Verify Your Backups!

by Mike Sullivan | Cove Apple Club | Updated January, 2020

"The best time to practice emergency procedures is during *non-emergency conditions*."

Those words, said to me by my first flight instructor, hold very true in the world of computer data backup and recovery.

It just makes sense to practice emergency data-recovery procedures for your Mac **before** you need to use them. Then, when the worst happens, or you just accidentally delete an entire folder of important documents one day, you'll know what to do to recover your valuable data.

This guide starts from the assumption that you already have a proper "3-2-1" backup regime in place and working. A "3-2-1" backup regime means that you have:

• THREE copies of all your data: the original copy on your Mac, plus two backups...

• ...on at least TWO different types of media (internal hard drive, external hard drive, cloud backup)

• ...and that ONE of them be off-site from your Mac, i.e., on a cloud backup system or on an external disk drive that you keep securely stored far away from your primary location.

In addition, a proper backup regime must be:

- *AUTOMATIC*, because even the most obsessive backer-uppers *forget;*
- REDUNDANT, because having only one backup copy is not much better than no backup at all;
- OFF-SITE, since catastrophes are more common than you think;

• and VERIFIED, since your plan is worthless unless it actually works!

Preparing to Verify Your Backups: Do This a Few Days Before Your Test

- 1. In Finder on your Mac, click on the Go menu and choose Documents
- 2. With the Documents window open in the Finder, click on the File menu, then choose "New Folder"
- 3. In the new folder item label, type "Test Recovery Data" and press Enter to name the new folder

4. *While holding down the Option key*, drag a few items from your Documents folder into the new Test Recovery Data folder: a few **SMALL**, *non-confidential* PDFs, photos, a music file or two — 10 files total is a good number. Holding down the Option key while you drag the items creates *copies* of the files into the test folder. That way, none of your *original* files are at risk during the test. Ideally, you want about 10Mb of data in the test folder, but just so you have a mix of items of various kinds and sizes, you're ready to move on.

5. Now forget about the test folder for a few days. While you use your machine normally day-to-day, your established backup routines **should** run automatically without your attention, and your test folder should be backed up in all three backup locations:

- ✓ Time Machine will make a local backup a copy of the new test folder during its next hourly "snapshot."
- ✓ Carbon Copy Cloner will include the test folder in its next whole-disk bootable clone process during its next scheduled run.
- ✓ BackBlaze will make a backup a copy of the new test folder to your BackBlaze off-site backup within an hour or less.

6. Once you've given your established backup systems a day or two to do their work, delete the Test Recovery Data folder on your Mac by dragging it to Trash.

7. Finally, from the Finder menu, choose Empty Trash.

Use Time Machine to Recover Your Test Folder

1. To use Time Machine to recover folders or files, you first must navigate in the Finder to the window where your deleted file or folder *was*. For example, if you accidentally deleted a file from your Documents folder, open the Documents folder. To recover an email message, open your inbox in Mail. If you're missing an item from the desktop, you don't need to open a window.

2. In your Mac's menubar, click the Time Machine icon, then choose Enter Time Machine. A message may appear while your Mac connects to the backup disk.

3. Use the arrows and timeline to browse the snapshots and backups from the most recent to the oldest.

4. White tick marks represent snapshots stored on your internal drive (portable computers only). Pink tick marks represent backups stored on your backup disk. If a tick mark appears dimmed or grayed, there's no backup available or the backup disk is not connected.

5. For more information about an item, double-click it.

6. The windows in Time Machine behave just like Finder windows, so you can open folders, click items in the sidebar, and use the search field in the upper-right corner of the window.

7. When you find the item you want to restore, select it, then click Restore. You can restore individual items, multiple items, folders, or your entire hard disk.

8. The restored item is returned to its original location. For example, if the item was found in the Documents folder, it is returned to the Documents folder.

9. Verify that the restored folder contains all of your test items.

10. Finally, Trash the test folder again, and empty Trash to prepare for the next recovery test.

Boot Your Mac from the Carbon Copy Cloner Bootable Whole-Disk Clone

1. Make sure your bootable Carbon Copy Cloner external backup disk is connected to your Mac.

- 2. Shut down your Mac. From the Apple menu, choose Shut Down.
- 3. Press the power button on your Mac, and then immediately hold down the Option key on the keyboard.
- 4. Continue holding the Option key until you see the Startup Manager screen on your Mac.
- 5. Use the left and right arrow keys on your keyboard to select the external drive containing your CCC Bootable Clone.
- 6. Press the Return key on your keyboard to start up the computer from the volume you selected.

7. Your Mac should boot up from the external clone drive. Once it boots, your Mac should behave exactly like it always does, with all your Apps, files and folders exactly as they were the last time the CCC scheduled clone routine made its copy.

- 8. Verify that the Test Recovery Data folder is in the Documents folder.
- 9. From the Apple Menu, choose Shut down
- 10. Press the power button on your Mac and it will start up normally from the internal Macintosh HD.

Recover From Your Backblaze Off-Site Backup

- 1. In Safari, go to www.backblaze.com, then click "Sign In to Restore" at the top-right of the BackBlaze home page.
- 2. Enter your email address and your BackBlaze password, then click "Sign In."
- 3. Find your Mac listed in the Overview section, and click the big blue "Restore" button.
- 4. If you're backing up more than one Mac with a BackBlaze family plan, choose your Mac's backup from the list of backups.
- 5. BackBlaze loads your data and builds a file directory for you to choose files to restore.

6. In the Folders column, click on **Macintosh HD**, then click **Users**, then click on your Home folder account name, then scroll down if needed and click **Documents**, then scroll down to find your **Test Recovery Folder**.

- 7. Click the checkbox next to your Test Recovery Folder to select it to be restored.
- 8. Click "Continue with Restore"

9. Keep the BackBlaze window open in Safari while BackBlaze locates and prepares your restore file. You will receive an email message when your file is ready to be downloaded. For a small file like your Test Recovery Folder, it should only take a minute or two. While you're waiting, you can click on the Account link in BackBlaze and verify your subscription end date and billing info to make sure it is correct and up-to-date.

10. Click on My Restores

- 11. Find your restore file in the list of files to be downloaded
- 12. Click the Download button to download your restored file.
- 13. Click Sign Out to sign out of BackBlaze
- 14. From the Finder menu, choose Go, then click on Downloads
- 15. Find the downloaded .ZIP file with your BackBlaze restore and double-click it to un-Zip the compressed file.

16. Double-click the Macintosh HD folder created from the de-compressed restore file, then open each of the subsequent enclosing folders to find your Test Recovery Folder

17. Verify that your test files are inside the Test Recovery Folder

Make sure to keep a secure, replicated, encrypted, off-site, backed-up copy of your BackBlaze account info, including your subscription renewal date. Ideally, this will be kept in a Secure Note inside the 1Password app (www.1Password.com) on your Mac, iPhone or iPad.

For more information:

Apple Time Machine:

http://support.apple.com/kb/HT1427

Verifying Time Machine backups in macOS: While holding down the Option key, then click the Time Machine icon in the Mac menubar, then choose "Verify Backups." Time Machine will verify the disk and display a notification with the results.

Carbon Copy Cloner:

http://www.bombich.com

BackBlaze Unlimited Secure Online Backup - use this link for a free month to try the service, no credit card needed :

https://secure.backblaze.com/r/00j72i

A good general guide to backup practices and tools (2014):

http://www.anandtech.com/show/8030/backup-guide

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