COURSE CONTENT

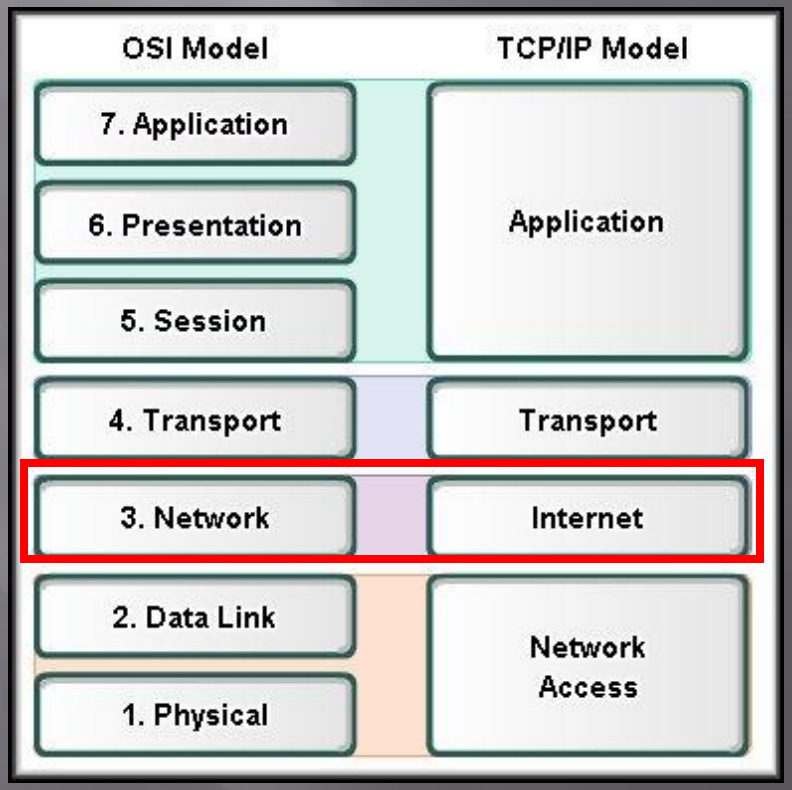
1. What is the Computer Network?
2. Network Fields.
3. Classification of Networks(Covered Area, Network Model, Network Topology)
4. Network Devices , Network Cables.
5. What do you need to build a computer network?
6. OSI & TCP/IP model.
7. IP Addressing.
8. DHCP,DNS And NAT.
9. Switching configurations.
10. Routing configurations.
11. Wireless
12. Security

