

## Task 1: Cấu hình mạng không dây

\*KẾT QUẢ

Congratulations cisco! You completed the activity.

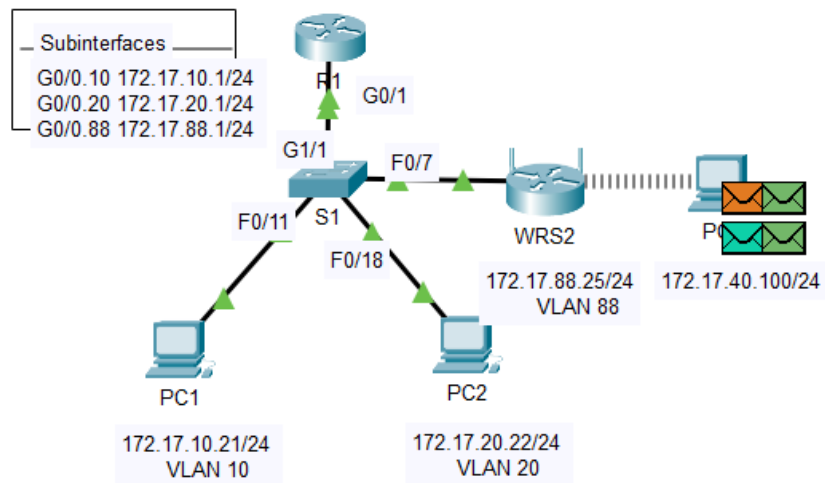
Overall Feedback [Assessment Items](#) Connectivity Tests

[Expand/Collapse All](#) [Show Incorrect Items](#)

Assessment Items	Status	Points	Component(s)	Feedback
Network				
PC3				
Wireless				
Security Mode	Correct	1	Wireless Client C...	
Authen Type	Correct	4	Wireless Client C...	
Pass Phrase	Correct	5	Wireless Client C...	
SSID	Correct	5	Wireless Client C...	
WRS2				
Default Gateway	Correct	10	Wireless Router ...	
DHCP Server				
DHCP Enable	Correct	10	Wireless Router ...	
Pools				
Pool ImplsPool	Correct	0	Ip	
Default Gateway	Correct	10	Wireless Router ...	
Ports				
Internet				
IP Address	Correct	10	Wireless Router ...	
Link to S1				
Connects to FastEthernet0/7	Correct	5	Device Connection	
Type	Correct	0	Device Connection	
Wireless				
Security Mode	Correct	10	Wireless Router ...	
Authen Type	Correct	10	Wireless Router ...	
Pass Phrase	Correct	10	Wireless Router ...	
SSID	Correct	10	Wireless Router ...	
SSID BroadCast	Correct	10	Wireless Router ...	

Score : 100/100  
Item Count : 13/13

Component	Items/Total	Score
Device Connection	2/2	10/10
Wireless Client Configuration	3/3	10/10
Wireless Router Configuration	8/8	80/80



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

### \*KẾT QUẢ

```
R1#show run
Building configuration...

Current configuration : 1314 bytes
!
version 15.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname R1
!
!
!
enable secret 5 $1$mERr$9cTjUIEqNGurQiFU.ZeCil
!
!
!
!
!
ip cef
no ipv6 cef
```

```
R1#show ip interface brief


| Interface          | IP-Address      | OK? | 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
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, 00:11:50, 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, 00:22:35, 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
```

```

R2#show run
Building configuration...

Current configuration : 923 bytes
!
version 15.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname R2
!
!
!
enable secret 5 $1$mERr$9cTjUIEqNGurQiFU.ZeCil
!
!
!
!
!
ip cef
no ipv6 cef

