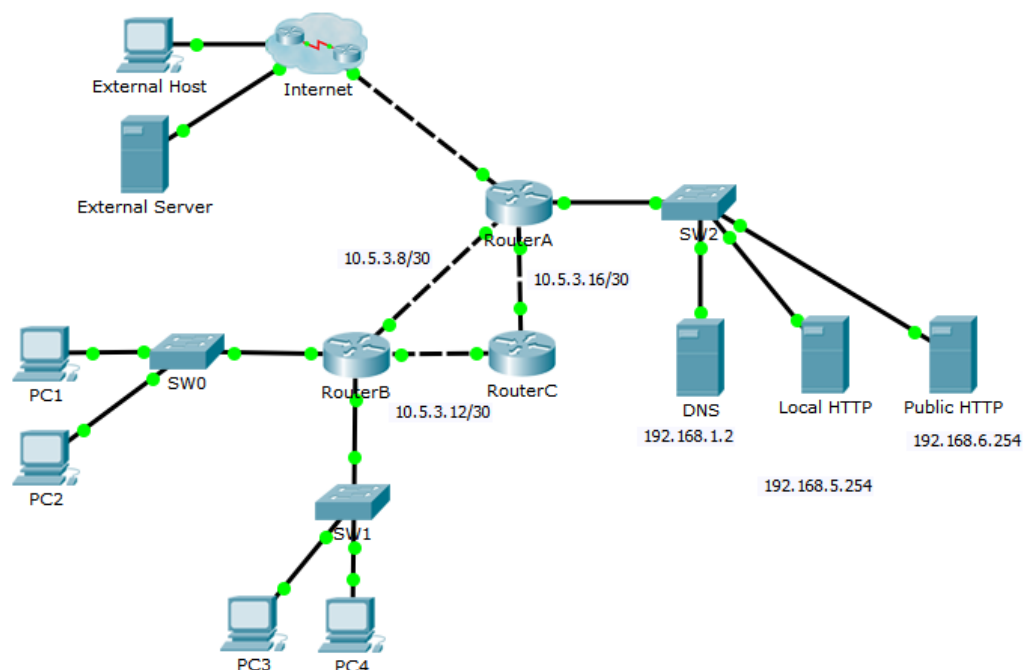


Схема сети



Расчет адресов сетей

Параметр	VLAN A	VLAN B	VLAN C	VLAN D
Количество узлов	63	342	75	5
Маска (префикс)	/25	/23	/25	/29
Маска (десятичн.)	255.255.255.128	255.255.254.0	255.255.255.128	255.255.255.248
Маска (инверсная)	0.0.0.127	0.0.1.255	0.0.0.127	0.0.0.7
SUBNET	10.5.2.128	10.5.0.0	10.5.2.0	10.5.3.0
BROADCAST	10.5.2.255	10.5.1.255	10.5.2.127	10.5.3.7

Сведения о конфигурации устройств

Устр-во	Интерфейс		IP-адрес/ VLAN	Маска подсети	Шлюз (где необходимо)
Router A	Fa6/0		169.13.14.33	255.255.255.252	-
	Fa7/0		192.168.0.1	255.255.0.0	-
	Fa8/0		10.5.3.10	255.255.255.252	-
	Fa9/0		10.5.3.18	255.255.255.252	-
Router B	Fa6/0		10.5.3.9	255.255.255.252	-
	Fa7/0	20	10.5.2.129	255.255.255.128	-
		21	10.5.0.1	255.255.254.0	-
	Fa8/0	22	10.5.2.1	255.255.255.128	-
		23	10.5.3.1	255.255.255.248	-
	Fa9/0		10.5.3.13	255.255.255.252	-
Router C	Fa6/0		10.5.3.17	255.255.255.252	-
	Fa7/0		10.5.3.14	255.255.255.252	-
Internet	Fa0/0		169.13.14.34	255.255.255.252	-
	Fa0/3		56.13.243.10	255.255.255.0	-
Switch0	Fa0/1		-	-	-
	Fa0/2		20	-	-
	Fa0/3		21	-	-
SW1	Fa0/1		-	-	-
	Fa0/2		22	-	-

Устр-во	Интерфейс	IP-адрес/ VLAN	Маска подсети	Шлюз (где необходимо)
	Fa0/3	23	-	-
SW2	Fa0/1	-	-	-
	Fa0/2	-	-	-
	Fa0/4	-	-	-
	Fa0/5	-	-	-
PC 1	NIC	10.5.2.254/20	255.255.255.128	10.5.2.129
PC 2	NIC	10.5.1.254	255.255.254.0	10.5.0.1
PC 3	NIC	10.5.2.126	255.255.255.128	10.5.2.1
PC 4	NIC	10.5.3.6	255.255.255.248	10.5.3.1
DNS	NIC	192.168.1.2	255.255.0.0	192.168.0.1
Local http	NIC	192.168.5.254	255.255.0.0	192.168.0.1
Public http	NIC	192.168.6.254	255.255.0.0	192.168.0.1

Сведения о настроенных ACL

Устр-во	Интер-фейс	Напр. трафика (in/out)	Правила
RouterB	Fa7/0.20	in	permit icmp any any permit ip 10.5.2.128 0.0.0.127 any
	Fa7/0.21	in	permit icmp any any deny ip 10.5.0.0 0.0.1.255 10.5.2.128 0.0.0.127 deny ip 10.5.0.0 0.0.1.255 10.5.2.0 0.0.0.127 deny ip 10.5.0.0 0.0.1.255 10.5.3.0 0.0.0.7 permit ip 10.5.0.0 0.0.1.255 any
	Fa8/0.22	in	permit icmp any any permit ip 10.5.2.0 0.0.0.127 host 192.168.5.254
	Fa8/0.23	in	permit icmp any any permit udp 10.5.3.0 0.0.0.7 host 192.168.1.2 eq domain deny ip 10.5.3.0 0.0.0.7 host 192.168.5.254 deny ip 10.5.3.0 0.0.0.7 host 192.168.6.254 permit ip 10.5.3.0 0.0.0.7 any

RouterA	Fa6/0	in	permit tcp any host 192.168.6.254 eq www permit udp any host 192.168.1.2 eq domain permit tcp any any established
	Fa7/0	out	permit ip 10.5.2.128 0.0.0.127 any permit udp 10.5.0.0 0.0.1.255 host 192.168.1.2 eq domain permit tcp 10.5.0.0 0.0.1.255 host 192.168.6.254 eq www deny ip 10.5.0.0 0.0.1.255 any permit tcp 10.5.2.0 0.0.0.127 host 192.168.5.254 eq www permit tcp any host 192.168.8.254 eq www permit udp any host 192.168.1.2 eq domain deny ip 10.5.2.0 0.0.0.255 any permit udp 10.5.3.0 0.0.0.7 host 192.168.1.2 eq domain permit tcp 10.5.3.0 0.0.0.7 host 192.168.5.254 eq www deny ip 10.5.3.0 0.0.0.7 any