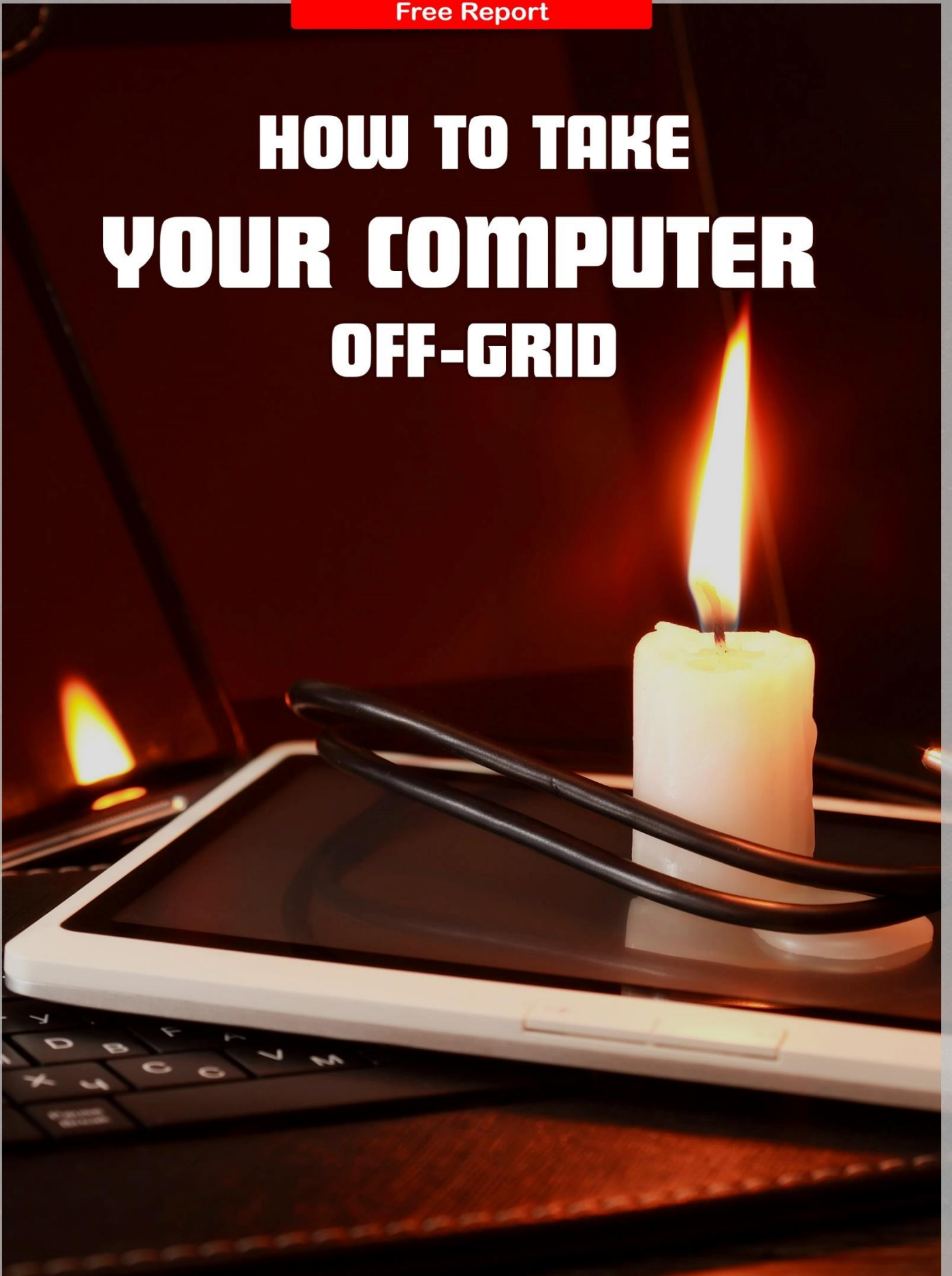


**NOVEMBER 2016**  
Free Report

# HOW TO TAKE YOUR COMPUTER OFF-GRID



Dear Friend,

A computer is probably not the first item to think about when SHTF but, trust me, you should seriously take it into account.

I know, a computer cannot hunt for you, boil water or make a pair of shoes but it helps you find out how to do all these as it gives you access to the biggest source of knowledge – the Internet. Plus, you can communicate with your loved ones or with other preppers.

This month's free report is going to show you:

- How to Choose the Best Off-grid Devices
- 8 Vital Programs and Plugins
- Software Options for Your Off-Grid Computer
- Important Computer Parts and Skills
- Sources of Power
- Off-grid Security

P.S.: Remember that sharing is caring, so share this info with your friends that might benefit from this experience!

**Alec Deacon**

Survivopedia.com

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## Moving Your Computer Off-Grid: Why Doing It?



More than a few preppers feel that if they can provide food, shelter, water, and basic medical needs for themselves and their families, nothing more is required. Other preppers may feel that self-defense, power generation, education, and machine repair are skills that will be required in the post crisis world.

Sadly, many preppers and off-gridders tend to ignore or underestimate the need to have a computer that can be used to help make it easier to survive.

### Computers and Prepping Can Get Along

A computer cannot hunt a deer for you, boil water, or make a pair of shoes, obviously. But any computer with a connection to the internet can help you find out how to do these things and

much more. When you find good information, it is also very easy to store those files on your computer so that you can read them and work with them whenever you want.

No matter whether you have just caught your first deer and need a diagram to help you with field dressing, or you need a refresher on the symptoms and treatment for Poison Ivy, the right computer can help you avoid making all kinds of mistakes.

And if you still have internet access, you can use your computer to contact friends and loved ones as well as people that might be able to help you get through a crisis.

Have you ever tried to make good quality soap from scratch? If so, have you noticed that it is very hard to get 100% lye? Have you also noticed that it is getting harder and harder to burn wood so that you can gather enough potash to make your own lye? If so, then you can certainly relate to the quandary of many preppers that are finding out it is becoming impossible to make or obtain raw materials that would be needed in a crisis.

Many of the items you need for basic prepping can also still be purchased online, if you have a prepaid debit card and an internet connection. You will get the supplies you need, and have a much wider selection goods to choose from.

Whether you are interested in the best quality gun cleaning kits, need a certain type of fishing reel, or need good quality vintage hand tools, you can find them all online. Even if you are disabled, you may be able to find customized materials and tools that have been modified to meet your needs.

Most people don't realize how important it is to network with preppers from different regions and make plans for bugging out that include those friends and connections. Consider what would happen if an earthquake or hurricane strikes your area. If you only have friends and family in a local, or small area, chances are everyone will be affected. If you have friends in other states that might be able to offer temporary shelter or help you make a new start, then you will be well ahead of the game.



One thing is for certain, if you must bug out, it never hurts to have a goal in mind, and know that you will be among friends and find safety at the end of the journey. A computer can be very useful for making these kinds of connections and make it easier to collaborate and make the travel and transition periods as smooth as possible.

Both money and barter systems are vital for exchanging needed goods and services. A computer is very important for expanding your trade and marketing options. It is also very important for securing alternative currencies that may play a vital role in remaining solvent in the face of currency collapse. Most people would be truly amazed at how easy it is for the average consumer to secure foreign currencies, keep a good supply of them, and even use them as down and dirty form of currency trading or flipping.

## Understanding the Impact of Utilization

No discussion about preparing your computer hardware for off gridding would be complete without at least touching on the resource cost involved in each program that you run on the system. For example, if you have a simple word processor program with no fancy graphics, it will take up far less processor and memory resources than one that has funny critters dancing around all over the place.

