

Introduction

1. ACEFH

OS structures

- What is the purpose of system calls?
- What is the main advantages of the layered approach to system design?
- What are the advantages and disadvantages of the microkernel approach?

OS structures

1. 允许用户级进程请求操作系统服务

2. 系统更容易调试和修改，因为更改只影响系统的有限部分，而不影响操作系统的所有部分。

3. 优点：添加新服务不需要修改内核

它更安全，因为在用户模式下比在内核模式下完成更多操作
更简单的内核设计和功能隔离带来更可靠的操作系统

缺点：

与进程间通信相关的开销以及频繁使用操作系统的消息传递功

能以使用户进程和系统服务能够相互交互，会使内核性能受损。

Process Management

- What are the advantages of multiprogramming?
- In operating system, each process has its own _____
 - open files
 - pending alarms, signals, and signal handlers
 - address space and global variables
 - all of the mentioned
- The portion of the process scheduler in an operating system that dispatches processes is concerned with _____
 - assigning ready processes to ready queue
 - assigning running processes to blocked queue → 不由负责
 - assigning ready processes to CPU
 - all of the mentioned

1. ① 极高的 CPU 利用率

② 提高系统的吞吐量

③ 优化资源利用率

④ 为多用户和时间共享系统奠定基础

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