

Big Sur - What's New?

Part 1 of 2 parts

For Prescott Macintosh User Group

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In this presentation we'll cover the basic features of Big Sur that are new from the previous version, Catalina. This is a major release from Apple. It was released on November 12, 2020 to the general public as version 11.01. We'll talk briefly about the hardware and software requirements and what hardware system it can be installed on. Then we'll cover the salient points of the new features. In Part 2, we'll go into a little more detail about a few of the Apple products, such as Safari, Maps, Messages, and Photos.

Compatibility requirements

Which computers?

If your computer is not in this list, you cannot upgrade to Big Sur.



MacBook Air
2013 or later



MacBook Pro
2013 or later



MacBook
2015 or later



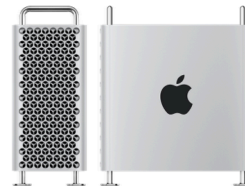
Mac Mini
2014 or later



iMac
2014 or later



iMac Pro
2017 and later



Mac Pro
2013 and later

Software and hardware:

OSX Yosemite 10.10 or higher

To find what version you have installed, click on the Apple logo in the upper left corner of the display and then click on "About this Mac". The version number is immediately below the name of the operating system in the window that opens up.

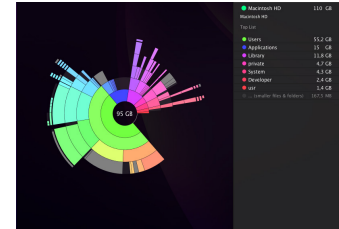
4GB

It will limp along with only 4GB. Many things might not work as fast as you would like. 8GB is my recommended minimum. If you are running any video intensive applications, then increasing to the maximum amount your machine can handle is best.



15-20 GB of free space

This is essential. If you need to free up space, move files to an external drive rather than deleting them.



Preferably an SSD

For the best possible performance of any computer, old or new, a solid state device is by far the best investment you can make. Swapping out a spinning hard drive with a solid state drive can be done quite easily - if you know what you're doing. You can even boot off an external SSD if you don't want to bother swapping out the drive, and that would be a little better than if and only if your USB port is 3.0. Attaching an SSD to a Thunderbolt port is best.



Preliminary tasks

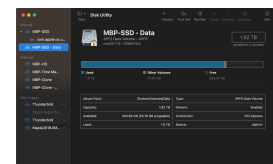
I'm going to go through the belt and suspenders process of preparing your computer for the Big Sur upgrade.

Check your hard drive

This is probably the most important step. If your internal drive is full of junk, it's best you clean it up before you do the upgrade.

Disk Utility

Run the repair option on the hard drive. You should do this for the entire drive, which means running the task in single user mode.



Onyx Maintenance

Running Onyx is the cheapest and best method for cleaning up any Mac. It isn't available yet for Big Sur, so be sure to get it and use it before you upgrade.



Onyx is available from Titanium Software. (titanium-software.fr)

CleanMyMac X

The cost is worth the peace of mind, and the current version will also work with Big Sur. Here are the items that are checked and cleaned automatically:

- System Junk
- Unused apps
- Extensions
- Browser Junk



Large and old files
Adware extensions
User caches & logs
Unused DMG installers
Broken downloads

Update your third party software.

No one has reported about any apps that run in Catalina fail in Big Sur. Still, it's a good idea to confirm that the third party apps you use will run in Big Sur, and update them now.

Remove any leftover 32-bit applications.

If you are currently running any version prior to Catalina, then you do need to be aware that 32-bit apps will not work in Big Sur. Make a list of what they are and remove them after you do the upgrade to Big Sur. Check out what you might have at [osxdaily.com](https://osxdaily.com/2018/03/06/find-32-bit-apps-mac/):

<https://osxdaily.com/2018/03/06/find-32-bit-apps-mac/>



Check the App Store for installed app updates.

This is probably not very essential since all Apple apps will be updated when you upgrade to Big Sur. But if you need to restore back to your current version, it would be nice to restore it back to the latest possible version of everything.



Update the Time Machine backup

And then put it aside. Use a different drive for the Big Sur Time Machine for now.

If you only have one external drive that you use for Time Machine Backup, it might be useful to get another one to use just for Big Sur after you do the upgrade so as to not mess with the current backup. This would make it easier to restore to the older version if you wanted to.



Clone the internal drive

The external drive (SSD preferred) that you use for the clone must be formatted as an APFS.

Carbon Copy Cloner is my choice for a clone app, but Super Duper works, too.

Make a clone of the current operating system and put that drive aside. So now you have two drives that you can restore from: the Time Machine drive and the clone.



About Big Sur, When To Do the Upgrade?

If we can trust what Carbon Copy Cloner (CCC) has to say, then wait for the third update after the initial release. But, if you have already done the upgrade, then you may have noticed a few advertised features aren't yet installed, and possibly a couple of minor annoyances. Welcome to the Early Adopter Club.

I have been using the Public Beta release for quite a while, and I am pleased with both the performance and the features. However, I can't honestly tell you anymore what's different without turning on my other computer that is still running Catalina and place the apps that I use side by side. Yeah, what a difference! Subtle, to be sure.

