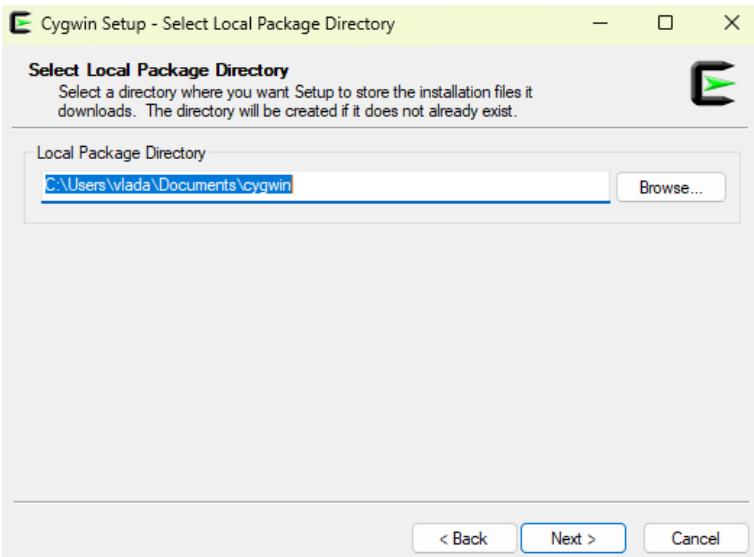
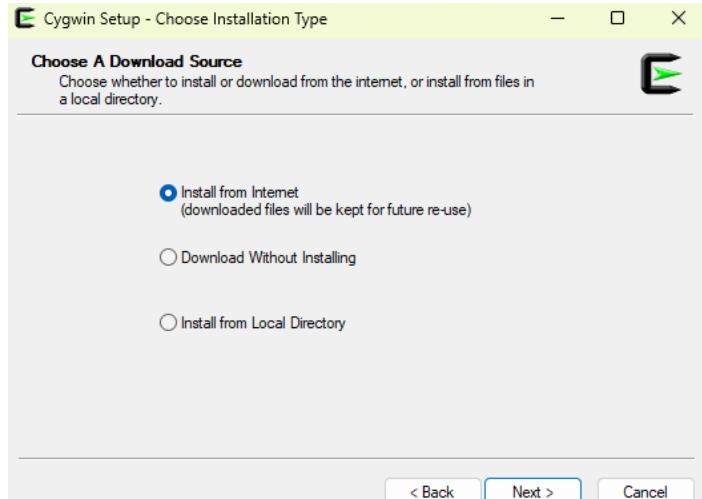


Instalare cygwin:

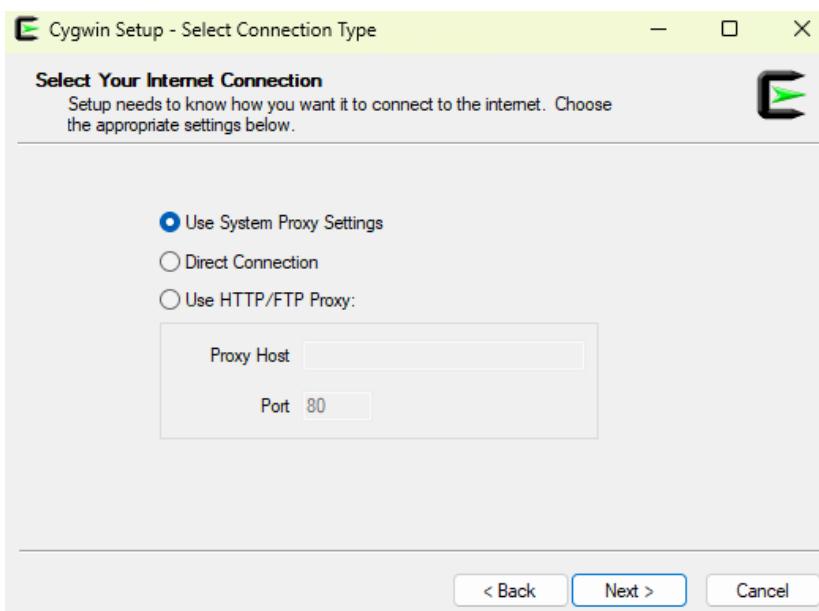
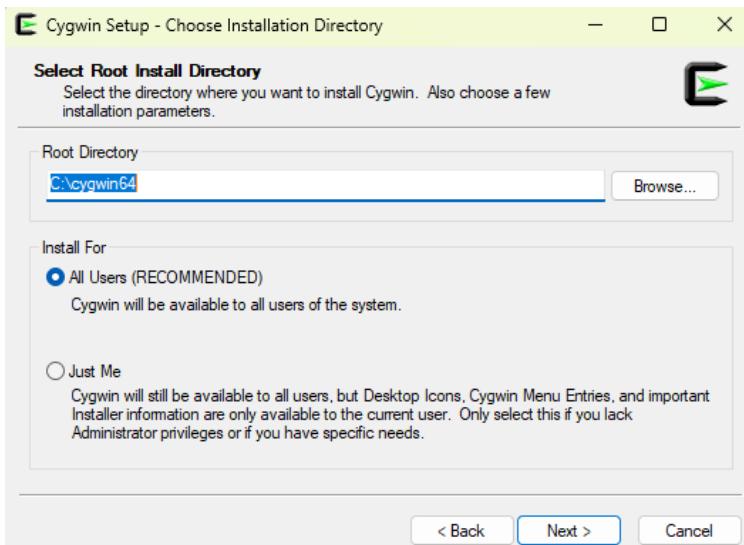


