

DNS strežnik

Jonas Korene Novak – 30. 3. 2025 – R2D

Screenshotti

allow-hotplug enp0s8

```
iface enp0s8 inet dhcp
# Hey Hey Hey Tukja pa jaz pisem
iface enp0s3 inet static
            address 192.168.56.10/24
            gateway 192.168.56.1
C:\Users\Vegova>ssh skrbnik@192.168.56.10
The authenticity of host '192.168.56.10 (192.168.56.10)' can't be established.
ED25519 key fingerprint is SHA256:nh/az7WdMRR7jADbHQYuCI17n7791XiGL7GFR7c09H8.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.56.10' (ED25519) to the list of known hosts.
skrbnik@192.168.56.10's password:
Linux rakov-debian 6.1.0-31-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.128-1 (2025-02-07) x86_64
The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Mon Mar 24 09:19:41 2025
skrbnik@rakov-debian:~$
е: опарте со госате раскаде тазітется
root@rakov-debian:/home/skrbnik# apt update
Get:1 http://security.debian.org/debian-security bookworm-security InRelease [48.0 kB]
Get:2 http://ftp.si.debian.org/debian bookworm InRelease [151 kB]
Get:3 http://ftp.si.debian.org/debian bookworm-updates InRelease [55.4 kB]
Get:4 http://security.debian.org/debian-security bookworm-security/main Sources [147 kB]
Get:5 http://security.debian.org/debian-security bookworm-security/main amd64 Packages [250 kB]
Get:6 http://security.debian.org/debian-security bookworm-security/main Translation-en [150 kB]
Get:7 http://ftp.si.debian.org/debian bookworm/non-free-firmware Sources [6,440 B]
```

Get:8 http://ftp.si.debian.org/debian bookworm/main Sources [9,495 kB] Get:9 http://ftp.si.debian.org/debian bookworm/main amd64 Packages [8,792 kB]



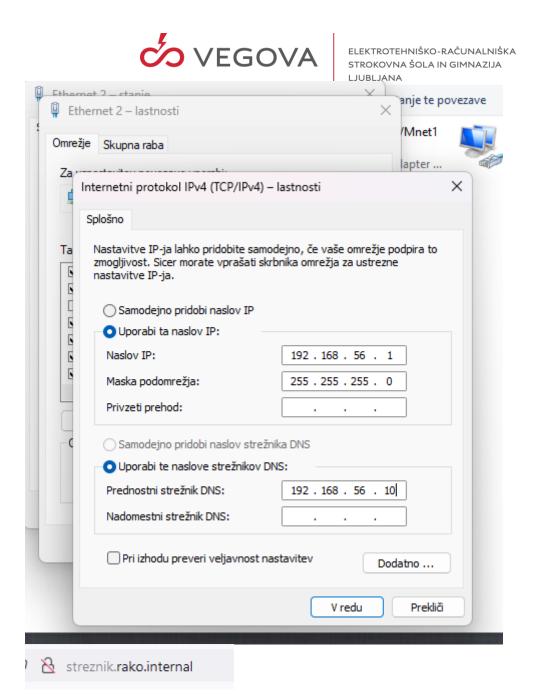
```
GNU nano 7.2
                                                        /etc/network/interf
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).
source /etc/network/interfaces.d/*
# The loopback network interface
auto lo
iface lo inet loopback
# The primary network interface
allow-hotplug enp0s8
iface enp0s8 inet dhcp
# Hey Hey Hey Tukja pa jaz pisem
auto enp0s3
iface enp0s3 inet static
         address 192.168.56.10/24
         gateway 192.168.56.1
 root@rakov-debian:/home/skrbnik# apt install bind9
 Reading package lists... Done
 Building dependency tree... Done
 Reading state information... Done
 The following additional packages will be installed:
   bind9-utils dns-root-data
 Suggested packages:
   bind-doc resolvconf ufw
root@rakov-debian:/etc/bind# ls
bind.keys db.127 db.empty named.conf named.conf.local rndc.key
db.0 db.255 db.local named.conf.default-zones named.conf.options zones.rfc1918
root@rakov-debian:/etc/bind#
                   forwarders {
                           1.1.1.1;
                           1.0.0.1;
                           8.8.8.8;
                           8.0.0.8;
                   };
                  //=========
root@rakov-debian:/etc/bind# nano name@.cont.options
root@rakov-debian:/etc/bind# systemctl restart named
root@rakov-debian:/etc/bind#
```

```
PS C:\Users\Vegova> nslookup google.si 192.168.56.10
Server: Unknown
Address: 192.168.56.10
Non-authoritative answer:
Name:
         google.si
Addresses: 2a00:1450:4002:415::2003
          216.58.204.227
PS C:\Users\Vegova>
// Consider adding the 1918 zones here, it they are not used in your
 // organization
 //include "/etc/bind/zones.rfc1918";
 zone "rako.internal" {
        type master:
        file "/etc/bind/db.rako.internal";
zone "rako.internal" {
         type master;
         file "/etc/bind/db.rako.internal";
} ; {
root@rakov-debian:/etc/bind# cp db.local db.rako.internal
root@rakov-debian:/etc/bind#
    604800
                   streznik.rako.internal. root.rako.internal. (
    ΙN
           SOA
                         2
                                   ; Serial
                    604800
                                   : Refresh
                     86400
                                  ; Retry
                                   ; Expire
                   2419200
                                  ; Negative Cache TTL
                    604800 )
```

```
BIND data file for local loopback interface
$TTL
          604800
                               streznik.rako.internal. root.rako.internal. (
          ΙN
                     SOA
                                                    ; Serial
                                604800
                                                    ; Refresh
                                  86400
                                                    ; Retry
                                                   ; Expire
                               2419200
                                604800 )
                                                   ; Negative Cache TTL
           vnos za nas DNS streznik
                      NS
                                 streznik.rako.internal.
;ostali dns vnosi
                                        192.168.56.10
streznik
               IN
root@rakov-debian:/etc/bind# systemctl restart named
root@rakov-debian:/etc/bind#
 PS C:\Users\Vegova> nslookup streznik.rako.internal 192.168.56.10
Server: UnKnown
 Address: 192.168.56.10
          streznik.rako.internal
 Address: 192.168.56.10
PS C:\Users\Vegova>
← → ∨ ↑ 👰 > Nadzorna plošča > Omrežje in internet > Omrežne povezave >
                                                                            Preišči Omrežne povezave
Organiziraj 🕶
Ethernet
                     Ethernet 2
Omogočen
                                           VMware Network Adapter VMnet1 VMware Network Adapter VMnet8
Omogočeno Omogočeno
  Omrežje
Intel(R) Ethernet Connection (7) I...
                       Omogočeno
VirtualBox Host-Only Ethernet Ad...
                                             Omogočeno
VMware Virtual Ethernet Adapter ...
                                                                  Omogočeno

VMware Virtual Ethernet Adapter ...
```

