

# The Digital viking



## Twin Cities

PC USER GROUP

NEWSLETTER

Minneapolis & St. Paul, Minnesota USA • Vol. 44 No.3 • October 2023

*TC/PC Exists to  
Facilitate and Encourage  
the Cooperative Exchange of  
PC Knowledge and  
Information Across  
All Levels of Experience*

**October 2023**

**Membership Info .....2**

**A Cautionary Tale -**

**Yahoo Mail Hacked ....3**

**A Conversation**

**With BARD.....5**

**Beware of AutoPays .....8**

**Forth Programs ..... 10**

**SIG Information .....13**

**TC/PC Calendar.....14**

**Membership Application.15**

**Maps to Events .....16**

<sup>4</sup>  
**General Meeting**  
**Tuesday, October 10, 2023**  
**7:00 PM**

**Backup and Sync Files**

**With GoodSync**

**Via Zoom Only**

Drew King, APCUG Board Member and member of the Sarasota Users Group gives this presentation on a reasonably priced (also a free version) app, GoodSync, that can help with both backup and syncing files. One can never be reminded too often to backup your files and syncing files across different devices and different platforms is sometimes a challenge, so here is a look at a software that can help with both. It is available for all platforms: Mac, PC, Linux. If you are using or want to recommend a similar program, please add to the conversation at our October meeting. 🖨

---

**Note:** All TC/PC Meetings and SIG Groups will be virtual until further notice. Visit [tcpc.com](http://tcpc.com) for info.

---

**Tech Topics with Jack Ungerleider via Zoom at 6pm before the General Meeting.**

TC/PC is a  
Member of



**24-Hour Information • [www.tcpc.com](http://www.tcpc.com)**

Application form inside back cover

---

# The Digital Viking

The Digital Viking is the official monthly publication of the Twin Cities PC User Group, a 501(c)(3) organization and an all-volunteer organization dedicated to users of IBM-compatible computers. Subscriptions are included in membership. We welcome articles and reviews from members. The Digital Viking is a copyrighted publication and reproduction of any material is expressly prohibited without permission. Exception: other User Groups may use material if unaltered and credited.

**Disclaimer:** All opinions are those of the authors and do not necessarily represent the opinions of the TC/PC, its Board of Directors, Officers, or newsletter staff. TC/PC does not endorse, rate, or otherwise officially comment on products available; therefore, readers are cautioned to rely on the opinions presented herein exclusively at their own risk. The Digital Viking, its contributors, and staff assume no liability for damages arising out of the publication or non-publication of any advertisement, article, or other item. All refunds in full or in partial, for advertising, membership or any other item shall be at the sole discretion of the Twin Cities PC User Group Board of Directors.

## Advertising

Full page (7½ x 9½)	\$100.00
Two-thirds page (7½ x 6)	80.00
Half page (7½ x 4¾)	65.00
One-third page (7½ x 3)	50.00
Quarter page (3½ x 4¾)	40.00
Member Bus. Card (2 x 3½)	10.00

Multiple insertion discounts available.

Contact Sharon Walbran at: SQWalbran@yahoo.com

Deadline for ad placement is the 1<sup>st</sup> of the month prior to publication. All rates are per issue and for digital or camera-ready ads. Typesetting and other services are extra and must be requested in advance of submission deadlines.

Payment must accompany order unless other arrangements are made in advance. Please make checks payable to: **Twin Cities PC User Group**

## TC/PC 2023-2024 Board of Directors

Meets once or twice per year. All members welcome to attend.

Visit [www.tcpc.com](http://www.tcpc.com) for meeting details.

<b>President</b> —Lee Kaphingst	leekap@comcast.net
<b>Vice President</b> —Curtiss Trout	ctrout@troutreach.com
<b>Secretary</b> - Sharon Walbran	sharon.walbran@gmail.com
<b>Treasurer</b> - Sharon Trout	strout@troutreach.com
<b>Newsletter Publisher</b> Sharon Walbran	952-925-2726 sharon.walbran@gmail.com
<b>Web Master</b> Curt Trout	ctrout@troutreach.com
Board Members:	
Steve Kuhlmeier	skuhlmeier@hotmail.com
Lon Ortnier	612-824-4946 lon@csacomp.com
Lee Kaphingst	leekap@comcast.net
Jeannine Sloan	Ambassador for Friendship Village
Curtiss Trout	ctrout@troutreach.com
Sharon Trout	strout@troutreach.com
Jack Ungerleider	jack@jacku.com
Sharon Walbran	sharon.walbran@gmail.com

