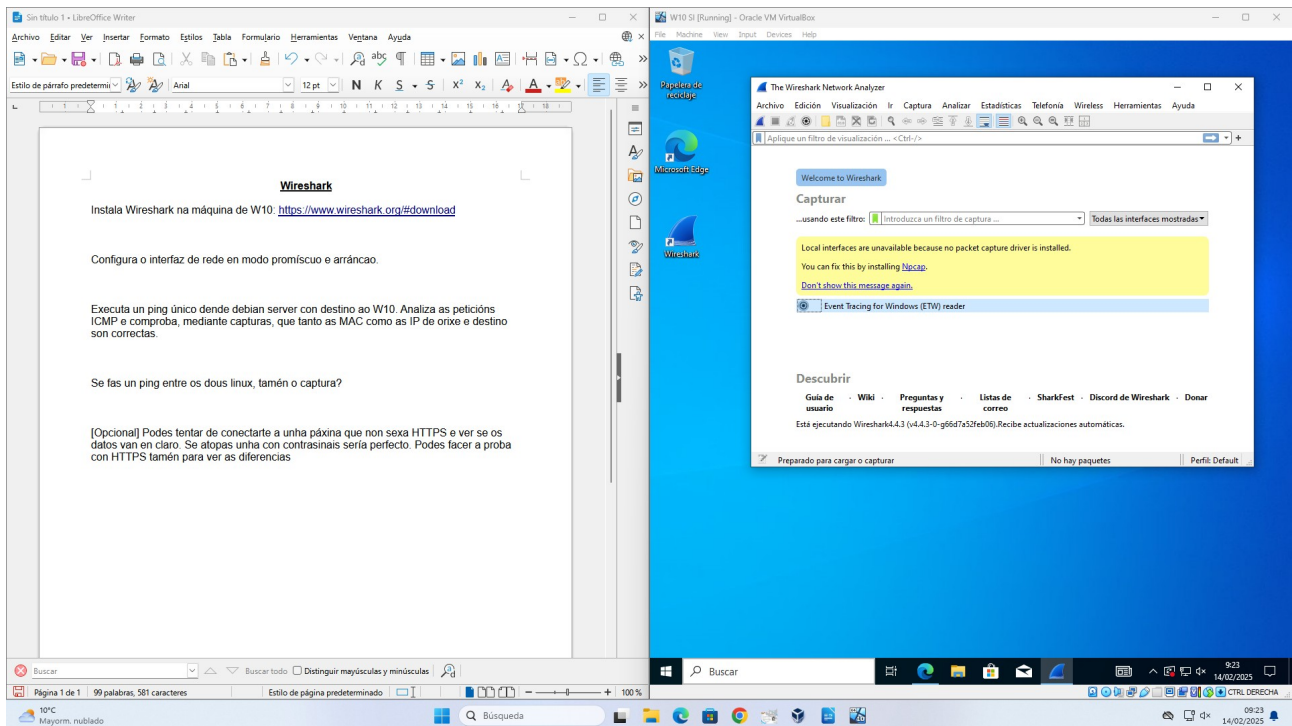
