**THE COMPANY**

**OmniCore Innovations**

**We make phone accessories.**

**The company was founded in 2010.**

**Including: Phone cases, Screen Protectors, Charging cables**

**Our core principles are to deliver a premium product to our customers, and to always be there for the customer if there are any complications.**

**Aswell, we try to push the boundaries of phone accessory technology.**

**We do charge a higher price because we are a smaller company and we use higher quality materials to make our products, ensuring our customers' satisfaction.**

**Most of our products are sold to distributors so we do not give price information on our website.**

**Company logo:**

|  |
| --- |
|  |

**Our staff will have access to a “portal” intranet site that will contain employee resources**

**Staff:**

**TASK 1 – IP ADDRESS STRUCTURE: COMPLETE**

**VLANS:** 10, 20, 30, 99 (Management)

**VLAN 10**: **Support VLAN**

Default gateway 192.168.0.1

Range: 192.168.0.2 – 192.168.0.2

Broadcast: 192.168.0.31

Subnet Mask: 255.255.255.224

**VLAN 20**: **Sales VLAN**

Default gateway 192.168.0.32

Range: 192.168.0.33 – 192.168.0.62

Broadcast: 192.168.0.63

Subnet Mask: 255.255.255.224

**VLAN 30: HR VLAN**

Default gateway 192.168.0.65

Range: 192.168.0.66 – 192.168.0.94

Broadcast: 192.168.0.95

Subnet Mask: 255.255.255.224

**VLAN 99: Native VLAN**

Default gateway 192.168.0.97

Range: 192.168.0.98 – 192.168.0.126

Broadcast: 192.168.0.127

Subnet Mask: 255.255.255.224

**Public address:**

Class B

128.10.0.0/16

**TASK 2 – NETWORK TOPOLOGY: COMPLETE**

Made in packet tracer.

Physical topology represented by floors.

**Notable details:**

Contains a remote internet server.

Contains an intranet server on the second floor

Remote network and the main office network are connected by serial cable.

**TASK 3 – PT File: COMPLETE**

**Packet Tracer:**

A screenshot of a computer

Description automatically generated

**DHCP:**

**DHCP Company Router Configuration**

ip dhcp excluded-address 192.168.0.1 192.168.0.11

ip dhcp excluded-address 192.168.0.34 192.168.0.44

ip dhcp excluded-address 192.168.0.66 192.168.0.76

ip dhcp excluded-address 192.168.0.98 192.168.0.108

!

ip dhcp pool VLAN10

network 192.168.0.0 255.255.255.224

default-router 192.168.0.1

dns-server 192.168.0.67

domain-name example.com

ip dhcp pool VLAN20

network 192.168.0.32 255.255.255.224

default-router 192.168.0.33

dns-server 192.168.0.67

domain-name example.com

ip dhcp pool VLAN30

network 192.168.0.64 255.255.255.224

default-router 192.168.0.65

dns-server 192.168.0.67

A screenshot of a computer

Description automatically generatedA screenshot of a computer

Description automatically generateddomain-name example.com

**Task 4 - Desktop Tech: COMPLETE**

PC2 = Riviera\*\*

PC3 = Riviera\*\*

**TASK 5 SWITHCS: COMPLETE**

**First Floor switch running configuration.**

Building configuration...

Current configuration : 2993 bytes

!

version 15.0

no service timestamps log datetime msec

no service timestamps debug datetime msec

service password-encryption

!

hostname FirstFlrSw

!

no logging console

enable secret 5 $1$mERr$hx5rVt7rPNoS4wqbXKX7m0

!

!

!

!

!

