

Backing Up Your Mac

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July 2009
MacMania9

ScreenCasts**Online**

Welcome & Introduction

Don McAllister

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Host/Producer of **ScreenCastsONLINE**

<http://www.screencastsonline.com>

Mac Industry Pundit & Commentator

MacBreak Weekly - Guest Panelist

Mac Voices Podcast - UK & European View

Mac Roundtable Podcast - Geek Tech Podcast

The Mac Jury - Panel Discussions

Magazine Contributor

MacFormat Magazine - London, UK

iCreate Magazine - London, UK

iProng Magazine - L.A, US

International Speaker on Podcasting

Podcast and New Media Expo - L.A. 2007

Macworld - San Francisco 2008 & 2009

New Media Expo - Las Vegas - 2008

Podcamp Barcelona - 2008

Session Content

- ✦ So why backup?
- ✦ Choosing a backup strategy
 - ✦ Full machine or file level backups or both?
- ✦ Backup applications
- ✦ Offsite and “cloud” based backups
- ✦ What everyone forgets!

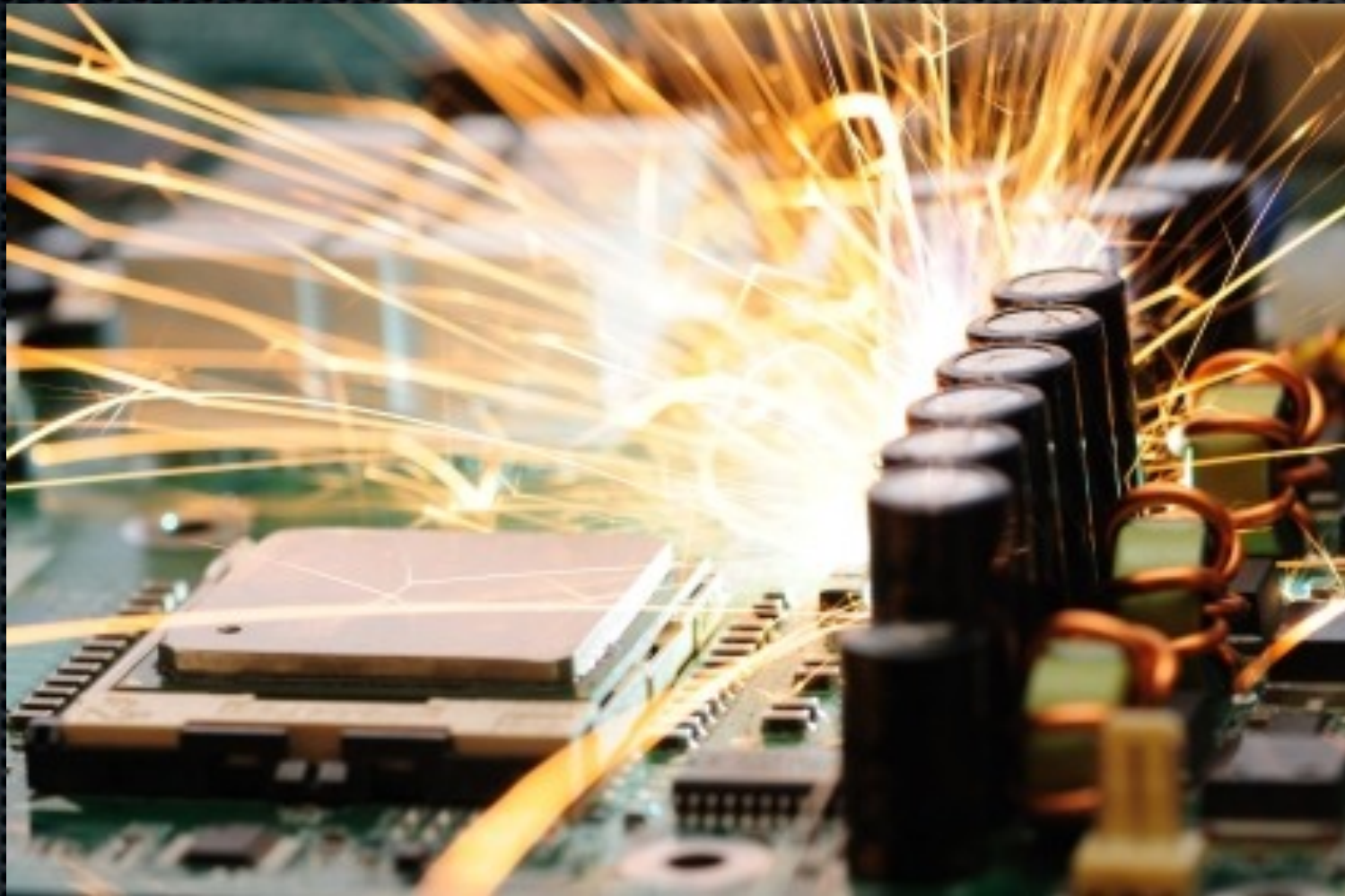
So Why Backup?

