

Bits & Bytes

Arkansas' Premier Computer Club



December 2024

The Bella Vista Computer Club - John Ruehle Center

Highlands Crossing Center, 1801 Forest Hills Blvd Suite 208 (lower level), Bella Vista, AR 72715

Website: <http://BVComputerClub.org>

Email: editor@bvcomputerclub.org

MEETINGS

Board Meeting: December 9, 2pm, in John Ruehle Training Center, Highlands Crossing Center.

General Meeting: December 9, 3pm.
Program: "Discovering Digital Wallets": a video of an APCUG presentation by Judy Taylour. Digital wallets are an alternative way to pay for goods and services that is accepted by an increasing number of merchants. It enables you to use a mobile device to pay via credit cards or a bank account without exposing the actual account to the merchant.

We will meet in-person in **John Ruehle Training Center**, Highlands Crossing Center, lower level, 1801 Forest Hills Blvd, Bella Vista, or you may attend the meeting on-line via Zoom. Zoom access information is published on our website.

Visitors or Guests are welcome.

Consider attending by Zoom if you are unable to attend in-person.

HELP CLINICS

December 7, 9am - noon at John Ruehle center

December 18, 9am - noon at John Ruehle center

Members may request Remote Help on our website at <https://bvcomputerclub.org> at menu path Member Benefits ► Remote Help .

MEMBERSHIP

Single membership is \$30; \$15 for each additional family member in the same household.

Join on our website at <https://bvcomputerclub.org> at menu path Get Involved ► Join/Renew, by mailing an application (from the web site) with check, or complete an application and pay in person at any meeting.

CLASSES

(At BVCC Training Center)

Wednesday, December 11, 9am-11am, "Data: Where Is It and What To Do With It", with Pete Opland.

Tuesday, December 17, 9am-11am, "Windows 10/11 For Beginners", with Pete Opland.

Advance sign up required for each listed class: For reservations: email to edu@bvcomputerclub.org, or sign up at the General Meeting. Classes are free to Computer Club members.

Check the monthly calendar and announcements for any last minute schedule changes at <https://bvcomputerclub.org> .

NEW OR RETURNING BVCC MEMBERS

We are pleased to welcome the following new members or members returning as BVCC members after an absence:

Barbara Stanley

Linda Schmelig

Lori Obrenovich

Barbara Lowinger

Kim Oxley

Mary Kay Solera

Jim Parsons

Yolie Parsons

CLEAN YOUR DIRTY LAPTOP

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After being used regularly for months or years, our laptops accumulate dust, grime, skin oils, sneezes, and who knows what else. Your laptop is most likely due for a cleaning, and I'm going to pass along some suggestions for how to do it effectively without harming this delicate piece of equipment.

You know your laptop is filthy. You can see the dirt and grime on your screen and keyboard. You might also be able to see grime accumulated on your trackpad. So, it's time for a cleaning.

A shining, newly cleaned laptop should be a joy to use; the keys are clean, and the screen is free of smudges and splatters. These cleaning suggestions might also be helpful if you buy a used laptop since the previous owner doesn't always leave it in pristine condition.

Your Supplies

You don't need much to clean a computer: rubbing alcohol, a mild dish detergent, soft lint-free cloths (microfiber cloths are ideal), Q-tips, and canned air. Ninety percent or higher isopropyl alcohol is what you want since it won't damage the internal components. And if you have some particularly embedded dirt, a Mr. Clean Magic Eraser (or other melamine sponge) can also work wonders. However, it should be an absolute last resort since it's abrasive and can leave permanent scratches.

Don't waste your money on specialty cleaners you see at Amazon or big box electronics stores like Best Buy. They work just fine but no better than what you already have at home.

Start With the Inside

Starting with that dirt on the keyboard and screen might be tempting, but you should start with the internals. Canned air will blow dust and dirt everywhere, so if you start cleaning the screen, you'll have to clean it again after you've used canned air. Start by blowing out the dust, then move on to the outside.

