

User Friendly

July 2018



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Ctrl-Click on this icon
to see our Meetup Page.



Ctrl-Click on this icon
to follow us on
Twitter.



Member of
An International
Association of Technology
& Computer User Groups

www.apcug2.org
www.facebook.com/APCUG
www.twitter.com/apcug
www.youtube.com/apcugvide

JULY 10 GENERAL MEETING

Google Apps at Home and on the Go

Speaker: **Phil Sorrentino**

Secretary and Contributing Editor
The Sun City Computer Club, Florida
philsorr (at) @yahoo.com



Most of us know Google as a website we visit to get answers to all kinds of questions, but there is a lot more behind the company and the term, Google. Google is a company, a website, a number, and a verb. Phil's presentation will cover many Google apps. New ones are developed from time to time for computers, tablets, and cell phones. Our speaker will discuss a selection of these apps, and you can also ask questions.

Meet Our Presenter

Phil Sorrentino is a member of the Sun City Center Computer Club in western Florida 24 miles south of Tampa, a past president of the Sarasota Computer Users Group, and a founding member of the Long Island Computer Club. He teaches a variety of beginner and advanced computer and smartphone classes and writes a monthly "Technical Thoughts" article for the club's newsletter. (His articles are frequently published in User Friendly.) He is an electrical engineer and has worked at developing computer hardware and software for his entire career.

Tuesday, July 10, 2018, 7:30 - 9:00 PM
Westchester United Methodist Church, Fellowship Hall
8065 Emerson Ave., Westchester, L.A. 90045

An informal Computer Q & A Roundtable meets from
6:30 to 7:20 to answer individual questions.

Refreshments and socializing at **7:00**

More info: www.lacspc.org

or at 310-398-0366

All are welcome.



FROM YOUR EDITOR

Culver City Senior Center

Several members of LACS volunteer one Friday morning a month at the open computer Lab at the CCSC at 4095 Overland Ave. at Culver Blvd. in Culver City, 90232. Volunteers get a free annual parking permit for the center.

Seniors can use the computers to access email, the internet, or to use or learn programs. Someone must be present when the computers are being used.

Our volunteers may get sick or want to go on vacation, so we could use a few more helpers. No special skills are needed. Those using the computers are most appreciative of simple assistance. That gives a good feeling! New volunteers will be partnered with an experienced member, until they feel at ease being on their own.

Please contact Loling Beckman at <LolingB (at) earthlink.net> or 310-471-7893 to learn more about what is needed or to volunteer.

How To Get on our Mail Lists!

To join both lists, send your name in the message body of an email to lacslist-subscribe@yahoogroups.com and to lacspsc-subscribe@yahoogroups.com.

Only members may join. **Lacslist** is for any computer-related messages and questions. **Lacspsc** is for official LACS business. Send questions to [mailportal \(at\) lacspsc.org](mailto:mailportal(at)lacspsc.org).

We Have a Secretary!

We thank Annette Tossounian for becoming our new secretary. We are most grateful! She has been an active director on our board, often sharing good ideas. She is also a good cook!



We Need A Welcome Chair

We thank Irene Mussack for being our greeter since October, 2016. She can't continue after August because of conflicts on Tuesdays. Please consider being a greeter. Two people can take turns or share the job. It's easy, and takes little extra time if you come to the meetings anyway!

Nominations

It is already time to find candidates for our 2019 officers and board.

We need nominations for President, Vice President, Secretary, Treasurer, and three Directors for 2-year terms, and one for 1 year.

Fred Kong, Stephanie Nordlinger and President Stanley Johnson comprise the nominating committee. Please contact one of them to throw your hat in the ring.

New blood with new ideas is crucial for keeping LACS viable! Check our By Laws at www.lacspsc.org/various/bylaws.pdf to find the duties of each position, or talk with any board member for answers to your questions. Please come out of the shadows and volunteer.

WE WANT YOU!

Are We Immortal?

We like to think that we are! All of us have lost loved ones and have had problems finding vital information regarding banking, money matters, notifying organizations they belonged to, social security numbers, computer passwords, social media accounts, whom to notify, etc., etc.

After a LACS member passed recently, we

had difficulty learning what he did and how to do it. I think those performing important tasks for LACS should consider sharing information to make it easier for those replacing them. See the article on page 7 of this issue for ideas on what to do to make it easier for our families and colleagues when we are no longer here. ❖

GENERAL MEETING REPORT

June 12, 2018

By **Leah Clark**, LACS Editor

Speaker: **Phil Bock**

How to Become Your Own Computer Expert

Much of this report is taken directly from Phil's PowerPoint slides. All URLs are clickable on the online version of *User Friendly*. The complete podcast of the presentation at <www.lacspc.org/category/audio-files/> will explain further all the topics listed below.

This presentation provided an approach for getting help for the newbie and the more experienced user. As used in this presentation, the term "computer(s)" refers to computing in general – including tablets, smartphones, the Cloud, home networks, Smart Home, etc.

There are two kinds of knowledge – personal knowledge and knowing where to find relevant information that you don't know. Unless we are passionate about a subject, most of us only bother to learn enough to complete common tasks in our lives. To become your own computer expert, you do not need to know everything there is to know about computers; you need only develop a knowledge base and identify how to access external knowledge when you need it - for those tasks you wish to accomplish.

Four Levels of Competence:

- Unconsciously Incompetent – You don't know what you don't know. You don't know enough to ask questions, or don't know what you need to learn to do what you want to do.
- Consciously Incompetent – You do know what you don't know, what questions to ask, and what you need to learn.
- Consciously Competent – You can complete the desired task(s) with thought, attention, and references.
- Unconsciously Competent – you complete task(s) with little thought or difficulty.

A Business Planning Process We Can Use

for learning computing and other subjects:

- Visioning – document your "vision" and your "reality" for what you want to learn or accomplish.
- Compare reality to your vision of what you want to improve.
- Identify and prioritize "gaps" between the two. Where is your reality falling short of your vision? Establish goals to close those gaps. Set a time frame.
- Develop and implement strategies, measure progress; adjust when needed.
- Review the process periodically, and modify as needed.

