

Recovering From a Double Computer Failure

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November 19, 2011

It was not a dark and stormy night...

The power went out with a **BANG!**



But you said it wasn't dark?

Okay, the power went out with a **BANG!**



A “fuse” exploded

What Happened to the Computers?

- ❖ Our desktop computers were plugged into two different UPSs
- ❖ Both computers ran normally on battery power after the power failed
- ❖ The computers were shut down manually
- ❖ Both computers ***failed*** to boot-up
- ❖ The computers still under warranty
- ❖ The computers were (unofficially) dead

My wife, Ann, was not amused!



Other Devices

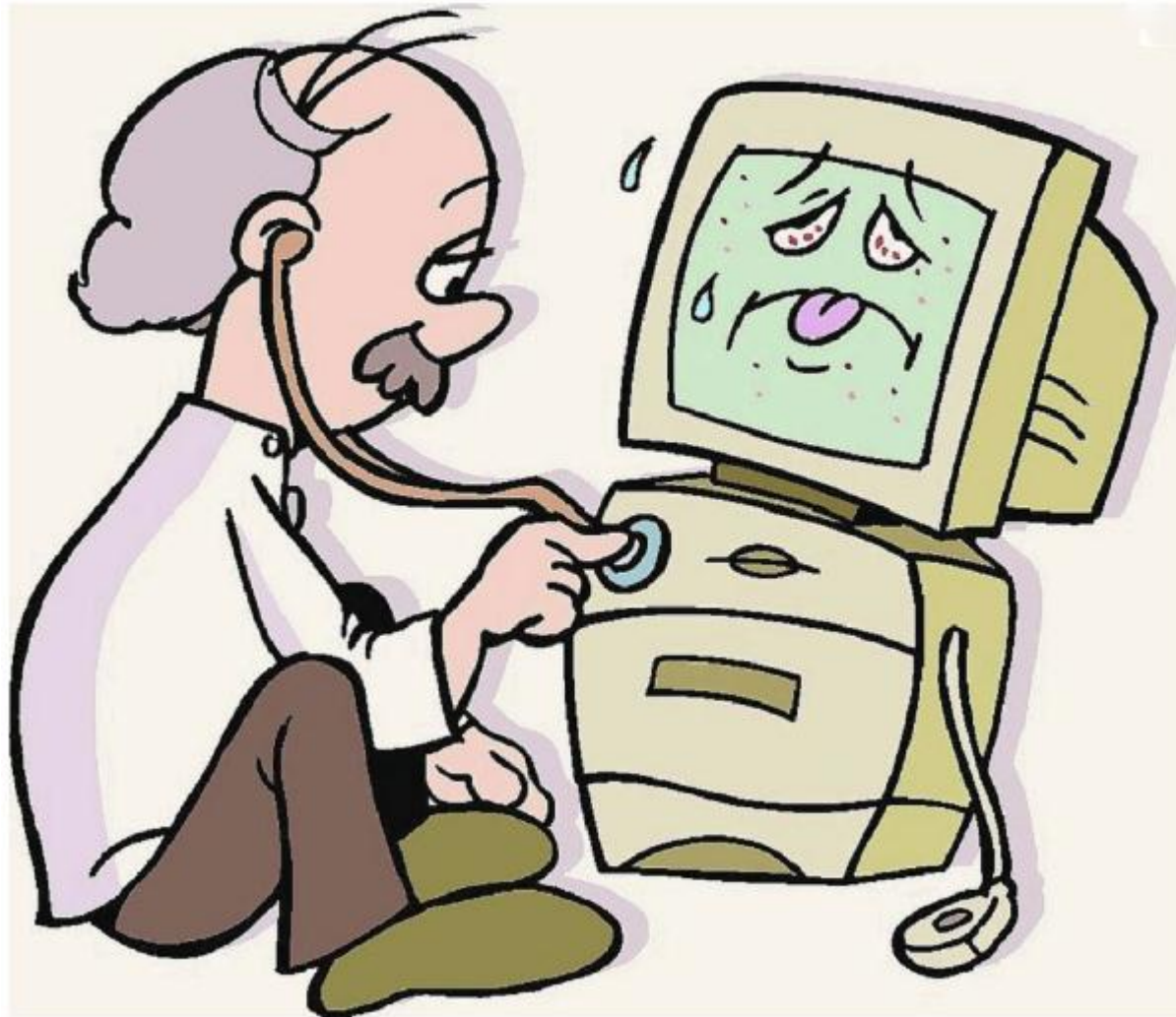
- ❖ Other devices plugged into the UPSs were unharmed:
 - ✓ Verizon Router
 - ✓ U.S. Robotics gigabit switch
 - ✓ HP MediaSmart home server (*maybe unharmed*)
 - ✓ Monitors
 - ✓ Laptop

Hewlett Packard Investigates

Sept 2

- ❖ Contact made with technician in India
 - ✓ Reseat memory (reboot)
 - ✓ Unplug disk drives (reboot)
 - ✓ Unplug power to motherboard (reboot)
- ❖ Second technician in India...
 - ✓ Reseat memory (reboot)
 - ✓ Unplug disk drives (reboot)
 - ✓ Unplug power to motherboard (reboot)

Computers Declared Officially Dead



Hewlett Packard Investigates

Sunday, Sept 4 (cont.)

