

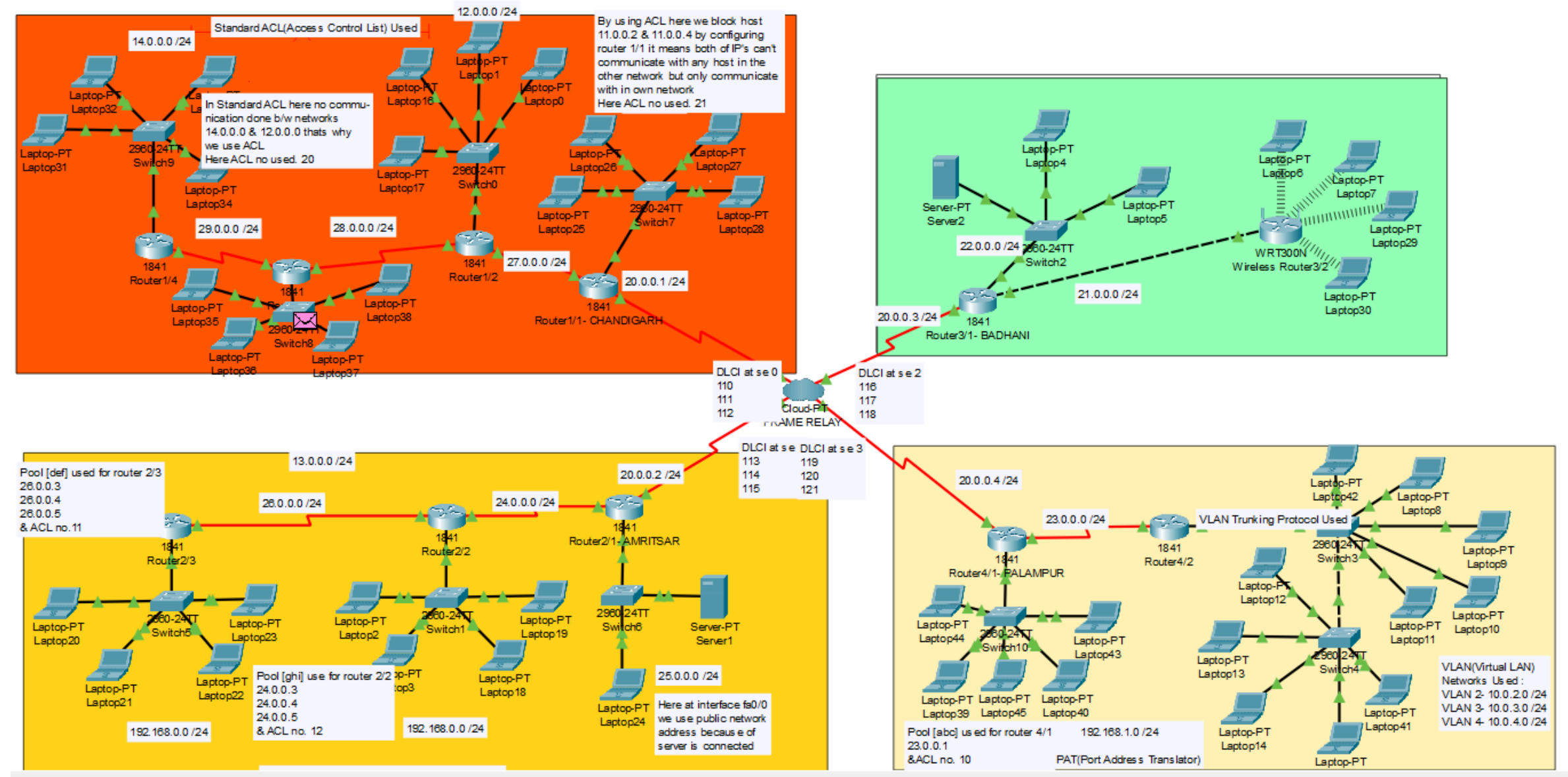
DEPI

CyberSecurity

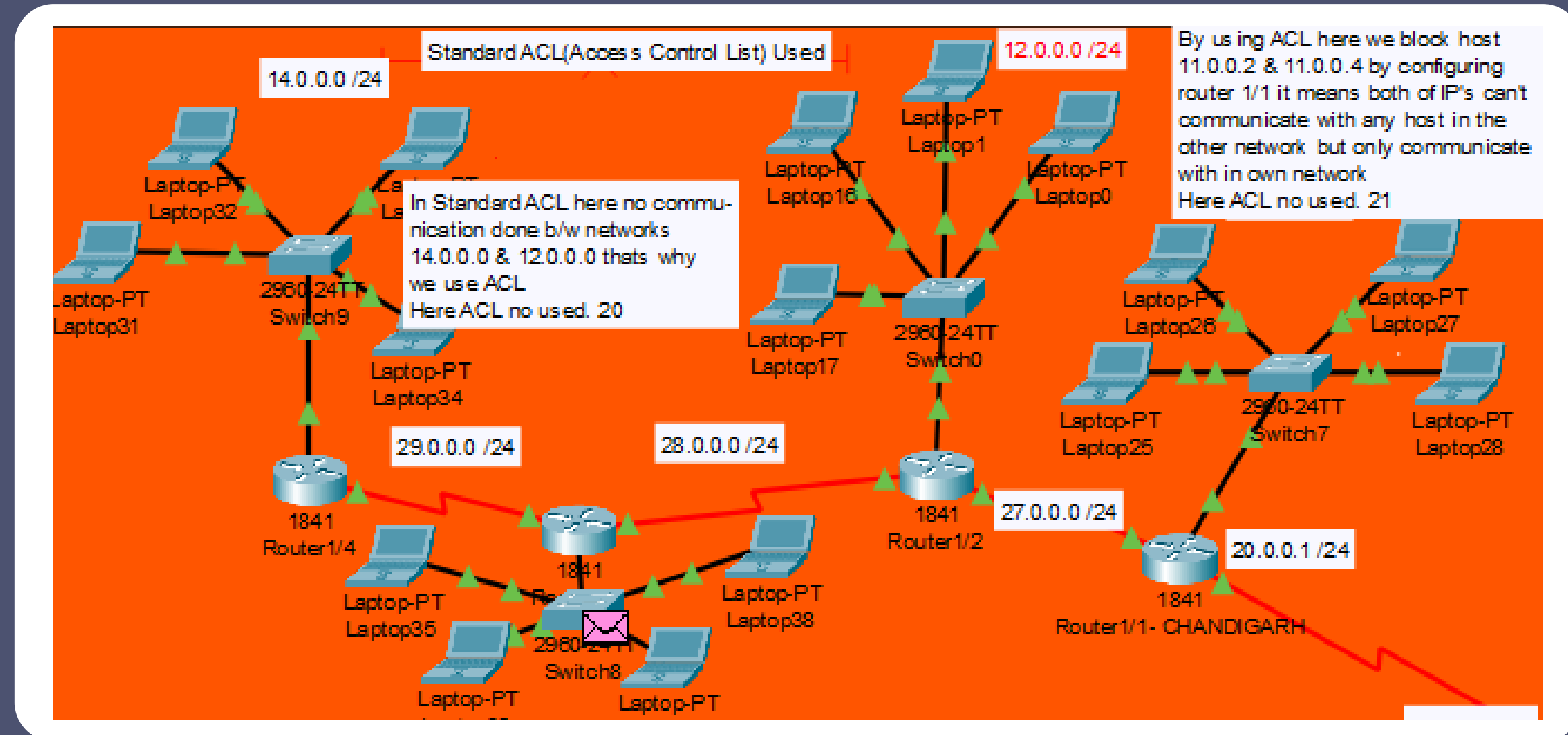
FALCON

Under supervision:Eng/Khaled Abdrabo

OVERVIEW



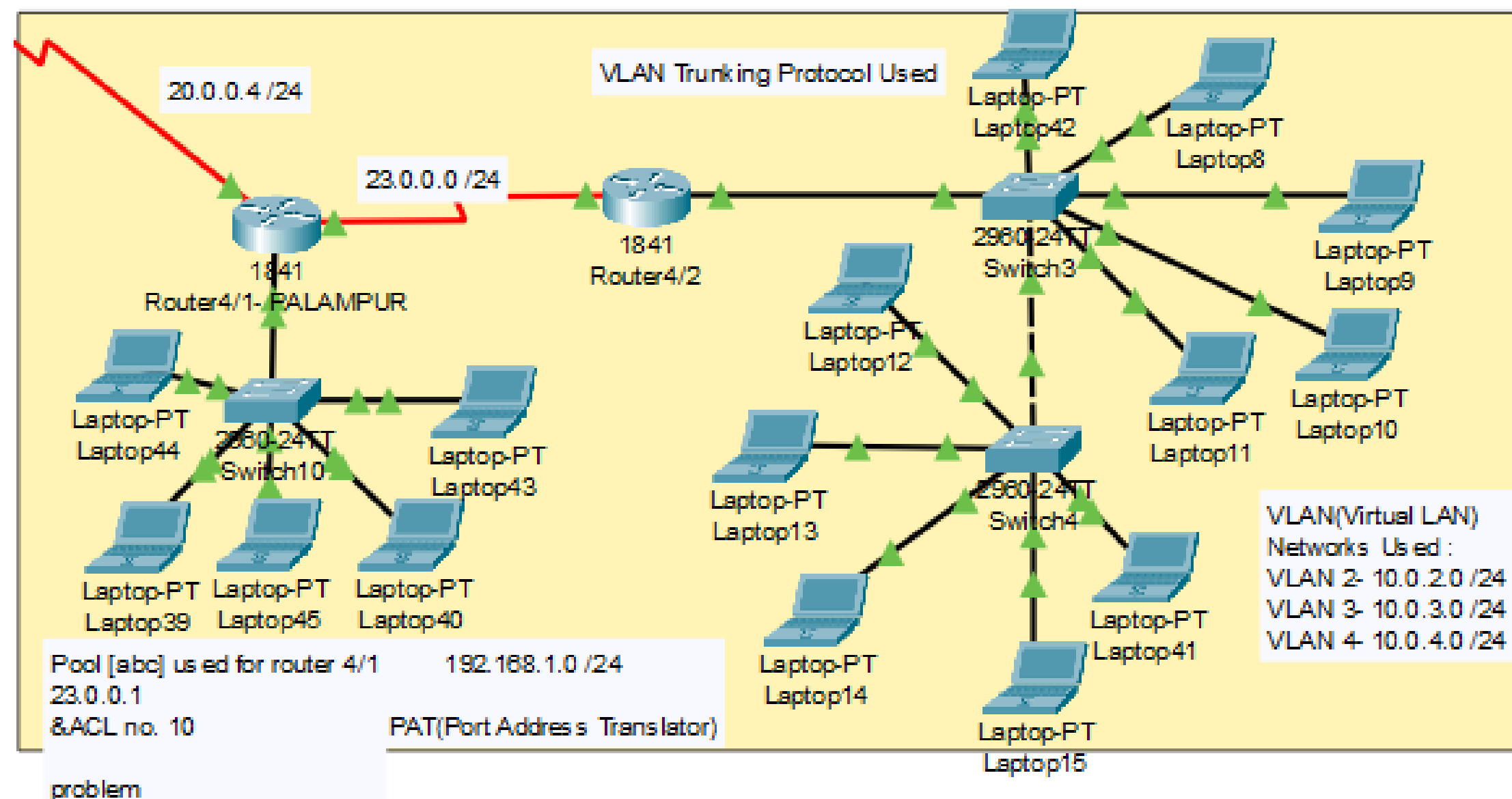
Standard ACL configuraiont



```
Router(config)#access-list 20 per
Router(config)#access-list 20 permit any
Router(config)#inter
Router(config)#interface f0/1
Router(config-if)#ip ac
Router(config-if)#ip access-group 20 out
Router(config-if)#exit
Router(config)#do sh access-1
Router(config)#do sh access-list
Standard IP access list 20
  10 deny 12.0.0.0 0.0.0.255 (22 match(es))
  20 permit any
```

