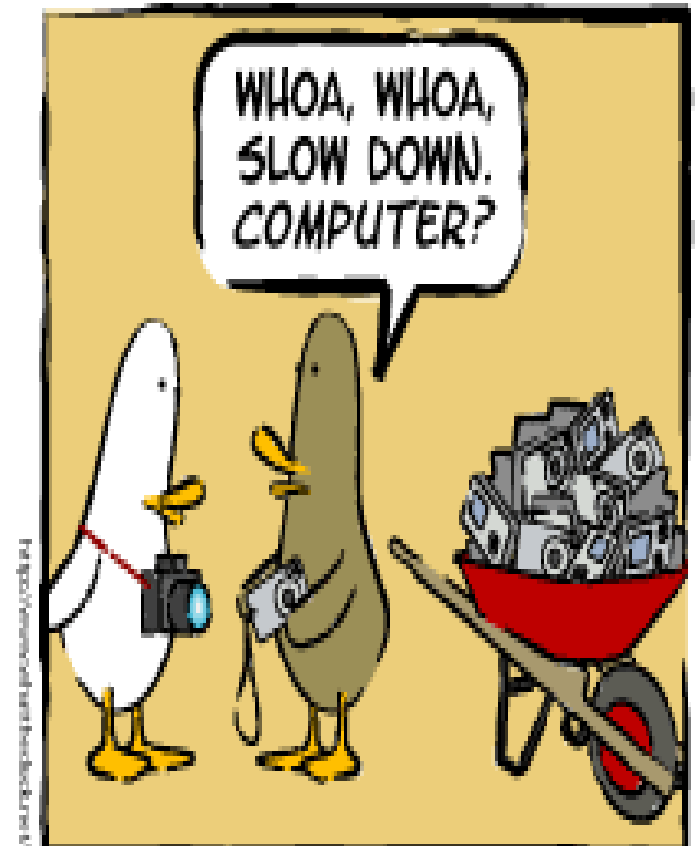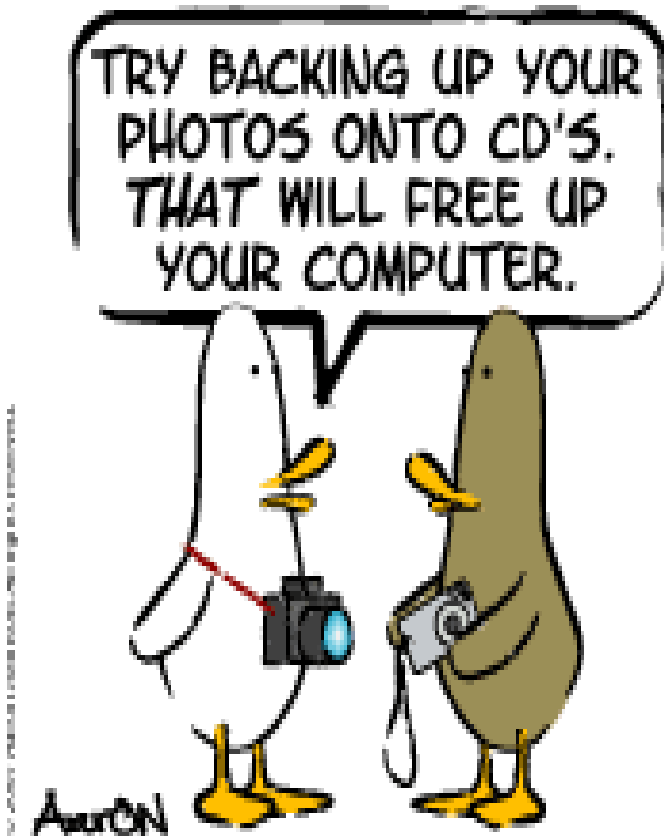# Photo Backups

Photo backup – a story....

