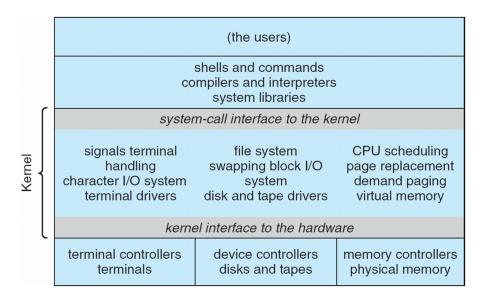
Monolithic Kernel Design



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Layered OS Design

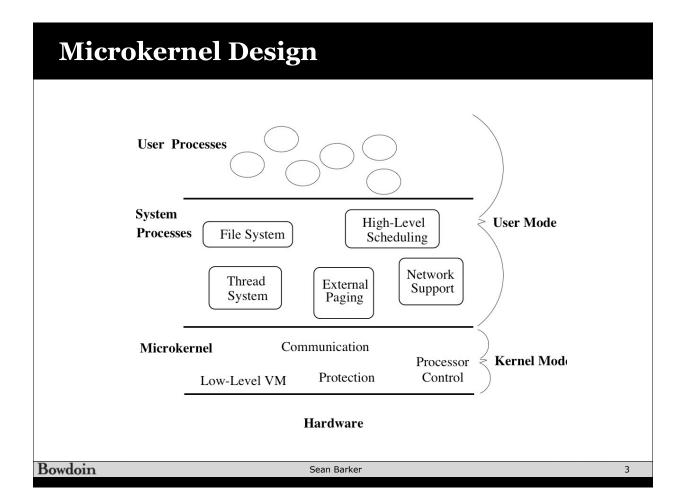
Device drivers

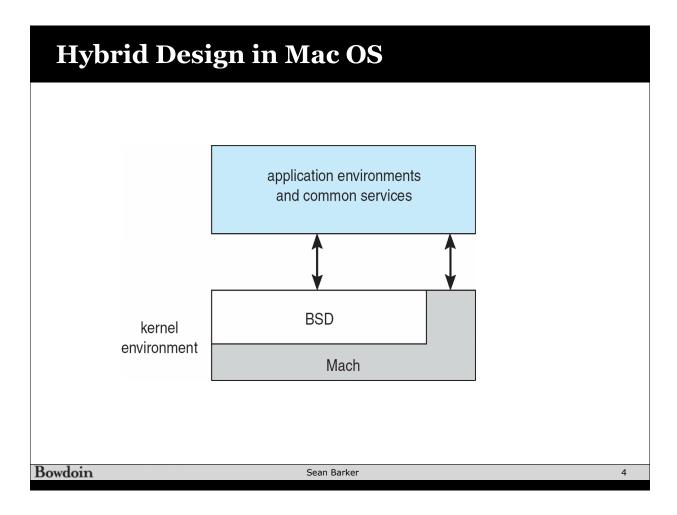
Virtual memory

I/O channel

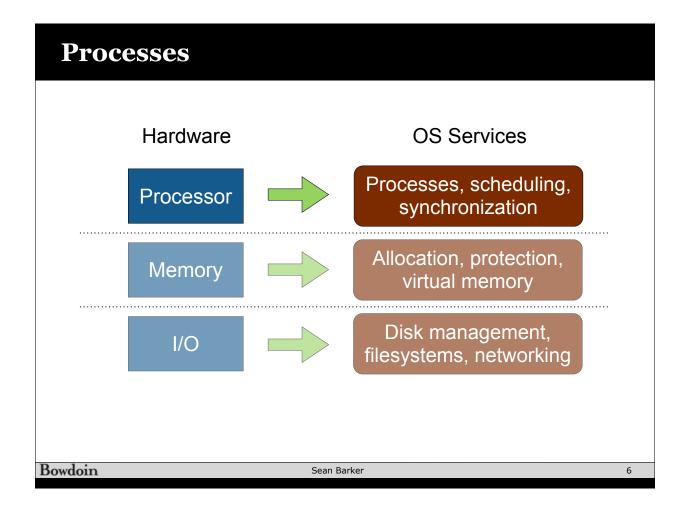
CPU scheduler

Hardware

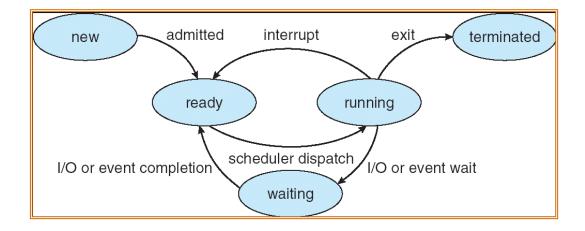




Modular Design scheduling classes device and file systems bus drivers core Solaris loadable kernel miscellaneous system calls modules STREAMS executable modules formats Bowdoin Sean Barker

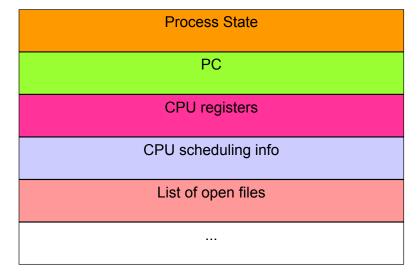


Process Execution States



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Process Control Block (PCB)

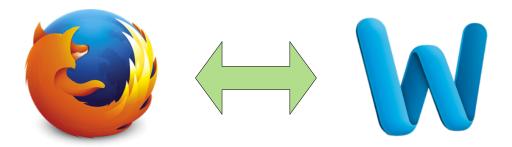


Ready Queue PCB X PCB L PCB A head ptr tail ptr Wait Queue PCB K PCB H head ptr tail ptr

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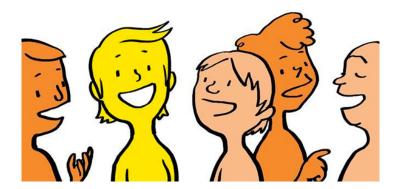
Context Switching

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Process Communication



Summary: Processes

- Execution state of a program
- Lifecycle states
- OS representation
- Creation
- Communication