!

spanning-tree mode pvst

spanning-tree extend system-id

!

interface FastEthernet0/1

description Trunk Link to SecondFlrSwitch

switchport trunk native vlan 99

switchport mode trunk

!

interface FastEthernet0/2

description Trunk link to Company Router

switchport trunk native vlan 99

switchport mode trunk

!

interface FastEthernet0/3

description Link to Domain Server

switchport access vlan 30

switchport mode access

switchport port-security

!

interface FastEthernet0/4

description Link to Intranet Serv

switchport access vlan 30

switchport mode access

switchport port-security

!

interface FastEthernet0/5

description Link to PC0 VLAN 30

switchport access vlan 30

switchport mode access

switchport port-security

!

interface FastEthernet0/6

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/7

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/8

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/9

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/10

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/11

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/12

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/13

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/14

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/15

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/16

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/17

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/18

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/19

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/20

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/21

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/22

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/23

switchport access vlan 101

switchport mode access

!

interface FastEthernet0/24

switchport access vlan 101

switchport mode access

!

interface GigabitEthernet0/1

switchport access vlan 101

switchport mode access

!

interface GigabitEthernet0/2

switchport access vlan 101

switchport mode access

!

interface Vlan1

no ip address

shutdown

!

interface Vlan10

no ip address

!

interface Vlan99

ip address 192.168.0.98 255.255.255.224

!

no cdp run

!

banner motd ^CWARNING UNAUTHORIZED ACCESS IS PROHIBITED!^C

!

!

!

line con 0

password 7 0822455D0A16

login

!

line vty 0 4

password 7 0822455D0A16

login

line vty 5 15

login

!

!

!

!

end

**Second Floor Switch Configuration**

service password-encryption

!

hostname SecondFlrSw

!

!

!

!

!

!

spanning-tree mode pvst

spanning-tree extend system-id

!

interface FastEthernet0/1

switchport trunk native vlan 99

switchport mode trunk

!

interface FastEthernet0/2

switchport access vlan 20

switchport mode access

!

interface FastEthernet0/3

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/4

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/5

!

interface FastEthernet0/6

!

interface FastEthernet0/7

!

interface FastEthernet0/8

!

interface FastEthernet0/9

!

interface FastEthernet0/10

!

interface FastEthernet0/11

!

interface FastEthernet0/12

!

interface FastEthernet0/13

!

interface FastEthernet0/14

!

interface FastEthernet0/15

!

interface FastEthernet0/16

!

interface FastEthernet0/17

!

interface FastEthernet0/18

!

interface FastEthernet0/19

!

interface FastEthernet0/20

!

interface FastEthernet0/21

!

interface FastEthernet0/22

!

interface FastEthernet0/23

!

interface FastEthernet0/24

!

interface GigabitEthernet0/1

!

interface GigabitEthernet0/2

!

interface Vlan1

no ip address

shutdown

!

interface Vlan10

no ip address

!

!

!

!

line con 0

!

line vty 0 4

login

line vty 5 15

login

!

!

!

!

end

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Device** | **Interface** | **VLAN** | **VLAN name** | **Trunk Ports** | **IP** |
| Switch 1 (First) | N/A | 10 | Sales | Fa0/1-2 |  |
| Name: FirstFlrSw | N/A | 20 | Engineering |  |  |
|  | fa0/3-5 | 30 | Server |  |  |
|  | N/A | 40 | Tech |  | 192.168.0.98/27 |
|  | Fa0/2 | 99 | Native |  |  |
|  |  | 101 | BlackHole |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Switch 0 (2nd flr)** | **Interface** | **VLAN** | **VLAN name** | **Trunk Ports** |
| Name: SecondFlrSw | fa0/3-4 | 10 | Sales | **Fa0/1** |
|  | fa0/2 | 20 | Engineering |  |
|  | N/A | 30 | Server |  |
|  |  | 40 | Tech |  |
|  |  | 99 | Native |  |
|  | fa0/1 | 101 | BlackHole |  |

**SCRIPT:**

**Switch1 (FirstFlrSw) Script:**

version 15.0

no service timestamps log datetime msec

no service timestamps debug datetime msec

service password-encryption

!

hostname FirstFlrSw

!

no logging console

enable secret 5 $1$mERr$hx5rVt7rPNoS4wqbXKX7m0

!

!

!

ip domain-name example.com

!

!

