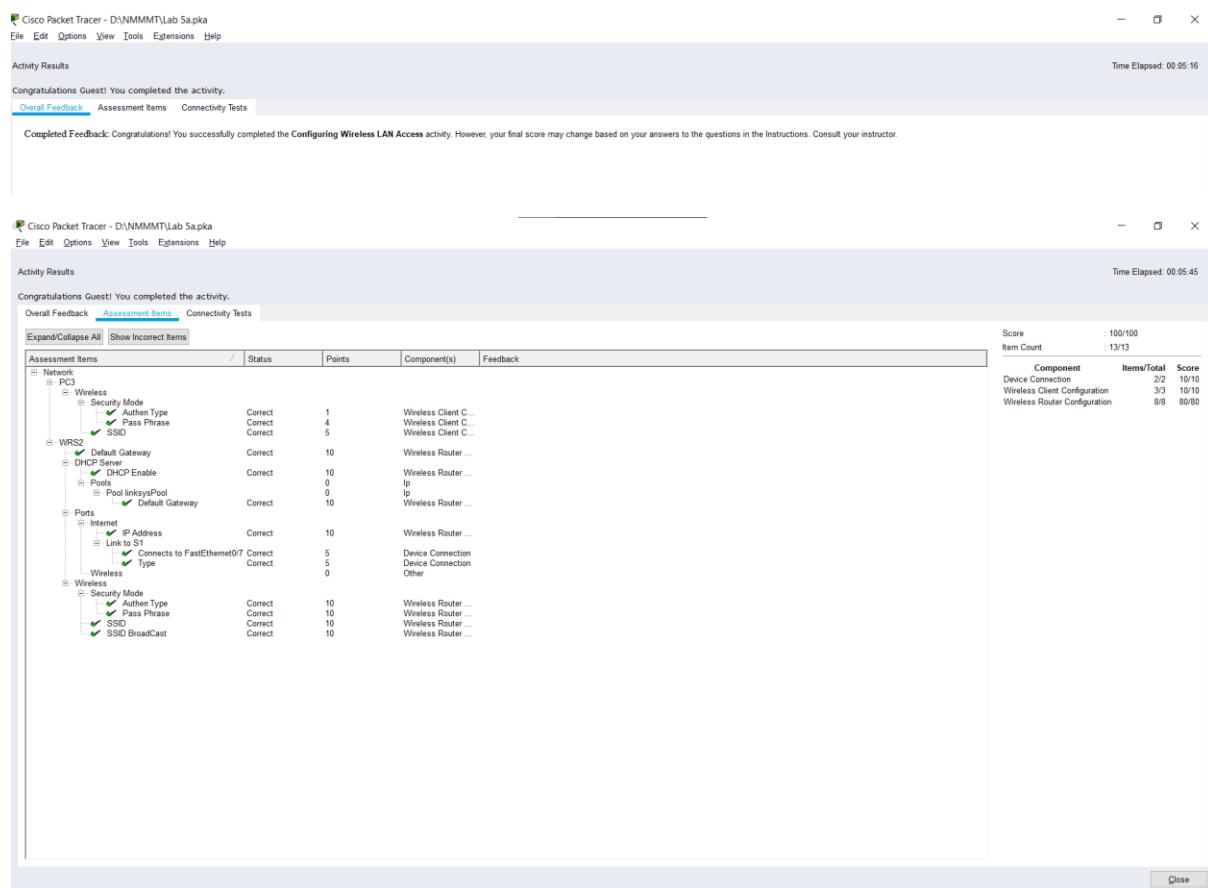


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LAB 5: CẤU HÌNH THIẾT BỊ MẠNG

1. Task 1: Cấu hình thiết bị mạng không dây



2. Task 2: Cấu hình địa chỉ IP trên Router

R1#Show run

```
R1#show run
Building configuration...
Current configuration : 1316 bytes
!
version 15.0
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname R1
!
!
enable secret 5 $1$0mERz9cTjUIEqH6urQ1FU.ZeC1i
!
!
!
!
ip cef
no ipv6 cef
!
!
license udl pid CISCO1941/K9 sn FTX15240FD
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
interface GigabitEthernet0/0
 ip address 192.168.10.1 255.255.255.0
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 192.168.11.1 255.255.255.0
 duplex auto
 speed auto
!
interface GigabitEthernet0/0
 ip address 192.168.10.1 255.255.255.0
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 192.168.11.1 255.255.255.0
 duplex auto
 speed auto
!
interface Serial0/0/0
 ip address 209.165.200.225 255.255.255.252
 clock rate 64000
!
interface Serial0/0/1
 no ip address
 clock rate 2000000
 shutdown
!
interface FastEthernet0/1/0
 switchport mode access
 switchport nonegotiate
 shutdown
!
interface FastEthernet0/1/1
 switchport mode access
 switchport nonegotiate
 shutdown
!
interface FastEthernet0/1/2
 switchport mode access
 switchport nonegotiate
 shutdown
!
interface FastEthernet0/1/3
 switchport mode access
 switchport nonegotiate
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router eigrp 1
 network 192.168.10.0
 network 192.168.11.0
 network 209.165.200.0
 auto-summary
!
ip classless
!
ip flow-export version 9
!
```

```
ip classless
ip flow-export version 9
!
!
!
!
!
line con 0
password ? 0822455D0A16
login
!
line aux 0
line vty 0 4
login
!
!
end
```

