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FACULTY OF ENGINEERING & TECHNOLOGY

DCS-503 Computer Networks

Lecture-36

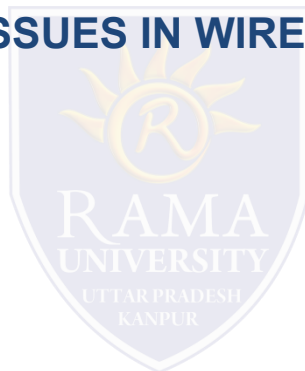
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OUTLINE

- **THE NETSTAT COMMAND**
- **THE NSLOOKUP COMMAND**
- **HARDWARE AND CONNECTION ISSUES IN WIRED & WIRELESS NETWORKS**
- **LED INDICATORS**
- **CABLE ISSUES**



THE NETSTAT COMMAND

Views open connections on a host

Informs user about:

- protocols
- local address
- port numbers
- connection state

```
E:\WINDOWS\system32\cmd.exe
C:\Documents and Settings\Corey>netstat -a

Active Connections

Proto Local Address           Foreign Address         State
TCP   beat you:epmap          beat you:0              LISTENING
TCP   beat you:microsoft-ds  beat you:0              LISTENING
TCP   beat you:2869          beat you:0              LISTENING
TCP   beat you:5190          beat you:0              LISTENING
TCP   beat you:5193          beat you:0              LISTENING
TCP   beat you:1025          beat you:0              LISTENING
TCP   beat you:1213          localhost:1214          ESTABLISHED
TCP   beat you:1214          localhost:1213          ESTABLISHED
TCP   beat you:5180          beat you:0              LISTENING
TCP   beat you:6999          beat you:0              LISTENING
TCP   beat you:netbios-ssn   beat you:0              LISTENING
UDP   beat you:microsoft-ds  *:*                    *:*
UDP   beat you:lsaknp        *:*                    *:*
UDP   beat you:1026          *:*                    *:*
UDP   beat you:1085          *:*                    *:*
UDP   beat you:1243          *:*                    *:*
UDP   beat you:1249          *:*                    *:*
UDP   beat you:1254          *:*                    *:*
UDP   beat you:2307          *:*                    *:*
UDP   beat you:4500          *:*                    *:*
UDP   beat you:40116         *:*                    *:*
UDP   beat you:ntp           *:*                    *:*
UDP   beat you:1031          *:*                    *:*
UDP   beat you:1120          *:*                    *:*
UDP   beat you:1900          *:*                    *:*
UDP   beat you:4421          *:*                    *:*
UDP   beat you:ntp           *:*                    *:*
UDP   beat you:netbios-ns    *:*                    *:*
UDP   beat you:netbios-dgm   *:*                    *:*
UDP   beat you:1900          *:*                    *:*

C:\Documents and Settings\Corey>
```

