



# DACS.doc

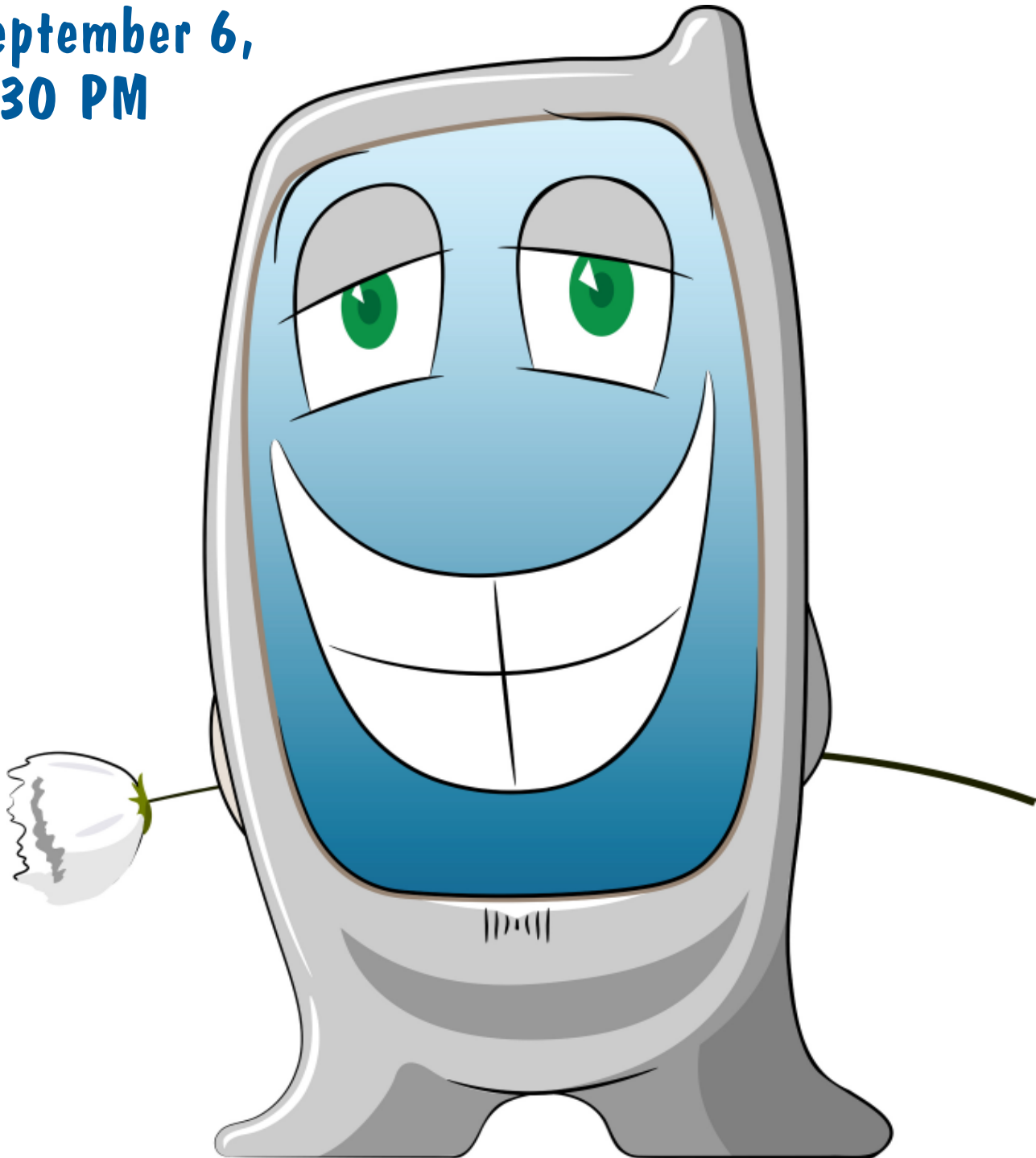
A Computer & Technology Newsletter

September 2016

Volume 27, Issue 9

\$2.00

**Next Event:  
September 6,  
7:30 PM**



**Come Hear the Smart Talk on  
Samsung's Mobile Product Line**



## Directors' Notes

Danbury Area Computer Society (DACS)

Board Meeting Minutes

Wednesday, August 3, 2016

The meeting was called to order at 7:22pm by the DACS President, Dave Green.

In attendance were board members Richard Corzo, Bert Goff (Secretary & Treasurer), Dave Green (President), Jim Scheef, and Andy Woodruff. Dick Gingras, Cathy Quaranta, and Tom Zarecki were not present. The minutes were taken by Richard Teasdale.

(Names in italics denote responsibilities for actions.)

- The Minutes of the 7/6/2016 Board Meeting were accepted.

### Reports

- Treasurer's report for July was discussed. Bert reported that dues receipts in July were very low, and that expenses for the month were also less than usual. The year-to-date loss is about \$454, compared to about \$502 at the same time last year. *Jim* will investigate the possibility that automatic e-mail reminders are not being sent out to expiring members.
- Membership committee: Jim reported 87 current members (including 5 new), and 16 in-grace, for a total of 103.
- Press Coverage: Dave reported that the press release for the August general meeting was distributed last month.
- Website:
  - o Richard reported that some instances of hacking of the website

have happened recently. A restore of Wordpress was done, since which no further hacks have been detected.

- o The price for protection of two sites (the DACS website and the CiviCRM site) using the premium version of Wordfence is now estimated at \$150/year. The board unanimously approved a motion to authorize expenditure up to \$175.

- o At Andy's request, the backup procedures for the DACS website were reviewed. All files and the database are being backed up regularly. Andy recommended that action be taken to address the possibility that the backup cycle wraps around completely before file corruption due to hacking is discovered.

### Old Business

- Programs:
  - o Preparations for John Patrick's talk in October about elections technology were discussed. Andy reported that John's new book, *Election Attitude*, is expected to be published in August. Hamlet Hub is involved and would be willing to participate in publicity for the DACS meeting. Bert mentioned that he had spoken with a contact at the New Milford Spectrum, which might be willing to have a reporter cover the meeting, but they would need a press release in advance. *Andy* will write the preview article (which will form the basis of the press release), and *Jim* will write the review.
  - o *Bert* will contact the DACS member who may be able to present about intellectual property, to ask about September or November.
  - o The potential topic, How to Buy a Computer, was discussed. *Andy* will ascertain whether the Samsung staff who work at the Best Buy store in Danbury include a possible speaker for that topic.
  - o *Jim* will contact Allan Ostergren about the possibility of an astronomy presentation, in conjunction with the McCarthy observatory in New Milford.
  - o *Richard* will contact Mike Kaltschnee about a possible presentation to DACS.
  - o *Richard* will find out whether the Apple store is willing to present (in November).
- Renovation of the Resource Center (RC):
  - o Jim reported (by e-mail prior to the meeting) that subject to certain

## Membership Information

*dacs.doc*, ISSN 1084-6573, is published monthly by the Danbury Area Computer Society, 65 Legion Rd, New Milford, CT 06776. Annual subscription rates: \$60 to regular members, \$40 electronic access (included in dues).

