

PORT FORWARDING HOW-TO

Speedtouch CPE

Uvod u port forwarding

Port forwarding je proslijeđivanje vanjskih portova na Internetu prema nekom računalu unutar LAN-a. Time činimo servise (npr: HTTP, FTP, DNS server) unutar LAN-a dostupnima preko Interneta.

Za pravilno podešavanje port forwarding-a potrebno je znati na kojem se portu ili dometu portova pokreće naš interni servis te na kojem portu želimo isti servis napraviti dostupnim preko Interneta, te koji protokol koristi naš servis (TCP ili UDP).

Uobičajeno se servisi pokreću na tzv. well-known i registered portovima (portovi specificirani od strane IANA-e).

Popis najčešće korištenih servisa:

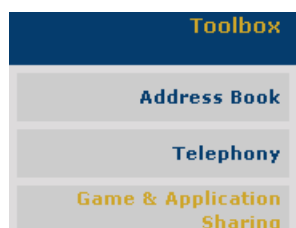
| Servis | Port / Protokol |
|--------------------|-----------------|
| HTTP | 80 / TCP |
| FTP | 20 – 21 / TCP |
| SSH | 22 / TCP |
| Telnet | 23 / TCP |
| DNS | 53 / TCP & UDP |
| TFTP | 69 / UDP |
| SMTP | 25 / TCP |
| POP3 | 110 / TCP |
| IMAP3 | 220 / TCP & UDP |
| HTTPS | 443 / TCP |
| PPTP (Windows VPN) | 1723 / TCP |
| Remote Desktop | 3389 / TCP |
| IRC server | 6667 / TCP |
| Xbox Live | 88 / UDP |
| IPSEC | 500 / UDP |

Popis svih portova se može pronaći na <http://www.iana.org/assignments/port-numbers>.

Konfiguracija port forwardinga za određene servise na Speedtouch CPE uređajima preko web sučelja

1. Kreiranje servisa na CPE-u (*primjer kreiranja HTTP-a i FTP-a*)

Kreiranje HTTP-a:



Pick a task...

- ➔ [Assign a game or application to a l](#)
- ➔ [Create a new game or application](#)



New Game or Application

Enter the name of the new game or application.

Name:

Select how you want to define the new game or application.

Manual Entry of Port Maps



HTTP only

• Game or Application Name

New Name:

• Game or Application Definition

A game or application is made of one or more TCP/UDP port ranges. Each incoming port range can be translated into a different internal (local network) port range. Port ranges can be statically assigned to devices or dynamically assigned using an outgoing trigger.

| Protocol | Port Range | Translate To ... | Trigger Protocol | Trigger Port |
|-----------------------------------------------------------|------------|----------------------|------------------|----------------------|
| <i>No port maps defined for this game or application.</i> | | | | |
| TCP | 80 to 80 | <input type="text"/> | TCP | <input type="text"/> |
| <input type="button" value="Add"/> | | | | |

- **Protocol i Trigger Protocol** – izabrati na protokol na kojem radi servis
 - HTTP radi na TCP
- **Port range** – izabrati port (ili domet portova – ako se radi samo o jednom portu upisati jedan te isti)
 - HTTP radi na portu 80
- **Translate To i Trigger Port** – ostaviti prazno
- Klikni **Add**



HTTP only

• Game or Application Name

New Name:

• Game or Application Definition

A game or application is made of one or more TCP/UDP port ranges. Each incoming port range can be translated into a different internal (local network) port range. Port ranges can be statically assigned to devices or dynamically assigned using an outgoing trigger.

| Protocol | Port Range | Translate To ... | Trigger Protocol | Trigger Port |
|---------------------------------------------|----------------------|-------------------------|------------------|----------------------|
| TCP | 80 - 80 | 80 - 80 | - | - |
| Edit Delete | | | | |
| Any | <input type="text"/> | to <input type="text"/> | Any | <input type="text"/> |
| <input type="button" value="Add"/> | | | | |

- Nakon dodavanja portova u servis, pokazat će se ovakav prozor.

- Klini Apply.

Kreiranje FTP-a:



Pick a task...

- ➔ [Assign a game or application to a](#)
- ➔ [Create a new game or application](#)



New Game or Application

Enter the name of the new game or application.

Name:

Select how you want to define the new game or application.

- Clone Existing Game or Application
- Manual Entry of Port Maps



FTP only

- **Game or Application Name**

New Name:

- **Game or Application Definition**

A game or application is made of one or more TCP/UDP port ranges. Each incoming port range can be translated into a different internal (local network) port range. Port ranges can be statically assigned to devices or dynamically assigned using an outgoing trigger.

| Protocol | Port Range | Translate To ... | Trigger Protocol | Trigger Port |
|-----------------------------------------------------------|------------|----------------------|------------------|----------------------|
| <i>No port maps defined for this game or application.</i> | | | | |
| TCP | 20 to 21 | <input type="text"/> | Any | <input type="text"/> |

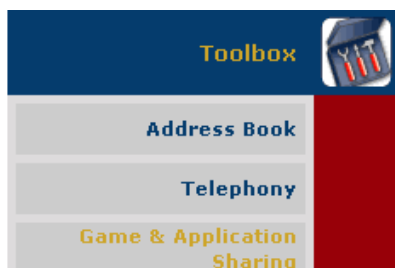
- **Protocol i Trigger Protocol** – izabrati na protokol na kojem radi servis
 - FTP radi na TCP
- **Port range** – izabrati port (ili domet portova – ako se radi samo o jednom portu upisati jedan te isti)
 - FTP radi na portu 20 i 21

- **Translate To i Trigger Port** – ostaviti prazno
- Kliknite **Add**

2. Pridjeljivanje servisa na računala



Preporučeno je da serveri (računala koja pokreću servise i na koje se radi mapiranje portova imaju ručno) – statički konfigurirane IP adrese !



