

Wireguard

```
Eshan@VPN: ~  
Eshan@VPN:~$ sudo apt install wireguard -y  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  wireguard-tools  
The following NEW packages will be installed:  
  wireguard wireguard-tools  
0 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.  
Need to get 92.2 kB of archives.  
After this operation, 345 kB of additional disk space will be used.  
Get:1 http://azure.archive.ubuntu.com/ubuntu noble/main amd64 wireguard-tools am  
d64 1.0.20210914-1ubuntu4 [89.1 kB]  
Get:2 http://azure.archive.ubuntu.com/ubuntu noble/universe amd64 wireguard all  
1.0.20210914-1ubuntu4 [3086 B]  
Fetched 92.2 kB in 1s (105 kB/s)  
Selecting previously unselected package wireguard-tools.  
(Reading database ... 67913 files and directories currently installed.)  
Preparing to unpack .../wireguard-tools_1.0.20210914-1ubuntu4_amd64.deb ...  
Unpacking wireguard-tools (1.0.20210914-1ubuntu4) ...  
Selecting previously unselected package wireguard.  
Preparing to unpack .../wireguard_1.0.20210914-1ubuntu4_all.deb ...  
Unpacking wireguard (1.0.20210914-1ubuntu4) ...  
Setting up wireguard-tools (1.0.20210914-1ubuntu4) ...  
wg-quick.target is a disabled or a static unit, not starting it.  
Setting up wireguard (1.0.20210914-1ubuntu4) ...  
Processing triggers for man-db (2.12.0-4build2) ...  
Scanning processes...  
Scanning linux images...  
  
Running kernel seems to be up-to-date.  
  
No services need to be restarted.  
  
No containers need to be restarted.  
  
No user sessions are running outdated binaries.  
  
No VM guests are running outdated hypervisor (qemu) binaries on this host.  
Eshan@VPN:~$
```

`sudo apt install wireguard -y`

This is a new experience. [Please provide feedback](#)

Search rules

Source == all

Destination == all

Protocol == all

Action == all

Priority ↑	Name	Port	Protocol	Source	Destination	Action
▼ Inbound port rules (6)						
100	Allow-WireGuard-UDP	51820	UDP	Any	Any	✔ Allow
110	⚠ Allow-Ping-ICMP	Any	ICMP	Any	Any	✔ Allow
300	SSH	22	TCP	Any	Any	✔ Allow
65000	AllowVnetInBound ⓘ	Any	Any	VirtualNetwork	VirtualNetwork	✔ Allow
65001	AllowAzureLoadBalancerInBound ⓘ	Any	Any	AzureLoadBalancer	Any	✔ Allow
65500	DenyAllInBound ⓘ	Any	Any	Any	Any	✖ Deny
▼ Outbound port rules (4)						
100	Allow-Outbound-Internet	Any	Any	Any	Any	✔ Allow
65000	AllowVnetOutBound ⓘ	Any	Any	VirtualNetwork	VirtualNetwork	✔ Allow
65001	AllowInternetOutBound ⓘ	Any	Any	Any	Internet	✔ Allow
65500	DenyAllOutBound ⓘ	Any	Any	Any	Any	✖ Deny

Edit tunnel
✕

Name:

Public key:

```

[Interface]
PrivateKey = wDUuzCVc/pgkv6hBg8CkxoVWdOWljRXNh/mNCLaFh2c=
Address = 10.0.0.2/24
DNS = 1.1.1.1

[Peer]
PublicKey = YKnvxQrHxJS77MjCKK22Pml00l7elxZptB4qkZyp2W0=
AllowedIPs = 0.0.0.0/0
Endpoint = 135.13.16.252:51820
PersistentKeepalive = 25