### Postmaster

Send address changes to Danbury Area Computer Society, Inc., 4 Gregory Street, Danbury, CT 06810-4430.

### Editorial Committee

Managing Editor: Richard Teasdale  
Production Editor: Allan Ostergren

### Contributors

Charles Bovaird	Richard Corzo
Drew Kwashnak	Lisa Leifels
Dave Mawdsley	Bruce Preston
Jim Scheef	Annette van Ommeren
Andy Woodruff	

DACS, its officers and directors assume no liability for damages arising out of the publication or non-publication of any article, advertisement, or other item in this newsletter.

The editors welcome submissions from DACS members. Contact Richard Teasdale (*dacseditor@dacs.org*). Advertisers, contact Charles Bovaird at (203) 792-7881 (*aam@mags.net*)

### Copyright

Nonprofit groups may request permission to reprint articles from *dacs.doc* or <http://www.dacs.org> by sending e-mail to *dacseditor@dacs.org*. Reprinted articles shall credit the copyright holder and a copy of the final publication shall be mailed to:

Danbury Area Computer Society, Inc.  
65 Legion Rd,  
New Milford, CT 06776

### IN THIS ISSUE

DIRECTORS' NOTES	2
HELP LINE	3
REVIEW: BACKUP AND RECOVERY	4
PREVIEW: SAMSUNG PRODUCT LINE	5
BUCKY MILAM CARTOON	5
WORKSHOP NEWS & NOTES	6
SEPTEMBER CALENDAR	7
SAFEGUARDING WINDOWS 10	8
MANY WAYS TO JOIN DACS	10
ULTRA HIGH DEFINITION TV	11
FUTURE EVENTS	12



Dick Gingras APCUG Liaison  
[rgingras@dacs.org](mailto:rgingras@dacs.org)



Apple User Group

## Officers

**DACS GENERAL NUMBER:** (203) 744-9198

**PRESIDENT:** David Green [dacsprez@dacs.org](mailto:dacsprez@dacs.org)

**VICE PRESIDENT PROGRAMS:** [vpprograms@dacs.org](mailto:vpprograms@dacs.org)

**SECRETARY:** Bert Goff • **TREASURER:** Bert Goff

## Directors

[dacsboard@dacs.org](mailto:dacsboard@dacs.org)

Richard Corzo	(203) 797-1518	<a href="mailto:rcorzo@dacs.org">rcorzo@dacs.org</a>
Richard Gingras	(203) 426-1780	<a href="mailto:rgingras@dacs.org">rgingras@dacs.org</a>
Bert Goff	(860) 355-8895	<a href="mailto:bgoff@dacs.org">bgoff@dacs.org</a>
David Green	(203) 797-8682	<a href="mailto:dgreen@dacs.org">dgreen@dacs.org</a>
Cathy Quaranta		<a href="mailto:cquaranta@dacs.org">cquaranta@dacs.org</a>
Jim Scheef	(860) 355-0034	<a href="mailto:jscheef@dacs.org">jscheef@dacs.org</a>
Andy Woodruff	(203) 744-9588	<a href="mailto:awoodruff@dacs.org">awoodruff@dacs.org</a>
Tom Zarecki		<a href="mailto:ZareckiT@wcsu.edu">ZareckiT@wcsu.edu</a>

## Committees

**NEWSLETTER:** Richard Teasdale: [dacseditor@dacs.org](mailto:dacseditor@dacs.org),

**PROGRAM:** [vpprograms@dacs.org](mailto:vpprograms@dacs.org)

**WEB MASTERS:** Richard Corzo ([rcorzo@dacs.org](mailto:rcorzo@dacs.org)), (203) 797-1518

Annette van Ommeren ([avanommeren@dacs.org](mailto:avanommeren@dacs.org)), (914) 232-0149

**PRESS RELEASES:** Dave Green ([dgreen@dacs.org](mailto:dgreen@dacs.org))

**APCUG LIAISON:** Dick Gingras ([rgingras@dacs.org](mailto:rgingras@dacs.org))

**MARKETING:** Cathy Quaranta ([cquaranta@dacs.org](mailto:cquaranta@dacs.org))

**MEMBERSHIP COORDINATOR:** Jim Scheef ([membership@dacs.org](mailto:membership@dacs.org))

**RESOURCE CENTER:** (203) 748-4330 • **WEB SITE:** <http://www.dacs.org>

## HelpLine

Our former telephone HelpLine has been replaced by our web-based DACS Community Forum at <http://forum.dacs.org>. We have topic-specific forums where DACS members can post questions. Questions may be answered by Workshop leaders or other DACS members. If none of the categories fit your question, just post it to the Ask DACS forum.

### Topic

.NET Programming  
Digital cameras/scanners/image processing  
Content Management Systems  
Linux  
Mac and iPhone/iPad/iPod touch  
PC maintenance  
Smartphones & Tablets  
Virtual machine software  
Desktop publishing and website design  
Windows

### Forum

ASP.Net and C#VB.Net Workshop  
Digital Imaging Workshop  
Drupal Workshop  
Linux Workshop  
Apple Workshop  
PC Maintenance Workshop  
Mobile Devices Workshop  
Virtual Computing Workshop  
Web Site Design Workshop  
Windows Workshop

conditions, the Ives Manor building manager has no objection to disposal of the old carpeting in the building's dumpster.

o Renovation tasks required were further discussed. The board agreed that next steps should include removal of the old carpeting and donation of the server rack to the Hackerspace.

## New Business

- Snacks for general meetings:
  - o *Jim and Dave* (drinks) and *Bert* (snacks) will make the arrangements in September.
- Richard initiated a discussion of two topics which might be of interest to the DACS membership: (1) a workshop devoted to Network-attached Storage (NAS) systems, and (2) SLACK, a web-based communication system. The board agreed that these would be legitimate topics for a survey of the membership. *Jim* will work on creating the survey.

The meeting was adjourned at 8:37 pm.

—Richard Teasdale



Uncle DACS  
Wants YOU!

We rely on volunteers for all our activities. Current positions include:

**Vice President:** Help the president and eventually become new president.

**Social Media:** Help DACS post interesting technical content

**Painters:** Help with the renovation of our resource center.

**Workshop Leaders:** Organize a group, or join an existing one.



# August Meeting Review

## Backup and Recovery - John F. Adams

By Lisa Leifels

**J**OHN ADAMS MADE what can be a dull subject interesting at the August general meeting of DACS! Most of us know how important it is to backup the data on our computers, yet many of us fail to do this on a regular basis. Luckily for us, John agreed to come back and speak again on the important topic of backup and recovery. Some of you may remember John from his presentation in January on Wi-Fi security



when we learned how to protect our wireless internet connections. This time John gave us a very thorough run-down of the options available for protecting our data, regardless of what platform is being used. John explained in detail how to backup the data on your computer using the Windows, Mac, and Linux operating systems. We also learned how to backup our photos and contacts on our cellphones and tablets.

