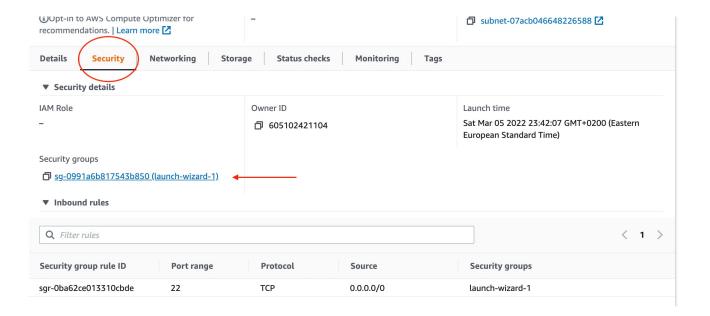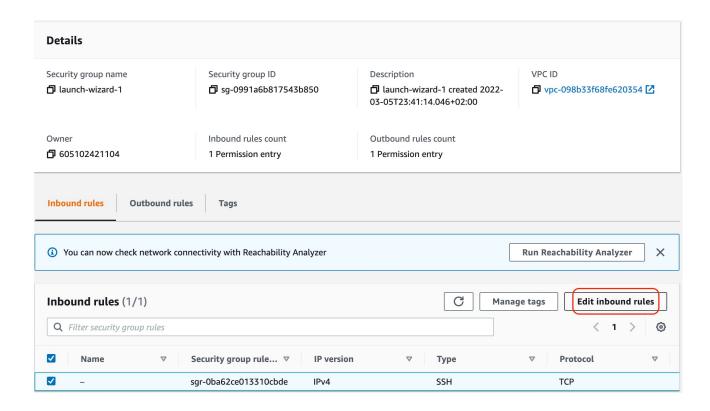Modificam regulile de securitate astfel incat sa permitem trafic TCP/UDP pe portul 53.
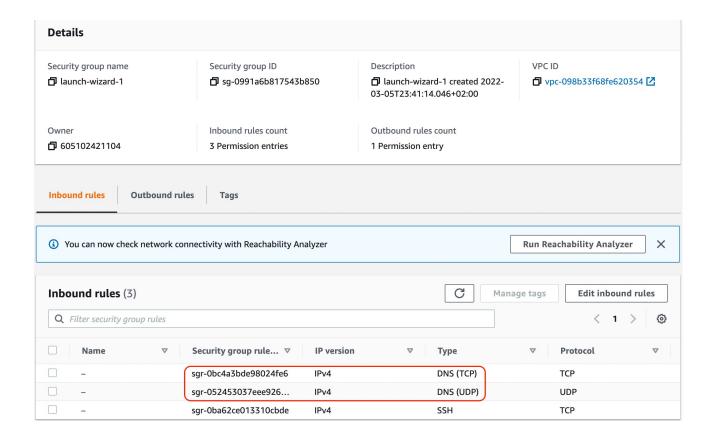
Dam click pe *Security groups* (vezi sageata)

Ne aflam in **Security groups** si editam **inbound rules** unde deja exista permis traficul SSH / TCP port 22.

Details

Security group name	Security group ID	Description	VPC ID
⧉ launch-wizard-1	⧉ sg-0991a6b817543b850	⧉ launch-wizard-1 created 2022-03-05T23:41:14.046+02:00	⧉ vpc-098b33f68fe620354 ↗

Owner	Inbound rules count	Outbound rules count
⧉ 605102421104	1 Permission entry	1 Permission entry

Inbound rules | Outbound rules | Tags

ⓘ You can now check network connectivity with Reachability Analyzer   **Run Reachability Analyzer** ✕

Inbound rules (1/1)   ↻   **Manage tags**   **Edit inbound rules**

🔍 Filter security group rules   ‹ 1 › ⚙

☑	Name ▽	Security group rule... ▽	IP version ▽	Type ▽	Protocol ▽
☑	–	sgr-0ba62ce013310cbde	IPv4	SSH	TCP

Adaugam doua reguli prin care permitem traficul UDP/ port 53 si TCP / port 53 de la toate IP-urile: 0.0.0.0/0

Details

Security group name	Security group ID	Description	VPC ID
📄 launch-wizard-1	📄 sg-0991a6b817543b850	📄 launch-wizard-1 created 2022-03-05T23:41:14.046+02:00	🔗 vpc-098b33f68fe620354 ↗
Owner	Inbound rules count	Outbound rules count	
📄 605102421104	3 Permission entries	1 Permission entry	

Inbound rules   Outbound rules   Tags

ⓘ You can now check network connectivity with Reachability Analyzer   **Run Reachability Analyzer**   ✕

Inbound rules (3)   ↻   Manage tags   **Edit inbound rules**

🔍 Filter security group rules   ‹ 1 ›   ⚙

☐	Name ▽	Security group rule... ▽	IP version ▽	Type ▽	Protocol ▽
☐	–	sgr-0bc4a3bde98024fe6	IPv4	DNS (TCP)	TCP
☐	–	sgr-052453037eee926…	IPv4	DNS (UDP)	UDP
☐	–	sgr-0ba62ce013310cbde	IPv4	SSH	TCP