By the same token, apps that automatically play videos or programs that automatically play music also shorten the hardware life of your computer. Therefore, when it comes to choosing the best computer for your off grid or prepping needs, it is always important to study benchmark tests and hardware longevity tests under certain loads.

Once again, you will find some of the best and most accurate information in the gaming forums.

## What About Brainwashing: Is it a Real Threat?

Have you ever wondered how ISIS and other terror groups “radicalize” people without even meeting them? It is fair to say that most people blowing themselves up and committing other



acts of violent insanity must be led on somehow by older people that start off by using brainwashing or other mental manipulation tactics.

Even if there are laws against subliminal seduction (in my opinion they are about as useful as gun free zones when it comes to preventing atrocities), rest assured that terrorists are more than likely creating more subtle sound, video, and even games that shape young minds in the direction of hate, violence, and social destruction. Even older people can be thrown off balance by these mind numbing signals that may be broadcast more easily on newer machines.

Newer computers offer a faster computing environment that allow for the faster playback of a wider range of sounds and colors. For example, the viewer doesn't consciously process:

- a pair of images or sounds shown sequentially or over a period that lead the person to conclude violence, which is an answer carefully hidden messages spelled out in images
- words that are not apparent unless the audio is played backwards
- specific sound frequencies paired with specific images. (To drive people into a frenzy about guns, it is all too easy to broadcast a high pitch uncomfortable sound along with the picture of a gun. As with Pavlov's dog, any time someone sees a gun, they will go crazy and some would act like crazy to destroy the police.)
- other cues that are not recognized consciously, but are recorded by the brain and processed just like everything else is.

It is often said that hallucinations can most easily be distinguished from real life because real life has more variance in sounds and colors. The more complex and "realistic" computers become, the easier it is to use subtle and even subliminal signals to brainwash people.

On the other side, a monitor that displays fewer colors, or a sound card that doesn't have the frequency range may not even broadcast the signal, or it may be so broken up and distorted that it does not affect the user.

## The Tough Choice on the Best Devices



When it comes to choosing the best devices for off grid living and prepping, there is no such thing as one computer that will fit all your needs. You can easily rule out any device that can only be used if you have an internet connection.

Obsolete devices may still be very useful because certain older technologies are easier to work with and may be safer than newer devices that are routinely overclocked (meaning the device is set to operate at speed that is above manufacturer recommendations), or are based on unstable hardware platforms.

## New Devices

If you are interested in newer devices, here are some categories, brands, and models that you can start off with for each category of device:

### Desktops

If you are primarily interested in a conventional desktop computer, my own experience leads me to believe the best option is to build the computer yourself so that you know exactly what parts are being used and how best to optimize the BIOS (this is where you can determine how fast the computer will run, whether the system can boot from a USB drive, and other aspects of basic operation) settings or not.

Even if most computers on the market utilize Intel processors, I have found the most durable processors and motherboards are manufactured by AMD. Gamers tend to put the most wear and tear on processors. Since many gamers choose AMD over Intel, you can rest assured these machines will also do well in an off-grid setting.

Always pair your motherboard and CPU choices with a good quality power supply. I have always built my systems with networking power supplies because they are often built with "self-healing" capacitors and other parts that last longer under difficult situations. It may cost a few dollars more for these power supplies, but like the AMD parts, it is well worth the expense.

I choose my power supply after I have decided on all the other parts so that I have a good idea about how much power each part of the system will draw. From there, I try to choose a power supply that provides at least 25 - 50% over the expected maximum load. This gives me plenty of room in case I want to add other hardware later, and it also ensures the power supply does not burn because of higher loads.

Since modern computer chips tend to run hot, provide plenty of ventilation and cooling options inside the case. If your CPU and motherboard kit come with sub-par heat conducting gel, do not

hesitate to find the best on the market. It is also very useful to add extra fans and other cooling devices right inside the case.

The cooler you can keep the chips during operation, the lower your chances of erratic freeze-ups or even ruining the chips. Insofar as other vital parts such as hard drives, CD/DVD drives, and video cards, it truly depends on your personal tastes.

Here are the things I look for in some of these parts:

- The hard drive must come without an operating system installed. Since I prefer Linux (more on that in software options for your off-grid computer), I prefer not to spend the money on a hard drive that has Windows installed. If you truly prefer Windows, go ahead and buy a hard drive with it already installed and save yourself some time with that process.
- The DVD drive must be capable of writing to and reading from DVDs and CDs. Although drives housed inside the case seem more efficient, I have also seen them take out an entire system when they short out. Therefore, I prefer DVD drives that connect via USB port.
- Most modern mother boards come with a jack for connecting the monitor, plus all the drivers required to operate the monitor. Unfortunately, most motherboards do not have the best math co-processor/video accelerator. You will need a dedicated video card to gain access to these specialized chips that will reduce wear on the CPU and enhance computer performance at the same time. Study gamer forums and video editing forums to find out which video cards work best with specific CPU and motherboard combinations. A bad fit between these parts can truly be a disaster.
- Memory cards (RAM) are yet another tricky, yet vital area of the computer that you will need to think about. This is also one area where only the best will do. It is better to go with the fastest cards that the motherboard will take, and from the best rated vendor.

Each calculation and action your computer makes, must somehow go through the RAM chips. The last thing you will want to do is put unreliable chips on the board and have them freeze up the system or cause other problems.

### Laptops

Unlike desktop computers, you will have far less control over what parts are found inside the case. Before purchasing a laptop, be sure to find out the model number of the CPU and motherboard. From there, you will need to look up the chipsets to find out what the optimal clock speeds are.

Sadly, I have seen more than one laptop burn up at around the 1 year mark because a sub-part mother board with a slower timing chip was paired with a faster CPU. Since most buyers do not ask about the motherboard model, there was no way for them to find out that they basically had an overclocked system that was going to fail very quickly.

Overall, I can safely say that I don't recommend spending 3 - 4 times as much money on a laptop when I can choose a much cheaper tablet and optimize it with less intensive apps. The only advantage a laptop might have over an off-grid tablet is that it is easier to customize the programs.

If you get a tablet and change the OS, it might work just as well. Since both devices have minuscule (at best) power supplies, you will need to purchase a USB hub that will also have power attached devices.

Without a question, I do not recommend powering any kind of motorized drive (even though you may be able to) directly from a laptop or tablet. I also do not recommend charging up camera batteries or other devices directly from the USB port on these devices. If you want to power devices from a computer, use a desktop unit with a suitable power supply.

## Tablets

An unlocked tablet will give you just about everything you need for basic document access and communicating with others. You can also choose apps that will enable you to create your own apps and carry out other more complex tasks.

Tablets also have the advantage of taking far less power than a desktop or laptop computer. They can easily be recharged on a portable solar pack, and it is also easy to bypass the battery. Insofar as brand names, I tend to favor Lenovo, but have also found Alldaymall tablets to work well. The Alldaymall tablets are also a good bit cheaper, so you can purchase more of them and put them in your bug out bag as well as other locations.

## Smart Phones

When it comes to a comfortable viewing experience combined with relatively low power usage, larger tablets will work much better than smart phones. In a "something is better than nothing" or a vital tool for your EDC, few things can rival a good quality unlocked smart phone.

