Sample project for the Topics CCNA: The first: 1- Building The topology as you show in figure: 2-Configure Basic configuration as following: A-Hostname to switches S1 as your first name, S2 as Second name, S3... B- Hostname to Routers First name, Second name,... C- Use domain name ((ITI.com)) D- All line password (3 first letters from every first name, second name, third name) E-Encrypt your password F-Username ((your Third name)) pass 123 G-Enable VTY SSH only with default module bits The second: 1-Creat VLANS 10, 20, 30 on Sw1 and 40, 50, 60 on SW2 as following: A-VLAN 10 interfaces f0/1, f0/2, and f0/3 B-VLAN 20 interfaces f0/4, f0/5, and f0/6 C-VLAN 30 interfaces G0/1 D-VLAN 40 interfaces f0/1, f0/2, and f0/3 E-VLAN 50 interfaces f0/4, f0/5, and f0/6 F-VLAN 60 interfaces G0/1

**G-Make STP on switches Rapid** 

The third:

## -DHCP configuration:

1-configure suitable DHCP pools on Router to can distribute IP add with subnet mask and default router and DNS is (192.168.7.10) to all end devices in network.

2-All pools with subnet mask class C (255.255.255.0) /24

A-VLAN 10 pool 192.168.x.0/24 default router 192.168.x.1

B-VLAN 20 pool 192.168.x+1.0/24 default router 192.168.x+1.1

C-VLAN 30 X+2

D-VLAN 40 X+3

E-VLAN 50 X+4

F-VLAN 60 x+5

G-SW3

H-Sw4 Pool 10.10.50.0 /24 default router 10.10.50.1

## The forth:

- 1- Routing area with 3 Routers You can use any dynamic Routing protocol (EIGRP)
- 2- Configure two routers with serial cable as default route.
- 3- Add radius Server on your network and make default authentication through it.

## ACL:

- 1-Make host 192.168.x.2 denied from use DNS services
- 2-Make network 192.168.x+2.0/24 do not access web server
- 3-Add Mail Server and make ACL prevent VLAN 10 from mail services.

Thanks. With MY best Wishes Engineer/Saleh Mahmoud