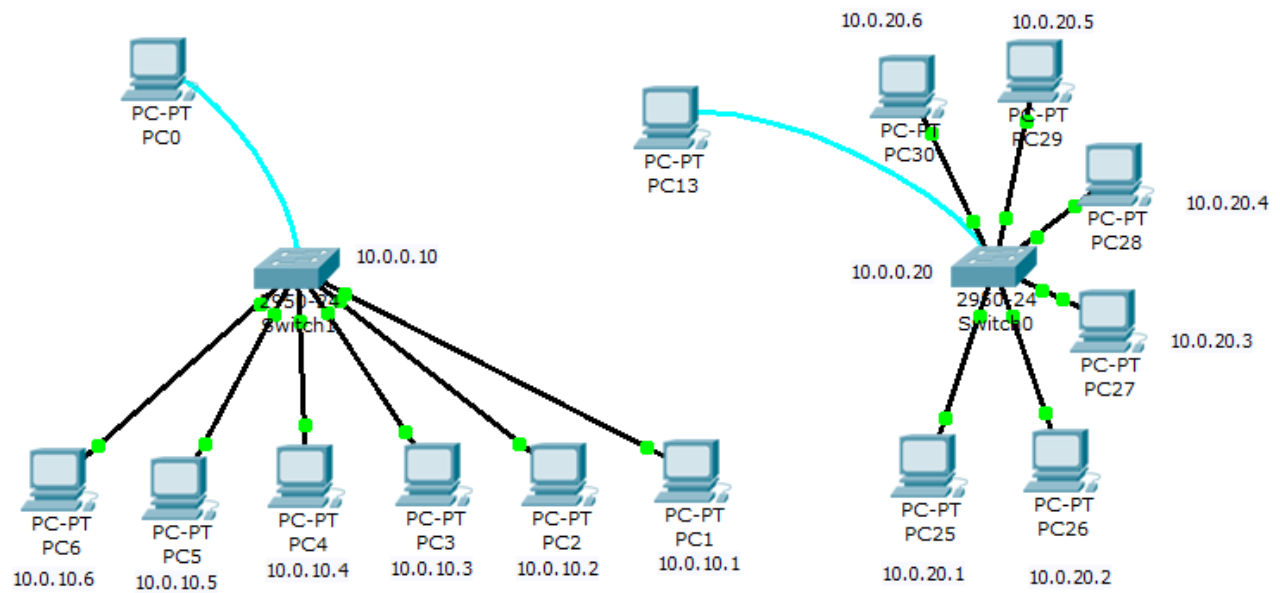


# Practical Applications in Networks I

## Lab 02

( based on Lec 02, 03)

## 2.1





<b>PC2 5</b>	<b>item</b>	<b>Configuration</b>	<b>PC2 6</b>	<b>item</b>	<b>Configuration</b>
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	100		Band width	100
	Duplex	Full		Duplex	Full
	IP	10.0.20.1		IP	10.0.20.2
	Mask	255.255.0.0		Mask	255.255.0.0
<b>PC2 7</b>	<b>item</b>	<b>Configuration</b>	<b>PC2 8</b>	<b>item</b>	<b>auto</b>
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	100		Band width	100
	Duplex	Full		Duplex	Full
	IP	10.0.20.3		IP	10.0.20.4
	Mask	255.255.0.0		Mask	255.255.0.0
<b>PC2 9</b>	<b>item</b>	<b>Configuration</b>	<b>PC3 0</b>	<b>item</b>	<b>Configuration</b>
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	100		Band width	100
	Duplex	Full		Duplex	Full
	IP	10.0.20.5		IP	10.0.20.6
	Mask	255.255.0.0		Mask	255.255.0.0



<b>PC1</b>	item	Configuration	<b>PC2</b>	item	Configuration
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	100		Band width	100
	Duplex	Full		Duplex	Full
	IP	10.0.10.1		IP	10.0.10.2
	Mask	255.255.0.0		Mask	255.255.0.0

<b>PC3</b>	item	Configuration	<b>PC4</b>	item	Configuration
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	100		Band width	100
	Duplex	Full		Duplex	Full
	IP	10.0.10.3		IP	10.0.10.4
	Mask	255.255.0.0		Mask	255.255.0.0

