

How to tweak your relatives' computers

(Slow, malware-prone, never-backed-up computers are as timeless as turkey.)

The benefit to being the resident geek:

It is a great way to get away from the family living room and go hole up in somebody's office or den and geek out and not have to deal with everybody.

Important Note: It is possible to be technically completely ept and ruin it for everybody.

- Don't leave the computer cluttered up with junk (that you need), e.g. don't leave stuff you use like PC Anywhere on their desktop, front and center.
- Don't reorganize the cluttered icons on the desktop. It's where they know how to find things and it's not what you're there to fix. We have to make it simpler for them.

Learn their lingo.

- They may refer to a computer with a virus as a rash.
- They may refer to the Internet as "The Google".

Do some basic maintenance.

Go to download.com and scroll down on the left to either the **Windows Starter Kit** or the **Mac Starter Kit**. These are kits created by the download.com editors that have everything that you'll need in them to get a fresh computer going.

For the Windows Starter Kit, you have a choice of Internet browsers, e-mail clients, office productivity, social networking tools, image editors, and music and video jukeboxes.

There are also two additional kits because not everybody needs the basic tools. Some people need utilities, some people want security.

- The **Security Starter Kit** includes antivirus programs, malware (spyware) removers, in-browser security, firewall, encryption, and parental control.
- The **Utility Starter Kit** includes uninstallers, system cleaners, defraggers, file archiving, task managers, Notepad replacements, launchers and docks, and essential extras.

CCleaner (www.piriform.com) is the single best registry cleaner. It has some really fantastic tools for cleaning out browser tracks, it has an installer, but far and away its killer app is its registry cleaner and backup. It does the job, it doesn't mess around, and it's free.

Revo Uninstaller (www.revouninstaller.com) is a necessary app. It's like manna from heaven. A lot of the uninstallers for apps are sloppy. They'll leave tracks behind, they'll leave registry keys behind, and they'll leave icons and other junk behind. It gives you multiple levels of uninstall. So, if you are dealing with a program that has deep hooks into your system, like a security program, you set Revo Uninstaller to the highest (and slowest) level of uninstall; it will take longer but it will get rid of everything that the program has put on your computer.

Revo Uninstaller is something that you would not want to get into accidentally. Do not leave it behind for the user. If you feel it is necessary to leave your tools installed on the computer, create a separate folder on the computer to put the tools in that you want to use or that you know you'll have to use again in the future. *(Here I would ask the question "In the future, would you not want to obtain the latest version of the tools at that time?")*

With Revo Uninstaller and these other apps, there is a portable version that can be run from a USB drive. (PortableApps.com)

Use a tech support pattern.

First, check out security situation of the computer. (Old security apps or multiple security apps)

Then install a trusted antivirus application:

- **AVG** (www.avg.com),
- **Avast**(www.avast.com),
- **Panda Cloud Antivirus** (www.pandasecurity.com),
- **Microsoft Security Essentials**.

Set the AV app to silent and gaming mode because nobody not in tech support wants to know when there are AV updates. They want it to be out of the way. They just want to know that they are secure.

If they are in the room,

- Bring up social engineering and computer security, and
- Remind them to un-check the toolbars and "helper" apps offered when installing things.

Second, clean out all the useless software, all the bloat, and then run CCleaner to clear out the registry and reboot.

Then you can start installing all the new apps. Consider including the following two:

- **LastPass** (lastpass.com) to manage passwords
- **Malwarebytes' Anti-Malware** (www.malwarebytes.org)
 - If you can talk them into purchasing the full version, they will get real-time protection and scheduled updating.

On an old computer, Windows, over time, gets slower. Certain apps that are used a lot also get bigger and slower (more and more patches and security updates). The biggest culprit is Adobe Reader. Adobe has this huge background app running processes and looking for updates. Replace the default Adobe Reader. Rafe Needleman has been recommending **FoxIt** (www.foxitsoftware.com/pdf/reader/), but Seth Rosenblatt prefers **Nitro PDF Reader** (www.nitroreader.com), he gave it an Editor's Choice. It is very similar to FoxIt in its usage of resources and it has more editing power.