Se instaleaza de pe acest url, setup-x86_64.exe si se pune intr-un folder separat unde vreti sa il instalati (by default va fi in downloads, nu cred ca vreti asta)

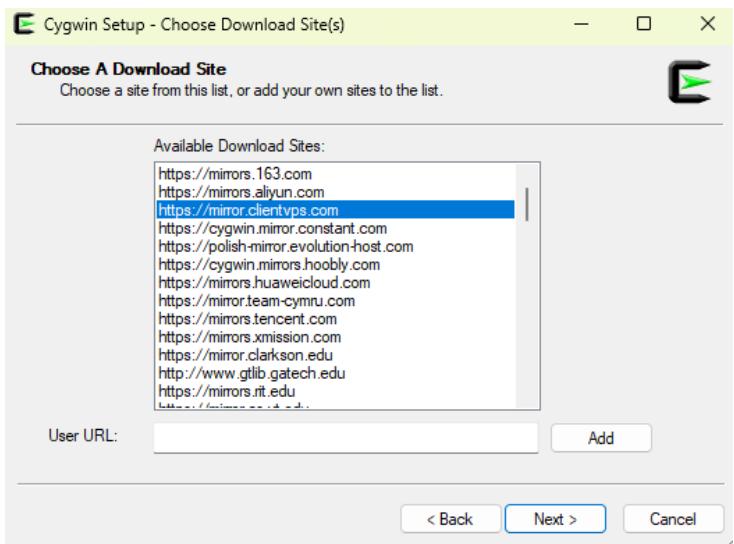
The screenshot shows the Cygwin website at cygwin.com/install.html. The main heading is 'Cygwin' with the subtext 'Get that [Linux](#) feeling - on Windows'. Below this is a section titled 'Installing and Updating Cygwin Packages'. It includes a sub-section 'Installing and Updating Cygwin for 64-bit versions of Windows' with instructions to run 'setup-x86_64.exe' and verify signatures. There's also a 'General installation notes' section. On the left, there's a vertical sidebar with navigation links like 'Pages', 'Topics', 'Bugs', 'Issues', 'Changelog', 'FAQ', 'Howto', 'Documentation', 'Translations', and 'About'.



