



RAMA UNIVERSITY

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FACULTY OF ENGINEERING & TECHNOLOGY

BCA-302 Computer Networks

Lecture-26

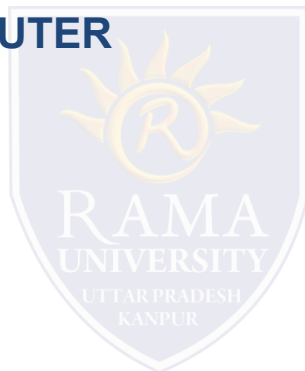
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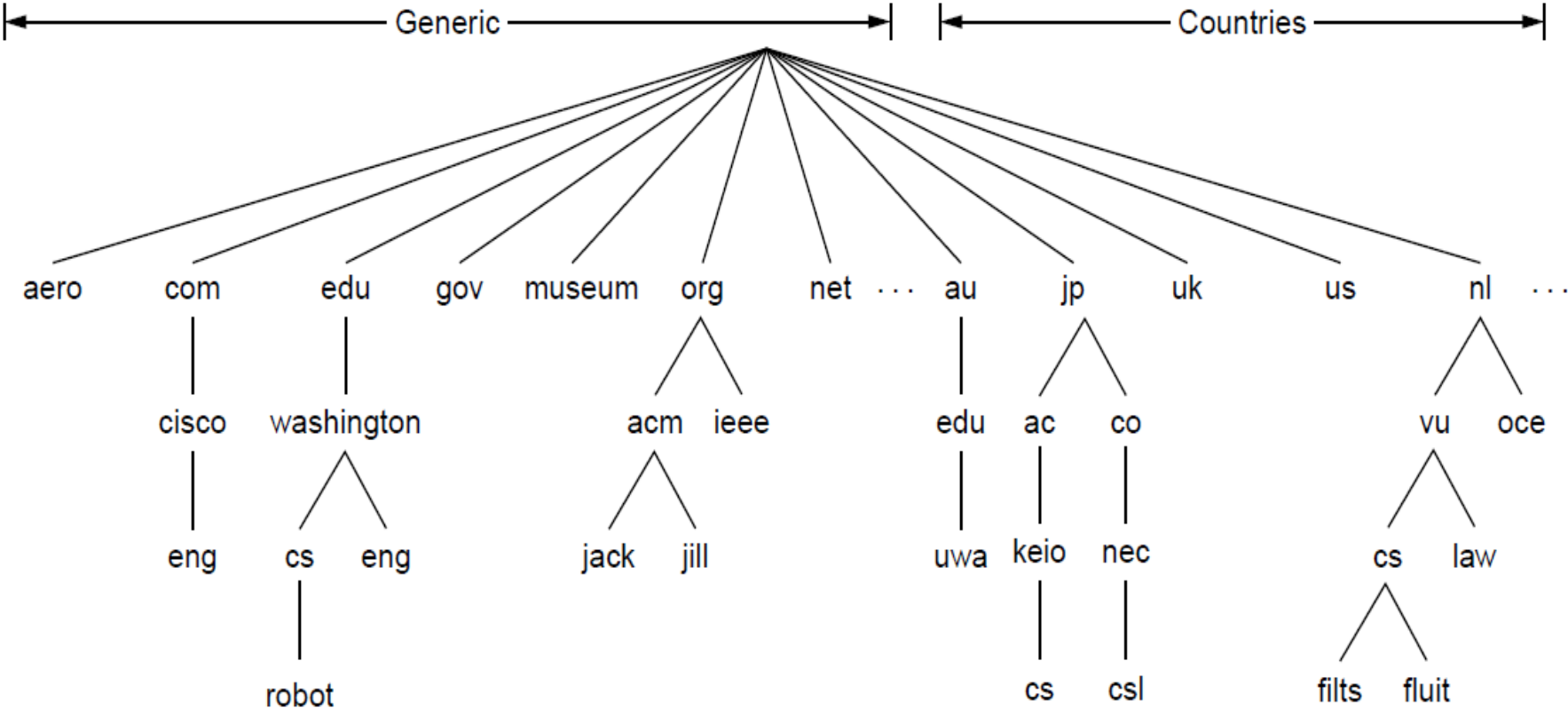
OUTLINE

