

Расчет адресов локальных сетей

| Параметр | LAN A | LAN B | LAN C | LAN D |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| Количество | 200 | 189 | 97 | 53 |
| узлов | | | | |
| Маска (префикс) | 24 | 24 | 25 | 26 |
| Маска | 255.255.255.0 | 255.255.255.0 | 255.255.255.128 | 255.255.255.192 |
| (десятичн.) | | | | |
| Маска | 0.0.0.255 | 0.0.0.255 | 0.0.0.127 | 0.0.0.63 |
| (инверсная) | | | | |
| SUBNET | 192.168.104.0 | 192.168.114.0 | 172.19.0.0 | 172.22.0.0 |
| HOSTMIN | 192.168.104.1 | 192.168.114.1 | 172.19.0.1 | 172.22.0.1 |
| (router) | | | | |
| HOSTMAX | 192.168.104.254 | 192.168.114.254 | 172.19.0.126 | 172.22.0.62 |
| (host) | | | | |
| BROADCAST | 192.168.104.255 | 192.168.114.255 | 172.19.0.127 | 172.22.0.63 |
| Суммарный | 192.168.96.0/19 | | 172.16.0.0/12 | |
| адрес | | | | |

Расчет адресов служебных сетей

| Параметр | R0-R1 | R1-R2 | R1-R3 | R2-R3 | |
|-----------------------|------------------|------------------|------------------|------------------|--|
| IP-адрес /маска | 56.245.23.96/30 | 56.245.23.100/30 | 56.245.23.104/30 | 56.245.23.108/30 | |
| Суммарный адр. /маска | 56.245.23.96/28 | | | | |
| Параметр | R0-R4 | R4-R5 | R4-R6 | R5-R6 | |
| IP-адрес /маска | 56.245.23.112/30 | 56.245.23.116/30 | 56.245.23.120/30 | 56.245.23.124/30 | |
| Суммарный адр. /маска | 56.245.23.112/28 | | | | |

Сведения о конфигурации устройств

| Устройство | Интер (пассив | - | ІР-адрес | Маска подсети | Шлюз (где необходимо) |
|------------|------------------|-----|---------------|-----------------|--------------------------|
| R0 | Fa0/0 | - | 56.245.23.97 | 255.255.255.252 | |
| | Fa2/0 | - | 56.245.23.113 | 255.255.255.252 | |
| R1 | Fa0/0 | Да | 56.245.23.98 | 255.255.255.252 | |
| | Fa1/0 | Нет | 56.245.23.105 | 255.255.255.252 | |
| | Fa2/0 | Нет | 56.245.23.101 | 255.255.255.252 | |
| R2 | Fa0/0 | Нет | 56.245.23.109 | 255.255.255.252 | |
| | Fa1/0 | Нет | 56.245.23.102 | 255.255.255.252 | |
| | Fa2/0 | Да | 192.168.104.1 | 255.255.255.0 | |
| R3 | Fa0/0 | Нет | 56.245.23.106 | 255.255.255.252 | |
| | Fa1/0 | Нет | 56.245.23.110 | 255.255.255.252 | |
| | Fa2/0 | Да | 192.168.114.1 | 255.255.255.0 | |
| R4 | Fa0/0 | Да | 56.245.23.114 | 255.255.255.252 | |
| | Fa1/0 | Нет | 56.245.23.117 | 255.255.255.252 | |
| | Fa2/0 | Нет | 56.245.23.121 | 255.255.255.252 | |
| R5 | Fa0/0 | Нет | 56.245.23.118 | 255.255.255.252 | |
| | Fa1/0 | Нет | 56.245.23.125 | 255.255.255.252 | |
| | Fa2/0 | Да | 172.22.0.1 | 255.255.255.192 | |
| R6 | Fa0/0 | Нет | 56.245.23.126 | 255.255.255.252 | |

| Устройство | Интерфейс (пассивный?) | | ІР-адрес | Маска подсети | Шлюз (где необходимо) |
|------------|---------------------------|-----|-----------------|-----------------|--------------------------|
| | Fa1/0 | Нет | 56.245.23.122 | 255.255.255.252 | |
| | Fa2/0 | Да | 172.19.0.1 | 255.255.255.128 | |
| PC 0 | NIC | | 192.168.104.254 | 255.255.255.0 | 192.168.104.1 |
| PC 1 | NIC | | 172.19.0.126 | 255.255.255.128 | 172.19.0.1 |
| PC 2 | NIC | | 172.22.0.62 | 255.255.255.192 | 172.22.0.1 |
| PC 3 | NIC | | 192.168.114.254 | 255.255.255.0 | 192.168.114.1 |

