

Vježba 5: Fizički pristup mreži

Alen Ćosić, Antonio Dumančić i Karlo Ferenčak

Priprema vježbe

1. DHCP (eng. Dynamic Host Configuration Protocol) mrežni je protokol korišten od strane mrežnih računala za dodjeljivanje IP adresa i ostalih mrežnih postavki.
2. Ping je administrativni alat koji služi za provjeru dostupnosti poslužitelja na računalnim mrežama temeljenim na IP protokolu.
3. Primjer: 192.168.1.1.
4. Primjer MAC adrese je: 00:1A:2B:3C:4D:5E.
5. Loopback adresa služi za testiranje mrežnih funkcionalnosti na lokalnom računalu bez potrebe za vanjskom mrežom. Najpoznatija loopback adresa u IPv4 protokolu je 127.0.0.1. U IPv6 protokolu, loopback adresa je ::1.

Vježba

1. Ethernet adapter Ethernet 3:

Connection-specific DNS Suffix . :

Description : Realtek PCIe 2.5GbE Family Controller

Physical Address. : 74-56-3C-6A-5E-9C

DHCP Enabled. : Yes

Autoconfiguration Enabled : Yes

Link-local IPv6 Address : fe80::9815:6bbc:78fc:3225%18(Preferred)

IPv4 Address. : 192.168.131.15(Preferred)

Subnet Mask : 255.255.255.0

Lease Obtained. : 11. listopada 2024. 10:48:24

Lease Expires : 11. listopada 2024. 11:08:23

Default Gateway : 192.168.131.5

DHCP Server : 192.168.131.1

DHCPv6 IAID : 494163516

DHCPv6 Client DUID. : 00-01-00-01-2D-44-4F-5F-00-0C-29-6B-61-EB

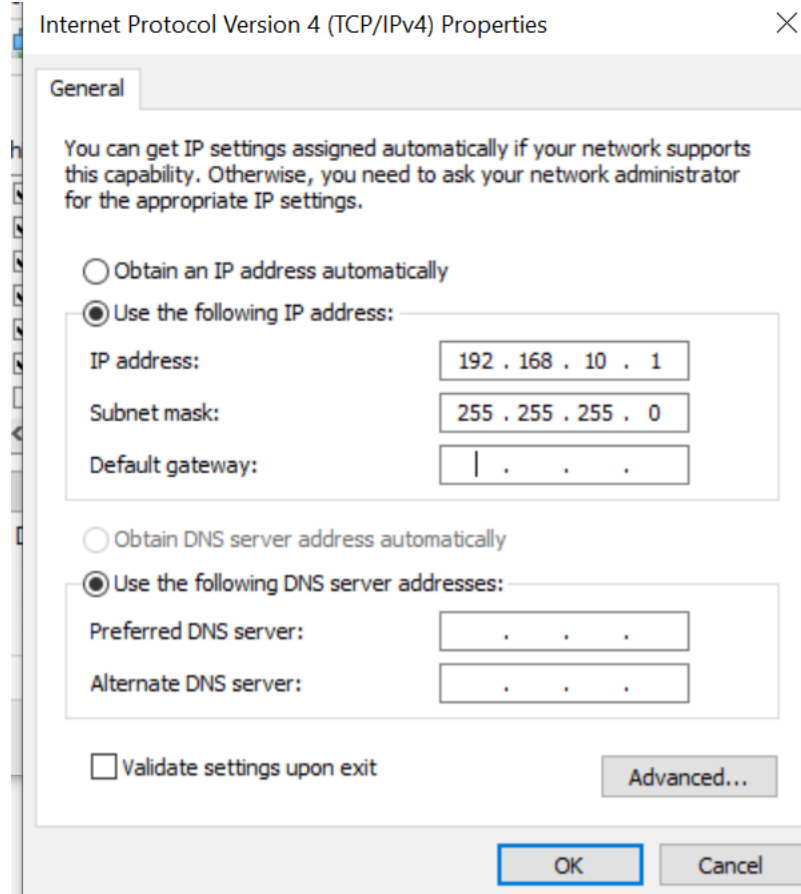
DNS Servers : 193.198.184.130

193.198.184.140

1.1.1.1

NetBIOS over Tcpi. : Enabled

2.



```
C:\Users\student>ping 127.0.0.1
```

Pinging 127.0.0.1 with 32 bytes of data:

```
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
```

```
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
```

```
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
```

```
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
```

Ping statistics for 127.0.0.1:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

Iz ovoga možemo očitati slijedeće podatke: IP adresu, veličinu paketa, odgovore, vrijeme odaziva i TTL.

Kada upišemo ipconfig. dobijemo ovo:

Ethernet adapter Ethernet 3:

Connection-specific DNS Suffix . :

Link-local IPv6 Address : fe80::9815:6bbc:78fc:3225%18

IPv4 Address. : 192.168.131.15

Subnet Mask : 255.255.255.0

Default Gateway : 192.168.131.5

3. Mrežna kartica i TCP/IP protokol su ispravni.

C:\Users\student>ping 127.0.0.1

Pinging 127.0.0.1 with 32 bytes of data:

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Reply from 127.0.0.1: bytes=32 time<1ms TTL=128

Ping statistics for 127.0.0.1:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

Dostupnost standarnog izlaza:

Ethernet adapter Ethernet 4:

Connection-specific DNS Suffix . :

Link-local IPv6 Address : fe80::d423:72b2:db23:7fa4%13

IPv4 Address. : 192.168.56.1

Subnet Mask : 255.255.255.0

Default Gateway :

Pristup internetu radi.