

Formatting, OS Installation, and Migration Guide

OWC Aura Pro X2 SSD



Important Notes

- This process requires a working internet connection on the host computer.
- This guide assumes that the [SSD installation process](#) was already followed and completed.
 - **IMPORTANT: macOS 10.13 High Sierra (or later OS) must be installed on the host computer BEFORE installing this SSD for the first time.** These OS versions include an EFI firmware update for your Mac. Without the update, the computer will not recognize the SSD. This process is separate from and should precede the other processes described here. Note that when installing the OS onto the drive itself (later in this document), macOS 10.13 or later is also required.
- If the SSD is installed on a laptop, make sure the power adapter is connected before you begin the steps below.

Start with Internet Recovery

This guide provides the information required to format your OWC SSD, as well as options for installing the Mac operating system and migrating your data. The process starts by booting into Internet Recovery, using one of the keyboard shortcuts listed below. Because the shortcut used and the specific Mac determine the OS used by Recovery it is worthwhile to determine the latest compatible OS for your Mac before choosing a method. We have included Apple's official compatibility lists for the last several OS versions (see below).

- [macOS 10.15 Catalina-compatible](#)
- [macOS 10.14 Mojave-compatible](#)
- [macOS 10.13 High Sierra-compatible](#)

Recovery Option 1: Cmd-Opt-R (Recommended)

Power on the Mac then immediately press and hold Cmd-Opt-R until you see a screen similar to the one at right (in some cases it may be grey). If you see a Wi-Fi menu, choose your preferred network to continue; you may need to provide network credentials.

This Recovery option ensures that later in the process, if you use the 'Reinstall macOS' function (i.e. a clean OS install) the latest compatible version will be used.



Recovery Option 2: Cmd-R

Power on the Mac then immediately press and hold Cmd-R until you see a screen similar to the one shown above (in some cases it may be grey). If you see a Wi-Fi menu, choose your preferred network to continue; you may need to provide network credentials.

This option ensures that if you use the 'Reinstall macOS' function (i.e. a clean install) later, the most recently installed OS version will be used.

Exception: If you recently had your Mac logic board replaced during a repair, Recovery might instead offer the latest compatible OS.

Additional Notes:

- If you want to verify the OS version that you booted into before you go further, you can use the Terminal. From the main menu at the top of the Recovery screen, choose Utilities > Terminal, then type the command `sw_vers` and press Return. The OS version that you have booted into will be displayed. If it's the version you expected based on the information provided earlier, you can continue.
- If not, you can try again by choosing Apple Menu > Restart, waiting till the screen turns black and then pressing and holding a different Recovery shortcut, to see if you get the result you want. If you do not it is possible the version of the OS you are looking for is no longer available for your specific Mac.

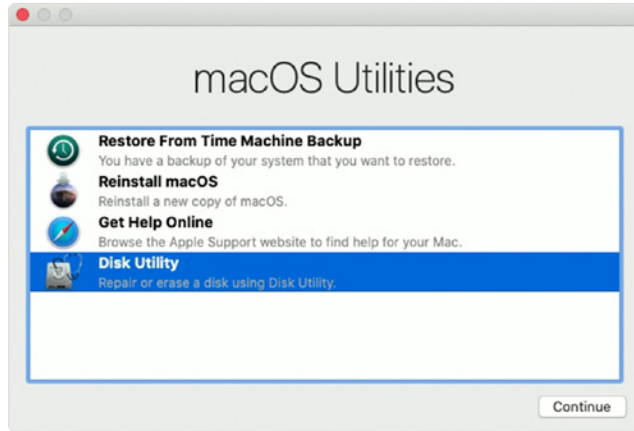
Formatting the SSD

Once you have booted into Recovery, use the built-in Disk Utility to format the SSD. **Please note:** the drive labels or information shown in one or more sections of this document may differ from what you see, but the overall processes won't change.

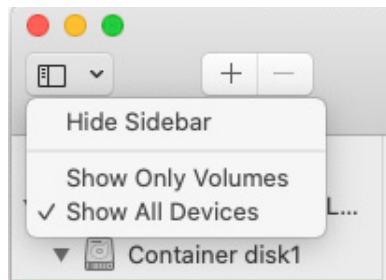
- If you need to start from the beginning, please continue with the Disk Utility process below.
- If you have already formatted the drive and are ready to review OS and data migration options, skip to **page 5**.

Formatting Steps: 10.13-10.15

Step 1 – from the macOS Utilities window, select the Disk Utility option and click Continue.