## TC/PC Member Benefits

Product previews  
and demonstrations

Special Interest Groups  
Monthly Newsletter

Discounts on products  
and services

Contests and prizes

## Business Member Benefits

All of the above PLUS:

FREE ½ page ad on  
payment of each renewal

20% discount on all ads  
Placed in the *Digital  
Viking* Newsletter

Up to 5 newsletters mailed to  
your site  
(only a nominal cost for each  
additional 5 mailed)

## Newsletter Staff

Editor Sharon Walbran

# A Cautionary Tale – Yahoo Mail Hacked!

David Kretchmar, Computer Hardware Specialist

Sun City Summerlin Computer Club

<https://www.scscclb.com>

dkretch \*\* gmail.com

Recently I helped a club member regain control of their Yahoo Mail account after they had been hacked by possibly one of the most sophisticated computer intrusions I have seen to date. The user became aware they had been compromised when people whose names were in the Yahoo Mail personal contact list reported receiving suspicious emails purportedly from the hacked individual's Yahoo account. No doubt those emails contained a link to malware that would have planted itself on any computer on which the infected link was opened.



The user immediately did the correct thing; they changed their Yahoo password.

Subsequently, the user could not log into their Yahoo mail account, instead getting a message that their account was locked and they would have to wait a period of time (the countdown "clock" appeared to start at one hour) before attempting to unlock it. The user encountered this lock and countdown when trying to access their account. The timer was an interesting clue since Yahoo's advertised lockout period for a user's repeated incorrect password attempts is either 12 or 24 hours, not one hour. There is a countdown clock available for Yahoo and Google advertisers that could be set to run for one hour or any preselected time.

## A Google Chrome issue?

This user was attempting to access their Yahoo Mail via their favorite browser, Google Chrome. On a hunch, I tried to access the Yahoo account using Microsoft's native internet browser, Microsoft Edge. The user manually entered their Yahoo username and the new password, and they got into their account with no problem! Yet the Yahoo account contained virtually no recent email. I then downloaded and installed the Mozilla Firefox web browser with the same results.



My suspicions turned to the Google Chrome internet browser installed on their computer. I checked the area in Chrome where browser infections are known to attack and reside: Extensions (Settings, More tools, Extensions). I turned off or deleted all potentially problematic Extensions, yet the problem persisted. I then reviewed each application installed on the system and saw nothing suspicious.

Chrome seemed to be operating fine except for the Yahoo Mail issue. This begged the question, "Why does Chrome present problems with Yahoo while two other browsers work?" The problem HAD to be with Chrome. I reset the Chrome browser and deleted cached data, but the problem persisted.

I deleted the Chrome browser, restarted the computer, then downloaded and reinstalled Chrome. The same problem persisted. That pesky timer seemed to continue its countdown, and since I had been working on the issue for almost an hour, the lockout appeared to be about to expire. When the countdown clock dropped to less than a minute, I continued to attempt to log in continuously, finally

getting Yahoo to accept the user's login and the new password, and the problem was solved. I had hit the program precisely when the lockout ended before the hacker or hacking program could kick in.

Even after accessing the Yahoo Mail account, the inbox was empty. I sent an email from that Yahoo account to that same account, and it seemed to send OK but never appeared in the inbox. Yet it appeared as sent mail. I checked to filter settings on Yahoo Mail and saw that any mail containing the Yahoo email address of the affected account, including every email going into that account, was being diverted to Trash. Removing that filter was an easy fix for the rest of the problem.

### **Conclusions and Recommendations**

The malware that caused the problem was probably accessed via a link in an email from a trusted friend. This is how most malware is spread. Remember, friends of the club member received an email from the club member that no doubt contained the same malicious link.

To prevent email account lockouts, a user should limit the number of times they try to enter a password. If an account holder gets a "bad username or password" message 2 or 3 times, they should use the "Forgot Password" feature to reset the password. The password is virtually always the problem with email accounts since we keep the same username (email address) all our lives.

Consider using a password manager like the good one built into Google Chrome. This will make it easier to use strong passwords that are almost impossible to hack, as well as make your life easier when you log in to sites. Also, a "keyboard logger" that records keystrokes cannot capture passwords.