Julie is an administrative assistant. After a recent thunderstorm, her machine was not booting at all. I picked up the machine and upon looking at it was immediately distressed by the hard drive that started making the ominous pinball machine sound that tells me the drive had been damaged. Unfortunately, there was no backup of the drive and it contained a wealth of family pictures that she did not want to lose. We sent the drive off to a data recovery outfit ..... Though we always consider these things having 'sentimental' value only, that value is actually higher than we usually think.

The company informed us that they were able to recover a large portion of files from the directories that we specified (mostly pictures and personal files): $500

We discussed options for preventing this from happening again. She has created a sort of hybrid solution to keep her storage requirements under control as her volume of photos is fairly large:

- *Archived photos from years past are burned to DVDs and multiple copies are made. These copies are distributed to family members across the country (something she always wanted to do anyway!)*

- *Current pictures are saved to the photo directory in her computer, which is backed up through an online backup service.*

- *As the photo directory reaches 4GB (around the size of a DVD), they are then burned to DVD and distributed.*

Photo Backups

- CD's – no way!!!
- DVDs – short term backup for a shoot.
- Bluray – not that much better......

Most of us will have more than 4 gigs of photos.
Most of us will have more than 4 gigs per shoot!

Most photographers will have photo collections that use > 100's of gigabytes!

Many "old" photographers will have terabytes.

My collection of digital images, started in about 2000, is currently running at 1.5 terabytes.

So how do I back these up?

Backups

http://www.pcworld.com/article/2065126/the-absurdly-simple-guide-to-backing-up-your-pc.html

Information based on data from 104 CEOs found that 30 percent of CEOs consider business continuity the crucial reason to back up data, and 98 percent of them expected business to be up and running within a day in case of any failure.

But the problem is that 23.8 percent of them said they had never tested their restore process. And that's a problem - backups can fail for a number of reasons, both internal and external, and you can't always rely on the log file reports.

Gary Williams of Spiceworks highlights the term **Schrodinger's Backup** which states "*The condition of any backup is unknown until a restore is attempted.*"

So test your backups.....

Backups

Firstly, organise your images. Try to keep them on **one** drive on your machine.
This makes it easier to back them up in a reasonable fashion.

Also, put some organisation **into** your folders....

Name	Size	Type	Date Modified	MIME Type
2000-and-earlier	2 items	Link to folder	Sat 26 Jan 2008 14:41:32 WST	inode/directory
2001	3 items	Link to folder	Sat 26 Jan 2008 14:42:13 WST	inode/directory
2002	8 items	Link to folder	Sat 26 Jan 2008 14:42:22 WST	inode/directory
2003	24 items	Link to folder	Sat 26 Jan 2008 14:42:32 WST	inode/directory
2004	15 items	Link to folder	Tue 14 Oct 2008 19:20:37 WST	inode/directory
2005	47 items	Link to folder	Tue 14 Oct 2008 19:20:37 WST	inode/directory
2006	49 items	Link to folder	Tue 26 Nov 2013 15:20:57 WST	inode/directory
2007	49 items	Link to folder	Sun 14 Dec 2008 18:13:51 WST	inode/directory
2008	58 items	Link to folder	Sat 04 Feb 2012 14:18:50 WST	inode/directory
2009	52 items	Link to folder	Wed 04 Dec 2013 09:33:30 WST	inode/directory
2010	35 items	Link to folder	Sun 18 Jul 2010 12:09:03 WST	inode/directory
2011	38 items	Link to folder	Mon 16 Jul 2012 16:58:14 WST	inode/directory
2012	42 items	Link to folder	Thu 27 Jun 2013 11:06:31 WST	inode/directory
2012_tmp	13 items	Link to folder	Thu 26 Apr 2012 11:15:09 WST	inode/directory
2013	32 items	Link to folder	Fri 17 Jan 2014 21:17:57 WST	inode/directory
2014	11 items	Link to folder	Sun 09 Mar 2014 09:11:38 WST	inode/directory
Abstract	7 items	Link to folder	Fri 23 Aug 2013 09:00:30 WST	inode/directory

