



SNS COLLEGE OF TECHNOLOGY

Coimbatore-35
An Autonomous Institution



Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

19ECT301- COMMUNICATION NETWORKS

III YEAR/₁V SEMESTER

UNIT 1 – INTRODUCTION TO NETWORKS AND LAYERED ARCHITECTURE

TOPIC – INTRODUCTION TO COMMUNICATION NETWORKS



COMMUNICATION



Communication:

Means of sending and receiving an information from one point to another point



Networks:

A **Network** is a collection of computers, servers, mainframes, **network** devices, peripherals, or other devices connected to one another to allow the sharing of data.





COMMUNICATION NETWORKS



A **communication network** is a set of **computers** connected together for the purpose of sharing resources or offering a service such as E Mail, Banking, Shopping Etc., The most common resource shared today is connection to the Internet. Other shared resources can include a printer or a file server. The Internet itself can be considered a **computer network**.



WHY COMMUNICATION NETWORK IS IMPORTANT





INTERNET

- ❖ We could clearly see that how the internet have changed the way interact, shop, study, paly and even the life styles.
- ❖ Internet have been used as an important tool for many start-ups to reach more people.



If networking is so important, and seems to have a tremendous growth in the future... Why cant you set up a career in this domain?



CAREER OPTIONS IN NETWORKING