John told us that backup and recovery are more than an idea or a process, they are really peace of mind. It's not pleasant to think about how often hard drives (HDDs) fail but unfortunately this is a fact many of us have to deal with. John started off by outlining the three types of backups that can be done; a full backup, an incremental backup and a differential backup. John said that the first time you are backing up you should always do a full backup for safety reasons. A full backup includes your operating system, which makes it easier to recover in the event of a total HDD failure. After you've done a full backup, you can either do an incremental backup or a differential backup. An incremental backup will backup only the files that have changed since the previous backup. The differential backup will backup all the files that have changed since the first backup.

Another important decision you need to make is where to store all that data you have

backed up. The first option is to use an external storage drive on-site, which is one of the most affordable solutions and it's convenient if you need it. The risk you take with this option is in the event of a major disaster such as a flood or a fire, your backup could be lost as well. The second option is to use an off-site external storage drive, which isn't quite as handy as the on-site option and could prove to be costly depending on the method you choose to secure it. The last option is to use one of the many 3rd party off-site services that are available.

If you are running Windows 7 or a later version, you can use the powerful backup and restore utility that is built right into the operating system. This program enables you to perform a full system recovery as well as restore individual files. You can also create a rescue disk that lets you boot the computer into recovery mode in case this is needed. John pointed out that Windows won't let you backup to a flash drive and that you aren't able to pick and choose specific files to backup. From Windows 8 on, the backup program works very similar to Apple's Time Machine. The Windows backup is a basic backup and not quite as sophisticated as a 3rd party backup program like Norton Ghost, which compresses the files so they take up less space.

Next John transitioned to talking about the backup and recovery system for the Mac. He said that Time Machine is a very simple yet thorough backup program. One of the benefits of Time Machine is that you will be asked if you would like to use your external hard drive for backup as long as the minimum requirements are available. You also have the option to encrypt the information on your backup disk. Time Machine not only makes a copy of every file, but it also will remember how your system looked so you can return your Mac to how it was at any specific point in the past.

John told us that one of the amazing features of Ubuntu as well as several variants of this Linux version is that it comes with a built-in file and folder backup and recovery application as part of the GUI. John explained that there is a tool you can use to create a full backup, and it makes sense to take this step once you have the software setup the way you want. The disk utility allows you to easily backup or restore a full disk image. You can go into scheduling and tell Ubuntu how often to do the backup and how long

you would like to keep your backups. You also have the option to create a password for your backup.

In case you were wondering about how to backup the valuable data stored on your cellphone or tablet, John covered this topic too. We learned that the operating system on most Android, iOS, Windows and BlackBerry devices is permanently embedded in the unit so you only need to be concerned with data backup. All of these devices offer multiple methods to backup. Apple offers 5 gigabytes of cloud storage for the iPhone, iPad and iPod and you can also do a full backup through iTunes. John warned us that iCloud backups are not full backups and will only backup your camera roll, accounts, documents and settings. An iTunes backup is the best choice if you have a lot of large files or want networked backups.

Most Android devices have an SD card installed and allow you to backup your data to the card. You can also copy your contacts and your photos to the SD card. Google also offers cloud services to backup your data. If you decide to use a third party backup program for your Android device your settings will also be backed up.

Starting with Windows 7 there is an application you can download for free right from the Microsoft website which interfaces with your Windows phone and enables you to create a backup of your entire phone. If you have a Windows tablet it will work the same as a Windows computer and you can use the standard Windows computer backup. Last but not least, BlackBerry devices give you either an embedded program or an app that will automatically do the backup depending on the version that handles the backup.

Once you have invested the small amount of time needed to implement a reliable backup plan, if the unthinkable does happen and your hard disk fails, you will have no reason to panic. You can relax since you've already done the hard part and you have that backup handy, right? If you are using a Windows computer simply boot the machine with the recovery disk and if necessary, you can restore the operating system along with any missing files. If you had to replace the hard drive in your Mac, you can use the Time Machine backup disk itself as a boot device, just hold down the Option key when you startup your Mac. If you replace the drive on your Ubuntu Linux computer with the same size drive or larger than the one you took an image of, then you can load from a live DVD. Thanks so much, John, for reminding us all to make it a priority to get a solid backup strategy in place so that our valuable time, money or memories will never be lost.

# Meeting Preview

## Samsung Smartphones and Tablets

By Richard Corzo

**Tuesday, September 6, 7:30 PM**  
**Danbury Hospital**  
**Robilotti Conference Center**  
**Presenters: Cindy Curran and**  
**Chris Cournoo**

**T**HIS WILL BE A FIRST for DACS, as we have two Samsung representatives from the Danbury Best Buy store to talk to us about Samsung mobile products. Of course, Samsung has a whole range of products, but our speakers Cindy Curran and Christopher Cournoo will be covering Samsung smartphones, tablets, and even smart watches.

Samsung's current flagship smartphones are the Galaxy S7 and its more expensive variant, the Galaxy S7 Edge, named for its screen's curved edges. They also have a "phablet", the just-released Galaxy S7 Note, sized between a large phone and a tablet, with an included stylus.

Samsung also has tablets running Android and even a 2-in-1 Windows 10 laptop/tablet. Their iPad competitor is

the Galaxy Tab S2 and the Windows 10 2-in1 is called the Galaxy TabPro S.

Samsung's phones and tablets run a customized version of Android, and have features that are specific to Samsung devices. Whether you choose a Samsung phone or tablet, our speakers will explain:

- how to transfer from one Samsung (or other Android) device to a new Samsung device using Smart Switch.
- how to back up to a cloud.
- how to transfer to an SD card.
- how to set up a lock on your device.

Many recent Android phones support Android Pay as a mobile payments solution, but Samsung has their own solution called Samsung Pay, which Cindy and Chris will explain.

Samsung phones and tablets can also connect with your PC or Mac using Samsung's SideSync software, so you can get mobile notifications on your computer or share files.

Samsung likes to compete in every category, so we will also get to hear about the Gear S2 Smartwatch. The representatives will explain the 3G/4G models versus the Bluetooth-only models, and the Gear Fit2 fitness band.

