

МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ
ФЕДЕРАЦИИ

федеральное государственное автономное образовательное учреждение

высшего образования

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Факультет информационных технологий и программирования

Лабораторная работа №4

По дисциплине «Телекоммуникационные системы и технологии»

Выполнил студенты группы №М33091:

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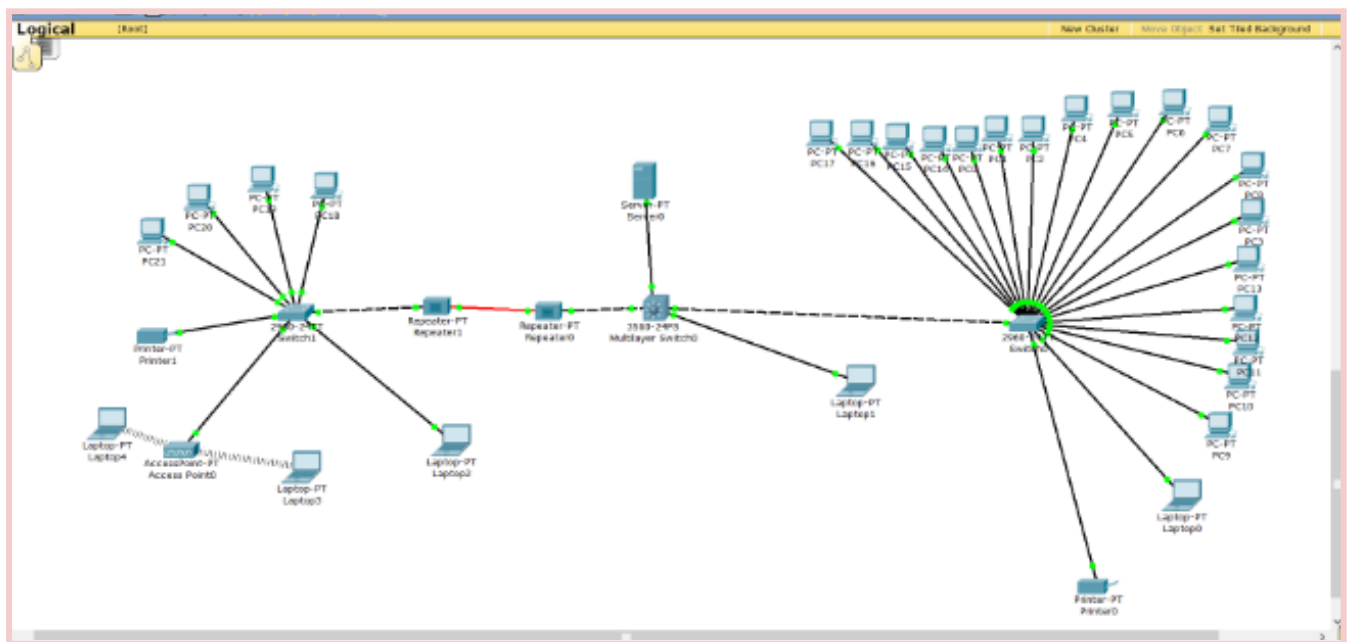
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Санкт-Петербург

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Артефакты:

- 1) Ссылка на файл самой модели for scaling purposes: [link](#)



2) История команд для конфигурации коммутаторов сети до конечного состояния.

IOS Con

```
o up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/4, changed state t
o down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/4, changed state t
o up

%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state t
o down

%LINK-5-CHANGED: Interface FastEthernet0/4, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/4, changed state t
o down

%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state t
o up

%LINK-5-CHANGED: Interface FastEthernet0/4, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/4, changed state t
o up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/4, changed state t
o up

Switch>
Switch>
Switch>
Switch>
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#vlan 20
Switch(config-vlan)#vlan 30
Switch(config-vlan)#vlan 40
Switch(config-vlan)#ex
Switch(config)#int vlan 10
Switch(config-if)#
%LINK-5-CHANGED: Interface Vlan10, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan10, changed state to up

Switch(config-if)#ip address 10.10.0.1 255.255.255.0
```

```
Switch(config-vlan)#ex
Switch(config)#int vlan 10
Switch(config-if)#
%LINK-5-CHANGED: Interface Vlan10, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan10, changed state to up

Switch(config-if)#ip address 10.10.0.1 255.255.255.0
```

```
Switch(config-if)#no shutdown
Switch(config-if)#int vlan 20
Switch(config-if)#
%LINK-5-CHANGED: Interface Vlan20, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan20, changed state to up

Switch(config-if)#ip address 10.20.0.1 255.255.255.0
Switch(config-if)#no shutdown
```

```
Switch(config)#int vlan 30
Switch(config-if)#
%LINK-5-CHANGED: Interface Vlan30, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan30, changed state to up

Switch(config-if)#ip address 10.30.0.1 255.255.255.0
Switch(config-if)#no shutdown
Switch(config-if)#ex
```

```
Switch(config)#int vlan 40
Switch(config-if)#
%LINK-5-CHANGED: Interface Vlan40, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan40, changed state to up

Switch(config-if)#ip address 10.40.0.2 255.255.255.0
Switch(config-if)#no shutdown
Switch(config-if)#ex
```

```
Switch(config-if)#no shutdown
Switch(config-if)#int vlan 20
Switch(config-if)#
%LINK-5-CHANGED: Interface Vlan20, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan20, changed state to up

Switch(config-if)#ip address 10.20.0.1 255.255.255.0
Switch(config-if)#no shutdown
```

```
Switch(config)#int vlan 30
Switch(config-if)#
%LINK-5-CHANGED: Interface Vlan30, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan30, changed state to up

Switch(config-if)#ip address 10.30.0.1 255.255.255.0
Switch(config-if)#no shutdown
Switch(config-if)#ex
Switch(config)#int 40
      ^
% Invalid input detected at '^' marker.

Switch(config)#int vlan 40
Switch(config-if)#
%LINK-5-CHANGED: Interface Vlan40, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan40, changed state to up

Switch(config-if)#ip address 10.40.0.2 255.255.255.0
Switch(config-if)#no shutdown
Switch(config-if)#ex
Switch(config)#ex
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#wr
Building configuration...
[OK]
Switch#
```

```
Switch(config)#int fa0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switch
Switch(config-if)#switchport ac
Switch(config-if)#switchport access vlan 40
```

3) Документация на сеть

Server0

PhysicalConfigDesktopCustom Interface

GLOBAL

Settings

Algorithm Settings

SERVICES

HTTP

DHCP

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

FIREWALL

IPv6 FIREWALL

INTERFACE

FastEthernet0

DHCP

Service

On

Off

Pool Name

vlan10

Default Gateway

10.10.0.1

DNS Server

8.8.8.8

Start IP Address :

10

10

0

2

Subnet Mask :

255

255

255

0

Maximum number of Users :

250

TFTP Server:

0.0.0.0

Add

Save

Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max Number	TFTP Server
serverPool	0.0.0.0	0.0.0.0	0.0.0.0	255.255.255.0	512	0.0.0.0
vlan10	10.10.0.1	8.8.8.8	10.10.0.2	255.255.255.0	250	0.0.0.0
vlan20	10.20.0.1	8.8.8.8	10.20.0.2	255.255.255.0	250	0.0.0.0
vlan30	10.30.0.1	8.8.8.8	10.30.0.2	255.255.255.0	250	0.0.0.0
vlan40	10.40.0.2	8.8.8.8	10.40.0.3	255.255.255.0	250	0.0.0.0