PROTOCOLS



Protocol

A set of rules governing data communications

Syntax: format of data block

Semantics: meaning of each section

Timing: speed and sequencing



STANDARDS ORGANIZATIONS



Creation Committees

ISO, ITU-T, ANSI, IEEE, EIA

Forums

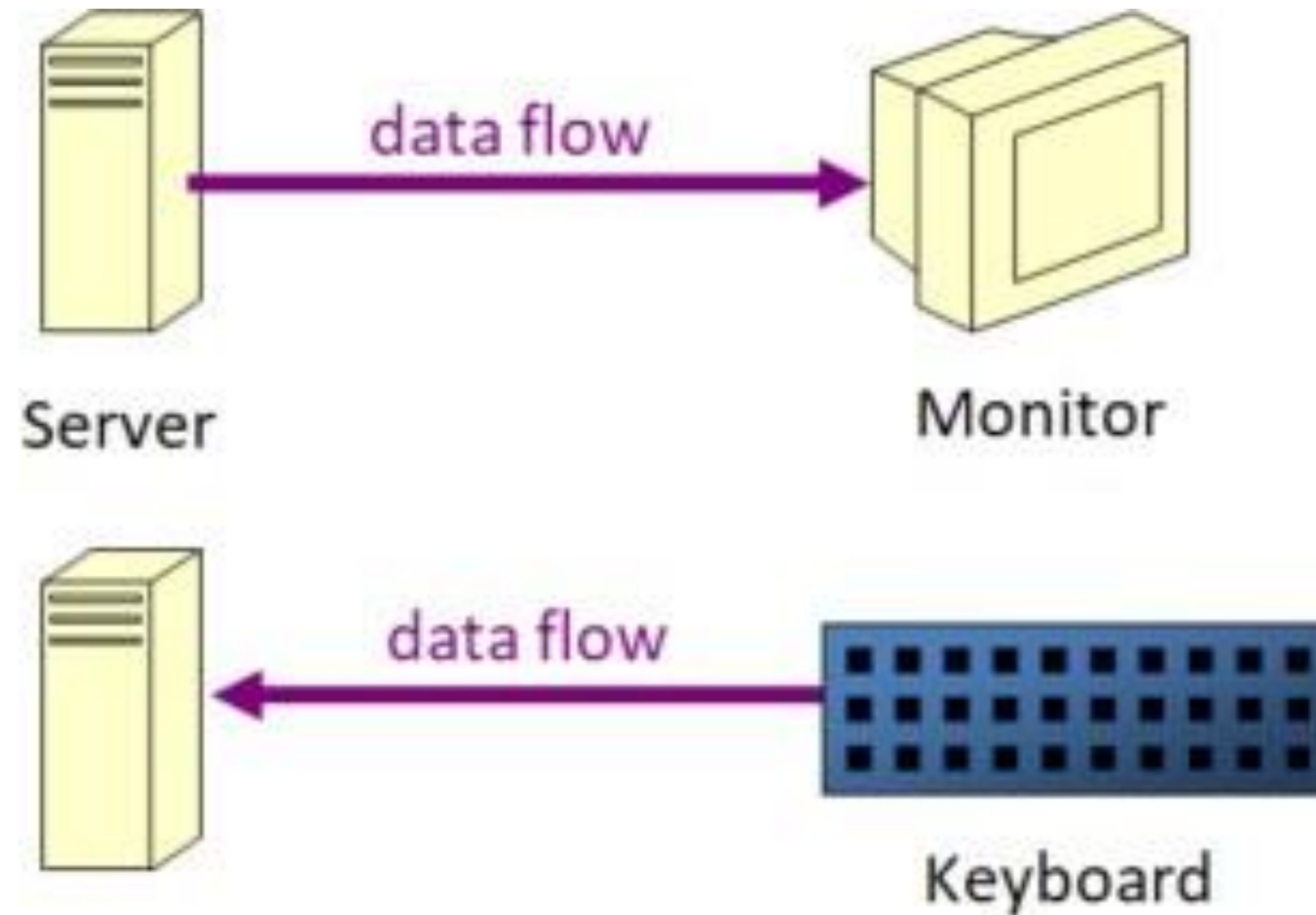
Regulatory Agencies



DIRECTION OF DATA FLOW



Simplex: One direction only

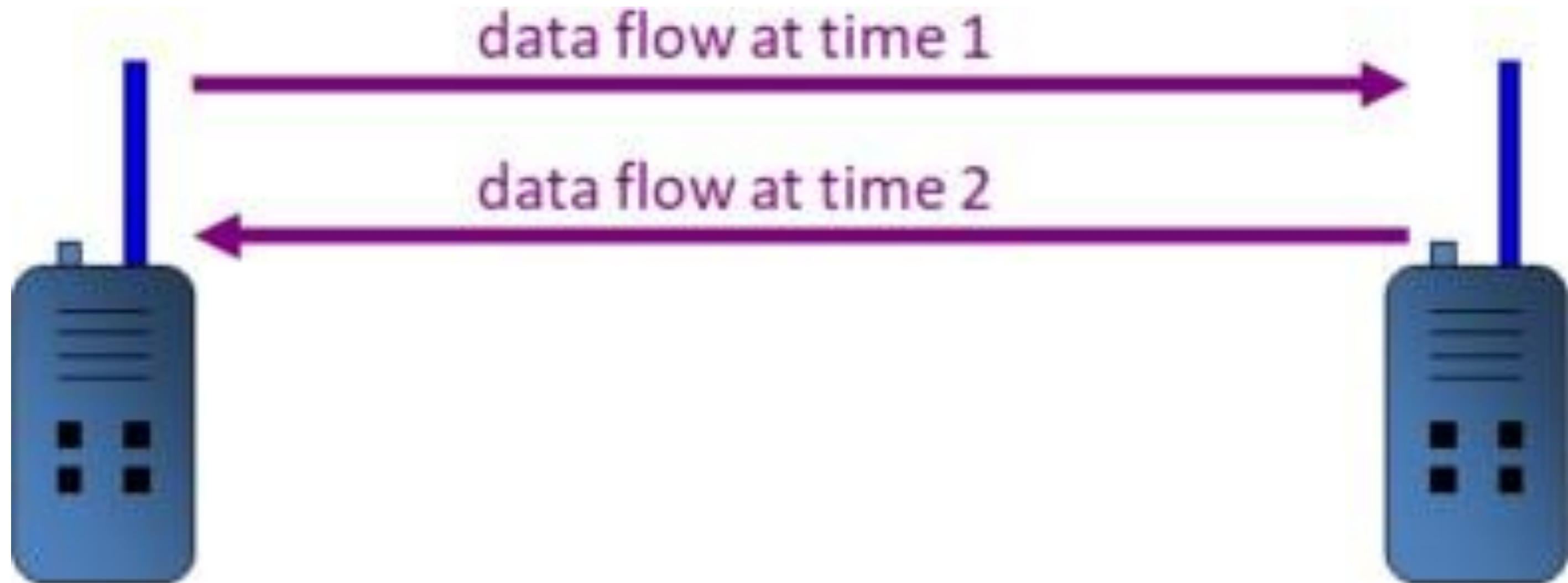




DIRECTION OF DATA FLOW



Half Duplex: Both directions, one at a time

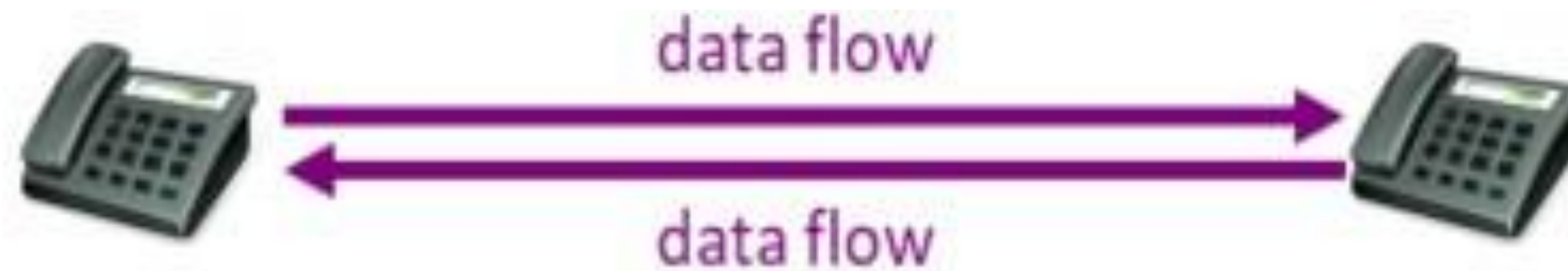




DIRECTION OF DATA FLOW



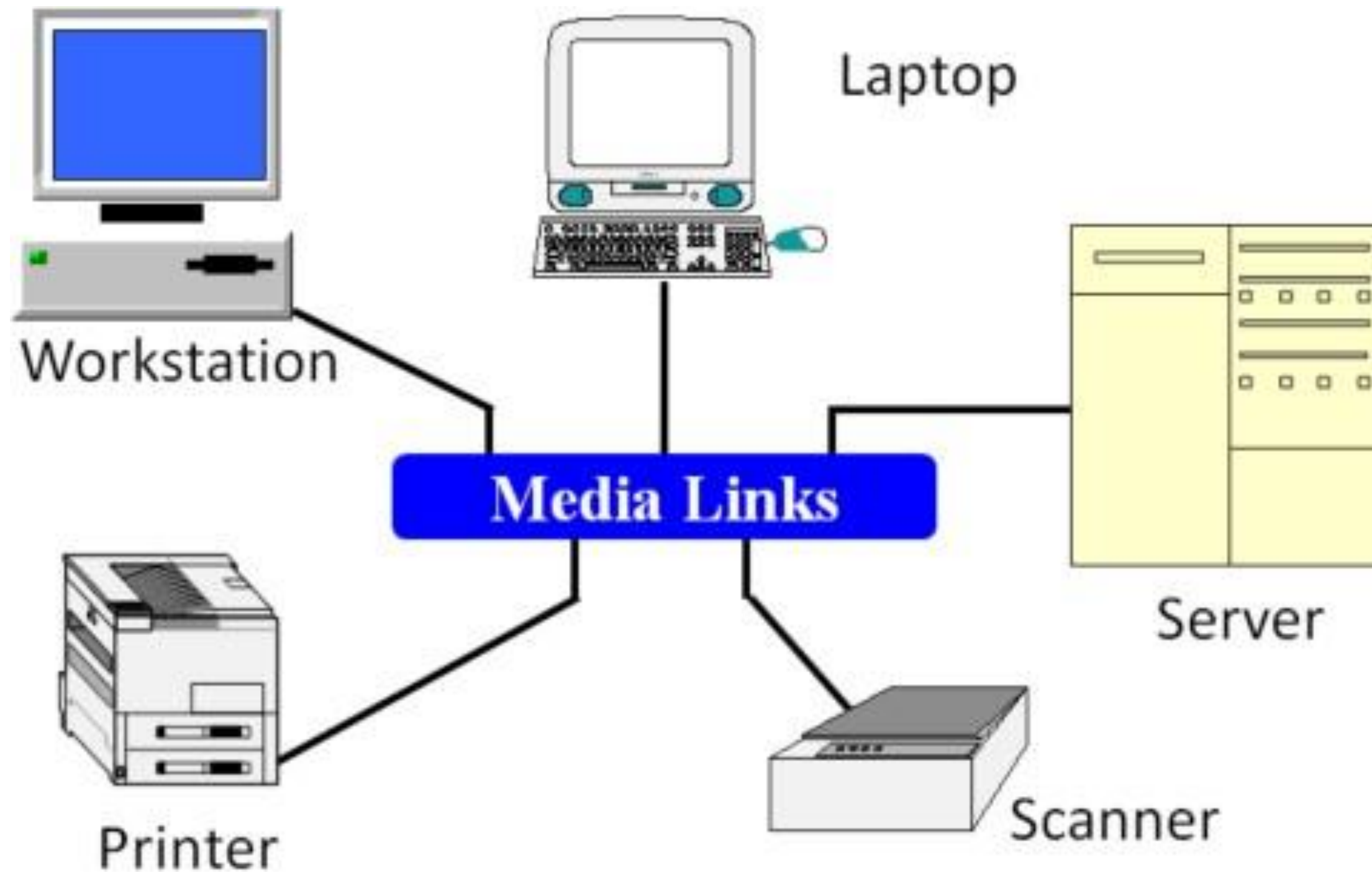
Full Duplex: Both directions simultaneously



– E.g., telephone



NETWORKS





THANK YOU