CCC also has a dire warning. If you expect to clone your system after doing the upgrade and have a bootable clone afterwards, forget it. There's a serious problem with Apple's APFS replication utility that prevents CCC from creating a bootable drive. CCC has every confidence that in time this will be corrected. Until then, you can still create a clone for use as a backup and the drive can be used with Migration Assistant to restore from - with the caveat that you will be restoring to a fresh install of the operating system if what you need to restore is the entire package.

Until Apple has corrected the problem with the APFS replication utility and CCC pushes an update, to make the Big Sur cloned drive bootable, just install Big Sur onto that drive.

So if you want to be proud that you're running the latest software, go ahead and do the upgrade - after you make a clone of the current operating system to restore from if you really want to go back. You might also want to use a separate Time Machine drive with Big Sur so that you can be sure that the old Time Machine drive will be compatible with Catalina should you revert back.

Given the precautions that one must take to feel safe about doing the upgrade, then maybe it would be better to wait until the Early Adopters are saying nothing but nice things.

And if you do decide to upgrade now, Apple has put up this website to guide you through the process:

<https://support.apple.com/en-us/HT201475>

(NOTE: The following is excerpted from [macrumors.com/roundup/macOS-big-sur](https://www.macrumors.com/roundup/macOS-big-sur) - shamelessly, without permission, and with some edits.)

macOS 11.0 Big Sur

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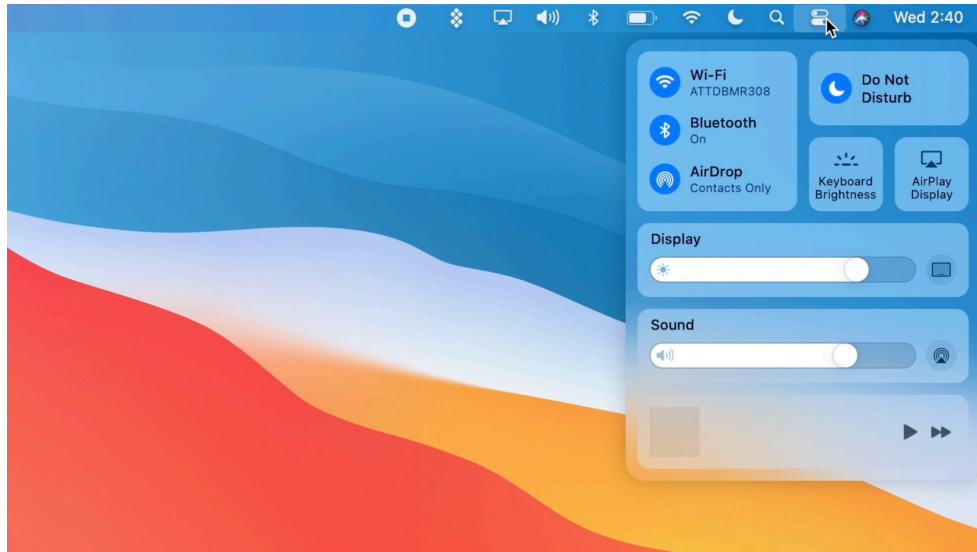
New Design

Apple introduced the **biggest design update** to macOS since the introduction of Mac OS X. macOS Big Sur has **overhauled everything** from the curvature of window corners to colors and dock icon designs. The revamped look was designed to feel both **fresh and familiar** at the same time.



Menu Bar and Control Center

At the top of the display, the menu bar is now translucent to blend better with the desktop, plus it can be hidden when not in use, much like the dock. Pull-down menus are easier to read with more spacing between lines.



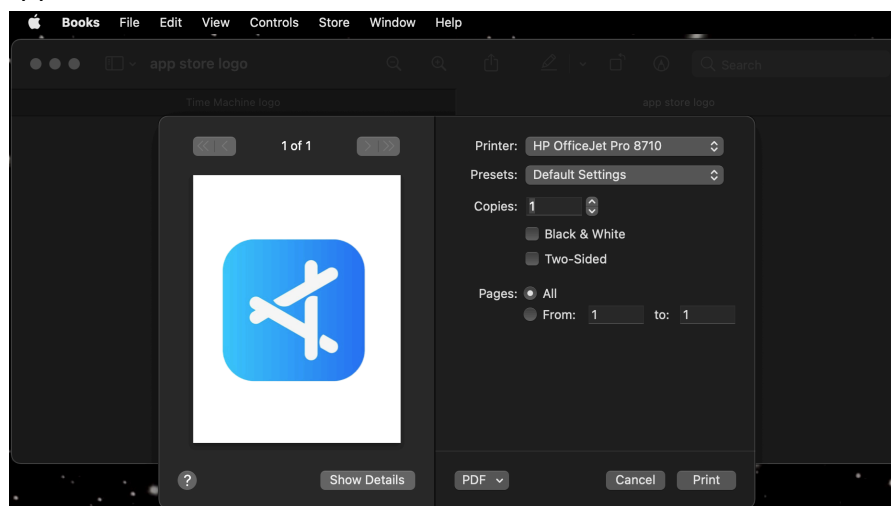
All of the menu bar icons and drop-downs have been redesigned, and notably, the battery icon once again provides details on how much battery life is remaining. Battery usage history is available in System Preferences as well, and macOS Big Sur includes the [Optimized Battery Charging feature](#) first added in macOS Catalina for prolonging battery life.