WinDirStat (windirstat.info) will analyze your disk usage. Slow, but worthwhile. (DiskInventoryX for use on the Mac)

Defragging is essential on a Windows XP computer.

- **Smart Defrag 2** (www.iobit.com)
- **Auslogics Disk Defrag** (www.auslogics.com/en/)

On a Windows 7 computer, you do not need to defrag (as per Seth).

It used to be that, if you were going to someone's house and needed to install all this software, you needed to burn it to a disk or put on a USB drive. Today, with high speed Internet access, you can download this from download.com (assuming Internet access isn't what you're there to fix). Also, use **Ninite** (ninite.com), which packages all the stuff together in a nice way.

Install a remote access tool (if you need to provide help on an ongoing basis and have a trust relationship with this person).

- **LogMeIn** (<https://secure.logmein.com/>) (Rafe)
- **CrossLoop** (www.crossloop.com) (Seth: Best, light weight, easy to use, for person-to-person tech support if you want to teach the other person how to do something.)

Make sure they have a backup solution. Go for off-site backup.

- **Mozy** (mozy.com)
- **Carbonite** (www.carbonite.com)
- **CrashPlan** (www.crashplan.com) CrashPlan has the option to do computer-to-computer backups. So you can be the backup computer for their backups and vice versa, which keeps costs low.

Make sure they are running an unattended, all-the-time backup product.

If they are still using Internet Explorer 6, install Firefox and make it the default: Be sure to import bookmarks and settings from Internet Explorer. You could even go with Google Chrome (chrome.google.com) for even tighter security and speed, if they wouldn't mind the abrupt shift in look and feel.

Set up their email in Gmail: Gmail has made it much easier to import email accounts, whether they're AOL, a cable company, or other defaults that just stuck around. You can make a simple switch in the settings to keep their receiving and sending email from their same address (or multiple addresses). Save their Gmail password in Firefox, but make sure they know it, and they'll even get some new-fangled email portability.

Make sure to take a can of compressed air. Clean out the dust bunnies to keep the computer running cooler and quietly.

Questions:

- Should I get a Mac?

If you can afford it, yes. Your personal support costs/time go way down. They maintain better. TimeMachine is reliable backup. (Rafe has moved a couple of people he knows/relatives to a Mac and they like their computers better. If you're going to get a new Windows computer, get Windows 7, it the most Mac-like experience you can get with Windows. (Seth: Who knew Microsoft could do something like this?)

- I have an old Compaq Presario that is about 5 years old that will be a perfect computer for my mom. It's clean of all viruses and malware but still preforms very slowly on even small tasks. Can I wipe the computer and reinstall Windows?

Seth: I wouldn't use this computer for a relative for anything other than a paperweight.

Rafe: Not recommended. If you reimagine this computer and get XP installed, it will be slower because XP is bigger. It will not be a satisfactory experience for media/video. Five years ago that was not nearly as big an issue on the Web as it is right now. You won't be able to have as good an experience with Hulu Desktop, Netflix, or YouTube; and if they can't do video on it, they're missing out on a lot of good stuff on the Web. Use this as a project computer for yourself.

If the computer won't boot

If this is happening on an XP computer, consider this a great opportunity to talk with your relatives or family friends about upgrading to Windows 7. Seriously.

Quick-fix triage (for non-booting systems you might be able to restore):

Boot from the Windows CD or DVD and follow the prompts to repair an existing installation, or, in the case of Vista or Windows 7, ask it to repair the startup process.