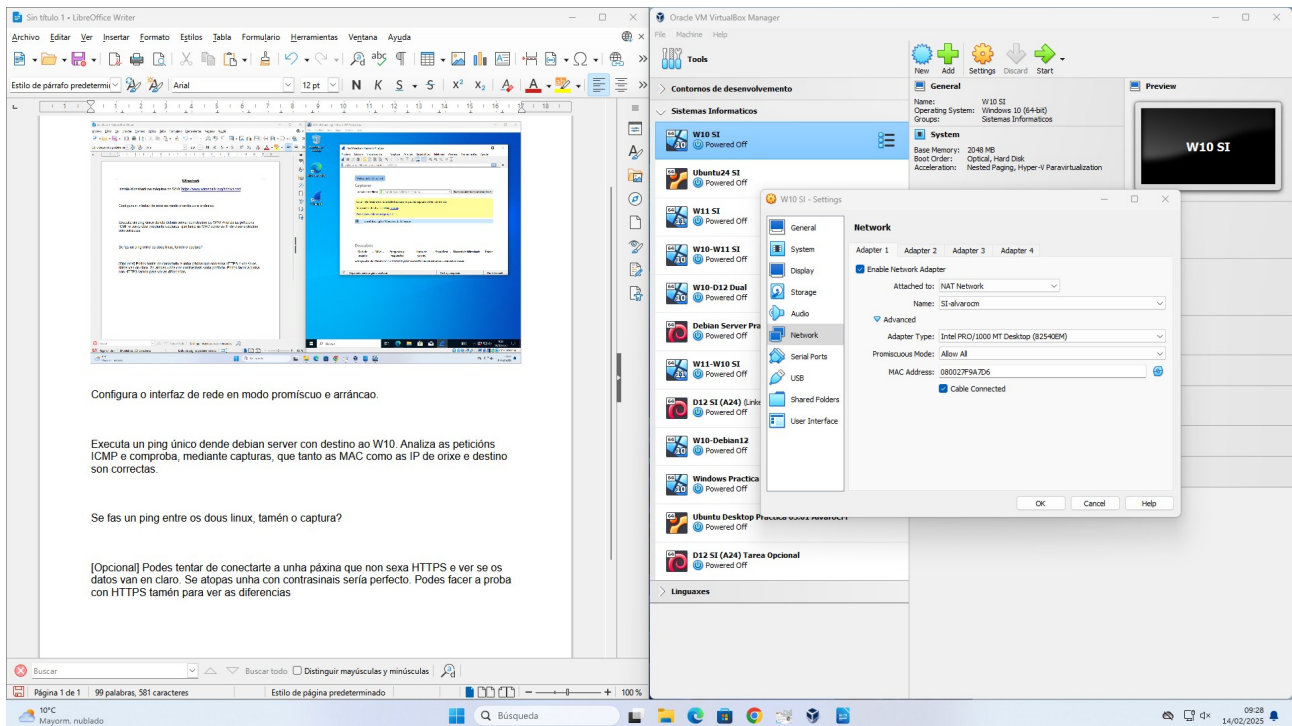


