What's up everyone? Welcome to another episode of IT Made EZ where we take you from zero to proficient in information technology focused on a helpdesk position. I'm still your host, Ben "The Machine" Lewis, coming to you from EZMicro Solutions in Pennsylvania. In this video, we're going to talk about

Being an IT Professional

a. The first thing I want to tell you is "Practice makes proficient"
   i. School doesn't give you the real-world experience that you need to be good at an IT position.
      1. I came out of school with an associate degree, a 3.9 GPA, and 3 separate computer certifications. I started an *entry* level position here at EZMicro Solutions and *quickly* realized that…I was…pretty much worthless. There was *nothing* of value that I could offer my coworkers who had been working professionally in this industry for two or more years. I decided to just…become a sponge and absorb as much information as I could. I took good *notes* and was eventually able to contribute ideas to the team.
   ii. Surprisingly, even *Microsoft* doesn't always have a good grasp on how things work in the small or medium-sized business world, and sometimes even their view of the *corporate* world isn't accurate. Ultimately, a company will have its own standards and practices to follow, but I decided to create this video series to give you the basics of what's out there.
b. Another good motto is "*Consistency* increases *efficiency*"
   i. It's not about *memorizing* every possible solution. It's about how *quickly* you can *find* the solution either *online* or in your own personal documentation.
      1. If you run into a problem more than *once*, create your *own* notes.
         a. *Web* page articles are full of extra unnecessary information (not to mention annoying or distracting ads), but if you create a simple text file with a sentence or two, you will be able to apply the fix much faster if the problem appears on another computer later on. Also, websites can *change*, and a page may get taken down that explained something very clearly and simply
         b. I've taken so many notes over the years that I use a search utility called "*Everything*" that *instantly* brings up all my files even as I'm typing the search terms.
      2. In IT, there are *fortunately* more problems than there are solutions. At first, that *sounds* like a bad thing, but here's an example: rebooting a computer can fix all kinds of problems with just that one *step*. Uninstalling and *reinstalling* software is another example.
c. The next tip is to familiarize yourself with all the places software *settings* can be stored:
   i. Knowing where software stores its settings is great for troubleshooting and configuring applications. There are a few places settings could *be* depending on whether *every* user is required to configure the software or if only the *first*

person has to set it up. Once you know everywhere settings could be *stored*, you'll be able to fix software that you've never even heard of.

ii. If software has *user*-specific settings, they could be located in one or more of the following locations:

1. The Registry – HKEY_CURRENT_USER\SOFTWARE is a common place to find the manufacturer's *name* such as Microsoft or Adobe

2. Next up, the Appdata\Local and Appdata\Roaming folders – Appdata is a hidden folder, so you'll need to browse there directly or type %localappdata% for the Appdata *Local* folder or %appdata% for Appdata Roaming in any Windows Explorer address bar to view the contents. You'll either see the *manufacturer* or application's name.

3. The Documents folder is *another* possible settings location. A lot of software creates a *folder* in your default Documents location which *could* contain data and/or custom settings such as an ini file which could be opened using Notepad

4. You could *also* run into software with a *cloud*-connected account. Software that requires an internet connection *could* store your custom settings in an online account which often *automates* the process of setting up the application on a new com*puter*. Even if there *are* settings that get cached locally, the cloud settings would most likely overwrite them next time it checks in with the server.

5. Sometimes software settings will become corrupted to the point where your *only* option is to create a fresh Windows profile like we mentioned in our first video. I realized recently that I didn't explain how to do that. You have to open the registry and navigate to HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\ProfileList. Expand *that* key and you will see a bunch of *sub*keys that start with S-1-5. Click on each one until you see the ProfileImagePath that matches the *username* in question. Export the key as a backup and then delete it from the registry. You can also rename the *profile* folder in C:\users to avoid confusion during the rebuild process. Otherwise, Windows will add the domain name or a set of numbers to the folder name of the fresh profile. If Windows *prevents* you from renaming the folder, you'll have to reboot the computer *first* and then log in as a different *user* to do the rename.