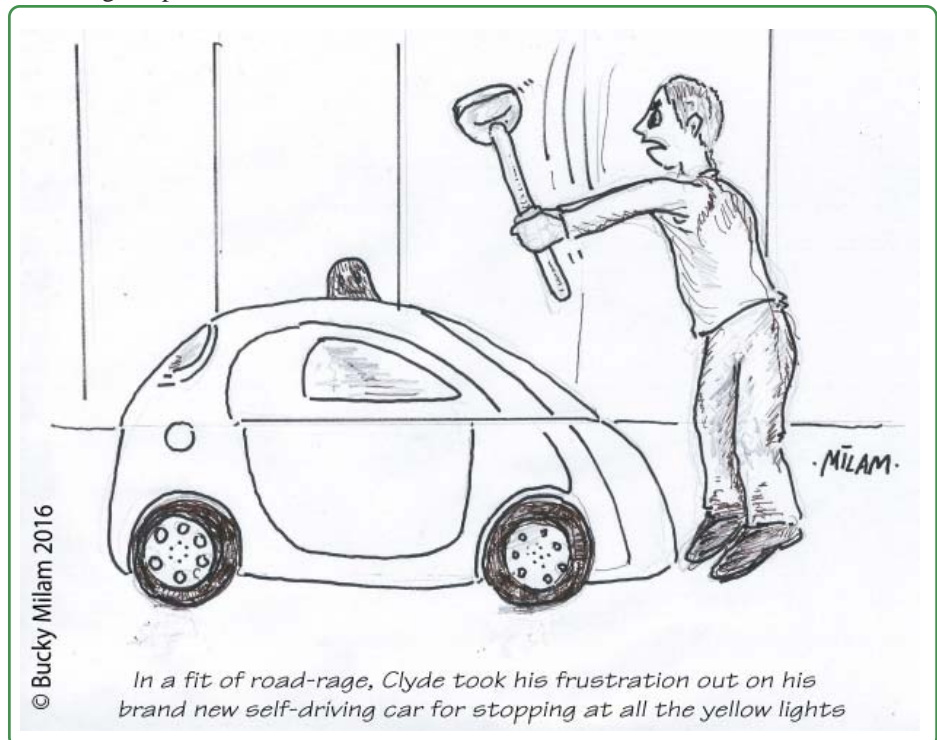
Cindy Curran is a Lead Certified Samsung Experience Consultant and

possesses many years of experience in the technology and retail field. She has owned and operated businesses in electronics and has always had a passion for mobile devices, especially in the line of smart phones, tablets and wearables. Her greatest reward is to be able to simplify someone's life by offering him or her all the benefits of the latest technology.

Christopher Cournoo is a solution expert who currently focuses on mobile technology. With 15+ years of experience in mobile communication, he has worked for Circuit City, T-Mobile USA, & Samsung Electronics America. With working knowledge of the Android operating System and OEM (Samsung) platform, he focuses on reducing the noise level between technical specs and user/customer benefits; showcasing practical applications for devices such as handheld smartphones, tablets, and wearables. He believes and states, "We are all learning one day at a time due to the astonishing pace of technology advancement."

DACS General Meetings are free and open to the public. Members and prior attendees are encouraged to extend invitations to anyone interested in this topic.

DACS holds its general meetings at Danbury Hospital in either Creasy Auditorium or the Robilotti Conference Center across the hall. There is plenty of free parking in the guest parking garage adjacent to the auditorium.





# Workshops

## Workshop NOTES: September 2016

**Apple.** Focuses on all aspects of the Mac and iPhone operating systems.

**Contact:** Richard Corzo ([applesig@dacs.org](mailto:applesig@dacs.org)).  
Meets 2<sup>nd</sup> Tuesday, 7 p.m. at DACS Resource Center.  
**Next Meeting:** Sep 13.

**Jobs.** Networking and jobs search

**Contact:** Charles Bovaird, 203-792-7881 ([aam@mags.net](mailto:aam@mags.net)). Go to DACS Community Forum (<http://forum.dacs.org> for job listings).

**Linux.** Helps in installing and maintaining the Linux operating system. Also of interest to Apple owners using OS X.

**Contact:** Dave Mawdsley, [linuxsig@dacs.org](mailto:linuxsig@dacs.org)  
Meets 3<sup>rd</sup> Wednesday, 7:30 p.m. at the DACS Resource Center.  
**Next Meeting:** September 21

**PC Maintenance.** Review of PC hardware and OpSys maintenance and use.

**Contact:** Charles Bovaird, 203-792-7881 ([aam@mags.net](mailto:aam@mags.net)).  
Go to DACS Community Forum (<http://forum.dacs.org>).

**Online Business Workshop.** Informal member gathering sharing ideas on creating an online source of income.

**Contact:** Steve Harkness ([onlinebizsig@dacs.org](mailto:onlinebizsig@dacs.org))  
Meets second Monday in Brookfield, or by Webinar.  
**Next Meeting:** Check [dacs.org](http://dacs.org).

**Single Board Computers Workshop.** Explores small cheap computers like Raspberry Pi, Arduino, Netduino, Beaglebone, and more. Meets 3<sup>rd</sup> Thursday at the

DACS Resource Center.

**Contact:** Jim Scheef (860-355-0034)

**Social Media:** Master the basics of Facebook, Twitter, LinkedIn, and Instagram.

**Contact:** Tom Zarecki 914-548-4948; email: [TomZshow@gmail.com](mailto:TomZshow@gmail.com).

Meets on the 4th Wednesday of the month at 6:30pm, usually at the DACS Resource Center, but check the monthly schedule.

**Next Meeting:** TBA

**Video Production.** The Video Workshop explores all aspects of video capture and production, including both inexpensive and professional choices for cameras and editing software.

Meets on the 4th Thursday of certain months, typically at 7:00 pm at the Resource Center. Check the Calendar for details.

**Contact:** Andy Woodruff ([awoodruff@dacs.org](mailto:awoodruff@dacs.org))

**Next meeting:** Check [dacs.org](http://dacs.org)

**Web Development/Design** This Workshop meets every 3<sup>rd</sup> Tuesday, 7-9 pm, at the DACS resource center. Although we cover many web-related subjects, most meetings will feature WordPress ("Content Management System"). We discuss its pros and cons, learn about theme editing, CSS, plugins, security, customization and more.

**Contact:** Annette van Ommeren ([avanommeren@dacs.org](mailto:avanommeren@dacs.org))

**Next meeting:** Sep 20

## Let's join heads!


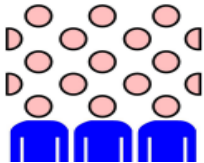
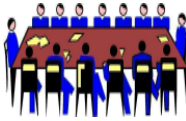






Do you have a special technology interest you would like to share or learn more about? Join a DACS workshop or start one. You don't have to be a nerd or a guru—just have a curiosity for what's out there and an interest in sharing or discov-



ering with others like you. Just send an e-mail to [dacsprez@dacs.org](mailto:dacsprez@dacs.org), or talk to one of our officers at the next meeting, and say something like "I want to start a workshop!" or "Wouldn't it be nice if we had a workshop on . . .?"