Don't count on antivirus software to protect you from hacks. The hacked user discussed in this article was running Malwarebytes Pro and Windows Security, two of the best PC defenses available today. 🖥️

**[Go to Page 1](#)**

# A Conversation with BARD

Art Gresham, Editor, Under the Computer Hood User Group

May 2023 issue, DriveLight

<https://uchug.org>

leditor101 \*\* uchug.org

Two months ago, I published two related articles in the March Drive Light. The first titled “What is ChatGPT and why does it matter?” which briefly introduced the chatbot that had recently been released from OpenAI (<https://openai.com/api/>). That was followed by an article about a subject with which I am quite familiar as an Electrical Engineer (BE EECS).

The second article is “What is Electricity? (Hint, the answer is not what you think)” The initial implication one might get upon starting to read this article with My name as the byline is that I had written about a subject I am familiar with. And I stated I had found the answers to some basic questions. However, as I conclude at the end, the content of these answers was NOT written by me, but by an AI Chat Bot from OpenAI.

Many other AI systems exist, with more being made available, evolving, and moving into new areas of application. The 60 Minutes (CBS) story “The Revolution” <https://youtu.be/TUCnsS72Q9s> introduced what is going on at GOOGLE. Their chatbot is named BARD.

So I signed up for access and asked Bard the same questions. The results are shown below, unedited. I find them to be quite similar to ChatGPT, as they should when providing factual answers to scientific questions. Equally as accurate, although some are less ‘chatty’, or perhaps slightly less complete. (<https://bard.google.com/signup> )

What caused the failure of the first trans-Atlantic telegraph cable?

BARD’s Response:

The first transatlantic telegraph cable failed for a number of reasons, including:

Mechanical problems: The cable was made of a copper wire surrounded by gutta-percha insulation, which was then wrapped in hemp and iron wire. The cable was very heavy and difficult to handle, and it was prone to breaking.

Electrical problems: The cable was not insulated well enough to withstand the high voltages that were used to transmit signals. This caused the insulation to break down, which led to short circuits.

Environmental factors: The cable was exposed to a variety of environmental factors, including salt water, which corroded the copper wire and the insulation.

The failure of the first transatlantic telegraph cable was a major setback, but it paved the way for the successful laying of subsequent cables. Today, transatlantic cables are an essential part of the global communications infrastructure.

Is electricity actually an EMF wave or movement of electrons?

Electricity is both an EMF wave and the movement of electrons.

An EMF wave is a disturbance in the electric and magnetic fields that propagates at the speed of light. When an EMF wave passes through a conductor, it causes the electrons in the conductor to move. This movement of electrons is what we call an

electric current.

In everyday electrical and electronic devices, the signals travel as electromagnetic waves typically at 50%–99% of the speed of light in vacuum, while the electrons themselves move much more slowly; see drift velocity and electron mobility. For example, when you turn on a light switch, an EMF wave is generated by the switch. This wave travels through the wires to the light bulb, where it causes the electrons in the filament of the bulb to move. This movement of electrons heats up the filament, causing it to glow.

So, electricity is both an EMF wave and the movement of electrons. The two are closely related, and they both play an important role in the way that electricity works.

Sources info

1. [en.wikipedia.org/wiki/Speed\\_of\\_electricity](https://en.wikipedia.org/wiki/Speed_of_electricity)

Do electrons move through a DC circuit at the speed of light?

No, electrons do not move through a DC circuit at the speed of light. The speed of light is the speed at which electromagnetic waves travel through a vacuum. In a DC circuit, the electrons move through a conductor, such as a wire. The speed at which the electrons move is much slower than the speed of light. The exact speed depends on the material of the conductor and the strength of the electric field. For example, in a copper wire, the electrons move at a speed of about 1 million meters per second, which is about 0.01% of the speed of light.

The reason why the electrons move so slowly is because they are constantly colliding with the atoms in the conductor. These collisions slow down the electrons and prevent them from moving at the speed of light.

And Bard can provide alternate answers with other details. Here is the Draft 2 of the above question, which is actually more like the way I personally would have expressed it.

Draft 2

No, electrons do not move through an AC circuit at the speed of light. The speed of light is the speed at which electromagnetic waves travel in a vacuum. When an EMF wave passes through a conductor, it causes the electrons in the conductor to move. However, the electrons themselves do not travel at the speed of light. The speed at which the electrons move is called the drift velocity, and it is much slower than the speed of light.

