

Using Carbon Copy Cloner To Do Backups

SBAMUG Meeting February 23, 2022

Kent McDonald

Introduction

- Carbon Copy Cloner has been a favorite utility for creating bootable backups of the entire internal drive of a Mac, which must be restored when it fails.
- Evil hackers have found ways to deliver software that enables them to remotely insert code in the operating system of targeted Macs, that can disable the computer or reveal private files.
- Apple's countermeasure to hacking is the decision to cryptographically seal the System Volume, starting with the macOS Big Sur operating system.
- Unfortunately, the sealed System Volume cannot be routinely copied, so the concept of a bootable backup is unworkable in Macs using macOS Big Sur and macOS Monterey. Only the Data Volume is captured now by Carbon Copy Cloner version 6.

How to Restore a Startup Volume Now

- Carbon Copy Cloner can only provide the Data Volume, so the System Volume must be obtained separately and merged with the Data Volume.
- Starting with a freshly erased APFS Startup volume, download-and-install mac OS from the App store on it.
- Using Migration Assistant, migrate the contents of your standard (Data-only) Carbon Copy Cloner backup onto your Startup volume, which is bootable.
- If you are still using mac OS Catalina and Carbon Copy Cloner version 5, you still create bootable backups and need not use the steps described above. However, once you upgrade to CCC version 6, you must invoke the Legacy Backup Creator option to create a Bootable Backup of the Startup Volume.

Carbon Copy Cloner Version 6 Features

- Backup Updates are up to 20X faster due to help from FS Events Service
- User Interface window shows more information, progress during a task and time remaining to completion of task
- Snapshot Navigator enables viewing of older versions of files, behaving much like Time Machine
- Backup Audit shows what was copied and why
- Task Preview shows a Dry Run of what will happen, before you do a backup
- Proactively looks for and deters “bit rot” on both source and destination drives