Apply This Approach To Computing?

- Start by taking stock of where you are now in your personal computing world. What equipment do you have, and what do you want to do? (Take notes!)
- Look ahead, identify new computer-related topics that interest you.

Assess Where You Are Today:

- What do you know about your hardware and software? What can you do with them? How to keep your software up-to-date? How to add new software?
- Are you able to accomplish your current computing goals on a regular basis?
- If you do run into a problem, are you able to solve it on your own?
- Do you understand current security risks, how to avoid them, and how to back up your data? Do you have robust security software on your computer?

Let's Start with Your Hardware.

- Do you have computer hardware?
- How old is it?
- Does it work properly?
- Do you have the user manuals? Do you know where they are, how to use them?
- Do you have an acceptable internet

connection? If not, what alternatives are available to you?

- Does your hardware meet your present and anticipated needs? If not, what shortfalls must you address?

What About Your Software?

- Take an inventory of the software installed on your computer(s). Document for future reference.
- Go into the Control Panel and select "Uninstall a program" to see a list of installed programs.
- If running Windows 8.1 or above, look at the Apps listed on your Start Screen.
- What does your software do? Should any be removed or replaced? Do you know how to use it?
- Are some programs on subscription? What are the expiration dates and renewal processes?
- What process do you use to keep your software up-to-date?
- Do you need to add new software for a particular task?
- How about extensions for your browsers? Which ones are installed? Are they enabled, or disabled? Do you need to add or delete any?

Security

- Is all of your software up-to-date?
- Is a process in place to back up all your files, separately from your computer?
- Do you have robust security software installed on your computer, running automatically?
- Have you informed yourself about "safe computing" practices, and follow them?
- Do you have a browser extension and/or security software that screens websites and search results? See <https://duckduckgo.com/?q=best+anti-virus+software&atb=v68-5&ia=web>.

Check out "Web of Trust", a browser add-on that shows you if a website is safe at www.mywot.com. See "Avast Online Security" at www.avast.com, and "Malwarebytes" at www.malwarebytes.com.

- Have you created a Standard account, to use when web surfing? Do not use your administrator account for web surfing.

Based on your assessments, develop your prioritized approach to learning and actions to take. To move forward, you will need to increase your computing knowledge. This can be internal knowledge that you can call upon immediately or external knowledge that you can access as needed. Given the pace of change, you must regularly double-check personal knowledge and materials for accuracy.

What Resources Can You Draw Upon?

- **General computing books.** Three good examples are "Is This Thing On?" by Abby Stokes, "Computer Basics - Absolute Beginner's Guide" by Michael Miller, and "Computers for Seniors for Dummies" by Nancy C. Muir.

There are many more specific books about computing, focused on operating systems, application software, etc. Check out the Technology section at your local library. Use online book reviews as a guide.

www.Amazon.com has user reviews. **Note that things may have changed since publication**, so check the dates.

Many eBooks are available at the "Take Control Series" site at <https://www.takecontrolbooks.com/>.

- **Websites** include Kim Komando at <https://www.komando.com/>, How-To Geek at <https://www.howtogeek.com/>, and ZDNet at <https://www.zdnet.com/>.
- **eMagazines** include *PC World* at www.pcworld.com, and *PC Magazine* at www.pcmag.com. These may be

available free through your library, or by subscription.

Participate in Online/Local Training Programs.

- **Tutorials:**

Google's help center is at <https://support.google.com/chrome/?hl=en#topic=7438008>, and Office Suite programs are at <https://www.office.com>. Click on Support > the Office program that you're interested in > Training.

- **Lynda.com** at

<https://www.lynda.com/sitemap> Click on "Library", > "All Subjects", and then scroll down the computer courses listed.

- **Udemy.com** <https://www.udemy.com/>

- **GCFlearnfree.org** at

<https://www.gcflearnfree.org> Explore the website to find tutorials on various subjects.

- **Techboomers.com** at

<https://techboomers.com/>

- **Local tech presentations** at libraries, adult education, senior centers, computer clubs, etc.

Search YouTube for Computer-related Videos.

- Past APCUG videos at <https://www.youtube.com/user/APCUGVideos/videos>
- Software and Hardware Product videos
- "How-to" video training - if you have questions, search for answers on YouTube.

Use Community Forums

Many software producers have online community forums where users can post questions and/or solutions.

For the Microsoft Forums go to

https://answers.microsoft.com/en-us/windows/forum/windows_10-update-winpc/windows-10-anniversary-update-for-32gb-efmc-budget/9158168e-54a2-4e9e-b6e7-784e7ace2469 or

<https://tinyurl.com/y8a6v9a9>, then click on Categories. Choose what you want to learn about from the drop-down menu.

Use "Help" Functions Built into Your Software Programs.

Post search queries online, on Google, Cortana, etc. Ask

- Why is _____ happening?
- Why isn't _____ happening?
- How do I _____?
- What does this message mean?
- Should I _____?
- Why can't I _____?

If you do not get the answer you are looking for, modify your search query and try again. You may need to be more specific.

Do not assume that every answer will be correct! Check the dates of the replies to be sure they're not out-of-date.

Security Deserves a Presentation of Its Own!

- With the internet, security has become a major issue.
- You can search the internet for security-related websites and advice at www.IdentityTheft.gov, and <https://www.consumer.ftc.gov/topics/privacy-identity-online-security>.
- Keeping safe on the internet involves a combination of hardware, security settings, software and behavior (yours). Learn what you should and should not do!

Plan in Advance what you will do when you run into a problem. Keep the resources you have gathered for easy retrieval.

Chances are, each new discovery will lead to another.



THE SIMPLE GAME OF SOLITAIRE?