In an AC circuit, the EMF wave is constantly changing direction. This means that the electrons are constantly being pushed back and forth. The average speed of the electrons is zero, but the individual electrons are moving back and forth at a high speed.

The drift velocity of electrons in an AC circuit depends on a number of factors, including the frequency of the AC current, the resistance of the conductor, and the type of material. In a typical copper wire, the drift velocity of electrons is about 1 millimeter per second. This means that it would take about 10 minutes for an electron to travel the length of a 10-meter wire.

The reason why the electrons move so slowly is because they are constantly colliding with the atoms in the conductor. These collisions scatter the electrons, which slows

them down. The higher the frequency of the AC current, the more collisions there are. This is why the drift velocity of electrons is lower in a high-frequency AC circuit than in a low-frequency AC circuit.

The type of material also affects the drift velocity of electrons. In a conductor with a high density of free electrons, the electrons are more likely to collide with each other. This also slows them down.

The speed of light is a fundamental constant of nature, but the drift velocity of electrons is not. It can be affected by a number of factors, and it is always much slower than the speed of light.

Do electrons move through an AC circuit at the speed of light?

No, electrons do not move through an AC circuit at the speed of light. The speed of light is the speed at which electromagnetic waves travel in a vacuum. When an EMF wave passes through a conductor, it causes the electrons in the conductor to move. However, the electrons themselves do not travel at the speed of light. The speed at which the electrons move is called the drift velocity, and it is much slower than the speed of light.

In an AC circuit, the EMF wave is constantly changing direction. This means that the electrons are constantly being pushed back and forth. The average speed of the electrons is zero, but the individual electrons are moving back and forth at a high speed.

The drift velocity of electrons in an AC circuit depends on a number of factors, including the frequency of the AC current, the resistance of the conductor, and the type of material. In a typical copper wire, the drift velocity of electrons is about 1 millimeter per second. This means that it would take about 10 minutes for an electron to travel the length of a 10-meter wire.

The reason why the electrons move so slowly is because they are constantly colliding with the atoms in the conductor. These collisions scatter the electrons, which slows them down. The higher the frequency of the AC current, the more collisions there are. This is why the drift velocity of electrons is lower in a high-frequency AC circuit than in a low-frequency AC circuit.

The type of material also affects the drift velocity of electrons. In a conductor with a high density of free electrons, the electrons are more likely to collide with each other. This also slows them down.

The speed of light is a fundamental constant of nature, but the drift velocity of electrons is not. It can be affected by a number of factors, and it is always much

slower than the speed of light.

End of content written by BARD

total time to research, write, edit 1 hr 27 min



**[Go to Page 1](#)**

# Beware of Auto-Pays

Jim Cerny, 1<sup>st</sup> VP, Education Chair, and Forums Coordinator

Sarasota Technology Users Group

<https://thestug.org/>

jimcerny123 \*\* gmail.com

It sounds great, doesn't it? Don't bother sending us a check every month – put us on “auto-pay”! We will charge your credit card or get a payment from your bank account every month, so you don't have to do anything. If you make automatic payments, you can forget about paying us! And that's what they hope you do – forget that you ARE paying them every month!

Autopay is a convenient way to allow a company to receive regular payments from you without you having to do anything. Some examples of convenient auto-pay billing are for your internet services, TV cable providers, utility services, entertainment video providers, lawn maintenance, car insurance, home, and appliance insurance, tollway payments, and many others. In fact, almost ANY company would love to have you use autopay to pay them! And why not? If you owned a company, wouldn't you like all your customers to use autopay?

There is nothing wrong with the convenience of autopay, but it is often TOO convenient!

With autopay, you are giving a company permission to get their payment directly from your charge card or checking account. Doesn't this sound like a rather dangerous open-door policy? So here are my tips on the things to be careful about autopay:

1. ALWAYS check your charge card and bank statements CAREFULLY every month and make sure ALL charges are correct!!!
2. A company may be able to increase your auto-payment without notifying you. Does your contract with the company clearly state the regular payment amount?
3. If you lose your credit card or have a serious problem with your bank account, you may be given a new credit card or account number. Unfortunately, you must change all your auto-pays to the new account. This can be very troublesome, especially if a company tries to get payment from a closed account – they may cancel their service.
4. There is the danger of over-drafting your account or going over your charge account limit when paying your bills automatically. Therefore, you must ensure all your bills are always paid from accounts with sufficient funds.
5. You need to CANCEL any services you are no longer using. People have begun paying for a new service and forget to cancel the payments to the discontinued service they no longer need or want. Check your statements to ensure you are using what you are paying for.
4. Some companies may add additional charges for services or products, even if you did not order them.