<b>PC5</b>	item	Configuration	<b>PC6</b>	item	Configuration
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	100		Band width	100
	Duplex	Full		Duplex	Full
	IP	10.0.10.5		IP	10.0.10.6
	Mask	255.255.0.0		Mask	255.255.0.0



```
[siwtch00]
enabl
config t
hostname B0-FL00-R01-SW01
banner motd #Hello & Welcome to Practical Applications on Network - Lecture 02#
interface vlan 1
ip address 10.0.0.10 255.0.0.0
no shutdown

line vty 0 4
password cisco
login

line console 0
password cisco
login

enable password cisco

enable secret cisco1

interface range fa0/1-6
speed 100
duplex full
end

copy running-config startup-config
reload
```

```
[siwtch01]
enabl
config t
hostname B0-FL00-R02-SW01
banner motd #Hello & Welcome to Practical Applications on Network - Lecture 02#
interface vlan 1
ip address 10.0.0.20 255.0.0.0
no shutdown

line vty 0 4
password cisco
login

line console 0
password cisco
login
```



```
enable password cisco
```

```
enable secret cisco1
```

```
interface range fa0/1-6
```

```
speed 100
```

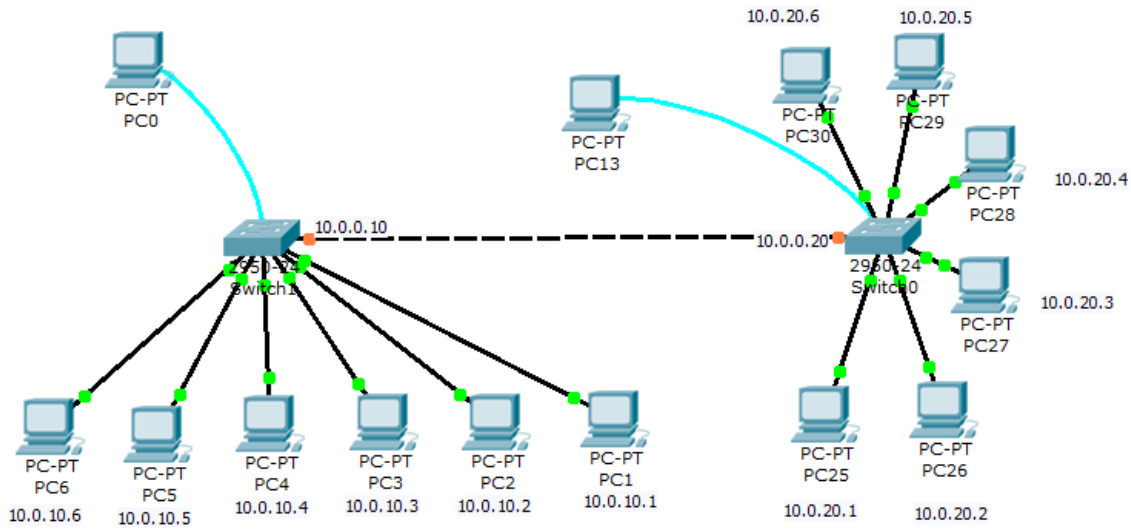
```
duplex full
```

```
end
```

```
copy running-config startup-config
```

```
reload
```

## 2.2



[SW-FL01-R01]