In the event of data loss or system crash.....

- ✦ Get you up and running with the minimum of downtime
- ✦ Recover information
- ✦ Minimise impact
- ✦ Peace of mind

Recovery!

So What Can Go Wrong?



Total System Failure

Hard Disk Failure

Theft

Fire or Flooding

Depressed yet?

Recover What?

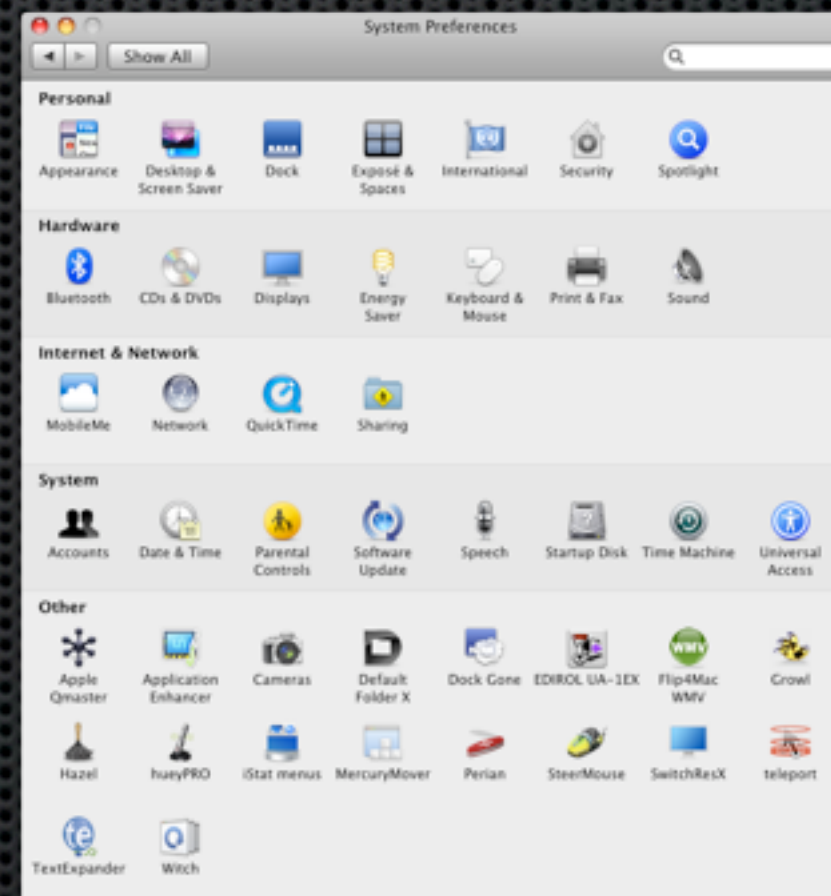
System Configuration

Business Data

Personal Data

Irreplaceable Photos

Media Files



Risk Assessment

- ✦ How critical is downtime to you or your business?
- ✦ How valuable the information is to you?
 - ✦ May well vary depending on information type
 - ✦ Can you afford professional recovery?
- ✦ Do you need versioning?

Backup Considerations

Full Machine Backup

File Level Backup

Offsite Backups

Onsite Backups

Media Types

Physical Backups

Restore Speed

Backup Speed

Restoration

Time Machine

The Holy Grail of Backup Solutions?