By **David Kretchmar**

Computer Hardware Technician

Sun City Summerlin Computer Club, NV

Gigabyte Gazette, March 2018

www.scscc.club

tomburt89134(at)cox.net

I admit it: I play Microsoft Solitaire (my game: Klondike Solitaire: draw 1, with three times through the deck, Vegas scoring). Of course, it's the most widely-played computer game of all time. Sometimes I play for an hour or more at a time, usually while watching TV.

I play "thoughtful solitaire" and will replay a game many times until I beat it, or I determine it cannot be beaten. Klondike Solitaire has become a universal computer program or application, used by over a half-billion users worldwide, on all major operating systems. I'm going to be discussing the Klondike Solitaire game included with the Windows 10 operating system.

Solitaire has long been a popular waste-of-time, and the computer version of the game has made it even more popular. With a little effort and repetition, a player can gain a good working knowledge of the position of each pertinent card in the deck and ultimately know that they have played the best possible game with each set of 52 cards. Remember one thing when playing Solitaire on a computer; if you can do it, it's not cheating.

A Very Big Number of Possible Hands

When I started investigating the odds of winning a game of Solitaire, I was amazed at the total number of different outcomes possible. I won't get into the details of the mind-boggling math involved, but there are 8 times 10 to the 67th power (8 with 67 zeros after it) different ways of shuffling 52 cards. This number is obviously massive – certainly beyond the understanding of humans and so large it is impossible for

today's most powerful computers to compute accurately the odds of winning a game.

Due to the limitation of computers, an exact mathematical solution to the question of what percentage of games are winnable does not exist and, because of the massive number of possibilities, statistical solutions based on playing a huge number of games are wildly inaccurate. Theoreticians have struggled with this game, referring to the inability to calculate the odds of winning a randomly dealt game as "one of the embarrassments of applied mathematics."

Monte Carlo Simulation – 79 to 92 Percent of Solitaire Games Are Winnable!

Enter the Monte Carlo Simulation. The Monte Carlo method was invented by scientists working on the atomic bomb in the 1940s, who named it for the city in Monaco famed for its games of chance. Its core idea is to use random samples of parameters or inputs to explore the behavior of a complex system or process that is too complex to be computed (like Solitaire).

Using Monte Carlo simulation for many millions of hands of Solitaire – this is really brute force – estimates of the percentage of winnable Solitaire games, for draw 3, are believed to be between 79% and 92%. I have not come across an analysis, but I know the draw 1 Solitaire game is somewhat easier to win than the draw 3 game since the player is going to see every single card in the draw pile at least three times. I would guess the probability of winning a draw 1 game is at least 92%, possibly much higher. Yet even excellent Solitaire players win fewer than 10% of games played, at least on their first try.

Human error and what turn out to be non-optimal decisions account for the difference between potential wins and actual winning hands. For example: during games, a player will have a choice of which card to play; playing a ten of hearts on a black jack instead of a ten of diamonds can result in an entirely

different game outcome. A player can only guess which play is optimal, and sometimes the ultimate result of a decision tree will not be known until the end of the game.

Thoughtful Solitaire

Solitaire does not have to be a mind-numbing exercise if you approach each game as probably winnable. If on your first try you lose, play that game again making different decisions as you reach each decision tree. Winning a game of Solitaire you have lost, sometimes lost several times, is immensely satisfying. Thoughtful Solitaire players will win many times more games than the typical “one and done” player and, in the process, they exercise and stimulate their brains. ❖

IS IT TIME TO START A DEATH DATA DOCUMENT?

By **Jerry Heaton**, Editor
Central Kentucky Computer Society
CKCS newsletter, January 2018
www.ckcs.org
newsletter (at) ckcs.org

I read an article in a newspaper, in which a reporter wrote about the death of his father and his being named the executor of his dad's estate. His mother had died earlier, and he knew nothing about his dad's affairs or estate. Like many families living many miles apart, they only visited on holidays, such as Thanksgiving or Christmas.

The reporter had many questions. Where did they bank? Were there investments? With whom? Is the car paid for? What is his social security number? And a hundred other questions. He wished he had talked with his dad or that his dad had written down things he needed to know.

This caused me to think about this, so I created what I call a Death Data document for my children to have at the time of my death. I recommend you consider creating such a document yourself to provide information your survivors will need to know. My

kids know I have created such a document, but they have never seen it. More than once we have talked about it. I have copied my master DD document from my computer to a flash drive -- one for each child and they know where to look.

It is a living document -- it must be updated regularly as things change. You may change banks, create a new will, eliminate a credit card account or start a new one, buy a new car, etc. Anytime I change anything, I update my DD document. My document has all sorts of information, even less important things like the numbers to work my combination lock at the gym. My document started small, but now is 33-pages long. Each time I update it, I copy the latest version to each flash drive for my kids.

I recommend you start your own DD document and follow the pattern I discuss here. Even a husband / wife combination needs to do this. For example, one would think the spouse knows all about finances, but that may not be so for often only one may handle the bill paying and finances, leaving the other in the dark.

I have a suggested guide from which you might begin your own DD document. My guide may offer some thought provoking items you may want to include or expand. I suggest you copy the guide to your computer and on topics that apply to you, just fill in the information suggested. Add topics and categories that are unique to your situation and go into detail to eliminate any confusion.

This is a project that takes time if you do it right. Go slowly, and complete each topic as you come to it. Provide the information you would want to know if you were on the outside and know nothing about yourself and situation.

If you would like a copy of Jerry's DD guide, email Leah at <editor (at) lacsps.org>. She will send you a copy. ❖

LACS NOTICES

WELCOME ALL

George Wolkon, LACS Database Manager

New Members (4)

Gavin Faught
Roger Garland
Jopie Ranselaar
Mildred Rucker



Renewals (13)

Larry Abe*	William Oppenheim
Barbara Benjamin	Richard Presky
Gordon Bergelson*	Judith Sakahara
Janet Chesne	Masashi Sakahara
Juan Dominguez	Susan Umeda
Shelby Croft	Paula Van Berkom*
Wade Huie	* Contributor

HOW TO CHANGE YOUR CONTACT INFORMATION

Go to www.lacspc.org. Click on **Member Forms** in the bar under the picture. Under **Membership Update**, select **Click Here** to select either the DOC or PDF form. Fill it out and bring it to a meeting, mail it, or email your changes to membership@lacspc.org.

