

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:





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
No port maps defined for this game or application.				
TCP	80 to 80		TCP	
<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	-	-
<input type="button" value="Edit"/> <input type="button" value="Delete"/>				
Any	<input type="button" value="to"/>		Any	
<input type="button" value="Add"/>				

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

- Klini Apply.

Kreiranje FTP-a:

Toolbox

- Address Book
- Telephony
- Game & Application Sharing**

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
 HTTP only
 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
No port maps defined for this game or application.				
TCP	<input type="text" value="20"/> to <input type="text" value="21"/>	<input type="text"/>	Any	<input type="text"/>
<input type="button" value="Add"/>				

- **Protocol i Trigger Protocol** – izabratи na protokol na kojem radi servis
 - FTP radi na TCP
- **Port range** – izabratи 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) – staticki konfiguirirane IP adrese !

The screenshot shows the WinBox Toolbox interface. On the left, there's a sidebar with 'Toolbox' at the top, followed by 'Address Book', 'Telephony', and 'Game & Application Sharing' which is highlighted in yellow. To the right, the main area has a title 'Pick a task...' and a sub-section with a blue arrow icon and the text 'Assign a game or application to a local network device'. Below this is a table with three columns: 'Game or Application', 'Device', and 'Log'. The 'Game or Application' column contains a dropdown menu set to 'HTTP only'. The 'Device' column contains a dropdown menu set to 'Unknown-00-16-ec-7d-48-bd'. The 'Log' column has two buttons: a checkbox and an 'Add' button.

Game or Application	Device	Log
HTTP only	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 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:

The screenshot shows the 'Toolbox' on the left with 'Game & Application Sharing' selected. On the right, under 'Pick a task...', there are two options: 'Assign a game or application to a...' and 'Create a new game or application'. The second option is highlighted.

New Game or Application

Enter the name of the new game or application.

Name: All_ports

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

Clone Existing Game or Application
FTP only

Manual Entry of Port Maps

Next | Cancel

All_ports

- Game or Application Name

New Name: All_ports

Apply | Cancel

- 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
No port maps defined for this game or application.				
Any	1 to 65534		Any	Add

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

All_ports

- Game or Application Name: All_ports
- 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	-	-
Any		to	Any	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 konfiguiranu IP adresu u rangeu 192.168.100.2 - 192.168.100.10 !

Toolbox

Pick a task...
Assign a game or application to a local network device

- Address Book
- Telephony
- Game & Application Sharing

Game or Application	Device	Log
<i>No games or applications assigned.</i>		
All_ports	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**.