Be careful to understand the advantages and dangers of using automatic payments. My bottom line: Carefully check your payments (checks, credit cards, etc.) every month to make sure your billing amounts and your payments are correct, and try not to use auto-pay unless you really need to.



[Go to Page 1](#)

## **Forth Programs**

By Dick Maybach, Brookdale Computer User Group

www.bcug.com

n2nd (at) att.net

As computers have evolved, they have become remarkably cheap, which has affected how we use them and how their software is developed. In the late 60s, minicomputers were beginning to appear in smaller companies, often as controllers, and these had, by today's standards, tiny amounts of RAM, often around eight kilobytes. Then, one byte of RAM costs about a dollar, which means that a GigaByte of it would have cost about a billion dollars. As a result, minimizing memory use was often a key objective for programs and the tools to create them. The Forth language, [https://en.wikipedia.org/wiki/Forth\\_\(programming\\_language\)](https://en.wikipedia.org/wiki/Forth_(programming_language)), was developed in this environment. Compared to modern languages, writing programs in it was tedious and error-prone. Nevertheless, let's briefly look at it, if for nothing else than to appreciate how far we've come. If you would like to experiment, development software for Gforth, a modern variant, is available for most platforms at <https://gforth.org/>, as is an online manual.

Forth uses reverse-Polish arithmetic, which is best explained by example. Operators separate operands in far more common arithmetic notation, and an equals sign causes the operation to occur.

2 + 4 =

In reverse-Polish notation, the operands appear first, followed by the operator. There is no equal sign as the operation occurs immediately.

2 4 +

A key concept here is the stack, which acts as temporary storage. In the above example, the 2 is pushed onto the stack; then the 4 is pushed. Finally, the + operator pops the two operands off the stack, sums them, and pushes the result back onto the stack. Figure 1 shows an example. The ".s" command displays the number of items on the stack (inside < >) and its contents. An "ok" indicates the operation was successful. Items in Forth are separated by whitespace (one or more spaces or tabs). A carriage return causes the entire line to be executed.

Command	Output	Comment
.s	<0> ok	The stack is empty.
2 4 6 .s	<3> 2 4 6 ok	2, 4, 6 are pushed onto the stack.
+ .s	<2> 2 10 ok	The two most recent stack items are popped, and their sum pushed.
* .s	<1> 20 ok	The two most recent stack items are popped and their product pushed.

Figure 1. Forth Code Example.

In Figure 1, a carriage return was entered after every ".s," which causes the result and "ok" to be added to the end of that same line. Figure 2 shows a screenshot of the session running this example.

```

n2nd@17-U-22-04:~$ gforth
Gforth 0.7.3, Copyright (C) 1995-2008 Free Software Foundation, Inc.
Gforth comes with ABSOLUTELY NO WARRANTY; for details type `license'
Type `bye' to exit
.s <0> ok
2 4 6 .s <3> 2 4 6 ok
+ .s <2> 2 10 ok
* .s <1> 20 ok

```

Figure 2. Screenshot of a Forth Session.

Like most languages, Forth supports functions. For example, figure 3 shows a session that defines three functions (called "words" in Forth-speak) square, cube, and fourth.

```

n2nd@i7:~$ gforth
Gforth 0.7.3, Copyright (C) 1995-2008 Free Software Foundation, Inc.
Gforth comes with ABSOLUTELY NO WARRANTY; for details type `license'
Type `bye' to exit
: square \ n -- n^2 compiled
dup * ; ok
: cube \ n -- n^3 compiled
dup square * ; ok
: fourth \ n -- n^4 compiled
dup square square ; ok
2 square . 4 ok
3 cube . 27 ok
4 fourth . 256 ok

```

Figure 3. Forth Word (Function) Definition and Use.

Each definition begins with a colon and ends with a semicolon. A backslash starts a comment, ending at the line's end. Finally, the program adds "compiled" to show that each line is valid and "ok" at the end of the definition. The forms of the comments are standard Forth usage. For example, "n – n^2" signifies that a number on the stack is replaced by its square. Note the "." command in the lines that invoke the functions, which pops the last number off the stack and prints it.