LACS HAS JOINED MEETUP

Our Meetup group is called:
"Los Angeles Computer Society and Technology Meetup."

Please join - it's free. If others see that a lot of people are interested, they will be encouraged to join LACS. We hope this will result in new members.

Go to <http://www.meetup.com/Los-Angeles-Computer-Society-and-Technology-Meetup/> and click on "Join Us." Also, please **RSVP** for our general meetings.

LACS IS ON TWITTER

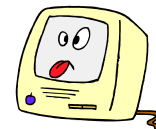
On **Twitter**, follow us at:

https://twitter.com/LA_CompSoc

The LACS board voted to discontinue the **Facebook** page for now.

FIX YOUR PC FOR FREE?

Jim McKnight has an open offer to all LACS members to diagnose, repair, disinfect, or upgrade members' PC's for free. There are certain limitations to Jim's offer, so see the details by clicking the "Fix my PC for Free?" link at www.jimopi.net. Non-members can wisely invest in a one-year new Regular LACS membership (\$40.00), and Jim will fix your PC problem, too. Contact Jim for specific considerations.



GENERAL MEETING PRESENTATIONS

July 10 Google Apps at Home and on the Go
August 14 TBA
September 11 Social Media
October 9 TBA
November 13 Auto Accessories
December 11 Holiday Potluck

Note: This schedule is subject to change. Check your email, *User Friendly*, and our website for updates.

PODCASTS

Listen to the podcasts of our general meetings. Go to <http://www.lacspc.org/category/audio-files/>. Click on the session you want to hear.

GENERAL MEETING SNACK SCHEDULE

By **Sylvia Q. Davis**, Hospitality Chair

Refreshments and socializing will be at **7:00**. The meeting starts at **7:30**. Please bring refreshments at **7:00**.

July 10	A through D
August 14	E through I
September 11	J through N
October 9	O through S
November 13	T through Z
December 11	Potluck Party



Bring **finger-food** treats such as fruit, veggies, nuts, cookies, cold drinks and the like. LACS provides hot drinks. See your email for updates and reminders. Please pick up your leftovers and serving pieces at the end of the meeting.

JULY 2018

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 Board Meeting 7:00 PM	3	4 	5	6	7
8	9	10 General Meeting 7:30 PM	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

No SIG meeting is scheduled for July.

General Meeting: Fellowship Hall on the 2nd Tuesday of the month at 7:30 PM.

The **Board** may meet at Charlotte Semple's home or at Santa Monica College. Members in good standing are welcome to attend.

SPECIAL INTEREST GROUPS (SIG's)

The Daytime and the Basics & Beyond SIGs may resume **IF** there is enough interest. Please contact the leaders to make your wishes known, or to offer ideas or help. New SIGs can be created if there is sufficient interest and leadership.

Basics & Beyond SIG: Paula Van Berkom, 310-398-6734, 2nd Monday at 7 PM, SMC, Bundy Campus

Daytime SIG: Jim McKnight, 310-823-7829, 4th Tues. 1 PM Felicia Mahood Center

ADDRESSES

Felicia Mahood Senior Center, 11338 Santa Monica Blvd., West LA 90025 (at Corinth)

Fellowship Hall, Westchester United Methodist Church

8065 Emerson Ave., Westchester 90045

Charlotte Semple, Please contact any officer or board member for Charlotte's address.

Santa Monica College Bundy Campus, 3171 S. Bundy Drive, LA 90066.

Go west on College Dr. (1 block South of Airport Avenue, 2 blocks North of Rose.) Drive to the back to park in the lot behind the building. Our room number may change each semester. Look for it on a sign opposite the elevator on the first floor.

MEMBERS HELPING MEMBERS

LACS members volunteer to help other members solve hardware and software problems by telephone during the hours listed below. Select the topic from the list and then call a person whose number is listed next to it. Or you may use a Helper's e-mail address, found in your LACS Roster. We hope that you find this free service useful. **If you are experienced using a particular program or know a topic, please volunteer to be a consultant. You don't have to be an expert.** To volunteer for this list or to make corrections, please e-mail or call Leah Clark at Leahjc (at) sbcglobal.net or at 310-677-2792. More Quick Consultants, and more categories are always needed. You may decline or postpone a call if it comes at an inconvenient time.

Adobe Creative Suite: PDF,
InDesign, PhotoShop, etc. - 17
Android Smartphones - 5
Apple devices - 15
Anti Malware and Backup - 5,12
Digital Imaging, Editing - 8
Digital Photography - 8
Dragon Naturally Speaking - 4
Genealogy - 5, 7
Hardware - 12

Linux - 11
Lotus Word Pro, Approach - 12
Mozilla Firefox - 12
MS Excel - 3, 15
MS Word - 3, 4, 10
MS Outlook - 5, 15, 17
MS PowerPoint - 15
MS Publisher - 7
Open Office - 16

Photoshop - 17
QuickBooks - 18
Quicken - 3, 5
Thunderbird - 12
Utilities - 5, 12
Visual Basic - 13
Websites - 13
Windows 7 - 16
Windows - 5, 12
WordPerfect - 5

