



# MacBook Pro Essentials

for MacBook Pro with Thunderbolt 3

---

[MacBook Pro at a glance](#)

[Get started](#)

[Use MacBook Pro with Thunderbolt 3 with other devices](#)

[Apps](#)

[Find answers](#)

[Safety, handling, and regulatory information](#)

# MacBook Pro at a glance

## Say hello to MacBook Pro with Thunderbolt 3



This guide provides the essential information you need in order to get the most from your MacBook Pro with Thunderbolt 3.

**Take a look around.** Want a quick intro to the features (ports, connectors, accessories) of your MacBook Pro with Thunderbolt 3? Go to the next section, [Take a tour](#).

**Get started.** Start your MacBook Pro with Thunderbolt 3 by lifting the lid or connecting it to power, or by pressing the power button or Touch ID. Follow the Setup Assistant prompts, and you're up and running. For details, see [Set up](#). To migrate your information from an older computer, see [Migrate your data](#) for more details.

**Make the most of shortcuts.** If your MacBook Pro has a Touch Bar, shortcuts for common tasks are right at your fingertips. Change settings, use typing suggestions for text and messages, add an emoji, edit photos, and much more, with just a touch. See [Meet the Touch Bar and Touch ID](#).

**Stay in sync.** Access your documents, photos, music, apps, contacts, and calendars across all your devices with iCloud. And use your MacBook Pro with your iOS devices to make and receive phone calls and texts, copy and paste across devices, or create an Instant Hotspot. Learn more in [Access your content anywhere with iCloud](#) and [Use your MacBook Pro with iCloud and Continuity features](#).

**Unleash your creativity.** Edit photos, organize albums, and share memories with Photos; organize and listen to music, books, movies, and more with iTunes; create presentations with Keynote; and check out all the apps available on the [App Store](#), to express yourself in as many ways as you have ideas.

**Dig deeper.** Explore your MacBook Pro with Thunderbolt 3 and get your questions answered. See [Mac Help](#).

## Take a tour

This guide is for MacBook Pro models with Thunderbolt 3 (USB-C). (Not all features are available on all models.)



- *Thunderbolt 3 (USB-C) ports:* Charge your computer, transfer data at Thunderbolt speeds (up to 40 Gbps), connect to a display or projector, and more.



- *3.5 mm headphone jack:* Plug in stereo headphones or external speakers to listen to your favorite music or movies.
- *Microphones:* Talk with friends or record audio (models with the Touch Bar have three microphones; other models have two microphones).



- *Touch Bar:* Some models include a Touch Bar at the top of the keyboard, which dynamically adapts to the app you're using. The Touch Bar is an extension of the keyboard that presents intuitive shortcuts and application controls exactly when and where you need them. You can use familiar gestures like slide and tap in the Touch Bar. For more information, see [Meet the Touch Bar and Touch ID](#).

- *FaceTime HD camera:* Make FaceTime video calls or take pictures and video. If the light is glowing, the camera is on. For more information, see [FaceTime](#).
- *Touch ID (power button):* To learn more about how to use Touch ID, see [Meet the Touch Bar and Touch ID](#). If your keyboard doesn't have the Touch Bar, you can learn more about the power button in [Keyboard](#).
- *Force Touch trackpad:* Control your MacBook Pro with gestures. The entire trackpad surface acts as a button so you can easily click anywhere. For more about using gestures, see [Trackpad](#).

## What's included

To use your MacBook Pro, you need these two accessories, included in the box:



**USB-C Charge Cable:** To charge your MacBook Pro, connect one end of the USB-C Charge Cable to any Thunderbolt 3 port on your MacBook Pro, and the other end to the 61W Power Adapter (13-inch MacBook Pro models) or the 87W Power Adapter (15-inch MacBook Pro models).



AC plug

**61W or 87W USB-C Power Adapter:** After the power adapter is connected to MacBook Pro with the USB-C Charge Cable, fully extend the electrical prongs on the AC plug, and plug the adapter into an AC power outlet.

**Automatically start up your MacBook Pro.** Connect your 61W or 87W USB-C Power Adapter and USB-C Charge Cable and lift the lid to turn on and start up your MacBook Pro. Log in and get right to work.

