Схема сети сценария

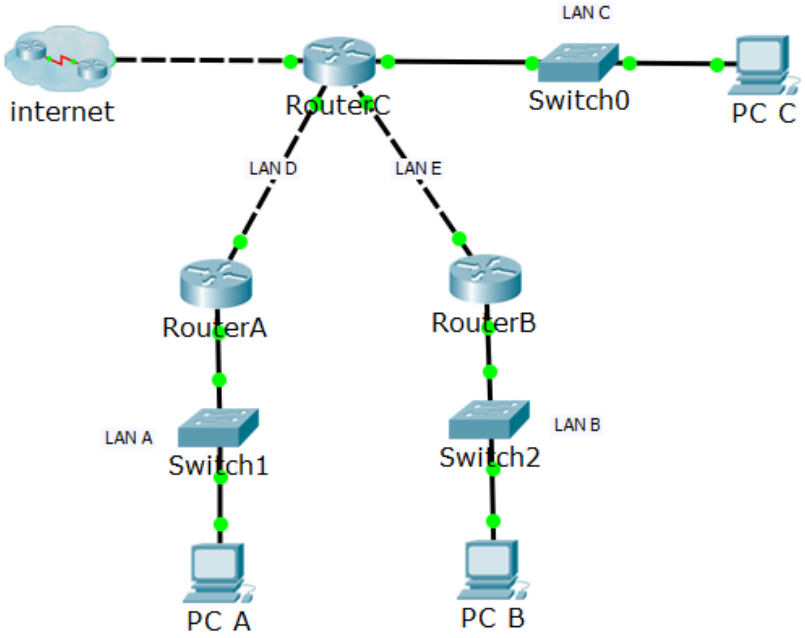

Рис.1. Топология сети

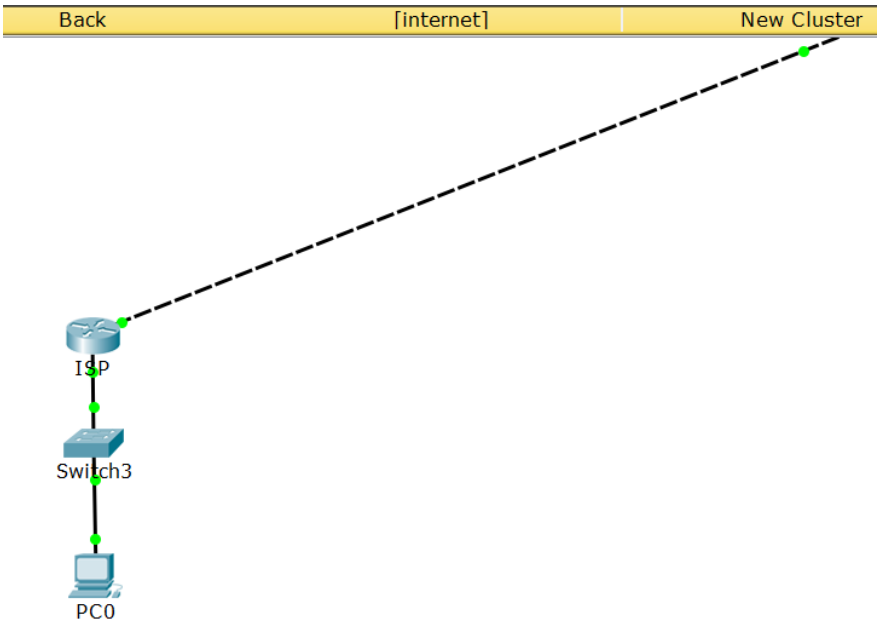

Рис.2. Интернет

Расчет адресов сетей

Параметр р р	LAN A	LAN B	LAN C	LAN D	LAN E
Количество узлов	20 (+2)	201 (+2)	200 (+2)	2 (+2)	2 (+2)
Ближайшая сверху степень двойки	5	8	8	2	2
Маска (префикс)	27	24	24	30	30
Маска (десятичн.)	255.255.255.224	255.255.255.0	255.255.255.0	255.255.255.252	255.255.255.252
SUBNET	104.144.0.0	104.145.0.0	104.146.0.0	192.168.4.0	192.168.4.4
HOSTMIN (router)	104.144.0.1	104.145.0.1	104.146.0.1	192.168.4.1	192.168.4.5
HOSTMAX (host)	104.144.0.30	104.145.0.254	104.146.0.254	192.168.4.2	192.168.4.6
BROAD-CAST	104.144.0.31	104.145.0.255	104.146.0.255	192.168.4.3	192.168.4.7
Суммарный др./маска	104.144.0.0/14			192.168.4.0/29	

Сведения о конфигурации устройств

Устройство	Интерфейс	IP-адрес	Маска подсети	Основной шлюз
PC A	NIC	104.144.0.30	255.255.255.224	104.144.0.1
PC B	NIC	104.145.0.254	255.255.255.0	104.145.0.1
PC C	NIC	104.146.0.254	255.255.255.0	104.146.0.1
Router A	Fa0/0	104.144.0.1	255.255.255.224	
	Fa1/0	192.168.4.1	255.255.255.252	
Router B	Fa0/0	104.145.0.1	255.255.255.0	
	Fa1/0	192.168.4.5	255.255.255.252	
Router C	Fa1/0	104.146.0.1	255.255.255.0	
	Fa2/0	192.168.4.2	255.255.255.252	
	Fa3/0	192.168.4.6	255.255.255.252	
	Fa4/0	15.16.7.1	255.255.255.252	
ISP	Fa0/0	15.16.7.2	255.255.255.252	
	Fa0/1	10.0.0.1	255.255.255.0	
PC 0	NIC	10.0.0.254	255.255.255.0	10.0.0.1

Сведения о таблицах маршрутизации

Устройство	Источник записи	Сеть назначения	AD/Метрика	Маршрут
Router A	S	10.0.0.0	0	FastEthernet1/0
	C	104.144.0.0/27	0	FastEthernet0/0
	S	104.145.0.0/24	[1/0]	
	S	104.146.0.0/24	[1/0]	
	C	192.160.4.0	0	FastEthernet1/0
	S	192.168.4.4	[1/0]	
	S*	0.0.0.0/0	[1/0]	
Router B	S	10.0.0.0	0	FastEthernet1/0
	S	104.144.0.0/27	[1/0]	
	C	104.145.0.0/24	0	FastEthernet1/0
	S	104.146.0.0/24	[1/0]	
	S	104.146.0.0/30	[1/0]	
	S	192.160.4.0	[1/0]	
	C	192.168.4.4	0	FastEthernet1/0
	S*	0.0.0.0/0	[1/0]	
Router C	S	10.0.0.0	0	FastEthernet4/0
	C	15.16.7.0	0	FastEthernet4/0
	S	104.144.0.0/27	[1/0]	
	S	104.145.0.0/24	[1/0]	
	C	104.146.0.0/24	0	FastEthernet1/0
	C	192.160.4.0	0	FastEthernet2/0
	C	192.168.4.4	0	FastEthernet3/0
	S*	0.0.0.0/0	0	FastEthernet4/0
ISP	C	10.0.0.0	0	FastEthernet0/1
	C	15.16.7.0	0	FastEthernet0/0
	S	104.144.0.0	[1/0]	
	S	192.168.4.0	[1/0]	