Clients and Servers

The prevalent model for structuring distributed computation is the client/server paradigm

➡ A **server** is a program (or collection of programs) that provide a service (file server, name service, etc.)

- The server may exist on one or more nodes
- Often the node is called the server, too, which is confusing

➡ A **client** is a program that uses the service

- A client first binds to the server (locates it and establishes a connection to it)
- A client then sends requests, with data, to perform actions, and the servers sends responses, also with data

Naming
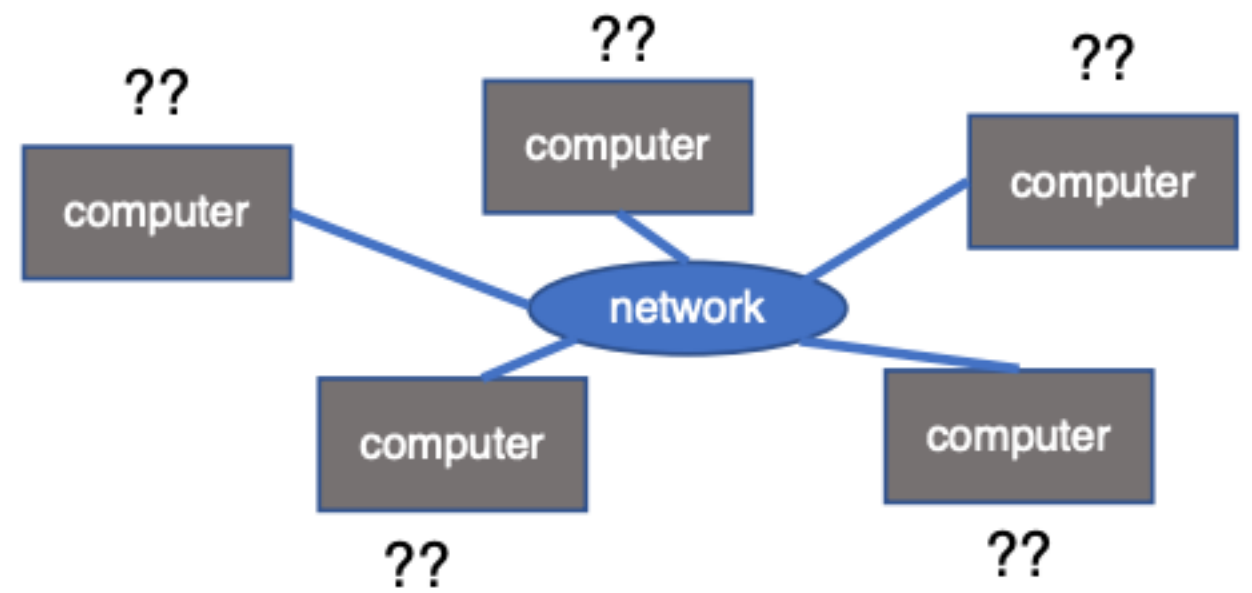
How to refer to a node in a distributed system?
Essentially naming systems in network

- Address processes/ports within system (host, id) pair

- Physical network address (Ethernet address)

- Network address (Internet IP address)

- Domain Name Service (DNS) provides resolution of canonical names to network address