

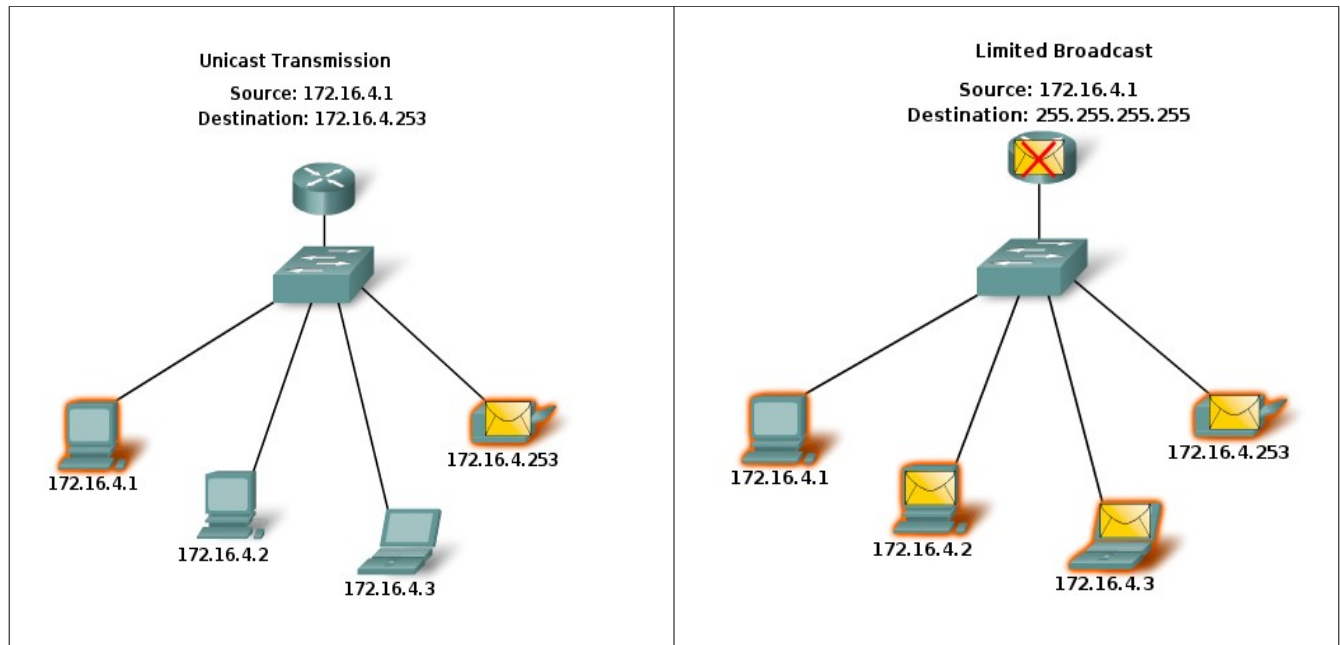
MODES OF COMMUNICATION AND PROTOCOL

In an IPv4 network, the hosts can communicate one of three different ways:

Unicast - the process of sending a packet from one host to an individual host

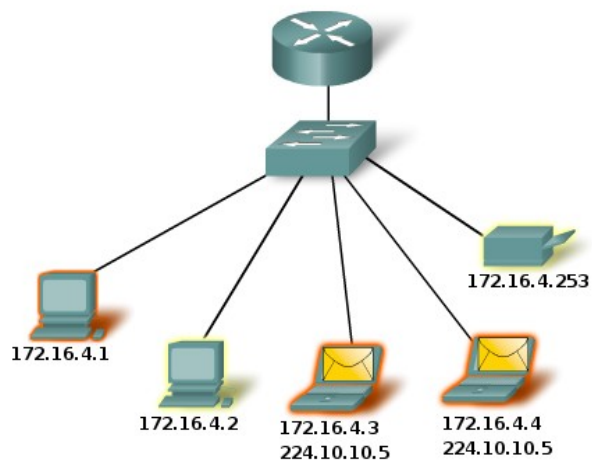
Broadcast - the process of sending a packet from one host to all hosts in the network

