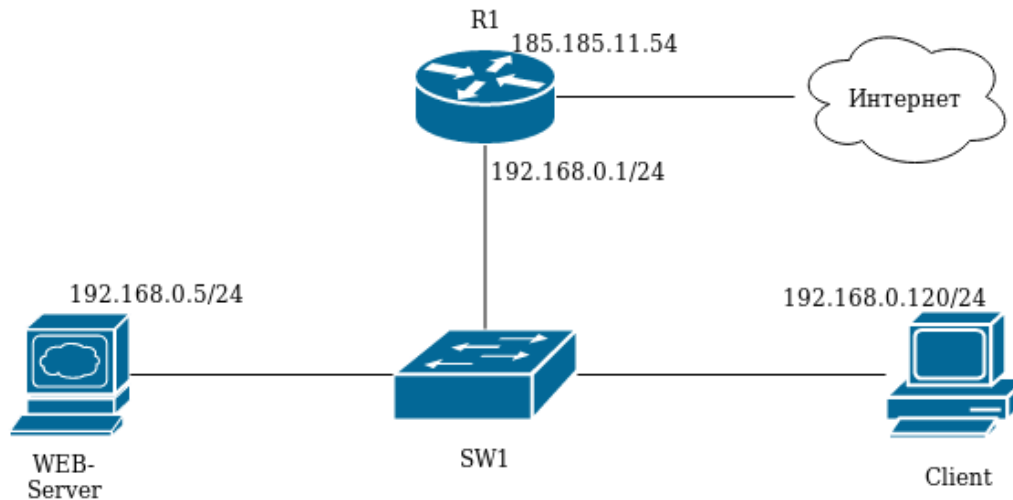


# Destination NAT + NAT Hairpinning



## Destination NAT

R1 web-. . IP 185.185.11.54 192.168.0.5. R1 trusted (192.168.0.1) untrusted (185.185.11.54).

IP-, Firewall DNAT.

- Net\_pub - ;
- Srv\_http - ;
- Server\_ip - .

```
esr(config)# object-group network Net_pub
esr(config-object-group-network)# ip address 185.185.11.54
esr(config-object-group-network)# exit
esr(config)# object-group service Srv_http
esr(config-object-group-service)# port-range 80
esr(config-object-group-service)# exit
esr(config)# object-group network Server_ip
esr(config-object-group-network)# ip address 192.168.0.5
esr(config-object-group-network)# exit
```

NAT. DNAT , , 185.185.11.54 .

```
esr(config)# nat destination
esr(config-dnat)# pool Server_ip
esr(config-dnat-pool)# ip address 192.168.0.5
esr(config-dnat-pool)# ip port 80
esr(config-dnat-pool)# exit
```

«DNAT», . , , «untrusted». (match destination-address, match destination-port) . , , (action destination-nat). «enable».

```
esr(config-dnat)# ruleset DNAT
esr(config-dnat-ruleset)# from zone untrusted
esr(config-dnat-ruleset)# rule 1
esr(config-dnat-rule)# match destination-address Net_pub
esr(config-dnat-rule)# match protocol tcp
esr(config-dnat-rule)# match destination-port Srv_http
esr(config-dnat-rule)# action destination-nat pool Server_ip
esr(config-dnat-rule)# enable
esr(config-dnat-rule)# exit
esr(config-dnat-ruleset)# exit
esr(config-dnat)# exit
```

, «untrusted» «trusted», . , «SERVER\_IP» DNAT.

```

esr(config)# security zone-pair untrusted trusted
esr(config-zone-pair)# rule 1
esr(config-zone-pair-rule)# match destination-address Server_ip
esr(config-zone-pair-rule)# match destination-nat
esr(config-zone-pair-rule)# action permit
esr(config-zone-pair-rule)# enable
esr(config-zone-pair-rule)# exit
esr(config-zone-pair)# exit
esr# commit
esr# confirm

```

R1 . NAT:

```

esr# show ip nat destination pools

esr# show ip nat destination rulesets

esr# show ip nat proxy-arp

esr# show ip nat translations

```

## NAT Hairpinning

, R1 (client), web- client , DNS 185.185.11.54. NAT Hairpinning.

```

esr(config)# object-group network LAN
esr(config-object-group-network)# ip prefix 192.168.0.0/24
esr(config-object-group-network)# exit

```

ruleset DNAT.

```

esr(config)# nat destination
esr(config-dnat)# ruleset loopback
esr(config-dnat-ruleset)# from zone trusted
esr(config-dnat-ruleset)# rule 10
esr(config-dnat-rule)# match protocol tcp
esr(config-dnat-rule)# match destination-address Net_pub
esr(config-dnat-rule)# match destination-port Srv_http
esr(config-dnat-rule)# action destination-nat pool Server_ip
esr(config-dnat-rule)# enable
esr(config-dnat-rule)# exit
esr(config-dnat-ruleset)# exit
esr(config-dnat)# exit

```

Source NAT.

```

esr(config)# nat source
esr(config-snat)# ruleset loopback
esr(config-snat-ruleset)# to zone trusted
esr(config-snat-ruleset)# rule 10
esr(config-snat-rule)# match source-address LAN
esr(config-snat-rule)# action source-nat interface
esr(config-snat-rule)# enable
esr(config-snat-rule)# exit
esr(config-snat-ruleset)# exit
esr(config-snat)# exit
esr(config)# exit
esr# commit
esr# confirm

```

R1 web- .