

Computer training course for amateur radio users

Background and experience

I graduated from Allentown Business School with a Specialized Diploma in LAN Technology my first position was with Centenary College in Hackettstown New Jersey. My responsibilities were to troubleshoot and repair over 400 computers for faculty and students. Maintain a records of what repairs and rebuilds I had done each day. I became very proficient in combating virus's and prevention I was approached by Access Office Electronics and took the position of Systems Engineer. My responsibilities were to repair both residential and commercial computers, setup and install windows servers. but my main function was to administrate more than 30 networks and servers. I continued to have a very high success rate of virus prevention and removal which earned me the title "King of the bug busters"

Computers are very susceptible to static charge and can do serious damage to the system. Never unplug the system from the outlet until you have fully discharged yourself against the chassis. To do this remove the cover and touch any part of the metal case to discharge the static. Newer computers still get power even though they are shut off. You must unplug the system to change any components but do not lose contact with the metal case. You can purchase grounding wrist wire for this as well and has a adapter to plug it into the ground of the wall outlet.

The first phase of the boot process starts with a 14 – 16 volt surge through the board this is then followed by the voltage regulator adjusting the voltages to 12 +/- and 5 +/-.

the next step is the POST = Power On Self Test. This is looking for the ram, CPU and video if found and functional you will get a single beep. If you hear multiple beeps its usually related to a ram issue or non functional video card.

Now the bios looks for a bootable medium and if none is found you will get system drive not found. If found you see the windows boot up screen. The needed files for the new versions of windows are boot.ini ntdelet and ntldr if any one of them is not found windows will not boot and you will get an error stating that one of them was not found this will require the recovery console to repair.

Basic network information

to communicate with other computers via the internet you computer is issued an ip address (internet protocol). Consisting of 4 blocks of 3 digits. If the internet has an ip of 10.0.1.2 subnet 255.255.255.0 and gateway 10.0.1.1 and ray's is 24.65.15.2 subnet 255.255.255.0 and gateway 24.65.15.1 how do we allow ray to communicate via the internet link?

A router is a hardware device designed to connect 2 networks of different schemes and allow them to communicate how this works is a routing list is created. The router knows that on the list that 10.0.0.1 is connected to the outside port and that 24.65.15.1 is the internal so with the routing table since ray is in the 24.x.x.x network it allows ray to access anything on the internet meaning any requests from the 24. network will pass and allow information to return to the 24. network but any requests coming from the 10. network will no pass through to the internal network. Those in echo link are experiencing this problem. The reason is that it requires certain ports to function properly which requires adding a port forward to the system running echo link. This is done via the internal web server in the router available to any home user. This process is more in depth with a commercial router. What you are doing is telling the router that information from port 2345 needs to send to rays computer and allows the software to

function properly. If you cannot config the router this is where the echo link proxy feature is used. It is a software router that accepts requests from the echo link server and forwards them on ports that are open to the internet like port 80 which is the HTTP port number and is allowed to pass through unless you forward this port to a web server.

Virus education

Most virus,s 90% are written by kids and college students to see if they can do it. 8% are written by disgruntled employees wanting to get back at their employer and end up being released onto the internet. The final 2% are written by hard core hackers looking to do damage most of DDOS attacks come from this small 2% if anyone remembers the blaster virus it was encoded to bring down Microsoft by using "Zombies" a zombie is a computer that has been infected and sends constant pings and strings of information to a specified server in the virus with such a large amount of hits the server goes down.

Virus prevention.

Its not necessary to do a complete reload when you get infected. These days most virus's are either spy ware or ad-ware. Spy ware files are usually key loggers which stores everything you type in a text file and then sent via an irc server to the encoder and then use this against you in many ways like id theft.

Ad-ware is a file that learns from what you search for if you are looking for shoes or other products the ad-ware learns this and you begin to get pop ups related to or close to what you have been looking for and these are generally Trojan horse files. Usually you get these from what you think is a legit shopping site and the site will say you need to click on ok to proceed doing this will infect your system.

There are programs to clean these out spy bot search and destroy , ad aware and others these must be kept current and run often.

Virus's can be removed either by your av software or you can research the virus you have on your system and most venders such as Symantec create cleaners specifically to remove a specific virus. Don't be duped into a friend of a friend says you need to do a full restore to get rid of the virus. I have only done 2 full reloads and it was rare cause the user did not have any av software running. Therefore before you decide to reload your system it can be successfully cleaned if you follow the instructions but if you feel you are unable to do so then ask a qualified person to either clean it for you or assist you if they can .keep your anti virus up to date and schedule it to update daily there are hundreds of new virus's released everyday. There are options in your software to do a daily scan schedule this during the night when your not on your system because it will slow down the system. I am available to assist anyone with any and all computer related issues and we can barter for ham radio equipment. You can purchase anti virus software such as norton 360, panda or mcafee. Avg , avast and there are others that are free for home usage. With a commercial version you get limited support from them then usually then becomes a pay by incident.

Basic system maintenance

The one thing that is very damaging to a computer is moisture and dust. The dirt line is usually between 1 and 2 feet above the floor. If possible do not place your tower on the carpet because the fans in the system will draw the dirt and dust into the system just as you walk past it. Make sure you vacuum the area around the computer often and at least once a month remove the cover and use a can of compressed air to clear out all the vents and ports. Also do not smoke around your pc the combination of dust and the by products of cigarette etc smoke will combine and create a very sticky hard to remove dirty mess. If you happen to spill a drink on your keyboard disconnect it and let it dry out. Also if you spill a drink on your laptop remove all power and allow the liquid to dry up for at least a day or so. Don't hesitate to contact me if you have done this I am here to help.

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