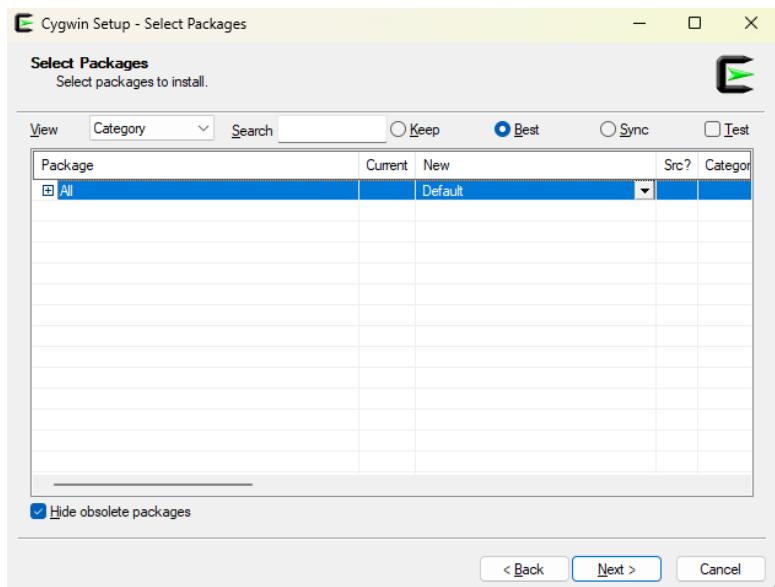
Aici recomandat sa nu aveți downloads ca root directory 😊



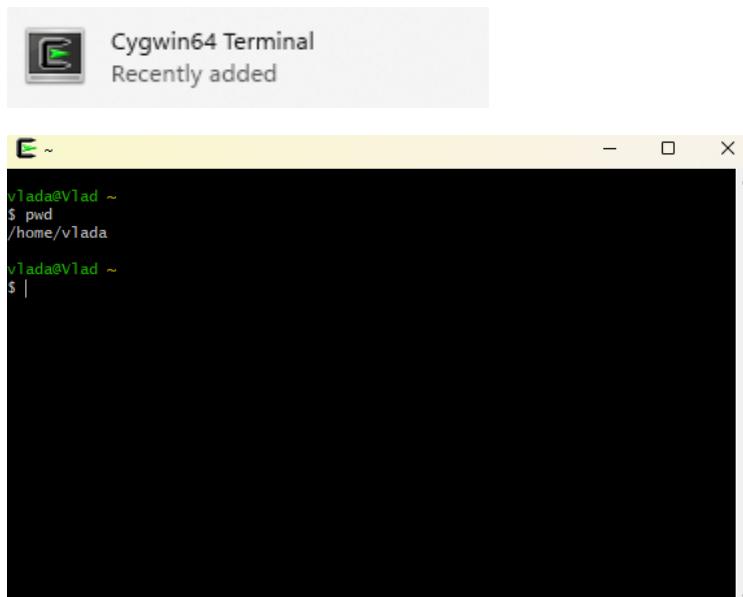
Mai departe nu contează neapărat ce alegeti