- ✦ Included as part of OS X Leopard - 10.5
- ✦ Supported by Time Capsule or External Drives
- ✦ Allows for file level or system level backup and restore
- ✦ Allows for versioning & searching across backups
- ✦ Self maintaining and works in the background



Time Machine

The Holy Grail of Backup Solutions?

Yes, but....

- Can be slow in operation & restore especially across the network
- Not very flexible and has limited configuration options as standard



Time Machine

The Holy Grail of Backup Solutions?

However....

The easiest and safest route to backups
for most general users.

A brilliant safety net for advanced users
when used in conjunction with
supplementary backup strategies.



Time Machine

The Holy Grail of Backup Solutions?

Demo

plus Time Machine editor



Time Machine

The Holy Grail of Backup Solutions?

Demo

plus Time Machine editor

<http://timesoftware.free.fr/timemachineeditor/>



Full Machine Backup

Backing up full systems

Full Machine Backup

**How quickly and easily
do you want to restore?**

Full Machine Backup

Full System Backup enabling “baremetal” restore

How fast would you like your restore?

Non Bootable - Slow

Boot & Install OS X from install disk

Run Software Update to download all patches

Use Migration Assistant to restore from Time Machine

Prepare for a long wait if using Time Capsule over Network

Full Machine Backup

Full System Backup enabling “baremetal” restore

How fast would you like your restore?

Bootable - Super Fast

Connect FireWire (or USB on Intel) Drive

Restore entire System Drive and Users via FireWire

Reboot!