If the Quick-fix triage doesn't work, and you really feel this system can boot again except for some silly error, try

- Boot from an Ultimate Recovery CD
 - (a Windows' preinstalled environment based on Bart's PE)
- Boot from a Linux Live CD
- Boot from a Linux Live USB Drive
 - UNetbootin (Universal **Netboot** Installer)
 - Linux Live USB Creator
- These processes can be used to:
 - Free space
 - Remove viruses
 - Rescue passwords
 - And more from crunked Windows setups

(Crunked: derived from "Crazy" and "Drunk")

Using an Ultimate Recovery CD

Creating an Ultimate Recovery CD, as detailed at www.howtogeek.com/howto/windows/geek-repair-create-your-own-ultimate-recovery-cd/

- It is based on Windows XP and includes many helpful tools that you are likely already familiar with for repairing or fixing most any Windows problem.

- Note that the installation will create the CD from your Windows XP CD.
 - You can't download the boot CD directly.
- Install the Ultimate Boot CD (www.ubcd4win.com) software, which is just the toolkit for creating your own CD version.
- You'll be asked for the Windows XP CD
 - You'll need a copy of Windows XP to create the CD, but you can actually use the CD to repair some elements of a Vista machine as well.
- Click the Build button and wait for the CD or ISO image to be created.
- Boot from the CD
- Before starting the Windows Pre-Installation Environment
 - You can run a memory test
 - Access the XP recovery console
- After starting the Windows Pre-Installation Environment, you'll be presented with a desktop similar to XP where you can use:
 - [DriveImage XML](#) to create full backups of your hard drive
 - [SelfImage](#) to clone a drive with just a few clicks
 - Anti-Virus and Anti-Spyware utilities
 - MBR fixing utilities
 - And still more tools

Using a Linux Live CD

First, download an installation .ISO file for most any Linux distribution and burn it to a blank CD using the software of your choice. The installation CD and the Live CD are one-and-the-same.

- **Ubuntu Live CD** (www.ubuntu.com/desktop/get-ubuntu/download)
- **Knoppix Live CD** (www.knopper.net/knoppix-mirrors/index-en.html)

Both are Linux distributions, they run on most kinds of hardware without installing, and can transfer the files you need to your backup media. Ubuntu should work; if it doesn't, give Knoppix a go. However, Windows users will find Ubuntu familiar.

When booting from the Ubuntu CD, select "Try Ubuntu". This will run Ubuntu without making any changes to your computer's hard drive.

If you need to download programs to scan for viruses, etc.; or you want to backup files to a location on the LAN or Internet, you need to give Ubuntu a network connection

- If you're using wired Ethernet, plug in a functioning LAN cable, and you should be good to go
- If you're using a wireless network, it requires a few steps
- Towards the right of the menu bar at top of the screen will be several icons
- You need two of these, “Install Drivers” and “Network Connections”
- Ubuntu may have recognized your WiFi card but not installed its driver
 - Use the Install Driver icon to install and activate the driver
- Strangely, even though it has no network connection, Ubuntu will say it's **downloading** the driver
- Let it have its way for a minute or so
- When finished, Ubuntu will tell you that you need to restart the computer to activate the driver
- **Ignore this!**
 - You have just booted from a live CD (or USB drive)
 - This means that Ubuntu is not saving anything to your local hard drive (and not to the CD or USB drive either)
 - If you reboot, you'll be at the same place you were originally without a WiFi driver installed
- Just close this window and continue
 - The WiFi is working at this point
- Now use the “Edit Network Connections” to configure the WiFi
- You need to
 - Specify which available network to use
 - Specify the type of security the WiFi uses (e.g. WEP, WPA)
 - Supply any password required
- Now the “Network Connections” will show the WiFi network as connected

Now you're ready to get started ...

- Backing up
- Scanning for viruses
- Freeing up space

To scan a Windows installation for viruses and to change a lost Windows password, you'll need to download and install additional programs.