# September 2016

## Danbury Area Computer Society

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday																																																																																											
<div> <div> <b>Aug 2016</b> <table> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td></tr> <tr><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td></tr> <tr><td>28</td><td>29</td><td>30</td><td>31</td><td></td><td></td><td></td></tr> </table> </div> <div> <b>Oct 2016</b> <table> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td></tr> <tr><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td></tr> <tr><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr> <tr><td>30</td><td>31</td><td></td><td></td><td></td><td></td><td></td></tr> </table> </div> </div>				S	M	T	W	T	F	S		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				S	M	T	W	T	F	S							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						1	2	3
S	M	T	W	T	F	S																																																																																											
	1	2	3	4	5	6																																																																																											
7	8	9	10	11	12	13																																																																																											
14	15	16	17	18	19	20																																																																																											
21	22	23	24	25	26	27																																																																																											
28	29	30	31																																																																																														
S	M	T	W	T	F	S																																																																																											
						1																																																																																											
2	3	4	5	6	7	8																																																																																											
9	10	11	12	13	14	15																																																																																											
16	17	18	19	20	21	22																																																																																											
23	24	25	26	27	28	29																																																																																											
30	31																																																																																																
4	5  Labor Day	6  <b>General Meeting</b> 7:30 PM	7  <b>Board of Directors</b> 7:00 PM	8  <b>Membership Committee</b> 7:00 PM Jim Scheef 860-355-0034	9	10																																																																																											
11	12	13  <b>Apple 7:00 PM</b> Richard Corzo <i>applesig@dacs.org</i>	14	15  <b>Single Board Computers Workshop</b> 7:00 PM Jim Scheef 860-355-0034	16	17  <b>DACS.DOC Deadline</b>																																																																																											
18	19	20  <b>Web Development and Design</b> Annette van Ommeren 7:00 - 9:00 PM <i>avanommeren@dacs.org</i>	21  <b>Linux</b> 7:30 PM Dave Mawdsley <i>linuxsig@dacs.org</i>	22	23	24																																																																																											
25	26	27	28	29	30																																																																																												

# Operating Systems

## Safeguarding Windows 10

By Dick Maybach

**I**F YOU'VE TAKEN ADVANTAGE of the free upgrade to Windows 10 from Windows 7, 8, or 8.1, you're vulnerable to losing it as well as your data if you don't make some preparations. Your old system installation disk or the recovery CD and backups you created will allow you to restore only your old Windows system. If you have a serious crash after July 29, 2016, when the free upgrade period expires, you would then either have to live with your old version or purchase a retail copy of Windows 10. Fortunately, Windows 10 includes utilities to avoid this, but only if you know about and use them, and they are buried deep enough in menus that a casual Windows user may not find them.

Your first task is to create a Windows Recovery Environment on an 8-Gbyte (or larger) USB memory stick with the following procedure.

- Tap the Windows key, type "recovery", and select "Create a recovery drive".
- Select "create recovery drive".
- Be sure the box "Backup systems files to the recovery drive" is selected (Screen 1).
- Click "continue". This is a slow process; don't get impatient.

This plus a system image (see below) substitute for an installation disk, and they will let you repair Windows and restore your software and data from your backups. Label the memory stick clearly, but before you store it in a safe place, be sure your PC can boot from it. You can also create a recovery environment on a separate hard disk partition, but this less safe as a hard disk failure will destroy it.

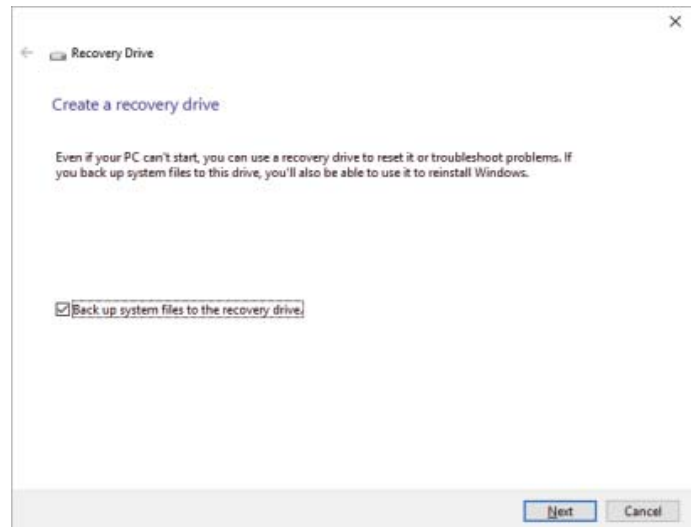
You may prefer to create a system repair CD (or make one in addition to a Recovery Environment), a legacy feature from Windows 7 that has fewer features but still allows you to recover your system after serious trouble. Follow these steps to create the disk.

- Tap the Windows key and type "control".
- Select "Backup and Restore (Windows 7)".
- Select "Create a system repair disc" (Screen 2, you may be asked for a password) and follow the instructions.

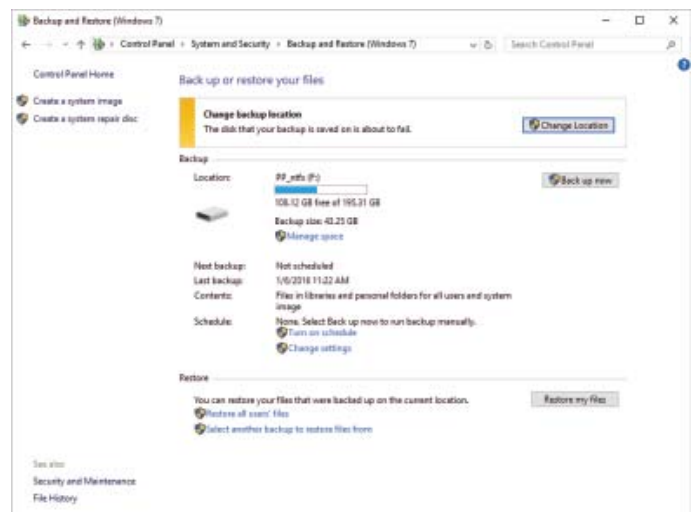
When you boot using a recovery drive memory stick you are in the Windows Recovery Environment, where you can perform the following tasks:

- perform a system reset,
- use a saved system image to overwrite your entire disk,
- repair the startup files,
- enable safe mode, and
- troubleshoot your PC (although this requires some expertise).