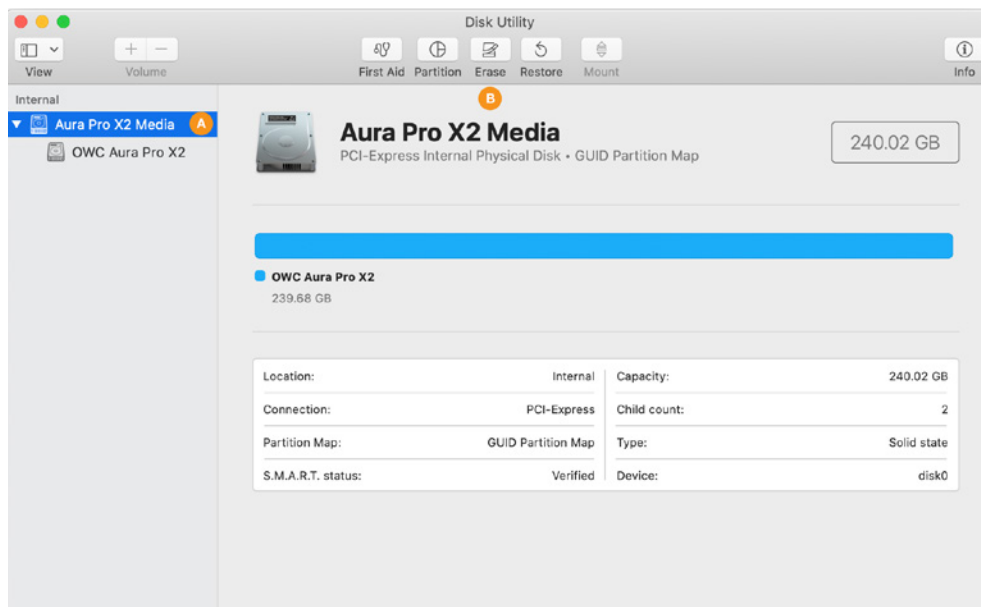


Step 2 – to ensure that all internal devices and volumes are shown from the start, open the View menu widget near the top-left corner of the Disk Utility window and choose 'Show All Devices'.

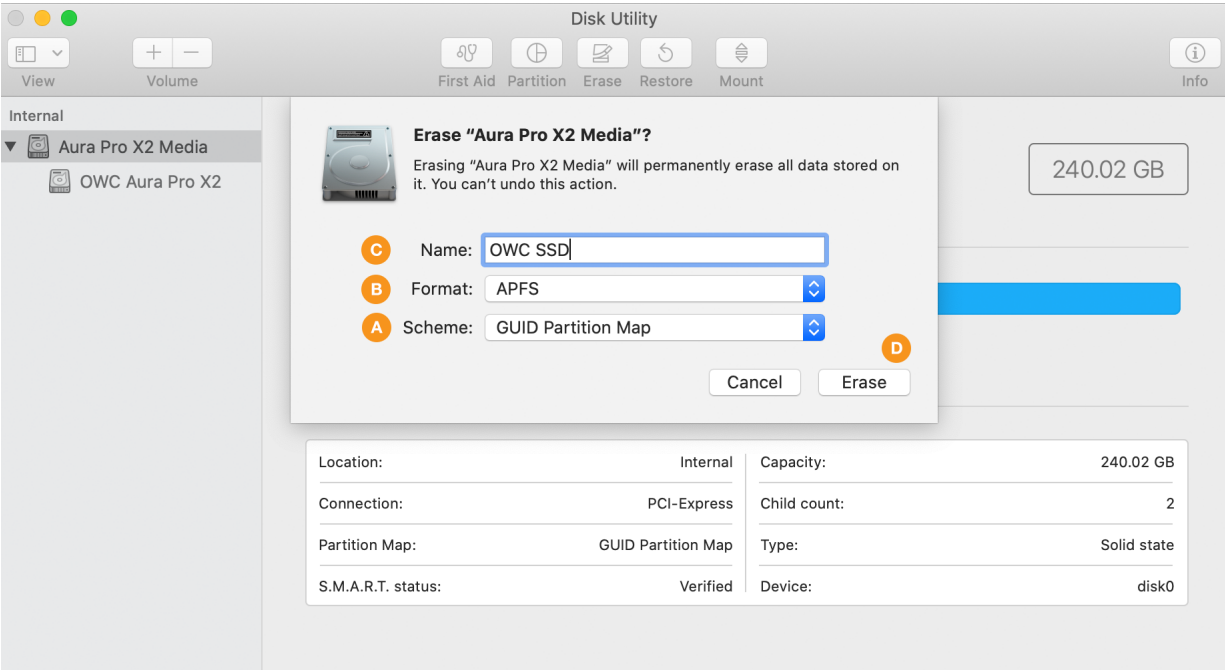


Step 3 – in the sidebar area at left, select the icon or label for the physical disk (item A below) Note: some SSDs may also include a factory-formatted volume, listed beneath the physical disk item; this factory volume — or any others on the drive — will be permanently erased.

