

An Autonomous Institution

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DEPARTMENT OF INFORMATION TECHNOLOGY

19CSB302 – COMPUTER NETWORKS

III YEAR V SEM

UNIT 1 – FUNDAMENTALS AND PHYSICAL LAYER

TOPIC 9 –Internet Architecture

Application programs

Request/reply
channel

Message stream
channel

Host-to-host connectivity

Hardware

defines the **interfaces** between the layers in the same
and with the layers of peer system

blocks of a network architecture

protocol object has two different interfaces

interface: operations on this protocol

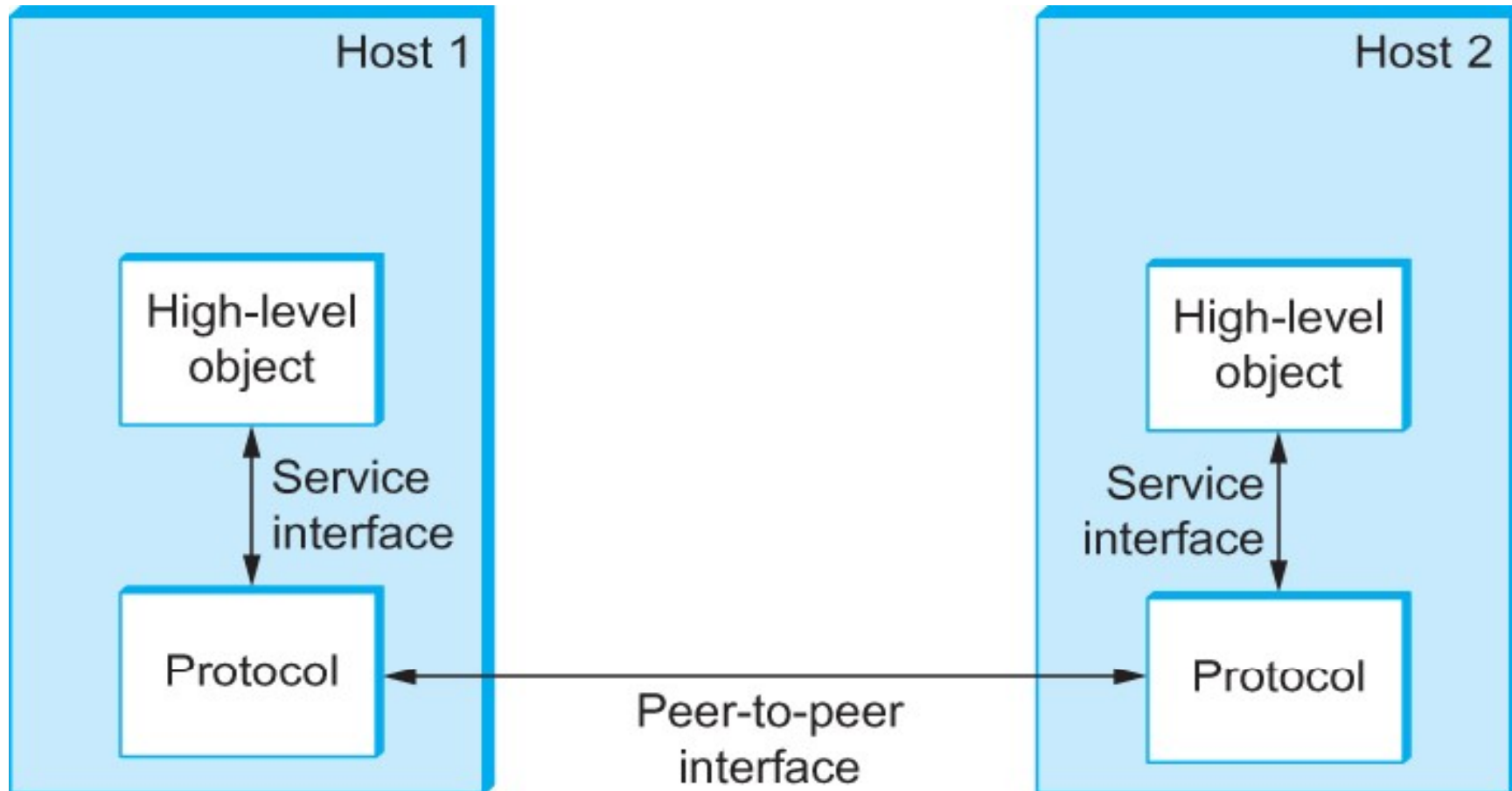
peer interface: messages exchanged with peer