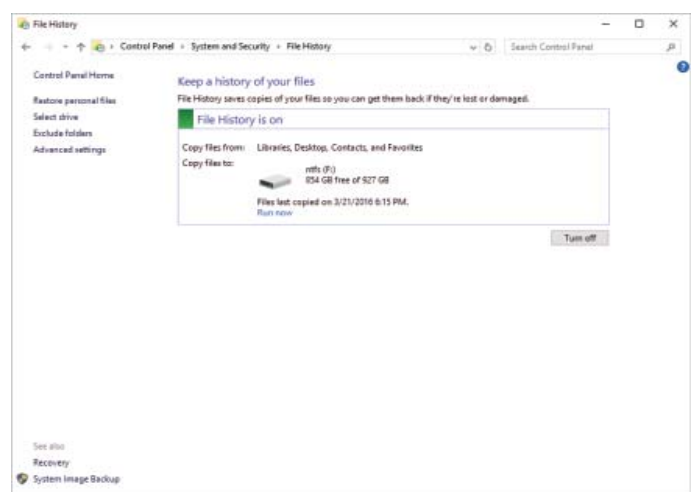
Although a Recovery Environment memory stick is essential, by itself it won't let you restore Windows 10. For that, you also need a system image, which is a copy of all the software and data on your hard disk. Portable USB-3, 2-Tbyte drives are now available for less than \$100, and these are adequate for most of us. You might prefer an internal drive, especially if you need more capacity, but an external unit does provide the extra protection of being completely separate from your PC.



Screen 1. Create a recovery drive

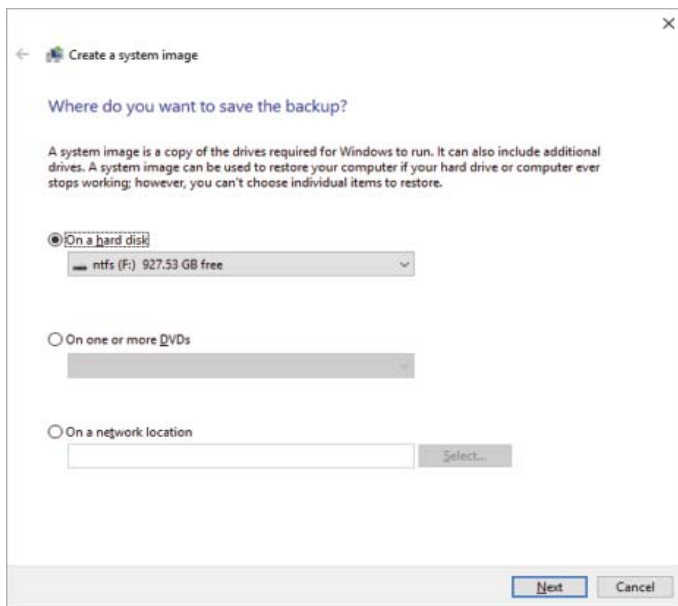


Screen 2. Backup and Restore

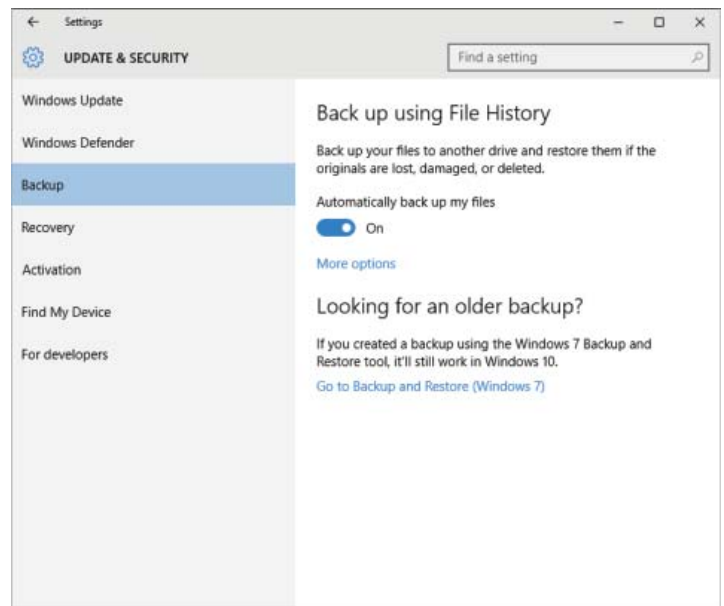


Screen 3. File History.

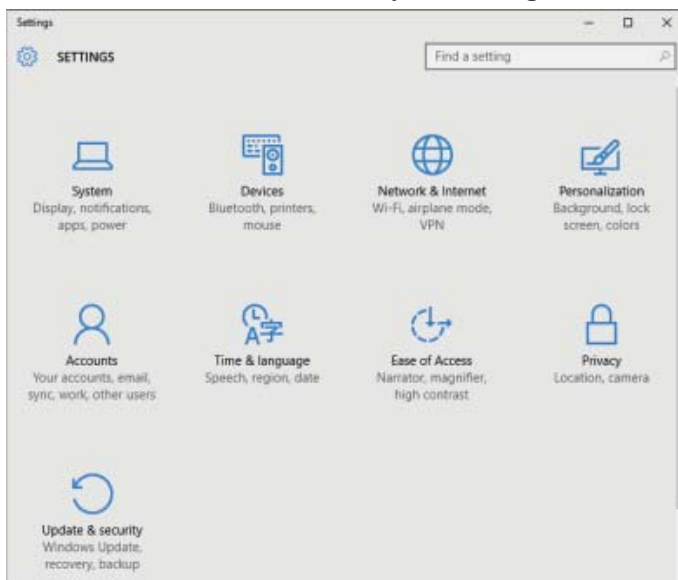




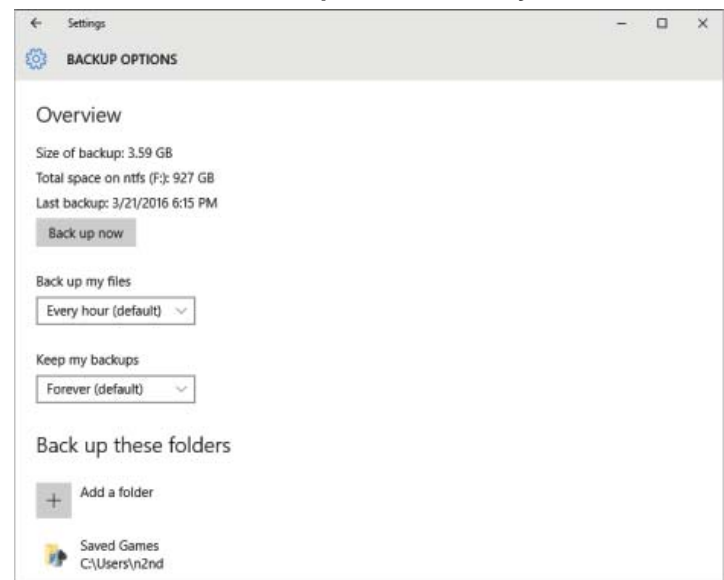
**Screen 4. Create a System Image**



**Screen 6. Update & Security.**



**Screen 5. Settings.**



**Screen 7. Backup.**

To create a system image follow this procedure.