For example, the Lenovo models (which I favor) and some of the ZTE models are inexpensive and can easily accommodate memory chips that have more than enough room for a library filled with videos, .pdf files, email threads, and just about anything else you might need to help you complete unfamiliar tasks. While I recommend a 10" tablet for bug out gear, a 5" smart phone is truly more than enough for EDC. Not only a phone this size fit easily into a purse or backpack, it is even easier to power than a larger tablet.

They also work well for reading a range of documents and will give you a good-sized window for viewing videos. You can also hook up a folding keyboard and can carry out several tasks that would be difficult using the screen keyboard.

## Obsolete Devices for Your Computer

If you think very carefully about your long-term computing needs outside of the internet environment, you will find that old, and even obsolete hardware and software may just be a useful and inexpensive way to build your off-grid computer system.

Have you ever purchased something brand new, and then found yourself desperately searching eBay and Craigslist in order to find an older model because it had better features or was easier to use? Did you secretly believe it was all your imagination until you heard of other people having the same problems?

If so, then you already have some ideas about why older or even obsolete computer hardware and software may be better for prepping needs. Here are a few things to consider:

### ***Modern Computers Have Hardware That Can Be Destroyed by Hackers***

In 2015, it made media headlines when a hacker proved he could shut down a vehicle just by hacking in remotely with another computer. Most computer users don't know that hard drives and other parts of the computer have been vulnerable to attacks through the BIOS and other chips on the mother board.

For example, a hacker can use an internet connection to access the BIOS or even the hard drive controller on newer computers and change the settings so that the drive heads crash into the disks. There are also many ways now to tamper with "solid state" memory chips and drives to ruin them. Older computers that do not have real time programmable chips are safe from these problems, as is the hardware that they control. Even if you do get a virus or other malicious code on an older computer, it is not likely that it can access the hardware in a way that destroys it.

### ***Modern Chips May Have Hidden Tracking Devices***

If smart phones (and these days' cars as well) have chips in them that reveal your location to emergency responders (and others), don't be surprised if laptops, tablets, and even desktop



computers have similar capacities built into the chips. In some cases, you may find some indicators of these chips in the settings area for the hardware.

Others may be better hidden and may require a forensic operating system such as Caine to detect. Unless the chips in your computer are from a time before RFID chips could go for year with no external power source, do not be surprised if there is tracking and reporting routine in them.

### ***Marketing Ploys Do Not Always Equate to Better or More Reliable Performance***

To be honest, I'm not immune to drooling over the latest AMD CPUs as they arrive on the market, and I do keep up quite a bit with news about advances in computing. At the end of the day, a CPU that is twice as fast as the one in your computer right now isn't going to help you type faster, nor is it going to make your internet any faster.

In most cases, if you go back to a computer you had 5 or even 10 years ago and look at the simplest and basic functions, you will find that you can still achieve them. While there may be new or different uses for computers, you can still store plenty of information and access it with ease using older or obsolete computers. When you don't have to worry as much about hardware overhead going for antivirus and other system resource hogs, you may find that the obsolete hardware works even faster than on a newer machine!

### ***There is a Glut of Useful Hardware***

Schools, government agencies, consumers, and businesses throw out thousands to millions of perfectly good computers each year because they are "obsolete". Today, junk yards and recycling centers don't even know how to get rid of all this electronic "trash".

You can easily pick up all kinds of cheap computers and additional hardware at very little cost. In addition, consider that in China and some other countries, people make a living on pulling gold from circuit boards. Even if the process is time consuming and requires several toxic (and

somewhat expensive) chemicals, it may be something you can do with others to raise money to build and maintain a larger scale prepper community.

### ***Easier to Keep Cool***

As fast as newer computers may be, they also require quite a bit of extended cooling capacity. On the other side of the equation, an older system might do perfectly well if you keep the case open, or simply add a few extra fans in the case. The last thing you will want to do is buy a brand-new computer that requires hundreds to thousands of dollars in extra cooling system parts, and then have it burn up in a year or two of routine use. An obsolete computer may already have been in the field for 5 or more years, and may easily go another 10 without any problems.

### ***5 Devices or Device Groups to Consider***

Before you settle on any given obsolete device, it is very important to make a list of the tasks you are most likely to use it for. If you are primarily interested in accessing .pdf files, video clips (you might have to convert them to other formats), and images, these devices will meet your needs. On the other hand, if you expect to do complex gaming or intensive video editing, these systems will not be suitable unless you match them with programs that worked during those times.

### ***Palm Pilot M515***

Except for not easily hooking up to WIFI, the Palm M515 is truly one of the best small devices for accessing pdfs, e-books, images, and many other document types. It offers a full color screen, and is also quite durable. Unlike smart phones, there is no real way to overrun the CPU in the Palm Pilot, and it will provide reliable performance with very simple controls.

It also offers you plenty of options for taking notes without needing to type, and you can also hook up a mini-keyboard. In my own experience, the weakest point on this device is the battery and charging gear wore out faster than I expected. Nevertheless, you would encounter the same

problem in newer devices, and you would also get around them pretty much the same way (essentially scavenge a battery from somewhere else or find some way to feed power directly into the M515 from a stable external source.

### ***800 MHz AMD Systems***

As I have mentioned in other places, I recommend AMD systems over ones based on Intel chips. While I am not a gamer, I do like having computers that don't freeze up, won't malfunction after just a few months or years, and have the capacity to overclock for those rare occasions when I need a bit more computing power. AMD based systems may cost a little bit more, but they are really and truly worth it in terms of obsolete computers, did you know that some of the AMD 800 MHz processors were overclocked to benchmark at 1 GHz? Now consider that most smart phones, tablets, and even many new computers on the market still come with 1.66 GHz CPUs.

Thus, if you have an 800 MHz AMD computer that isn't overclocked, you can still run most important applications with only a slight reduction in speed. If you do decide to overclock the system, there are plenty of new cooling systems that can probably extend the life of the CPU under those loads for a few months to a year.

### ***Non-bundle accessories such as printers, scanners, mp3 players, and external drives***

Many people buy new computers and accessories thinking that they get to use the machine during the best years of its life. If you are planning to use obsolete accessories, it is better to have all separate devices just in case one breaks down. Now let's have a look at some devices and why older models may be better than new ones:

#### ***Printers***

Consider a situation where your experience leads you to believe you will be best served by using an inkjet printer. Unfortunately, if you buy printers manufactured after 2007 or so, you will find it impossible to refill the cartridges on your own. Before purchasing an obsolete printer, make sure that you can obtain a chip resetter (if needed), an ink refill syringe, and appropriate ink for the

cartridge in question. My personal recommendation is the Canon BJC-250 and Lexmark printers manufactured around the same time.

The BJC-250 stands out as an unparalleled workhorse with a small size and a cartridge that can be refilled dozens of times. In a similar way, Lexmark cartridges for printers in the same timeframe were also easy to refill if you also use a chip resetter so that it reads as full. I do not recommend later design printers from most manufacturers because they now use very thin connectors inside the cartridges that will break after the cartridge is empty. Even if you do fill the cartridge and trick the printer into thinking it is a full cartridge, it will not work because the cartridge itself has basically self-destructed.

### ***Scanners***

If you have a library full of “how to” books on household repair, automobile engines, or other references, it may be of some use to scan the important pages into your computer. An old flatbed scanner (and a lot of time) can help you achieve this goal. I have also found that some of the old hand scanners work well, and sometimes faster than the flat beds.

### ***MP3 Players***

From playing music to help you relax to audio recordings on how to carry out certain tasks, an MP3 player really and truly should be part of your EDC and bug out gear even if you have more modern devices. Oddly enough, this is one of the few places where I recommend using remakes of obsolete technology as opposed to going back and using old MP3 players.

