

Bioinformatics practice



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Computer networks

- What is a server?
- What is a client computer? What is a thin client?
- What is a remote desktop control?
- How can we run softwares on our and an other distant computer?

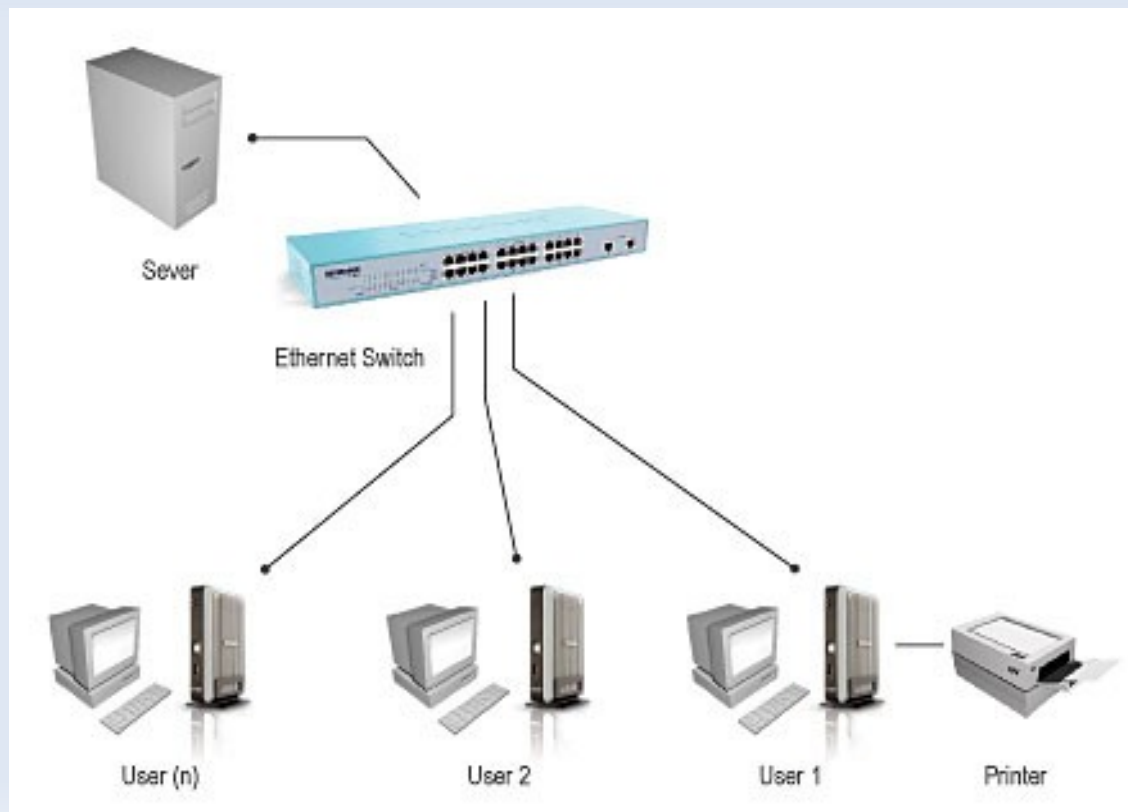
Server

- A **server computer** is a computer, or series of computers, that link other computers or electronic devices together.
- They often provide essential services across a network, either to private users inside a large organization or to public users via the internet.
- For example, when you enter a query in a search engine, the query is sent from your computer over the internet to the servers that store all the relevant web pages. The results are sent back by the server to your computer.
- Many servers have dedicated functionality such as web servers, print servers, and database servers.



Client computers

- A client is an application or system that accesses a remote service on another computer system, known as a server, by way of a network.
- Using Internet sockets a user may connect to a service operating on a possibly remote system through the Internet protocol suite. Web browsers are clients that connect to web servers and retrieve web pages for display



The types of clients

- **A fat client:**
 - or thick client is a computer in client - server architecture or networks which typically provide rich functionality *independent* of the central server.
 - A fat client still requires at least periodic connection to a network or central server, but is often characterised by the ability to perform many functions without that connection.
- **A thin client:**
 - (sometimes also called a lean or slim client) is a computer or a computer program which *depends heavily* on its server computer to fulfill its traditional computational roles.
 - The most common type of modern thin client is a low-end computer terminal which concentrates solely on providing a graphical user interface to the end-user. The remaining functionality, in particular the operating system, is provided by the server.

Bioinformatic servers and collections

- EMBnet: European Molecular Biology Network
<http://www.embnet.org/>



- EBI: European Bioinformatics Institute
<http://www.ebi.ac.uk/>



- NCBI: National Center for Biotechnology Information
<http://www.ncbi.nlm.nih.gov/>

