

What happens when a process forks?

The child gets a copy of the stack & program, and there are two processes running. You differentiate the child from the parent by fork's ending status. If zero, you're in the child. If not, you're in the parent and the ending status is the PID of the child.

- A process calling `fork()` spawns a child process.
- The child is almost an identical clone of the parent:
- Program Text (segment `.text`)
- Stack (`ss`)
- PCB (eg. registers)
- Data (segment `.data`)

The `fork()` is one of the those system calls, which is called once, but returns twice!

- After `fork()` both the parent and the child are executing the same program.
- `pid < 0`: the creation of a child process was unsuccessful.
- `pid == 0`: to the newly created child process.
- `pid > 0`: the process ID of the child process, to the parent.