Ping 10.0.0.20

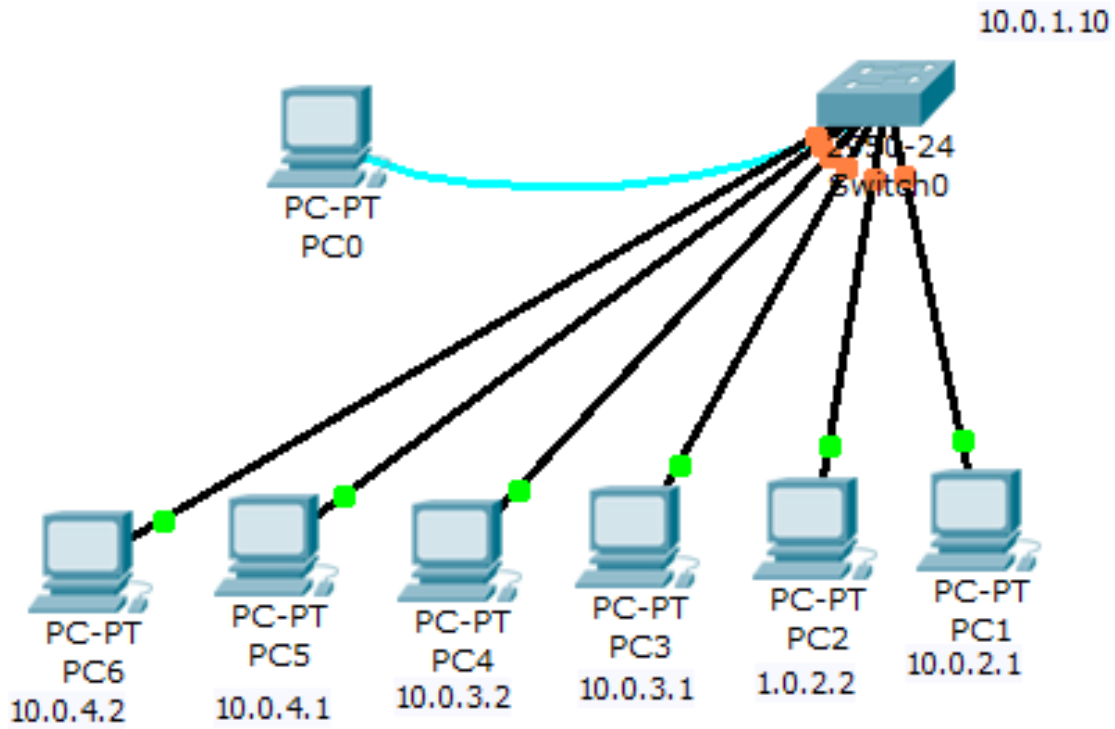
Ping 10.0.20.1

[SW-FL01-R02]

Ping 10.0.0.10

Ping 10.0.10.1

## 2.3





<b>PC1</b>	<b>item</b>	<b>Configuration</b>	<b>PC2</b>	<b>item</b>	<b>Configuration</b>
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	auto		Band width	auto
	Duplex	auto		Duplex	auto
	IP	10.0.2.1		IP	10.0.2.2
	Mask	255.255.0.0		Mask	255.255.0.0
<b>PC3</b>	<b>item</b>	<b>Configuration</b>	<b>PC4</b>	<b>item</b>	<b>auto</b>
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	auto		Band width	auto
	Duplex	auto		Duplex	auto
	IP	10.0.3.1		IP	10.0.3.2
	Mask	255.255.0.0		Mask	255.255.0.0
<b>PC5</b>	<b>item</b>	<b>Configuration</b>	<b>PC6</b>	<b>item</b>	<b>Configuration</b>
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	auto		Band width	auto
	Duplex	auto		Duplex	auto
	IP	10.0.4.1		IP	10.0.4.2
	Mask	255.255.0.0		Mask	255.255.0.0

```
[B0-FL00-R01-SW01]
```

```
enbale
```

```
config t
```

```
vlan 2
```

```
name Finance
```

```
vlan 3
```

```
name HR
```

```
vlan 4
```

```
name Administration
```

```
interface fa0/1
```

```
switchport mode access
```

```
switchport access vlan 2
```

```
interface fa0/2
```

```
switchport mode access
```

```
switchport access vlan 2
```

```
interface fa0/3
```

```
switchport mode access
```

```
switchport access vlan 3
```

```
interface fa0/4
```

```
switchport mode access
```

```
switchport access vlan 3
```

```
interface fa0/5
```

```
switchport mode access
```

```
switchport access vlan 4
```

```
interface fa0/6
```

```
switchport mode access
```

```
switchport access vlan 4
```

```
end
```

```
copy running-config startup-config
```

```
show vlan
```

```
show ip interface brief
```