- THE DNS NAME SPACE
- WAN TECHNOLOGY/TERMINOLOGY
- CONNECTING A MODEM TO A ROUTER



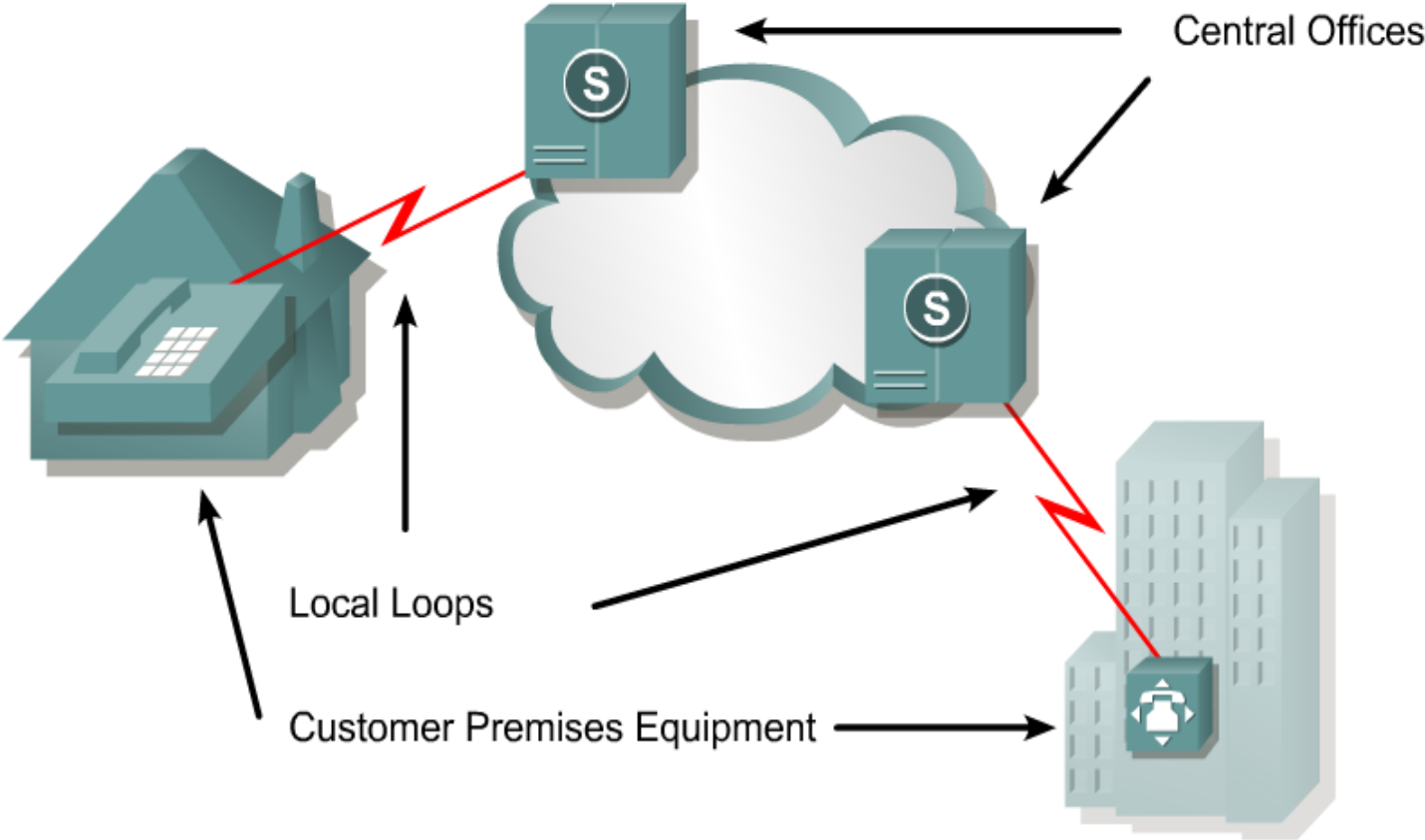
THE DNS NAME SPACE

A portion of the Internet domain name space



WAN TECHNOLOGY/TERMINOLOGY

WAN technology/terminology



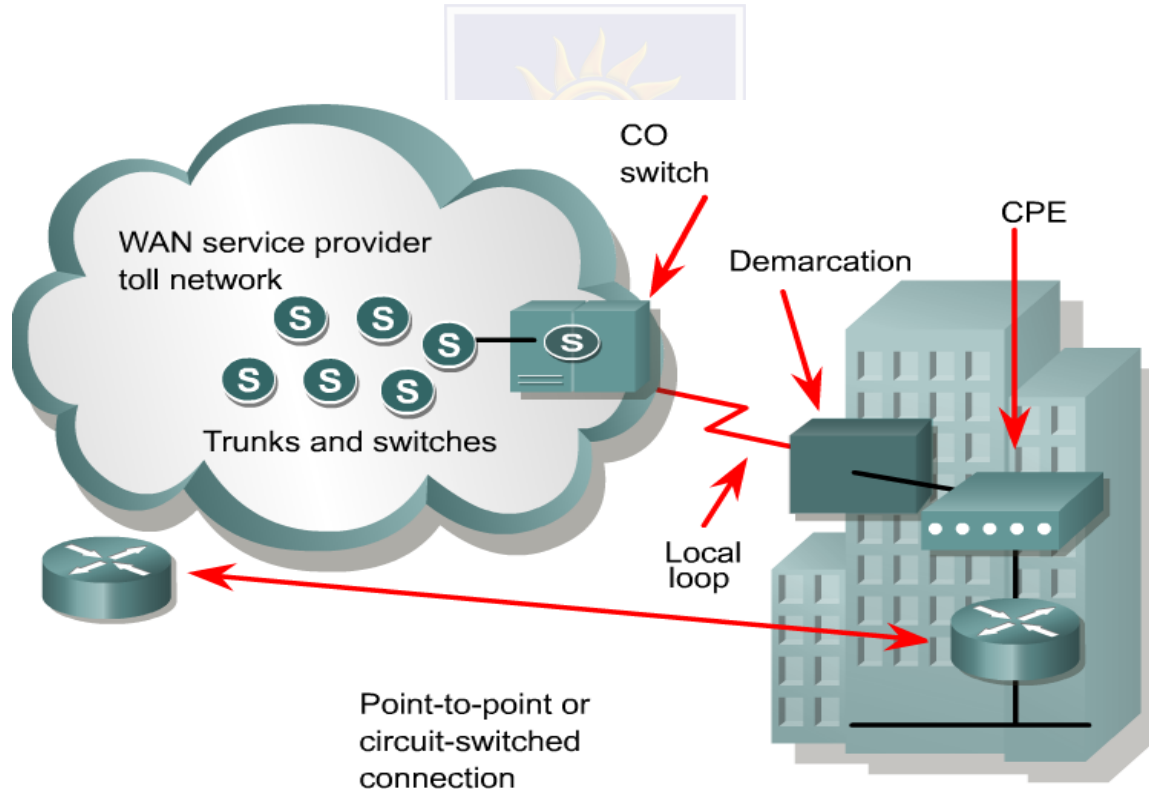
WAN TECHNOLOGY/TERMINOLOGY

Devices on the subscriber premises are called **customer premises equipment (CPE)**.

The subscriber owns the CPE or leases the CPE from the service provider.

A copper or fiber cable connects the CPE to the service provider's nearest exchange or **central office (CO)**.