Wireshark

Instala Wireshark na máquina de W10: <https://www.wireshark.org/#download>



Configura o interfaz de rede en modo promíscuo e arráncao.



Executa un ping único dende debian server con destino ao W10. Analiza as peticións ICMP e comproba, mediante capturas, que tanto as MAC como as IP de orixe e destino son correctas.

Debian Server Practica 05.01 AlvaroCM [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

GNU nano 7.2 /etc/network/interfaces

```
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

source /etc/network/interfaces.d/*

# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto enp0s3
iface enp0s3 inet static
    address 192.168.5.3
    netmask 255.255.255.0
    gateway 192.168.5.1
```

[Léronse 15 liñas]

^G Axuda	^O Gravar	^W ¿U-lo?	^K Cortar	^T Executar	^C Posición	M-U Desfacer
^X Saír	^R Ler Fich	^_ Substituír	^U Pegar	^J Xustificar	^- Ir á liña	M-E Refacer

CTRL DERECHA

Propiedades: Protocolo de Internet versión 4 (TCP/IPv4)

General

Puede hacer que la configuración IP se asigne automáticamente si la red es compatible con esta funcionalidad. De lo contrario, deberá consultar con el administrador de red cuál es la configuración IP apropiada.

☐ Obtener una dirección IP automáticamente

☒ Usar la siguiente dirección IP:

Dirección IP:

 Máscara de subred:

 Puerta de enlace predeterminada:

☐ Obtener la dirección del servidor DNS automáticamente

☒ Usar las siguientes direcciones de servidor DNS:

Servidor DNS preferido:

 Servidor DNS alternativo:

☐ Validar configuración al salir
 Opciones avanzadas...

```

col@debian:~$ ping 192.168.5.4
PING 192.168.5.4 (192.168.5.4) 56(84) bytes of data:
64 bytes from 192.168.5.4: icmp_seq=1 ttl=128 time=0.696 ms
64 bytes from 192.168.5.4: icmp_seq=2 ttl=128 time=0.404 ms
64 bytes from 192.168.5.4: icmp_seq=3 ttl=128 time=0.401 ms
64 bytes from 192.168.5.4: icmp_seq=4 ttl=128 time=0.413 ms
64 bytes from 192.168.5.4: icmp_seq=5 ttl=128 time=0.405 ms
64 bytes from 192.168.5.4: icmp_seq=6 ttl=128 time=0.449 ms
64 bytes from 192.168.5.4: icmp_seq=7 ttl=128 time=0.413 ms
64 bytes from 192.168.5.4: icmp_seq=8 ttl=128 time=0.414 ms
64 bytes from 192.168.5.4: icmp_seq=9 ttl=128 time=0.410 ms
64 bytes from 192.168.5.4: icmp_seq=10 ttl=128 time=0.357 ms
64 bytes from 192.168.5.4: icmp_seq=11 ttl=128 time=0.426 ms
64 bytes from 192.168.5.4: icmp_seq=12 ttl=128 time=0.386 ms
64 bytes from 192.168.5.4: icmp_seq=13 ttl=128 time=0.433 ms
64 bytes from 192.168.5.4: icmp_seq=14 ttl=128 time=0.422 ms
64 bytes from 192.168.5.4: icmp_seq=15 ttl=128 time=0.415 ms
64 bytes from 192.168.5.4: icmp_seq=16 ttl=128 time=0.426 ms
64 bytes from 192.168.5.4: icmp_seq=17 ttl=128 time=0.416 ms
64 bytes from 192.168.5.4: icmp_seq=18 ttl=128 time=0.401 ms
64 bytes from 192.168.5.4: icmp_seq=19 ttl=128 time=0.426 ms
64 bytes from 192.168.5.4: icmp_seq=20 ttl=128 time=0.392 ms
64 bytes from 192.168.5.4: icmp_seq=21 ttl=128 time=0.426 ms
64 bytes from 192.168.5.4: icmp_seq=22 ttl=128 time=0.444 ms
64 bytes from 192.168.5.4: icmp_seq=23 ttl=128 time=0.370 ms
64 bytes from 192.168.5.4: icmp_seq=24 ttl=128 time=0.434 ms
64 bytes from 192.168.5.4: icmp_seq=25 ttl=128 time=0.316 ms
64 bytes from 192.168.5.4: icmp_seq=26 ttl=128 time=0.418 ms
64 bytes from 192.168.5.4: icmp_seq=27 ttl=128 time=0.519 ms
64 bytes from 192.168.5.4: icmp_seq=28 ttl=128 time=0.432 ms
64 bytes from 192.168.5.4: icmp_seq=29 ttl=128 time=0.431 ms
64 bytes from 192.168.5.4: icmp_seq=30 ttl=128 time=0.436 ms