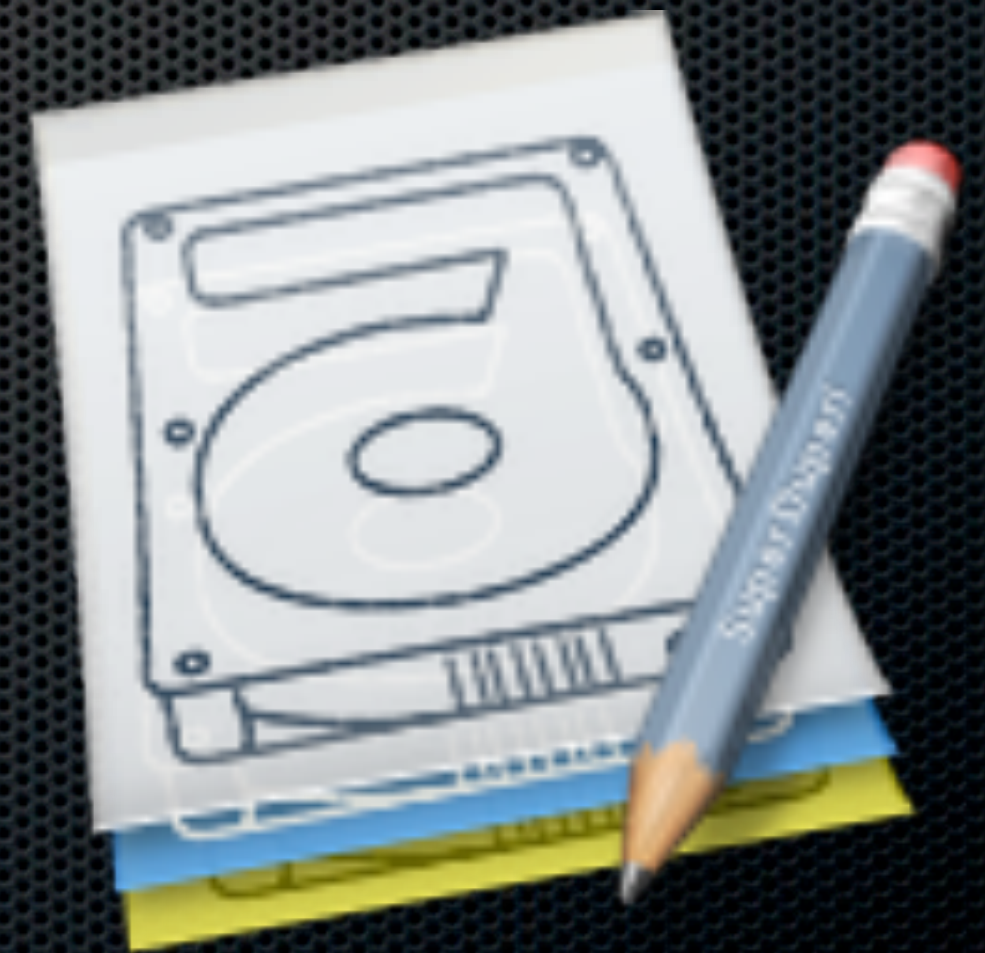
Achieved using SuperDuper

SuperDuper

Shirt-Pockets.com

Demo

- ✦ Free version allows you to Clone drive
- ✦ Allows for booting from backup drive and full bootable system restore
- ✦ Paid for version allows “Smart Backups” and scheduling - \$27.95
- ✦ Access files on backup easily - but no versioning
- ✦ Use in conjunction with Time Machine

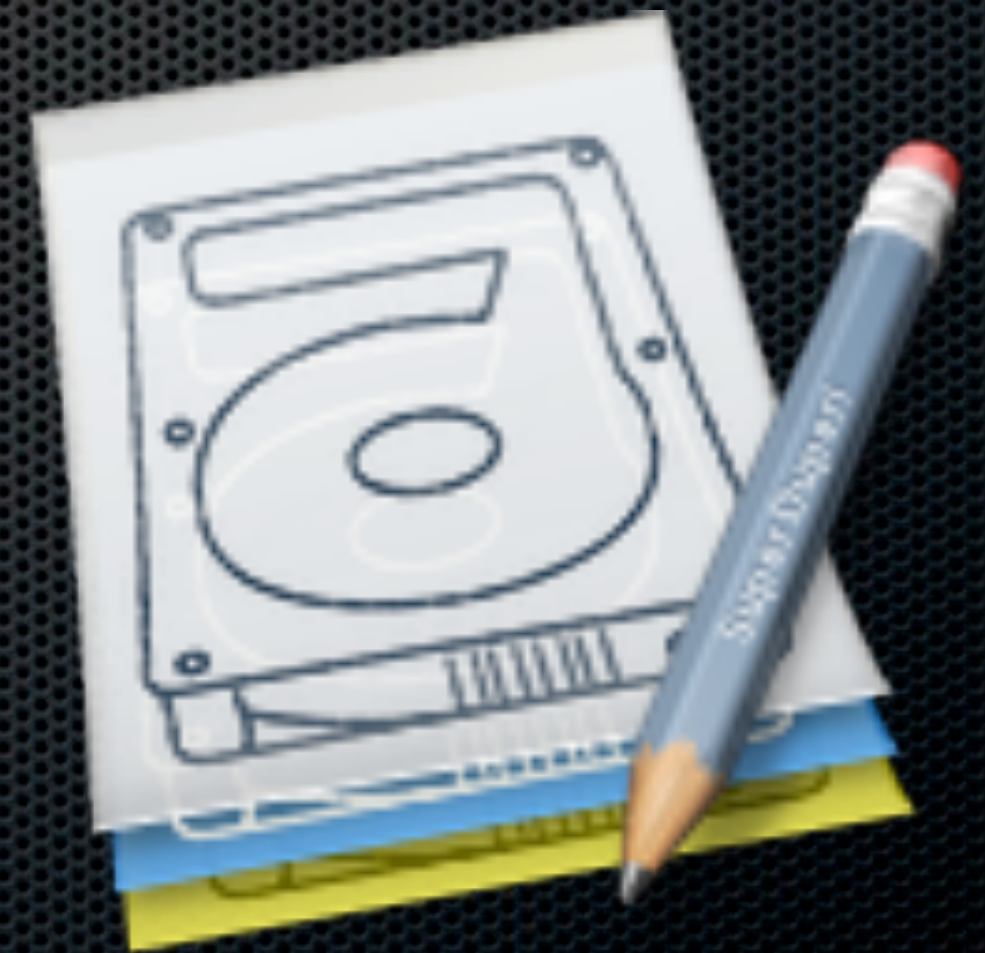


SuperDuper

Shirt-Pockets.com

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SuperDuper

Shirt-Pockets.com



SuperDuper!