This cabling is often called the local loop, or "**last-mile**".

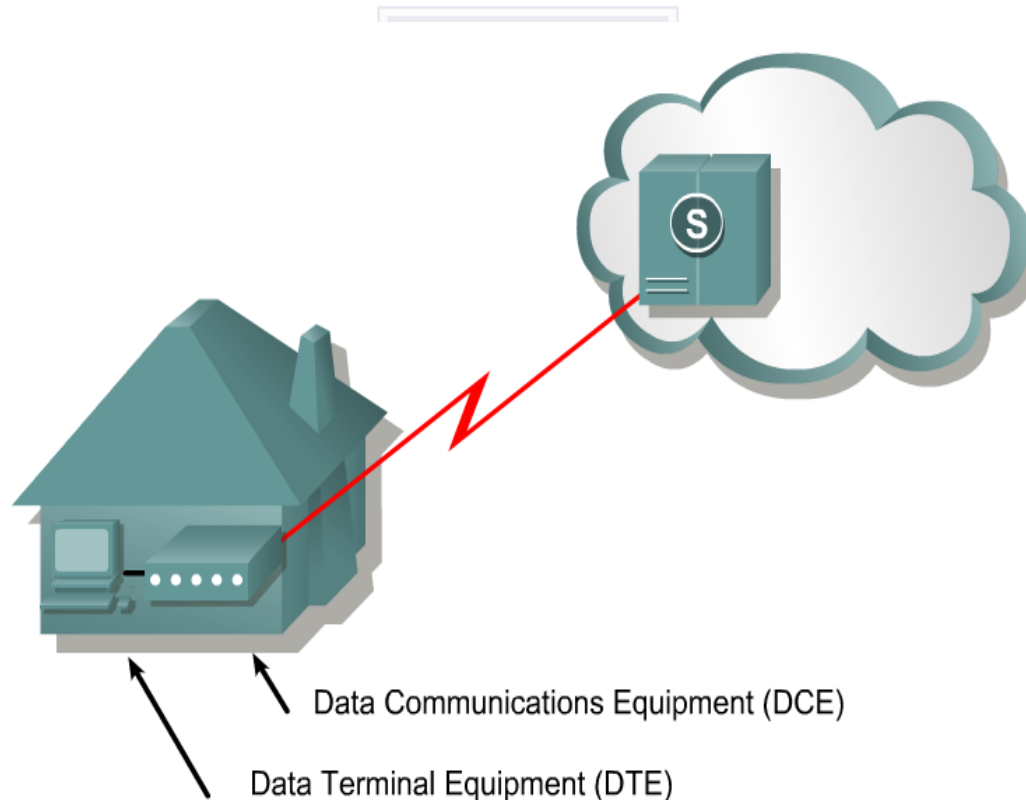


WAN TECHNOLOGY/TERMINOLOGY

Devices that put data on the local loop are called data circuit-terminating equipment, or data communications equipment (DCE).

The customer devices that pass the data to the DCE are called data terminal equipment (DTE).