VLANs AND PAT

```
Switch(config)#! Create VLANs 2, 3, and 4
Switch(config)#vlan 2
Switch(config-vlan)# name VLAN_2
Switch(config-vlan)#vlan 3
Switch(config-vlan)# name VLAN_3
Switch(config-vlan)#vlan 4
Switch(config-vlan)# name VLAN_4
Switch(config-vlan)#
Switch(config-vlan)#! Assign interfaces to VLANs
Switch(config-vlan)#interface FastEthernet 0/1
Switch(config-if)# switchport mode access
Switch(config-if)# switchport access vlan 2
Switch(config-if)#exit
Switch(config)#
Switch(config)#interface FastEthernet 0/2
Switch(config-if)# switchport mode access
Switch(config-if)# switchport access vlan 3
Switch(config-if)#exit
Switch(config)#
Switch(config)#interface FastEthernet 0/3
Switch(config-if)# switchport mode access
Switch(config-if)# switchport access vlan 4
Switch(config-if)#exit
Switch(config)#
Switch(config)#! Configure trunk port between Switch3 and Switch4
Switch(config)#interface FastEthernet 0/24
Switch(config-if)# switchport mode trunk
Switch(config-if)# switchport trunk allowed vlan 2,3,4
```



VLANS AND PAT

```
Switch(config)#! Create VLAN 4
Switch(config)#vlan 4
Switch(config-vlan)# name VLAN_4
Switch(config-vlan)#
Switch(config-vlan)#! Assign interfaces to VLAN 4
Switch(config-vlan)#interface FastEthernet 0/1
Switch(config-if)# switchport mode access
Switch(config-if)# switchport access vlan 4
Switch(config-if)#exit
Switch(config)#
Switch(config)#! Configure trunk port between Switch4 and Switch3
Switch(config)#interface FastEthernet 0/24
Switch(config-if)# switchport mode trunk
Switch(config-if)# switchport trunk allowed vlan 4
Switch(config-if)#exit
Switch(config)#
```