The menu bar is home to a new Control Center for the Mac, providing quick access controls to Wi-Fi, Bluetooth, volume, display brightness, keyboard brightness, now playing, and toggles like Dark Mode, True Tone, Night Shift, Do Not Disturb and AirPlay. The Control Center is customizable, so you can set it up to put the functions you use most often right at your fingertips.

Your favorite menu items can be dragged out and pinned to the top of the menu bar for quick access.

Sheets

Sheets are the small pop up windows that come up when you do things like print or save a document. These have been rethought in macOS Big Sur, with borders and bezels removed to make them less obtrusive. Sheets dim into the background automatically and scale into the center of the app.



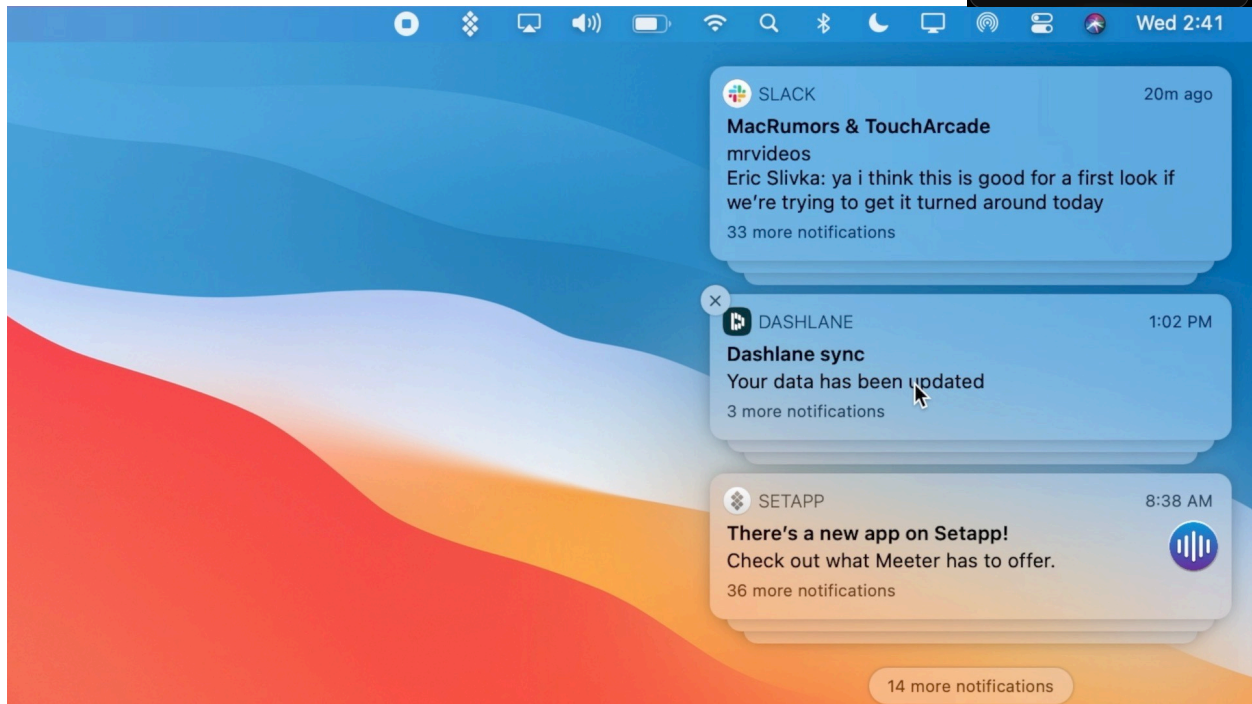
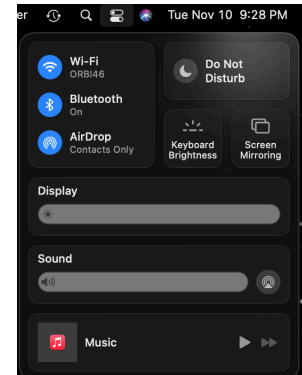
System Sounds

All of the traditional Mac sounds have been updated and designed to be "more pleasing to the ear." Each sound was created with snippets of the original sounds, so they sound familiar but new at the same time.

