

Exokernel: An Operating System Architecture for Application-level Resource Management

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1. What is the overriding goal of exokernel? How is this different than what previous extensible systems did (Nucleus, Mach, HYDRA)? How is this different from a VVM?
2. What are exokernel's design principles?
3. Where does policy belong? How does exokernel handle conflicts/competing applications?
4. What is the purpose of a **secure binding**? Why can secure bindings achieve good performance? How can secure bindings be used to multiplex physical memory? To multiplex the network?
5. What is an Application-Specific Safe Handler (ASH) and why is it useful?
6. Why is resource revocation **visible** to applications using an exokernel?
7. Why is an **abort protocol** needed?
8. How did the authors demonstrate the flexibility of the exokernel architecture?
9. How can various resources be "multiplexed" without policy decisions?
10. Conclusions?