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| **Институт**  **информационных систем**  **и технологий** | **Кафедра**  **информационных технологий и вычислительных систем** |

ОТЧЕТ

О ВЫПОЛНЕНИИ ЛАБОРАТОРНОЙ РАБОТЫ ПО ДИСЦИПЛИНЕ   
**«Сети и телекоммуникации»**

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| СТУДЕНТА | *4* | КУРСА | | *бакалавриата* | ГРУППЫ | *ИДБ-18-04* |
|  | | | *(уровень профессионального образования)* | |  | |

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| **Ефременко Маргариты Александровны** |
| *(ФИО)* |

НА ТЕМУ

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| Списки контроля доступа. |

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| Отчет сдан «\_\_\_\_\_\_» \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_20\_\_\_г. | | | |
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| Оценка \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
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| Преподаватель | Сосенушкин С.Е. |  |  |
|  | *(Ф.И.О., должность, степень, звание.)* |  | *(подпись)* |

### Расчет адресов сетей

| **Параметр** | **VLAN A** | **VLAN B** | **VLAN C** | **VLAN D** |
| --- | --- | --- | --- | --- |
| Количество узлов | 276 | 75 | 167 | 1832 |
| Маска (префикс) | /23 | /25 | /24 | /21 |
| Маска (десятичн.) | 255.255.254.0 | 255.255.255.128 | 255.255.255.0 | 255.255.248.0 |
| Маска (инверсная) | 0.0.1.255 | 0.0.0.127 | 0.0.0.255 | 0.0.7.255 |
| SUBNET | 10.6.0.0 | 10.6.2.0 | 10.6.3.0 | 10.6.8.0 |
| BROADCAST | 10.6.1.255 | 10.6.2.127 | 10.6.3.255 | 10.6.15.255 |

### 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 | | 10.6.16.1 | 255.255.255.252 |  |
| Fa9/0 | | 10.6.16.9 | 255.255.255.252 |  |
| Router B | Fa6/0 | | 10.6.16.2 | 255.255.255.252 |  |
| Fa7/0 | .1 | 10.6.0.1 | 255.255.254.0 |  |
| .2 | 10.6.2.1 | 255.255.255.128 |  |
| Fa8/0 | .1 | 10.6.3.1 | 255.255.255.0 |  |
| .2 | 10.6.8.1 | 255.255.248.0 |  |
| Fa9/0 | | 10.6.16.5 | 255.255.255.252 |  |
| Router C | Fa6/0 | | 10.6.16.10 | 255.255.255.252 |  |
| Fa7/0 | | 10.6.16.6 | 255.255.255.252 |  |
| Switch0 | Fa0/1 | | trunk |  |  |
| Fa0/2 | | 22 |  |  |
| Fa0/3 | | 23 |  |  |
| SW1 | Fa0/1 | | trunk |  |  |
| Fa0/2 | | 25 |  |  |
| Fa0/3 | | 24 |  |  |
| PC 1 | NIC | | 10.6.1.254 | 255.255.254.0 | 10.6.0.1 |
| PC 2 | NIC | | 10.6.2.126 | 255.255.255.128 | 10.6.2.1 |
| PC 3 | NIC | | 10.6.3.254 | 255.255.255.0 | 10.6.3.1 |
| PC 4 | NIC | | 10.6.15.254 | 255.255.248.0 | 10.6.8.1 |
| DNS | NIC | | 192.168.1.2 | 255.255.0.0 | 192.168.0.1 |
| Local http | NIC | | 192.168.6.254 | 255.255.0.0 | 192.168.0.1 |
| Public http | NIC | | 192.168.7.254 | 255.255.0.0 | 192.168.0.1 |

### Сведения о настроенных ACL

|  |  |  |  |
| --- | --- | --- | --- |
| **Устр-во** | **Интер-фейс** | **Напр. трафика (in/out)** | **Правила** |
| RouterB | Fa7/0.1 | in | permit ip 10.6.0.0 0.0.1.255 any |
| permit icmp any any |
| Fa7/0.2 | in | permit icmp any any |
| deny ip 10.6.2.0 0.0.0.127 10.6.0.0 0.0.1.255 |
| deny ip 10.6.2.0 0.0.0.127 10.6.3.0 0.0.0.255 |
| deny ip 10.6.2.0 0.0.0.127 10.6.8.0 0.0.7.255 |
| permit ip 10.6.2.0 0.0.0.127 any |
| Fa8/0.1 | in | permit icmp any any |
| permit ip 10.6.3.0 0.0.0.255 host 192.168.6.254 |
| permit udp 10.6.3.0 0.0.0.255 host 192.168.1.2 eq 53 |
| Fa8/0.2 | in | permit icmp any any |
| permit udp 10.6.8.0 0.0.7.255 host 192.168.1.2 eq 53 |
| deny ip 10.6.8.0 0.0.7.255 host 192.168.6.254 |
| deny ip 10.6.8.0 0.0.7.255 host 192.168.7.254 |
| permit ip 10.6.8.0 0.0.7.255 any |
| RouterA | Fa6/0 | in | permit tcp any host 192.168.7.254 eq 80 |
| permit udp any host 192.168.1.2 eq 53 |
| permit tcp any any established |
| Fa7/0 | out | permit ip 10.6.0.0 0.0.1.255 any |
| permit tcp 10.6.2.0 0.0.0.127 host 192.168.7.254 eq 80 |
| permit udp 10.6.2.0 0.0.0.127 host 192.168.1.2 eq 53 |
| deny ip 10.6.2.0 0.0.0.127 any |
| permit tcp 10.6.3.0 0.0.0.255 host 192.168.6.254 eq 80 |
| permit tcp any host 192.168.7.254 eq 80 |
| permit udp any host 192.168.1.2 eq 53 |
| deny ip 10.6.3.0 0.0.0.255 any |
| permit udp 10.6.8.0 0.0.7.255 host 192.168.1.2 eq 53 |
| permit tcp 10.6.8.0 0.0.7.255 host 192.168.7.254 eq 80 |
| deny ip 10.6.8.0 0.0.7.255 any |