- Ignore any statement in the referenced articles which states you must "tell Ubuntu that it's okay to download applications that aren't entirely 'free' in the software/copyright sense"
- I assume it was necessary when the article was written, but I have found, using version 10.10, that this is no longer required
- To download and install programs
 - Click on Applications → Ubuntu Software Center
 - Use the search box to find the program
 - Click Install

To backup files

- Move your cursor to the "Places" menu.
- Your USB drive, local hard drive, and CD/DVD drive should all show up.
- Ask your relatives which files and documents are important to them.
- Back up the entire "My Documents" folder (with "My Music" and "My Pictures" included).
- Back up Outlook or Outlook Express email data.
- Back up Firefox profile or, more likely, their "Favorites" folder for Internet Explorer.
- Simply open your USB drive from the Places menu.
- Or a network location to which you want to backup your files
- Open your main Windows drive.
- Drag files to copy from your Windows system onto the backup medium.

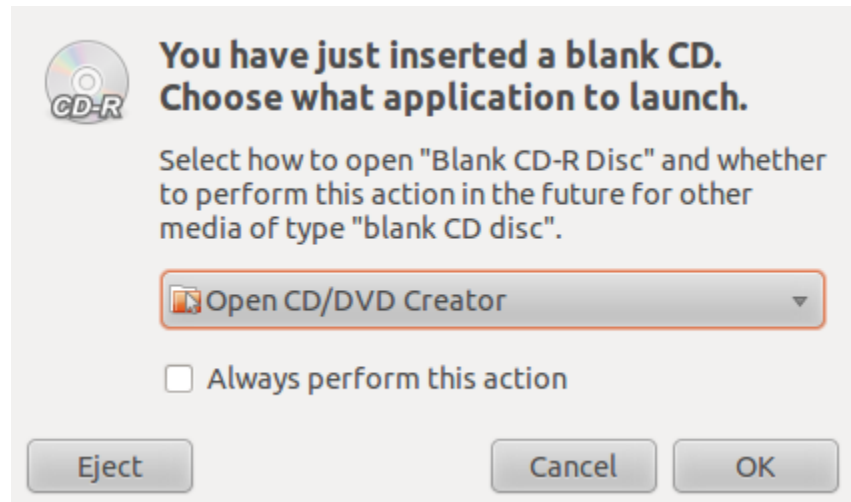
If you'd like, you can ZIP files before you back them up

- Collect the files into a folder

- Right click on that folder
- Select "Compress"

Burning to a DVD

- Insert a blank DVD.
- From the pop-up, select "Open CD/DVD Creator".
- This will open a folder that you can drag the files you want to burn.
- Hit "Write to Disc".



Scanning for and removing viruses

- Ubuntu doesn't have any built-in tools for scanning Windows drives for viruses
 - and why would it, really?
- But they are available for downloading and installing
- Since we're running a live session of Ubuntu, "installing" just means downloading and saving to temporary space on our USB drive (persistence)
 - Leaving your Windows drive untouched
 - Preventing viruses from interfering with the scan-and-fix process
 - Persistence is covered in a later slide
- LifeHacker recommends **clamtk** to scan Windows for viruses

Free Up Disk Space

- Visualize your hard drive and clean it out
 - **Disk Usage Analyzer**
 - An awesome program that you can use to see where all the space on your Windows drive is being taken up

Reset a Lost Password

- LifeHacker recommends installing **chntpw** (Change NT Password) for changing passwords

Managing Partitions

- Don't commit anything you're not sure of
- But know that you can pull off most anything you need from Ubuntu's **Disk Utility**

When you're done

- Click on the power icon in the far upper right corner of the screen.
- Select "Shut Down ..."



Note: Lifehacker has a guide entitled "The Complete Guide to Saving Your Windows System with a Thumb Drive (lifelhacker.com/#!/5504531/the-complete-guide-to-saving-your-windows-system-with-a-thumb-drive).

