

# System Administration for Beginners

## Week 8 Homework

April 13, 2009

Please turn in your homework at the beginning of class, with the assignment title, your name, `inst` login, and the answers (if multiple choice, just the letter is fine).

1. Support for quotas is supported out of the box on Debian.
  - (a) True
  - (b) False
2. What file needs to be modified to set up quotas?
3. What's the difference between a hard limit and soft limit? What happens (or doesn't happen) when you exceed the soft limit and what does the grace period have to do with it? What happens when you exceed the hard limit?
4. What is an `inode`? Why would it be useful (or not useful) to limit how many `inodes` a user has?
5. How do you modify a user's quota? What is the format for a user's quota?
6. SSH into the OCF and check your quota. Explain the output you receive (e.g., soft/hard limits, quotas on different filesystems).
7. In addition to disk quotas, there are various types of other quotas. Name a few and how you would implement them (e.g., what software packages implement them, or how to theoretically implement them).
8. EXTRA: Linux-VServer doesn't yet have support for `quotas` (i.e., although you can implement quotas on the host system, you can't set up quotas on the guest VMs). Why is this the case? What server virtualization platform has out of the box support for implementing quotas?