Protecting Oneself:

Backing up, Archiving and Restoring (client) Data
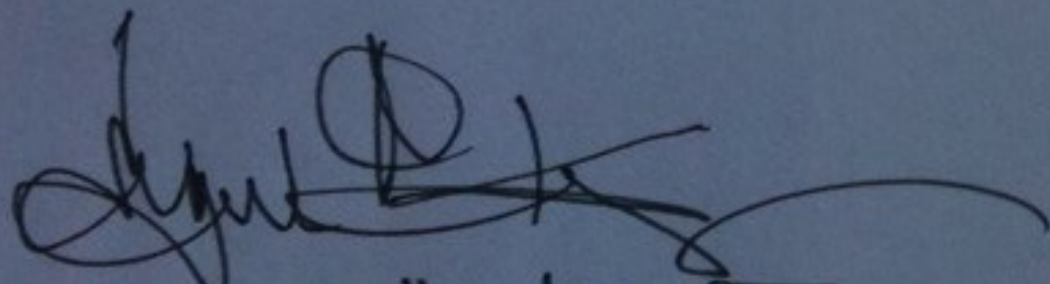
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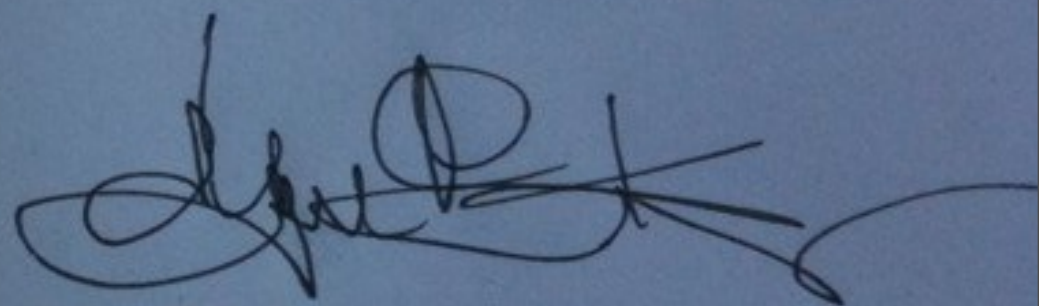To Sean —

"Failure is NOT
an Option!"

[signature]

"White" FLIGHT

APOLLO 13

To Sean —
Arn.Hirsh!

[signature]

What is backup?

- Backup is having what we need in a crisis
- Backup is not having to say "I'm sorry"
- Backup is feeling safe at night
- Backup is a way to protect your investment of time in a project
- Backup is not an archive (neither is RAID)

Backup vs. Archive

- *Backup* is all about being able to quickly resume use of data that you were still in the middle of (or were very recently) using.

- *Archives* are about having access to old work that you weren't sure you were going to need again, or wasn't worth keeping online.

- The kicker? You should backup your archives.

Restoration

- When disaster strikes, how far back in time are you willing to travel?

- How much time will rebuilding the system take?

- How much will the restoration downtime cost?

- Schedule a monthly restore test. Discuss the results with your clients.

Planning the Backup

- Data Source

- Backup Destination

- Transport Means/Medium (incl. Software)

- Backup Frequency

- Defining layers of protection

- Method & speed of restoration

Branson loses autobiography in blaze

Airline tycoon Richard Branson has lost his autobiography and 15 years of handwritten notes after his British Virgin Islands house caught fire.

Actress Kate Winslet and 20 other guests were holidaying at the billionaire's home when lightening hit the wooden property and set it ablaze, reports contactmusic.com.

"My office was in the house and I lost everything in it. I'd got a long way into writing my autobiography and it's lost. Fifteen years of handwritten notebooks went and photographs and so on," Branson told Britain's The Sunday Times.

"Running a business, we have a meticulous computer backup system so I'd assumed all that was completely safe. But it turns out the backup was also in the house.

"Everything filed on the computers there in the past few years is lost, both business-related and personal... But these are things. And as long as you have your family and friends around you, they're not that important," he added.

The business case for backup

- "Can you afford and are you prepared to lose everything you've worked on since your last backup?"

- Focus on the *restoration experience* when discussing options vs. cost with clients.

- Let the client imagine the alternatives to backup, while trying not to resort to scare tactics.

- When a client doesn't seem open to the idea, draw out the real reason why.

- Document the plan; use a hold harmless agreement?

Additional questions to ask?

- Bootable or user data only?

- Databases should be addressed carefully

- Consider how you are backing up your large files (MS Entourage databases and Virtual Machines.

- How to keep track of your backup status.

What about storage?

- Disk-based media
  - Plain hard drives
  - Drive cartridges
- Tape drives / libraries
- Network Attached Storage
- Storage Area Network
- Continuous onsite/offsite solutions
- Backing up the backups
- Encrypting the backup media

Lowell Green wonders if he was the target of a random robbery, or if thieves to his west-end home knew exactly what they were looking for.

Wednesday, the local radio talk show host and author discovered his home had been broken into, and the only thing stolen was his HP laptop computer.

The machine was stored in Green's home office and contained all the research for his upcoming book, which will be about immigration and multiculturalism. He hadn't backed up much of the data and didn't store it anywhere else. A rough draft of the book has already been sent for editing, but all the background work is lost.

Encrypted drive options

- Apricorn Aegis Padlock

- Data Locker

- LaCie SAFE hard drives

- MXI Stealth Bio hard drives and flash drives

- RadTech's Impact enclosures

- RocStor's Rocbit FXKT and Rocsafe MX

- SecureDisk enclosures

- any drive with full disk encryption - PGP, Truecrypt, WinMagic & others

Credit: Adam Engst, Take Control Books

Backup software options

- Time Machine; free & integrated

- Carbon Copy Cloner / SuperDuper!

- Crashplan / CrashPlan PRO / PROe

- PresSTORE

- Retrospect 9

- Rsync & other scripted solutions

A sample rsync call

rsync -avz /Users/costello/Desktop/Hold costello@1.2.3.4:/inboundbackups/

This will see the folder "Hold" (and all of it's contents) from my local machine being synchronized with a folder (which will be created if needed) named Hold, on the computer at IP address 1.2.3.4

When connecting to 1.2.3.4, challenge me for the password to the account 'costello'

Monitoring the backups

- Why wait until the monthly restore test?

- Consider automated email notifications

- Log analysis, Watchman Monitoring

- Client Education

Testing the Restore

- Document the restore process as a part of the backup planning and implementation.

- Schedule test restores in your calendar, make them a repeating task.

- Great for client education & empowerment

- Talking about the results, good or bad, will foster a deeper sense of trust.