## How to configure wireless network in packet tracer

This tutorial explains how to configure and connect wireless network in packet tracer step by step with examples. Learn how to secure a wireless network with WAP key and enable static routing in Linksys router with packet tracer lab example.

Either configure a practice lab shown in following figure



In this practice lab we have three pc connected from Linksys Wireless routers with following configuration.

- DHCP is configured and enabled on Wireless router
- IP pool for DHCP is 192.168.0.100 to 192.168.0.150
- PC are configured to receive IP from DHCP Server
- No security is configured
- Default SSID is configured to Default
- Topology is working on infrastructure mode
- Default user name and password is admin
- IP of wireless is set to 192.168.0.1

Now your task is to:-

- Configure Static IP on PC and Wireless Router
- Change SSID to MotherNetwork
- Change IP address of router to 10.0.0.1 and 10.0.0.2 of PC0 10.0.0.3 of PC1 10.0.0.4 of PC2
- Secure your network by configuring WAP key on Router
- Connect PC by using WAP key

To complete these tasks follow these step by step instructions

As given in question our network is running on 192.168.0.0 network and all PC's are DHCP clients and functioning properly. So we will first connect to Wireless router to off DHCP.

Double click on PC and select Web Browser. As given in question IP of Wireless router is 192.168.0.1 so give it in Web browser and press enter, now it will ask for authentication which is also given in question. Give user name admin and Password to admin

PC0		
Physical Co	onfig Desktop	
Web Bro	WSEr X URL http://192.168.0.1 Go Stop	PC-PTE PC-PT PC-PT PC0 IIII PC1
	Vser Name: admin Password:	Linksys-WRT300N Wireless Router0
	OK Cancel	

This will bring GUI mode of Wireless router. Scroll down screen to Network Step and Select Disable DHCP

Veb Browser			Х
< > URL http://	192. 168.0. 1	Go	Stop
Optional Settings (required by some internet service providers)	HOST Name: Domain Name: MTU: Size:	: 1500	
Network Setup	ID Address: 192 168 0		=
Router IP	Subnet Mask: 255.255.255.0	•	

Go in end of page and click on Save setting this will save setting click on continue for further setting

Physical Config Desktop		
Web Browser		X
< > URL http://192.168.0.1/apply.cgi	Go	Stop
Settings are succes	sful.	
Continue		

Now select Administration from top Manu and change password to test and go in the end of page and Click on Save Setting

PC0				-		
Physical Con	fig Desktop					
Web Brow	/ser					X
< > UF	L http://192.168.	.0.1/Manage	ment.asp		Go	Stop
ikeye.						
t et caso ayatema, mc.					Firmware	Version: v0.92.3
1.00 E				Wireless-N Bro	badband Router	WRI300N
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ninstration Management	Setup Wireless Management	Log	Restrictions Diagnostics	& Gaming Factory Defaults	Firmware Upgi	rade
Management Router Access	Setup Wireless Management Router Passv	Log word:	Restrictions Diagnostics	& Gaming Factory Defaults	Firmware Upg	rade

Click on continue for further setting. This time it will ask you to authenticate again give new password test this time

Physical	Config		
Web B	> URL h	ttp://192.168.0.1/Management.asp	G
		<sup>1</sup> Authorization	2 ×
		Jser Name: admin Password: ••••	
		OK Car	icel

Now click on wireless tab and set default SSID to MotherNetwork

Physical C	onfig Desktop			
Web Bro	WSET	s Basic.aso	Go	X
		-		
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		KOCTRICTIONS & COMING		
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sic Wireles Setting	Basio Wireless Settings Wireless S S Network Mode: Network Name (SSID):	Mixed  MotherNetwork	Advanced Win	eless Settings p
sic Wireles Setting	Basio Wireless Settings       Wireless S         S	Mixed  MotherNetwork Auto Auto	Advanced Win	eless Settings p

Now Select wireless security and change Security Mode to WEP

PC0							
Physical	Config	Desk	top				
Web B	Browse	r					
	> URL h	ttp://192.	.168.0.1/WL_V	VPATable.asp			
A Division of C	CEYE Seco Systems, Inc.				Wire	Jess-N Broa	Firmus Vesi dband Router W
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	Wireless Security	Dasis YVI	eless gemilits	wreess security		MAG HILEI	Ouvalides whiteless s
		Secur	ity Mode:	Dis	abled abled	•	Help
		2		WE	Р		

Set Key1 to 0123456789

Physical       Config       Desktop         Web Browser           <       >       URL       http://192.168.0.1/WL_WPATable.asp         Linkerse       Wireless       Wireless-N Broadband Router         Wireless       Setup       Wireless       Access       Applications       Administration         Basic Wireless       Seturity       Access       Applications       Administration         Wireless       Security       Wireless MAC Filter       Advanced Wireless         Wireless       Security       Wireless MAC Filter       Advanced Wireless	C0						
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Encryption: 40/64-Bit(10 Hex digit -		Encryption:	40/64-Bit(1	0 Hex digit	•		
Passphrase: Generate		Passphrase:			Generate		
Key1: 0123456789		Key1:	012345678	9			

Again go in the end of page and Click on Save Setting

Now we have completed all given task on Wireless router. Now configure the static IP on all three PC's

Double click on pc select Desktop tab click on IP configuration select Static IP and set IP as given below

PC	IP	Subnet Mask	Default Gateway
PC0	192.168.0.2	255.255.255.0	192.168.0.1
PC1	192.168.0.3	255.255.255.0	192.168.0.1
PC2	192.168.0.4	255.255.255.0	192.168.0.1

Now it's time to connect PC's from Wireless router. To do so click PC select Desktop click on PC Wireless



Click on connect tab and click on Refresh button

Sical coning b	esktop		
LINKSYS A Division of Cisco Systems, Inc	°.		
ink Information Below is a list of available w	Connect	Profiles search for more w	reless networks
ink Information Below is a list of available w the <b>Refresh</b> button. To view name. To connect to that ner <b>Wireless Network Name</b>	Connect vireless networks. To s more information abo twork, click the Conne CH Signal	Profiles search for more wi but a network, sele ect button below. Site h	reless networks ct the wireless r nformation
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As you can see in image that Wireless device is accessing MotherNetwork on CH 6 and signal strength is 100%. In left side you can see that WEP security is configured in network. Click on connect button to connect MotherNetwork

IL WIII ASK IOF WAP KEY INSER UT23456789 and CIICK CONNEC
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LINKSYS" A Division of Cisco Systems, Inc.		
WEP Key Needed fo	or Con	nection
This wireless network has WEP er encryption. Enter the required pas <b>Connect</b> .	cryption e sphrase o	enabled. To connect to this network, select the level of WEP r WEP key in the appropriate field below. Then click the
Security WEP	-	Please select the wireless security method used by your existing wireless network.
S		To use WEP encryption, select 64-bit or 128-bit
WEP 64-bit	•	
WEP 64-bit Passphrase	<u> </u>	The Passphrase is case-sensitive and should be no more than 16 characters in length.

It will connect you with wireless router.

As you can see in image below that system is connected. And PCI card is active.

oco nysical Config	Desktop		
LINKSY A Division of Cisco System	<b>'8</b> ° 15. inc.		
Link Information	Connect	Profiles	
More Information Infrastructure Mode		2.4 <sup>GH:</sup>	
		(11	
Signal Strength		Link Quality	Adapter is Act

Repeat same process on PC1 and PC2.