Dupa ce ne conectam pe server via ssh,
instalam bind9**:**

sudo su -

apt-get update

apt install -y bind9

```
1. ne conectam pe server via ssh
ssh —i .ssh/ubmi23.pem ubuntu@54.210.155.177

2. ne facem root
sudo su —

3. instalam bind9
apt install —y bind9
```

Editam /etc/bind/named.conf

si adaugam linia:

include "/etc/bind/named.conf.zones";

In acest fisier vom adauga toate domeniile/zonele pe care configuram pe server.

```
No modified files, so no updates needed.
root@ip-172-31-16-249:/etc/bind# cat  named.conf
// This is the primary configuration file for the BIND DNS server named.
//
// Please read /usr/share/doc/bind9/README.Debian.gz for information on the
// structure of BIND configuration files in Debian, *BEFORE* you customize
// this configuration file.
//
// If you are just adding zones, please do that in /etc/bind/named.conf.local

include "/etc/bind/named.conf.options";
include "/etc/bind/named.conf.local";
include "/etc/bind/named.conf.default-zones";
include "/etc/bind/named.conf.zones";  ←
```

Cream /etc/bind/named.conf.zones

si adaugam configul pentru zona **ubmilab.ro**:

```
zone "ubmilab.ro" {
    type master;
    file "/etc/bind/zones/ubmilab.ro.db";
};
```

```
root@ip-172-31-16-249:/etc/bind# cat named.conf.zones
zone "ubmilab.ro" {
        type master;
        file "/etc/bind/zones/ubmilab.ro.db";
};
root@ip-172-31-16-249:/etc/bind#
```

Cream directorul **"/etc/bind/zones/"** unde vom pastra toate fisierele cu zonele pe care le definim.

mkdir /etc/bind/zones

Cream apoi fisierul de zona la care facem referire in slide-ul anterior:

/etc/bind/zones/ubmilab.ro.db

si adaugam in el informatiile necesare.

```
root@ip-172-31-16-249:/etc/bind# cat /etc/bind/zones/ubmilab.ro.db
$ORIGIN .
$TTL 86400      ; 1 day
ubmilab.ro                      IN SOA  ns1.ubmilab.ro. info.ubmilab.ro. (
                                2022030601 ; serial
                                7200       ; refresh (2 hours)
                                900        ; retry (15 minutes)
                                1209600    ; expire (2 weeks)
                                3600       ; minimum (1 hour)
                                )
                        NS      ns1.ubmilab.ro.
$TTL 300        ; 5 minutes
                        A       54.210.155.177
                        TXT     "zona dns pentru teste"
$ORIGIN ubmilab.ro.
$TTL 300
ns1                     A       54.210.155.177
```

Verificam ca nu avem erori:

named-checkzone ubmilab.ro /etc/bind/zones/ubmilab.ro.db

Restartam bind9:

systemctl restart bind9

```
root@ip-172-31-16-249:/etc/bind# named-checkzone ubmilab.ro /etc/bind/zones/ubmilab.ro.db
zone ubmilab.ro/IN: loaded serial 2022030601
OK
root@ip-172-31-16-249:/etc/bind# systemctl restart bind9
root@ip-172-31-16-249:/etc/bind# systemctl status bind9
● named.service - BIND Domain Name Server
     Loaded: loaded (/lib/systemd/system/named.service; enabled; vendor preset: enabled)
     Active: active (running) since Sun 2022-03-06 19:42:01 UTC; 7s ago
       Docs: man:named(8)
   Main PID: 31583 (named)
      Tasks: 5 (limit: 1147)
     Memory: 21.2M
     CGroup: /system.slice/named.service
             └─31583 /usr/sbin/named -f -u bind
```

De pe alta masina linux, interogam serverul DNS pe care tocmai l-am creat.

Cerem o inregistrare de tip NS (nameservers) pentru domeniul ubmilab.ro

host –t NS ubmilab.ro 54.210.155.177

si primim raspunsul:

ubmilab.ro name server ns1.ubmilab.ro.

Cerem apoi o inregistrare de tip A pentru ns1.ubmilab.ro ca sa aflam IP-ul nameserverului.

ns1.ubmilab.ro has address 54.210.155.177

```
liviu@ubmi~ $ host -t NS ubmilab.ro 54.210.155.177
Using domain server:
Name: 54.210.155.177
Address: 54.210.155.177#53
Aliases:

ubmilab.ro name server ns1.ubmilab.ro.
liviu@ubmi~ $ host -t A ns1.ubmilab.ro 54.210.155.177
Using domain server:
Name: 54.210.155.177
Address: 54.210.155.177#53
Aliases:

ns1.ubmilab.ro has address 54.210.155.177
```

Puteti inregistra un domeniu gratuit (.ga .cf .tk .ml) la ***www.freenom.com*** pentru a-l configura pe serverul DNS autoritativ pe care tocmai l-ati creat.

ubmi-andrei.ga

Check Availability

Yes **ubmi-andrei.ga** is available!

2 domains in cart   Checkout

ubmi-andrei   •**FREE**

.ga

EUR 0.⁰⁰

✔ Selected

Get one of these domains. They are **free**!

ubmi-andrei
.tk   •**FREE**   EUR 0.⁰⁰   Select

ubmi-andrei
.ml   •**FREE**   EUR 0.⁰⁰   Select

ubmi-andrei
.cf   •**FREE**   EUR 0.⁰⁰   Select