Agenda

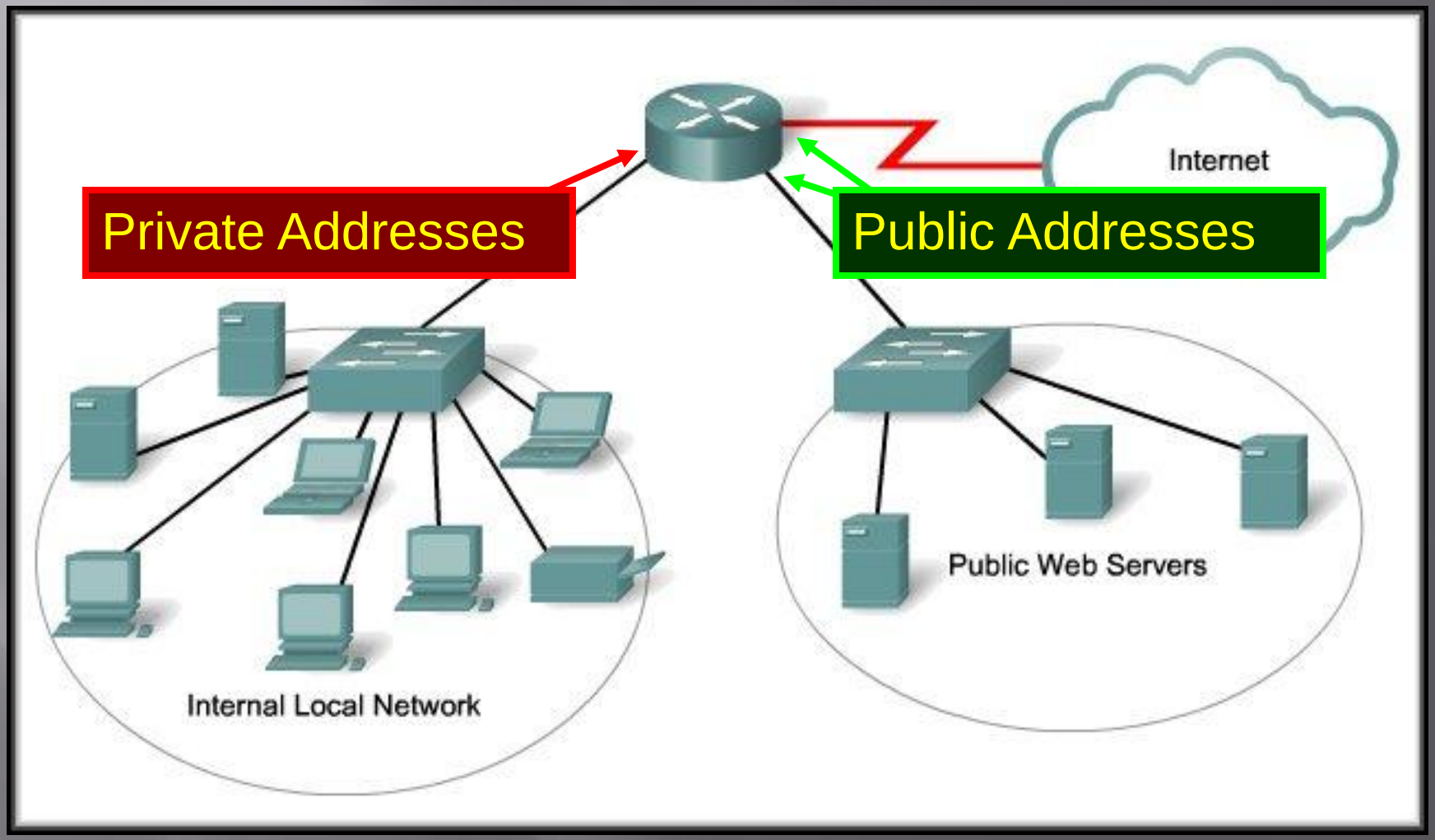
8.DHCP,DNS And NAT

Addressing the Network: IPv4

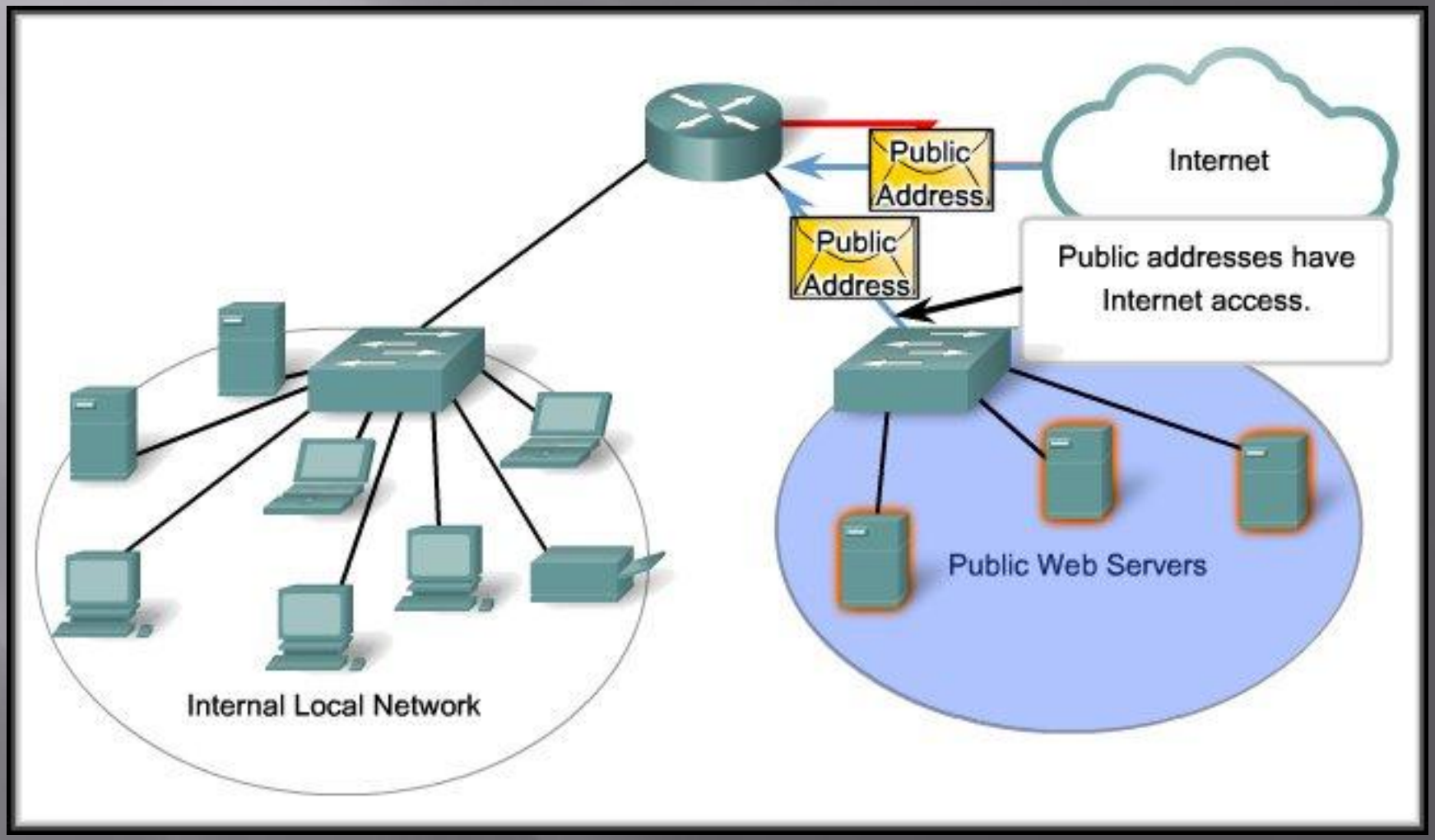
Assigning Addresses



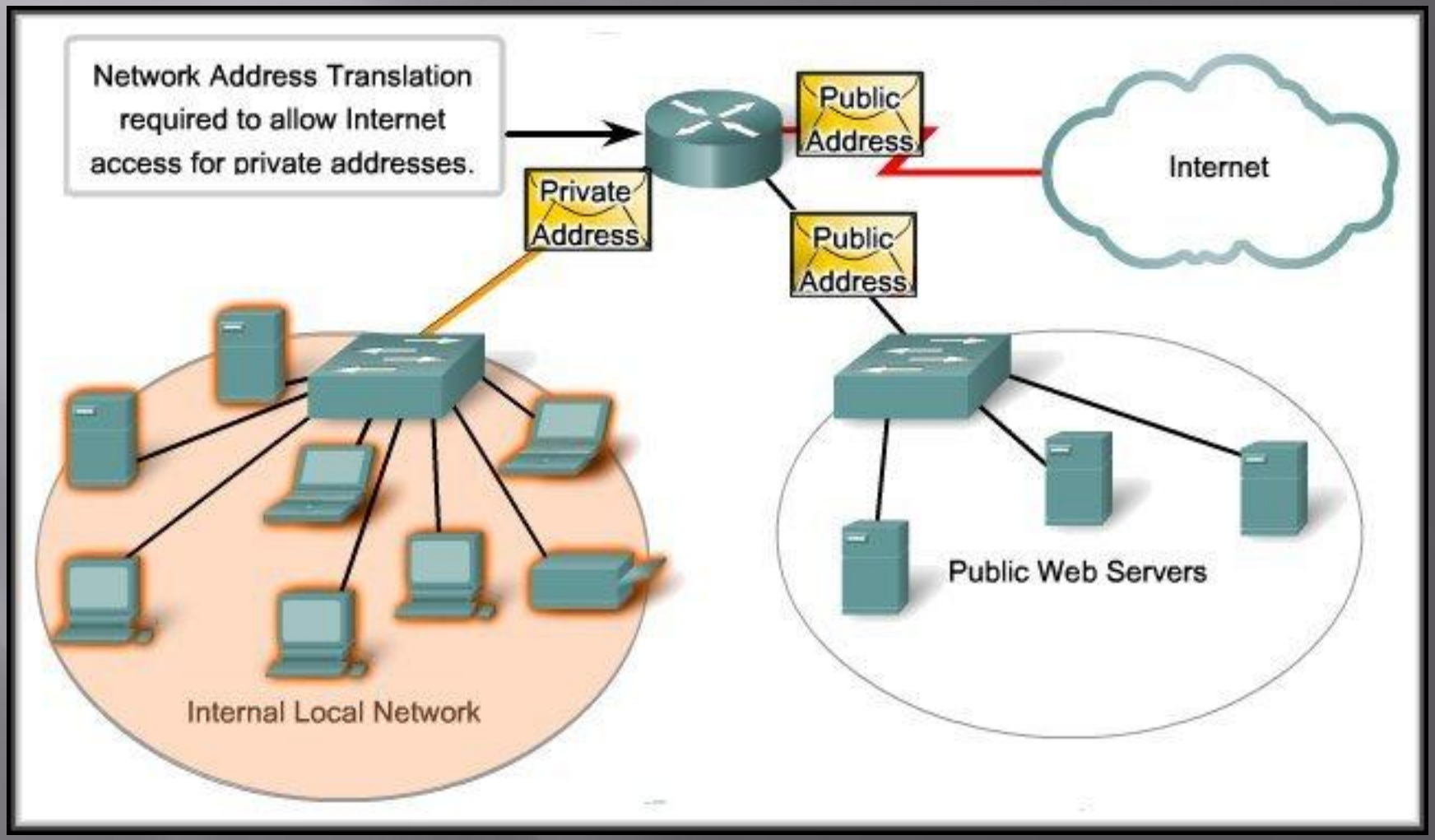