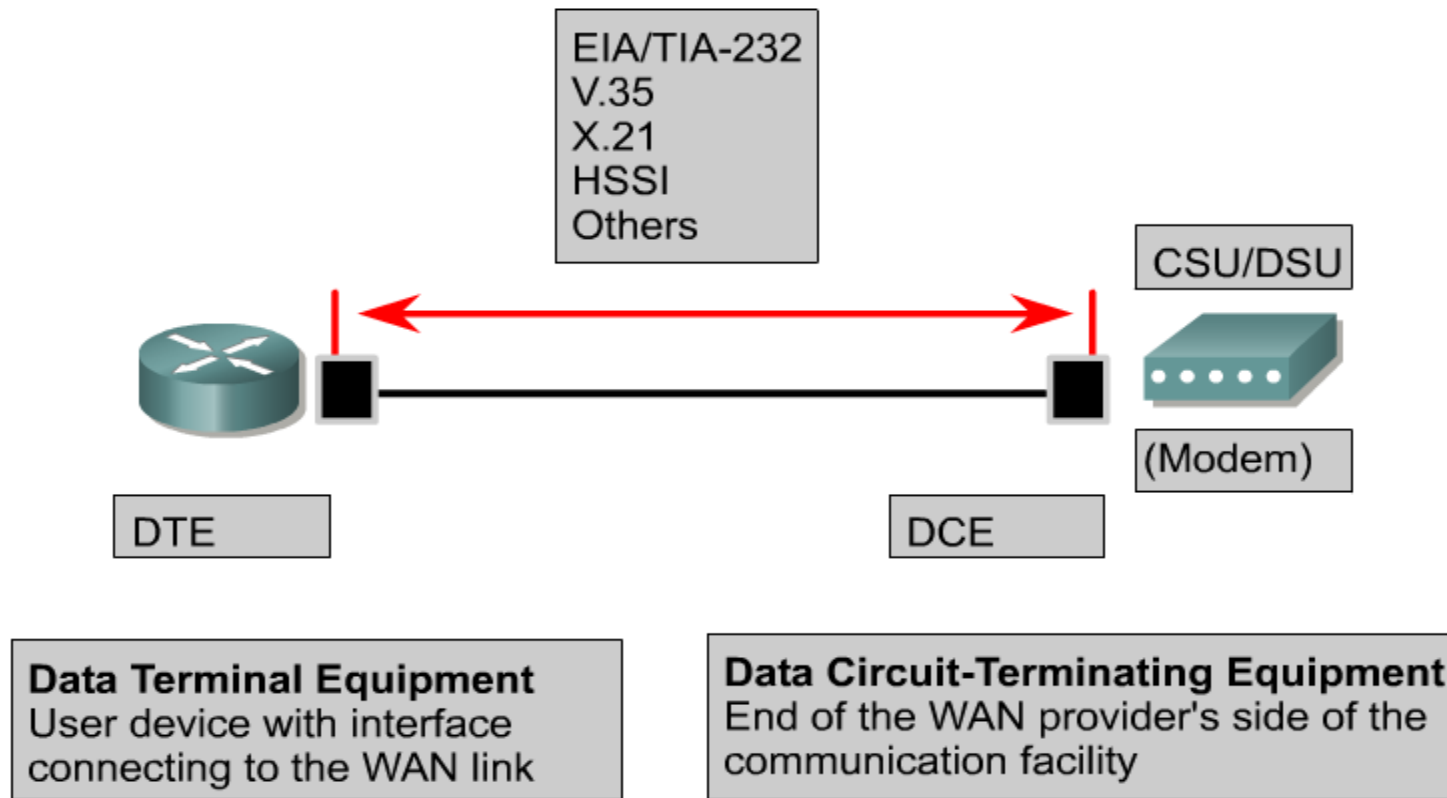
The DCE primarily provides an interface for the DTE into the communication link on the WAN cloud.



WAN TECHNOLOGY/TERMINOLOGY

The DTE/DCE interface uses various physical layer protocols, such as High-Speed Serial Interface (HSSI) and V.35.

These protocols establish the codes and electrical parameters the devices use to communicate with each other

