System Administration And Me Essay, Research Paper

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What is system administration? System administration is basically adding and configuring new workstations, setting up user accounts, installing system-wide software, performing procedures to prevent the spread of viruses, and allocating mass storage type. While there are a lot more things that make up the job description of most system administrators, these are the ones that I’ll be touching on in this report. But before getting into what that stuff means, let’s talk a little bit about what’s required for a system administration position.

Many things are needed. First and foremost, you should have some knowledge in hardware. If you know what the difference between a scanner and a monitor, that’s a good start. But there is a lot more than that. Some good things to learn are the difference between a server and a workstation, routers, hubs, cables, the difference between a NIC (Network Interface Card) and a modem, and firewalls. There are many more pieces of hardware that make up a computer network. Also, knowing how to troubleshoot, replace, or even fix hardware will come in quite handy.

Once you have a good grasp on hardware, then you should look into software. The main software of a network is the OS (Operating System) that the network is based on. Some of the main operating systems that run networks are Windows NT, Unix, and Linux. These are the main programs that all the other programs run off of. It’s not very likely that one can completely master all, or even one of these operating systems. There is a lot of knowledge pent-up in operating systems, and to be considered a master in one of them would take a while. But luckily, you don’t have to know everything about them. A good, solid foundation in an operating system is usually enough. If you know all of the commands, or know where to find them, you should be fine.

When you get a firm grasp on operating systems, then you should learn some other software. Things such as Perl, Oracle, and Apache are good to know. Perl is a programming language that can be used to create many, many things. Among them being web sites. The system administrator is oftentimes called upon to also double as webmaster for the company. Therefore, knowing how to create and maintain a web page is very helpful. Oracle is a database program. It would come in handy for keeping track of employees?where they go while on the internet, their phone number, salary, and a number of other things. Apache is a server software. It got its name from being a spin-off of a previous software that was patched (a patchy). It hosts more than 50% of all the sites in the world. As before, there is almost an infinite amount of knowledge of software that could all be helpful, but knowing everything is almost impossible. So if you don’t know it all, don’t worry. You can always take classes at LSSU!!

Ok. Now that we have the basics out of the way, let’s get back to some of the job descriptions.

? Adding and Configuring New Workstations

When the network gets setup, it’s basically a bunch of computers (workstations) connected to a central computer (server) using NICs and cables. Making sure that valid computer and workstation names is a major part in this. Also, using the correct protocols, adapter, and client are also important.

There is much more involved, such as file sharing, but due to space conservation, that is a good start.

? Setting Up User Accounts

Once you get the network operating (all of the workstations can communicate and share with the server) then you have to set up users to have access to whatever you want them to. User names and passwords must be chosen, as well as a list of who can have access to what. Things such as email addresses and web space could be allocated by giving users specific amounts of space on the server.

? Installing System-Wide Software

Some software would be better run off of the server, as opposed to installed and run off of each workstation. Others would be better run off of each workstation. Depending on the size of the network, software such as MS Word would probably be better run off each system, while others such as Vantive would be better run off of the server.

? Performing Procedures to Prevent the Spread of Viruses

Viruses and security are usually major factors in network management. Regularly updating the ant virus software is a huge responsibility. Not only does anti virus software detect, clean, and prevent viruses, many of them can also detect “back door” software, such as Netbus, Back Orifice, or SubSeven. An employee (not management) who has access to payroll or scheduling could be a bad thing.

? Allocating Mass Storage Space

Back we go to users having web space or email addresses. Having large quantities of hard drive space on the server can do this. Another way is using RAID devices. Raid devices use 2 or more drives in combination for fault tolerance and performance. The more space you have, the more space you may want to let users have. This space can be specified whenever you add a user or at will by?you guessed it?.you!

Well, that’s a brief description of what it takes to be a system administrator. Keep in mind that if you should choose to pursue this career, I’m only giving the basics. There is a lot of work, time, and knowledge involved. Not to mention the numerous people who are trying to get the same job that you are. So once you get those basics down, don’t stop. Keep learning all that you can and maybe, someday, you could be a system administrator.

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