La pachete, dati next, vom instala pe masura ce vom avea nevoie

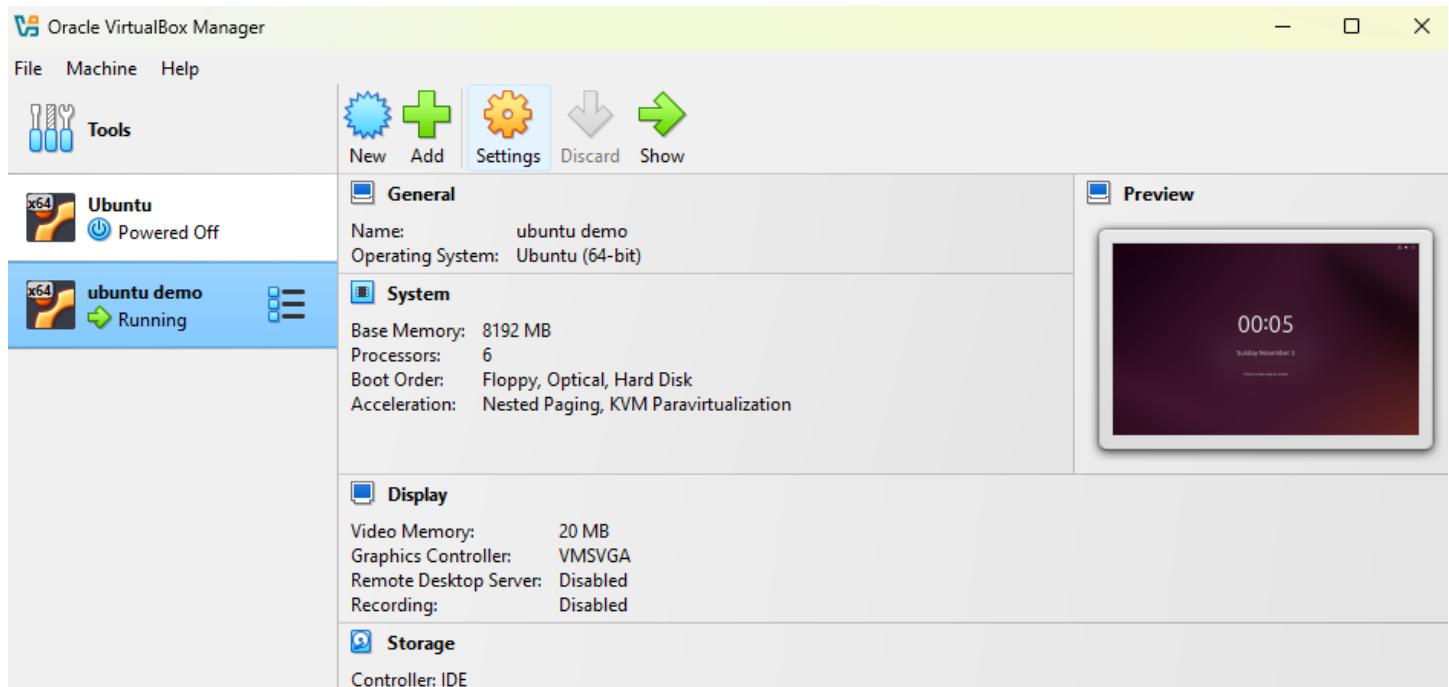


Apoi daca deschideti ce ati instalat, vezi avea o mini consola linux pe masina voastră 😊.