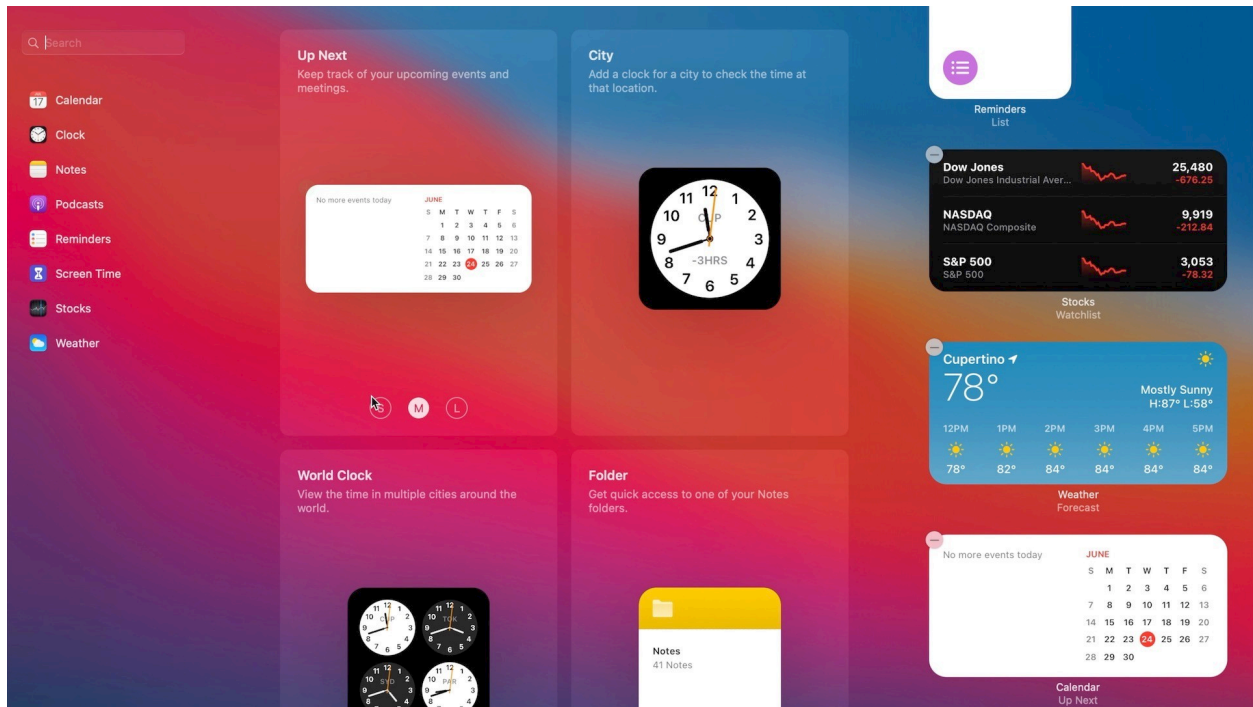
Apple has also brought back the [classic startup chime](#) that was removed from the MacBook lineup in 2016.

Notification Center

The Notification Center has been redesigned and it now combines incoming notifications with widgets in a single view to provide more information at a glance.



Notifications are now grouped by app and have additional interactive features, so you can do things like play a new podcast or reply to an email without having to open up an app. Just click and hold on a notification to access the new options.



Widgets have been redesigned and are similar to the widgets introduced in iOS 14, customizable in three sizes and with a widget gallery to set things up in a way that's perfect for your needs. There are also new widgets to work with for apps like Notes, Screen Time, Podcasts, and more.

Third-party widgets for the Notification Center can be found in the Mac App Store.