```

W10 SI [Running] - Oracle VM VirtualBox

Capturando desde Ethernet

No.	Time	Source	Destination	Protocol	Length	Info
55	79.854043	PCSystemtec_f9:a7:..	Broadcast	ARP	42	Who has 192.168.5.1? Tell 192.168.5.4
56	80.758918	PCSystemtec_f9:a7:..	Broadcast	ARP	42	Who has 192.168.5.1? Tell 192.168.5.4
57	81.774781	PCSystemtec_f9:a7:..	Broadcast	ARP	42	Who has 192.168.5.1? Tell 192.168.5.4
58	101.997733	PCSystemtec_53:5b:..	Broadcast	ARP	60	Who has 192.168.5.4? Tell 192.168.5.3
59	101.997752	PCSystemtec_f9:a7:..	PCSystemtec_53:5b:..	ARP	42	192.168.5.4 is at 08:00:27:f9:a7:d6
60	101.998011	192.168.5.3	192.168.5.4	ICMP	98	Echo (ping) request id=0x001e, seq=1/256, ttl=64 (req)
61	101.998076	192.168.5.4	192.168.5.3	ICMP	98	Echo (ping) reply id=0x001e, seq=1/256, ttl=64 (res)
62	103.829586	192.168.5.3	192.168.5.4	ICMP	98	Echo (ping) request id=0x001e, seq=2/512, ttl=64 (req)
63	103.829574	192.168.5.4	192.168.5.3	ICMP	98	Echo (ping) reply id=0x001e, seq=2/512, ttl=64 (res)
64	104.053074	192.168.5.3	192.168.5.4	ICMP	98	Echo (ping) request id=0x001e, seq=3/768, ttl=64 (req)
65	104.054036	192.168.5.4	192.168.5.3	ICMP	98	Echo (ping) reply id=0x001e, seq=3/768, ttl=64 (res)
66	105.077431	192.168.5.3	192.168.5.4	ICMP	98	Echo (ping) request id=0x001e, seq=4/1024, ttl=64 (req)
67	105.077498	192.168.5.4	192.168.5.3	ICMP	98	Echo (ping) reply id=0x001e, seq=4/1024, ttl=64 (res)
68	106.101425	192.168.5.3	192.168.5.4	ICMP	98	Echo (ping) request id=0x001e, seq=5/1280, ttl=64 (req)
69	106.101491	192.168.5.4	192.168.5.3	ICMP	98	Echo (ping) reply id=0x001e, seq=5/1280, ttl=64 (res)
70	106.635801	PCSystemtec_f9:a7:..	Broadcast	ARP	42	Who has 192.168.5.1? Tell 192.168.5.4
71	106.758010	PCSystemtec_f9:a7:..	PCSystemtec_53:5b:..	ARP	42	Who has 192.168.5.3? Tell 192.168.5.4
72	106.758355	PCSystemtec_53:5b:..	PCSystemtec_f9:a7:..	ARP	60	192.168.5.3 is at 08:00:27:53:5b:29
73	107.125613	192.168.5.3	192.168.5.4	ICMP	98	Echo (ping) request id=0x001e, seq=6/1536, ttl=64 (req)
74	107.125692	192.168.5.4	192.168.5.3	ICMP	98	Echo (ping) reply id=0x001e, seq=6/1536, ttl=64 (res)
75	107.258389	PCSystemtec_f9:a7:..	Broadcast	ARP	42	Who has 192.168.5.1? Tell 192.168.5.4

Frame 1: 42 bytes on wire (336 bits), 42 bytes captured (336 bits) on interface 11, Src: PCSystemtec_f9:a7:d6 (08:00:27:f9:a7:d6), Dst: Address Resolution Protocol (request)

Ethernet II, Src: PCSystemtec_f9:a7:d6 (08:00:27:f9:a7:d6), Dst: Address Resolution Protocol (request)

Ethernet: live capture in progress

Paquetes: 126

Perfil: Default

9:53 14/02/2025

Se fas un ping entre os dous linux, tamén o captura?