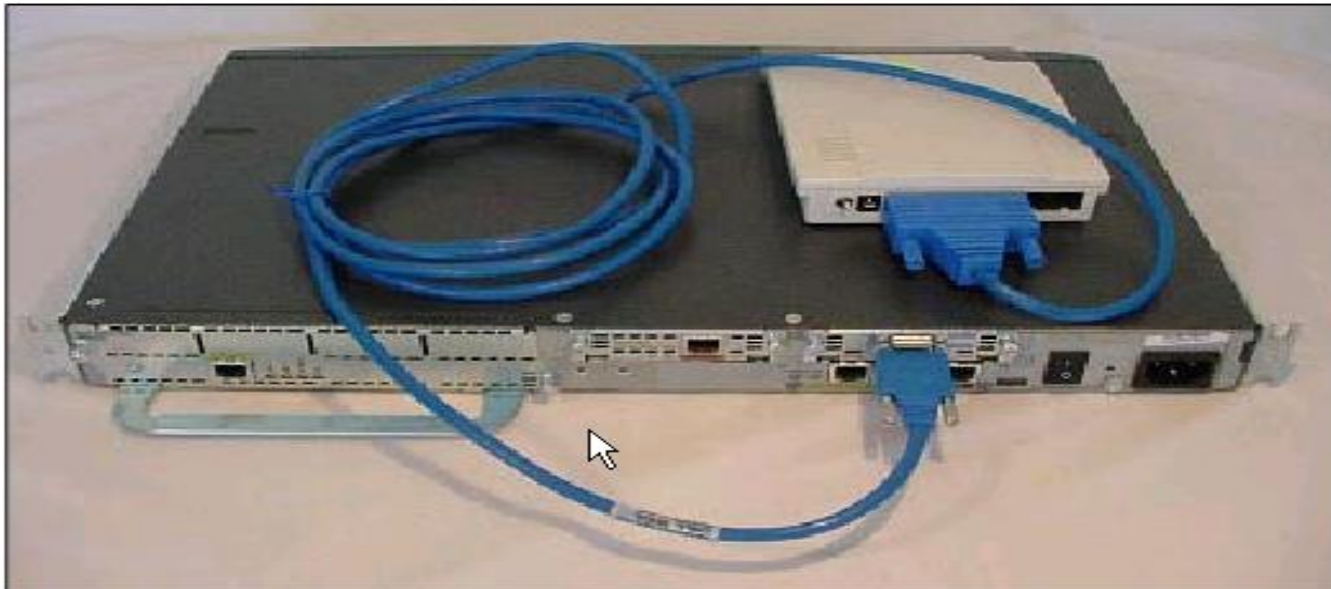


CONNECTING A MODEM TO A ROUTER

Connecting to a serial interface :physical-layer async interface command

The Picture shows a connection between a Cisco 2620 series router and an external modem using an EIA/TIA-232 Smart Serial cable

Connecting a Modem to a Router



CONNECTING A MODEM TO A ROUTER

AUX (Auxiliary): To connect a modem to a Cisco router's AUX port, you typically use a rollover cable and a RJ-45-to-DB-25 male DCE modem adapter

Connecting a Modem to a Router



WAN TECHNOLOGY/TERMINOLOGY

Line Type	Signal Standard	Bit Rate Capacity
56	DS0	56 Kbps
64	DS0	64 Kbps
T1	DS1	1.544 Mbps
E1	ZM	2.048 Mbps
E3	M3	34.064 Mbps
J1	Y1	2.048 Mbps
T3	DS3	44.736 Mbps
OC-1	SONET	51.84 Mbps
OC-3	SONET	155.54 Mbps
OC-9	SONET	466.56 Mbps
OC-12	SONET	622.08 Mbps
OC-18	SONET	933.12 Mbps
OC-24	SONET	1244.16 Mbps
OC-36	SONET	1866.24 Mbps
OC-48	SONET	2488.32 Mbps

Multiple Choice Question

MUTIPLE CHOICE QUESTIONS:

Sr no	Question	Option A	Option B	OptionC	OptionD
1	Socket-style API for windows is called _____	wsock	winsock	wins	sockwi
2	Which one of the following is a version of UDP with congestion control?	datagram congestion control protocol	stream control transmission protocol	structured stream transport	user congestion control protocol
3	A _____ is a TCP name for a transport service access point.	port	pipe	node	protocol
4	Transport layer protocols deals with _____	application to application communication	process to process communication	node to node communication	man to man communication
5	Which of the following is a transport layer protocol?	stream control transmission protocol	internet control message protocol	neighbor discovery protocol	dynamic host configuration protocol

REFERENCES

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