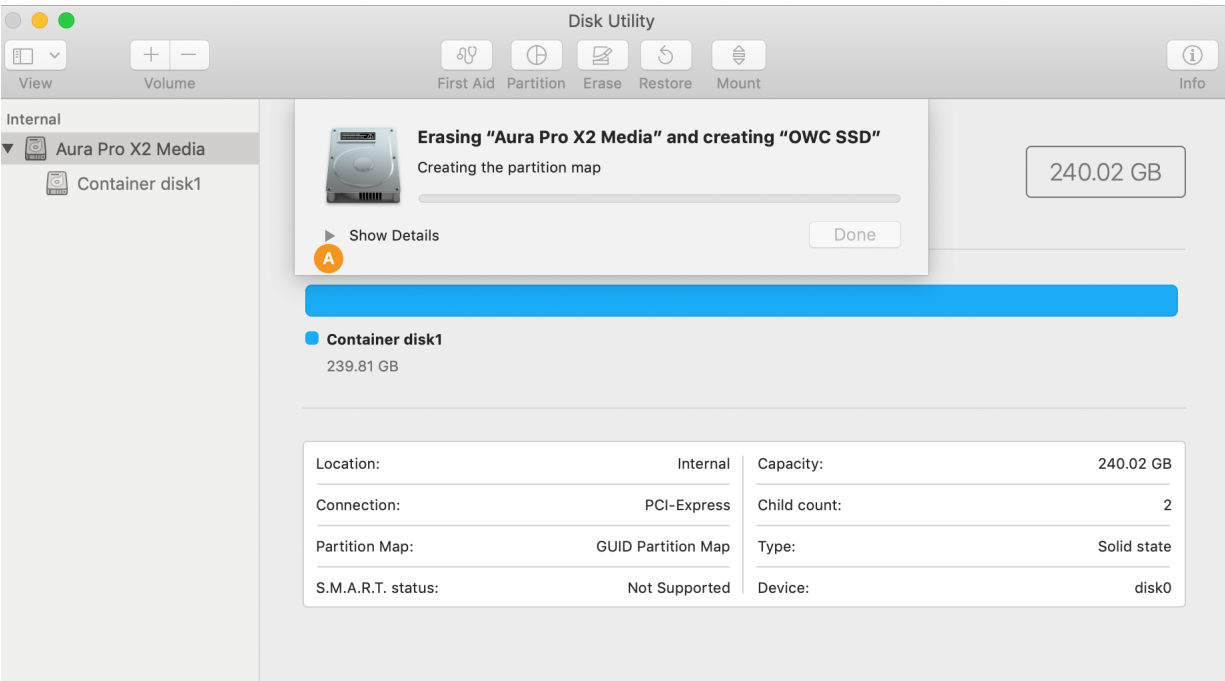
Step 4 – click the 'Erase' button (item B below) to continue.



- Step 5** – a sheet will open containing the settings needed to format the drive. From the ‘Scheme’ menu (item A below) set the value to ‘GUID Partition Map’ if it’s not already selected (required).
- Step 6** – from the ‘Format’ menu (item B below) choose ‘APFS’. This is the recommended format for Mac SSDs for 10.13 and later.
- Step 7** – type a name for your new system volume in the field supplied (item C). **Note:** the volume names shown in later sections will not match the one shown here because the examples are from different sources. However, whatever volume name you choose at this step, will be applicable when choosing a destination for your system and/or data files during the migration process, as well.
- Step 8** – click the ‘Erase’ button (item D) to format the drive. In many cases it will only take a few seconds.