```

☒ Block untunneled traffic (kill-switch)
Save
Cancel

```
Eshan@VPN: ~  
Eshan@VPN:~$  
Eshan@VPN:~$ wg genkey | sudo tee /etc/wireguard/server_privatekey | wg pubkey |  
DtirU7fSfk2Ntncc8Iujulmt+79uau/HaLl8HVSkh1I=  
Eshan@VPN:~$ sudo cat /etc/wireguard/server_privatekey  
IEOpaFPo049BCbagZUYKuaT+kLTnSd8KaA89u2AeKkg=  
Eshan@VPN:~$ sudo cat /etc/wireguard/server_publickey  
DtirU7fSfk2Ntncc8Iujulmt+79uau/HaLl8HVSkh1I=  
Eshan@VPN:~$
```

```
Eshan@VPN: ~  
GNU nano 7.2 /etc/wireguard/wg0.conf  
[Interface]  
Address = 10.0.0.1/24  
PrivateKey = eDhBi08LltNq2bIZDS41K34MFrpEtHCsaKx9G41Qe34=  
ListenPort = 51820  
PostUp = iptables -A FORWARD -i wg0 -j ACCEPT; iptables -t nat -A POSTROUTING -o eth0 -j MASQUERADE;  
PostDown = iptables -D FORWARD -i wg0 -j ACCEPT; iptables -t nat -D POSTROUTING -o eth0 -j MASQUERADE;  
  
[Peer]  
PublicKey = 48vcktkKGLa8rZBT/3vNxImb2gF5faDOFuK4xQSSiH=  
AllowedIPs = 10.0.0.2/32  
  
[ Read 10 lines ]  
^G Help      ^O Write Out  ^N Where Is   ^K Cut        ^T Execute    ^C Location   M-U Undo      M-A Set Mark  
^X Exit      ^R Read File  ^N Replace    ^U Paste      ^J Justify    ^_ Go To Line  M-E Redo      M-B Copy
```

```
Command Prompt

Pinging 8.8.8.8 with 32 bytes of data:
Reply from 8.8.8.8: bytes=32 time=111ms TTL=112
Reply from 8.8.8.8: bytes=32 time=110ms TTL=112
Reply from 8.8.8.8: bytes=32 time=111ms TTL=112
Reply from 8.8.8.8: bytes=32 time=111ms TTL=112

Ping statistics for 8.8.8.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 110ms, Maximum = 111ms, Average = 110ms

C:\Users\Star Gate>ping 10.0.0.1

Pinging 10.0.0.1 with 32 bytes of data:
Reply from 10.0.0.1: bytes=32 time=109ms TTL=64
Reply from 10.0.0.1: bytes=32 time=109ms TTL=64
Reply from 10.0.0.1: bytes=32 time=109ms TTL=64
Reply from 10.0.0.1: bytes=32 time=109ms TTL=64

Ping statistics for 10.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 109ms, Maximum = 109ms, Average = 109ms

C:\Users\Star Gate>
```

