

Topics: Communication Choices

Approach: Problems, Tools, Solutions

Today's New Ideas: select, named pipes, shared memory, semaphores

Outline

IPC So Far

We have seen several methods for one process to communicate with another process. We have seen files, pipes, sockets, and signals. How do you choose which method to use?

Theme for Today: Multiplicity in Communication

Reading from multiple inputs
Multiple methods to transfer data
Multiple methods to lock data
Printing multiple files on multiple printers

I. Reading from Multiple Inputs: the talk command

What talk does
How talk works: the select system call
Design choices for writing talk

II. Comparing IPC Methods

Disk Files
Shared Memory
Named Pipes

III. Techniques for Locking Data

Read locks and write locks
File locks with fcntl
Locks with semaphores

IV. Making Choices

Handling multiplicity in printing