Copy to

using

1. Prepare to Copy Files ✓

- ✓ Prepared Macintosh HD
- ✓ Prepared MBP_Superduper
- ✓ Preserved Spotlight state on MBP_Superduper

2. Copy Files

→ Copying files from Macintosh HD to MBP_Superduper using Smart Update
436 of 994,883 files evaluated, 164 files copied. Effective copy speed 38.87 MB/s.
4.33 GB evaluated, 201.70 MB already up to date, 70.36 MB copied.

3. After Successful Copy

- Make MBP_Superduper bootable
- Restore Spotlight state on MBP_Superduper

Registered to: Don McAllister Elapsed time: 00:07

External Drives - Tips

What to look for in an External Drive

- ✦ FireWire over USB - Faster
 - ✦ Apologies to recent MacBook owners
- ✦ Sizing?
 - ✦ SuperDuper - As big as the System Disk?
 - ✦ Exclude folders - downloads, scratch
 - ✦ TimeMachine or TimeCapsule
 - ✦ How far do you want to go back or how many Macs?

External Drives - Tips

What to look for in an External Drive

- ✦ Portability
 - ✦ Size for both - Dual partitions?
- ✦ Might be worth considering off-site requirements
 - ✦ Open enclosures for cycling
 - ✦ NewerTech Voyage Quad - USB, FW and eSata



File Level Backup

Backing up individual folders or files

File Level Backup

Backing up individual folders or files

Media Considerations

- ✦ “Cloud” Based Services - “Infinite storage”
 - ✦ RAID Enclosures - e.g. $5 \times 1.5\text{TB} = 7.5\text{TB} \times 4 = 30\text{TB}$
 - ✦ Drobo - Redundant Drives - Up to 16TB
 - ✦ USB or FireWire Hard Drives - 1.5TB and above....
 - ✦ DVDs - 4.7GB
 - ✦ CDs - 660MB
- TIP - How to efficiently save to CD or DVD

Create Images using Disk Utility

- ✦ Create CD or DVD sized disk images
- ✦ Save your backups to them
- ✦ Burn the image to Media when full