Errors

```
19:57:55.276918 IP 10.0.0.2 > derp11b.tailscale.com: ICMP echo request, id 10083, s
19:57:55.277823 IP 10.0.0.2 > derp19b.tailscale.com: ICMP echo request, id 10083, s
19:57:55.277847 IP 10.0.0.2 > static.233.218.161.5.clients.your-server.de: ICMP ech
19:57:55.277868 IP 10.0.0.2 > derp4f.tailscale.com: ICMP echo request, id 10083, se
19:57:55.277874 IP 10.0.0.2 > derp10b.tailscale.com: ICMP echo request, id 10083, s
19:57:55.277879 IP 10.0.0.2 > derp13b.tailscale.com: ICMP echo request, id 10083, s
19:57:55.277884 IP 10.0.0.2 > derp21b.tailscale.com: ICMP echo request, id 10083, s
19:57:55.277898 IP 10.0.0.2 > derp22b.tailscale.com: ICMP echo request, id 10083, s
19:57:55.277904 IP 10.0.0.2 > static.62.143.109.65.clients.your-server.de: ICMP ech
[xc^C
200 packets captured
200 packets received by filter
0 packets dropped by kernel
[Eshan@VPN:~$ ping 10.0.0.2
PING 10.0.0.2 (10.0.0.2) 56(84) bytes of data.
From 10.0.0.4 icmp_seq=6 Destination Host Unreachable
From 10.0.0.4 icmp_seq=8 Destination Host Unreachable
From 10.0.0.4 icmp_seq=15 Destination Host Unreachable
From 10.0.0.4 icmp_seq=18 Destination Host Unreachable
From 10.0.0.4 icmp_seq=21 Destination Host Unreachable
From 10.0.0.4 icmp_seq=23 Destination Host Unreachable
From 10.0.0.4 icmp_seq=27 Destination Host Unreachable
```



```
sudo: tcpdump: command not found
[Eshan@VPN: ~]$ sudo tcpdump -i wg0 icmp
tcpdump: verbose output suppressed, use -v[v]... for full protocol decode
listening on wg0, link-type RAW (Raw IP), snapshot length 262144 bytes
19:28:10.443210 IP 10.0.0.2 > derp6-blr.tailscale.com: ICMP echo request, id 2888, seq 1, length 10
19:28:10.443246 IP 10.0.0.2 > derp7b.tailscale.com: ICMP echo request, id 2888, seq 2, length 10
19:28:10.443253 IP 10.0.0.2 > derp11b.tailscale.com: ICMP echo request, id 2888, seq 3, length 11
19:28:10.443259 IP 10.0.0.2 > derp19b.tailscale.com: ICMP echo request, id 2888, seq 4, length 11
19:28:10.443264 IP 10.0.0.2 > static.233.218.161.5.clients.your-server.de: ICMP echo request, id 2888, seq 5, length 11
19:28:10.443269 IP 10.0.0.2 > derp4f.tailscale.com: ICMP echo request, id 2888, seq 6, length 10
19:28:10.443274 IP 10.0.0.2 > derp10b.tailscale.com: ICMP echo request, id 2888, seq 7, length 11
19:28:10.444219 IP 10.0.0.2 > derp13b.tailscale.com: ICMP echo request, id 2888, seq 8, length 11
19:28:10.444237 IP 10.0.0.2 > derp21b.tailscale.com: ICMP echo request, id 2888, seq 9, length 11
19:28:10.444248 IP 10.0.0.2 > derp22b.tailscale.com: ICMP echo request, id 2888, seq 10, length 11
19:28:10.444255 IP 10.0.0.2 > static.62.143.109.65.clients.your-server.de: ICMP echo request, id 2888, seq 11, length 11
19:28:10.444261 IP 10.0.0.2 > derp5b.tailscale.com: ICMP echo request, id 2888, seq 12, length 10
19:28:10.444267 IP 10.0.0.2 > derp8e.tailscale.com: ICMP echo request, id 2888, seq 13, length 10
19:28:10.444273 IP 10.0.0.2 > derp9d.tailscale.com: ICMP echo request, id 2888, seq 14, length 10
19:28:10.444279 IP 10.0.0.2 > derp1f.tailscale.com: ICMP echo request, id 2888, seq 15, length 10
19:28:10.444285 IP 10.0.0.2 > derp12d.tailscale.com: ICMP echo request, id 2888, seq 16, length 11
19:28:10.444291 IP 10.0.0.2 > derp15b.tailscale.com: ICMP echo request, id 2888, seq 17, length 11
19:28:10.444297 IP 10.0.0.2 > derp16b.tailscale.com: ICMP echo request, id 2888, seq 18, length 11