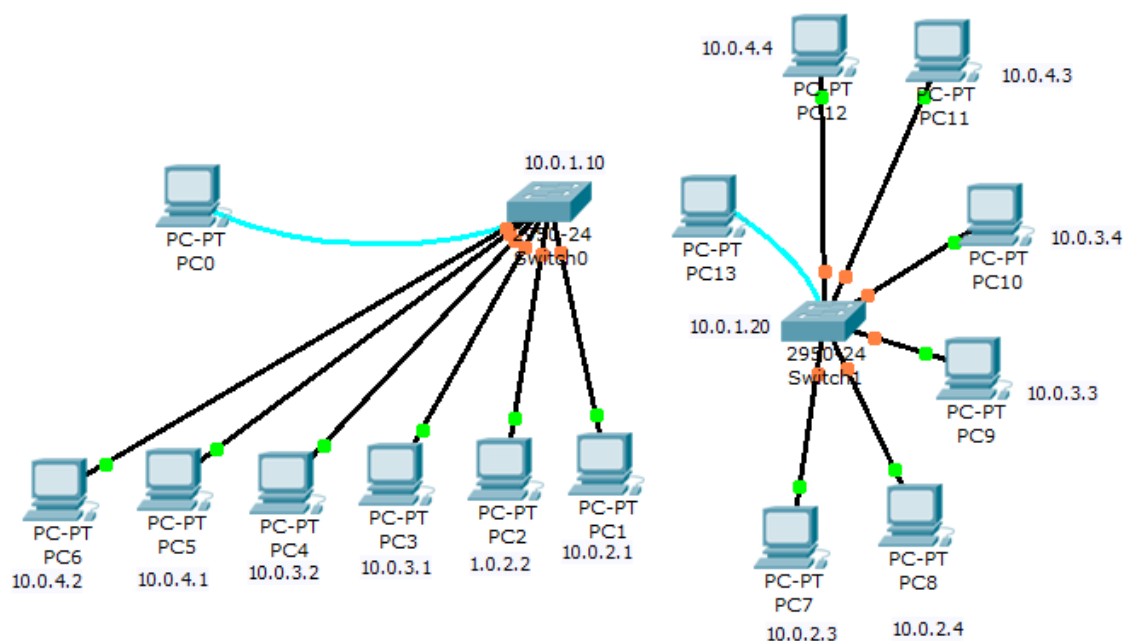
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```
ping 10.0.1.10  
ping 10.0.2.1  
ping 10.0.3.1  
ping 10.0.4.1
```

### 3.1



PC1	item	Configuration	PC2	item	Configuration
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	auto		Band width	auto
	Duplex	auto		Duplex	auto
	IP	10.0.2.1		IP	10.0.2.2
	Mask	255.255.0.0		Mask	255.255.0.0

PC3	item	Configuration	PC4	item	Configuration
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	auto		Band width	auto
	Duplex	auto		Duplex	auto
	IP	10.0.3.1		IP	10.0.3.2
	Mask	255.255.0.0		Mask	255.255.0.0



<b>PC5</b>	<b>item</b>	<b>Configuration</b>	<b>PC6</b>	<b>item</b>	<b>Configuration</b>
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	auto		Band width	auto
	Duplex	auto		Duplex	auto
	IP	10.0.4.1		IP	10.0.4.2
	Mask	255.255.0.0		Mask	255.255.0.0

<b>PC7</b>	<b>item</b>	<b>Configuration</b>	<b>PC8</b>	<b>item</b>	<b>Configuration</b>
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	auto		Band width	auto
	Duplex	auto		Duplex	auto
	IP	10.0.2.3		IP	10.0.2.4
	Mask	255.255.0.0		Mask	255.255.0.0

<b>PC9</b>	<b>item</b>	<b>Configuration</b>	<b>PC10</b>	<b>item</b>	<b>Configuration</b>
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	auto		Band width	auto
	Duplex	auto		Duplex	auto
	IP	10.0.3.3		IP	10.0.3.4
	Mask	255.255.0.0		Mask	255.255.0.0



<b>PC1 1</b>	item	Configuration	<b>PC1 2</b>	item	Configuration
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	auto		Band width	auto
	Duplex	auto		Duplex	auto
	IP	10.0.4.3		IP	10.0.4.4
	Mask	255.255.0.0		Mask	255.255.0.0