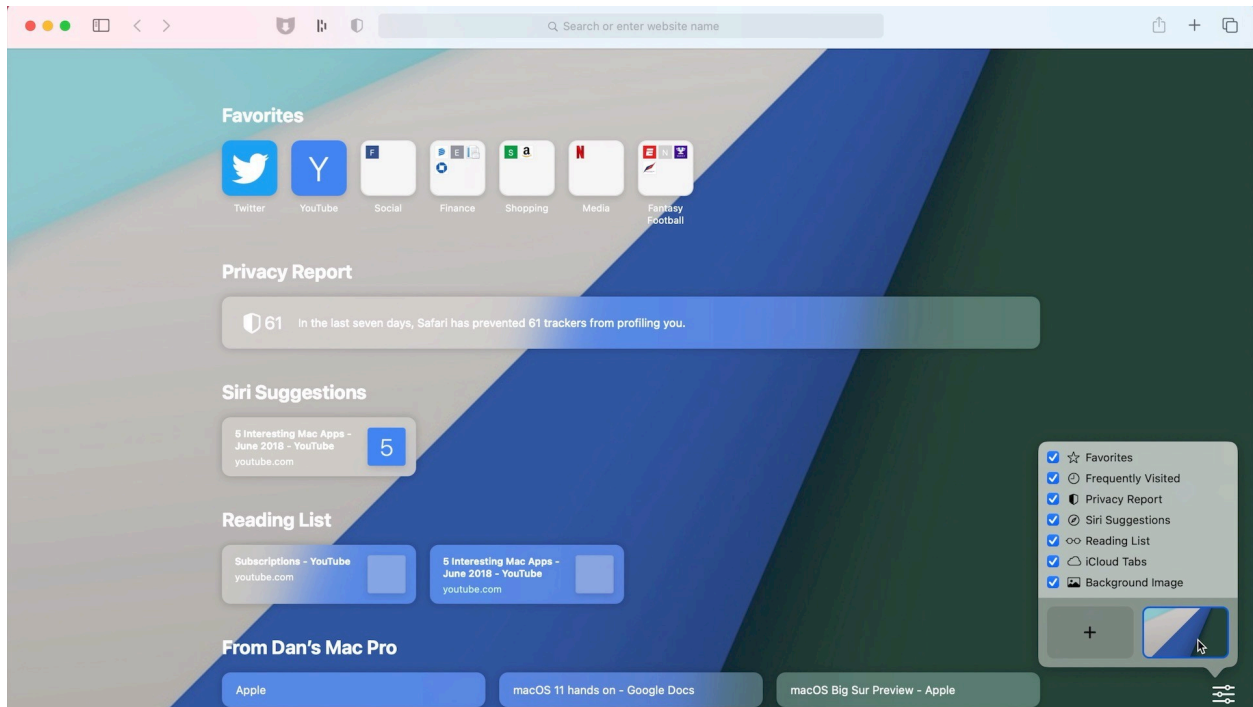
Faster Updates and More Security

Along with the cleaner, more refined look, macOS Big Sur has a feature that lets software updates begin in the background and then finish faster, so installations of new software updates won't take as long. Installing macOS Big Sur is a prerequisite for this feature, so the initial macOS Big Sur installation takes the standard amount of time.

The feature is powered by a cryptographically signed system volume that's new in Big Sur and which also adds a layer of protection against malicious tampering. macOS Big Sur also now supports APFS Time Machine backups, so you can use an APFS disk for backing up your Mac in addition to HFS+.

Safari

Safari has a new start page that can be customized with a wallpaper, and there are options to add Favorites, Frequently Visited Sites, Siri Suggestions, Reading List, iCloud Tabs, and the new Privacy Report feature.



Safari is faster and more power-efficient than before. It's 50 percent faster at loading frequently visited sites than Chrome, and it lasts up to three hours longer when streaming videos compared to Chrome and Firefox.

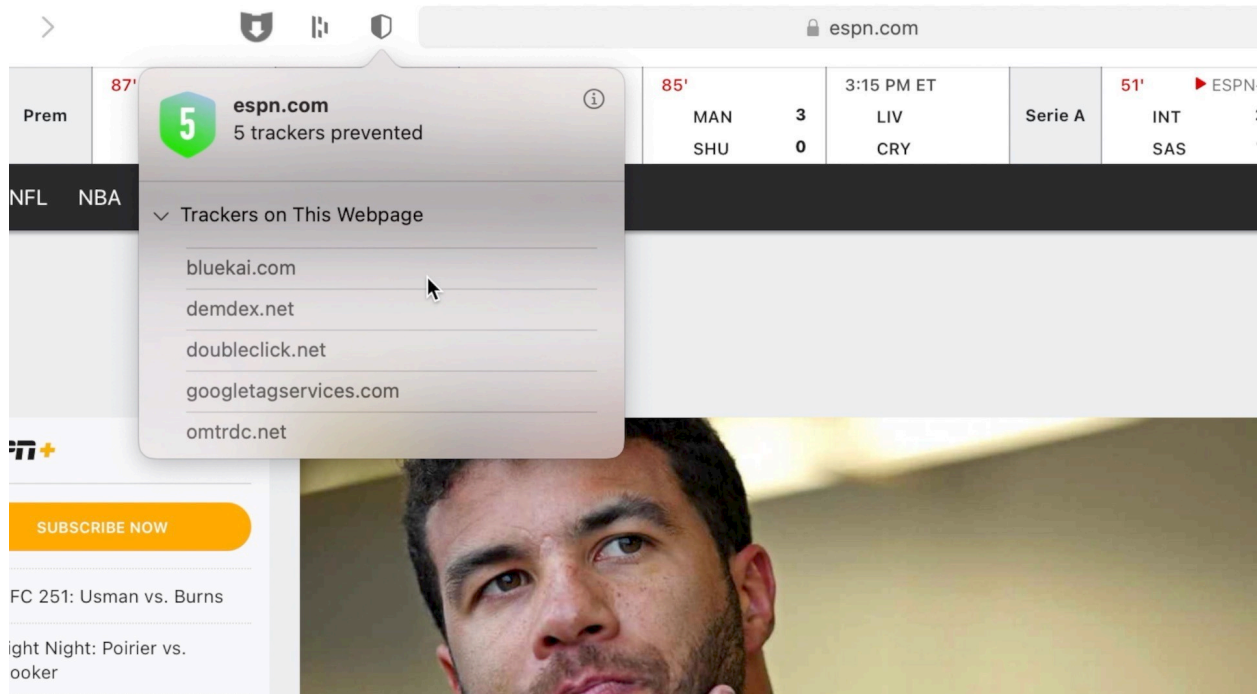
History, bookmarks, and saved passwords can also now be imported from Chrome to Safari if you want to switch browsers to take advantage of the new features in Big Sur.