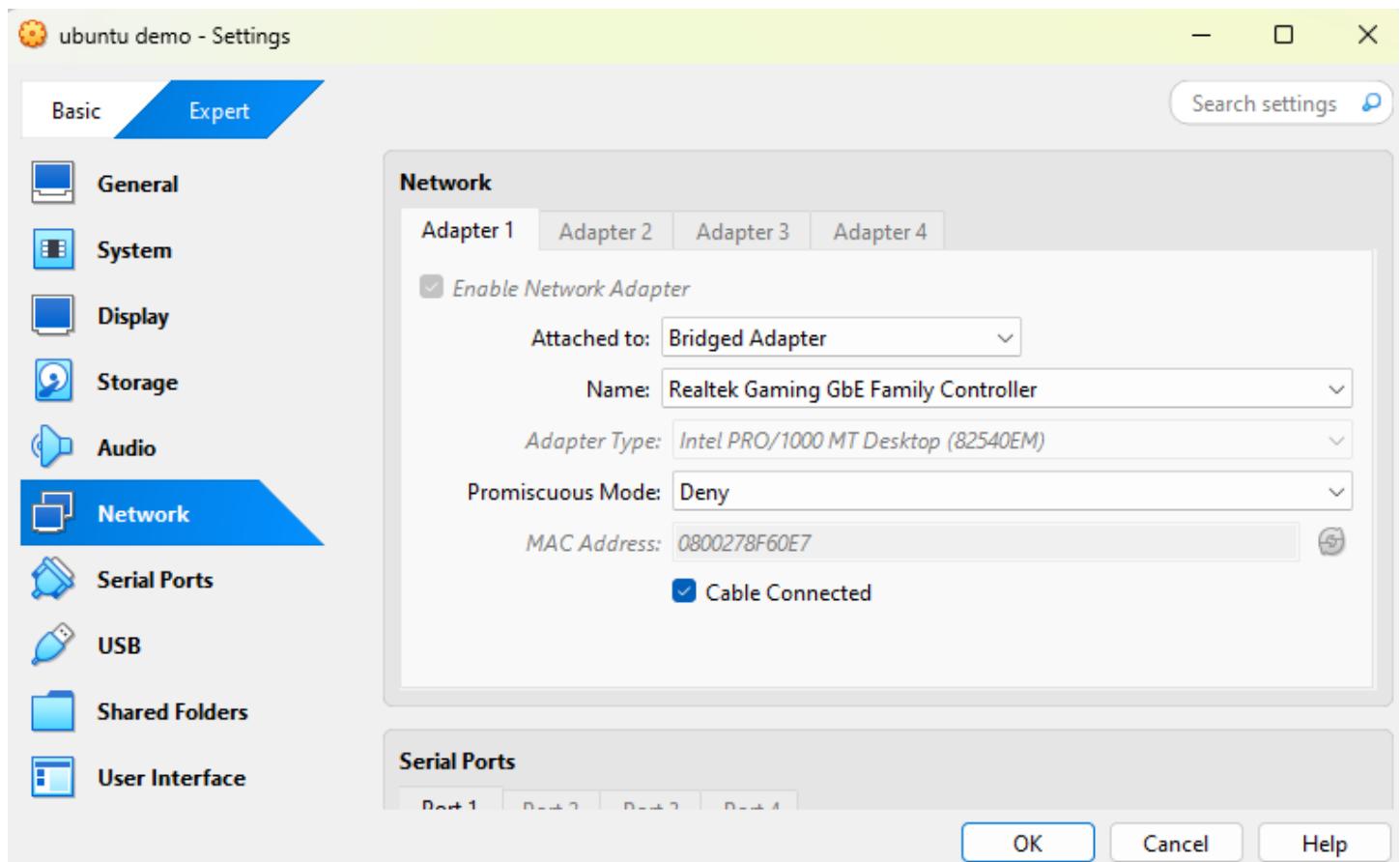


Configurare masina virtuala-server

Mergeti in settings pe masina pe care vreti sa o considerati server



La network trebuie sa fie Bridge



Instalam apache (pentru a rula serverul). Pagina de referinta:

<https://cloud.google.com/compute/docs/tutorials/basic-webserver-apache>

```
Processing triggers for lsb-dln (2.39-0ubuntu0.3) ...
vlad@vlad-VirtualBox:~/Desktop$ sudo apt -y install apache2
Reading package lists... Done
Building dependency tree... Done
```

Verificam daca este activ:

```
vlad@vlad-VirtualBox:~/Desktop$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
  Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: en>
  Active: active (running) since Sat 2024-11-02 22:35:56 UTC; 37s ago
    Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 3348 (apache2)
     Tasks: 55 (limit: 9444)
    Memory: 5.7M (peak: 6.7M)
       CPU: 79ms
      CGroup: /system.slice/apache2.service
              ├─3348 /usr/sbin/apache2 -k start
              ├─3349 /usr/sbin/apache2 -k start
              └─3350 /usr/sbin/apache2 -k start

Nov 02 22:35:56 vlad-VirtualBox systemd[1]: Starting apache2.service - The Apac>
Nov 02 22:35:56 vlad-VirtualBox apachectl[3347]: AH00558: apache2: Could not re>
Nov 02 22:35:56 vlad-VirtualBox systemd[1]: Started apache2.service - The Apac>
```