Unlike most modern languages, Forth doesn't access variables by name. Instead, it pulls them off the stack, which is constantly changing. So, for example, "dup" duplicates the last variable, and we calculate the square by duplicating and multiplying. Of course, for all but trivial functions, it's more efficient to use local variables, but I'll omit the details in this introduction to the language.

In the above examples, we're using Forth as a calculator; it discards everything when we close the program. You can store function definitions in text files for later use, as shown in Figure 4.

```
Gforth 0.7.3, Copyright (C) 1995-2008 Free Software Foundation, Inc.
Gforth comes with ABSOLUTELY NO WARRANTY; for details type `license'
Type `bye' to exit
include powers.fs ok
s" powers.fs" ok
2 square . 4 ok
3 cube . 27 ok
4 fourth . 256 ok
see fourth
: fourth
  dup square square ; ok
```

Figure 4. Reading Functions from a File.

The definitions of square, cube, and fourth had been stored in the text file "powers.fs." In this session, the first two lines read and execute that file. The last three lines perform as in Figure 3, where the same functions were defined during that session. Note the line "see fourth," which displays the definition of that word. Programmers often use the see command to check the functions they've defined.

So far, all the examples have used integer arithmetic. Although it's seldom used today, years ago, many small computers could not process in floating point, and if they did, they stored floating-point numbers separately from integers and used different functions on them. Forth preserves this distinction with a separate stack for floating point quantities. Figure 5 compares the two types.

```
Gforth 0.7.3, Copyright (C) 1995-2008 Free Software Foundation, Inc.
Gforth comes with ABSOLUTELY NO WARRANTY; for details type `license'
Type `bye' to exit
2 3 .s <2> 2 3 ok
/ . 0 ok
2E 3E f.s <2> 2.0000000000000E0 3.0000000000000E0 ok
f/ f. 0.666666666666667 ok
```

Figure 5. Integer and Floating-point Operations.

The first command line pushed the integers 2 and 3 onto the stack, and the second divides them and pops the result, which is zero. The third pushes the numbers 2E and 3E onto the stack. (The Es force these to be floating-point numbers.) The operation "f.s" displays the floating-point stack. The fourth command line performs a floating-point division and pops the result of the floating-point stack. In Forth, operation names beginning with "f" are floating-point ones.

Forth is a difficult language to use. It's easy to lose track of the contents of the stacks. You can use the see command to show the code associated with a word, but the comments are stripped, which means you must make careful records. As a result of confusing syntax, most words are just a few lines, but this increases the number of functions, making it difficult to track what each does. As computers became more powerful, program languages were developed that were far easier to use. We now see Forth as a historical artifact with little purpose other than to show the environment with which early developers had to contend.



[Go to Page 1](#)

# Special Interest Groups (SIGs)

w Work phone   h Home phone   c Cell phone  
\* Meets at an alternate location

Most SIGs will meet at Edina Executive Plaza, Conference Room #102, 5200

Willson Road, Edina, MN

Confirm with a SIG group if they meet elsewhere.

For more info contact the SIG Leader(s) listed here.

Get SIG announcements!

Link from [www.tcp.com](http://www.tcp.com)

## Board of Directors\*

All members are welcome! Check  
[www.tcp.com](http://www.tcp.com) for location.

Selected Saturday mornings

## Linux on Saturday

This is for the Linux newbie and those trying  
to come over from Microsoft to a different  
operating system.

Second Saturday @ 9 AM-Noon

Note: No Meetings June-August

Jack Ungerleider      612/418-3494 c  
jack@jacku.com

## Tech Topics

Technical presentation/discussion on  
various technical topics from the following  
areas:

- Web/Internet
- Mobile Devices and Apps
- Playing with Programming
- DIY (3D Printing, R-Pi, other hobby electronics, etc.)

Second Tuesday @ 6:00-7:00 PM

Every month

Right before the general meeting.

Jack Ungerleider      612/418-3494 c  
jack@jacku.com

## Microsoft Access

All levels. Presentations by expert develop-  
ers within the group and by MS reps.

Third Saturday 9:00 AM—Noon

Note: No Meetings June-August

Steve Kuhlmeier      952/934-8492  
skuhlmeier@hotmail.com

## Microsoft Office

Addresses the use, integration, and nuanc-  
es of the Microsoft Office applications.