Assigning Addresses Within a Network



Assigning Addresses Within a Network

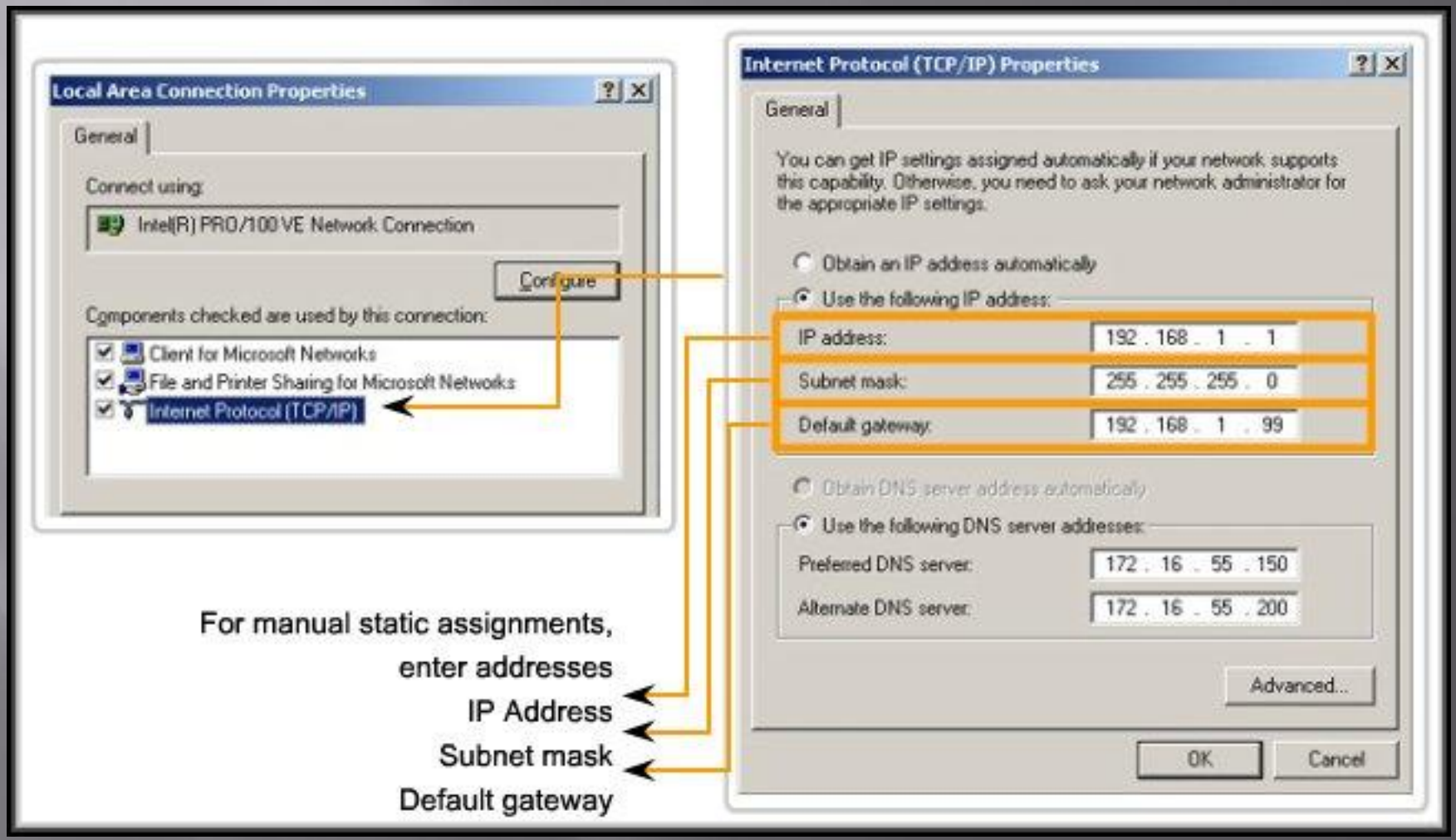


Assigning Addresses Within a Network



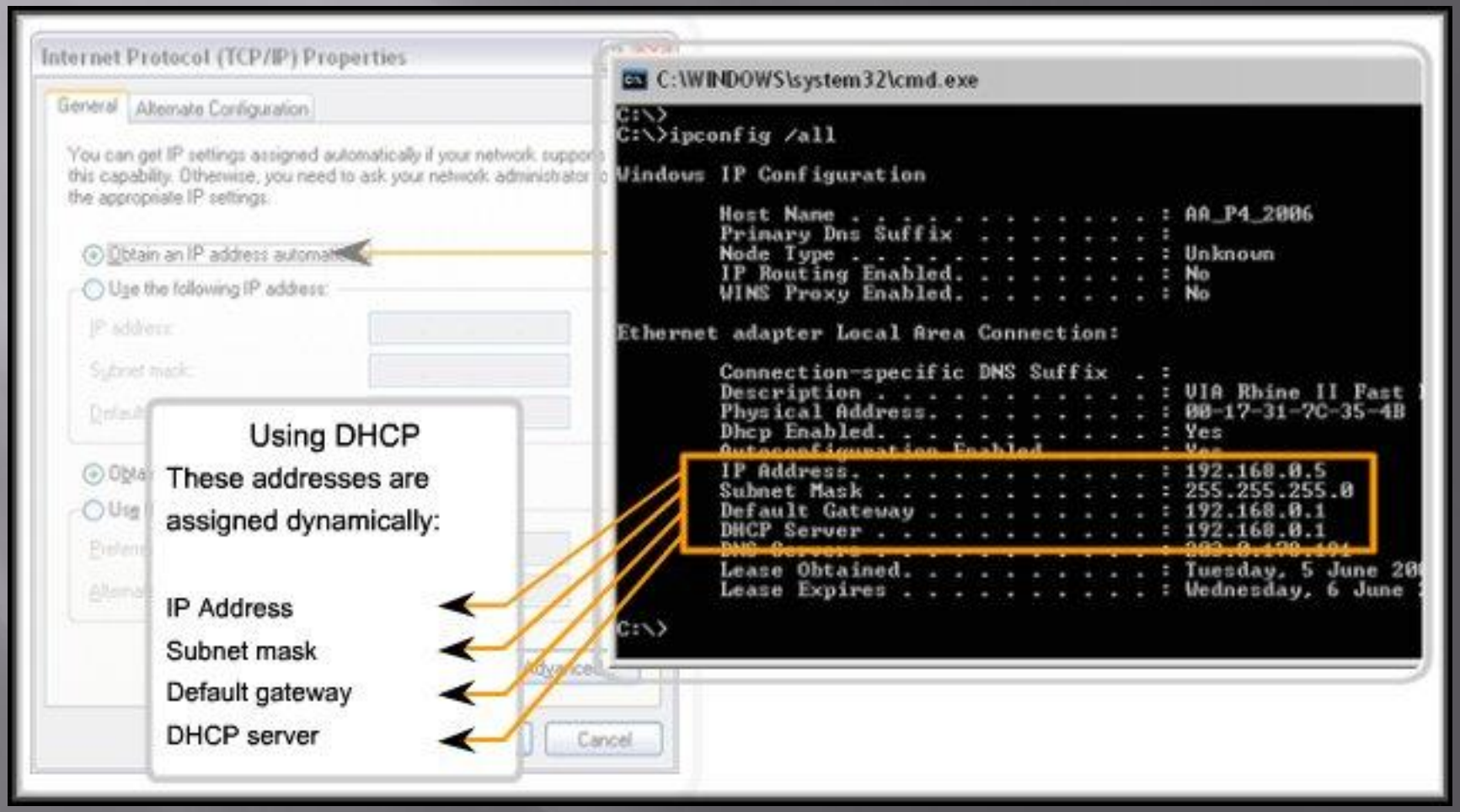
Static or Dynamic Addressing