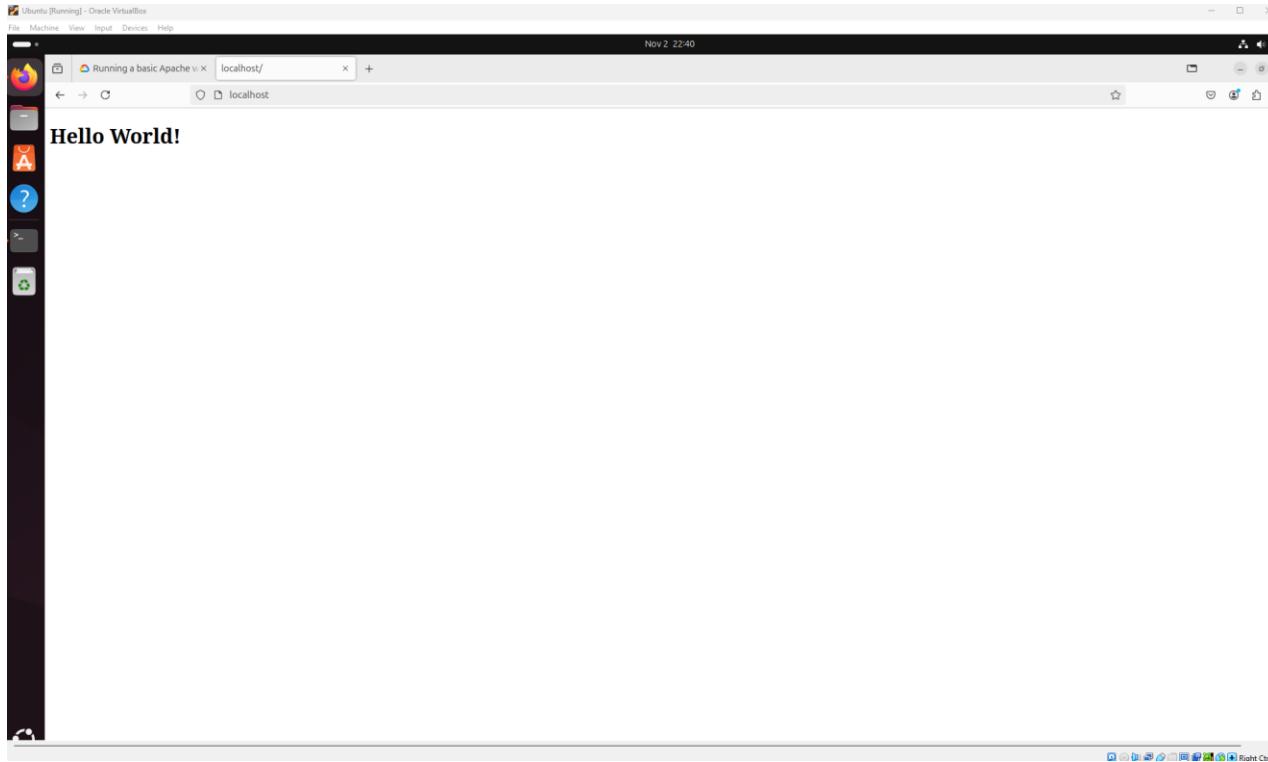
Trebuie sa apara active: active (running)

Rulam comanda pentru a trimite un template html, sa putem testa pe web

```
echo '<!doctype html><html><body><h1>Hello World!</h1></body></html>' | sudo tee
/var/www/html/index.html
```

```
vlad@vlad-VirtualBox:~/Desktop$ echo '<!doctype html><html><body><h1>Hello World!</h1></body></html>' | sudo tee /var/www/html/index.html
<!doctype html><html><body><h1>Hello World!</h1></body></html>
vlad@vlad-VirtualBox:~/Desktop$
```

Daca mergem in vm pe localhost pe web ar trebui sa vedem serverul ca trimite html-ul scris mai sus:



Daca dam un ip a, putem vedea ip-ul local al masinii si putem accesa serverul pe care tocmai l-am deschis la ip-ul 192.168.1.142 (in cazul de fata) pe masina gazda. Puteti testa scriind ip-ul din consola in browser pe masina gazda si ar trebui sa incarce siteul.

```
vlad@vlad-VirtualBox:~/Desktop$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether 08:00:27:72:ea:d4 brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.142/24 brd 192.168.1.255 scope global dynamic noprefixroute enp0s3
        valid_lft 85939sec preferred_lft 85939sec
    inet6 2a02:2f00:230e:db00:906:ab99:530:8ea6/64 scope global temporary dynamic
        valid_lft 604340sec preferred_lft 85852sec
    inet6 2a02:2f00:230e:db00:a00:27ff:fe72:ead4/64 scope global dynamic mngtmpaddr
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fe72:ead4/64 scope link
        valid_lft forever preferred_lft forever
vlad@vlad-VirtualBox:~/Desktop$
```

Daca nu functioneaza, incercati urmatoarele comenzi, trebuie deschise porturile 80 (http) si 443 (https):

```
sudo ufw allow 80/tcp
```

```
sudo ufw allow 443/tcp
```

```
sudo ufw enable
```