Safari in macOS Big Sur [supports HDR video](#) and it works with 4K HDR and Dolby Vision content from Netflix and YouTube. Mac owners with a 2018 or later Mac can watch 4K Netflix content in Safari when running Big Sur.

- [How to Add a Start Page Wallpaper in macOS Safari 14](#)

Privacy Report

On the start page, Privacy Report gives a rundown on how many trackers have been blocked from profiling you, and if you click on the shield icon next to the URL bar, you can see trackers on a site by site basis.



Privacy Report provides a list of all trackers on a website and the number of trackers that were blocked, preventing websites from keeping tabs on your browsing habits across the web. From the Privacy Report menu bar option, you can see how many trackers have been blocked in the last 30 days.

Tabs

Safari tabs have been redesigned and more tabs are visible at once, plus there's a new hover option that lets you hover over a tab to see a page preview. Tabs also have page icons so you can see what's what at a glance.

Extensions

There's a dedicated category for extensions in the Mac App Store, and Apple included support for the WebExtensions API that lets developers [convert extensions](#) designed for other browsers like Chrome, Edge, and Firefox into a format that works with Safari, which increases the number of extensions available for Safari users.

With the additional focus on extensions, Apple added new privacy protections. You can choose which websites an extension can access, and you'll see a warning when an extension has broad permission to access every webpage you visit.

Built-In Translation

Safari has a built-in web translator that translates seven languages with just a click, so you can read an entire webpage in another language without having to have an extension installed.

Built-in translation works for English, Spanish, Chinese, French, German, Russian, and Brazilian Portuguese.

Password Monitoring

For passwords saved in iCloud Keychain, Safari now monitors to make sure they haven't been compromised in any known data breaches. If a password is leaked, Safari sends an alert so you can change it.

YouTube and Netflix in 4K

macOS Big Sur supports 4K HDR YouTube videos in Safari for the first time, allowing higher quality videos to be watched at full resolution rather than being limited to 1080p. It also supports 4K HDR and Dolby Vision content from Netflix, but Mac owners will need a 2018 or later Mac [with a T2 chip](#) can watch 4K Netflix content in Safari when running Big Sur.

Messages

Messages is now a Mac Catalyst app, bringing it more in line with the Messages app on iOS devices with many of the same capabilities, including some of the new features introduced in iOS 14.

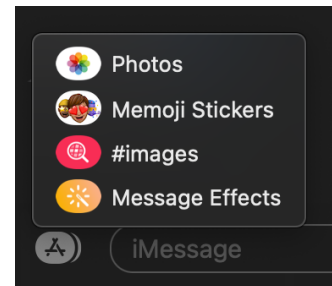
Up to nine of your most important conversations can be pinned to the top of the Messages app, with pinned conversations depicted as circular icons at the top of the app. Typing indicators let you know when someone's typing, and new messages and Tapbacks animate right above the pin.



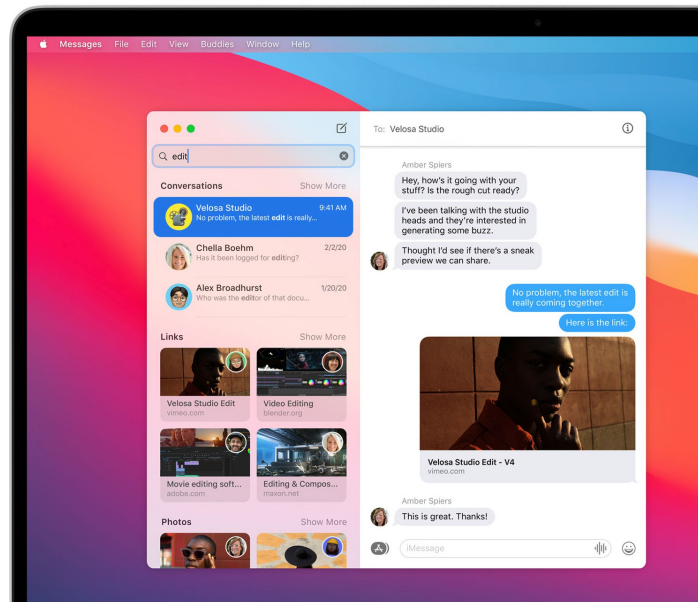
Inline replies help keep conversations more organized, letting you reply to a specific message that starts a new thread that can be singled out. It works in single-person conversations, but it's most useful in group chats.

Group chats can be customized with photos, Memoji, or emoji, and Mentions let you direct a message to a specific person. If an active group chat is muted and someone @mentions you in the conversation, you can have it send a notification so you don't miss the most important moments of a chat.

There's a new Photos picker in the Messages app that's accompanied by Memoji stickers (which can be created on the Mac for the first time with the Memoji editor), an #images search for finding trending images and GIFs, and Message effects, which have been available on iOS for several years.



Message effects like balloons, confetti, lasers, and more can take over the Messages screen, plus there are custom effects that can be applied to chat bubbles.