!

spanning-tree mode pvst

spanning-tree extend system-id

!

interface FastEthernet0/1

description Trunk Link to SecondFlrSwitch

switchport trunk native vlan 99

switchport mode trunk

!

interface FastEthernet0/2

description Trunk link to Company Router

switchport trunk native vlan 99

switchport mode trunk

!

interface FastEthernet0/3

description Link to Domain Server

switchport access vlan 30

switchport mode access

switchport port-security

!

interface FastEthernet0/4

description Link to Intranet Serv

switchport access vlan 30

switchport mode access

switchport port-security

!

interface FastEthernet0/5

description Link to PC0 VLAN 30

switchport access vlan 30

switchport mode access

switchport port-security

!

interface FastEthernet0/6

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/7

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/8

switchport access vlan 101

switchport mode access

shutdown

!

**Switch0 (SecondFlrSw) Script:**

version 15.0

no service timestamps log datetime msec

no service timestamps debug datetime msec

service password-encryption

!

hostname SecondFlrSw

!

no logging console

enable secret 5 $1$mERr$hx5rVt7rPNoS4wqbXKX7m0

!

!

!

!

!

!

spanning-tree mode pvst

spanning-tree extend system-id

!

interface FastEthernet0/1

description Trunk Link to FirstFlrSwitch

switchport trunk native vlan 99

switchport mode trunk

!

interface FastEthernet0/2

description Link to PC2 VLAN20

switchport access vlan 20

switchport mode access

switchport port-security

!

interface FastEthernet0/3

description Link to PC3 VLAN10

switchport access vlan 10

switchport mode access

switchport port-security

!

interface FastEthernet0/4

description Link to SecondFlrPrinter VLAN10

switchport access vlan 10

switchport mode access

switchport port-security

!

interface FastEthernet0/5

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/6

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/7

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/8

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/9

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/10

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/11

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/12

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/13

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/14

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/15

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/16

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/17

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/18

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/19

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/20

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/21

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/22

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/23

switchport access vlan 101

switchport mode access

shutdown

!

interface FastEthernet0/24

switchport access vlan 101

switchport mode access

shutdown

!

interface GigabitEthernet0/1

switchport access vlan 101

switchport mode access

shutdown

!

interface GigabitEthernet0/2

switchport access vlan 101

switchport mode access

shutdown

!

interface Vlan1

no ip address

shutdown

!

interface Vlan10

no ip address

!

no cdp run

!

banner motd ^CWARNING!!! UNAUTHORIZED ACCESS IS PROHIBITED.^C

!

!

!

line con 0

password 7 0822455D0A16

login

!

line vty 0 4

password 7 0822455D0A16

login

line vty 5 15

login

!

!

!

!

end

**Task 6 - Company Router: COMPLETE**

|  |  |
| --- | --- |
| G0/0.10 | VLAN 10 |
| G0/0.20 | VLAN 20 |
| G0/0.30 | VLAN 30 |
| G0/0.99 | VLAN 99 |

**Task 7 – Remote Router: COMPLETE**

**Company Router configuration**

service password-encryption

!

hostname Company\_Router

!

!

!

enable secret 5 $1$mERr$hx5rVt7rPNoS4wqbXKX7m0

!

!

ip dhcp excluded-address 192.168.0.1 192.168.0.11

ip dhcp excluded-address 192.168.0.34 192.168.0.44

ip dhcp excluded-address 192.168.0.66 192.168.0.76

ip dhcp excluded-address 192.168.0.98 192.168.0.108

!

ip dhcp pool VLAN10

network 192.168.0.0 255.255.255.224

default-router 192.168.0.1

dns-server 192.168.0.67

domain-name example.com

ip dhcp pool VLAN20

network 192.168.0.32 255.255.255.224

default-router 192.168.0.33

dns-server 192.168.0.67

domain-name example.com

ip dhcp pool VLAN30

network 192.168.0.64 255.255.255.224

default-router 192.168.0.65

dns-server 192.168.0.67

domain-name example.com

!

!

!

ip cef

no ipv6 cef

!

!

!

!

license udi pid CISCO1941/K9 sn FTX15240LOO-

!

!

!

!

!

!

!

!

!

!

!

spanning-tree mode pvst

!

!

!

!

!