DEMO

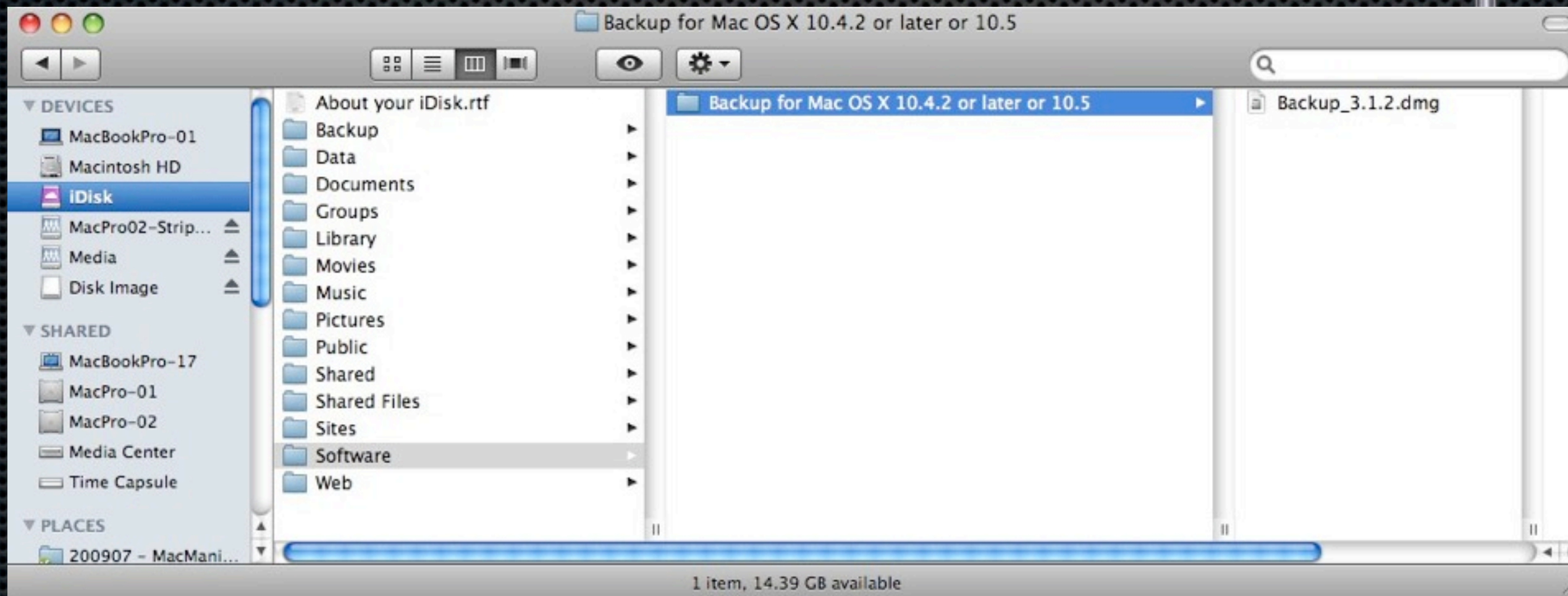


Applications for File Level Backup

Backing up individual folders or files

Backup 3 (MobileMe Users)

- ✦ Included as part of MobileMe
- ✦ Uses backup “Plans” for common data



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- ✦ Multiple backup targets:
 - ✦ **iDisk**, CD and DVD discs, FireWire disk, your own hard drive, a network server, or other mounted volumes.
 - ✦ Supports Scheduling

DEMO



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DEMO



ChronoSync

File or Folder Replication

- Scheduled backups to External Device
- Synchronise data between Macs
 - ChronoAgent
- Synchronise deletions and archive replaced files
- Econ Technologies - \$40 and \$10



Free Backup Applications

System Restore

- ✦ Carbon Copy Cloner

File Level Restore

- ✦ Time Machine
- ✦ BackUp 3 (Mobile Me users)
- ✦ rSync
- ✦ PSyncX

Offsite Backups

Keeping secure backups offsite

Offsite Backups

Keeping secure backups offsite

- ✦ Don't store all your physical backup media on site!
- ✦ Copy CDs or DVDs and store in deposit box, neighbours house, at work...**anywhere except next to your Mac!**
- ✦ What about Hard Drives?
 - ✦ Create a RAID 1 pair - mirrored drives
 - ✦ Split the mirror
 - ✦ Ship one offsite and bring in a new drive



File Level Backup in the “Cloud”

Backing up individual folders or files on the Net

Two Types of Cloud Backup

Pure Backup
Stored on the Internet

Backup & Sync/Share
Locally Cached &
Stored on the Internet

Mozy

BackBlaze

JungleDisk - Amazon S3

iDisk

DropBox

SugarSync

Many more available

Two Types of Cloud Backup

Pure Backup
Stored on the Internet

Mozy

BackBlaze

JungleDisk - Amazon S3

- ✦ Backs up selected folders to a datacenter
- ✦ Runs as background task
- ✦ Setup and forget
- ✦ Need to be careful what you select to backup
- ✦ No sync with other Macs
- ✦ Relatively low cost