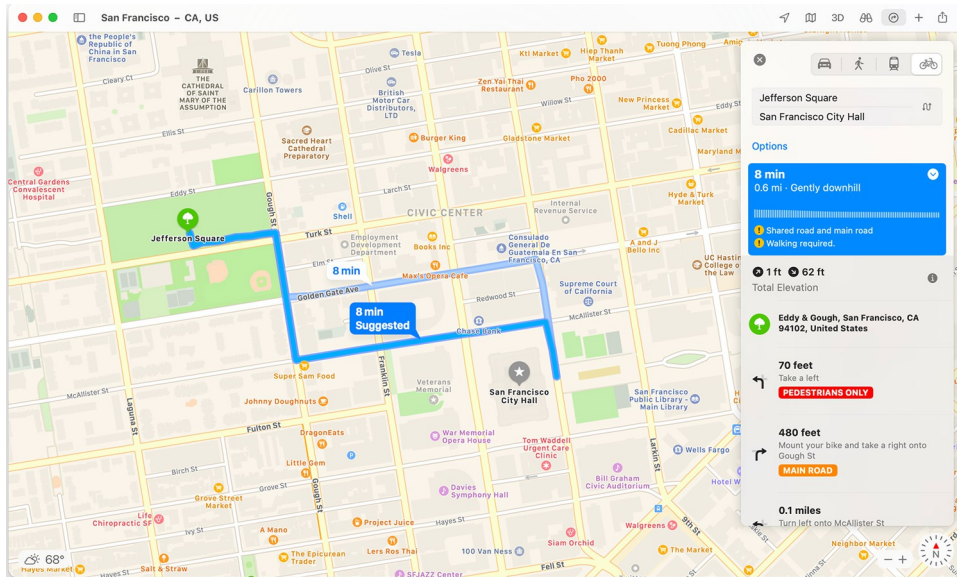


Search in Messages has been streamlined, and search results organize links, photos, and phrases.

Maps

Like Messages, Apple has improved Maps for Mac, bringing several features that were previously limited to iOS, as well as adding the same new capabilities brought to iOS 14.

Routes with cycling directions can be planned on Mac and sent to iOS, with the directions taking into account elevation, busy roads, stairs, and more, plus there are options for planning routes that incorporate electric vehicle charging stations.



Guides created by trusted brands and partners list suggestions of places to eat, shop, and visit in cities across the world, and you can create your own Guides in the Maps app in macOS Big Sur and then share them with friends and family.



macOS Big Sur adds Look Around to the Maps app, so you can explore cities in a detailed, street-level view, and with indoor maps, you can see inside airports and shopping centers to familiarize yourself with layouts before heading out.

Live updates for shared ETAs can be viewed in the Maps app so you can follow along with the progress of someone who has shared an ETA right on your Mac, and Apple's more detailed maps are set to be rolled out in Canada, Ireland, and the UK in 2020.

Other New Features

Spotlight

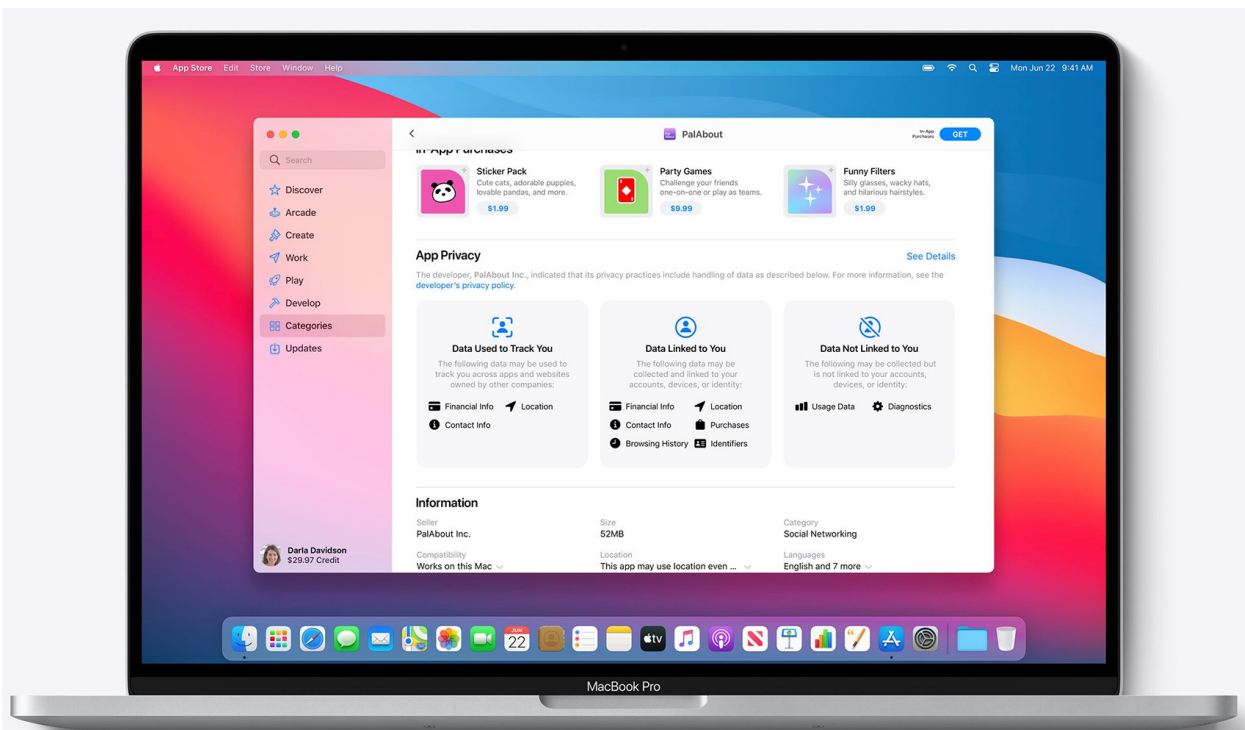
Searching with the Spotlight feature in Finder is faster than before, and the results are presented in a more streamlined list that's easier to parse.

