

15-441

Network Programming

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David A. Maltz

Slides based on work by

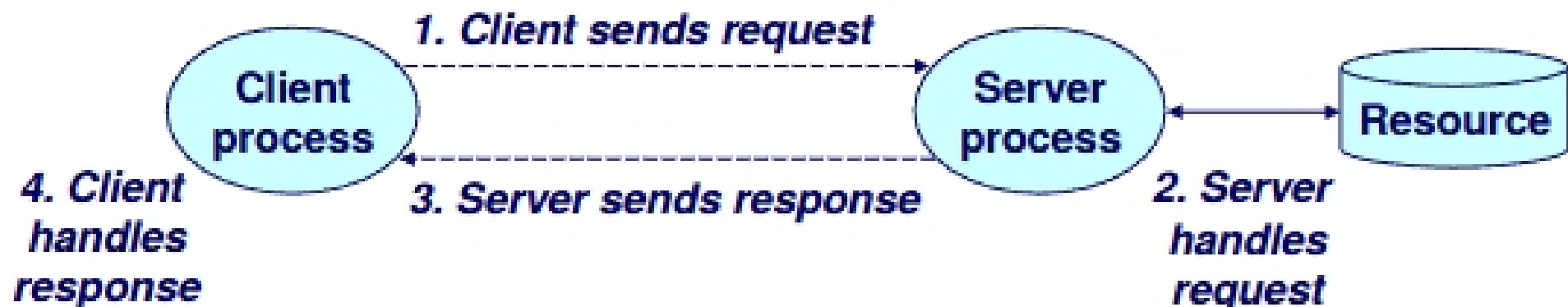
- Randy Bryant and the 15-213 crew
- Geoff Langdale

Topics

- Programmer's view of the Internet
- Sockets interface
- Writing clients and servers
- Concurrency with I/O multiplexing
- Debugging With GDB
- Version Control With RCS

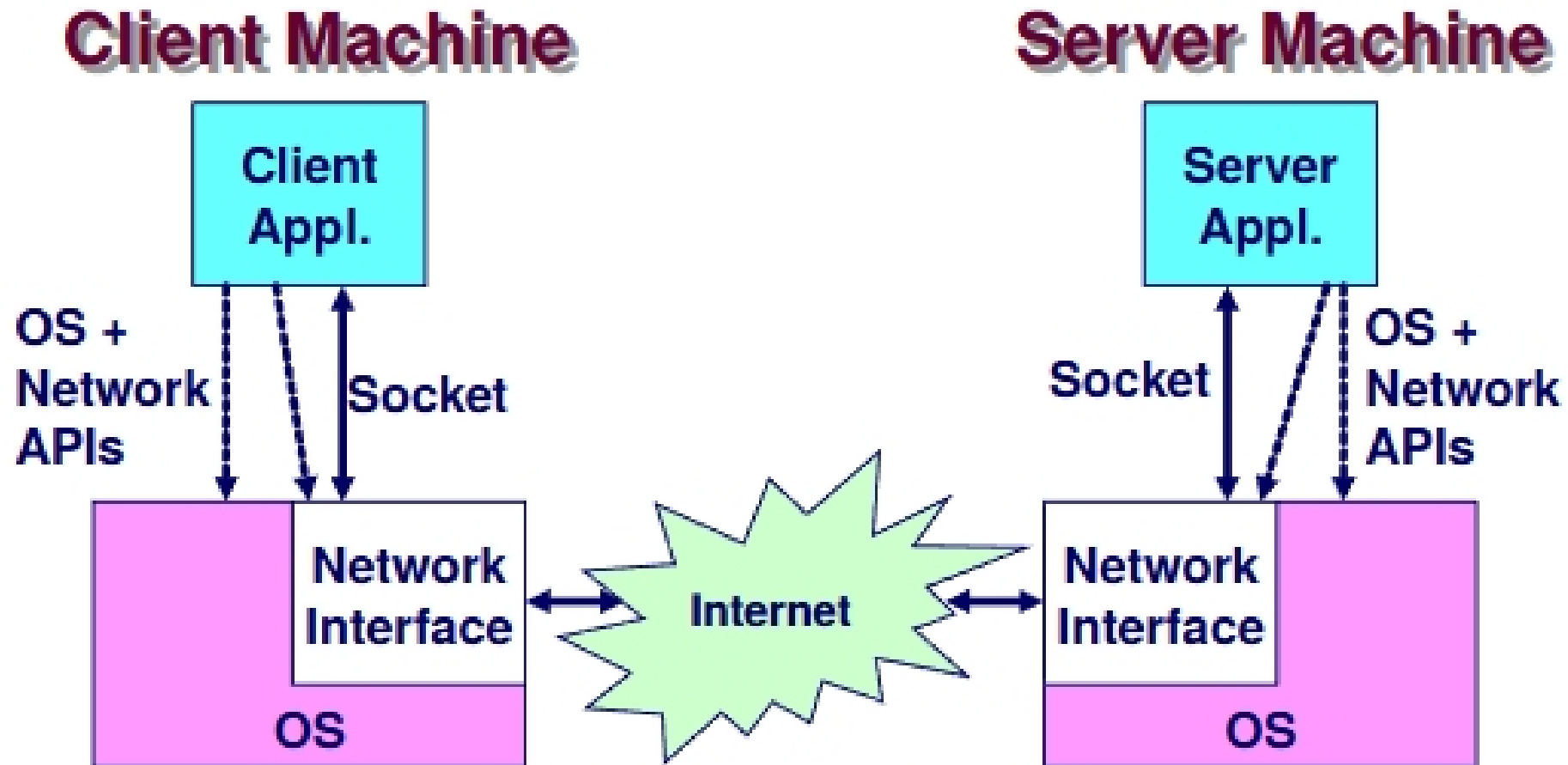
A Client-Server Exchange

- A *server* process and one or more *client* processes
- Server manages some *resource*.
- Server provides *service* by manipulating resource for clients.



Note: clients and servers are processes running on hosts (can be the same or different hosts).

Network Applications



Access to Network via Program Interface

- Sockets make network I/O look like files
- Call system functions to control and communicate
- Network code handles issues of routing, segmentation.