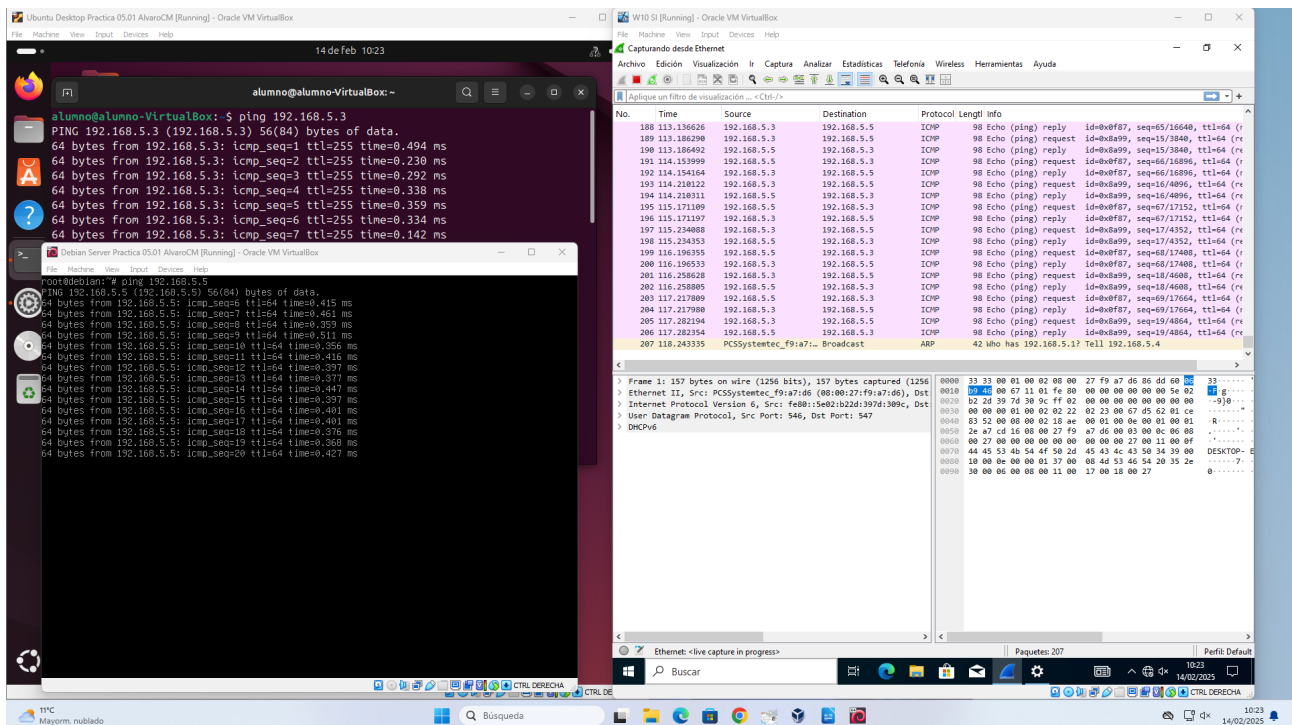
Detalles Identidad IPv4 IPv6 Seguridad

Velocidad de conexión 1000 Mb/s

Dirección IP 192.168.5.5

Dirección física 08:00:27:47:4C:13

Ruta predeterminada 192.168.5.1



Si que lo captura el ping entre las linux

[Opcional] Podes tentar de conectarte a unha páxina que non sexa HTTPS e ver se os datos van en claro. Se atopas unha con contrasinais sería perfecto. Podes facer a proba con HTTPS tamén para ver as diferencias

The image is a composite of three screenshots. The top-left screenshot shows a Linux terminal window with a dark background, displaying network traffic capture data in a table format with columns for time, source, destination, and protocol. The top-right screenshot shows a Windows desktop with a blue background. A Wireshark packet capture window is open, displaying a list of captured packets with columns for No., Time, Source, Destination, Protocol, and Info. The bottom screenshot shows a web browser window displaying the 'edu4java' website. The website has a header with the 'edu4java' logo and navigation links for JAVA, ANDROID, JUEGOS, SQL, HTML, and CONCEPTOS. The main content area is titled 'Android Principiantes' and lists topics like 'Instalar SDK y ADT plugin', 'Depurar en Telefono/tablet', 'Componentes y Estructura', 'Interfaz Java y/o Xml', 'Interfaz arrastrar y soltar', 'Navegando con Intents', 'Arquitectura', 'adb.exe y SQLite', and 'Buscar'. A small Android robot icon is visible on the right side of the page.