```

```

R2#show ip interface brief

```

Interface	IP-Address	OK?	Method	Status
Protocol				
GigabitEthernet0/0	10.1.1.1	YES	manual	up
GigabitEthernet0/1	10.1.2.1	YES	manual	up
Serial0/0/0	209.165.200.226	YES	manual	up
Serial0/0/1	unassigned	YES	unset	administratively down
Vlan1	unassigned	YES	unset	administratively down

```

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

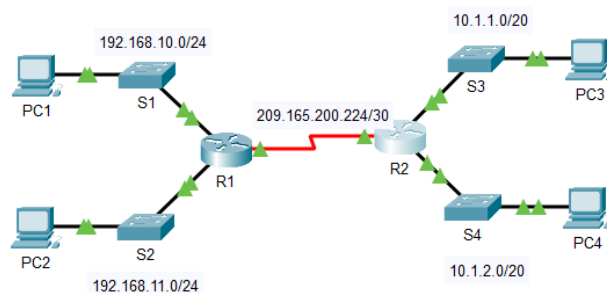
```

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, 00:25:37, 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, 00:36:22, Serial0/0/0
D    192.168.11.0/24 [90/2170112] via 209.165.200.225, 00:30:53, Serial0/0/0
    209.165.200.0/24 is variably subnetted, 3 subnets, 3 masks
D    209.165.200.0/24 is a summary, 00:25:37, 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
--More--

```



### **Task 3: Áp dụng chia địa chỉ IP**

- Chia địa chỉ 192.168.100.0/24 thành 8 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	192.168.100.192	192.168.100.193	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

- Gán Subnet 0 cho mạng LAN kết nối đến GigabitEthernet 0/0 interface của R1
- Gán Subnet 1 cho mạng LAN kết nối đến GigabitEthernet 0/1 interface của R1
- Gán Subnet 2 cho mạng LAN kết nối đến GigabitEthernet 0/0 interface of R2
- Gán Subnet 3 cho mạng LAN kết nối đến GigabitEthernet 0/1 interface of R2
- Gán Subnet 4 cho kết nối giữa R1 to R2

Sau khi gán mạng con, bảng địa chỉ sẽ như sau

Device	Interface	IP Address	Subnet Mask	Default Gateway
R1	G0/0	192.168.100.1	255.255.255.224	N/A
	G0/1	192.168.100.33	255.255.255.224	N/A
	S0/0/0	192.168.100.129	255.255.255.224	N/A
R2	G0/0	192.168.100.65	255.255.255.224	N/A
	G0/1	192.168.100.97	255.255.255.224	N/A
	S0/0/0	192.168.100.161	255.255.255.224	N/A
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

Congratulations Guest! You completed the activity.

Overall Feedback [Assessment Items](#) Connectivity Tests[Expand/Collapse All](#)[Show Incorrect Items](#)

Assessment Items	Status	Points	Component(s)	Feedback
Network				
PC1				
Default Gateway	Correct	2	Default Gateway ...	
Ports				
FastEthernet0				
IP Address	Correct	2	IPv4 Host Address...	
Subnet Mask	Correct	2	IPv4 Subnet Mask...	
R1				
Ports				
GigabitEthernet0/0				
IP Address	Correct	3	IPv4 Host Address...	
Port Status	Correct	1	Device Interface C...	
Subnet Mask	Correct	3	IPv4 Subnet Mask...	
GigabitEthernet0/1				
IP Address	Correct	3	IPv4 Host Address...	
Port Status	Correct	1	Device Interface C...	
Subnet Mask	Correct	3	IPv4 Subnet Mask...	
S3				
Default Gateway	Correct	3	Default Gateway ...	
Ports				
Vlan1				
IP Address	Correct	3	IPv4 Host Address...	
Port Status	Correct	1	Device Interface C...	
Subnet Mask	Correct	3	IPv4 Subnet Mask...	

Score : 30/30  
Item Count : 13/13

Component	Items/Total	Score
Default Gateway Configuration	2/2	5/5
Device Interface Configuration	3/3	3/3
IPv4 Host Address Calculation	4/4	11/11
IPv4 Subnet Mask Calculation	4/4	11/11

