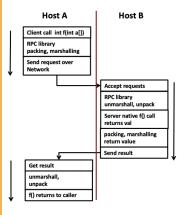# remote processes, over network

Sockets: two-way communication between two processes

↳ these can be on different systems

↳ local or over network   ↳ protocols

remote procedure calls (RPC):

Host A | Host B

Client call int f(int a[])
RPC library packing, marshalling
Send request over Network

Accept requests
RPC library unmarshall, unpack
Server native f() call returns val
packing, marshalling return value
Send result

Get result
unmarshall, unpack
f() returns to caller

• like function call

the procedures can be on different
machine, even can be written in diffent languages

TCP Server
socket()
well-known port
bind()
listen()
accept()
blocks until connection from client

TCP Client
socket()
connect()
connection establishment (TCP three-way handshake)
write()   data (request)   read()
process request
read()   data (reply)   write()
close()   end-of-file notification   read()
close()