

Lecture 04

Network Devices and Servers

Mr. Mubashir Ali

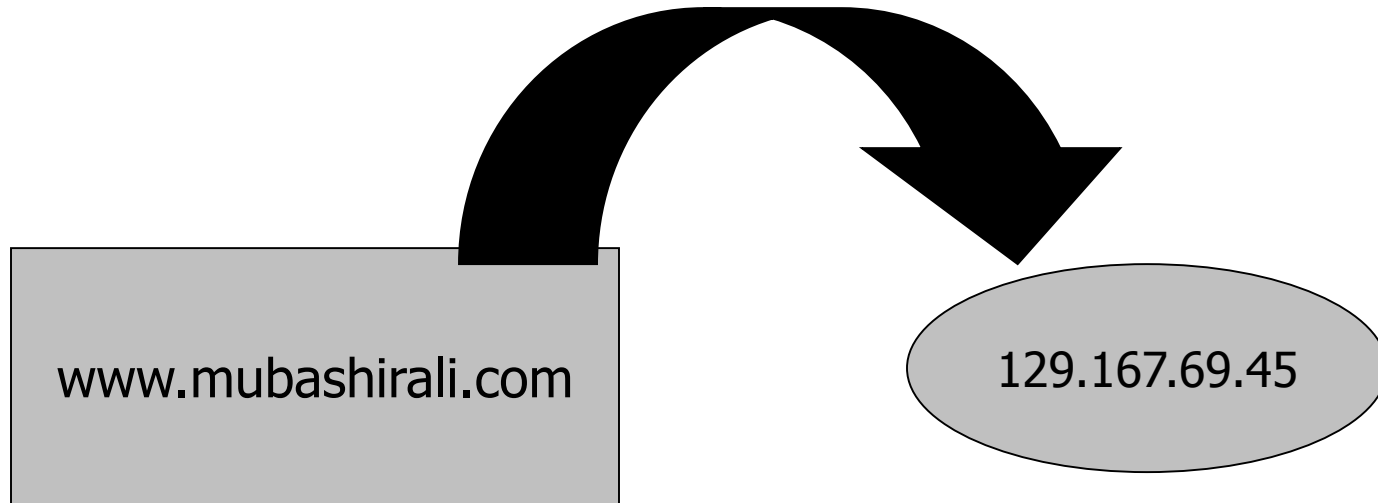
Lecturer (Dept. of Computer Science)

dr.mubashirali1@gmail.com

Outline

- 1. Domain Name Servers**
- 2. MAC Address**
- 3. Network Topology**
- 4. Network Devices**

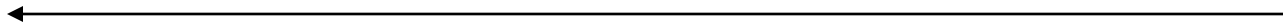
1. Domain Name Servers



How do we get the IP address?

- Domain name servers translate the domain name to IP address.

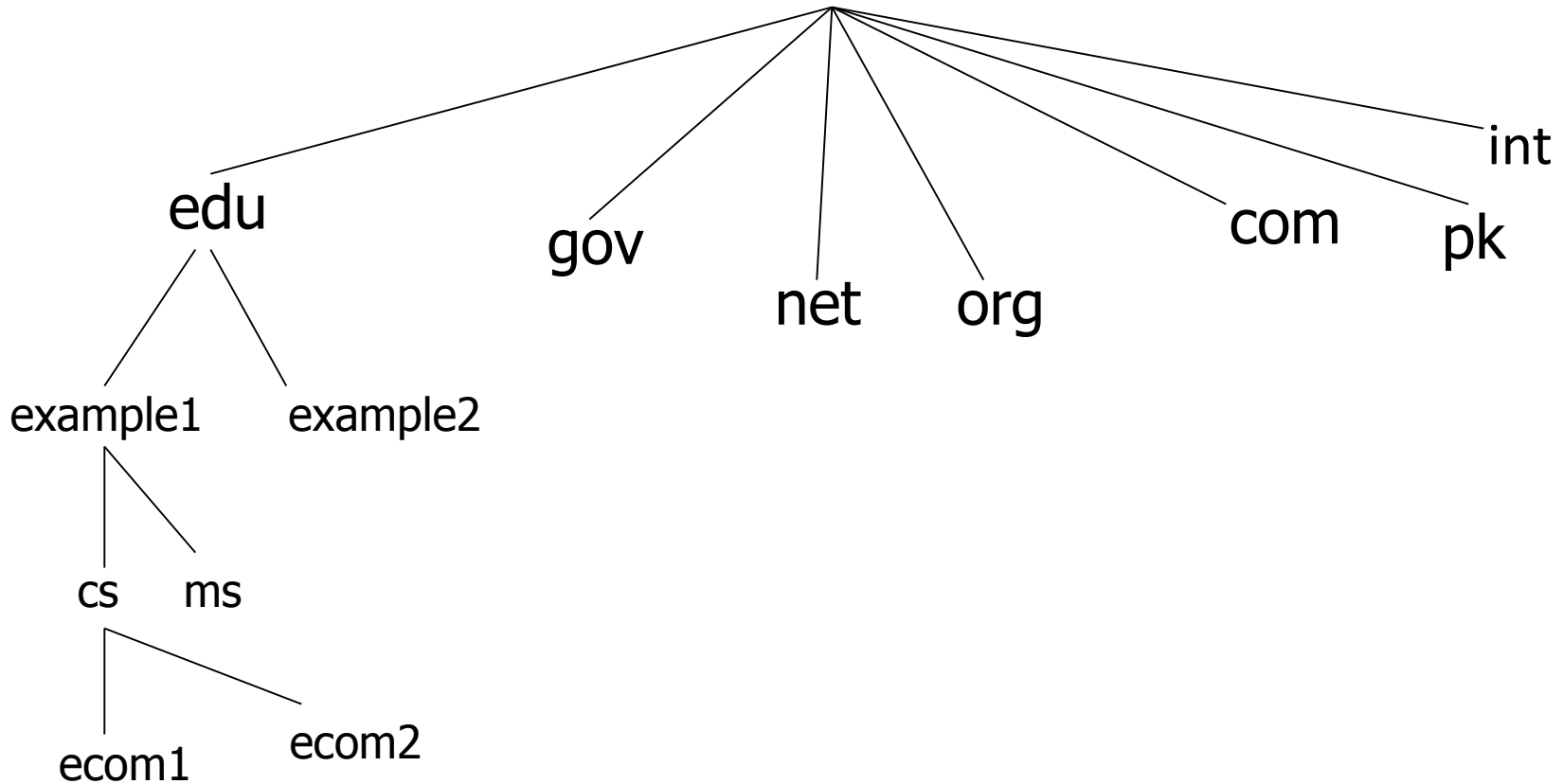
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cpanel.login.Mubashirali.com

**Web
server** **Sub
Domain** **Name** **TLD**

Domain Hierarchy



2. Mac Address

- Consists of 12 hexadecimal characters
- 090017A9B2EF
- 09:00:17:A9:B2:EF
- 09-00-17-A9-B2-EF
- A pattern of 48 bits is available
- 2^{48} unique MAC addresses possible
- Institute of Electrical and Electronic Engineers (IEEE) administers the allocation of MAC addresses

3. Network Topologies

- Bus Topology
- Ring Topology
- Star Topology
- Mesh Topology
- Ring Topology

4. Network Devices

- HUB
- Switch
- Bridge
- Routers

Summary

- ✓ **Domain Name Servers**
- ✓ **MAC Address**
- ✓ **Network Topology**
- ✓ **Network Devices**