▷	2011-05-15_Jacinta_DressUp	17 items	folder	Sun 05 Jun 2011 18:23:48 WST	inode/directory
▷	2011-05-21_Dwellingup	4 items	folder	Wed 25 May 2011 09:54:44 WST	inode/directory
▷	2011-05-24_John_and_Miriam	25 items	folder	Tue 24 May 2011 16:50:12 WST	inode/directory
▷	2011-05-31_Walk_with_Sally	78 items	folder	Thu 16 Jun 2011 17:38:38 WST	inode/directory
▷	2011-06-11_macro	196 items	folder	Sat 11 Jun 2011 23:00:28 WST	inode/directory
▷	2011-06-12_Schipps_Rd	122 items	folder	Thu 16 Jun 2011 17:24:52 WST	inode/directory
▷	2011-07-01_Mauritius	30 items	folder	Tue 02 Aug 2011 23:06:42 WST	inode/directory
▷	2011-07-22_Sullivans_Rock	37 items	folder	Mon 25 Jul 2011 19:55:10 WST	inode/directory
▷	2011-07-24_Pinnacles	187 items	folder	Sun 01 Jul 2012 11:13:02 WST	inode/directory
▷	2011-08-25_Rottnest	19 items	folder	Wed 18 Jan 2012 08:07:11 WST	inode/directory
▷	2011-09-07_Iceland	31 items	folder	Sat 25 Feb 2012 07:42:54 WST	inode/directory

Backups

First Choice: use the cloud.
Carbonite, Google Drive,
Dropbox, etc.
Backup or synchronise from all
devices!
BUT: bandwidth + ISP and
        initial upload!

Second Choice: use a **good**
external drive x 2, 1 out-of-house.
Backup nightly, weekly, monthly to
those, alternating (or use more and
have copies)

BUT: software and
        Hardware.

You could use a network-attached storage box (NAS). Gigabit ethernet is as fast as
USB 3.0, and a NAS box lets you back up multiple computers on a network without
having to drag a box from location to location.

One day, a flashing red light - on the small network storage device the company used to store ALL of their data - indicated there was a problem. The owner of the company contacted the maker of the device and discovered that one drive in the system had failed. Fortunately, the system was protected by RAID (Redundant Array of Independent Disks) and thus the failure of one drive did not prevent access to data on the device. A major

Ooooops and
system administration....

and lost all the data in the array. Support then informed the business owner that they had no way to recover from this type of mistake and, if he had no backup, they suggested he contact a reputable data recovery firm.

The owner did contact a data recovery firm and luckily they were able to recover the array - after several days of work and shipping the device back and forth; the studio being without access to their data for an entire business week; and paying $25,000 in recovery fees! That fee might sound excessive, but the process of recovering a failed RAID array is very labour-intensive work, requiring highly skilled individuals and expensive tools.

This is a compelling example of why RAID is not a backup plan in and of itself.

Backups

Use a **good** external drive – don't buy cheap! Use a trusted brand. And make certain that it powers down. These consumer drives are not built to be spinning 24/7.