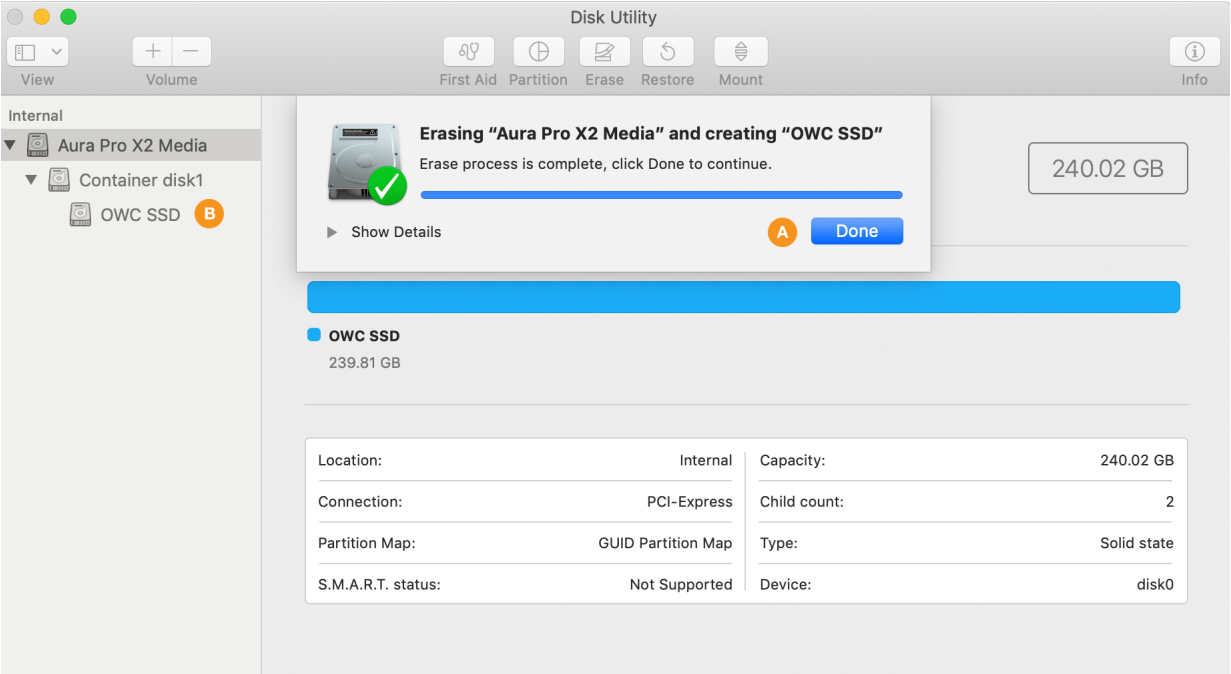


During the format process, by default the screen will look similar to what you see below. Note that it is possible to see the details of the formatting process by clicking the ‘Show Details’ widget (item A), but it is not necessary to complete the process.



Step 9 – once the process is complete, click the ‘Done’ button (item A below). You should now see the newly created volume under the physical disk you selected in Step 3 (here it’s called ‘OWC SSD’, item B below).

When finished you can choose Disk Utility > Quit from the main menu. This will take you back to the main Recovery screen.



OS Install Methods & Data Migration

Once you have created a new volume on your SSD, there are three methods we typically recommend for setting up a new system drive with your data on it. Which one you choose will depend on your situation and on your preferred backup method. The options are:

1. Recovery: 'Reinstall macOS' (i.e. a clean install) + Migration Assistant (move data after OS install)
2. Recovery: (Full) 'Restore from Time Machine Backup' (i.e. transfers macOS and data at same time)
3. Transfer macOS and data from Carbon Copy Cloner backup (both as part of the same process)

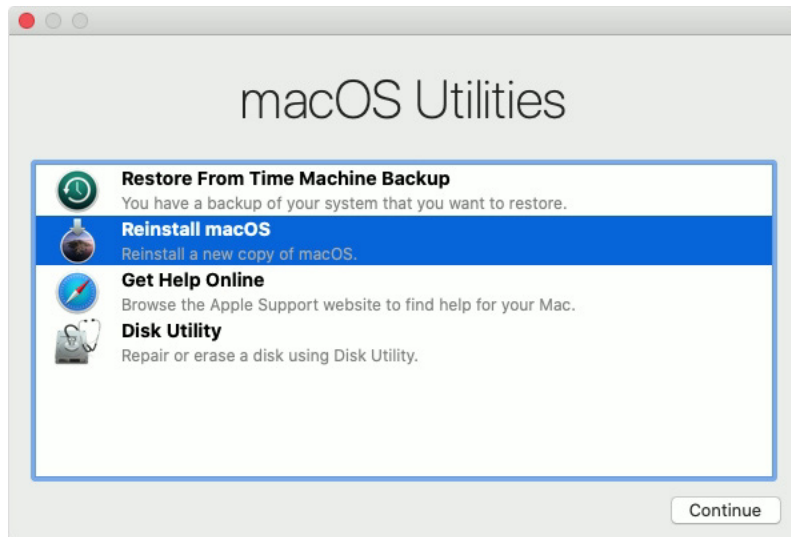
Notes

- If your latest backup does not include system 10.13 or later, *a clean macOS install is required as a first step for this drive.*
- If you do not need to set up a clean OS install, please skip ahead to Page 7 to migrate both your system and data using Restore from Time Machine, or to Page 9 if you're using Carbon Copy Cloner.