Datacenter Synchronisation

Mozy

2GB Free

\$4.95 per month
unlimited

Multiple Restore
Options

BackBlaze

\$5 per month
unlimited

Multiple Restore
Options

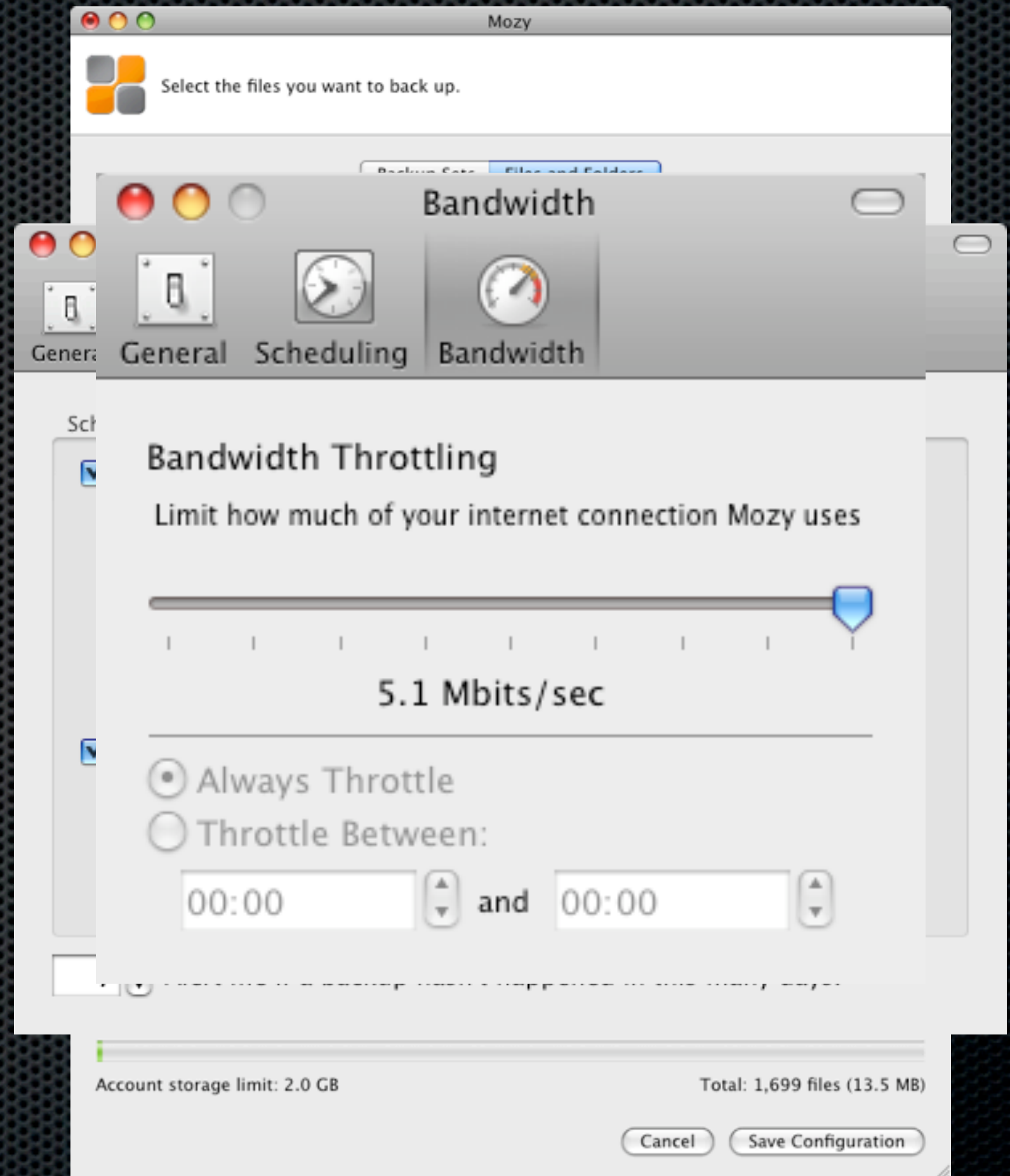
JungleDisk - Amazon S3

\$2 per month
plus Amazon Charges
\$0.15GB storage

Network Drive

Use ChronoSync

Mozy Home Free



Two Types of Cloud Backup

Pure Backup
Stored on the Internet

Backup & Sync/Share
Locally Cached &
Stored on the Internet

Mozy

BackBlaze

JungleDisk - Amazon S3

iDisk

DropBox

SugarSync

Many more available

Local and Remote Sync

iDisk

20GB Storage

Home Directory Sync

Web Interface

Sharing large files

Performance?