19:28:10.444303 IP 10.0.0.2 > derp18b.tailscale.com: ICMP echo request, id 2888, seq 19, length 11
19:28:10.444310 IP 10.0.0.2 > derp20b.tailscale.com: ICMP echo request, id 2888, seq 20, length 11
19:28:10.444317 IP 10.0.0.2 > derp23b.tailscale.com: ICMP echo request, id 2888, seq 21, length 11
19:28:10.444323 IP 10.0.0.2 > derp24b.tailscale.com: ICMP echo request, id 2888, seq 22, length 11
19:28:10.444329 IP 10.0.0.2 > derp14b.tailscale.com: ICMP echo request, id 2888, seq 23, length 11
19:28:10.444334 IP 10.0.0.2 > derp17b.tailscale.com: ICMP echo request, id 2888, seq 24, length 11
19:28:10.444341 IP 10.0.0.2 > derp2d.tailscale.com: ICMP echo request, id 2888, seq 25, length 10
19:28:10.444348 IP 10.0.0.2 > derp25b.tailscale.com: ICMP echo request, id 2888, seq 26, length 11
19:28:10.444951 IP 10.0.0.2 > static.200.72.235.167.clients.your-server.de: ICMP echo request, id 2888, seq 27, length 11
19:28:10.444991 IP 10.0.0.2 > derp3b.tailscale.com: ICMP echo request, id 2888, seq 28, length 10
19:28:15.454736 IP 10.0.0.2 > derp13b.tailscale.com: ICMP echo request, id 59086, seq 1, length 11
19:28:15.455802 IP 10.0.0.2 > derp20b.tailscale.com: ICMP echo request, id 59086, seq 2, length 11
19:28:15.457857 IP 10.0.0.2 > derp21b.tailscale.com: ICMP echo request, id 59086, seq 3, length 11
19:28:15.458917 IP 10.0.0.2 > derp22b.tailscale.com: ICMP echo request, id 59086, seq 4, length 11
19:28:15.458933 IP 10.0.0.2 > static.62.143.109.65.clients.your-server.de: ICMP echo request, id 59086, seq 5, length 11
19:28:15.458941 IP 10.0.0.2 > derp5b.tailscale.com: ICMP echo request, id 59086, seq 6, length 10
19:28:15.458946 IP 10.0.0.2 > derp8e.tailscale.com: ICMP echo request, id 59086, seq 7, length 10
19:28:15.458953 IP 10.0.0.2 > derp9d.tailscale.com: ICMP echo request, id 59086, seq 8, length 10
19:28:15.458960 IP 10.0.0.2 > derp1f.tailscale.com: ICMP echo request, id 59086, seq 9, length 10
19:28:15.458971 IP 10.0.0.2 > derp12d.tailscale.com: ICMP echo request, id 59086, seq 10, length 11
19:28:15.458977 IP 10.0.0.2 > derp15b.tailscale.com: ICMP echo request, id 59086, seq 11, length 11
19:28:15.458984 IP 10.0.0.2 > derp16b.tailscale.com: ICMP echo request, id 59086, seq 12, length 11
19:28:15.458990 IP 10.0.0.2 > derp18b.tailscale.com: ICMP echo request, id 59086, seq 13, length 11
19:28:15.458996 IP 10.0.0.2 > derp3b.tailscale.com: ICMP echo request, id 59086, seq 14, length 10
19:28:15.459002 IP 10.0.0.2 > derp23b.tailscale.com: ICMP echo request, id 59086, seq 15, length 11
19:28:15.459008 IP 10.0.0.2 > derp24b.tailscale.com: ICMP echo request, id 59086, seq 16, length 11
19:28:15.459015 IP 10.0.0.2 > derp14b.tailscale.com: ICMP echo request, id 59086, seq 17, length 11
19:28:15.459026 IP 10.0.0.2 > derp17b.tailscale.com: ICMP echo request, id 59086, seq 18, length 11
19:28:15.459032 IP 10.0.0.2 > derp2d.tailscale.com: ICMP echo request, id 59086, seq 19, length 10
19:28:15.459038 IP 10.0.0.2 > derp25b.tailscale.com: ICMP echo request, id 59086, seq 20, length 11
19:28:15.459043 IP 10.0.0.2 > static.200.72.235.167.clients.your-server.de: ICMP echo request, id 59086, seq 21, length 11
19:28:15.459049 IP 10.0.0.2 > derp19b.tailscale.com: ICMP echo request, id 59086, seq 22, length 11
19:28:15.459055 IP 10.0.0.2 > derp6-blr.tailscale.com: ICMP echo request, id 59086, seq 23, length 10
```