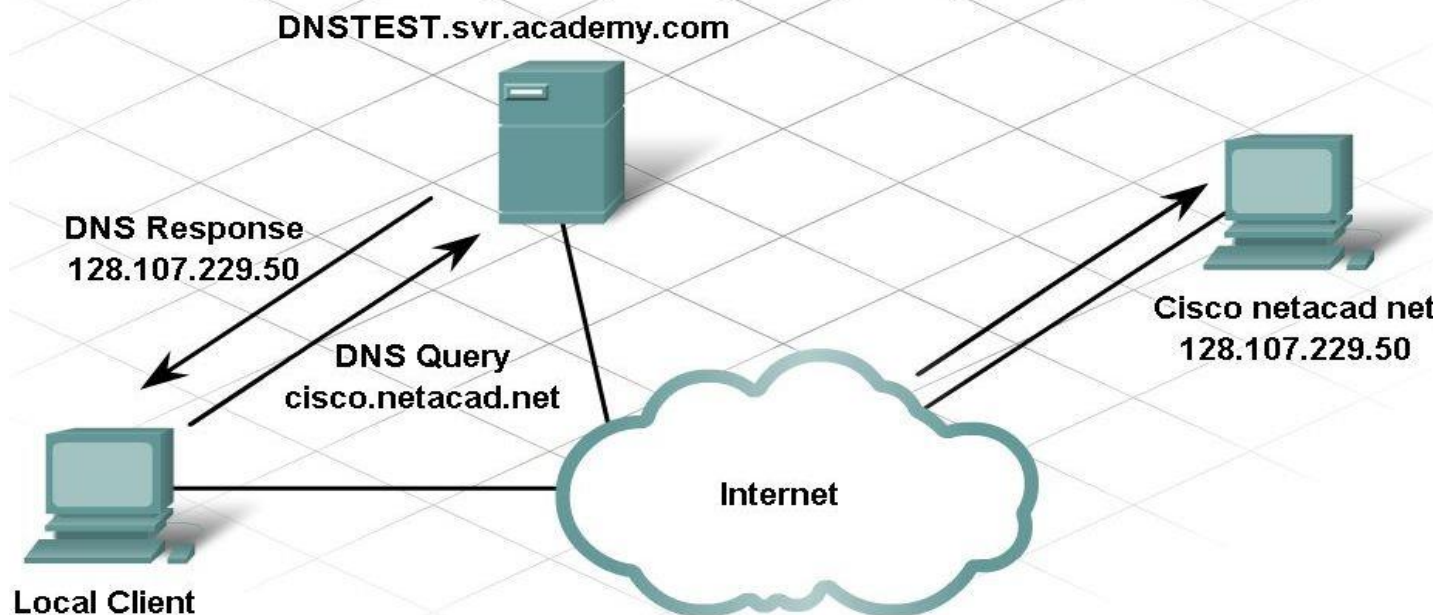
THE NSLOOKUP COMMAND

Allows end user to look up information about DNS name and DNS server

Used as a troubleshooting tool to see if DNS server has the correct IP with the correct name

```
C:\>nslookup cisco.netacad.net
Server: TOROON12NSC15.svr.bell.ca
Address: 67.69.184.139

Non-authoritative answer:
Name:   cisco.netacad.net
Address: 128.107.229.50
```