- ❖ Case escalated to “Case Manager” in Colorado
- ❖ Was advised computer not repairable; new replacement computers would be sent

Hewlett Packard Investigates

Sept 6-13 (cont.)

- ❖ Difficulty in e-mail communications
- ❖ Confusion over **two** dead computers
- ❖ “Fraud” suspected causing delay

Hewlett Packard Ships Computers Sept 13-19

- ❖ First replacement computer arrives
September 13th
- ❖ Second replacement computer arrives
September 19th

Comparing Dead to Replacement Computers

| Computer | Operating System | CPU | Graphics Card | Memory (GB) | Disk Capacity |
|---|-----------------------------|-----------------------------------|------------------------|--------------------|----------------------|
| HP Pavilion Ultimate d4996t [DEAD] | Win-7 (64 bit) Professional | Intel Core2 Quad Q6600 (2.40 GHz) | NVIDIA GeForce 8500 GT | 4 | 500 GB RAID-1 |
| HP Pavilion HPE h8xt [Replacement] | Win-7 (64 bit) Ultimate | Intel Core i7-2600 (3.40 GHz) | NVIDIA GeForce GT 530 | 8 | 1 TB RAID-1 |

Comparing graphic cards is complex, see 

Value of each replacement computer: \$1,700

Microsoft Office 2007 Professional upgraded to Office 2010 Professional

Data Recovery

Sept 5-6

- ❖ Data recovered from Home Server to laptop*
 - ✓ Ann's data
 - ✓ Lorrin's data
- ❖ Data copied from laptop to external USB-2 disk drive
- ❖ Data now reside in four places

***Excluding photos which only reside on the Home Server and two external disk drives. The Home Server is also backed up to a third external disk drive.**

Recovery—Lorrin's Computer

Sept 16-17

- ❖ Replacement computer “initialized”
- ❖ Microsoft Security Essentials installed
- ❖ Hooked up to the LAN
- ❖ Data restored from USB-2 drive
- ❖ Software loaded
- ❖ Numerous “bits and pieces” ...

Software Installation

| | | | |
|-------------------------|-----------------|---------------------------|-----------------------------------|
| Office 2010 | Outlook | Firefox | MS Security Essentials |
| Google Chrome | iTunes | Adobe Flash Player | Adobe Photoshop Elements 9 |
| Malwarebytes | Ad-Aware | Belarc Advisor | CCleaner |
| APC PowerChute | RoboForm | TrueCrypt | Ditto Clipboard |
| Foxit PDF Viewer | Eraser | Google Earth | Gadgets |

Belarc Advisor is very useful in software recovery; to download see 

Recovery—Ann's Computer

Sept 21-22

- ❖ Replacement computer “initialized”
- ❖ Microsoft Security Essentials installed
- ❖ Hooked up to the LAN
- ❖ Data restored from USB-2 drive
- ❖ Software loaded
- ❖ Numerous “bits and pieces” ...

Issues with Outlook

- ❖ Outlook.pst restored and placed in
C:\Users\Lorrin\AppData\Local\Microsoft\Outlook
- ❖ Other .pst files need attention (archive.pst, etc.)
- ❖ Access to e-mail servers should be established manually, **not automatically**
 - ✓ POP, SMTP and/or IMAP names
 - ✓ Incoming & outgoing port numbers
 - ✓ Other parameters*

*Information available for Verizon, Gmail (POP/SMTP) and GMU (IMAP)

American Power Conversion

- ❖ September 26th ask APC about continued use of UPSs
- ❖ September 29th receive replacement UPSs from APC (and claim form)

Other Issues

- ❖ The 4-year old Home Server is being replaced
 - ✓ HP ProLiant MicroServer
 - ✓ Microsoft Windows Home Server 2011
- ❖ Additional backup is now being done using Windows-7 software to an external USB-2 disk drive

Summary

- ❖ ~4 days to be “back in business” using the family laptop
- ❖ Hewlett Packard was very helpful and generous
- ❖ American Power Conversion (APC) was also very generous
- ❖ Data and *most* software recovery took about 2 days/machine
- ❖ Constructing the new server is a work in progress

Summary (cont.)

- ❖ ~12-17 days to get replacement computers
- ❖ ~2-3 weeks to be “back in business”
- ❖ The experience was nerve-wracking but educational
- ❖ An iPod Touch with Calendar and Contacts saved our bacon
- ❖ Recovery without the family laptop would have been much more difficult
- ❖ *Without good backup, recovery would have been **impossible***

Thanks for your attention!