protocol" is **overloaded**

ation of peer-to-peer interface

that implements this interface

Interfaces

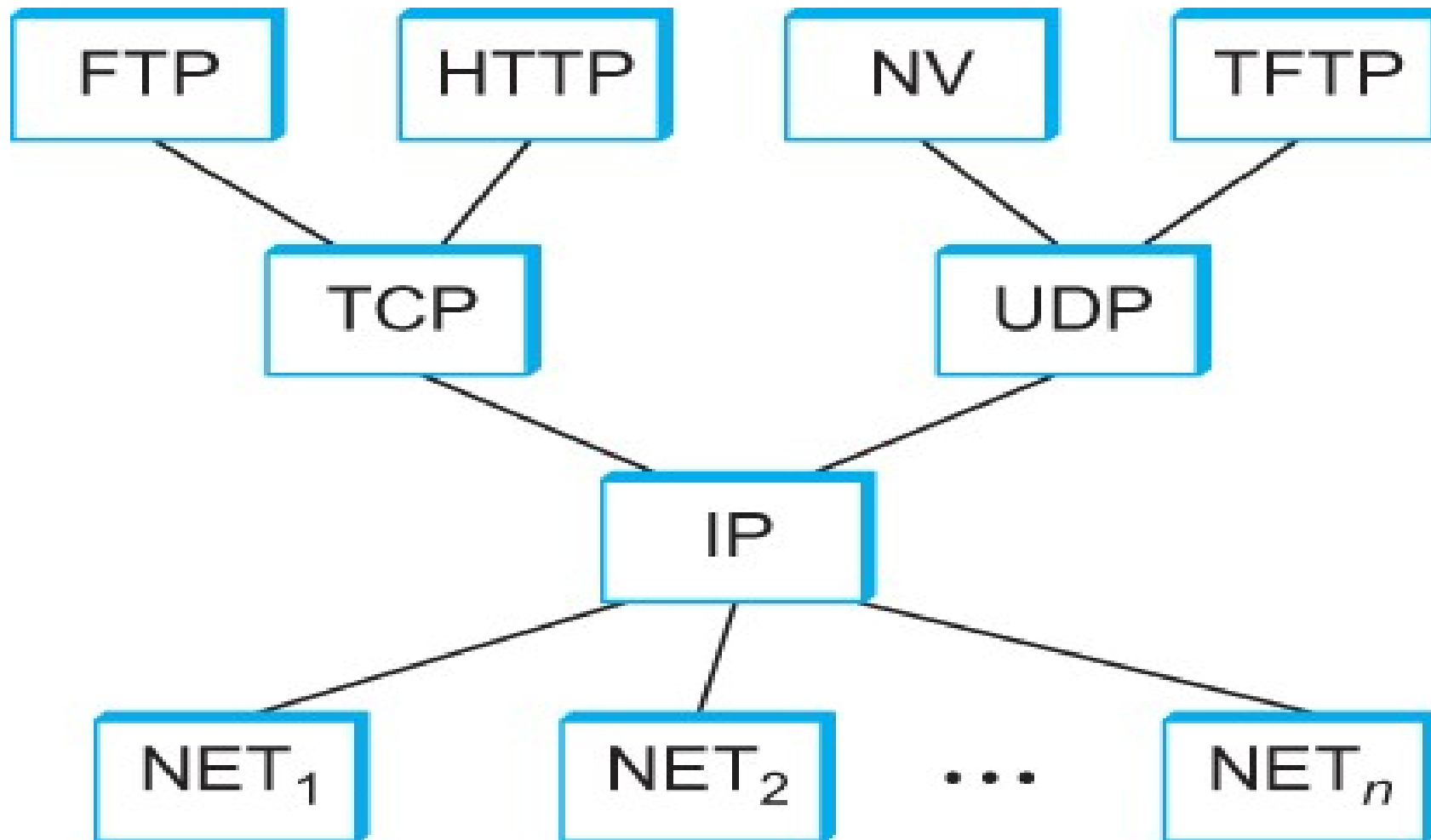


Service and Peer Interfaces

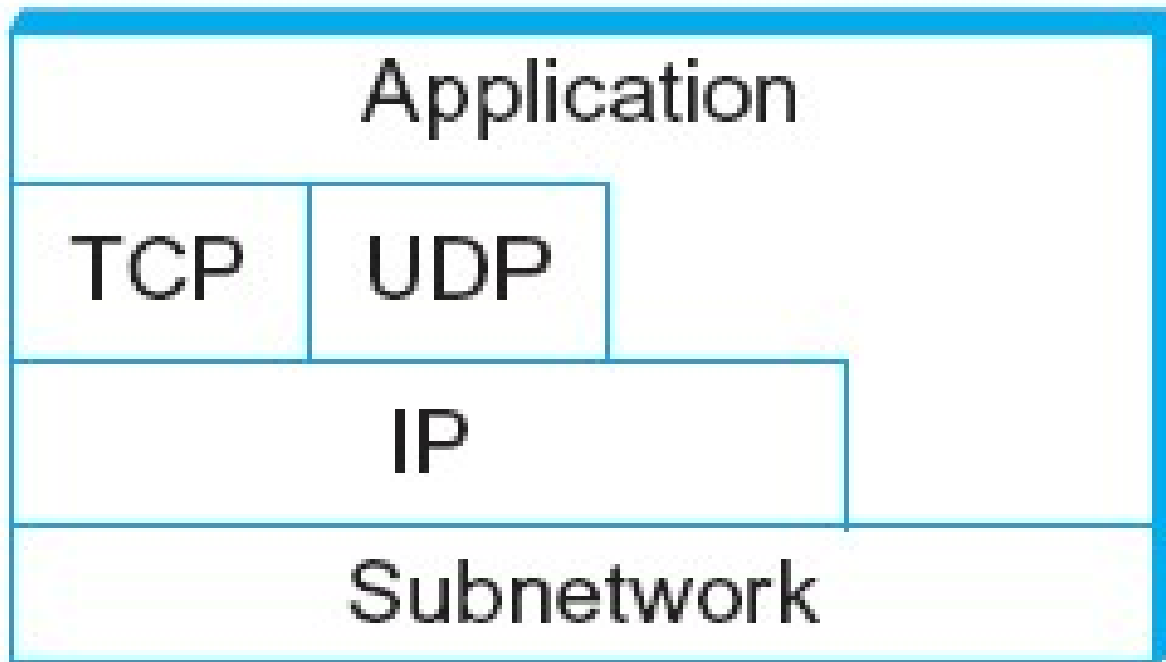
Specification: **prose, pseudo-code, state transition diagrams**

Interoperable: when two or more protocols that implement the specification accurately

Internet Engineering Task Force



Internet Protocol Graph



...ve view of the Internet architecture. The “Network
...re is sometimes referred to as the “sub-network” o

defined by IETF

three main features

Does not imply strict layering. The application is free to bypass transport layers and to directly use IP or other underlying network

an hour-glass shape – wide at the top, narrow in the middle and bottom. IP serves as the focal point for the architecture

In order for a new protocol to be officially included in the architecture needs to be both a protocol specification and at least one (and preferably two) representative implementations of the specification

P model does not have _____ layer but OSI model have the

ion layer

nsport layer

lication layer

work layer

address is used on the internet for employing the TCP/

sical address and logical address

t address

cific address

of the mentioned

Thank You