## Keyboard

The function keys on the keyboard provide shortcuts for common functions, such as increasing the volume or screen brightness.

*Note:* If your MacBook Pro has the Touch Bar, the system function keys are in the Touch Bar. See [Meet the Touch Bar and Touch ID](#).



Function (Fn) key

- *Power button:* Press and hold  for 3 seconds to turn your MacBook Pro on or off. Press  to put MacBook Pro to sleep.
- *Brightness keys (F1, F2):* Press  or  to decrease or increase the brightness of the screen.
- *Mission Control key (F3):* Press  to view what's running on your MacBook Pro, including all your spaces and open windows.
- *Launchpad key (F4):* Press  to instantly see all the apps on your MacBook Pro. Click an app to open it.
- *Keyboard illumination keys (F5, F6):* Press  or  to decrease or increase the brightness of the keyboard.
- *Media keys (F7, F8, F9):* Press  to rewind,  to play or pause, or  to fast-forward a song, movie, or slideshow.
- *Mute key (F10):* Press  to mute the sound from the built-in speakers or 3.5 mm headphone jack.
- *Volume keys (F11, F12):* Press  or  to decrease or increase the volume of sound from the built-in speakers or 3.5 mm headphone jack.
- *Function (Fn) key:* Each function key (on the top row) can also perform other functions—for example, the F12 key can open Dashboard. Hold down the Fn key while you press a function key to trigger the action associated with the key.

 **Tip:** Press the Fn key twice to turn on dictation, which lets you dictate text wherever you can type it (for example, in Messages, Mail, Pages, and many other apps).

**Set keyboard preferences.** Use the Keyboard pane of System Preferences (choose Apple menu > System Preferences, click Keyboard, then click the buttons at the top to see the available options).

# Keyboard with the Touch Bar and Touch ID

## Meet the Touch Bar and Touch ID

*Note:* Read the following sections if your MacBook Pro has the Touch Bar.

The Touch Bar at the top of your keyboard displays dynamically changing tools, depending on your current activity. The Touch ID (power button) is located on the right side of the Touch Bar. After you set up Touch ID, you can use your fingerprint to unlock your MacBook Pro and make purchases on the App Store, iBooks Store, iTunes Store, and websites using Apple Pay.



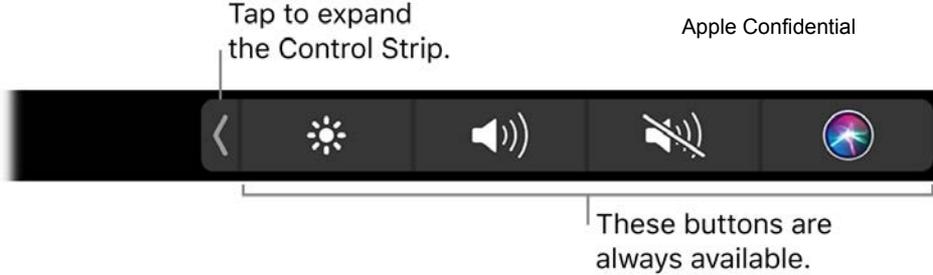
**Use the Touch ID (power button).** Press to turn on your MacBook Pro (or just lift the lid). When you first start up or restart, you need to log in by typing your password. You set up Touch ID during setup or later in the Touch ID pane of System Preferences. After setup, whenever you're asked for your password after you first log in, you can place your finger lightly on the Touch ID sensor to authenticate instead of typing your password.

You can also use Touch ID to make purchases online securely with Apple Pay. For more information about Touch ID, see [Set up](#). For more information about Apple Pay, see [Apple Pay](#).

*Note:* Press and hold the Touch ID (power button) for a few seconds to turn off your MacBook Pro. To put your MacBook Pro to sleep, choose Apple menu > Sleep.

**Use the Touch Bar.** The Touch Bar is integrated into many macOS apps to give you handy shortcuts for the tasks you do most, based on your current app and activity. Use familiar gestures—like tap and slide—in the Touch Bar while you work.

The buttons at the right end of the Touch Bar are the Control Strip—you use them to expand or collapse the Control Strip, change the brightness and volume, or use Siri. The other buttons in the Touch Bar depend on the app you're using.



