

# Bits & Bytes

Arkansas' Premier Computer Club



## March 2025

**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](mailto:editor@bvcomputerclub.org)

### MEETINGS

**Board Meeting:** March 10, 2pm, in John Ruehle Training Center, Highlands Crossing Center.

**General Meeting:** March 10, 3pm. Program: "Q&A: Panel of Experts", with Woody Ogden and Pete Opland – an opportunity to submit your computer-related questions to our panel. If our panel doesn't know the answer, someone else in the audience may. Questions accepted from the floor; or by emailing your question in advance to [Q.and.A@bvcomputerclub.org](mailto:Q.and.A@bvcomputerclub.org).

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

**March 1, 9am - noon at John Ruehle center**

**March 19, 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)

**Tuesday, March 4, 9am-11am, "Why, When and How to Backup Your C Drive", with Pete Opland.**

**Tuesday, March 18, 9am-11am, "Building a Password Manager Using Excel", with Pete Opland.**

**Advance sign up required for each listed class: For reservations: email to [edu@bvcomputerclub.org](mailto: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:

Maxine Olson

Marion Heath

Cathy Schimming

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## LENOVO LAPTOP RAFFLE

One of BVCC's most important fundraisers during the year is a raffle of a computer. This year the offering will be a refurbished Lenovo Ideapad 5, 15.6" laptop, including a laptop case and wireless mouse.



The raffle drawing will be held at the BVCC April 14 General Meeting. Tickets are available for a donation of \$10 at the BVCC General Meetings up until the time of the drawing, or by calling or texting 479-966-9357. You do not have to be a BVCC member or present at the meeting to win.

The specifications of the laptop are as follows:

- Name: **IdeaPad 5 - 15ITL05** MTM: 82FG000RUS, S/N: PF20M4DS
- Processor: 11th Gen **Intel Core i5-1135G7, 2.40 GHz**, PassMark Single/Multi BM: 2667/9690
- **Display: 15.6"** FHD (1920x1080), w Camera
- RAM: **8 GiB** (not upgradable)
- Operating System: **Windows 11 Pro**
- Storage Drive: **512 GB NVME SSD**
- 2 USB-A 3.2 Gen 1 ports, 1 USB-C 3.2 Gen 1 port
- SD Card reader
- HDMI 1.4b
- Headphone/mic port
- 802.11AX WiFi & Bluetooth 5.1
- Installed software: **Microsoft Office 365** (not a subscription), Chrome, Firefox, Thunderbird, VLC Media Play, LibreOffice, and Zoom

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## CHANGE IN HELP CLINIC POLICY FOR EXCESSIVELY-LATE RENEWALS

We send out emails to remind members it is time to renew membership during the last month of membership and during the following month as well. Our annual membership dues do constitute a significant part of our income, almost all of which supports our Training Center and makes Help Clinics possible.

The Help Center personnel have felt that a few members take undue advantage of the ability to renew membership at a Help Clinic well beyond their usual renewal grace period of two months when they find they need computer help. That suggests they might have delayed renewing even longer if they hadn't suddenly needed our services. If too many members followed that practice, that would impact our ability to sustain the Training Center and its equipment.

**At the February Board Meeting a motion was made and approved that members renewing after the normal two-month grace period might have to wait 30 days before being eligible for Help Clinic service, to encourage members to renew on time unless there are extenuating circumstances.**

We do recognize there can be extenuating circumstances for late renewals, and Help Clinic personnel will take that into account; but we hope that members will in part think of their membership fee as an inexpensive form of insurance to guarantee computer help when needed, rather than as a fee that is only paid when they actually need help.

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## LIFESPAN OF VARIOUS DIGITAL RECORDING MEDIA<sup>1</sup>

By Joel Ewing, President, Bella Vista Computer Club  
Bits & Bytes, March 2025  
<https://bvcomputerclub.org>  
president (at) bvcomputerclub.org



### ***Floppy Disk***

Sometimes the media was even bad when new. Claimed lifespan of 3 to 5 years, although maybe 10 years under ideal storage conditions. Shorter life if heavily used because read/write heads physically contact the recording surface and rub oxide off the surface causing physical damage over time.

### ***CD and DVD***

Unrecorded (blank) CDs and DVDs have 5 to 10 years of shelf life! Life expectancy of recorded CDs and DVDs may be as short as 2 to 5 years, could be as long as 10 to 25 years depending on the media quality and conditions under which they are stored. Improper handling can scratch the surface and destroy data. Use of inappropriate markers or adhesive labels on a DVD can also render data unreadable.

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1 Mostly from <https://www.arcserve.com/blog/data-storage-lifespans-how-long-will-media-really-last>

## ***Hard Disk Drives***

It is reasonable to expect a HDD that is heavily used to last 3 - 5 years. Moving mechanical parts will eventually fail. I have also seen lightly used HDD drives that have lasted as long as 10 years, but usually by that time they are obsolete for other reasons. There are reports that under ideal storage conditions a hard drive can be stored for 20 years and still retain its data.<sup>2</sup> Magnetic signals tend to deteriorate with time and can also be affected by temperatures over 90° F or by exposure to other magnetic fields. Exposure to excessive humidity can also corrode internal components and shorten the HDD life.

## ***Flash Storage (Thumb Drives)***

These devices are typically designed to last 3 to 5 years based on "normal" usage, although some manufacturers offer much longer warranties, even up to a lifetime warranty. Every write or erase cycle shortens the device life by a little bit, but these devices can be designed for durability and longevity if you are willing to pay more. Storage at elevated temperatures also shortens their life. I've used maybe 25 different thumb drives over the last 25 years, but most of them are lightly used. One is still working after over 20 years. Only one has completely failed, and that was one I was given that had an unknown history.

## ***Solid State Drives (SSDs)***

These are faster and more durable than thumb drives (which also contain solid-state storage). Like thumb drives, write and erase cycles eventually will wear out the device, but current SSDs are designed to spread the wear more uniformly across the physical storage. For that logic to work well, some recommend you should always leave 10% to 30% of the SSD storage space unused. The Operating System or a user may write data repeatedly in the same logical sectors of the SSD, but internally the SSD will store the data in different physical memory locations to distribute the wear across all parts of its storage. Most SSDs can last over 5 years and the most durable units over 10 years. Many SSDs have a wear indicator that counts down from 100% to 0%, which shows how much longer they can be used. One recommendation is that an SSD should be replaced once its media life remaining is less than 10%. Some SSDs may be better at retaining data in storage than others. An SSD should be able to retain data without power in storage for a minimum of 2 to 5 years, while some SSD manufactures claim retention for 15 - 20 years without power.

## ***What This Means If Indefinite Archival is required***

Since all media has some finite lifetime, and in some cases the drives that can access a particular media may become increasingly difficult to find, no archive media can last forever. This means either the old archived data must be copied from the old media to new media, or new backups must be made to new media before the old backup media has reached end-of-life.

This is one of the current limitations of digital archival, in that current record media can only be dependably stored for decades at best. Contrast that with archival of printed documents on high-quality paper that can be expected to survive in readable form for centuries if properly stored.

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2 <https://datarecovery.com/rd/how-long-can-a-hard-drive-last-in-storage/#:~:text=The%20data%20retention%20rate%20of,retain%20all%20of%20its%20data.>

I wasn't that aware that blank CDs and DVDs can also deteriorate in a few years. I strongly suspect some of the CD blanks I still have around and rarely use are probably well past the recommended shelf life and may need to be discarded. It's even possible my impression that CDs are less dependable than DVDs may actually be an indication of the age of my CD blanks.