The Long Road to Red Hat Certified Engineer

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In 1999 I purchased my first PC from a local trade show where small vendors built the PC according to a printed spec sheet where the consumer would check off components that would comprise the final product. It reminded me a lot of ordering sushi.

My friend Ken Sugino, a computational neuroscientist student at Brandeis University, encouraged me to install Linux on it. I had never heard very much of Linux back then, but since Ken and I ordered identical PCs, both lacking an operating system, he recommended we install Red Hat Linux 5. Thus began my fondness for the fine grained control over an operating system and its applications that I never before witnessed on any Windows 98 or Mac OS 7, 8, or 9 system.

I recall that the state of Linux was still pretty raw back then and out of the box support for new hardware was often lacking. For example, when Ken finished examining the motherboard spec sheet and tuned all the jumper switches to provide a custom hardware setup, we moved on to searching the web for a solution to overcome a problem where X would not start -- X is the windowing or graphical interface for Linux -- and soon we found an esoteric hack for the video card chipset settings that did the trick. Much of my early experience with Linux was like that. It was the Wild West of operating systems.

Several years have passed and during that time I've performed hundreds of Linux installations on tens of machines. My Linux skills were initially derived from hours and hours of tinkering like this, but the major jumps in my knowledge level came from taking Red Hat Linux courses from Red Hat itself. I've completed the basic system administration and networking classes often separated by several years between them. Starting with RH253 Networking and Security for Red Hat 7, then 2 years later going back to RH133 System Administration for Red Hat 9, and in 2005 the RH300 Rapid Track to RHCE course for RHEL4, which is whirlwind survey of the material covered in the earlier classes.

The RHCE is was rated at the Hottest Certification for 2006, although it has been in the top 10 for many years now. I recently overheard an RHCE instructor stating that the test is designed to cull the herd of Linux SysAdmin wannabes such that the RHCE test averages about a 30% success rate, and that if the test scores creep up towards the 40% success rate that Red Hat then redesigns the test to push the bar higher again. Last fall I had my first experience with the RHCE exam, and I walked out of the exam shattered, knowing that I had not passed well before receiving my scores. Last month, I paid out of pocket for the RHCE class again, and although I did much better that time, still I did not pass the six hour exam.

While the material was still fresh in my mind, I spent a month working on my weakest Linux skills to ramp up for another repeat of the exam in May. In fact the week before this exam I set up a small Linux network at home so that I could practice the System Administration and Networking skills over and over. FTP, DNS, Mail Servers, Pop Servers, Web Servers,

Proxy Servers, iptables firewall rules, RAID and LVM, automounting, NIS, LDAP, NFS, Samba, and more... these are the core components of the exam which overlay basic **prerequisites** such as shell scripting, controlling services, system initialization, and booting. To say that the course material and the exam are comprehensive is an understatement.

Feeling very prepared and wanting to take the exam again as soon as possible, I booked a flight and an exam at my own expense, since this had become such a strong personal goal. Last Friday I caught a 6:30 AM flight from Boston to Baltimore. With the help of a hell-bent taxi driver I made it from BWI airport to the test facility in Columbia, MD at exactly 9:00 AM, the start of the test. As described on the **RH300 Exam detail page**, the first half of the test is troubleshooting a live system, and the second half is the installation and configuration of a production quality Enterprise Linux box. This test is not a short multiple choice exam. You're in it for the long haul of almost six tortuous hours.

Similar to my last exam, I was the first one finished this half, and with a faster time, too. During lunch, while waiting for the instructor to configure the classroom for the second half of the exam, the examinees waited together in the break room, making nervous chatter and keeping a close eye on the clock, wishing the second half would start already. There's no point in trying to study much more at this point. If you didn't know it by then, you weren't going to learn it during lunch. For the second half of the exam I was the only one to finish early, and all the other examinees used the full time alloted. I went back and carefully checked the requirements several times before feeling satisfied that I correctly completed as much as I could.

Back at the airport, I waited five hours before my 10:00 PM flight, but the time went well because I felt very secure in my test performance this time. Finally at home around midnight, I logged on to check my email to see what happened during the day, and to my surprise at the top of my inbox was a message titled "Certification Lab Exam results" with a paperclipped attachment. With a last burst of adrenaline, I raced through the message text to see the words "RHCE Certification: PASS". And there it was, a glowing score of 100% on the first half and 94% on the second. As tired as I was from such a long day, I could hardly sleep after reading this fantastic news.

For me this is a true academic achievement built on years of learning, and I'm very proud to **claim the rank** of Red Hat Certified Engineer.