I recommend players that take AAA batteries (which means you can even run them on batteries charged up in the Little Sun Solar Light or other devices), and have a slot for micro memory cards (do not use chips larger than 2 GB). These MP3 players cost less than \$5.00, yet they can still give you easy access to audio information, the capacity to record sound, and even tune into some of the local radio stations.

### ***External Drives***

Far too many preppers buy a few USB drives, a few memory chips, and think that all their files will be safe. A few may extend their data preparations to DVD and CD backup. While the CD and USB backups will work on obsolete systems, there are no guarantees that these formats will hold up over the years.

For example, if you do not store CD and DVD disks carefully, they can be wiped clean after about 5 years of being in storage. By the same token, the solid-state technology used in USB and microchips does not lend itself well to be overwritten or accessed thousands to millions of times over. The most reliable memory for your data remains external hard drive. You can purchase conversion kits that turn a conventional internal hard drive into one that can be accessed from a USB port or a serial port. While these drives are rapidly becoming obsolete, their low price and long term durability make them very practical and useful for off gridding and prepping.

### ***Monitors***

Overall, the higher the resolution monitor, and the more colors it produces, the more work it takes for the computer to put something useful and recognizable on the screen. While CRT, LCD, and LED monitors all have their advantages and disadvantages, you will be best served by choosing the smallest, least graphics intensive screen for your needs.

For example, if you are only going to read .pdf files with a few images and diagrams, a 10" monitor may be all you need. Aside from being easier to carry around than a 20" or above monitor, they will load and refresh a bit faster even if you are using older CPUs and memory chips.

### ***Language Translator and Dictionary***

One of my favorite "obsolete" devices are the little pocket sized language translators and dictionaries. They are of much use in a crisis, just think about what you will do if you must

communicate with someone that doesn't speak English. If you have a smart phone, but cannot gain access to the internet, there will be no way for you to reach a free language translation program. While those obsolete pocket language translators may be a bit tedious, at least they will get the job done. Many of these translators also calculators and other added features that can be useful in everyday life too.

### *8 Vital Programs and Plugins*

No matter how many mother boards, fans, power supplies and other bits of hardware you store away, they won't do any good if you don't have software that can be used to carry out various task. While many of these programs are "obsolete" they work beautifully on older systems and can be used to either directly meet many goals, or give you the resources to create additional programs.

#### *Parted Magic (old free versions).*

Parted Magic is a very lightweight operating system that can be booted from a USB, a DVD, or even placed on a hard drive. It also comes with a robust group of tools that you can use to manage hard drives, detect hardware problems, write documents, go online, and even do basic image editing. This operating system also comes with an excellent program that you can use to retrieve files that were deleted or damaged.

I have been able to retrieve files after completely repartitioning and reformatting drives. Basically, if the drive is readable and the file hasn't been written over more than 5 times or so, you should be able to retrieve it with this software. It should be noted there are many other distros of Linux that can be booted from a USB drive as well as both light weight and more robust ones that can be installed on your hard drive.

#### *Netscape Browser*

There are three reasons why Netscape 2.0 to 4.1 are ideal for off-gridders. 1. It has a lightweight, but very comprehensive email program that you can use with multiple email addresses at the

same time (in my opinion, the only thing better is Evolution, which requires a Linux distro and the Gnome desktop). I also like the mailer for Netscape because I can restore backed up emails with relative ease.

This is very important if you have a lot of old information saved from newsgroups or correspondences with others. 2. you can write and view HTML without an internet connection. If you need to create forms or organize information, this will be of immense help. 3. you can create java programs - from creating dynamic spreadsheet scripts to recipe boxes and chess games, the java programming environment can be used for just about anything.

### **Open Office/ Star Office/Libre**

Many people that pay a high price for Microsoft products tend to think that they cannot get ahold of compatible software. These very same people may have even stopped using perfectly good "obsolete" computers because they could no longer run these suites. Open Office and other office suite programs have been around almost if their Microsoft counterparts. Since many of these programs are also available for Linux systems you can easily run them on older or even lightweight distros.

These office suites will include a word processing program, spreadsheet, and other related software. Depending on the range of file types in your library, it may also help to have several older versions of these programs. You will need a few readers for specific files so that you can at least view them in time of need. For example, if you install a word processing package that reads .doc files from the DOS era, you may still need either another word processing program or a reader for .doc files stored under later versions of Windows, as well as the .docx formats.

Make sure that you can open all files on your computer, and then install additional readers as needed. This also remains true for e-book formats, as there are several that require special programs or apps.

### **Older Versions of GIMP, or the Pixia Image Editor**



If you need to resize photos, create banners, or perform other digital imaging tasks, both programs are free and available in both older and brand new versions. If you have a scanner, you can also scan in your old paper based photos so that you never lose them. No matter how bad a situation is, there is always some comfort in having pictures of family members, special places, and past events on hand.

Even if you devote one USB drive or 1 DVD to old photos, they will be easy enough to keep with you in an EDC or bug out bag. Why lose everything when it is possible to store your old photos and even touch them up if you have the time to do so. In fact, you may even find that image editing is a relaxing hobby that will help you cope with a major crisis.

### **Older Versions of Any Video Converter**

Any Video Converter is necessary for converting between different video and music file formats. For example, if you download a video from YouTube, you may find that you want an .mp3 or some other file that you can listen to without having to watch the video part. All you need to do is run these video files through Any Video Converter and output the sound tracks to a separate .mp3 file.

Do you have an old .mp3 player or some other digital sound player that took a proprietary format? Chances are, you will find it possible to covert back and forth between those and other formats using this software. Not only is this an excellent way to diversify your library, it also makes it much easier to access important files on any computer system or device that may be available to you.

### **Wine and Other Operating System Emulators**

If you give it some thought, you are bound to remember programs for DOS and other operating systems that were perfect for your needs. You may also have a few favorite Windows programs that seem indispensable. Surprisingly enough, you can get them all back and have them run

perfectly under Linux. For Windows programs, just install WINE (Wine Is Not an Emulator) for your Linux distro.

In a similar fashion, if you have old DOS or other "obsolete" programs that no longer run on newer operating systems, you may be able to find suitable emulators that can be installed for your Linux Distro. From old, favorite games to that word processing package you never wanted to get rid of - you can have them all back with the proper emulator running under Linux.

### **Mapping Software**

Realistically speaking, there are very few, if any people that won't need to travel after a major crisis hits. Even if you are very good at finding your way around the woods or a city, that doesn't mean you won't need maps. Conventionally speaking, many people believe that they should only use the most updated maps so that they know which roads still exist.

In a major emergency, you will need to know about places where roads once were to find overlooked travel paths. For example, if you know you must pass through an area with roadblocks, "obsolete" maps may just show you where a road was that used to be maintained. If that road exists, it may not be well maintained, but it may still offer better traveling than trying to get through dark alleys or abandoned sewer pipes.

You can also get good quality, current maps by using updated websites and then simply save the .pdf files. You may also find this is a useful way to get topographical maps or other types of maps that would take up a lot of space if you kept printed versions on hand. If you are interested in underground travel paths, storing them on a handheld device or an obsolete computer will be much better than trying to carry around several pounds of paper maps.

If you keep at least one device stored in an EMP proof bag, and diversify your files and backups, it should be possible to keep all your maps on hand always. Not only does this give you an ideal way to keep maps on hand in your EDC and bug out bags, it is also useful for your bug out location.