Static Address Assignment



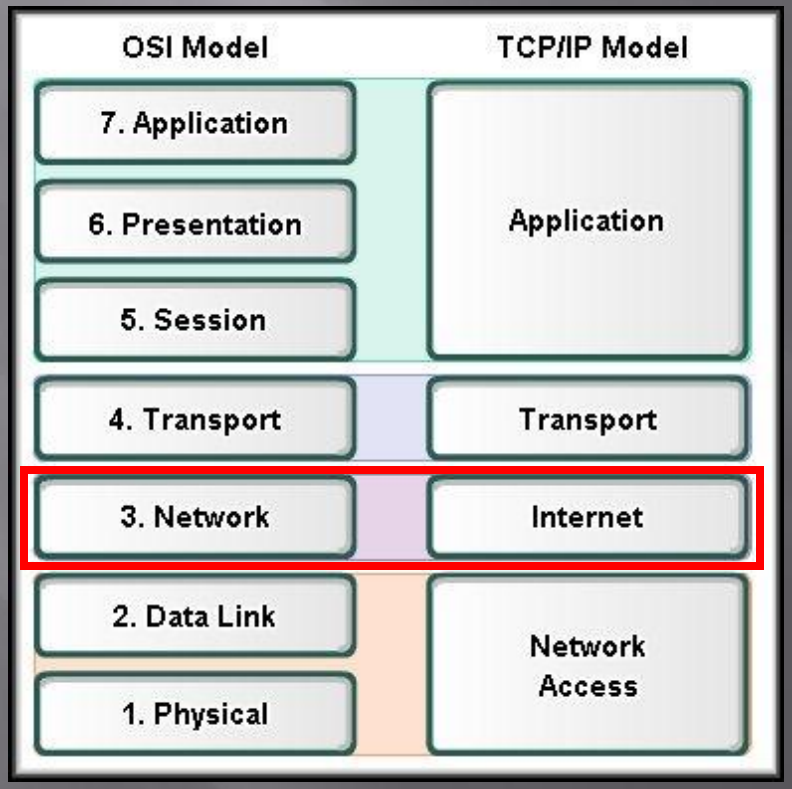
Static or Dynamic Addressing

Dynamic Address Assignment - DHCP



Addressing the Network: IPv4

Testing the Network Layer

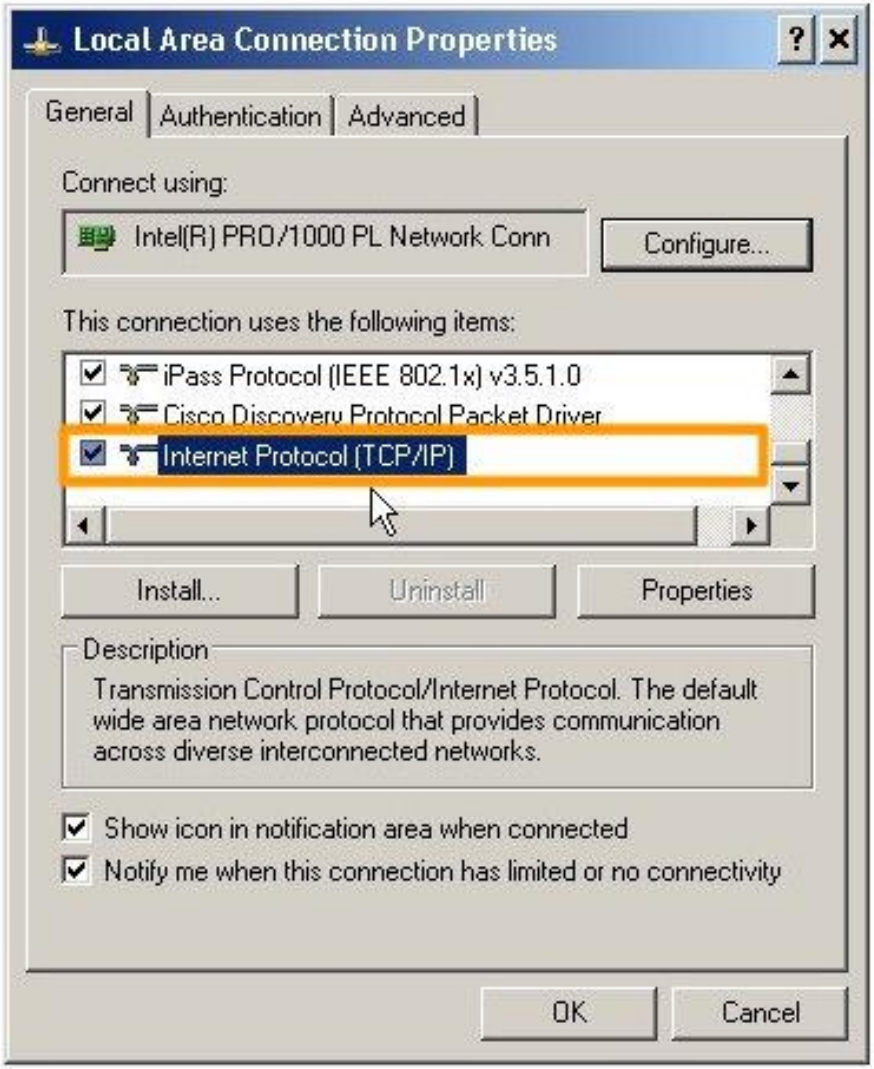