You shouldn't have to open your laptop to clean the inside. Turn off the laptop, unplug the power cable, and remove the battery if it pops out (removable batteries are becoming a thing of the past). Give it a quick burst away from the laptop to eliminate condensation, and then start blowing air into any cracks and crevices: the keyboard, the vents, and even the USB and other ports. Blow in short bursts since longer sprays can cause moisture to accumulate inside your computer. You can also damage the fans by making them spin too fast.

You probably won't see a significant change after doing this. The goal is to prevent dust buildup over time, which can cause your laptop to overheat and possibly spontaneously shut down. If you can see dust bunnies in the vents, you've let it go too long without a cleaning. If you see dust stuck behind the vent that you can't dislodge by blasting it with compressed air, consult your user manual to open the case. Be sure you remember which screws went where for the reassembly. Snap a picture or two of your laptop for reference before opening the case, and be super-organized with the screws as you remove them.

Smokers and pet owners should take special care to clean the inside often since you'll likely experience a much quicker buildup of dust, smoke, hair, and other dirt. Computers exposed to smokers can have their useful life cut by as much as half.

Wipe Down the Outside

Remember, when cleaning a laptop (or desktop) computer, apply the cleaning product to the tool you're using to clean, NEVER directly onto the computer. So, grab your microfiber cloth, pour a little alcohol onto it, wring it out so it isn't dripping wet, and wipe down the surface. Cotton swabs and alcohol are helpful for the keyboard keys and the small spaces between them. (If there are marks that won't come off, you can try rubbing them with a Mr. Clean Magic Eraser or other cleaner very lightly, but again, they're mildly abrasive, which can alter the surface's finish.)

It may take a few passes to get all that grime off, but you should notice a dramatic difference once you do. If your laptop is particularly old, you may not be able to get rid of the shine on the keys; some of us may have worn down the top layer of plastic and even the letters on the keys. There's not much you can do about that.

You should be able to wipe fingerprints off your screen with a dry microfiber or soft terry cloth. If you need more cleaning power, a slightly damp cloth that has been thoroughly wrung out first can help. Some manufacturers, including Dell and Lenovo, even say you can use a 50:50 mixture of isopropyl alcohol and water to remove tough dirt. Avoid household cleaners with harsher chemicals like ammonia or Windex on the screen.

Get Rid of Bad Smells

Let's say you have a particularly terrible case of a gross laptop, and even after the above steps, your laptop still carries the essence of whatever it has been exposed to. I've seen many laptops that smelled like smoke, and getting rid of that is challenging or impossible. Cleaning the surface can help, but many of those smells may also be inside the computer. For that, you can turn to a natural deodorizer: charcoal. Don't go digging through your grill for briquettes! Cooking charcoal is different from activated charcoal. Activated charcoal is made with much more (micro) surface area to be more absorbent.

Another common household item is kitty litter. It's a great odor eliminator because most kitty litter formulas have activated charcoal to neutralize litter box smells.

Seal the laptop in a bag or closable bin with a cup or so of the activated charcoal or litter and leave it for at least 24 to 48 hours. If you don't have a cat, people also had good luck with diaper pail deodorizers, which are neat little packets of charcoal you can throw away when you're done. The longer you leave the computer in the bin, the better.

HEIC FILE TYPE – SHOULD I CARE ABOUT THIS FILE TYPE?

By Phil Sorrentino, Secretary & Newsletter Contributor
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HEIC is the name of the file format that Apple uses for images taken with an iPhone or iPad. Even if you don't have Apple equipment, you may have received a picture with the .heic file type from someone with an iPhone. I got one just a few weeks ago. (Though I have read that when a photo is sent or exported from an iOS device to a non-iOS device, the image is typically converted from an HEIC file to a JPEG file.)

