



RAMA UNIVERSITY

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FACULTY OF ENGINEERING & TECHNOLOGY

DCS-503 Computer Networks

Lecture-37

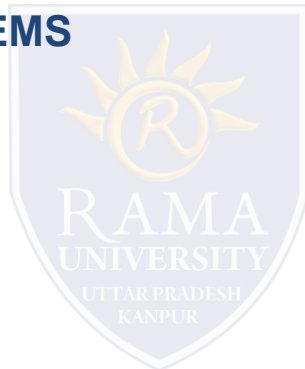
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OUTLINE

- **RADIO PROBLEMS WITH A WIRELESS NETWORK**
- **ASSOCIATION AND AUTHENTICATION ISSUES**
- **ISR ROUTER TO THE ISP PROBLEMS**
- **DOCUMENTATION**
- **USING THE HELPDESK**



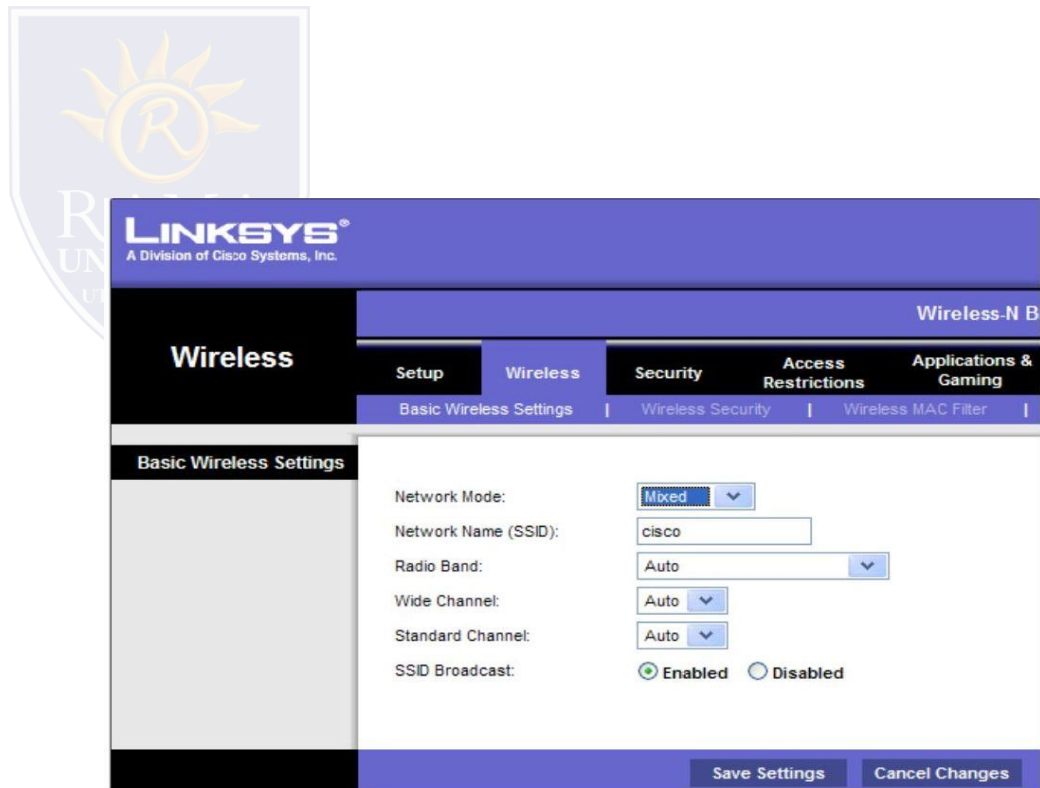
RADIO PROBLEMS WITH A WIRELESS NETWORK

What if . . .

- the wireless client is unable to connect to the access point

Possible fixes:

- check wireless standards being used
- check channels
- check signal strength
- may be too far away from AP
- check for outside interference
- check available bandwidth
- too many clients on one channel