Option 1: Reinstall the OS + Migration Assistant

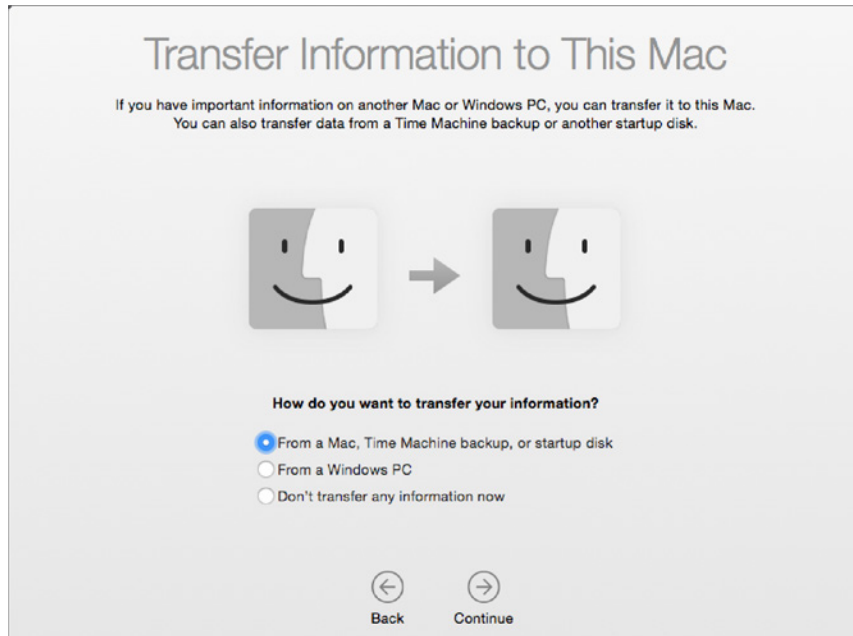
This option is most commonly required when your system backup uses a version of macOS that is earlier than the SSD's base requirement (e.g. an Aura Pro X2 customer whose last backup uses 10.12.6 or earlier). Some people also choose this route if they were having stability trouble with the macOS around the time it was last backed up, or just for peace of mind that the system will be installed fresh on their new drive. To create a clean install you can stay within Recovery mode and use the macOS Utilities following the steps below.

Step 1 – select the 'Reinstall macOS' option from the Utilities window.



Step 2 – once the macOS installer opens, follow the prompts as you normally would to install the system onto a new drive). Once the installation is complete the system will reboot to your new drive.

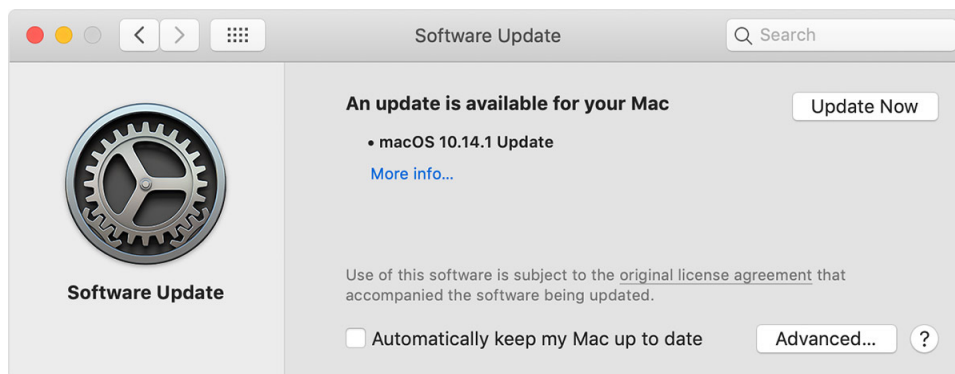
Step 3 – by default the Setup Assistant will open, walking you through a few screens to help get your new system setup. One of these is the Migration Assistant screen (below). While this is optional after a clean OS install, for this guide we assume that you have data to move to your new drive, either from a Time Machine or Carbon Copy Cloner backup. It is also possible to migrate data by connecting your original drive via external enclosure and then using the ‘From a Mac, Time Machine Backup, or startup disk’ option.



Step 4 – What you do next will depend on the type of backup you have. If you have a Time Machine drive, connect it to your Mac then select the ‘From a Mac, Time Machine Backup, or startup disk’ option (shown above), and click continue. Follow the remaining prompts to select your Time Machine backup volume and migrate your selected data. Note: to learn more about the Migration Assistant, please see [this page](#). When you’re finished migrating your data, follow any remaining prompts for the Setup Assistant to finish that process.

If you’re using Carbon Copy cloner, you can connect that disk to the host computer and select it by choosing the ‘From a Mac, Time Machine backup, or startup disk’ option and following the prompts. More information is available [here](#).