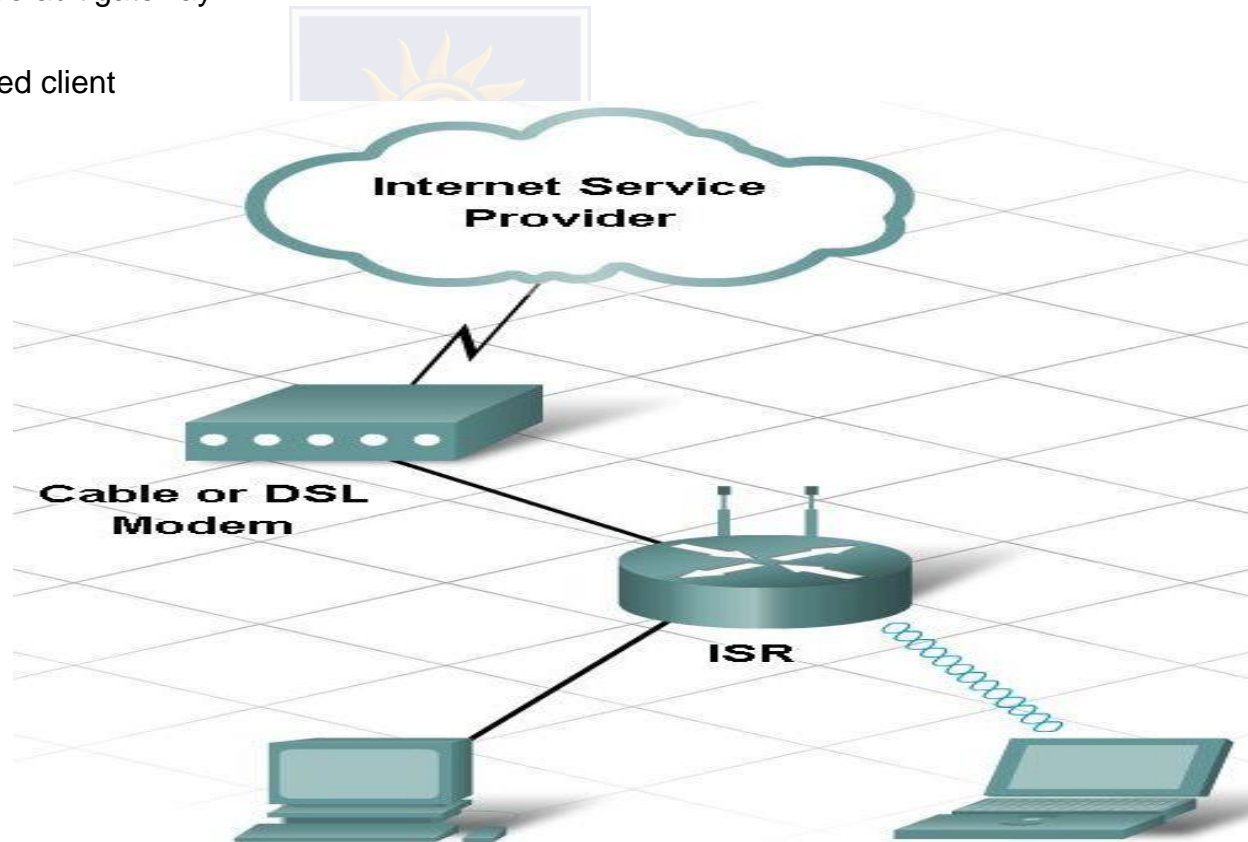


HARDWARE AND CONNECTION ISSUES IN WIRED & WIRELESS NETWORKS

Use divide-and-conquer technique

To determine where the problem exists:

- ping from wireless client to default gateway
- ping from wired client to default gateway
- ping wireless client to wired client



LED INDICATORS

Used to show activity

Security LED

solid green = security enabled

Link Lights

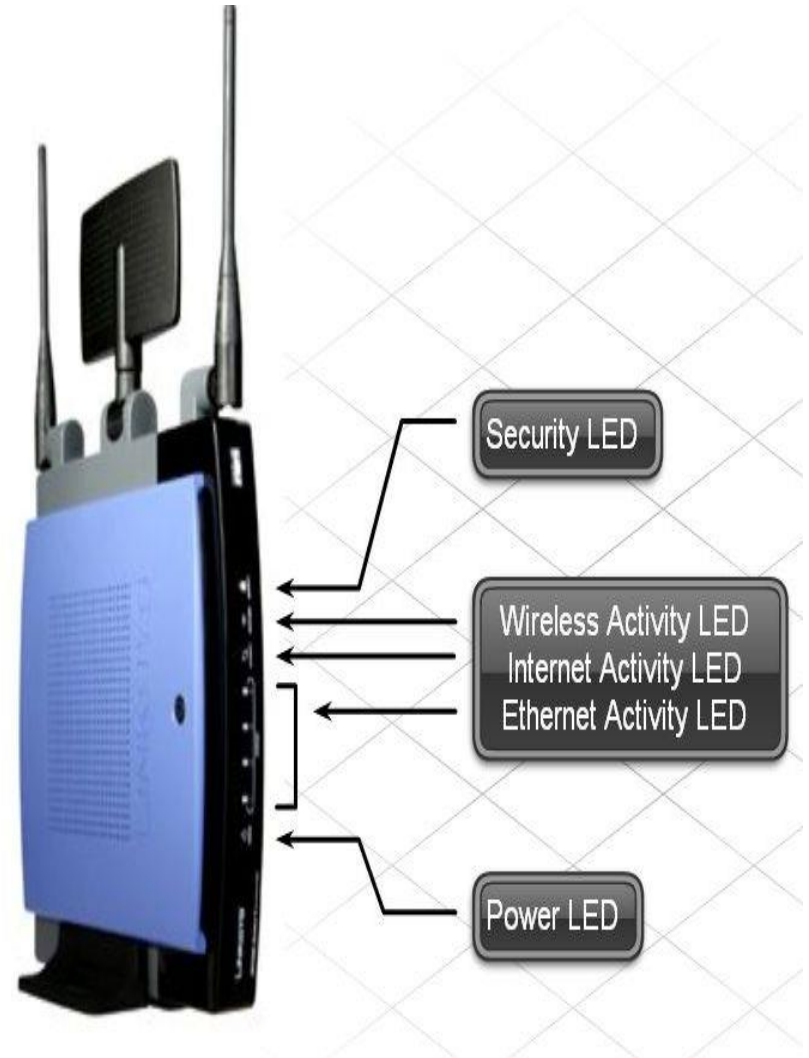
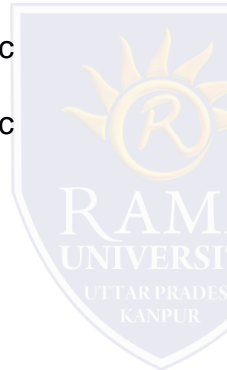
solid green = plugged in with no traffic

