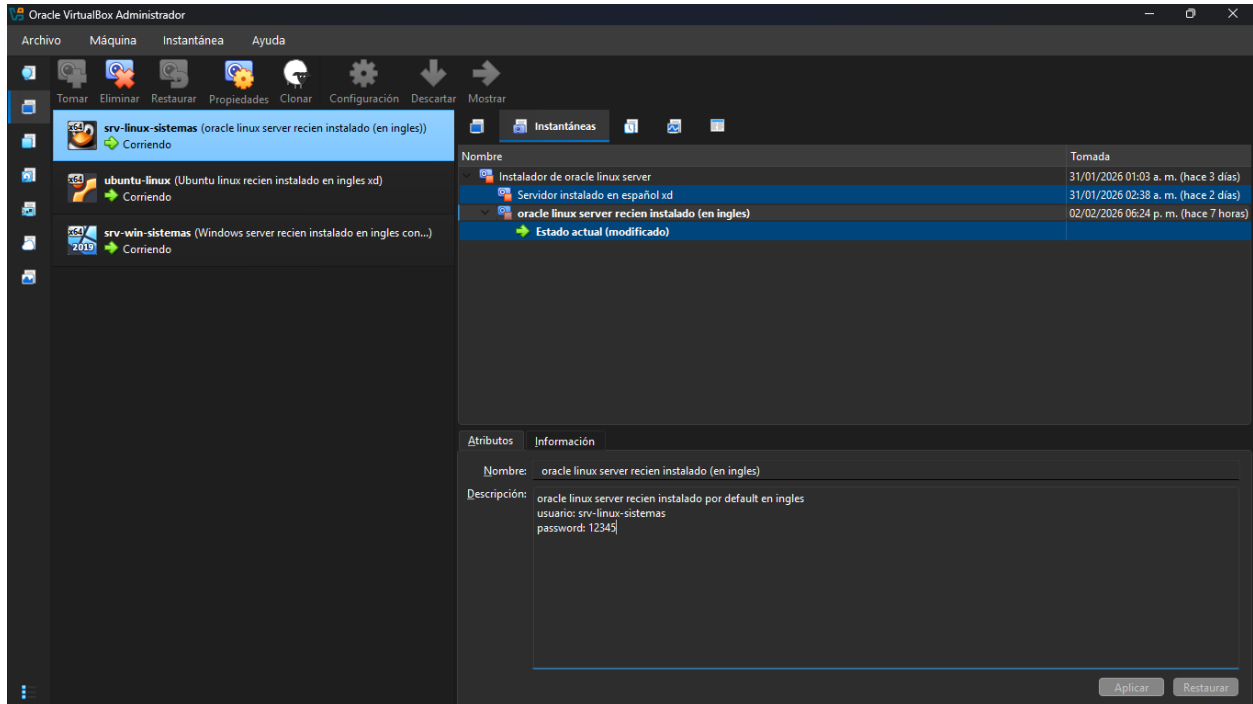
- Ping de ubuntu-linux-sistemas a srv-win-sistemas

The screenshot shows a terminal window titled 'ubuntu-linux-sistemas@ubuntu-linux-sistemas-VirtualBox: ~'. The user has executed the command 'ping 192.168.0.71'. The output shows 5 successful ping requests, each with a 64-byte payload, a TTL of 128, and response times ranging from approximately 1.07 ms to 1.30 ms. The terminal window is part of an Oracle VM VirtualBox interface, with a menu bar at the top (Archivo, Máquina, Ver, Entrada, Dispositivos, Ayuda) and a taskbar at the bottom.

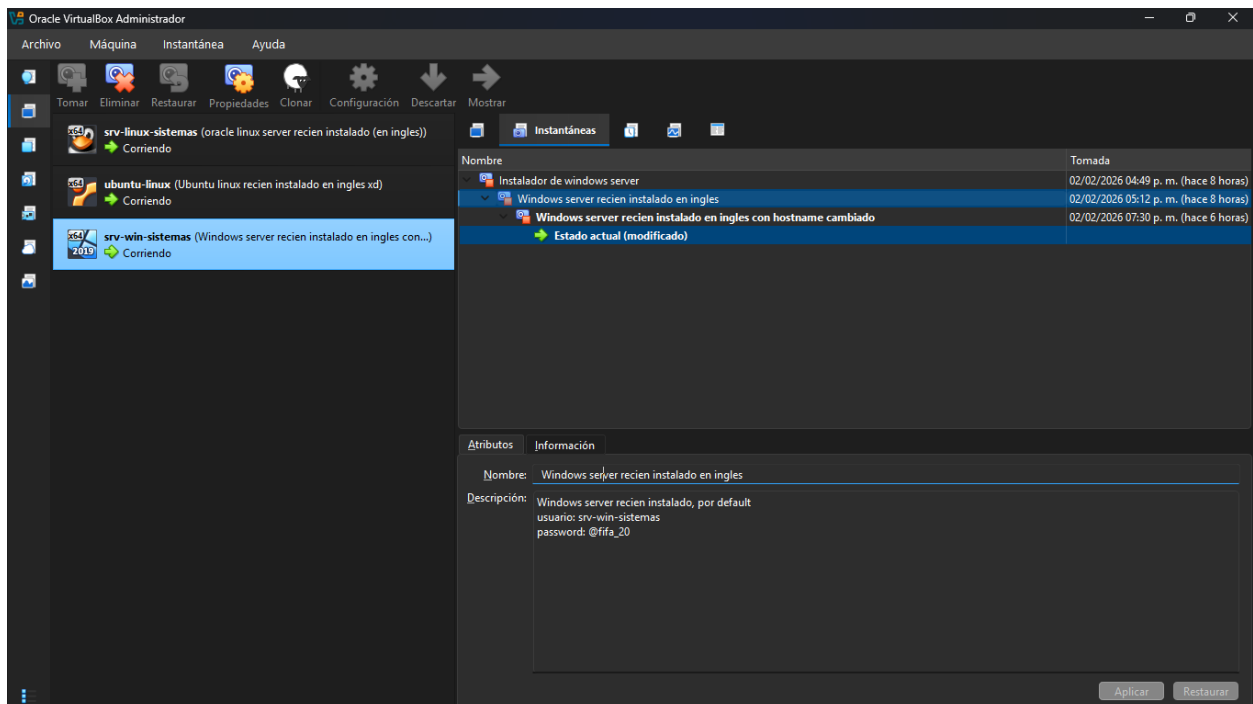
```
ubuntu-linux-sistemas@ubuntu-linux-sistemas-VirtualBox: ~  
$ ping 192.168.0.71  
PING 192.168.0.71 (192.168.0.71) 56(84) bytes of data:  
64 bytes from 192.168.0.71: icmp_seq=1 ttl=128 time=1.30 ms  
64 bytes from 192.168.0.71: icmp_seq=2 ttl=128 time=1.08 ms  
64 bytes from 192.168.0.71: icmp_seq=3 ttl=128 time=1.01 ms  
64 bytes from 192.168.0.71: icmp_seq=4 ttl=128 time=0.997 ms  
64 bytes from 192.168.0.71: icmp_seq=5 ttl=128 time=1.07 ms  
^C  
[4]+  Stopped                  ping 192.168.0.71  
ubuntu-linux-sistemas@ubuntu-linux-sistemas-VirtualBox: ~
```

Captura de los “Snapshots” creados en el hipervisor

- **srv-linux-sistemas**



- **srv-win-sistemas**



ubuntu-linux-sistemas

