

5 - Client-Server Anatomy

Student version

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Question 1

Proxies can support replication transparency by invoking each replica. Can (the server side of) an application be subject to a replicated calls?

Question 2

Constructing a concurrent server by spawning a process has some advantages and disadvantages compared to multithreaded servers. Mention a few.

Question 3

Sketch the design of a multithreaded server that supports multiple protocols using sockets as its transport-level interface to the underlying operating system.

Question 4

Is a server that maintains a TCP/IP connection to a client stateful or stateless?

Question 5

Imagine a Web server that maintains a table in which client IP addresses are mapped to the most recently accessed Web pages. When a client connects to the server, the server looks up the client in its table, and if found, returns the registered page. Is this server stateful or stateless?

Question 6

In order to implement a distributed server we can make use of mobility support for IP version 6 (MIPv6). Discuss the use of route optimisation.