HEIC stands for High Efficiency Image Container. Advanced, modern compression methods allow photos to be created in smaller file sizes while retaining a higher image quality than JPEG. Since Apple's release of iOS 11 in 2017, the iPhone has, by default, produced images in the HEIC format, so it's been around for quite a while. HEIC, also known as HEIF, is a more efficient format than JPEG because it creates smaller files, in some cases up to half the size, even though the quality of the images is about the same. (Similarly, High-Efficiency Video Coding (HEVC) is the default video file type for video files for some Apple products.) In switching from JPEG to HEIC, Apple has lowered the space needed to store the image files so they can keep up with the increasing quality and resolution of their smartphone cameras. This has led other manufacturers, including Microsoft and Canon, to embrace the HEIF format. The Moving Picture Experts Group (MPEG) is the developer of the original HEIF and HEVC technologies and JPEG.

An HEIC file contains one or more images saved in the High-Efficiency Image Format (HEIF) and metadata describing each image. HEIC files are most commonly saved with the .hemic extension but may also use the .heif extension. This newer standard offers 25% to 50% better data compression at the same quality level. HEIC allows you to store multiple images in one file. If your phone has burst mode functionality, you can capture multiple high-quality action shots of a moving subject with a single click. Then, with multiple images in a file, you can convert HEIC files into GIFs to make moving animations from your stored sequences of images. (The GIF file type is an animation created from a sequence of still images.)

A brief technical review shows two main types of digital image files: raster and vector. JPG, JPEG, and JPE are all file extensions that refer to the same file format: JPEG is probably the most common name.

Each refers to the Joint Photographic Experts Group “Raster Image” file type. Raster Image file types are images produced when scanning or photographing an object. The image is compiled using a matrix of pixels, or tiny dots containing unique color and tonal information, organized into rows and columns, or a grid, that creates the image. Other common Image file types are bmp, png, tiff, and raw (raw being the largest of all the file types). Wikipedia provides a comparison between JPEG and HEIF.



Comparison of JPEG, JPEG 2000, JPEG XR and HEIF files at similar file sizes

Can you tell the difference?

And just for completeness, Vector images are made up of points, lines, curves, and shapes based on mathematical formulas. When you scale up a vector image file, there is no loss of quality, so it can be sized to however large or small you need it. When you scale up a raster image, it can become pixelated, blocky, and possibly unrecognizable.

Remember that iOS is Apple’s mobile device OS (iPhone and iPad), and MacOS is the Apple computer OS. When Apple added HEIF support to iOS, they also added HEIF support to MacOS. Then, in 2018, Google followed suit by adding HEIF support to Android (smartphones and tablets), and Microsoft added HEIF support to Windows. To open HEIC files in Microsoft applications, however, users may have to manually install the Microsoft HEIF Image Extensions and HEVC Video Extensions packages from the Microsoft Store, though that was not my experience.

If you have an .heic image on a Windows 10 system that you want to view, locate the file with File Explorer and then double-click the image; if it opens, great. If it doesn’t open, right-click the image and select “Open With > Photos.” If the Photos app prompts you to download the HEIF Image Extension, click the “Download and Install it now” link to get it free from the Microsoft Store. But if your Windows 10 is up to date, the .heic file will probably open with Photos. Although the Extension software for Images (HEIC Image Viewer, Converter) is free, there is a one-time cost of \$0.99 for the Video Extension software (HECV Video Extensions). (Note that photos here refer to Microsoft Photos, not Google Photos.) If you have Windows 11, you might not notice that the .heic image is any different than any other picture on your system, most likely because .heic support is included in the Windows 11 Photos App. You will not notice a difference if you don’t have the Show “File name extensions” option checked” because then the file type part of the file name (the part after the “.”) is not shown, and you won’t see the type of file you are viewing.

HEIC and JPEG have advantages and disadvantages depending on their intended use. The OS developer’s and a computer user’s point of view may differ. HEIC files take up less space than JPEG files and still produce the same –if not better- quality images. However, HEIC is currently limited to

specific platforms and software due to its lack of compatibility and acceptance. In these instances, you may first have to use a converter to convert the HEIC files to JPEG. In the long run, you may not need to care much about the HEIC format, but it will not be a mystery if you find one on your system.