**Expand or collapse the Control Strip.** Frequently used system controls, like volume and brightness, are located in the Control Strip on the right side of the Touch Bar. Tap < to expand the strip, then tap buttons or sliders for the settings you want to change. Tap ⊗ when you finish, or leave the Control Strip open to keep the buttons available.



**Customize the Control Strip.** Use the Keyboard pane of System Preferences (choose Apple menu > System Preferences, then click Keyboard) to customize the Control Strip.

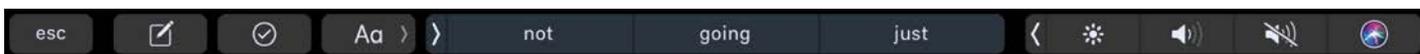
**Display the function keys.** Press and hold the Function (Fn) key to display the function keys F1 through F12 in the Touch Bar, then tap a function button to use it.



**Use the Esc button.** The Esc button usually appears on the left side of the Touch Bar, in the same place the Esc key appears on traditional keyboards. Esc appears on the left even when the other tools on the Touch Bar change.

**Tip:** In some apps, another tool in the Touch Bar may temporarily replace the Esc button. Tap Done or ⊗, and the Esc button appears. For more information, see the Apple Support article [How to use the Escape button on your MacBook Pro with Touch Bar](#).

**Tap instead of type.** In apps where you compose text, like Notes, Messages, TextEdit, and Mail, the Touch Bar can display typing suggestions to help you save time by presenting words and emoji you can tap instead of type. Tap < [keyboard icon] in the Touch Bar to see typing suggestions, if they're not already showing.



*Note:* Typing suggestions may not be available in all languages or in all areas.

**Express yourself with emoji.** In some apps, you can choose an emoji instead of words for a fun way to make your point. Tap 😊 to display the emoji. Swipe to scroll through options, organized by category, such as "Frequently Used," "Smileys & People," "Travel & Places," and more. Tap to select the emoji you want.



**Explore and experiment.** Tap around to see what you can accomplish quickly and efficiently. It's often easier to tap the Touch Bar than to click or select items onscreen in order to accomplish a task or apply a setting. For example, open Calculator and do quick calculations with the number keys and the functions on the Touch Bar—no more moving your cursor, clicking, and typing onscreen.



Keep using the Touch Bar to find the best ways to achieve the results you want. Move seamlessly between the Touch Bar, your keyboard, and the trackpad to get the job done. See [Included apps](#) and the sections for each app for information about their Touch Bar features.

To learn more about the Touch Bar, see the Apple Support article [How to use the Touch Bar on your MacBook Pro](#).

