

Application Layer 2

Dynamic Host Configuration Protocol (DHCP)

- Automation of IPv4 addressing, subnet masks, gateways and other networking parameters

DHCP → dynamic addressing

DHCP → for end user devices
Static → for network devices

DHCPv6 provides similar services for IPv6 clients and does not provide default gateway address.

DHCP Operational Steps

- (1) Discover
- (2) Offer
- (3) Request
- (4) Acknowledge

File Sharing Services

File Transfer Protocol (FTP)

Server _____ Network _____ Client

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(1) Control Connection

- Opens first connection to the server for control traffic

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(2) Data Connection

- Client opens second connection for data traffic

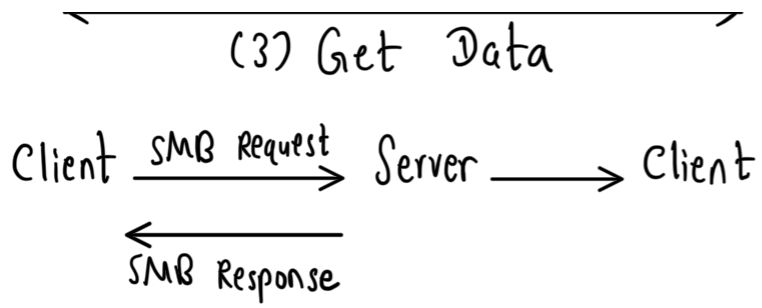
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Server Message Block (SMB)

- Client / Server, request-response file sharing protocol

3 functions:

- (1) Start, authenticate and terminate sessions
- (2) Control file / printer access



(3) Allow an app to send / receive messages to or from another device