Quick Look in Spotlight allows for full-size scrollable previews of almost any document or website with tools for making quick edits like cropping, signing PDFs, and more. Quick Look tools can be used without launching an app for speedier editing.

Spotlight also now powers the Find menu in Safari, Pages, Keynote, and other apps.

App Store

Apple is adding a "nutrition label" for apps in the App Store and Mac App Store, which will include information from developers on what data is collected and whether that data is used to track you across other apps and websites, so you can make informed decisions about the apps you download.



Developers will be self-reporting this information, and it will be included in the Mac App Store when Big Sur launches.

Apple Arcade includes deeper Game Center integration so you can see games that are popular with friends, view games that have achievements and milestones, and view your achievements in-game with the Game Center profile.

Apple Arcade in Big Sur also allows recently played games to be viewed in the Apple Arcade tab so you can seamlessly switch between platforms. There are new filters for finding Apple Arcade content, and in the future, the Apple Arcade section of the App Store will include sneak peeks at upcoming games.

App developers are now able to make in-app purchases and app subscriptions sharable among multiple family members, so multiple people can use subscription app features.

Photos

The Photos app has an improved retouching tool for removing unwanted elements from images, and all of the photo editing tools are now also available when editing videos.

Vibrance can be applied to photos, and the intensity of filters and Portrait Lighting effects can be adjusted for subtler edits.

Descriptions, the feature that allows text to be added to images to add another search element, has been renamed "Captions" to fit in with the new Captions option in iOS 14.

AirPods

With macOS Big Sur and iOS 14, AirPods automatically switch between active devices paired to the same iCloud account.

So if you watch a video on your iPhone and then swap over to your Mac, your AirPods can switch between the iPhone and the Mac seamlessly without the need to use the Bluetooth controls to change devices.

HomeKit

HomeKit Secure Video cameras viewed in the Home app now support Face Recognition and Activity Zones. With Face Recognition, the camera learns people's names from the Photos app, so it can detect friends and family to let you know who's at the door or captured on video.

Activity Zones allow certain areas of high motion to be blocked out, so you can better tailor motion detection notifications.

HomeKit-connected smart lights that change color throughout the day can take advantage of a new Adaptive Lighting feature that's basically Night Shift for light bulbs. It changes the color temperature of the bulb throughout the day, minimizing blue light at night.

The Home app also features a redesigned main toolbar interface that lets you see important accessories at a glance and accessories that need attention, such as those low on battery, having connectivity problems, or with updates to install.

Apple Music

"For You" in Apple Music has been replaced with "Listen Now," an interface that provides new releases, artist interviews, and personalized playlists in one place. It's similar to "For You," but with more emphasis on personalized content and new releases.

Search in Apple Music incorporates different genres and music based on categories like "Summertime Sounds" to make it easier to find something new to listen to.

Notes

As with iOS, the Pinned notes section can be expanded or collapsed, and there are additional text styles and formatting options that can be accessed in a flash with the new Quick Styles feature.

Search includes "Top Hits" with suggestions of what might be most relevant, and the scanner feature for Continuity Camera is better, resulting in sharper scans with improved auto cropping. Continuity Camera is using your iPhone to scan with while working from a Mac.

Reminders

Reminders can now be assigned to people who share lists. Smart suggestions are offered up based on reminders you've created in the past. Lists can be personalized with emoji. There are more organizational options for smart lists. Search is better than ever. There are new keyboard shortcuts for navigating lists and changing reminder dates.

Weather

The Weather widget provides government alerts about severe weather events, offers details on when there are major shifts in temperature coming, and provides next-hour precipitation details.

Future

Expect several iterations of new hardware based on the new Apple Silicon chip now called M1.

The M1 itself, which was just released, will be supporting older versions of third party applications in the same way that macOS X supported the older macOS 9 applications, with an emulator. It may be another year before the majority of vendors release M1 apps.

And along with the hardware redesigns will come new operating system designs. The next four years will show a dramatic change in both hardware and software and I expect amazing new apps that will raise eyebrows and open wallets.

References

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