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ELEKTROTEHNIŠKO-RAČUNALNIŠKA STROKOVNA ŠOLA IN GIMNAZIJA LJUBLJANA

```
BIND data file for local loopback interface
$TTL
        604800
                SOA
                         streznik.rako.internal. root.rako.int
        ΙN
                                         ; Serial
                               4
                                         ; Refresh
                         604800
                          86400
                                         ; Retry
                                         ; Expire
                         2419200
                          604800 )
                                         ; Negative Cache TTL
        vnos za nas DNS streznik
                        streznik.rako.internal.
                NS
        ostali dns vnosi
streznik
                IN
                                192.168.56.10
                               streznik.rako.internal.
krompir
                IN
                        CNAME
                        CNAME streznik.rako.internal.
jaz
                IN
PS C:\Users\Vegova> nslookup krompir.rako.internal 192.168.56.10
Server: Unknown
Address: 192.168.56.10
Name: streznik.rako.internal
Address: 192.168.56.10
Aliases: krompir.rako.internal
PS C:\Users\Vegova> nslookup jaz.rako.internal 192.168.56.10
Server: UnKnown
Address: 192.168.56.10
Name:
       streznik.rako.internal
Address: 192.168.56.10
Aliases: jaz.rako.internal
PS C:\Users\Vegova>
root@rakov-debian:/etc/bind# cd /etc/apache2/sites-available/
root@rakov-debian:/etc/apache2/sites-available#
root@rakov=uebian:/etc/apachez/sites=avaitabte# hano /etc/apachez/sites=avaita
root@rakov-debian:/etc/apache2/sites-available# nano 000-default.conf |
```

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GNU nano 7.2 000-default.conf * <VirtualHost *:80> serverName krompir.rako.internal ServerAdmin matic.flegar.si@gmail.com DocumentRoot /var/www/html ErrorLog \${APACHE_LOG_DIR}/error.log CustomLog \${APACHE_LOG_DIR}/access.log combined </VirtualHost> <VirtualHost *:80> serverName jaz.rako.interna ServerAdmin matic.flegar.si@gmail.com DocumentRoot /var/www/jaz ErrorLog \${APACHE_LOG_DIR}/error.log CustomLog \${APACHE_LOG_DIR}/access.log combined </VirtualHost> root@rakov-debian:/etc/apache2/sites-available# systemctl restrt apache2 Unknown command verb restrt.

root@rakov-debian:/etc/apache2/sites-available# systemctl restart apache2
root@rakov-debian:/etc/apache2/sites-available# |

```
root@rakov-debian:/var/www# mkdir jaz
root@rakov-debian:/var/www# chown skrbnik:ww-data jaz
chown: invalid group: 'skrbnik:ww-data'
root@rakov-debian:/var/www# chown skrbnik:www-data jaz
root@rakov-debian:/var/www# chown skrbnik@rakov-debian:/var/www# chown skrbnik@rakov-debian:/var/www/jaz
-bash: cd: /var/ww/jaz: No such file or directory
skrbnik@rakov-debian:~$ nano index.html
skrbnik@rakov-debian:~$ cd /var/www/jaz
skrbnik@rakov-debian:/var/www/jaz$ nano index.html
```

Odgovori

- 1.1.: Uporabili smo bind9.
- 1.2.: V /etc/bind/ direktoriju.
- 1.3.: .options in DNS record db datoteke.
- 1.4.: Ker se .internal TLD definiran kot TLD, ki se ne sme pojaviti v javnem internetu.
- 2.1.: Ker imamo dva apache2 VirtualHost-a, ki imata listen domeno drugo. Z CNAME recordi lahko usmerimo pravilne spletne strani.

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