Pick a task...

 [Assign a game or application to a local network device](#)

| Game or Application | Device | Log |
|-------------------------------------------|-----------------------------|------------------------------|
| <i>No games or applications assigned.</i> | | |
| HTTP only ▾ | Unknown-00-16-ec-7d-48-bd ▾ | <input type="checkbox"/> Add |

Pod **Game or Application** izaberemo servis koji smo prije kreirali te pod **Device** izaberemo računalo na koje želimo mapirati port.



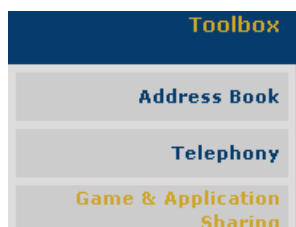
Pod device će pisati ime računala ukoliko računalo koristi NetBIOS (Windows file sharing). Na ostalim računalima će ime biti **Unknown-MAC-adreesa**.

Konfiguracija port forwardinga za sve servise na Speedtouch CPE uređajima



Forwardanje svih portova na jedno računalo nije preporučljivo zbog sigurnosnih razloga !! Uz ovu kombinaciju, preporučljivo je imati firewall na računalu.

1. Kreiranje servisa na CPE-u:



Pick a task...

- [Assign a game or application to a l](#)
- [Create a new game or application](#)



New Game or Application

Enter the name of the new game or application.

Name:

Select how you want to define the new game or application.

- Clone Existing Game or Application
- Manual Entry of Port Maps



All_ports

• Game or Application Name

New Name:

• Game or Application Definition

A game or application is made of one or more TCP/UDP port ranges. Each incoming port range can be translated into a different internal (local network) port range. Port ranges can be statically assigned to devices or dynamically assigned using an outgoing trigger.

| Protocol | Port Range | Translate To ... | Trigger Protocol | Trigger Port |
|-----------------------------------------------------------|------------|------------------|------------------|--------------|
| <i>No port maps defined for this game or application.</i> | | | | |
| Any | 1 to 65534 | | Any | |

- **Protocol i Trigger Protocol** – izabrati **Any**
- **Port range** – izabrati range 1-65534
- **Translate To i Trigger Port** – ostaviti prazno
- Kliknite **Add**



All_ports

- **Game or Application Name**

New Name:

- **Game or Application Definition**

A game or application is made of one or more TCP/UDP port ranges. Each incoming port range can be translated into a different internal (local network) port range. Port ranges can be statically assigned to devices or dynamically assigned using an outgoing trigger.

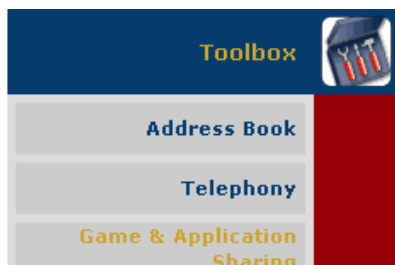
| Protocol | Port Range | Translate To ... | Trigger Protocol | Trigger Port | |
|----------------------------------|----------------------|-------------------------|----------------------------------|----------------------|---------------------------------------------|
| Any | 1 - 65534 | 1 - 65534 | - | - | Edit Delete |
| <input type="text" value="Any"/> | <input type="text"/> | to <input type="text"/> | <input type="text" value="Any"/> | <input type="text"/> | <input type="button" value="Add"/> |

- Nakon dodavanja portova u servis, pokazat će se ovakav prozor.
- Klinite **Apply**.

Pridjeljivanje servisa na računalo



Preporučeno je da server (računalo koja pokreću servise i na kojeg se radi mapiranje portova) ima ručno – statički konfiguriranu IP adresu u rangeu 192.168.100.2 - 192.168.100.10 !



Pick a task...

 [Assign a game or application to a local network device](#)

| Game or Application | Device | Log |
|-------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------|
| <i>No games or applications assigned.</i> | | |
| <input type="text" value="All_ports"/> | <input type="text" value="Unknown-00-16-ec-7d-48-bd"/> | <input type="checkbox"/> <input type="button" value="Add"/> |

Pod **Game or Application** izaberemo servis koji smo prije kreirali te pod **Device** izaberemo računalo na koje želimo mapirati port.



Pod device će pisati ime računala ukoliko računalo koristi NetBIOS (Windows file haring). Na ostalim računalima će ime biti **Unknown-MAC-adreesa**.