6. Another topic I probably could have brought up earlier is Google Chrome as it's the most popular web browser out there. Most people have a Gmail account these days and I *highly* recommend enabling the *Sync* feature. This has the ability to store *all* of your bookmarks and passwords in your Google account. If you choose to store *passwords* in your account, turning on two-factor authentication is advisable. Two-factor authentication or 2FA makes it *impossible* to log into your account using *only* your password. It would also require the use of a one-time code that Google sends to your cell phone for example. The

reason I recommend Google Chrome's sync feature is primarily due to *passwords*. It is *not* usually possible to pull Chrome passwords off of a faulty hard drive if the computer won't boot into Windows. There *is* a Password *Export* feature *inside* Chrome, but it will *only* work from the original account that stored them. Otherwise, you can only restore bookmarks and history from a hard drive. To do so, copy all loose files from %localappdata%\Google\Chrome\User Data\Default and copy them to a new computer once you have launched Chrome on that new machine at least one time to build the appropriate folders.

    a. It's *also* possible to *redirect* Chrome data including passwords to a network location using Group Policy, but you will have to download a custom ADMX template first

    b. One other thing worth noting is the frequently exploited feature of *notifications*. A lot of websites will pop-up a little box that asks you if you want to allow notifications for that particular *website*. You should *always* click *Block* as clicking Allow will overload your screen with ads from that site even when you're not on that page.

    c. You should *also* be cautious of what Chrome *Extensions* you're installing as not all of them are trustworthy and *also* have the ability to spam your computer.

    d. One more cool trick with Chrome or literally *any* web browser is adding a URL to the end of the exe path in the shortcut *properties* window. This will *bypass home* page settings and go directly to the address specified. It's helpful if a user has some URLs on their desktop that they need to open with a specific web browser that isn't their default.

7. I also wanted to share another trick I learned recently that *would have* been included in Episode 2 in regard to accessing server data from a *non*-domain computer. If it's *not* easy to make a home computer's username and password the same as an Active Directory account such as when a *Microsoft* account is used, you can store *domain* credentials in *Credential* Manager. Open it up from Control Panel and click on Windows Credentials and then Add Windows credential. Enter the [server name.domain name] followed by the user's Active Directory credentials and click OK. When they try to browse to the UNC path of the server, those *credentials* will be used, and it should open right away

iii. Moving onto *software* settings that are *computer*-specific, which means they would be configured by the first user and then wouldn't need to be touched by any subsequent users. *That* kind of setting could be found in the following places:

1. The Registry, but this time in HKEY_LOCAL_MACHINE\Software. Here again, you would look for the software or manufacturer name in the list

2. Another spot would be the Program Files or Program Files (x86) folder – there might be an ini file with configuration data in the *same* directory that the program is actually installed.
3. We also have the ProgramData folder – this is a hidden directory on the root of C so you either need to type in C:\ProgramData manually in a Windows Explorer *address* bar or unhide hidden and system files from Folder Options.
4. Lastly, computer-wide settings could be in C:*Users*\Public - data and/or settings are sometimes stored in the Public profile folder as it is accessible from *every* account on the computer.

d. Now I'd like to spend a little bit more time on IT efficiency
   i. If you want to stand out in this industry, you need to work efficiently on *your* PC *and* on any *client* machine
   ii. Get to know the built-in hotkeys and shortcuts. It will save you a *ton* of time using your keyboard to issue quick commands instead of finding them on the computer using the mouse and Windows Explorer.
      1. Examples of hotkeys are Ctrl+A to Select *All*, Ctrl+*C* to *copy*, Ctrl+X to cut, Ctrl+V to paste, and Windows+R to open the Run box. Also, holding down the *Windows* key and pressing the left or right *arrow* will automatically take the active window and move it off to either side of the monitor, making it half the size. Holding down the Windows key and pressing the up or *down* arrow will toggle the window between full screen, smaller, or minimized.
      2. Examples of *shortcuts* are appwiz.cpl to open Programs and Features, ncpa.cpl to open Network Connections, and compmgmt.msc to open Computer Management
      3. You should also get more familiar with *navigational* shortcuts like the Appdata ones we mentioned earlier as well as %userprofile% which takes you to the current user's *profile* folder and %temp% which takes you directly to the current user's *temp* folder.
      4. Windows 10 also has a built-in clipboard manager that is super helpful when you need to copy and paste multiple items in a row. To turn it on and then use it, hold down the Windows key and press the letter V. It's easy to remember because *pasting* the contents of your clipboard is *Ctrl*+V.
      5. If you're a slow typer, Windows 10 also has a built-in talk-to-*text* function. Hold down the Windows key and press the letter H to get started.
      6. If you *really* want to increase your efficiency, download and install a free application called AutoHotKey. This allows you to create your own custom keyboard shortcuts and hotkeys.
         a. You can issue commands to a computer in less than a second
         b. You can call up information or browse to specific folders instantly