Step 5 (optional) – once the OS installation and data migration are complete, we strongly recommend you run [Software Update](#) to make sure your system resources and apps are fully up-to-date.



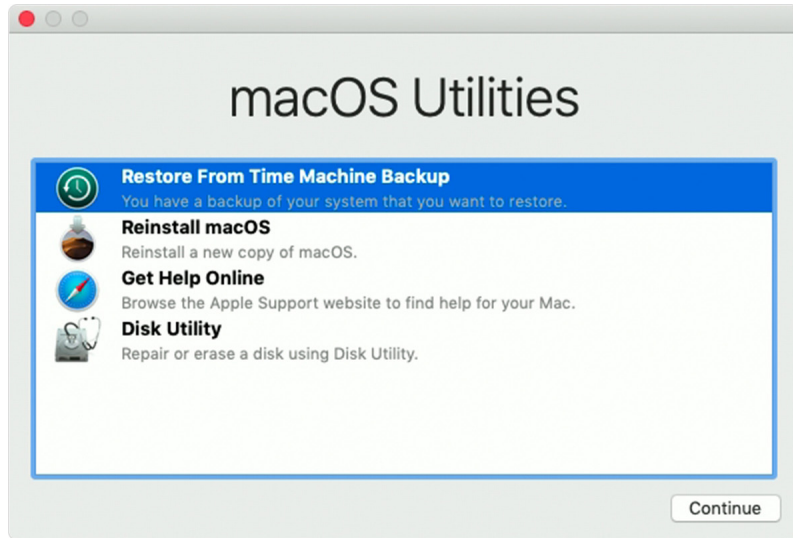
Option 2: (Full) Restore From Time Machine Backup

If you have a recent, working Time Machine backup of your system drive, the simplest method of migrating all system and user data is to use the 'Restore from Time Machine' option in the macOS Utilities window.

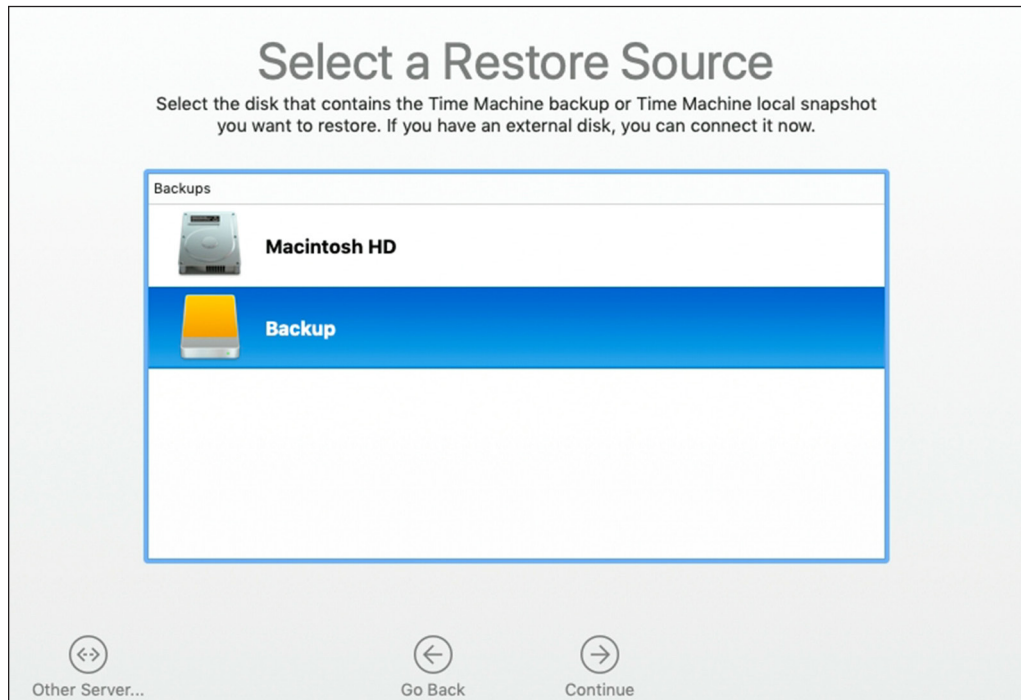
Notes:

- Make sure your Time Machine backup drive is connected and powered on before proceeding.
- The volume icons and names shown in the following steps are examples and differ from those shown earlier.