No.	Name	Preferred Phone for Calls	From	To
3	Wilder, Joan	310-472-8445	9:00 AM	9:00 PM
4	Hershman, Irv	310-397-9453	11:00 AM	11:00 PM
5	Nordlinger, Stephanie	323-299-3244	10:00 AM	7:00 PM
7	Clark, Leah	310-677-2792	7:00 AM	5:00 PM
8	Silverstein, Elliot	310-670-1544	10:00 AM	10:00 PM
10	Beckman, Loling	310-471-7893	10:00 AM	6:00 PM
11	Hughes, Bill	424-259-1818	Any	Any
12	McKnight, Jim	310-823-7829	8:00 AM	7:00 PM
13	Ialongo, Gilbert	310-641-7906	9:00 AM	5:00 PM
15	Van Berkomp, Paula	310-398-6734	9:00 AM	5:00 PM
16	Johnson, Carol	310-372-8535	10:00 AM	9:00 PM
17	Rozek, E. J.	310-823-3811	Noon	8:00 PM
18	Semple, Charlotte	310-398-5052 M-F	9:00 AM	5:00 PM

OFFICERS, DIRECTORS AND LEADERS

Title	Name	Term	Telephone
President	Stanley Johnson	2018	424-216-6984
Past President	Maurice Stephenson	2018	310-625-0450
Vice President	Stephanie Nordlinger	2018	323-299-3244
Secretary	Annette Tossounian	2018	310-559-2847
Treasurer	Charlotte Semple	2018	310-398-5052
Director	Leah Clark	2018	310-677-2792
Director	Jim McKnight	2018	310-823-7829
Director	E. J. Rozek	2018	310-823-3811
Director	Vacant	2018	
Director	Paula Van Berkom	2019	310-398-6734
Director	George Wolkon	2019	310-459-2671
Director	Vacant	2019	
APCUG Rep.	Leah Clark		310-677-2792
Car Pool Coordinator	Freda Sanders		323-230-3278
Change of Address	George Wolkon		424-646-3410
Corporate Counsel	Stephanie Nordlinger		323-299-3244
CCSC Computer Lab	Loling Beckman		310-471-7893
Hospitality Chair	Sylvia Davis		213-924-4927
Asst. Hospitality Chair	Freda Sanders		323-230-3278
Membership Database	George Wolkon		310-459-2671
Newsletter Editor	Leah Clark		310-677-2792
Program Chair	Stephanie Nordlinger		323-299-3244
" "	Stanley Johnson		424-216-6984
Publicity Chair	Annette Tossounian		310-559-2847
Publicity - Press	Mark Presky		310-398-0366
Quick Consultants	Leah Clark		310-677-2792
Webmaster	Paula Van Berkom		310-398-6734
Welcome Chair	Irene Mussack		310-672-3077
Asst. Welcome Chair	Vacant		310-645-4546

Website www.lacspc.org**Newsletter Editor** editor (at) lacspc.org**Voice Mail** 1-310-398-0366**Webmaster** sitemaster (at) lacspc.org**E-mail** ContactUs (at) lacspc.org**Change of Address** membership (at) lacspc.org

The **ContactUs (at) lacspc.org** address goes to our **president** and **vice president**.

If the message is for another officer or member, they will forward it to the correct person.

To contact other officers, directors, leaders or members directly, members may use our roster for phone numbers and e-mail addresses.

WHAT'S THE DIFFERENCE BETWEEN HIBERNATE AND SLEEP?

By **Leo Notenboom**

AskLeo!

Leo (at) notenboom.org

<https://askleo.com>

Hibernate and sleep are two optimizations to the boot/reboot process that can speed things up.

Sleep (also called “standby”) and hibernate modes are alternatives to shutting down your computer completely. The idea is that when they’re used, your computer will either shut down faster, start up faster, or both.

The primary difference between the two is what happens to the contents of your computer’s RAM, but there are more subtle differences as well.

Shut Down and Restart

First, let’s look at what happens to your computer when you don’t use sleep or hibernate.

When you shut down or power down your computer, a number of things happen.

- Any running programs are told that the system is shutting down. They may or may not warn you about any open files you have, after which the program exits and is removed from RAM.
- Any software services that are part of Windows itself are also told of the impending shutdown, so they can perform any necessary cleanup, writing anything that needs to be preserved to disk for the next time the machine is turned on.
- The software drivers associated with the hardware in or attached to your machine are also told of the impending shutdown, so they can do the same thing, in addition to turning off the

hardware they control (or perhaps resetting it to a safe state, if needed, before power is removed).

- Finally, any last-minute information is written to disk, and the system instructs the hardware to turn off the power, at which point everything in RAM is erased.

When the power is turned back on to restart the computer, a similar sequence happens in reverse from the shutdown process.

- The boot process causes Windows itself to be read from the hard disk and placed into RAM, where it can control your machine.
- The drivers associated with your hardware are loaded from the disk into RAM and initialized. They typically initialize the hardware that they control.
- The services associated with the various Windows features and functions are loaded from disk into RAM and run, each initializing itself to whatever state is required to perform its task.
- Finally, the applications you have configured to run automatically are loaded from disk into RAM and run. Once again, each initializes itself into some known state in preparation for whatever task it’s intended to perform.

Even though what I’ve presented is an oversimplification, you can already see that shutting down and starting up are complex processes that take time.

Sleep and hibernate are two different approaches to optimizing the shutdown and startup process.

Hibernate: Write RAM to Disk

One of the common threads in the startup and shutdown processes outlined above is that each process — be it an application, a service, or a hardware driver — needs to initialize itself on startup, or to clean itself up on shutdown. Frequently, this is nothing

more than collecting and maintaining information in the computer's memory or RAM. The hibernate process is relatively simple, at least in concept. Rather than having all the software shut down and then later re-initialize itself, hibernate attempts to preserve that state in a way that takes less effort.

- Applications, services, and drivers are notified that hibernation has been requested. They still have the option to do something, if they like. Drivers, in particular, may still need to set their associated hardware into known states, but it's also possible that they need do nothing.
- The contents of RAM are written to disk. All the loaded and running programs are included in the exact state they happen to be in, including any data they've initialized and maintained.
- The system instructs the hardware to turn off the power, at which point everything in RAM is erased.

When you resume from a hibernation state, the process is reversed.