Combined with Systems on Saturday

Third Saturday of the Month

9:00 AM—Noon

Note: No Meetings June-August

Steve Kuhlmeier      952/934-8492  
skuhlmeier@hotmail.com

## Directions to Accord, 1515 Energy Park Drive for General Meetings:

From I-94 in St. Paul, take the Snelling Avenue exit, then go north on Snelling Avenue about one mile to Energy Park Drive. Take Energy Park Drive and take the first left into the driveway to 1515 Energy Park Drive.

From I-694 or Hwy 36 in St. Paul, take the Snelling Avenue exit, then go south on Snelling Avenue past Como Avenue to Energy Park Drive. Take Energy Park Drive and take the first left into the driveway to 1515 Energy Park Drive.

Directions to Edina Executive Plaza  
for Systems on Saturday, Access,  
Word and Picture Perfect SIGs: Take  
Highway 100 to the 50th Street/Vernon  
exit. [If you have come from the north,  
cross back over Highway 100 to the  
east side.] Take the first right and go  
past Perkins [The golf course will be on  
your left.] and continue on the east  
frontage road (Willson Road) to the  
next building—5200 . There is ample  
parking in the building's lot.  
Conference Room #102 is on 1st floor.

## Help yourself by helping others!

## Join the team & share your knowledge with others.

Contact TC/PC at [www.tcp.com](http://www.tcp.com)

Meetings start at 7:00 PM (9:00 AM on Saturday) unless otherwise noted. \*Virtual Meetings during Covid pandemic.

## October

SUN	MON	TUES	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10 7pm General Mtg Backup & Sync  6pm Tech Topics	11	12	13	14 Linux on Saturday SIG 9am—Noon
15	16	17	18	19	20	21 MS Office SIG (includes Access) 9am—Noon
22	23	24	25	26	27	28
29	30	31	1	2	3	4
5	6	7	8	9	10	11 Linux on Saturday SIG 9am—Noon
12	13	14 7pm General Mtg TBA  6pm Tech Topics	15	16	17	18 MS Office SIG (includes Access) 9am—Noon
19	20	21	22	23	24	25
26	27	28	29	30		

## November



## You have just read an issue of The Digital Viking.

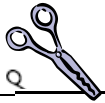
*Would you like to receive this delivered directly to your email or business each month?*

As a member of TC/PC, the Twin Cities Personal Computer Group, one of the benefits is reading this monthly publication at [www.tcpc.com](http://www.tcpc.com).

As a member of TC/PC, you may attend any or all of the monthly Special Interest Group (SIG) meetings and be eligible for software drawings. The small membership fee also includes access to real-live people with answers via our helplines, discounts, and various other perks.

Does membership in this group sound like a good way to increase your computer knowledge?

It's easy to do! Simply fill in the form below and mail it to the address shown.  
(If you use the form in this issue, you will receive an extra month for joining now.)



10/23

### Here's the info for my TC/PC Membership:

Full name \_\_\_\_\_

Company name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

☐ Home ☐ Business ☐ Change address: ☐ Perm. ☐ Temp. 'til \_\_\_\_\_

Home phone \_\_\_\_\_ Work phone \_\_\_\_\_

Online address(es) \_\_\_\_\_

Where did you hear about TC/PC? \_\_\_\_\_

☐ I DO NOT want any of my information disclosed.

☐ I DO NOT want to receive any mailings

### I'm signing up for:4

☐ Individual/Family Membership (\$18)

☐ Business Membership (\$100)

If an existing member your # \_\_\_\_\_

### Make checks payable to:

**Twin Cities PC User Group  
341 County Rd C2 W  
Roseville, MN 55113**

### Or sign up on our website:

<http://www.tcpc.com>

☐ Check # \_\_\_\_\_ ☐ Bill me

☐ New member ☐ Renewal ☐ Prior member

I'm interested in:

☐ Training classes ☐ Volunteering

☐ Special Interest Groups: New User, Access, etc.

List here:

**Administrative Use Only** Rec'd \_\_\_\_\_ Chk# \_\_\_\_\_

**October 10, 2023  
7:00 pm  
General Meeting**

**Backup & Sync Files  
With GoodSync**

**Via Zoom Only**



341 County Rd C2 W  
Roseville, MN 55113

***FIRST CLASS MAIL***