flashing green = plugged in with traffic

amber = making adjustments

Power LED

solid green = operational

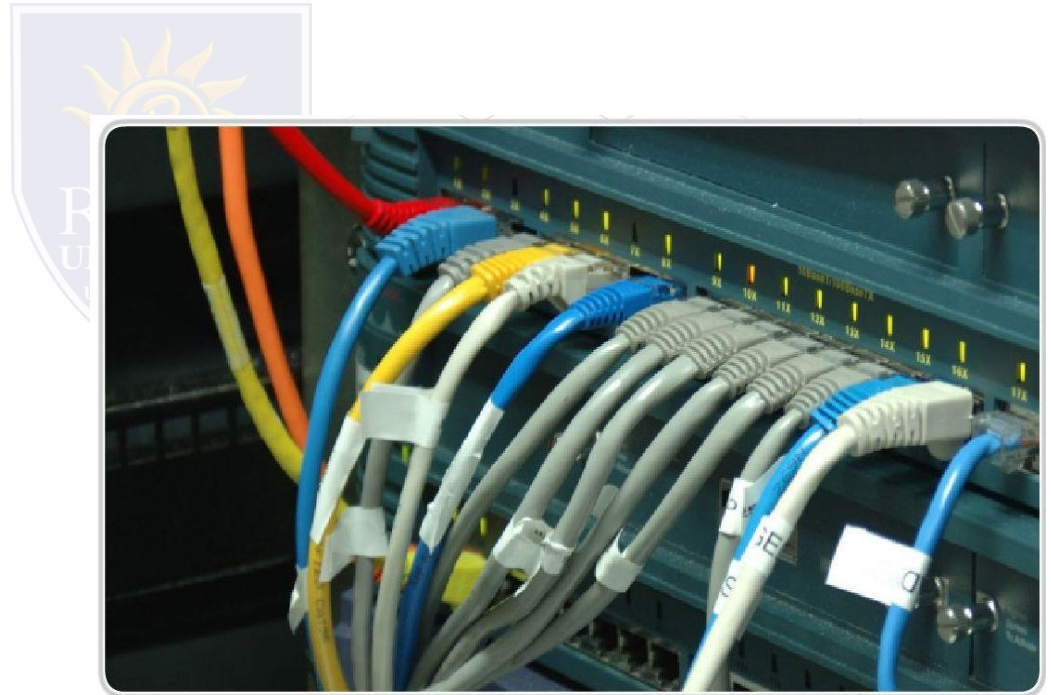


CABLE ISSUES

One of the most common problems

Check for:

- correct cable type
- improper cable termination
- too long of cable runs
- verify correct ports
- protect cables from damage



Multiple Choice Question

MUTIPLE CHOICE QUESTIONS:

Sr no	Question	Option A	Option B	OptionC	OptionD
1	During teardown phase, the source, after sending all the frames to destination, sends a _____ to notify termination.	teardown response	teardown request	termination request	termination response
2	Delay of the resource allocated during setup phase during data transfer is _____	constant	increases for each packet	same for each packet	different for each packet
3	Delay of the resource allocated on demand during data transfer is _____	constant	increases for each packet	same for each packet	different for each packet
4	In virtual circuit network, the number of delay times for setup and teardown respectively are _____	1 and 1	1 and 2	2 and 1	2 and 2
5	In data transfer phase, how many columns does the table contain?	1	2	3	4

REFERENCES

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