Multicast - the process of sending a packet from one host to a selected group of hosts



Multicast Transmission

Source: 172.16.4.1



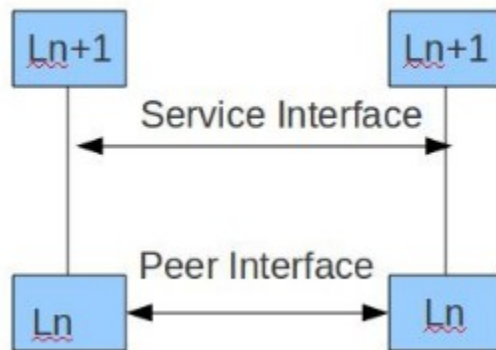
Protocol:

A protocol defines the format and the order of messages exchanged between two or more

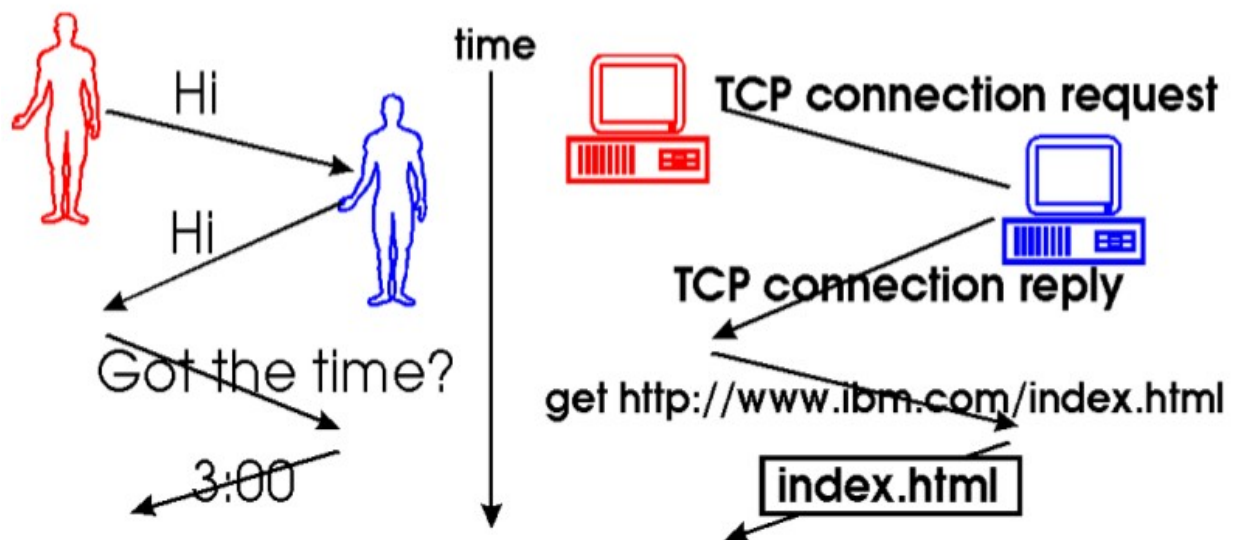
- Each protocol object has two different interfaces.
 - Service interfaces: Defines operation on this protocol.
 - Peer-to-peer interfaces: Defines message exchanged with peer.

communicating entities, as well as the actions taken on the transmission and/or receipt of a message.

- Building blocks of a Network Architecture.



- Most networks are organized as a series of layers.
- The task of each layer is to give some service to the upper layers.
- Any layer maintains a virtual connection with the corresponding layer in a peer.
- There is a peer to peer protocol running between any two corresponding layers.
- The interface between any two layers is well defined.
- The implementation of each layer in each node is transparent to other devices.



A Human protocol and Computer Network protocol