R1#show ip interface brief

```
R1#show ip interface brief
Interface    IP-Address      GW? Method Status     Protocol
GigabitEthernet0/0   192.168.10.1      YES manual up          up
GigabitEthernet0/1   192.168.11.1      YES manual up          up
Serial0/0/0         209.165.200.225  YES manual up          up
Serial0/0/1         unassigned       YES unset administratively down down
FastEthernet0/1/0    unassigned       YES unset administratively down down
FastEthernet0/1/1    unassigned       YES unset administratively down down
FastEthernet0/1/2    unassigned       YES unset administratively down down
FastEthernet0/1/3    unassigned       YES unset administratively down down
Vlan1               unassigned       YES unset administratively down down
```

R1#show ip route

```
R1#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
      D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
      N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
      E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
      i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
      * - candidate default, U - per-user static route, o - ODR
      P - periodic downloaded static route

Gateway of last resort is not set

D    10.0.0.0/8 [90/2170112] via 209.165.200.226, 00:07:22, Serial0/0/0
     192.168.10.0/24 is variably subnetted, 2 subnets, 2 masks
C      192.168.10.0/24 is directly connected, GigabitEthernet0/0
L      192.168.10.1/32 is directly connected, GigabitEthernet0/0
     192.168.11.0/24 is variably subnetted, 2 subnets, 2 masks
C      192.168.11.0/24 is directly connected, GigabitEthernet0/1
L      192.168.11.1/32 is directly connected, GigabitEthernet0/1
     209.165.200.0/24 is variably subnetted, 3 subnets, 3 masks
D      209.165.200.0/24 is a summary, 00:13:03, Null0
C      209.165.200.224/30 is directly connected, Serial0/0/0
L      209.165.200.225/32 is directly connected, Serial0/0/0
```

R1#

#R2 Show run

```
R2#show run
Building configuration...

Current configuration : 925 bytes
!
version 15.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname R2
!
!
!
enable secret 5 $1$9mERr$9cTjUIEqNGurQiFU.ZeCil
!
!
!
!
!
ip cef
no ipv6 cef
!
!
!
!
license udi pid CISCO1941/K9 sn FTX1524E7C4
!
!
!
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
interface GigabitEthernet0/0
 ip address 10.1.1.1 255.255.255.0
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 10.1.2.1 255.255.255.0
 duplex auto
----
```

```
!
interface GigabitEthernet0/0
 ip address 10.1.1.1 255.255.255.0
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 10.1.2.1 255.255.255.0
 duplex auto
 speed auto
!
interface Serial0/0/0
 ip address 209.165.200.226 255.255.255.252
!
interface Serial0/0/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router eigrp 1
 network 10.0.0.0
 network 209.165.200.0
 auto-summary
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
!
line con 0
 password 7 0822455D0A16
 login
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

#R2 show ip interface brief

```
R2#show ip interface brief
Interface          IP-Address      OK? Method Status          Protocol
GigabitEthernet0/0  10.1.1.1        YES manual up           up
GigabitEthernet0/1  10.1.2.1        YES manual up           up
Serial0/0/0         209.165.200.226 YES manual up           up
Serial0/0/1         unassigned      YES unset administratively down down
Vlan1              unassigned      YES unset administratively down down
R2#
```

#R2 show ip route

```
R2#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
      D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
      N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
      E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
      i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
      * - candidate default, U - per-user static route, o - ODR
      P - periodic downloaded static route
```

Gateway of last resort is not set