c. You can automate repetitive tasks for you *and* for your end-users
d. If you find yourself doing or typing the same things over and over, AutoHotKey is a game-changer.
e. It's also great if you're not a fast *typer*. Converting abbreviations into full words and phrases will allow you to take notes much faster and no one will have to learn what your shorthand means.
f. Helpdesk is very repetitious and AutoHotKey can be used to automate notes and actions for recurring *tasks*. You can program *one* hotkey to instantly type a whole paragraph or click specific areas of the screen at desired intervals.
g. One of my favorite things to do with AutoHotKey is to automatically dial a *phone* number using one keystroke. Most phone systems are *digital* nowadays and they allow you to dial a number using *software*. I programmed AutoHotKey to put a phone number on the clipboard, paste it into the correct field in my phone software, and hit Enter. All I have to do is put on my headset. Allow me to demonstrate. (video of it)
h. I would *also* make a case for the ability to be ambidextrous with a *mouse*. If you support users in-person, you will be visiting a lot of desks and need to be comfortable with both setups as it might not be easy to move their mouse to the other side. *Personally*, I have my mouse on the *right* at home and on the *left* at my office to stay sharp with both positions. I also use a lot of hotkeys containing the Enter, Delete, End, Insert, and Home keys at my office, so I find it advantageous to keep my right hand on that side of the keyboard at all times.
i. Your IT job might require you to go on-site frequently, and sometimes you'll be tasked with physically replacing a PC. I've seen desks with *lots* of knickknacks and decorations that I had to temporarily disturb when installing their new computer. As a courtesy, I took a picture of what their desk looked like before I touched anything to make sure I put everything back in the same spot.
j. You could *also* run into people with lots of desktop icons in very specific places. Fortunately, there's great free software called Desktop Restore that allows a user to quickly recall desktop icon positions. If you're migrating a computer and want to avoid putting everything back manually, install this software on the old computer first and *then* on the new computer as well. I *will* say that all of the *same* icons need to be present on the *new* computer *and the screen resolution* has to match *exactly* for it to work properly after a migration. Even then, it's best to have

a screenshot of what it looked like before just in case. Hit the Print Screen button and launch paint to save it as a picture somewhere.

k. *Another* courtesy would be saving someone's desktop background as a *theme*, copy it to their new *computer*, and then simply double-click on it

l. If *do* have to meet face-to-face with a customer, make sure you're wearing at *least* business *casual* attire, make sure you've showered recently, your hair is not a mess, and don't overdo it with the cologne or perfume. Guys, make sure you have time to *shave* and ladies…you know how to present yourselves. It's us guys who need the occasional reminder. Also, if you have any visible tattoos, some companies might ask you to *cover* them while others don't really care.

m. The bottom line is: if you look your best, you'll feel your best, and if you feel your best, you'll perform your best

n. Now, when people talk about *doctors*, they *might* say "He or she is very *good*, but their *bedside* manner needs some work" which *basically* means they're *smart*, but they're not a very nice person to be around. In this field, I like to call it your *desk*-side manner. It's *definitely* helpful if you're a *people* person, because if you're in *helpdesk*, you will talk to a *lot* of people *every* day, and *everyone* wants to hear a friendly voice on the other end. If you're *not* a people person…fake it…I guess…if you have to. Just make sure it doesn't *sound* like you're faking it because most people can hear the difference. Honestly, if you don't like talking to people, helpdesk probably isn't for you.

   i. There *are* other jobs in this field that *don't* involve as much personal interaction, and helpdesk can be used as a steppingstone if that's ultimately where you want to be.

   ii. Personally, I've been in helpdesk over 13 years, and I've never wanted to advance to a different position because I love being everyone's hero. Some people even give helpdesk more respect than a server *migration* engineer because of their *perspective*. They might think, "Oh, Ben's here to fix our stuff" versus "Oh great, Clint's here to break everything". Now obviously, Clint is not *really* going to break anything, but migrations create *change*, and most people don't *like* change. *I* take it upon myself to make the *necessary* changes as *familiar* and *painless* as possible, because at the end of the day, we're not in business to fix computers; we're in business to help people.

That's all we're going to cover in this video. Hopefully if was helpful to *you*. Be sure to check out our other videos and leave a comment, letting us know what topic you'd like to see covered in a future video. Thanks for watching.