

# CISCO commands

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## SECURITY (ENABLE SECURITY + TELNET)

```
(config)# enable password cisco
(config)# line vty 0 4
    password cisco
    login
```

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## IPV4 SETTINGS

```
(config)# interface fa0/0
(config-if)# ip address 192.168.0.5 255.255.255.0
(config-if)# no shutdown

(config-if)# clock rate 128000 u sériového rozhraní nastavit clock rate DTE/DCE
```

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## IPV6 SETTINGS

```
(config)# ipv6 unicast-routing
(config)# interface fa0/0
(config-if)# ipv6 address address/mask
(config-if)# no shutdown

(config-if)# ipv6 address autoconfig
(config-if)# ipv6 nd suppress-ra
(config-if)# ipv6 nd ra-interval seconds
(config-if)# ipv6 nd ra-lifetime seconds
```

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## HOSTNAME SETTING

```
(config)# hostname R1
(config)# hostname SW1
```

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## SWITCH SETTINGS

```
(config)# interface fa0/0
(config-if)# switchport mode trunk
(config)# vlan 10
(config-vlan)# name A
(config)# interface fa0/1
(config-if)# switchport mode access
(config-if)# switchport access vlan 10
```

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## DYNAMIC NAT

```
(config)# interface fa0/0
(config-if)# ip address 10.10.10.1 255.255.255.0
(config-if)# ip nat inside

(config)# interface s0/0
(config-if)# ip address 172.16.10.64 255.255.255.0
(config-if)# ip nat outside

(config)# ip nat pool POOL_NAME 172.16.10.1 -172.16.10.63 prefix 24
(config)# ip nat inside source list ACL_NUMBER pool POOL_NAME
(config)# access-list ACL_NUMBER permit 10.10.10.0 0.0.0.31 (povolený rozsah který propustí)
```

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## STATIC NAT

```
(config)# interface fa0/0
(config-if)# ip address 10.10.10.1 255.255.255.0
(config-if)# ip nat inside

(config)# interface s0/0
(config-if)# ip address 172.16.10.64 255.255.255.0
(config-if)# ip nat outside

(config)# ip nat inside source static 10.10.10.2 172.16.10.65
```

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## ROUTING

### 1) OSPF

```
(config)# router ospf 1
(config-router)# network 192.168.0.1 0.0.0.255 area 0
(config-router)# passive interface fa0/0 (OSPF se daným rozhraním nešíří)
(config-router)# default-information originate (šíření statické cesty)
(config-if)# ip ospf priority
(config-if)# ip ospf hello-interval seconds
(config-if)# ip ospf dead-interval seconds
```

### 2) RIP

```
(config)# router rip
(config-router)# version 2
(config-router)# network
(config-router)# passive-interface fa0/0 (RIP se daným rozhraním nešíří)
(config-router)# default-information originate
(config-router)# no auto-summary
```

### 3) OSPF pro IPv6

```
(config)# ipv6 router ospf 1
(config-router)# redistribute {connected|static} metric 1 subnets
(config-router)# router-id 1.1.1.1
(config)# interface fa0/0
(config-if)# ipv6 ospf 1 area 0
```

### 4) RIP PRO IPv6

```
(config)# ipv6 router rip 1
(config-router)# redistribute connected metric 1
(config-router)# redistribute static metric 1
(config)# interface fa0/0
(config-if)# ipv6 rip enable – povolí RIP na XY/Z
(config-if)# ipv6 rip default-information originate
```

### 5) Static routing

```
(config)# ip route 192.168.0.1 255.255.255.0 192.168.1.2
(config)# ipv6 route IPv6_address / mask next_hop
```

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## INFORMATION EXTRACT

```
# show running configuration
# show cdp
# show cdp neighbors
# show interface
# show ip interface brief
# show ip nat translations
# show ip route
# show ipv6 route
# show version
# show ip ospf
```