

Chapter 30

An Example Socket Application

An Example Service

- Purpose
 - Count the number of times it is invoked
 - Return printable ASCII message
- Connection-oriented protocol
- Sequential execution (not concurrent)

An Example Client

- Open TCP connection to server
- Iterate until end-of-file
 - Receive text
 - Print characters received
- Close connection
- Exit

Example Server

- Create socket and put in passive mode
- Iterate forever
 - Accept next connection, get new socket
 - Increment count and send text message
 - Close socket for connection
- Note:
 - The main socket remains open
 - Server never exists

Socket Calls in Client and Server

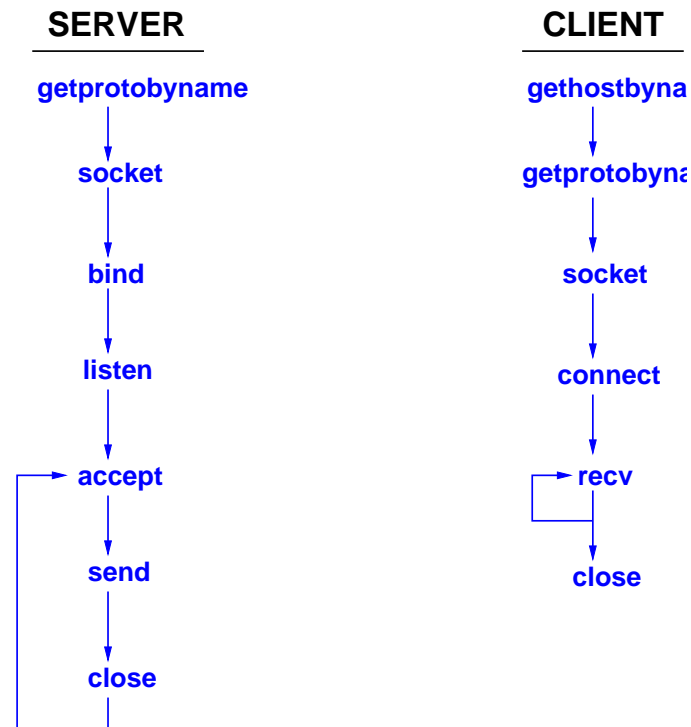


Figure 1: Calls by Client and Server

- Client closes socket after use
- Server never closes original socket