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DEPARTMENT OF INFORMATION TECHNOLOGY

16IT301 – COMPUTER NETWORKS

II YEAR IV SEM

UNIT 3 – INTERNETWORKING AND ROUTING

TOPIC 19 –BOOTP

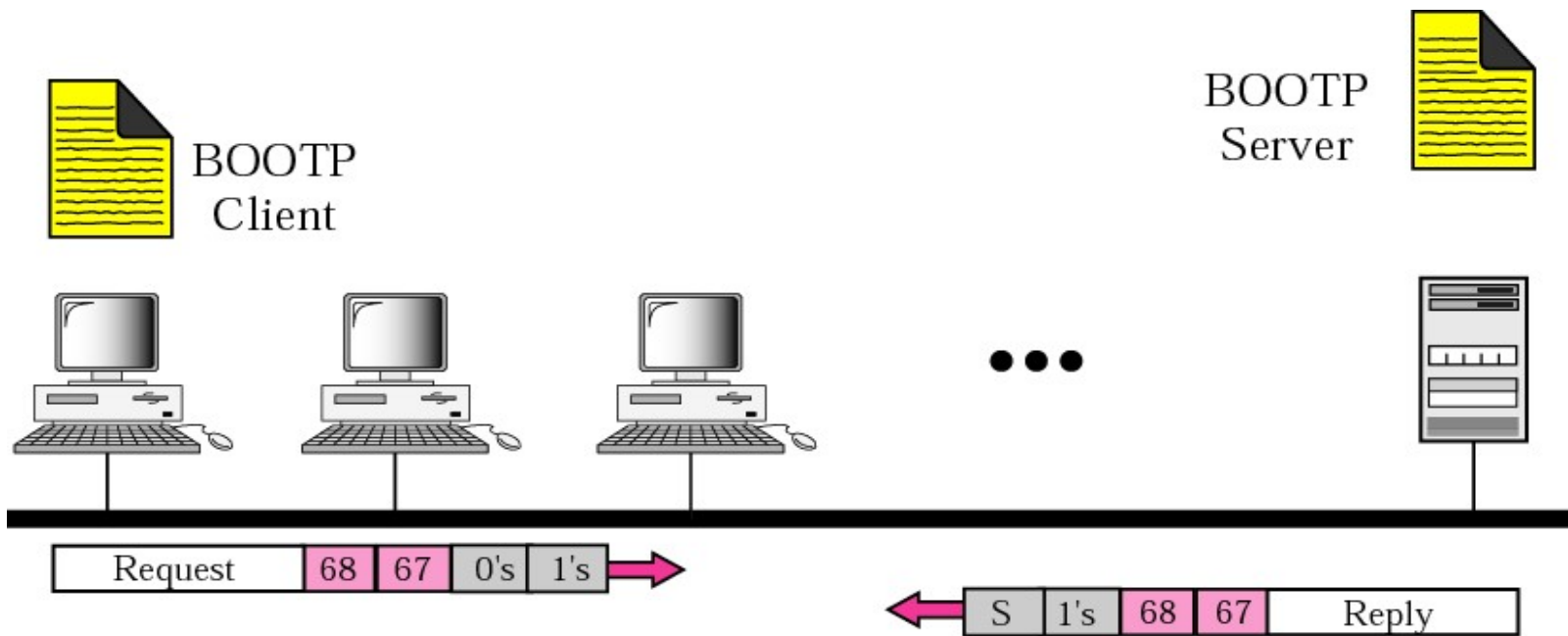
ootstrap Protocol (BOOTP) is a client/server pro
ures a diskless computer or a computer that is booted f
OOTP provides the IP address, net mask, the address o
and the address of a name server.