Сведения о таблицах маршрутизации (добавить необходимое число строк)

| сведения о такинцая маршру гизации (десавить песемедимое инеле стрек) | | | | | |
|---|-----|-----------------|---------|-----------------|--|
| Устр- | SRC | Сеть назначения | AD/ | Маршрут | |
| В0 | | | Метрика | | |
| R3 | R | 56.245.23.96 | 120/1 | FastEthernet1/0 | |
| R3 | R | 56.245.23.100 | 120/1 | FastEthernet1/0 | |
| R3 | С | 56.245.23.104 | 0/- | FastEthernet1/0 | |
| R3 | С | 56.245.23.108 | 0/- | FastEthernet0/0 | |
| R3 | R | 192.168.104.0 | 120/1 | FastEthernet1/0 | |
| R3 | С | 192.168.114.0 | 0/- | FastEthernet2/0 | |
| R3 | R* | 0.0.0.0 | 0/- | FastEthernet0/0 | |
| R2 | С | 56.245.23.100 | 0/- | FastEthernet1/0 | |
| R2 | С | 56.245.23.108 | 0/- | FastEthernet0/0 | |
| R2 | R | 56.245.23.96 | 120/1 | FastEthernet1/0 | |
| R2 | R | 56.245.23.104 | 120/1 | FastEthernet1/0 | |
| R2 | С | 192.168.104.0 | 0/- | FastEthernet2/0 | |
| R2 | R | 192.168.114.0 | 120/1 | FastEthernet0/0 | |
| R2 | R* | 0.0.0.0 | 120/1 | FastEthernet1/0 | |
| R1 | С | 56.245.23.96 | 0/- | FastEthernet2/0 | |

| R1 | R | 56.245.23.108 | 120/1 | FastEthernet2/0 |
|----|----|---------------|-------|-----------------|
| R1 | С | 56.245.23.100 | 0/- | FastEthernet1/0 |
| R1 | С | 56.245.23.104 | 0/- | FastEthernet0/0 |
| R1 | R | 192.168.104.0 | 120/1 | FastEthernet2/0 |
| R1 | R | 192.168.114.0 | 120/1 | FastEthernet1/0 |
| R1 | S* | 0.0.0.0 | 0/- | FastEthernet0/0 |
| R | S | 56.245.23.96 | 0/- | FastEthernet0/0 |
| R | С | 56.245.23.96 | 0/- | FastEthernet0/0 |
| R | С | 56.245.23.112 | 0/- | FastEthernet2/0 |
| R | S | 172.16.0.0 | 0/- | FastEthernet2/0 |
| R | S | 192.168.96.0 | 0/- | FastEthernet0/0 |
| R4 | С | 56.245.23.112 | 0/- | FastEthernet0/0 |
| R4 | С | 56.245.23.116 | 0/- | FastEthernet1/0 |
| R4 | О | 56.245.23.124 | 110/2 | FastEthernet1/0 |
| R4 | С | 56.245.23.120 | 0/- | FastEthernet2/0 |
| R4 | О | 172.19.0.0 | 110/2 | FastEthernet2/0 |
| R4 | О | 172.22.0.0 | 110/2 | FastEthenet1/0 |
| R4 | S* | 0.0.0.0 | 0/- | FastEthernet0/0 |
| R5 | С | 56.245.23.116 | 0/- | FastEthernet0/0 |
| R5 | С | 56.245.23.124 | 0/- | FastEthenet1/0 |
| R5 | О | 56.245.23.120 | 110/2 | FastEthernet1/0 |
| R5 | О | 172.19.0.0 | 110/2 | FastEthernet1/0 |

| R5 | С | 172.22.0.0 | 0/- | FastEthernet2/0 |
|----|----|---------------|-------|-----------------|
| R5 | O* | 0.0.0.0 | 110/2 | FastEthernet0/0 |
| R6 | О | 56.245.23.116 | 110/2 | FastEthernet1/0 |
| R6 | С | 56.245.23.120 | 0/- | FastEthernet0/0 |
| R6 | С | 56.245.23.124 | 0/- | FastEthernet1/0 |
| R6 | С | 172.19.0.0 | 0/- | FastEthernet2/0 |
| R6 | О | 172.22.0.0 | 110/2 | FastEthernet0/0 |
| R6 | O* | 0.0.0.0 | 110/1 | FastEthernet1/0 |