### **Vital Plugins for Your Browser**

Technically speaking, the following plugin categories aren't necessarily obsolete, however they will make it much easier to convert online materials into an offline format that can be used on just about any device regardless of operating system and computer age. They will also help you manage situations where internet access is not reliable or more limited than usual.

Here are 5 necessary plugin types that you should have on your browser so that you can keep a permanent record of any online content of interest to you:

1. YouTube and other Video Downloaders - typically these plugins will allow you to save files in .mp4, flv, or some other video format. You may need a separate one for YouTube and Vimeo, or other video sharing sites. Once you have the video files saved to your hard drive, you can use Any Video Converter to change them to .mp3 or other pure audio formats.
2. HTML to .PDF conversion plugins - consider a situation where you found a website that gives the perfect instructions for purifying water using a sari cloth, but there is no link or option to save the page in .pdf. With the conversion plugin, you can save the file on your own. It should be noted that you may need 2 or 3 different apps because some cannot convert content if it is integrated into the page as opposed to being part of the page you are seeing.
3. Download accelerator - if you have never used dial up for your internet, then you may not realize why this one is so important. A download accelerator is ideal for situations where you cannot gain access to WIFI or other high speed internet, but you still need to download larger files. These plugins also usually come with modules that will resume downloading after an internet connection is restored. Even if you have access to WIFI, this is bound to be very important for times when internet access may be intermittent.
4. WIFI management app - even if your smartphone or tablet comes with a rudimentary WIFI manager, there are others that can make it much easier to manage these

connections. If one hotspot becomes unavailable, some of these apps will automatically connect you to another one stored on the list. These apps can also connect you automatically to available hotspots with the best connection so that you can do your work as quickly as possible.

5. Root Access Apps - if you have been browsing around for files in your tablet or smart phone, you may not realize that you cannot access some very important parts of the system. Without access to these areas, you may not be able to manually detect or get rid of malicious content or deal with error messages that must be dealt with from the root folder. No matter how old your smartphone or tablet may be, having root access is very important for keeping the device in good condition. Just because you don't have access to this part of the computer, that doesn't mean hackers can't find their way in. The best thing you can do is give yourself the same level of access, and then learn how to use it in time of need.

## Testing Current Software and Apps

Consider a situation where you have a tablet, smart phone, or even a desktop/laptop computer that came with the operating system installed. Have you ever even used the device without it being hooked up to the internet or a cell phone service? If not, you may be in for a rude awakening if you try to use the device without having any kind of access to data transfer provider.

Here are just a few devices that will be just about useless in a time of need because you may not be able to access information stored on them.

First, there is any device that requires access to the internet or a phone signal to boot. Some Toshiba "satellite" laptops, are perfect examples of devices that will either fail to boot or prevent you from accessing information stored on the device. Typically, these devices will also fail to access add on or external memory cards or USB drives even though there is nothing wrong with

the memory storage device. These devices do not have a fully functional operating system or programs stored on the computer. Instead, the laptop must use an internet connection to log onto the main server and then obtain further instructions for booting and operation. If that server goes down, you are unable to connect to it, or the vendor decides not to service your device, then you will have no means to access your information.

To find out if you have one of these devices, make sure that it cannot access the internet or a phone line. You may need to shut the router in your home, or take the device to some place where there are no internet signals for the device to find. Turn it on, and see if you can get to your programs and software. If the only thing affected is your ability to get online, then you should be able to use the device in just about any situation. Don't forget to make sure you can read, edit, and manage documents and files stored on the device as well as those kept on external memory cards and drives.

If you have a device that does not have a full operating system and software installed, it will be to your advantage to obtain a device that can work without being connected to a remote computer. You can also look for Linux distros that can be installed on these devices. Once you install these distros, you may not be able to log in or access the parent server, however you will at least have full control of your device and the use of it regardless of whether you are hooked up to a remote computer.

Smart Phones and Tablets that are "locked" to a cell phone or data service provider. Chances are, if you have a smart phone or tablet, you may already know what happens when the cell tower is down or something else happens to prevent you from being hooked up to the data provider's information network. In most cases, you may simply turn the phone off and wait for the connections to be restored, or you may take steps to get the device repaired. What happens if you are in a crisis and need the device to access important files. If you do not run the following tests to find out beforehand, you may be stockpiling information and then have no way to access it later.

To find out the extent your device is locked to a data signal, try the following:

1. Start off by powering the device down.
2. Open the back of the device and remove the SIM card. If you are unsure of how to do this, consult the User's manual or call for tech support from the data provider and ask how to remove the SIM card.
3. Turn the device back on. The device should boot like normal, except for you will see a note about a bad or missing SIM card. If you can't get past this notice, can't access files, or can't go online (including via WIFI for enabled devices in the presence of a router or public hotspot), then it is safe to say your device will be pretty much useless in an emergency where there is no access to that specific data provider's signal.

There are two ways to resolve this problem. The best thing you can do is buy an unlocked tablet or cell phone that is WIFI enabled. These devices do not come with SIM cards or programming that tie them to any kind of network. If you are near a functioning WIFI router or public hotspot, you will be able to get online. Even if you do not have access to the internet, you should still be able to read files stored on the device or carry out other tasks that do not require an internet connection. If you are looking for an inexpensive tablet or smart phones with plenty of features - I recommend the Lenovo brand products. You will pay about 1/3 the price of other brands and still get a better, more durable device that can be upgraded and modified with relative ease.

If you have the sad misfortune of being on a data plan contract or using a "pay as you go plan", you can try calling the data provider and asking for an unlock code. Typically, once you unlock the phone, you will also break the contract and may wind up paying fees for early termination. In addition, once the phone is unlocked, you may still find that you cannot use the device unless you connect to another data provider (which you can just as easily find out by removing the SIM). Even though new laws say that phones must be unlockable, you may still have an older device that cannot be unlocked or used without being connected to a data provider.

## Software Options for Your Off-Grid Computer

When it comes to prepping your computer for off grid living, it is all too easy to fall into the trap of thinking only about hardware needs. Unfortunately, if you don't keep up with changes in software and apps, you may find that you have a perfectly functional computer, but no way to use it for your needs. Given some of the newer technologies, it is more important than ever to make sure that you pay as much attention to software and security needs as you do the physical device and accessories.

### Pros and Cons of Changing the Operating System

If you are serious about having a fully functional computer that will last for years in an off grid or survival situation, it is very important to get the right operating system. Among other things, a good quality operating system will have a longer usable life cycle, require fewer updates or upgrades, and will run all the software you need for as long as you need it. Sadly, the most popular operating systems that come installed on PCs, laptops, smart phones, and tablets are not the best for off gridding. You will need to choose one or more Linux distros and then choose programs that will best meet your needs. Here are some advantages and disadvantages to consider:

- if you are already accustomed to using certain apps or programs, it can be very hard to adapt to new ones that do not have the same features, or have them organized in a different way.
- you may void the hardware manufacturers service warranty. Even if the new operating system is more efficient and creates less strain on processors and memory, you may still need to send the device off to the manufacturer for warranty covered repairs. In most cases, they will delete your new operating system and install the old one so that they can run diagnostic scans. To get around warranty related issues, you will need to create a



dual boot system and then use the one you want routine and off grid purposes. You can also purchase older, non-warranty devices and then make sure you know how to maintain and repair them.