```
10.0.0.0/8 is variably subnetted, 5 subnets, 3 masks
D 10.0.0.0/8 is a summary, 00:10:22, Null0
C 10.1.1.0/24 is directly connected, GigabitEthernet0/0
L 10.1.1.1/32 is directly connected, GigabitEthernet0/0
C 10.1.2.0/24 is directly connected, GigabitEthernet0/1
L 10.1.2.1/32 is directly connected, GigabitEthernet0/1
D 192.168.10.0/24 [90/2170112] via 209.165.200.225, 00:16:03, Serial0/0/0
D 192.168.11.0/24 [90/2170112] via 209.165.200.225, 00:13:51, Serial0/0/0
209.165.200.0/24 is variably subnetted, 3 subnets, 3 masks
D 209.165.200.0/24 is a summary, 00:10:22, Null0
C 209.165.200.224/30 is directly connected, Serial0/0/0
L 209.165.200.226/32 is directly connected, Serial0/0/0
```

Giao diện thành công

Assessment Items	Status	Points	Component(s)	Feedback
GigabitEthernet0/0 Description	Correct	3	Device Interface C.	
GigabitEthernet0/0 IP Address	Correct	3	Device Interface C.	
GigabitEthernet0/0 Port Status	Correct	3	Device Interface C.	
GigabitEthernet0/0 Subnet Mask	Correct	3	Device Interface C.	
GigabitEthernet0/1 Description	Correct	3	Device Interface C.	
GigabitEthernet0/1 IP Address	Correct	3	Device Interface C.	
GigabitEthernet0/1 Port Status	Correct	3	Device Interface C.	
GigabitEthernet0/1 Subnet Mask	Correct	3	Device Interface C.	
Startup Config	Correct	3	Configuration Manager	

Score: 54/54
Item Count: 18/18
Component: Configuration Management
Items/Total: 2/2
Score: 6/6
Component: Device Interface Configuration
Items/Total: 16/16
Score: 48/48

Assessment Items	Status	Points	Component(s)	Feedback
GigabitEthernet0/0 Description	Correct	3	Device Interface C.	
GigabitEthernet0/0 IP Address	Correct	3	Device Interface C.	
GigabitEthernet0/0 Port Status	Correct	3	Device Interface C.	
GigabitEthernet0/0 Subnet Mask	Correct	3	Device Interface C.	
GigabitEthernet0/1 Description	Correct	3	Device Interface C.	
GigabitEthernet0/1 IP Address	Correct	3	Device Interface C.	
GigabitEthernet0/1 Port Status	Correct	3	Device Interface C.	
GigabitEthernet0/1 Subnet Mask	Correct	3	Device Interface C.	
Startup Config	Correct	3	Configuration Manager	

Score: 54/54
Item Count: 18/18
Component: Configuration Management
Items/Total: 2/2
Score: 6/6
Component: Device Interface Configuration
Items/Total: 16/16
Score: 48/48

Time Elapsed: 00:18:47

3. Task 3: Áp dụng chia địa chỉ IP

Địa chỉ 192.168.100.0/24

-Có 5 mạng con

STT	Địa chỉ mạng	Địa chỉ đầu	Địa chỉ cuối	Địa chỉ Broadcast
0	192.168.100.0	192.168.100.1	192.168.100.30	192.168.100.31
1	192.168.100.32	192.168.100.33	192.168.100.62	192.168.100.63
2	192.168.100.64	192.168.100.65	192.168.100.94	192.168.100.95
3	192.168.100.96	192.168.100.97	192.168.100.126	192.168.100.127
4	192.168.100.128	192.168.100.129	192.168.100.158	192.168.100.159
5	192.168.100.160	192.168.100.161	192.168.100.190	192.168.100.191
6	192.168.100.200	192.168.100.201	192.168.100.222	192.168.100.223
7	192.168.100.224	192.168.100.225	192.168.100.254	192.168.100.255

Device	Interface	IP Address	Subnet Mask	Default Gateway
R1	G0/0	192.168.100.1	255.255.255.224	
	G0/1	192.168.100.33	255.255.255.224	
	S0/0/0	192.168.100.129	255.255.255.224	
R2	G0/0	192.168.100.65	255.255.255.224	
	G0/1	192.168.100.97	255.255.255.224	
	S0/0/0	192.168.100.158	255.255.255.224	
S1	VLAN 1	192.168.100.2	255.255.255.224	192.168.100.1
S2	VLAN 1	192.168.100.34	255.255.255.224	192.168.100.33
S3	VLAN 1	192.168.100.66	255.255.255.224	192.168.100.65
S4	VLAN 1	192.168.100.98	255.255.255.224	192.168.100.97
PC1	NIC	192.168.100.30	255.255.255.224	192.168.100.1
PC2	NIC	192.168.100.62	255.255.255.224	192.168.100.33
PC3	NIC	192.168.100.94	255.255.255.224	192.168.100.65
PC4	NIC	192.168.100.126	255.255.255.224	192.168.100.97