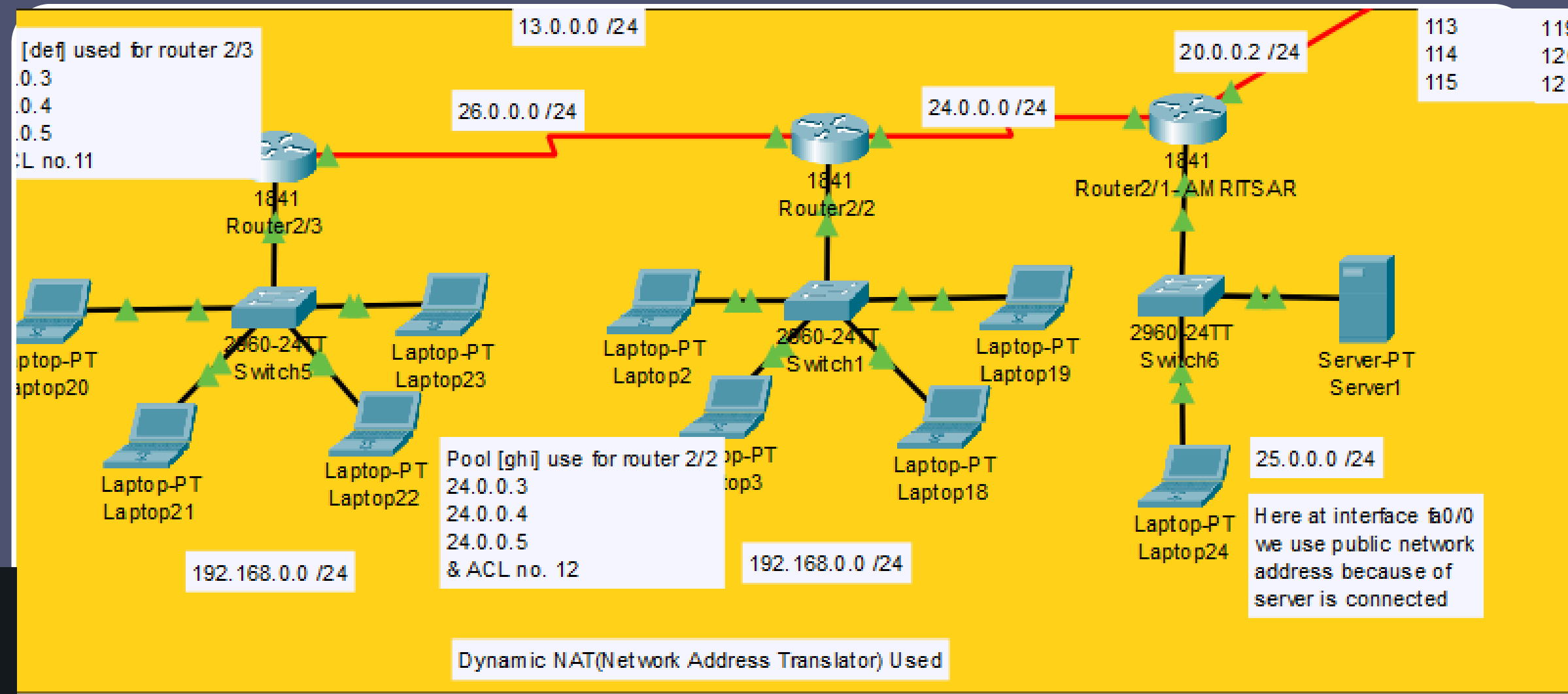
```
Router(config)# interface GigabitEthernet 0/1
Router(config-if)# ip nat inside
Router(config-if)# exit
Router(config)# interface GigabitEthernet 0/0
Router(config-if)# ip nat outside
Router(config-if)# exit
Router(config)# access-list 1 permit 192.168.0.0 0.0.0.255
Router(config)# ip nat inside source list 1 interface GigabitEthernet 0/0 overload
Router(config)# exit
Router# write memory
```

DYNAMIC NAT

```
# Define the NAT pool for Router 2/3
ip nat pool def 13.0.0.3 13.0.0.4 netmask 255.255.255.0
# Define the access list for internal network 192.168.0.0/24
access-list 11 permit 192.168.0.0 0.0.0.255

# Apply NAT for the internal network using the pool 'def'
ip nat inside source list 11 pool def

# Define interfaces for NAT
interface FastEthernet0/0
 ip address 192.168.0.1 255.255.255.0
 ip nat inside
!
interface FastEthernet0/1
 ip address 26.0.0.2 255.255.255.0
 ip nat outside
```



Internet Setup

Internet Connection type

Static IP

Internet IP Address: 21 . 0 . 0 . 2

Subnet Mask: 255 . 255 . 255 . 0

Default Gateway: 21 . 0 . 0 . 1

DNS 1: 21 . 0 . 0 . 1

DNS 2 (Optional): 0 . 0 . 0 . 0

DNS 3 (Optional): 0 . 0 . 0 . 0

Optional Settings (required by some internet service providers)

Host Name:

Domain Name:

MTU: Size: 1500

Network Setup

Router IP

IP Address: 192 . 168 . 0 . 1

Subnet Mask: 255.255.255.0

DHCP Server:

Enabled

Disabled

DHCP Reservation

Start IP Address: 192.168.0. 100

Maximum number of Users: 50

IP Address Range: 192.168.0. 100 - 149

Client Lease Time: 0 minutes (0 means one day)

Static DNS 1: 0 . 0 . 0 . 0

Static DNS 2: 0 . 0 . 0 . 0

WIRELESS

