

ABHISHEK SHARMA

CS 2ND YEAR

SECTION : "I"

ROLL NO.: 01

ENROLLMENT NO.: 12019009001127

COMPUTER NETWORKS LAB 9

WEEK : 9

ASSIGNMENT : 9

Experiment 9

PLATFORM USED : CISCO PACKET TRACER 7.2

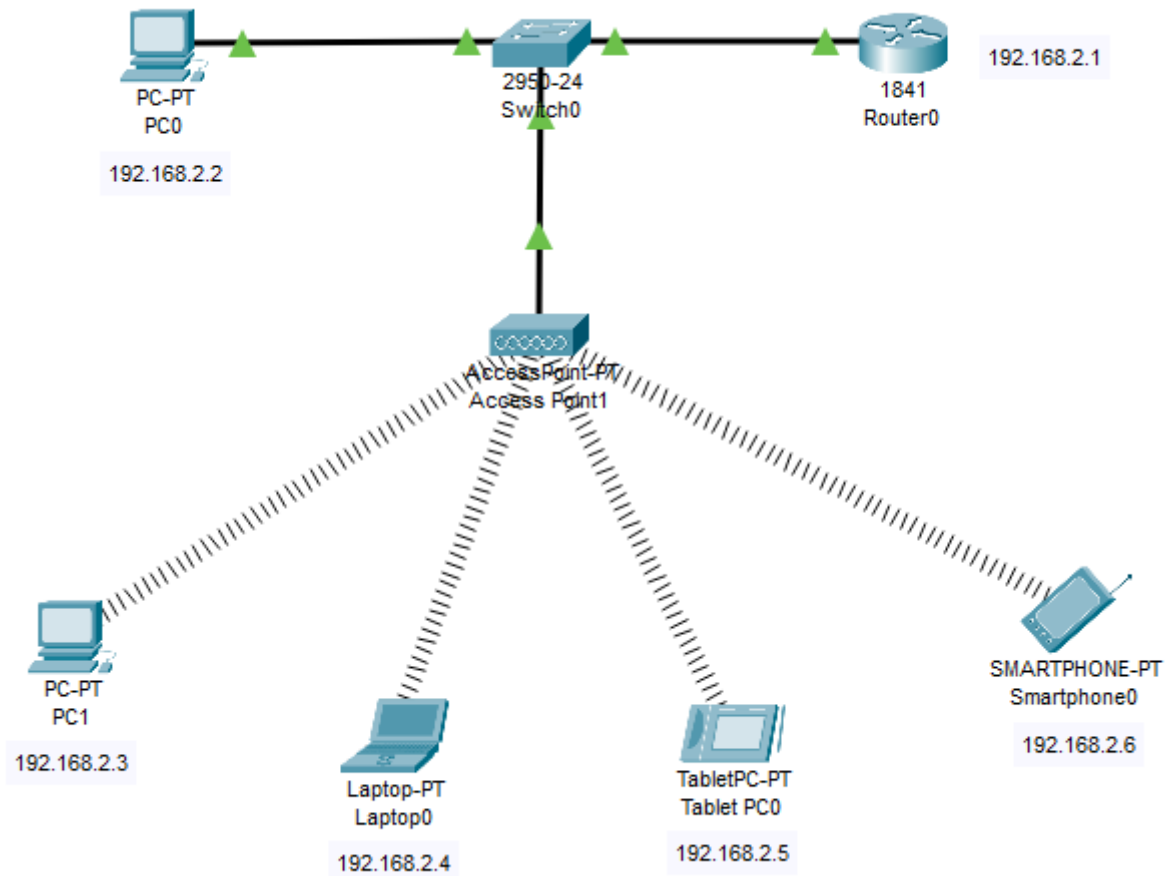
DATE : 08.04.2021

**UNIVERSITY OF ENGINEERING & MANAGEMENT, KOLKATA
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

Q1. Configure the Wireless Access point network using Cisco packet tracer.

Requirements :

1. 2 PCs (Here, PC0 and PC1)
2. 1 Switch (2950-24)
3. 1 Router (1841)
4. 1 Access Point PT
5. 1 Laptop
6. 1 Tablet
7. 1 Smart Phone



IP address for PC0 : 192.168.2.2
IP address for Router0 : 192.168.2.1 (Default Gateway)
IP address for PC1 : 192.168.2.3
IP address for Laptop0 : 192.168.2.4
IP address for Tablet0 : 192.168.2.5
IP address for Smart Phone0 : 192.168.2.6

Configuring the FastEthernet0/0 of the Router0 :

FastEthernet0/0	
Port Status	<input checked="" type="checkbox"/> On
Bandwidth	<input checked="" type="radio"/> 100 Mbps <input type="radio"/> 10 Mbps <input checked="" type="checkbox"/> Auto
Duplex	<input type="radio"/> Half Duplex <input checked="" type="radio"/> Full Duplex <input checked="" type="checkbox"/> Auto
MAC Address	0090.21C9.0A01
IP Configuration	
IPv4 Address	192.168.2.1
Subnet Mask	255.255.255.0

IP Configuration of PC0 :

IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IPv4 Address	192.168.2.2
Subnet Mask	255.255.255.0
Default Gateway	192.168.2.1
DNS Server	0.0.0.0

AccessPoint-PT Configuration :


Port 1	
Port Status	<input checked="" type="checkbox"/> On
SSID	AS
2.4 GHz Channel	6
Coverage Range (meters)	140.00
Authentication	
<input type="radio"/> Disabled	<input checked="" type="radio"/> WEP
<input type="radio"/> WPA-PSK	<input type="radio"/> WPA2-PSK
WEP Key	1234567890
PSK Pass Phrase	
User ID	
Password	
Encryption Type	40/64-Bits (10 Hex digits)

Configuring the PC1 and connect it to the Router0 using the wireless AccessPoint-PT :

Step 1 : Configure the IP address of the PC1 and set it static.