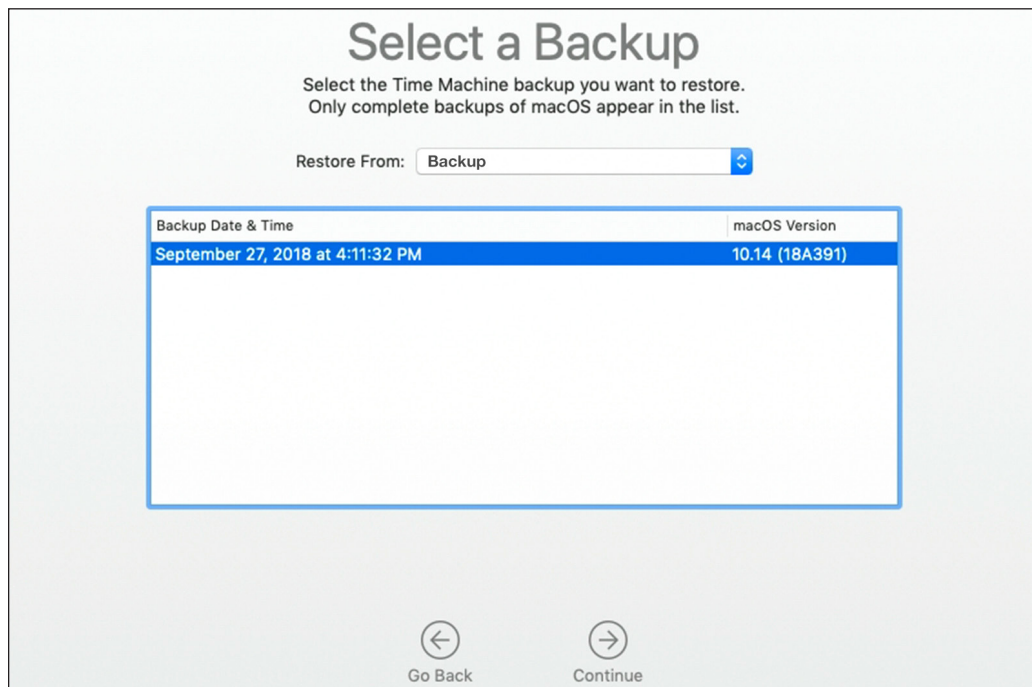
Step 1 – choose 'Restore From Time Machine Backup' from the macOS Utilities screen then click Continue.



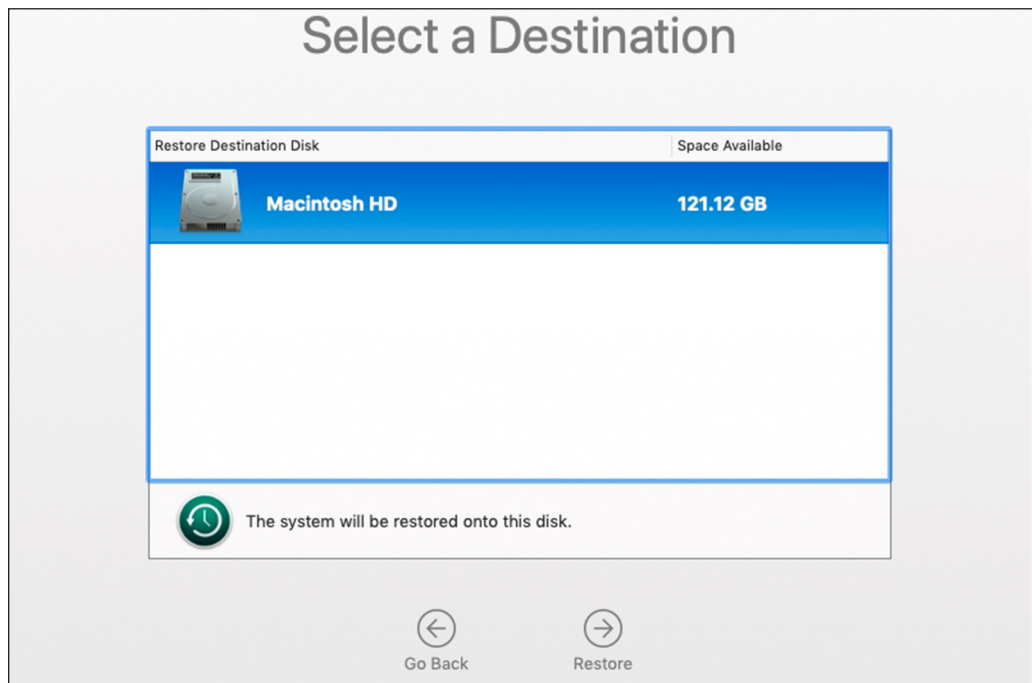
Step 2 – from the 'Select a Restore Source' window (below) select your Time Machine backup disk then click Continue.



