

Introduction

1. ACEFH

OS structures

1. What is the purpose of system calls?
2. What are the main advantages of the layered approach to system design?
3. 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通常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

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

2. d

3. c