- You will have full control over the system. Many manufacturers use operating system versions that give them special access to various parts of the computer. While these areas are most often used for diagnostics and restoring factory settings, they can still be used for other means. On the other hand, when you install your choice of operating system, you will have full control of the entire system. No matter whether you are concerned about others snooping in your computer or having full control over connection ports, it is very easy to achieve these goals when you install your choice of operating system.
- As a rule of thumb, the more popular an operating system is, the more you will find malicious content and programs aimed at it. Unfortunately, modern hardware also comes with built in programming that makes it very vulnerable to these same hackers. If you install a Linux distro, you can easily choose one that has forensic features, as well as custom variants that no hacker will bother wasting their time with. Even though most distros rely on the same kernel (basically this is a set of core operating system programs), there may still be enough variance in relatively unknown distros to keep you safe from any problems.
- a good quality OS that does not require extensive security features will help save and extend the life of your hardware. As discussed in a previous article, everything you do on the computer requires carrying out mathematical calculations and then turn all that into something you find useful. The memory chips and processor chips used to do all those calculations get hot very quickly, and also have a limited life span. Basically, the less work you make them do to achieve a task, the longer they will last. In the case of security software, the system may spend as much as 50 - 80% of the processor and memory simply looking for malicious software or incoming threats. When you have an operating

system that is impervious to these attacks, your computer does not need to do all those scans. This is just one of many places where changing to a better quality and more efficient OS will help you get things done faster without shortening the life of your computer. I have personally noticed a 2 -3 year extension in lifespan on my own computers when I switched to more efficient operating systems even though I was running more demanding software (that still didn't take up as much processor and memory usage as security software required on other operating systems.)

## Features of Good Software and Apps for Preppers

Consider a situation where an EMP or some other disaster prevents computers from connecting to each other from remote locations. In this situation, you will only be ahead of the game if you can still access important documents and other files that will help you manage the situation. From instructions on how to tan a deer hide to purifying water, there are bound to be many things that you may store information on, yet not actually practice or remember well enough to carry out without instructions. In these instances, it is very important to make sure that you have programs and apps that can be used in any situation for if you need them. Here are some of the most important features:

- you should be able to use every part of the program or app regardless of whether the device is hooked up to the internet or a cell phone data provider.
- be able to access information stored on external drives or memory cards. Sadly, I've seen far too many apps and programs that can read from a memory card, but they cannot read from a USB drive or an external DVD drive simply because the programmer did not include these features in the interface. Take the time now to make sure all your memory storage devices are fully accessible to each app and program. If they aren't, this is a good indicator that you need to find software more compatible with your needs.
- make sure you can turn off automatic updating. One of the worst things that can happen is to find a perfectly good app, and then have it update to a version that requires access

to the internet. Worse yet, the app may be “upgraded” to one where you can only create, store, and access files stored on a remote server. Even if you buy unlocked phones, tablets, and install your own operating system, never forget that software developers can still find ways to control how you store and access important information.

- the software should be secure enough to reduce the risk of becoming infected or controlled by malicious users. Unfortunately, as computer technologies change, both apps and programs can become obsolete for this reason alone. You can alleviate some of these problems by starting off with a more secure operating system, however at some point, you may need to make some software changes or accept upgraded versions.

## Parts and Skills

For each device in your EDC, bug out bag, or other location, there are some important parts that can help double or even triple the useful lifespan of your computer. Even if you lose some functionality, the main parts should still work for 2 - 3 decades on desktop units, and up to 10 years on laptops, tablets, and smart phones.

Start off by buying all your devices brand new and with the maximum warranty available. If something breaks down during the warranty period, let the manufacturer or repair center take care of the problem.

Buy at least 3 to 5 non-functioning devices that are compatible with the make and model of each device. Usually, you can pick these units up for around 10 to 20% of the cost of a brand-new device. You can choose different manufacturers if the parts are fully interchangeable with your device. You will use these devices to learn how to make repairs, and for spare parts if something breaks down on your main device.

Since RAM chips take the most abuse on any computer system, keep a few spare ones on hand.

Have at least one extra power supply for desktop units. Unlike other parts of the system, you should never open the case on the power supply unless you have a good bit of experience working with electronic devices. Never forget that the capacitors inside these power supplies may not be fully discharged, and that touching them or a live circuit can cause death or severe injury.

Keep at least 2 USB hubs handy that also have the capacity to power any device you hook up to them. When connecting devices to the USB ports on your computer, try to never at least one pair of ports.

If you look carefully at the motherboard, you should find at least two separate locations or control access points for the USB ports. If you use only one of them and it burns out, there is a good chance that the other will remain functional. From there, you can always hook up the external ports to run more devices.

Cables and other gear to turn internal hard drives and DVD drives into external ones that will run on a USB port. Depending on the motherboard, you may also have a second disk controller that can be used if one breaks down.

To use it, however, you must open the computer case and switch the connector from one port to the other. You may also have to reconfigure some jumpers on the board so that the other port is activated.

An add on card that can be used to run internal hard drives, DVDs and other hardware. Even though you may have other parts on hand, it never hurts to have one of these inexpensive, but very useful cards on hand. You may also find that some older sound cards come with a controller for DVD drives.

Polarizing filters for LCD screens. If your monitor is becoming blurry or hard to read, it may only need a new polarizing filter. Just make sure that you buy the right size filter for your monitor, and store it away in a place where it won't get bent or warped.

Extra monitor inverters - these are usually used as drivers for laptop monitors. They are usually impossible to repair, and you will need to install a new one if your monitor fades out or stops working.

Fortunately, they are far less expensive than a brand-new monitor or laptop. If you purchase non-functioning laptops that still show clear, readable screens, chances are the monitor inverter from them can be used in other systems.

Refill kits or refillable cartridges for printers.

Many people reading this list might be wondering about storing away extra batteries. I don't recommend storing these away because a battery that is not used will continue draining and the internal parts will corrode or break down. If you buy batteries and never use them, their shelf life may even be shorter than for ones that you use on a regular basis.

## Basic Toolkit

It will not be of much use to have plenty of parts on hand, and then no way to install them or make good use of them.

Here are the most essential tools you will need for building computers or making repairs:

- chip extractors for chips that are installed in sockets
- high heat conducting gel
- anti-static grounding strap
- precision and larger size screwdriver kit
- magnifying glass
- low wattage solder iron, solder, and flux suitable for computer parts
- desoldering bulb
- pliers and wrenches
- wire cutters

- anti-static bags and mats for placing boards on while you are working
- multi meter, port testers, and digital logic probe

If you become especially proficient at scavenging and rebuilding electronics parts, it may be to your advantage to include a copper board etching kit. You can use these to make new circuit boards in a time of need. Even though the board may be much larger than the original one, it may still be enough to help you bypass damaged areas of any given board in the system.

## Scavenging and Repair Skills

If you take good care of your devices, they may last for several years without need for repair. Once they break down, however, you will need to put your toolkit and stored parts to use. Here are some basic scavenging and repair skills that you can use to fix your own devices, or trade as service with others:

- understand hardware part numbers so that you know which parts are compatible across different manufacturers
- learn how to solder and desolder chips or other parts without damaging the parts
- know how to diagnose problems and figure out the best way to solve them
- how to recognize which parts (example what a melted down chip looks like) need to be replaced or repaired
- how to use software diagnostics, driver programs, and BIOS programs to resolve problems
- how to find viable parts in a junk yard or other locations where discarded electronics may be found.