!

interface GigabitEthernet0/0

no ip address

duplex auto

speed auto

!

interface GigabitEthernet0/0.10

encapsulation dot1Q 10

ip address 192.168.0.1 255.255.255.224

ip helper-address 192.168.0.67

!

interface GigabitEthernet0/0.20

encapsulation dot1Q 20

ip address 192.168.0.33 255.255.255.224

ip helper-address 192.168.0.67

!

interface GigabitEthernet0/0.30

encapsulation dot1Q 30

ip address 192.168.0.65 255.255.255.224

ip helper-address 192.168.0.67

!

interface GigabitEthernet0/0.99

encapsulation dot1Q 99

ip address 192.168.0.97 255.255.255.224

!

interface GigabitEthernet0/1

no ip address

duplex auto

speed auto

shutdown

!

interface Serial0/0/0

ip address 192.168.0.129 255.255.255.224

clock rate 2000000

!

interface Serial0/0/1

no ip address

clock rate 2000000

!

interface Vlan1

no ip address

shutdown

!

ip classless

ip route 0.0.0.0 0.0.0.0 Serial0/0/0

ip route 192.168.0.128 255.255.255.224 Serial0/0/0

!

ip flow-export version 9

!

!

!

!

!

!

!

line con 0

password 7 0822455D0A16

login

!

line aux 0

!

line vty 0 4

login

!

!

!

End

**Remote Router Configuration**

service password-encryption

!

hostname RemoteRouter

!

!

!

enable secret 5 $1$mERr$hx5rVt7rPNoS4wqbXKX7m0

!

!

!

!

!

!

ip cef

no ipv6 cef

!

!

!

!

license udi pid CISCO1941/K9 sn FTX152430J1-

!

!

!

!

!

!

!

!

!

no ip domain-lookup

!

!

spanning-tree mode pvst

!

!

!

!

!

!

interface GigabitEthernet0/0

description Cnecction to the server

ip address 128.10.0.1 255.255.0.0

duplex auto

speed auto

!

interface GigabitEthernet0/1

description Cnecction to the pc1 client

ip address 129.10.0.1 255.255.0.0

duplex auto

speed auto

!

interface Serial0/0/0

description static route to the compnay router

ip address 192.168.0.130 255.255.255.224

!

interface Serial0/0/1

no ip address

clock rate 2000000

!

interface Vlan1

no ip address

shutdown

!

ip classless

ip route 192.168.0.128 255.255.255.224 Serial0/0/0

ip route 129.10.0.0 255.255.0.0 GigabitEthernet0/1

ip route 128.10.0.0 255.255.0.0 GigabitEthernet0/0

!

ip flow-export version 9

!

!

!

no cdp run

!

banner motd ^C

WARNING UNAUTHORIZED ACCESS IS PROHIBITED!!! ^C

!

!

!

!

line con 0

password 7 0822455D0A16

!

line aux 0

!

line vty 0 4

password 7 0822455D0A16

login

line vty 5 15

password 7 0822455D0A16

login

!

!

!

end

**SCRIPT:**

en

config t

hostname RemoteRouter

enable secret **cisco**

no ip domain-lookup

line con 0

password cisco

exit

line vty 0 15

password cisco

exit

banner motd $ WARNING UNAUTHORIZED ACCESS IS PRHOBITED!!! $

no cdp run

no ip http server2

int g0/0

ip address 128.X.X.X

description Connection to client

int g0/0

ip address 128.X.X.X

description Connection to server

int s0/0/0

ip address 192.168.0.98 255.255.255.224 **(TEMP)**

no shut

ip route 192.168.0.0 255.255.255.0 192.168.0.99

**Task 8 - Websites: IN PROGRESS**

Both websites are located i the OneDrive folder

**Task 9 – Printer: IN PROGRESS**

Printer Default gateway: 192.168.0.1

Printer DNS: 192.168.0.67

Ip address: 192.168.0.2

**Task 10 - Domain:**

Domain server: 192.168.126.133

**Username:** Admin

**Password:** Riviera\*\*

IP address: 192.168.126.133

Subnet mask 255.255.255.0

Default gateway 192.168.126.2

**Riviera97.local**

**Task 11 – Domain users and groups: IN PROGRESS**