Step 3 – If your Time Machine disk is encrypted, you will need to unlock it first by providing an administrator password. Otherwise the ‘Select a Backup’ window will appear. Choose the desired backup instance, then click Continue.



Step 4 – from the ‘Select a Destination’ window, choose the new volume you created earlier on the SSD, then click ‘Restore’. When the process is finished, restart to verify that the transfer of your data was successful.



Step 5 (optional) – before using your Mac, we strongly recommend you run [Software Update](#) to make sure your system resources and apps are fully up-to-date.

Option 3: Full Restore from Carbon Copy Cloner

If you recently cloned your system drive using [Carbon Copy Cloner \(CCC\)](#), you should be able to boot to your cloned system backup and then migrate data as shown below. These steps are recommended by the developer (Bombich).

Notes:

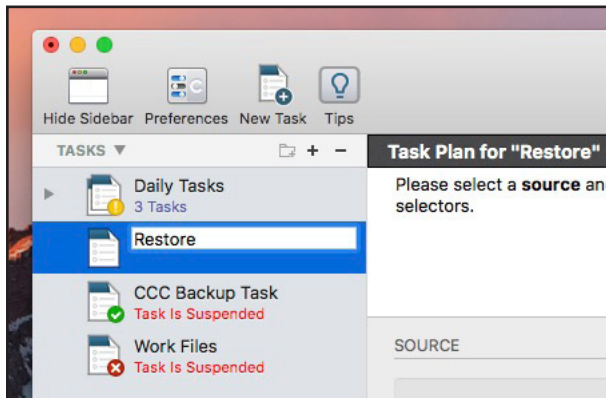
- Make sure your CCC backup drive is connected and powered on before proceeding.
- The volume icons and names shown in the following steps are examples and differ from those shown earlier.

Step 1 – from the Apple menu at the top of the screen, choose 'Restart'. Once the computer restarts and you hear the system chime, hold down the Option key until you see the Startup Manager screen and the available boot drives. Note: the example below shows a typical default boot drive name and icon. The icon for a new OWC SSD will be different than the example below, as well as the name, but the process described is the same.

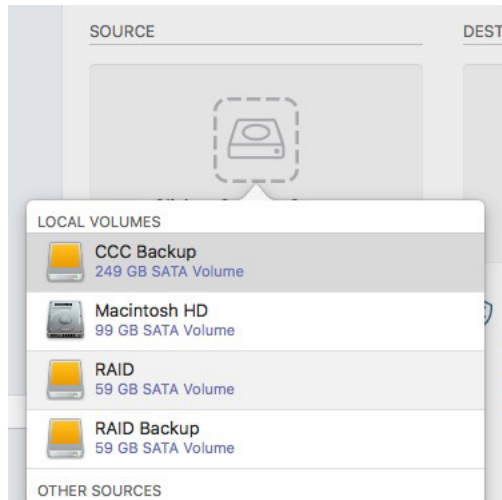


Step 2 – select your Carbon Copy Cloner backup volume from the list and click the arrow (similar to the one shown above) to continue the boot process.

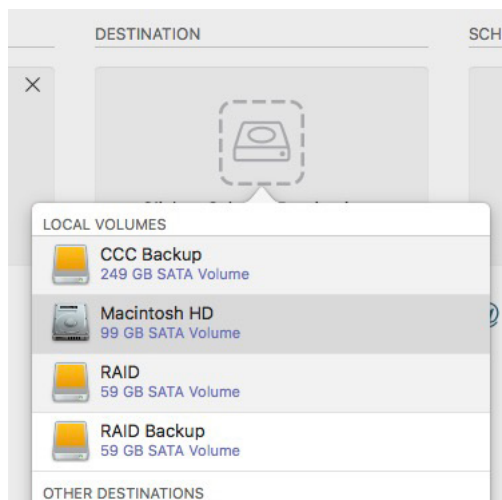
Step 3 – once the Desktop is available, launch the Carbon Copy Cloner application, then click the 'New Task' button in the toolbar (unhide the Sidebar if needed). Name the newly created task (e.g. 'Restore').



Step 4 – in the ‘Source’ area of the window, click on the drive icon and then select the desired backup from the menu.



Step 5 – in the ‘Destination’ area, click on the drive icon and then select the new volume you created in the Disk Utility.



Step 6 – click the ‘Clone’ button (highlighted in red below). The transfer can take a while depending on the amount of data and the connection type. After the process is complete, go to System Preferences, choose ‘Startup Disk’ and select your new startup volume, then restart the computer. Notes:

- You will need to provide administrator credentials to access and set the Startup volume.
- After restarting we strongly recommend you run [Software Update](#) to make sure your system is fully up-to-date.

