Cisco Packet Tracer: Commands

1. VLSM: Calculating IP Pools – Alhálózatok számítása

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IPv4 Subnet Mask Chart

Prefix	IP Addresses	Subnet Mask	Bits
/32	1	255.255.255.255	0
/31	2	255.255.255.254	1
/30	4	255.255.255.252	2
/29	8	255.255.255.248	3
/28	16	255.255.255.240	4
/27	32	255.255.255.224	5
/26	64	255.255.255.192	6
/25	128	255.255.255.128	7
/24	256	255.255.255.0	8
/23	512	255.255.254.0	9
/22	1,024	255.255.252.0	10
/21	2,048	255.255.248.0	11
/20	4,096	255.255.240.0	12
/19	8,192	255.255.224.0	13
/18	16,384	255.255.192.0	14
/17	32,768	255.255.128.0	15
/16	65,536	255.255.0.0	16
/15	131,072	255.254.0.0	17
/14	262,144	255.252.0.0	18
/13	524,288	255.248.0.0	19
/12	1,048,576	255.240.0.0	20
/11	2,097,152	255.224.0.0	21
/10	4,194,304	255.192.0.0	22
/9	8,388,608	255.128.0.0	23
/8	16,777,216	255.0.0.0	24
/7	33,554,432	254.0.0.0	25
/6	67,108,864	252.0.0.0	26
/5	134,217,728	248.0.0.0	27
/4	268,435,456	240.0.0.0	28
/3	536,870,912	224.0.0.0	29
/2	1,073,741,824	192.0.0.0	30
/1	2,147,483,648	128.0.0.0	31
/0	4,294,967,296	0	31

2. Devices – Eszközök
   Router: 1941
   Switch: 2960
   WiFi: WRT300N
   ! Portokra odafigyelni !

3. Basic Configuration – Alap konfiguráció
   banner motd "Unauthorized access is prohibited"

   enable secret zipi-pass

   no ip domain-lookup

   ip domain-name zipi.net

   hostname []

   crypto key gen rsa

   1024

   ip ssh version 2

   service password-encryption

   line con 0

   enable secret zipi-ssh

   line vty 0 15

   enable secret zipi-pass

   line vty 0 15

   login local

   transport input ssh

   exit

4. SSH
   username admin secret admin

   crypto key generate rsa
   1024

   line vty 0 4
   transport input ssh
   login local

5. VLAN létrehozása
   int g0/0.10
   encapsulation dot1q (vlan száma)
   ip cím – alhálózati maszk
   ip helper address 0.0.0.0

6. ETHERCHANNEL
   interface range ()

   channel-group (szám) mode active

   interface port-channel (szám)

   switchport mode trunk

7. VTP
   vtp domain (domain név)

   vtp mode server/client

   vtp password (jelszó)

8. ROUTING
   RIP, OSPF, EIGRP, BGP
   redistribute számok eigrp-nél: 1544 100 255 1 100

9. Statikus NAT

R2(config)# ip nat inside source static 192.168.10.2 195.1.1.3
R2(config)# interface g0/0
R2(config-if)# ip address 192.168.10.1 255.255.255.0
R2(config-if)# ip nat inside
R2(config-if)# interface g0/1
R2(config-if)# ip address 195.1.1.2 255.255.255.0
R2(config-if)# ip nat outside

Dinamikus NAT
R2(config)# ip nat pool NAT-POOL1 195.1.1.3 195.1.1.10 netmask 255.255.255.0
R2(config)# access-list 1 permit 192.168.10.0 0.0.0.255
R2(config# ip nat inside source list 1 pool NAT-POOL1
R2(config)# interface g0/0
R2(config-if)# ip nat inside
R2(config)# interface g0/1
R2(config-if)# ip nat outside

10. Redistribute

OSPF
router ospf 25 redistribute eigrp 15 subnets redistribute rip subnets
EIGRP
router eigrp 15 redistribute ospf 25 metric 1544 100 255 1 100
redistribute rip metric 1544 100 255 1 100
RIP
router rip version 2
redistribute ospf 25 (metric 2)
redistribute eigrp 15 (metric 2)

11. ACL

Router(config)# access-list 1 permit 192.168.1.0 0.0.0.255
Router(config)# interface g0/0
Router(config-if)# ip access-group 1 in

12. Extended ACL

```
Router(config)# access-list 100 permit tcp 192.168.1.0 0.0.0.255
host 10.0.0.10 eq 80
Router(config)# interface g0/0
Router(config-if)# ip access-group 100 in
```