- select "Control Panel" and under "System and Security, select "Save backup copies of your files with File History".
- Select "System Image Backup" (at the bottom left; see Screen 3; you may have to enter your password).
- Select "Create a system image".
- Select "On a hard disk". There are options to use a network drive or DVDs, but the limited capacities of the latter make the procedure tedious indeed (Screen 4).

Because creating a system image is time-consuming, and restoring one replaces the entire contents of your hard disk with the image, you will probably do this infrequently. The Windows 10 backup is called "file history", and by default it runs every hour while your backup drive is connected. It's important to remember that file history saves only your data; you must use a system image to restore software. As a result, you will want to store a system image every month or so (depending on how often you install or update your software), although you probably want to save file history much more frequently.

Use this procedure.

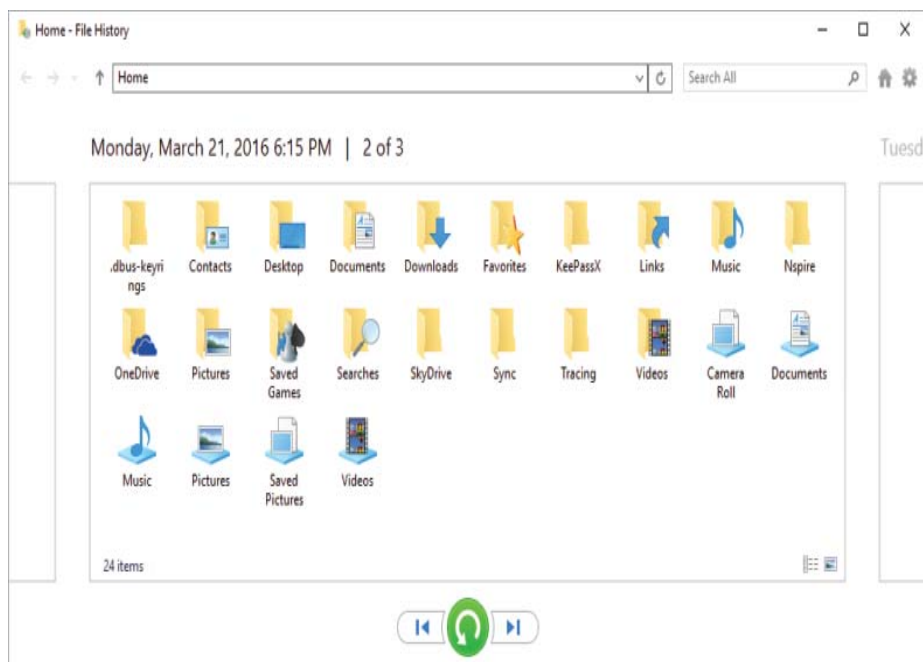
- Tap the Windows key, type "settings", select "Settings", then select "Update & security" (Screen 5).
- Select "Backup" (Screen 6).
- If your backup disk is not always connected, select "More options", then select "Back up now" (Screen 7).

The first time through this you have to specify where the histories will be stored. After that, you can just connect the backup drive and Windows will automatically perform the action. You will have to select "Back up now" only if the drive is connected for just a short time. Note on Screen 6 the item "Go to Backup and Restore (Windows 7)", which you can use if you prefer it to file history.

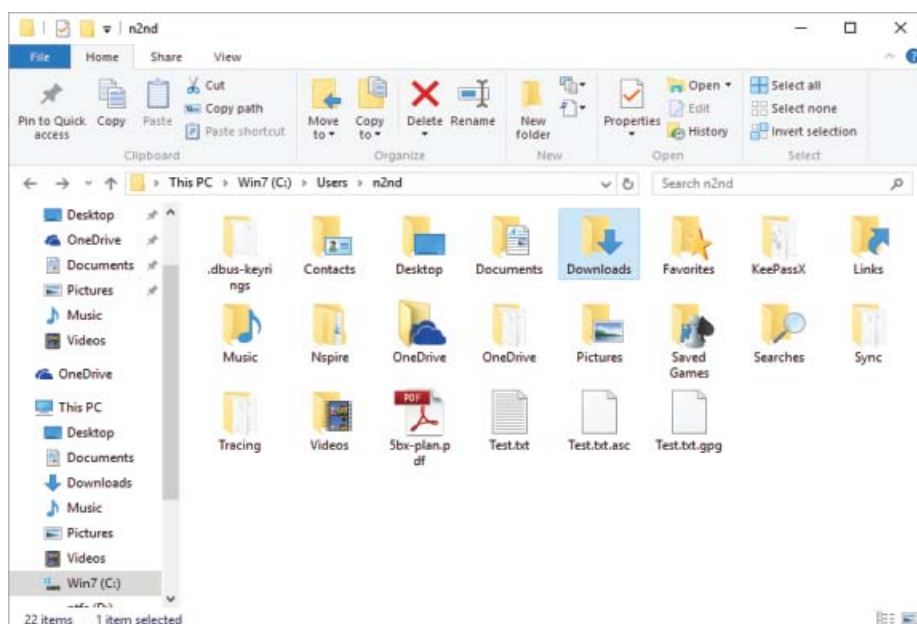
Do the following to restore a file from your file history. (If your history is stored on a removable drive, be sure it's connected).

- Tap the Windows key and type "control".
- Select "Control Panel".
- Select "Save backup copies of your files with File History" (under System and Security).
- Select "Restore personal files" (see Screen 3 above).

You'll see the results (Screen 8 - next page).



**Screen 8. Restore Personal Files.**



**Screen 9. File Browser with an Expanded Ribbon.**

The files and folders shown are for the date shown. To see earlier version click on the arrow to the left of the green button; to see later ones click on the right arrow. Selecting an item and clicking on the green button will restore it.

However, there is a quicker way to access file history. When you are using the file browser, expand the ribbon (if it's been minimized) by clicking the small down-arrow just to the left of the help button (a blue circle with a question mark). Screen 9 shows a file browser window with an expanded ribbon. Then click on "History" to see the file history screen for an item you've selected.

As you can see, using file history can be much more convenient than the older backup and restore technique, especially if you keep your history disk connected to your PC. The particular scheme with which you back up your files isn't important, as long as it's effective, but be sure you have one and test it to be sure it works.

*Dick Maybach is a member, Brookdale Computer Users' Group, NJ*

*This article appeared in the May 2016 issue, BUG Bytes (www.bcug.com n2nd (at) att.net), and is reprinted by permission.*

## There are Many Ways to Join DACS



An easy way to join DACS is to attend one of the monthly general meetings. General meetings are normally held on the first Tuesday of each month at Danbury Hospital. Or join right on our Website via the PayPal link, where you may also pay by credit card without a PayPal account.

General meetings are always free to the public, but only members benefit fully from DACS' many other events, activities, and publications. As a member you become part of a dynamic computer group in the Greater Danbury Area.