## Important Software Skills

Just because a major crisis occurs, that does not mean your computing needs will remain the same. For example, you may not have thought about including a spreadsheet or database app

or program in your software for your off-grid device. If you wind up needing this kind of software, it may be unavailable. If you know how to write programs and apps for your device, then you can build anything you need. There are many different compilers and programming languages available. Choose one that you can access for free, and that you can use without an internet or phone connection. You will also find that there are many free tutorials and e-books that you can download and keep on your computer. All in all, it should not take you more than 2 - 3 months of study to master enough of any given programming language to manage most needs.

## Security Skills to Master

When you need information about what is going on, or you need to contact others, chances are you will wind up going online. Aside from making sure that your device does not give away your location, it is also important to be able to do the following:

- be able to track anything that tries to access your device. If you convert your system to Linux or have a dual boot, use the Linux portion for internet access. This part of your system should also be set up with computer forensics software that can help you find out what is going on in each communication port and the origins of any incoming matters that might need your attention.
- know how to shield and manually scan your device from keyloggers and other malicious software. In these cases, being able to create your own apps and programs will be very helpful, especially if there are no updated databases available for detecting new threats.
- if you do detect malicious content on your computer, you should know how to clean the system manually, or worst comes to worst, wipe out the entire system and start over again. For the latter option, always make sure that you have master and duplicate copies of the operating system and any other software that you might need to reload onto the system. When you get your devices, it does not hurt to practice cleaning and creating



new installations from scratch so that you know what to expect. As with programming, you will find many free guides and books on this subject.

## Ways to Learn and Improve Your Skills

No matter whether you can barely turn on your computer and send out an email, or you have a bit more confidence, it is entirely possible to learn most of what you need for off grid computing in as little as 4 months. I highly recommend taking weekend workshops or dedicated college courses on topics of interest. Regardless of whether you plan to pursue a degree or certification (these may prove useful in a time when others need computer repairs or troubleshooting services), you can study online and at your own pace. For example, Udemy.com has all kinds of courses available. You can also find all kinds of free videos, tutorials, and e-books on subjects of interest.

Do you remember a time when Silicon Valley was the leader of the computer world? Today, China and Russia have the capacity to hack some of our most secure computers and send us all scrambling to recover from the damages. As a prepper, I often find it a bit frightening that we are told using a more secure system like Linux may cause us to be put on a government watch list. In the meantime, people, businesses, and government agencies that use more popular, easily hacked systems are not considered problematic because they may be a point of entry for serious threats to our way of life. In fact, while we are all looking at monetary collapse, nuclear threats, natural disasters, biohazards, and food shortages; a destruction of our computer infrastructure may be the true death knell of our nation and society. When it comes to choosing software for off grid living, it is very important to look at all your options and make choices that will ensure you can access important information regardless of the situation at hand.

## Where to Get More Information and Training

Overall, you will find it easiest and cheapest to build and test your skills on desktop computers. If you go to a flea market or do some research online, you can easily pick up dozens of obsolete motherboards, CPUs, power supplies, and just about anything else for a few dollars.

Start off by trying to build a complete and functioning system. This will give you plenty of practice with identifying basic parts and help you overcome any hesitance you may have in working with computer parts.

While you are exploring these parts, take a course on basic electronics and then one on computer hardware. You can also find plenty of good books on this subject. In total, you should spend about 4 months on this part of your skill development.

Once you master desktop computers, you can go ahead and choose the parts for, and build your own system. If you do not want to build a desktop unit, then go ahead and start working on building your stockpile of laptops, tablets, and smart phones.

You can always practice your skills on non-working units as well as get to know more about working with smaller devices that require a good bit more patience and care. If you develop a interest in these smaller devices, it will be to your advantage to take courses on how to repair them.

In a time of need, being certified to repair these kinds of devices can help you trade your services for other goods.

The first time you open a computer case, it can truly be a dizzying experience. I will never forget the first time I saw all those cards and cables going all over the place, and how exhilarating it felt when I replaced a card and the whole case didn't explode.

Over the years, I have also found that computers are a very valuable source of information, and that they can be a tremendous asset in a major crisis. No matter whether you need a new hobby,

want to focus on a skill in heavy demand, or recognize the need for computers in the post crisis world, being able to navigate hardware issues is very important.

Without a question, the first time you bypass a battery during a major crisis or repair a failing laptop monitor you will see why these skills are every bit as important as anything else you may be learning and practicing for a time of need.

## **The Challenge on Providing a Steady Source of Power**

Today, most computers have subpar power supplies that make them more susceptible than ever to fluctuations in power coming into the system.

As our electric grid continues to crumble, rolling blackouts, brownouts, and line voltage fluctuations caused by excess usage during peak hours will shorten the life cycle of many computers. If you are generating your own power, it is just as important to make sure you know how to keep the current going into your computer as steady as possible.

Here are some things you can do now, as well as consider when building a power system that will help you get the most out of every computer that you own:

- The first thing you need to do is find as many ways as possible to protect your devices from power surges. These can occur when the power first goes back on after a disruption. The cheapest method involves unplugging your devices as soon as the power goes out. It is also very important not to plug them back for at least an hour after the power goes back on.

During this critical hour, refrigerators, air conditioners, and other heavy drain devices will be trying to catch up, and they will put a heavy strain on the commercial grid. The last thing you want to do is have your computer subject to any brownouts or other problems that may occur during this time.

Do not forget to unplug routers (or unplug the network cable from your computer if that is how you access the internet for the device in question), printers, and anything else that might transmit voltage to the main computer.

- Your next goal will be to have your computer and peripherals hooked up to an electric socket as little as possible. UPS battery backup systems can be of immense help in this matter. Try to find a system that can power your computer for at least 4 - 6 hours. When the battery runs down, simply disconnect the computer plugs and charge the battery back up again. It is much cheaper to replace a UPS unit than it is an entire computer.
- One of the most important "last ditch" things you can do is keep your UPS and computer system on a good quality surge protector. Even though most UPS systems come with one built in, I recommend having three of them.

For example, on my system, I have a surge protector connecting between the power source and the UPS system, and then another surge protector between the UPS and the computer plugs.

Not only does this give me a total of four sets of circuit breakers, I also have a very easy way to shut power to peripherals without closing the entire computer system. I also use this arrangement for charging my tablets and other devices when they need it.

## What Happens When the Battery Dies?

If you have been thinking about using a smart phone or tablet as a place to store important survival information, you may hesitate because you know that the battery can easily be ruined by overcharging, or that it will wear out sooner rather than later.

While some devices will continue to work while the battery is "charging", others will not. If you have a device that will not work while charging, you will need to remove the battery and apply current directly to the device.

In this scenario, you must know how to keep the voltage and amperage as stable as possible before they reach the device. You can make your own controllers for this purpose then hook them up to solar panels or anything else that you will be using as a power source.

Just remember that your power controller may also need to go safely from AC to DC current as well as match the voltage and amperage needs of the device. If you aren't sure how much power to provide for laptops, tablets, or smart phones, just go by what the battery is rated for.

As you may be aware, UPS systems are usually constructed around a battery. Usually, these batteries will wear out and drain very fast in about a year of active service. Since the battery on the UPS system is the actual device used to smooth out the current, there is no real way to refurbish them.

In these cases, you would need to build a capacitor based inverter, or find some way to build a new battery with similar capacities.