the types of information required by a system on boot-

how BOOTP operates

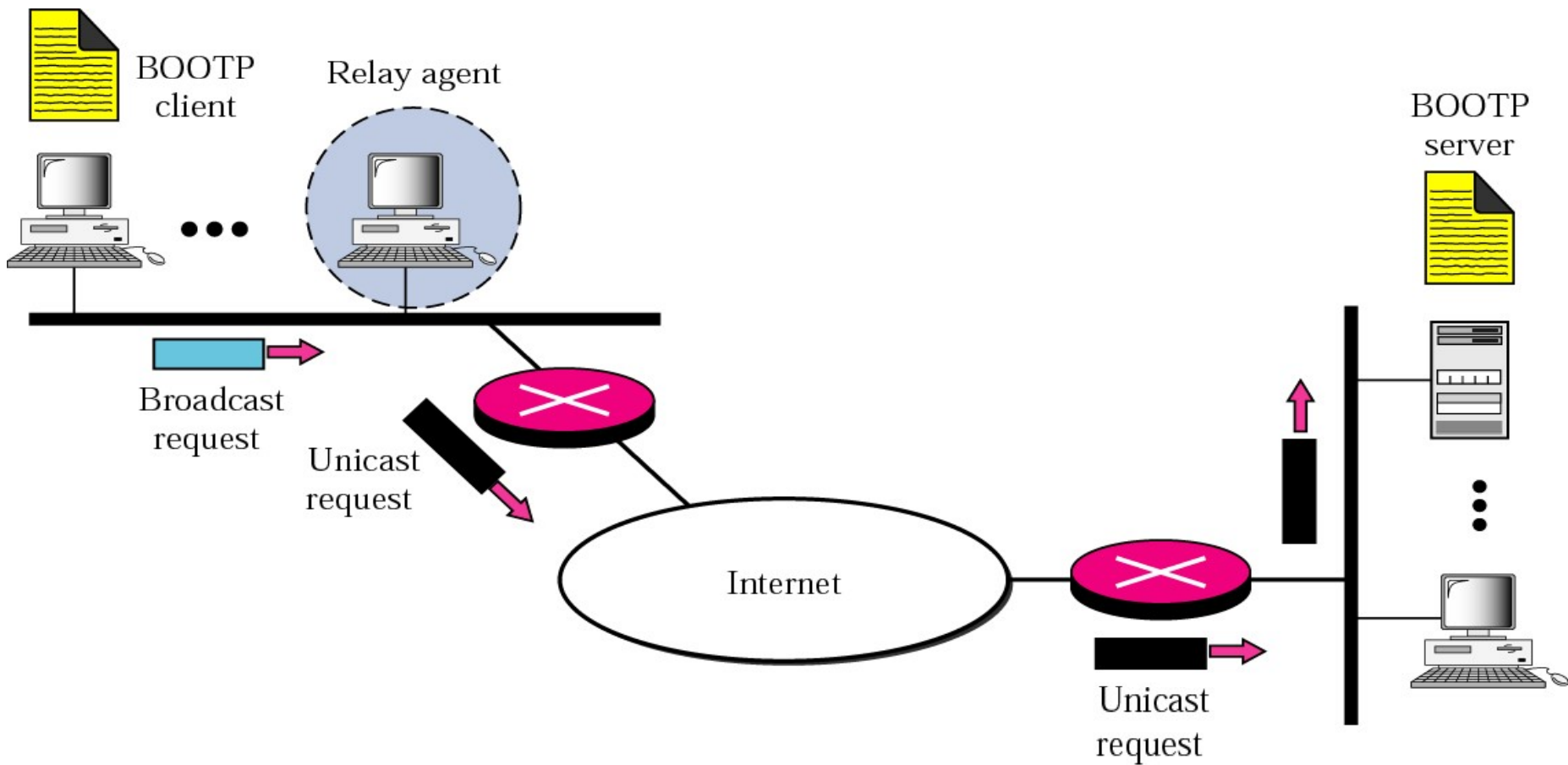
Bootstrap Protocol (BOOTP) Operations

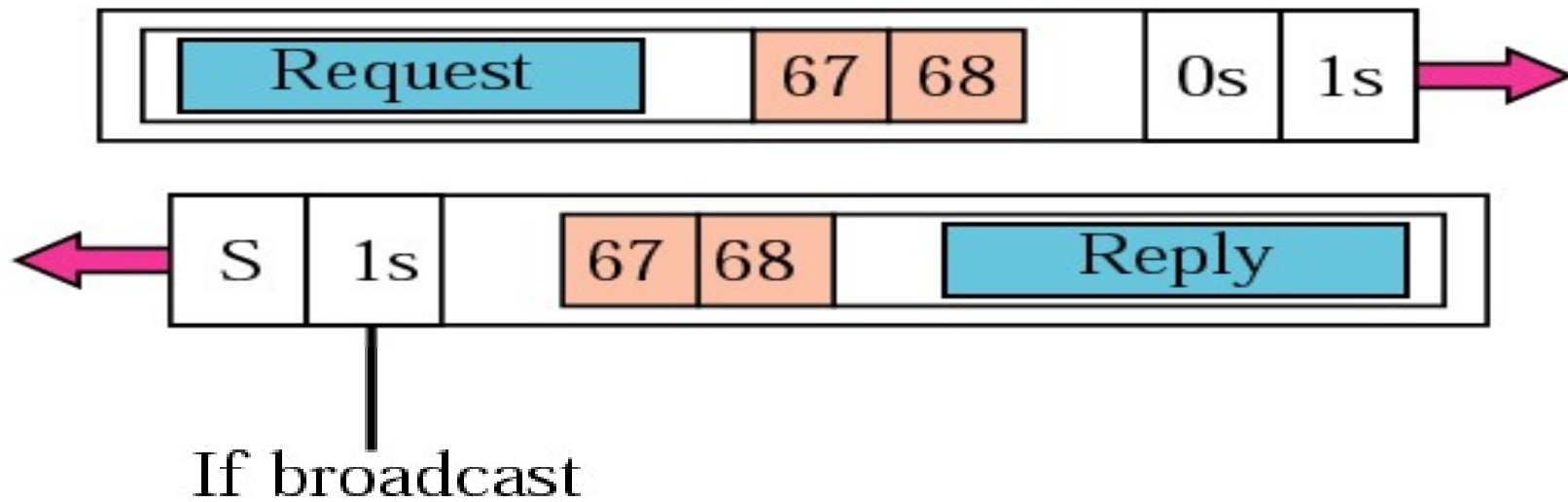
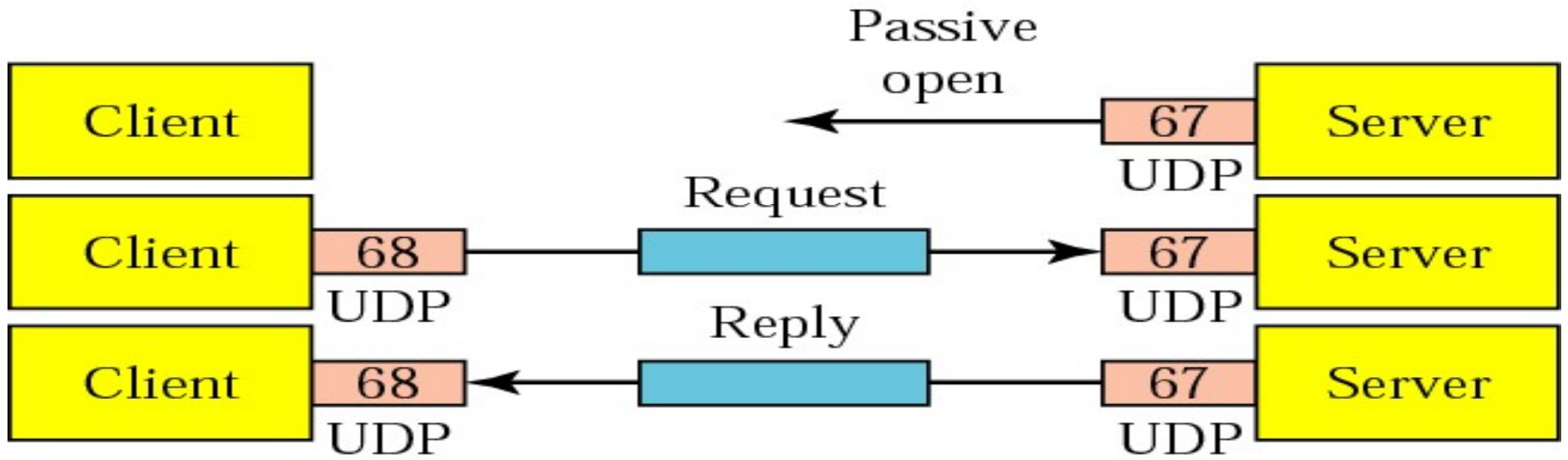
BOOTP Packet Format