Step 2 : Turn off the PC and change the LAN port with the WMP300N wireless module, and turn on again.

Step 3 : Go to PC wireless -> choose the wireless network -> put the WEP key -> connect -> active the adapter.

Link Information	Connect	Profiles																		
<p>Below is a list of available wireless networks. To search for more wireless networks, click the Refresh button. To view more information about a network, select the wireless network name. To connect to that network, click the Connect button below.</p>																				
<table><thead><tr><th>Wireless Network Name</th><th>CH</th><th>Signal</th></tr></thead><tbody><tr><td>AS</td><td>1</td><td>43%</td></tr></tbody></table>	Wireless Network Name	CH	Signal	AS	1	43%	<table><thead><tr><th colspan="2">Site Information</th></tr></thead><tbody><tr><td>Wireless Mode</td><td>Infrastructure</td></tr><tr><td>Network Type</td><td>Mixed B/G</td></tr><tr><td>Radio Band</td><td>Auto</td></tr><tr><td>Security</td><td>WEP</td></tr><tr><td>MAC Address</td><td>000A.414E.4185</td></tr></tbody></table> <p><input type="button" value="Refresh"/> <input type="button" value="Connect"/></p>	Site Information		Wireless Mode	Infrastructure	Network Type	Mixed B/G	Radio Band	Auto	Security	WEP	MAC Address	000A.414E.4185	<div>2.4GHz</div>  <p>Adapter is Active</p>
Wireless Network Name	CH	Signal																		
AS	1	43%																		
Site Information																				
Wireless Mode	Infrastructure																			
Network Type	Mixed B/G																			
Radio Band	Auto																			
Security	WEP																			
MAC Address	000A.414E.4185																			
<p>Wireless-N Notebook Adapter Wireless Network Monitor v1.0 Model No. WPC300N</p>																				

Configuring the Laptop0 and connect it to the Router0 using the wireless AccessPoint-PT :

Step 1 : Turn off the PC and change the LAN port with the WMP300N wireless module, and turn on again.

Step 2 : Configure the IP and WEP key.

Wireless0	
Port Status	<input checked="" type="checkbox"/> On
Bandwidth	24 Mbps
MAC Address	0001.63A1.2325
SSID	AS
Authentication	
<input type="radio"/> Disabled	<input checked="" type="radio"/> WEP
<input type="radio"/> WPA-PSK	<input type="radio"/> WPA2-PSK
<input type="radio"/> WPA	<input type="radio"/> WPA2
<input type="radio"/> 802.1X	Method: MD5
WEP Key	1234567890
PSK Pass Phrase	
User ID	
Password	
User Name	
Password	
Encryption Type	40/64-Bits (10 Hex digits)
IP Configuration	
<input type="radio"/> DHCP	
<input checked="" type="radio"/> Static	
IPv4 Address	192.168.2.4
Subnet Mask	255.255.255.0

Configuring the Tablet0 :

Wireless0	
Port Status	<input checked="" type="checkbox"/> On
Bandwidth	24 Mbps
MAC Address	0002.16C2.B125
SSID	AS
Authentication	
<input type="radio"/> Disabled	<input checked="" type="radio"/> WEP
<input type="radio"/> WPA-PSK	<input type="radio"/> WPA2-PSK
<input type="radio"/> WPA	<input type="radio"/> WPA2
<input type="radio"/> 802.1X	Method: MD5
WEP Key	1234567890
PSK Pass Phrase	
User ID	
Password	
User Name	
Password	
Encryption Type	40/64-Bits (10 Hex digits)
IP Configuration	
<input type="radio"/> DHCP	
<input checked="" type="radio"/> Static	
IPv4 Address	192.168.2.5
Subnet Mask	255.255.255.0

Configuring the SmartPhone0 :

Wireless0

Port Status

☒ On

Bandwidth

54 Mbps

MAC Address

000C.85B6.DA04

SSID

AS

Authentication

☐ Disabled

☒ WEP

☐ WPA-PSK

☐ WPA

☐ 802.1X

☒ WEP

☐ WPA2-PSK

☐ WPA2

Method:

WEP Key

1234567890

PSK Pass Phrase

User ID

Password

MD5

User Name

Password

Encryption Type

40/64-Bits (10 Hex digits)

IP Configuration

☐ DHCP

☒ Static









IPv4 Address

192.168.2.6

Subnet Mask

255.255.255.0

Now sending the PDUs to the Router0 from PC1, laptop0, Tablet0 and Smart Phone respectively, and check whether they are successfully transmitted or not :

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC1	Router0	ICMP		0.000	N	0	(edit)	(delete)
	Successful	Laptop0	Router0	ICMP		0.000	N	1	(edit)	(delete)
	Successful	Tablet...	Router0	ICMP		0.000	N	2	(edit)	(delete)
	Successful	Smart...	Router0	ICMP		0.000	N	3	(edit)	(delete)

Conclusion : All the devices are successfully deployed and the wireless network is successfully implemented. The whole wireless network is working properly.