SLAAC Aufgabe

Um auf PC zuzugreifen `virt-viewer` in Command-Line
GNS3 Web UI

Aufgabenstellung

Zwei Router jeweils mit einem Debian PC
Bei PC1:

- ether1 linklocal (automatisch)
- ether2 fd01::1/64 advertise=yes
  Bei PC2:
- ether1 linklocal (automatisch)
- ether2 fd02::1/64 advertise=yes

Configuration

Router

Link Local Address (auf ether1 wird automatisch erstellt)

Router1

```
ipv6/address/add address=fd01::1/64 advertise=yes interface=ether2
ipv6/route/add routing-table=main dst-address=fd02::/64
gateway=fe80::e0f:a2ff:fef6:0%ether1 disabled=no
```

Das % bei Gateway sagt, dass es bei ether1 hinausschicken soll

Router2

```
ipv6/address/add address=fd02::1/64 advertise=yes interface=ether2
ipv6/route/add routing-table=main dst-address=fd01::/64
gateway=fe80::e89:6cff:fef2:0%ether1 disabled=no
```

Das % bei Gateway sagt, dass es bei ether1 hinausschicken soll

PCs

VIM Editor

- normal mode: esc

- edit: i
- exit save: :wq
- exit: :q!

PC1

Username/Password: debian

```
sudo vi /etc/network/interfaces
/*
        auto ens4
        iface ens4 inet6 auto
*/

sudo systemctl restart networking.service
```

PC2

Username/Password: debian

```
sudo vi /etc/network/interfaces
/*
        auto ens4
        iface ens4 inet6 auto
*/

sudo systemctl restart networking.service
```

Documentation

Pinging PC1 from PC2

PC1 Address

```
debian@debian:~$ ip addr
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: ens4: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 0c:88:31:e4:00:00 brd ff:ff:ff:ff:ff:ff
    altname enp0s4
    inet6 fd01::e88:31ff:fee4:0/64 scope global dynamic mngtmpaddr
       valid_lft 2591992sec preferred_lft 604792sec
    inet6 fe80::e88:31ff:fee4:0/64 scope link
       valid_lft forever preferred_lft forever
```

Address: fd01::e88:31ff:fee4:0

Ping

```
debian@debian:~$ ping fd01::e88:31ff:fee4:0
PING fd01::e88:31ff:fee4:0(fd01::e88:31ff:fee4:0) 56 data bytes
64 bytes from fd01::e88:31ff:fee4:0: icmp_seq=1 ttl=62 time=1.53 ms
64 bytes from fd01::e88:31ff:fee4:0: icmp_seq=2 ttl=62 time=1.78 ms
64 bytes from fd01::e88:31ff:fee4:0: icmp_seq=3 ttl=62 time=1.97 ms
```

Pinging PC2 from PC1

PC2 Address

```
debian@debian:~$ ip addr
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: ens4: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 0c:fc:ed:19:00:00 brd ff:ff:ff:ff:ff:ff
    altname enp0s4
    inet6 fd02::efc:edff:fe19:0/64 scope global dynamic mngtmpaddr
       valid_lft 2591828sec preferred_lft 604628sec
    inet6 fe80::efc:edff:fe19:0/64 scope link
       valid_lft forever preferred_lft forever
```

Address: fd02::efc:edff:fe19:0

Ping

```
debian@debian:~$ ping fd02::efc:edff:fe19:0
PING fd02::efc:edff:fe19:0(fd02::efc:edff:fe19:0) 56 data bytes
64 bytes from fd02::efc:edff:fe19:0: icmp_seq=1 ttl=62 time=1.76 ms
64 bytes from fd02::efc:edff:fe19:0: icmp_seq=2 ttl=62 time=1.67 ms
64 bytes from fd02::efc:edff:fe19:0: icmp_seq=3 ttl=62 time=1.76 ms
```