You will receive a subscription to *dacs.doc*, our award-winning monthly newsletter, packed with news and information pertinent to computer users of all levels. In addition to interesting feature stories, the newsletter contains a monthly calendar of events and a recap of the the previous general meeting and last month's workshops. Members may also post questions to the DACS Community Forum.

Members may also attend the monthly workshops, where topics relating to computers, peripherals, software, and operating systems are discussed. Workshops meet throughout the month at our Resource Center in downtown Danbury unless mentioned otherwise in the calendar. Occasionally, special topic sessions are also offered to members.

### Individual/Family Memberships

Annual membership dues are \$40.00 for individuals or for each family living at the same address. Annual memberships which include a printed newsletter are available for \$60.00 a year.

# Home Entertainment

## Ultra High Definition TV - Do I need one?

By Phil Sorrentino

ULTRA HIGH DEFINITION TV seems to be the latest in advertised TV developments (maybe with the exception of curved TV screens). Digital TV became the standard for TV in the United States on Feb. 17, 2009 when the United States switched over from the almost 70 year old Analog TV. By now, most of us have Digital flat panel TVs in our homes, most of which are capable of High Definition TV (HDTV). The term "High Definition" is an indication of the digital format and resolution that the TV can reproduce. Digital TV is delivered in many formats. The most popular, and the highest definition, are 1080p, 1080i, and 720p. The number, 1080 or 720, indicates the number of horizontal scan lines, from top to bottom, that makes up the picture. The "p" indicates "progressive scanning", meaning that every line of the picture is scanned in sequence, line 1, then line 2, then line 3, etc., to the bottom of the picture. This is different from an "interlaced" format such as 1080i. The interlaced format scans every other line (the odd numbered lines) first and then at the end comes back to the top and does the rest of the lines (the even numbered lines). For example, line 1, then line 3, then line 5, etc. to the bottom of the screen, then back to the top for line 2, then line 4, then line 6, etc. to the bottom of the picture. Progressive scanning provides a better picture than interlaced, but requires higher speed circuitry. With progressive scanning, images appear smoother and fast-motion sequences are sharper. (The interlaced format is a hold-over from early TV days, when it was used because of broadcast bandwidth constraints.)

So then what is Ultra HDTV? Well, the TV picture is a rectangle, typically with a 16 by 9 aspect ratio. (Just for comparison, the old analog CRT TVs had a 4 by 3 aspect ratio.) The aspect ratio indicates the ratio of the number of horizontal picture elements or "pixels" to the number of vertical pixels. So for a 1080 screen, with a 16 by 9 aspect ratio, there are 1920 horizontal pixels, and 1080 vertical pixels. So, on a 1080 screen there are 1920 X 1080 pixels, or a total of 2,073,600 pixels. This is the density

of a 1080 capable screen. No matter how big the screen is, it must be able to produce that number of total pixels. A practical corollary is that as screens get bigger the pixels get bigger. And as a screen gets bigger, for a given pixel density, the pixels will begin to become noticeable, which will eventually lead to a grainy looking picture.

So as screens get bigger it would be beneficial if the pixel density were increased.

(Again, just for comparison, analog

TVs were about 640 pixels wide by about 480 pixels high, which is the digital Standard Definition (SD) format.)

For big screens, UHD is just what the doctor ordered. UHD doubles the number of pixels in both dimensions, making the pixel density four times that

of HD. (UHD is sometimes referred to as 4K, however, 4K really indicates something slightly different; it indicates a 4096 horizontal pixel count which is a motion picture studios production standard.) UHD is then 3840 pixels by 2160 pixels, each dimension is just twice its HD counterpart. With four times the pixel density, TV screens can now grow, maybe beyond the current flat panel production capability.

So the answer to the question of whether or not I need a UHD TV depends on a few things like the expected distance from the TV screen to the viewer's eyeballs, and maybe more importantly, is there enough interesting video material, like movies, specials, or TV, in the UHD format?

There is a relationship between the screen size and the viewing distance to the screen. The further away from the screen you are, obviously, the smaller the TV will appear. For an HDTV, the ideal distance is to have the screen fill a certain amount of your field of view, though this is not very easy thing to define or specify. One recommendation is to choose a viewing angle of about 40 degrees, which, it is said by experts, will create an "immersive cinematic experience" (CNET's words not mine). For HDTV it boils down to the fact that a reasonable distance to a 55 inch screen is about 9 feet. This is a very soft science, so maybe anywhere from about 7

feet to around 10 feet would be appropriate for a 55 in. screen. This is typical for many homes. If you have an unusually large viewing room, say a very large house or a "media room", a larger screen may be desirable. So, as the room size increases, the screen size can increase and the need for UHD becomes more apparent.

UHD media availability is definitely a consideration. How will UHD content be delivered? HDTV is very new and there may not be any intension of upsetting the broadcast and cable companies with another upgrade in capability for many years, (though this is pure speculation on my part). And, Blu-Ray is the standard for HDTV content on optical disks. A UHD "Blu-Ray" standard is in the pipeline, I'm told, but not for the near future. So, without broadcast, cable or disk as the delivery mechanism, my guess is that UHD content will have to be delivered by download and/or streaming on the internet. Both of which are viable options for high speed internet connections. Netflix, Hulu+ and Amazon are all possible sources of UHD media.

So, if you have a large viewing room, a high speed internet connection, a subscription to a few UHD internet services, and some money burning a hole in your pocket, you may really need one of these UHD TVs (maybe even one with a curved screen).

PHIL SORRENTINO is a contributing writer for The Computer Club, Florida (<http://sccccomputerclub.org>; /PhilSorr.wordpress.com; philSorr (at) yahoo.com).

This article was published in the May 2016 issue of BCUG Bytes, and has been distributed for reprint by APCUG-member user groups.

### Membership has its Privileges!

Become a member and support DACS. Each member has access to the Community Forum, where they can post questions, the online newsletter in PDF form, group related news via email, SIG meetings, online forums, and any group-only related events, promotions, or activities. There is also an option to receive a mailed newsletter. For information on how to join DACS, <http://dacs.org/joining-dacs/>.



dacs.doc

Danbury Area Computer Society  
65 Legion Rd  
New Milford, CT 06776



**APCUG's 2016 International Technology Conference**  
**Palace Station Hotel and Casino, Las Vegas**  
**October 21, 22 & 23, 2016**

For more information, please go to: [www.apcug2.org](http://www.apcug2.org)



**Voice  
for  
Joanie**

Help give the  
gift of speech  
Call Frank Ruiz  
at 203 770-6203  
and become a  
**Voice for Joanie**  
volunteer  
[www.voiceforjoanie.org](http://www.voiceforjoanie.org)

# Future Events:

**September 6**

Cindy Curran  
and Chris Cournoo  
Samsung Smartphones  
& Tablets

**October 4**

John Patrick  
Elections  
Technology

**November 1**

Al Fressola  
Intellectual Property

**December 6**

TBA