- The system's boot process reads the image that was saved into RAM when the machine was placed in hibernation.
- The applications, services, and drivers — all already loaded into RAM — are notified that the system has resumed, in case they need to perform any initialization. (Again, hardware drivers are typically the most impacted.)
- That's it. Your system is back up and running. It's usually quicker than a full shutdown and restart because all the software doesn't have to be individually loaded and initialized from scratch.

Sleep: Keep RAM in RAM (at a Cost)

Sleep takes things one step further by not bothering to write RAM to disk. The process is even simpler.

- Applications, services, and drivers are notified that a sleep is happening. Most do nothing about it at all, though once again, drivers may elect to put their hardware into a low-power state.
- The system instructs the hardware to turn off the power — *mostly*. A small amount of power is left on to keep RAM from losing its contents.
- As you can see, sleep causes very little activity, and can, therefore, happen very quickly.

Resuming from sleep is similarly straightforward: the power is turned on and the software still in RAM resumes operating. The "cost" of sleep, however, is that unlike hibernation — which truly and completely powers down your device — sleep uses a small amount of power to keep RAM from losing its contents. Particularly if your computer is battery-powered, this means that eventually a sleeping computer will run out of power and need to do something about it. Typically, it wakes up long enough to put itself into hibernation.

Windows 10 Fast Startup: Hibernate, Sort of

I have to call out Windows 10's fast startup option as being somewhat of a third alternative to a true shutdown, hibernate, or sleep.

Fast startup, as I understand it, lies somewhere between a true shutdown and hibernation. Rather than doing the full and individual shutdown and initialization sequence, fast startup puts some aspects of the system into hibernation. Exactly which, and what the specific differences are, I couldn't tell you.

Which Is Better?

Hibernate and sleep are neither better nor worse than one another. They're different and are intended for different purposes.

Sleep is great if you just need to close your laptop for a while but expect to be back at it before any significant battery drain has occurred. Hibernate is great as an alternative to shutting down most of the time, though we'll see in a moment that sometimes only the real thing will do.

Honestly, the "better" one is whichever works well for you, on your machine and in your situation.

Problems with Sleep and Hibernate

Both sleep and hibernate have a long history of not quite working. Particularly in years past, it wasn't uncommon for a machine not to resume properly, or for something to be "not quite right."

A true shutdown and restart always resolved the issue.

The problem mostly stems from all the device drivers that deal with the hardware on your machine. They each need to be aware of sleep and/or hibernate, and either state could impact the hardware's performance. The answer is different for different hardware, and quite possibly different for the state the hardware happens to be in at the moment you put a machine into sleep or hibernate. The fact that device drivers come from a variety of sources doesn't help.

Many drivers got it wrong. While most now get it right, they can still be fragile when it comes to both sleep and hibernate. If something's "not quite right" after resuming or waking up, a restart might be in order.

You Still Want to Restart Periodically

Any issues caused by sleep and hibernate aside, you still want to shut down and restart, or reboot your machine from time to time.

As much as Microsoft might desire otherwise, instability accumulates over time. Especially for a computer that's being used

for many different things, with many different programs coming and going, or even with just a poorly written program that's left running all the time, sometimes you just need to reboot to start afresh.

Even though you might get to a point where hibernate and sleep are viable, it's an opportune time to consider avoiding both options anyway and performing a "real" shutdown instead.

That's what I do. Rarely do I sleep or hibernate my computers, even my laptops. Years of misbehavior have trained me to avoid them, and even though they're more stable than ever, I feel better with a complete shutdown and clean restart. ❖

WHAT'S THE DIFFERENCE BETWEEN A HUB, A SWITCH, AND A ROUTER?

By **Leo Notenboom**

AskLeo!

Leo (at) notenboom.org

<https://askleo.com>

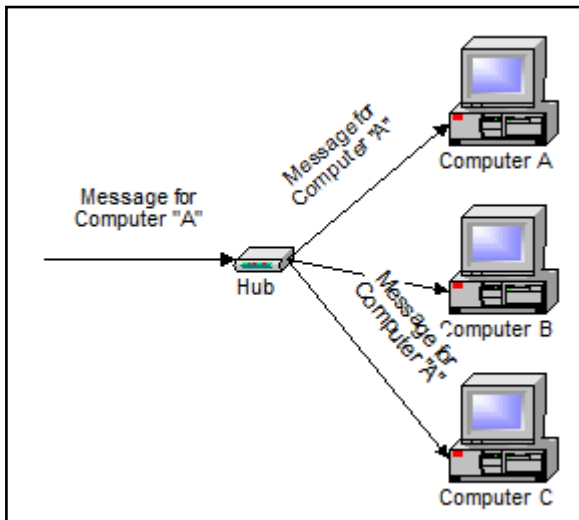
Hubs, switches and routers are all computer networking devices with varying capabilities. Unfortunately, the terms are often misused.

What's the difference between a hub, a switch, and a router? In a word, intelligence. Hubs, switches, and routers are all devices that let you connect one or more computers to other computers, networked devices, or even other networks. Each has two or more connectors called ports into which you plug in the cables to make the connection. Varying degrees of magic happen inside the device and therein lies the difference. I often see the terms misused, so let's clarify what each one really means.

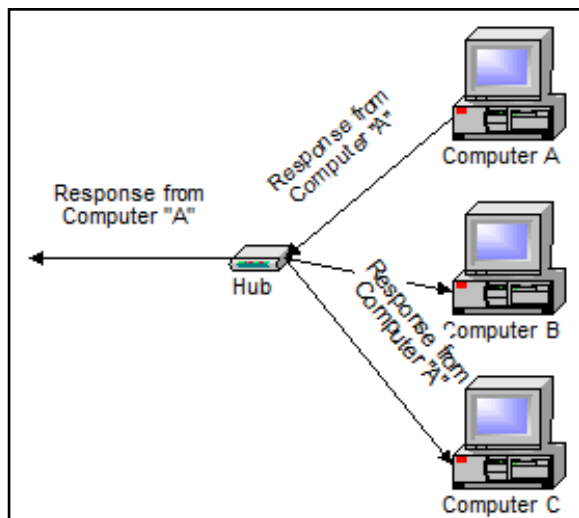
Hubs

A **hub** is typically the least expensive, least intelligent, and least complicated of the three. Its job is very simple – anything that comes in one port is sent out to the others.