## Is Off-Grid Computer Security an Issue to Address?

### Stealth Browsing and Communications



More than a few people living off the grid today do not give a lot of thought to personal security. After all, the police and militaries are still pretty much intact and the economy is still hanging on by a thread. In these situations, most people don't even begin to think about all the information they are giving away about their whereabouts. This, in turn, creates a situation where people who have not done much in the way of prepping will know exactly where you are. All they must do is make it out of wherever they are and get to you. Here are just a few people that may be monitoring your every move online, and using various kinds of software to figure out where you are located and what kind of supplies you may have on hand:

- gangs and other thugs that specialize in black market sales. Rest assured these people already have machine guns and other "illegal" weapons, plus the ammunition necessary to overcome anyone that gets in their way. If they know you have items that will sell for a high price in a crisis, all they must know is where you are to take what they want.

- individuals that may not be putting any effort into prepping, but who may still recognize that it is important to know where to find food and safety. Some may come to you simply asking for help while others may join with larger numbers of people to overwhelm you. No matter how far away you may live from a city or large groups of people, do not forget that your internet signatures can still reveal exactly where you are and give others plenty of time to figure out how best to get what they want from you.
- government agencies that will look to seize food, water, medicine, and other items that can be redistributed to others that make their way to FEMA camps.

Fortunately, there are only three pieces of information that you need to control online, and there are several methods for achieving that goal. As you look at these information types, try to see how you can change your online footprint, and take steps to replace browsers, programs, and apps that might give away valuable information.

- IP Address - each time you log onto the internet, your computer is assigned a special ID by the internet service provider (ISP). Since each ISP only has a certain number of addresses to work with, it is possible to use software to figure out where your computer is connecting to the internet from. This problem is even worse if you are using public hotspots. For example, if you stop off at a thruway exit and use their WIFI to connect to the internet, every email you send and every site you visit will record the identity of that exit. The simplest way to keep your location safe is to simply never log into a computer within 100 - 150 miles of your homestead. You can also use VPN or Very Private Networks that will assign you a different IP number; including ones that make it look like you are overseas or in a different part of the country. It is also important to use a secure browser that will prevent websites from seeing and storing information about your IP. Sadly, most apps for smart phones and tablets record everything. For these devices, you will more than likely need to use a VPN to keep your IP information as private as possible.

- your browsing habits and areas of interest. Did you know that backup passwords and other "private" information are of immense interest to hackers? Even putting your family tree information on a genealogy site can give people clues about how to get into your social networking, banking, email, and other online accounts.
- In addition, even if you put different information for the "reminder" prompts, data miners can still take some good guesses based on things you commonly talk about or have an interest in. Typically, you won't even know these data miners are in operation. Consider a situation where you used the Google search engine to find out how to pick a bug out bag. Now let's say you close the computer down and shut all the browser windows. After you turn the computer back on, you decide to log into a social networking site completely unrelated to the Google search engine. Do you notice ads for bug out bags or related accessories? If so, then you can safely figure that your search information was recorded and is now being used to "deliver content of interest". Never forget that unsavory people can also use this information to arrive at conclusions about what you purchase and what you may have on hand.
- At the end of the day, there is no real way to keep websites from tracking your activities online. If you protect your IP address and make sure it can't reveal your important locations, there is a chance you will remain safe. That all being said, you can still throw data miners further off the trail by looking up random bits of material that have nothing to do with survival matters. Pick a hobby, follow news from liberal and conservative sources, do everything you can to make it difficult, if not impossible for data miners to predict what you will look at next.
- Information You Disclose to Others - of all the sources of information, this one is the easiest to control, yet most people let their fingers and mouths do far too much talking. For example, if you are going to be away from home for a few weeks, don't broadcast that information on social media. Make sure that anyone you tell will keep that information confidential. Social networking sites are a wonderful place to gain



information and meet people, however they can also stimulate you to give out more information than is wise to give. There are data miners that are highly skilled at stroking egos, stimulating prideful boasts, and even getting you to respond to something in anger that reveals something important. Other data miners might use words phrases that trigger an interest in providing educational information. To be on the safe side, you must establish personal information and knowledge sharing boundaries. No one can force you to reveal how much you know about marksmanship, what kind of guns you own, or what kind of food stores you have available; however, there are many ways to encourage you to give up just that kind of information. Once the information is out there, it cannot be taken back. In a time of need, you would be amazed at what people remember about what you have and don't have on hand!

## Keeping Your Information Safe and Available

As with many other preppers, I have a huge number of .pdf, videos, and other files related to how to carry out a wide range of tasks. If I ever tried to print out all the documents, plus my notes on what does and what does not work, I could fill up an entire library. A collection of information that large cannot easily be carried around and organized in any other format than an electronic one. When your life may rely on being able to access these electronic files, knowing how to keep them backed up, safe, and easily accessible is very important. Here are a few things you can do to ensure you always have access to your documents:

Choose two devices that you will use exclusively for reading your files. These devices should not be used online or with any kind of connection to another computer. It should have all the software required to read all the document formats of interest to you. You should not need to upgrade the software to read these same formats. The device should also be able to read at least three kinds of external memory sources: USB "thumb" drive, SDHC memory card (you can also purchase a connector that accepts micro cards), and DVD/CD RW disks.

You should keep one device with you in an EMP shielded compartment of your EDC, and then store the other one away in a fireproof, EMP shielded locked safe.

Even though you will be constantly gathering new information, it is very important to always have your data stored on four different external memory sources (including the micro memory cards), plus a master for each one that you only update once or twice a year. Always keep your masters, plus one copy of working media in a locked, EMP shielded, fireproof safe along with a device that is ready and able to read all the memory sources.

Aside from your EDC, you may also want to store additional copies of your files plus appropriate devices in your bug out bag or any other fast access bag that you would grab prior to an evacuation.

while some people put passwords on their documents and drive access points, I don't necessarily think it is the best of ideas. If you are in a traumatic situation and need to get into your files, or need to search for something, the last thing you will want to do is be stuck entering hundreds of passwords. If you feel the need for passwords, then only put them on one set of media and leave one without passwords in case you need something easier to work with.

## What About the Cloud Revolution?

To be honest, I'm one of those people that loves the cloud revolution. I have several devices that I work from, and being able to access a central set of files from one location is truly a gift. That, and I never worry about my hard drive crashing, or losing all my files because of some other hardware problem. The only problem is the fact these files cannot be accessed without internet connection. For this reason alone, I will always recommend keeping files secured offline so that you can always get to them. In one sense, choosing to keep one or more spare sets of information in the cloud is entirely a personal decision. Here are some advantages and disadvantages to consider:

Advantage: if the internet remains accessible, you can create a common core of files that can be built by you and other preppers. Do you have experience with trying things found on videos? Does someone else in another state, or even another country have experience with something you haven't explored yet? All that information can be easily stored and shared in a cloud setting, and then downloaded to your own devices. Why reinvent the wheel or spend hours searching for information when you can build an extensive, peer tested library?

Disadvantage: when you store files on the cloud, the host or cloud provider can access all your files. Even though they may not consider your files or monitor everything you do, there is a chance it will happen. If you aren't concerned about this privacy issue, then cloud computing and storage may be very appealing to you. You may also want to consider VPN cloud system that connects only certain users in a private network. As with many other security related matters, you will probably find that Linux distros have much more to offer.

No matter whether you are on a very tight budget, or don't think computers will be important in the post crisis world, you can give obsolete devices a try. At the very least, if you don't wind up in a major crisis because of an EMP attack, and you can still find a way to power a computer, these devices can help you access very important information that might otherwise have been lost to you.

# Resources

Survivopedia Articles on Using Computers

[7 Steps to Increase Privacy When Using the Internet](#)

[Basic Guide to A Secure Linux USB Drive](#)

[How to Easily Convert Your PC to Linux](#)