



Storage and Protecting Yourself*

Backing up, Archiving and Restoring Data

*and Your Customers

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MACINTOSH CONSULTING

What Is A Backup?

What Is NOT A Backup?

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- Flash drives

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- Drag and drop copies
“I moved it to the server”

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- Drag and drop copies
“I moved it to the server”
- DropBox / MobileMe
- RAID

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- ALL the customer’s data!

What Is A Backup?

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- ALL the customer’s data!
- GOAL:

No data loss when disaster strikes

Centralizing data storage

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- Direct Attached Storage

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- Direct Attached Storage
- Network Attached Storage

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- Direct Attached Storage
- Network Attached Storage
- Storage Area Network

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- Direct Attached Storage
- Network Attached Storage
- Storage Area Network
- Cloud

What you need to tell your customers about backup and restores

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“Don’t back up what you can afford to lose.”

Common Customer Complaints

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- Cost

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- Issue with backup scheduling because “it affects speed”

Common Customer Complaints

- Cost
- Issue with backup scheduling because “it affects speed”
- Doesn’t want personal files stored in backups (e.g., privacy issues)

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- Potential for theft of offsite backup, or theft of local backup drive

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- “I’ve never had a hard drive crash. I don’t need a backup.”

Common Customer Complaints

- Potential for theft of offsite backup, or theft of local backup drive
- “I’ve never had a hard drive crash. I don’t need a backup.”
- “Macs are better than PCs, so we don’t need a backup.”

Making the case for backups

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- Avoid the customer stone walling the conversation

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- Many inexpensive or free software solutions

Making the case for backups

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- Many inexpensive or free software solutions
- Create a “hold harmless” agreement for your clients that don’t do backups

What you need to know about backup & restores

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- It's not about a backup...

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It's about the restore.

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- Prove it

What you need to know about backup & restores

- It's not about a backup...
It's about the restore.
- Prove it
- Test test test

Developing a backup strategy

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- Interview the customer

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- Full bootable backups vs. incremental or data backup

Developing a backup strategy

- Interview the customer
- Full bootable backups vs. incremental or data backup
- How much space for Time Machine: 1.5-2x the volume being backed up

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- Do you back up everything?

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- Plan for hourly, daily, and weekly backups

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- Plan for offsite rotation if backups are done locally

Developing a backup strategy

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- Plan a backup schedule

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- Plan a backup schedule
- Document it

Developing a backup strategy

- Plan a backup schedule
- Document it
- Submit a proposal to the customer

Some Onsite Options

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- Time Machine

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- Time Machine
- Carbon Copy Cloner or SuperDuper

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- Carbon Copy Cloner or SuperDuper
- CrashPlan

Some Offsite Options

Some Offsite Options

To The Cloud!

Some Offsite Options

Some Offsite Options

- Crashplan: More flexible and powerful than ...

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 - Mozy, Carbonite, BackBlaze, etc.

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- DollyDrive
- Roll Your Own

Some Obscure Options

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- Retrospect

Some Obscure Options

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- rsync, cp, ditto and custom rolled scripts

Developing a strategy for restores

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- Teach the client how to restore

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- Do it for them

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- Keep reports of successes

Developing a strategy for restores

- Teach the client how to restore
- Do it for them
- Show them the results
- Keep reports of successes
- Immediately deal with failures,
don't run and hide

Where you can learn more?

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Where you can learn more?

- Mac In The Shell: MacTech Magazine

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- Mac In The Shell: MacTech Magazine
- Lynda.com, Training Centers

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- Take Control Ebooks
- Retrospect User Guide

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Q & A

Link List

- *Take Control Ebooks:*
takecontrolbooks.com
- *Retrospect User Guide:*
www.roxio.com/enu/support/retrospect/default-mac.html
- *Carbon Copy Cloner:*
bombich.com
- *Alsoft Diskwarrior*
diskwarrior.com

Scripting

- Example script for utility: Explained line by line.

```
#!/bin/bash
```

```
#cp-backup.sh
```

```
#Created by Sean Colins on 1-25-2011.
```

```
#Copyright 2010 CoreQuick LLC.All rights reserved.
```

```
# Here we are copying the documents folder to the backup volume.
```

```
cp -Rp "/Users/sean/Documents" "/Volumes/backup/Users/sean/Documents/"
```

Good Uses of Automator and

- What is the difference?
- Hot Folders
- Workflow examples