ASSOCIATION AND AUTHENTICATION ISSUES

SSID

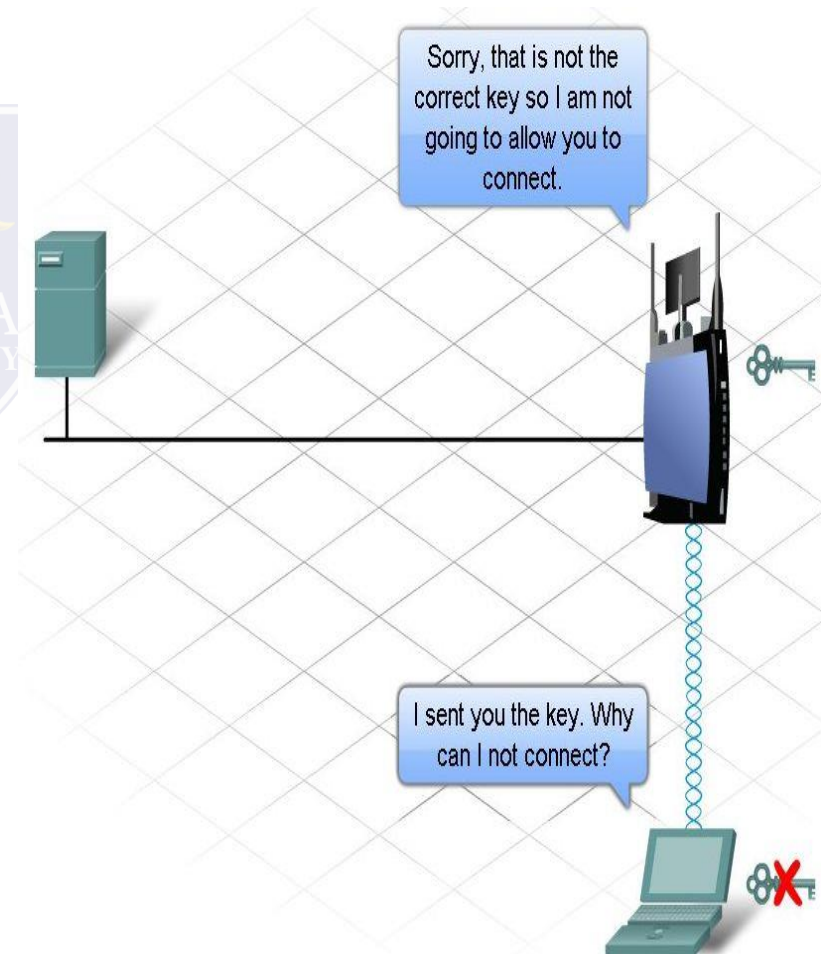
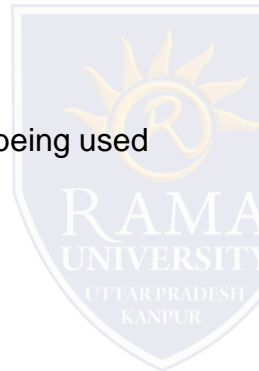
- make sure client is configured with the correct SSID

Check Authentication

- open (by default)
- might have be changed
- check to make sure the correct key is being used

Encryption

- key needed by the client



ISR ROUTER TO THE ISP PROBLEMS

Wired and Wireless devices can connect to each other, but not the Internet . . . Why??

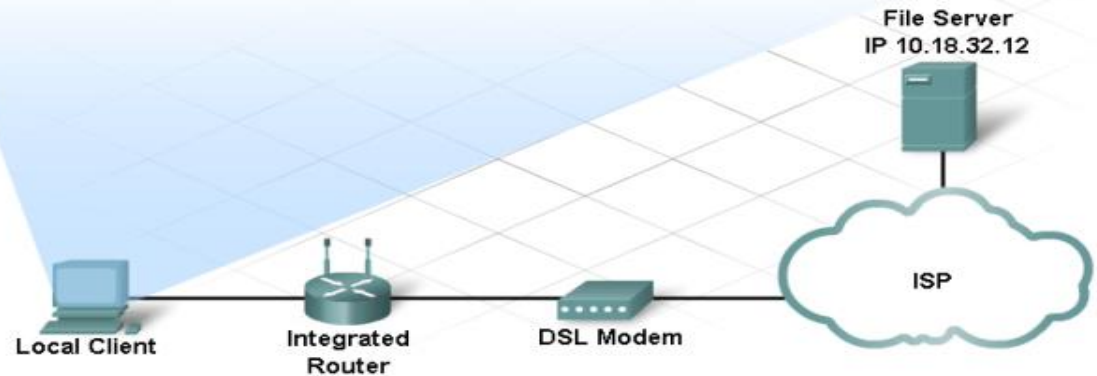
May be a connection between the access point and the ISP

- check out the router status page
- check physical connections (including indicator lights)
- verify passwords
- may be that the Internet site is just down



```
C:\>ping 10.18.32.12
Pinging 10.18.32.12 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 10.18.32.12:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```



DOCUMENTATION

- **Set a performance baseline**

do this just after the network is installed and running efficiently

- **When documenting a problem, include the following**

- initial problem
- steps taken
- result of the steps
- determined cause of problem
- how the problem was resolved
- preventive measures taken



USING THE HELPDESK

Provides assistance for the end user to help fix a problem

- via email
- via live chat
- via phone
- Use of remote access
- help desk takes control of your machine

Inform the help desk of the following:

- symptoms
- who had the problem
- when it happened
- steps taken
- results of steps taken



Helpdesk: Good Afternoon Ms. Smith, Thank you for calling the help desk. My name is Pat. How may I be of assistance?

Customer: I cannot connect to the Cisco web site.

Helpdesk: In order to help you I will have to gather some additional information.

Multiple Choice Question

MUTIPLE CHOICE QUESTIONS:

Sr no	Question	Option A	Option B	OptionC	OptionD
1	Which of the following is not a characteristic of Virtual Circuit Network?	There are setup and teardown phases in addition to the data transfer phase	Resources can be allocated during setup phase or on demand	All packets follow the same path established during the connection	Virtual circuit network is implemented in application layer
2	The address that is unique in the scope of the network or internationally if the network is part of an international network is called as _____	Global address	Network address	Physical address	IP address
3	The Identifier that is used for data transfer in virtual circuit network is called _____	Global address	Virtual circuit identifier	Network identifier	IP identifier
4	Which of the following is not a phase of virtual circuit network?	Setup phase	Data transfer phase	Termination phase	Teardown phase
5	Steps required in setup process are _____	Setup request and acknowledgement	Setup request and setup response	Setup request and setup termination	Setup and termination steps

REFERENCES

- <http://www.engppt.com/2009/12/networking-fourzan-ppt-slides.html>

