

Introduction

- Client-Server computing is a computing model in which client and server computers communicate with each other over a network.
- In Client-Server computing, a server takes requests from client computers and shares its resources, applications and/or data with one or more client computers on the network, and a client is a computing device that initiates contact with a server in order to make use of a shareable resource.

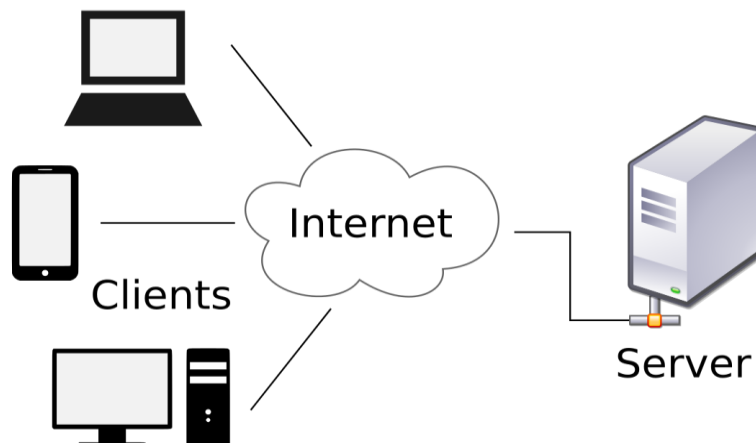


Figure: Client-Server Computing

Client's Responsibilities

- Handle the user interface.
- Translate the user's request into the desired protocol.
- Send the request to the server.
- Wait for the server's response.
- Translate the response into "human-readable" results.
- Present the results to the user.

Server's Responsibilities

- Listen for a client's query.
- Process that query.
- Return the results back to the client.

Client-Server Interaction

- The user runs client software to create a query.
- The client connects to the server.
- The client sends the query to the server.
- The server analyzes the query.
- The server computes the results of the query.
- The server sends the results to the client.
- The client presents the results to the user.
- Repeat as necessary.

Advantages of Client-Server Computing

- Improved Data Sharing
- Integration of Services
- Shared Resources amongst Different Platforms
- Inter-Operation of Data
- Data Processing capability despite the location
- Easy maintenance
- Security

Disadvantages of Client-Server Computing

- Overloaded servers
- Impact of centralized architecture

Questions asked in semester paper

Question: Explain client-server architecture with diagram?

[2017-2018][2015-2016]

Question: Who initiates client/server interaction: the client or the server? How is this done?

Which of the following are clients and which are servers?

1. A web browser
2. A web site where you can access a general search engine
3. A website that tells you the correct time
4. A program that displays news headlines on your desktop
5. A web site that tells you the speed of your internet connection
6. A program that tracks stock prices and displays a customized ticker for you.

[2005-2006]