Boot from a Linux Live USB Drive

- Rather than using your CD drive to boot Linux
 - Install the Linux .ISO onto a USB drive
 - Boot from the USB drive
- The boot process is faster
- The CD/DVD drive is available to backup files
- Use either UNetBootin (unetbootin.sourceforge.net) or Linux Live USB Creator (www.linuxliveusb.com/) to download and install the .ISO file onto a USB drive
- After UNetbootin is downloaded, it does not need to be installed
 - Just run it
- Unlike UNetbootin, Linux Live USB Creator must be installed after it is download and before it can be run
- For either of these programs,
 - Specify the Linux distribution you want (e.g. Ubuntu or Knoppix)

- ... and the version (e.g. 10.10)
- Also specify how much space you want to allocate for persistent data (if any)
- Designate the destination drive

Linux Live USB Creator also allows you to select any of three options

- Hide created files on key
- Format the key in FAT32
- Enable launching Linux Live in Windows (Virtualization)
- Deselect the options to hide files and to enable launching Linux Live in Windows
- Select the option to format the USB drive in FAT32 if the drive isn't already formatted

Booting and repairing a crunked computer using the Live Linux USB drive is now the same as with a Live Linux CD.

When all else fails

- At this point, you probably have no choice but to reinstall Windows.
- The best choice is to replace the hard drive and save the original as a backup.
 - (the new drive may be larger/faster)
- Another option is to mount the hard drive as a slave in another computer and backup the files there.

You'll need

- The Windows installation CD/DVD
- A backup of all the user's data
- Always make sure there isn't any software they can't locate a license for
 - This is a good reason to reinstall onto a new hard drive and leave the original intact
- When you're all done backing up files,
- Install Windows on the system.
 - Erasing whatever partitions or data exist
 - (assuming you're sure the important stuff is backed up)

The source for most of this material came from

CNET to the Rescue: How to tweak your relatives' computers

www.cnet.com/8301-31361_1-20025077-254.html?tag=mncol;txt

Rafe Needleman, CNET Editor at large

Seth Rosenblatt, Special Guest and Senior associate editor

Lifehacker: How to Fix Your Relatives' Terrible Computer

lifehacker.com/#!/5413223/how-to-fix-your-relatives-terrible-computer

Other guides that may be of interest:

How-To-Geek: Create Your Own Ultimate Recovery CD

www.howtogeek.com/howto/windows/geek-repair-create-your-own-ultimate-recovery-cd/

Lifehacker: The Complete Guide to Saving Your Windows System with a Thumb Drive

lifehacker.com/#!/5504531/the-complete-guide-to-saving-your-windows-system-with-a-thumb-drive

Previously referenced links:

CCleaner (www.piriform.com)

Revo Uninstaller (www.revouninstaller.com)

Portable apps (PortableApps.com)

AVG (www.avg.com),

Avast(www.avast.com),

Panda Cloud Antivirus (www.pandasecurity.com),

Microsoft Security Essentials

LastPass (lastpass.com) to manage passwords

Malwarebytes' Anti-Malware (www.malwarebytes.org)

FoxIt (www.foxitsoftware.com/pdf/reader/)

Nitro PDF Reader (www.nitroreader.com)

WinDirStat (windirstat.info)

Smart Defrag 2 (www.iobit.com)

Auslogics Disk Defrag (www.auslogics.com/en/)

Ninite (ninite.com)

LogMeIn (<https://secure.logmein.com/>)

CrossLoop (www.crossloop.com)

Mozy (mozy.com)

Carbonite (www.carbonite.com)

CrashPlan (www.crashplan.com)

Google Chrome (chrome.google.com)

Ubuntu Live CD (www.ubuntu.com/desktop/get-ubuntu/download)

Knoppix Live CD (www.knopper.net/knoppix-mirrors/index-en.html)

UNetBootin (unetbootin.sourceforge.net)

UBCD4Win (www.ubcd4win.com)

Bart's PE (www.nu2.nu/pebuilder/)