DropBox

2GB Free 50GB - \$99 per Year

DropBox Folder Sync

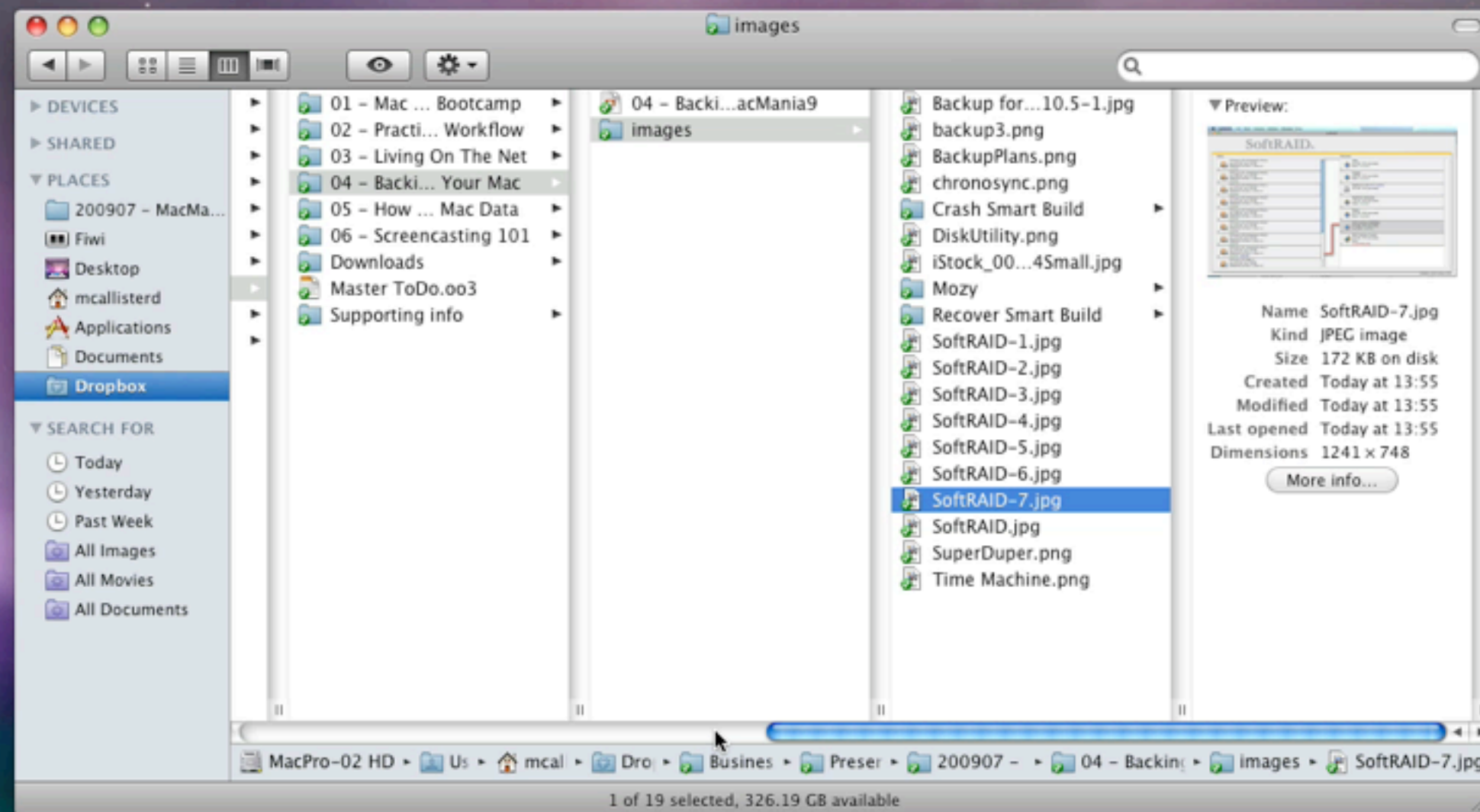
Web Interface & Versioning

Folder & File Sharing

Public links

Impressive Performance

DropBox



What Everyone Forgets....

Don't fall into the trap!

Validate your backups

- Check the validity of your backups regularly
- Make sure you can read and open files
- Test your restore mechanisms
- Don't wait until you really need them!

Any Questions?

Contact Details

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Next Session

How To Manage Your Mac Data - **Thursday** 8:30am

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