```
[B0-FL00-R01-SW01]
*****
enabl
config t
hostname B01-FL00-R01-SW01
banner motd #Hello & Welcome to Practical Applications on Networks I - Lecture 03#

line vty 0 4
password cisco
login

line console 0
password cisco
login

enable password cisco

enable secret cisco1

interface vlan 1
ip address 10.0.1.10 255.255.0.0
no shutdown

interface range fa0/1-6
speed auto
duplex auto

vlan 2
name Finance

vlan 3
name HR
```

```
vlan 4
name Administration

interface fa0/1
switchport mode access
switchport access vlan 2

interface fa0/2
switchport mode access
switchport access vlan 2

interface fa0/3
switchport mode access
switchport access vlan 3

interface fa0/4
switchport mode access
switchport access vlan 3

interface fa0/5
switchport mode access
switchport access vlan 4

interface fa0/6
switchport mode access
switchport access vlan 4

end

copy running-config startup-config

[B0-FL00-R01-SW01]
*****
enabl
config t
hostname B01-FL00-R02-SW01
banner motd #Hello & Welcome to Practical Applications on Networks I - Lecture 03#

line vty 0 4
password cisco
login

line console 0
password cisco
login
```

```
enable password cisco

enable secret cisco1

interface vlan 1
ip address 10.0.1.20 255.255.0.0
no shutdown

interface range fa0/1-6
speed auto
duplex auto

vlan 2
name Finance

vlan 3
name HR

vlan 4
name Administration

interface fa0/1
switchport mode access
switchport access vlan 2

interface fa0/2
switchport mode access
switchport access vlan 2

interface fa0/3
switchport mode access
switchport access vlan 3

interface fa0/4
switchport mode access
switchport access vlan 3

interface fa0/5
switchport mode access
switchport access vlan 4

interface fa0/6
switchport mode access
switchport access vlan 4
```





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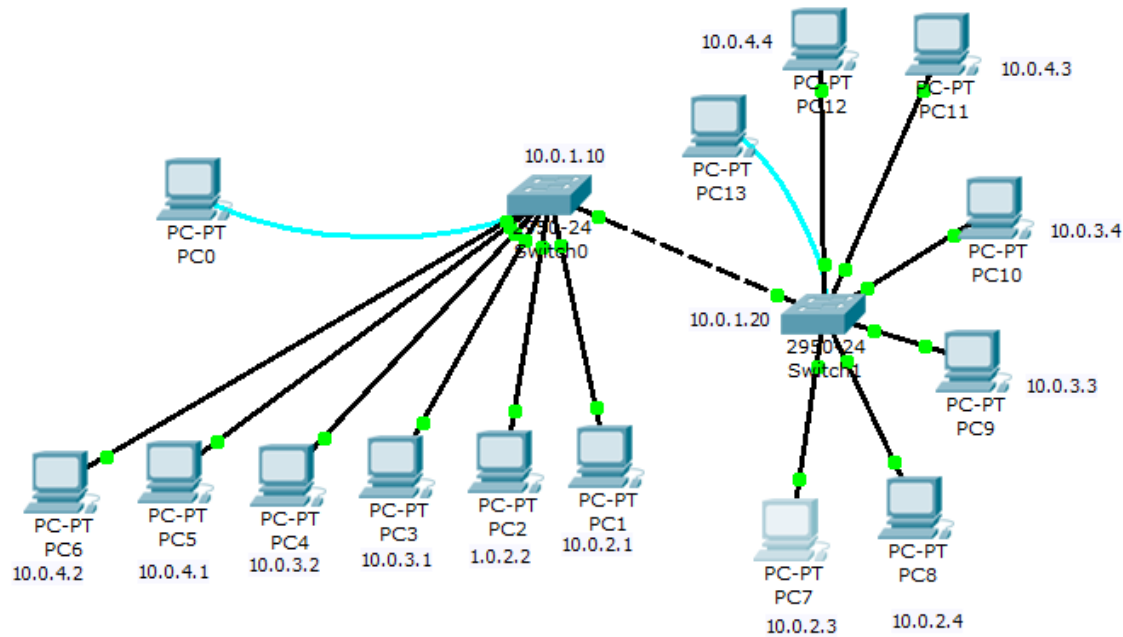


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end

copy running-config startup-config

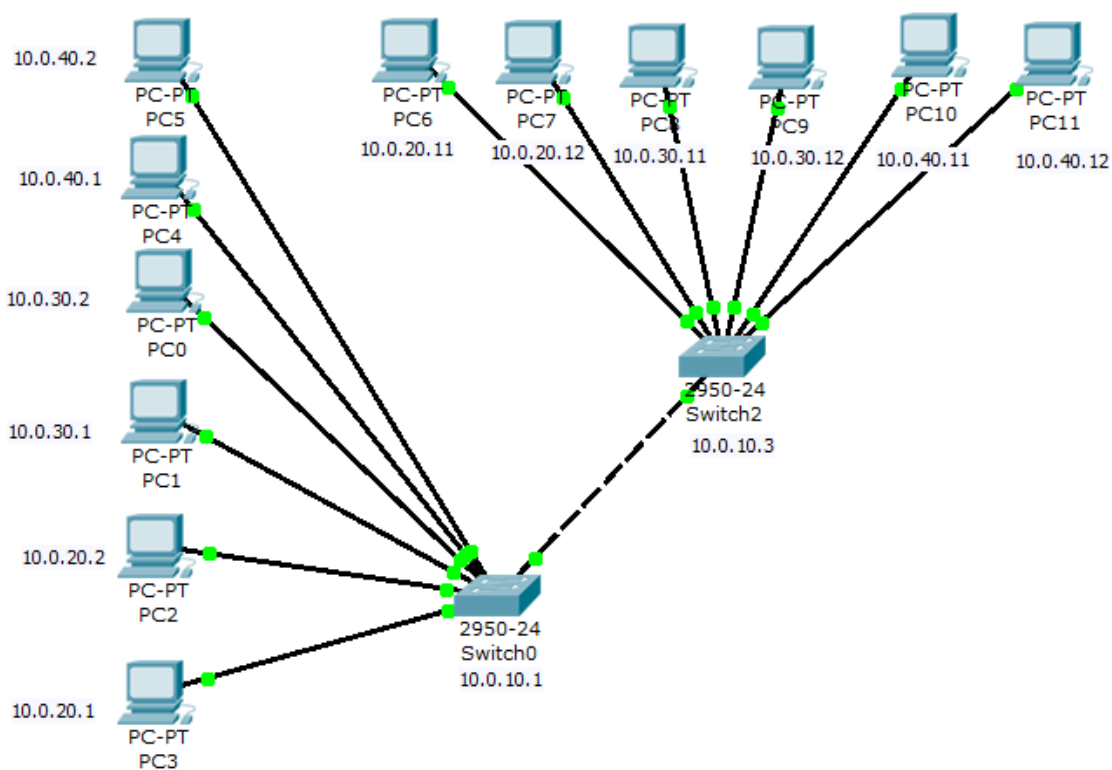
3.2