Request 68 67 0's 1's →

← S 1's 68 67 Reply



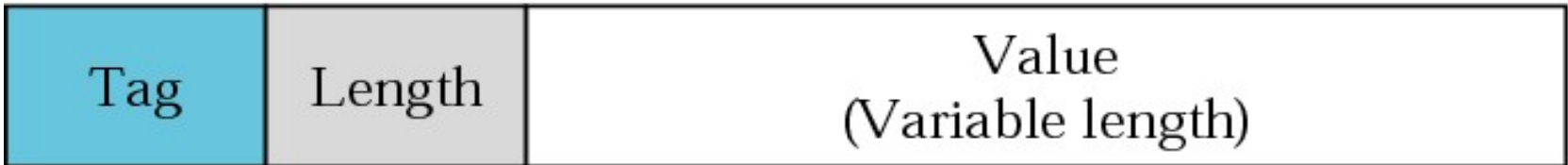


DHCP Parameters Form

Operation code	Hardware type	Hardware length	Hop count
Transaction ID			
Number of seconds		Unused	
Client IP address			
Your IP address			
Server IP address			
Gateway IP address			
Client hardware address (16 bytes)			
Server name (64 bytes)			
Boot filename (128 bytes)			
Options			

Tag
(0)

Padding



Other options

Tag
(255)

End of list

<i>Description</i>	<i>Tag</i>	<i>Length</i>	<i>Value</i>
Padding	0		
Subnet mask	1	4	Subnet mask
Time offset	2	4	Time of the day
Default routers	3	Variable	IP addresses
Time servers	4	Variable	IP addresses
DNS servers	6	Variable	IP addresses
Print servers	9	Variable	IP addresses
Host name	12	Variable	DNS name
Boot file size	13	2	Integer
Vendor specific	128–254	Variable	Specific information
End of list	255		

Application

specify an interface of switch as a BOOTP client, the interface uses BOOTP to get information (such as IP address) from the server, which simplifies your configuration.

On a BOOTP server, an administrator must configure a BOOTP parameter file for each BOOTP client on the BOOTP server. The parameter file contains information such as MAC address and IP address of a client. When a BOOTP client sends a request to the BOOTP server, the server searches for the BOOTP parameter file and returns the corresponding configuration information.

BOOTP is usually used in relatively stable environments. In environments that change frequently, DHCP is more suitable.

... obtaining the IP address, to prevent the IP conflict the client r

_____ Internet relay chat

... loader gateway protocol

... dress resolution protocol

... one of the mentioned

DHCP server can provide the _____ of the IP addresses.

... amic allocation

... omatic allocation

... ic allocation

... of the mentioned

... client and servers on the same subnet communicate via _____

... P broadcast

... P unicast

... P broadcast

Thank You