Testing the Network Layer

Testing Local TCP/IP Stack

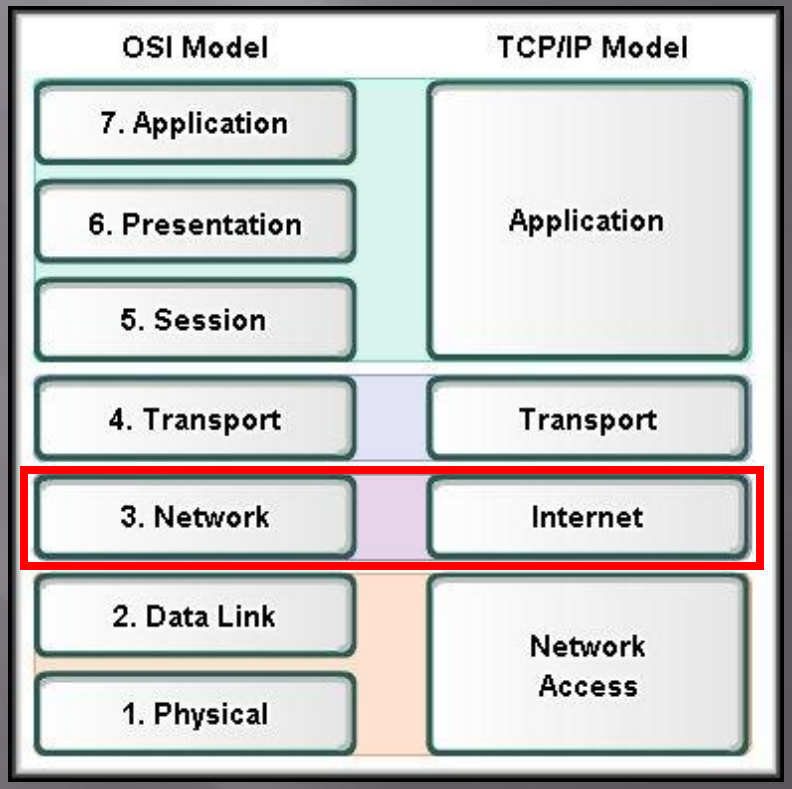
Pinging the local host confirms that TCP/IP is installed and working on the local host.

Pinging 127.0.0.1 causes a device to ping itself.



Assignment (1)

Testing the Network Layer



- Dynamic host configuration protocol (DHCP) :-

  It is gives a dynamic IP address + subnet mask + default gateway + DNS IP from DHCP server has a DHCP pool

- Domain Name Server (DNS) :-

  That Convert URL Address To IP Address.

- Network address translation (NAT) :-

  It is a software built in routers that convert private IP address to public IP address