```
[B01-FL00-R01-SW01]
enable
config t
interface fa0/24
switchport mode trunk
speed auto
duplex auto
end
copy running-config startup-config
reload
```

```
[B01-FL00-R02-SW01]
enable
config t
interface fa0/24
switchport mode trunk
speed auto
duplex auto
end
copy running-config startup-config
Reload
```

### 3.3



```
[B01-FL00-R01-SW01]
****
enabl
config t
hostname B01-FL00-R01-SW01
banner motd #B01-FL00-R01-SW01 - 10.0.10.1#

line vty 0 4
password cisco
login

line console 0
password cisco
login

enable password cisco

enable secret cisco1

vtp domain ACU
vtp mode server
```

```
interface vlan 1
ip address 10.0.10.1 255.255.255.0
no shutdown
```

```
vlan 2
name Finance
```

```
vlan 3
name HR
```

```
vlan 4
name Administration
```

```
interface range fa0/1-24
speed auto
duplex auto
```

```
interface range fa0/1-5
switchport mode access
switchport access vlan 2
```

```
interface range fa0/6-10
switchport mode access
switchport access vlan 3
```

```
interface range fa0/11-15
switchport mode access
switchport access vlan 4
```

```
interface range fa0/23-24
switchport mode trunk
```

```
end
```

```
copy running-config startup-config
```

```
[B01-FL00-R02-SW01]
```

```
enabl
config t
hostname B01-FL00-R02-SW01
banner motd #B01-FL00-R02-SW01 - 10.0.10.2#
```

```
line vty 0 4
password cisco
login
```



```
line console 0
password cisco
login

enable password cisco

enable secret cisco1

vtp domain ACU
vtp mode client

interface vlan 1
ip address 10.0.10.2 255.255.255.0
no shutdown

interface range fa0/1-24
speed auto
duplex auto

interface range fa0/1-5
switchport mode access
switchport access vlan 2

interface range fa0/6-10
switchport mode access
switchport access vlan 3

interface range fa0/11-15
switchport mode access
switchport access vlan 4

interface fa0/24
switchport mode trunk

interface fa0/23
switchport mode trunk

end

copy running-config startup-config
```