If a message or packet comes in for computer "A," that message is sent out to all the other ports, regardless of which one computer "A" is on:



And when computer "A" responds, its response also goes out to every other port on the hub:



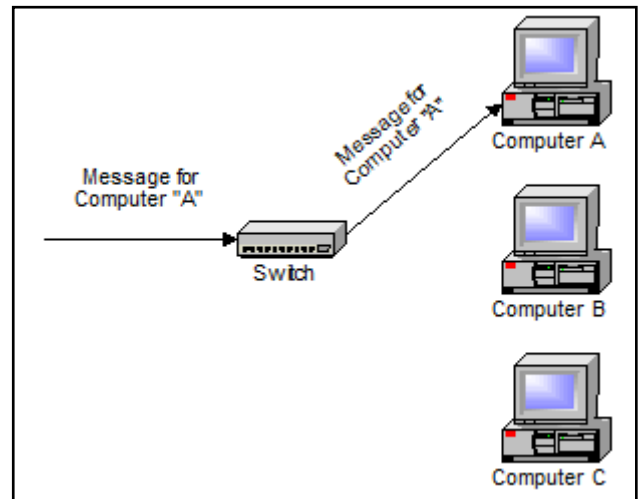
Every computer connected to the hub "sees" everything that every other computer on the hub sees. The computers themselves decide if they are the targeted recipient of the message and if a message should be paid attention to or not.

The hub itself is blissfully ignorant of the data being transmitted. For years, simple hubs have been quick and easy ways to connect computers in small networks.

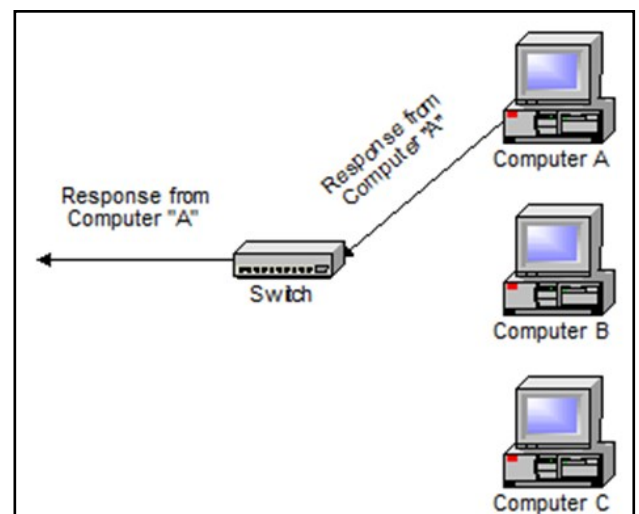
Switches

A **switch** does essentially what a hub does, but more efficiently. By paying attention to the traffic that comes across it, it can "learn" where particular addresses are.

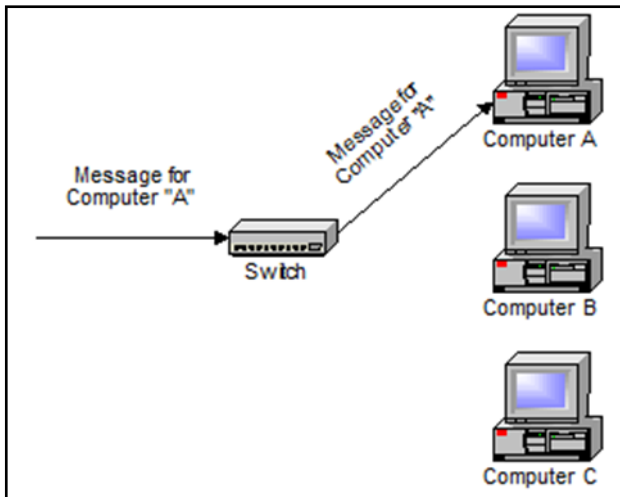
Initially, a switch knows nothing, and it simply sends on incoming messages to all ports:



Even accepting that first message, however, the switch has learned something – it knows on which connection the sender of the message is located. Thus, when machine "A" responds to the message, the switches only need to send that message out to the one connection:



In addition to sending the response through to the originator, the switch has now learned something else – it knows on which connection machine "A" is located. That means that subsequent messages destined for machine "A" need only be sent to that one port:



Switches learn the location of the devices that they are connected to almost instantaneously. The net result is that most network traffic only goes where it needs to rather than to every port. On busy networks, this can make the network *significantly* faster.

Routers

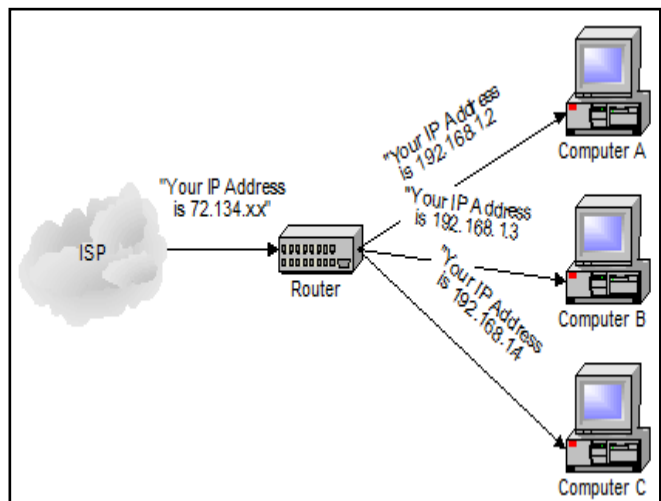
A **router** is the smartest and most complicated of the bunch. Routers come in all shapes and sizes – from the small, four-port broadband routers that are very popular right now to the large industrial strength devices that drive the internet itself.