RAID is good, but more expensive.... *you pays your money....*

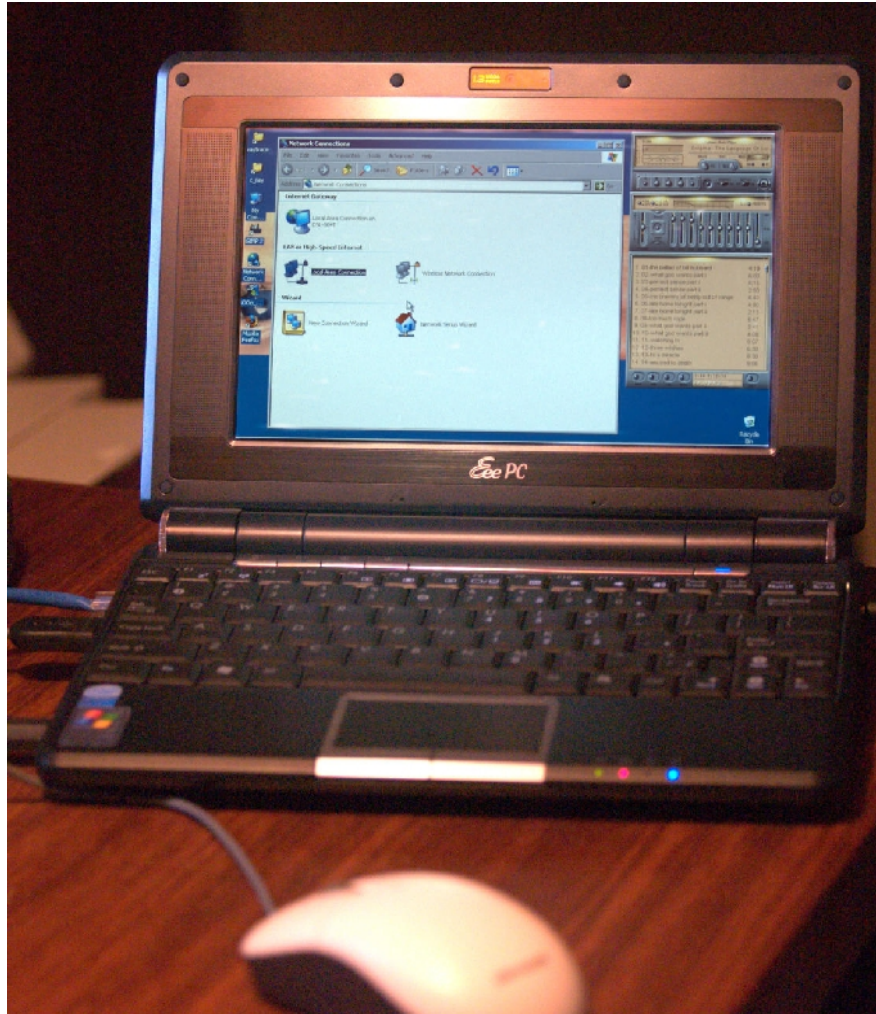Backup nightly, weekly, monthly to those, alternating (or use more and have copies).

Treat the drives well!!! **TREAT THE DRIVES WELL!!!**

Backups

Software: Don't know..... :?)

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Mobile Photo Backups

In early 2009 my beloved and I planned to travel through China for 3 weeks for holidaying and associated photography. It was obvious from previous trips that typical shooting created 4-6 gigabytes of raw images each day. Therefore Photo Storage Devices (PSD) were investigated to ensure the safe storage of the images.

One trend that looked promising was the new wave of small notebooks. We discounted notebooks that were built to a price rather than a quality level. We did not want failure whilst on a holiday in china as the gigabytes piled up. There was about 130 gigabytes free for storage after loading all extra software. That is, about 20-30 days worth of shooting. Drive had partitions C: and D:.

Transfer of images from the camera card - CF, SD etc - to the hard disk via a card reader attached to the USB port is quick and simple. The transferred images can be viewed before they are removed from the card. The notebook processor is not powerful - it should not be seen as a powerhouse converter of raw images, or as a photoshop workstation.

The notebook can also be used for browsing, email, word processing, music, etc.

The external VGA connector easily connects to a hotel TV for presentation and is not limited to the 1024x600 resolution.

In summary, the notebook was a very cost-effective buy. All of the benefits of a PSD plus some. None of the detriments. More expensive than a PSD, but more overall features for a travelling photographer. Only disadvantage of the system: no in-built DVD burner for that extra feeling of protection of your images....

Mobile Photo Backups

Now I also take two hard disks with me so I have
- Internal storage
- External storage that sits protected in my carry on luggage
- External storage that sits in my stowed luggage

When I get home, I immediately backup to my hard disk, maybe even burn some DVD's if the size is not prohibitive. China was 135 gigs in total (after post-processing).

Backups

If you are not doing it, you have no place in the world as a photographer...

Expect no mercy....

Thanks.