

Puzzle for January 25, 2006

The UNIX operating system (and most computer systems) have an all-powerful user (*root* or *operator* or *wheel*).

1. Why does such a user exist?
2. Dennis Ritchie called the existence of this user both a theoretical and practical flaw. Why?
3. If you were designing an operating system with security being a key goal, could you avoid creating such a user? If so how? If not, how would you implement the functionality of the *root* user?