A simple way to think of a router is as a computer that can be programmed to understand, possibly manipulate, and route the data that it's being asked to handle. Many routers today are, in fact, little computers dedicated to the task of routing network traffic.

As far as simple traffic routing is concerned, a router operates exactly as a switch, learning the location of the computers on its connections, and routing traffic only to those computers.

Consumer grade routers perform, at minimum, two additional and important tasks: DHCP and NAT.

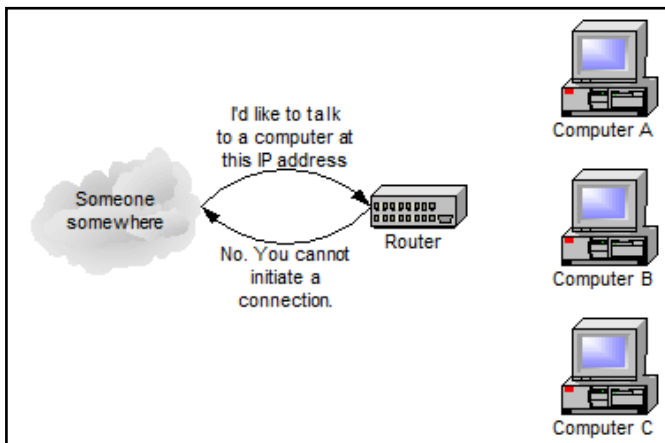
DHCP – Dynamic Host Configuration Protocol – is the way dynamic IP addresses are assigned. A device asks for an IP address to be assigned to it from *upstream*. A DHCP server responds with an IP address assignment. A router connected to your ISP-provided internet connection will typically ask your ISP's server for an IP address; this will be your IP address on the internet. Your local computers, on the other hand, will ask the router for an IP address and these addresses are local to your network.



NAT – Network Address Translation – is the way that the router *translates* the IP addresses of packets that cross the internet/local network boundary. When computer "A" sends a packet out, the IP address that it's "from" is that of computer "A" – 192.168.1.2 in the example above. When the router passes that on to the internet, it replaces the local IP address with the internet IP address assigned by the ISP. It also keeps track, so that if a response

comes back from somewhere on the internet, the router knows to do the translation in reverse – replace the internet IP address with the local IP address for machine "A" and then send that response packet on to machine "A". A side effect of NAT is that machines on the internet cannot initiate communications to local machines – they can only respond to communications initiated by those local machines.

The net effect is that the router then also acts as a firewall:



What that means is that malware that might spread by trying to connect to your computer over the network independently cannot.

All routers include some kind of user interface for configuring how the router will treat traffic. The really large routers include the equivalent of a full-blown programming language to describe how they should operate as well as the ability to communicate with other routers to describe or determine the best way to get network traffic from point A to point B.

A Note About Speed

A quick note on one other thing that you'll often see mentioned with these devices; network speed. Most devices now are capable of both 10 mbps (10 megabits, or a million bits, per second) as well as 100 mbps and will automatically detect the speed.

More and more devices are now capable of handling 1000 mbps or a billion bits per second (1gpbs).

Similarly, many devices are now also wireless transmitters that simply act as additional ports on the device. ❖

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INTERESTING INTERNET FINDS

By **Steve Costello**

Boca Raton Computer Society

Editor (at) brcs.org

<http://ctublog.sefcug.com/>

While going through the more than 300 RSS feeds, I often run across things I think might be of interest to other user group members.

Microsoft Blocks All Windows 7 Security Updates Unless You Have Antivirus.

<https://www.howtogeek.com/345946/microsoft-blocks-all-windows-7-security-updates-unless-you-haveantivirus/>

If you are still running Windows 7, this is an important post for you to read and understand.

How to Manage Your PC When You're on Vacation

<https://lifehacker.com/how-to-manage-your-pc-when-youre-on-vacation-1823701063>

I leave my PC on, with the monitor off, when I am on vacation. I use TeamViewer through a VPN to access every couple of days to check for updates. This post talks about other options you can take. ❖

CASH FLOW

as of May 31, 2018

Charlotte Semple, Treasurer

Total Assets	\$8,088.63
Receipts	
Member Dues	294.00
Total Gross Receipts	\$294.00
Expenses	
Newsletter	174.98
Facilities Rental	60.00
Verizon Wireless	50.08
Total Expenses	\$285.06
Current Total Assets	\$8,097.57

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<https://apcug2.org/discounts-special-offers-for-user-groups/> for discounts and special offers for User Groups Members. Avast Anti-virus and Acronis True Image, as well as several book, media and training sites, offer discounts, including the two mentioned below.

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CHARACTER DENSITY: The number of very weird people in the office, divided by the floor space

COMPUTER: A device designed to speed and automate errors

COMPUTER CLUB: Used to strike computer forcefully upon receiving error messages

CONSOLE: What one does to a "down" computer

CURSOR: An expert in 4-letter words

DUMP: A system programmer's work area

FEATURE: Hardware limitation as described by a marketing representative

KEYBOARD: An instrument used for entering errors into a system

LANGUAGE: A system of organizing and defining error messages

PASSWORD: The nonsense word taped to your terminal

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Electronic Newsletter	30
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Students	18
Contributor	50
Supporter	75
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Church Fellowship Hall
8065 Emerson Ave.
Los Angeles CA 90045

From the North:

Take Sepulveda Blvd.
SOUTH to W. 80th St. Turn
WEST/right. Go about one
mile to Emerson Ave. Turn
SOUTH/left. Go one long
block to W. 80th Place. It is
on the Northwest corner of
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Take Manchester Ave. to
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80th Place. Fellowship Hall is
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Emerson and W. 80th Place.
There is street parking and a
small parking lot West of the
church.