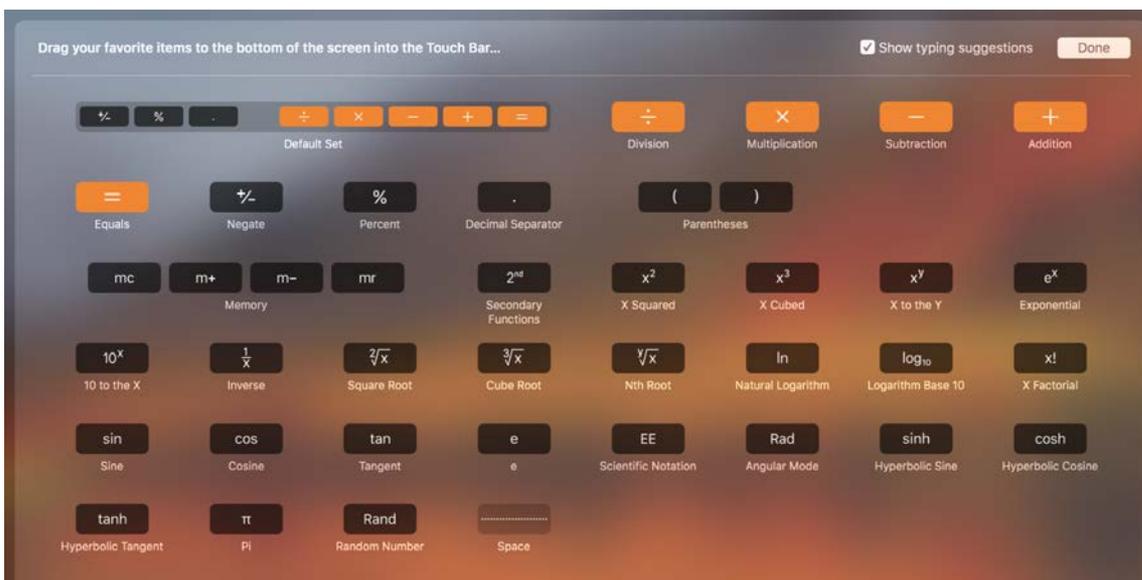
## Customize the Touch Bar

In the Finder and in many apps, such as Mail and Safari, you can customize the buttons in the Touch Bar. You can also customize the Control Strip. Choose View > Customize Touch Bar to add, delete, or rearrange items in the Touch Bar.

When you're customizing the Touch Bar, the buttons jiggle, and you see the Done button. For example, here's the Calculator Touch Bar, ready to be edited:



**Add buttons to the Touch Bar.** Drag controls to the bottom of your screen and into the Touch Bar to add them.



When you finish, tap Done in the Touch Bar or click Done on the screen.



**Rearrange buttons in the Touch Bar.** While customizing the Touch Bar, drag buttons to a new location. When you finish, tap Done.

**Remove buttons from the Touch Bar.** While customizing the Touch Bar, drag a button from the Touch Bar to the screen to remove it. When you finish, tap Done.

## Trackpad

You can do a lot on your MacBook Pro using simple trackpad gestures—scroll through webpages, zoom in on documents, rotate photos, and more. With the Force Touch trackpad, pressure-sensing capabilities add another level of interactivity. The trackpad provides feedback—when you drag or rotate objects, you feel a subtle vibration when they're aligned, allowing you to work with greater precision.

Here are some common gestures:

	<b>Click:</b> Press anywhere on the trackpad. Or enable “Tap to click” in Trackpad preferences, and simply tap.
	<b>Force click:</b> Click and then press deeper. You can use force click to look up more information—click a word to see its definition, or an address to see a preview that you can open in Maps.
	<b>Secondary click (right click):</b> Click with two fingers to open shortcut menus. If “Tap to click” is enabled, tap with two fingers.
	<b>Two-finger scroll:</b> Slide two fingers up or down to scroll.
	<b>Pinch to zoom:</b> Pinch your thumb and finger open or closed to zoom in or out of photos and webpages.
	<b>Swipe to navigate:</b> Swipe left or right with two fingers to flip through webpages, documents, and more—like turning a page in a book.
	<b>Open Launchpad:</b> Quickly open apps in Launchpad. Pinch closed with four or five fingers, then click an app to open it.
	<b>Swipe between apps:</b> To switch from one full-screen app to another, swipe left or right with three or four fingers.

**Customize your gestures.** Choose Apple menu > System Preferences or click the System Preferences icon  in the Dock, then click Trackpad.

In Trackpad preferences you can:

- Learn more about each gesture

- Set the pressure you prefer to use Apple Confidential

- Decide whether to use pressure-sensing features

- Customize other trackpad features

 **Tip:** If you find you're force clicking when you don't intend to, try adjusting the click pressure to a firmer setting in Trackpad preferences. Or change the "Look up and data detectors" option from the "Force Click with one finger" default setting to "Tap with three fingers."

For more information and examples of force click options, see the Apple Support article [How to use the Force Touch trackpad](#).

## Charge the battery

The battery in your MacBook Pro recharges whenever the MacBook Pro is connected to power.



**Charge the battery.** Connect your MacBook Pro to a power outlet using the included USB-C Charge Cable and 61W or 87W USB-C Power Adapter.

You can charge your MacBook Pro using any of the Thunderbolt 3 ports on your computer. The battery charges more quickly when the computer is off or in sleep.

**Check the battery's charge.** Look at the battery status icon at the right of the menu bar to see the battery level or charging status.



Charging



Charged

**Conserve battery power.** To extend battery life on a given charge, you can reduce the display brightness, close apps, and disconnect peripheral devices you're not using. You can change your power settings in Energy Saver preferences (click the System Preferences icon  in the Dock, then click Energy Saver). If your MacBook Pro with Thunderbolt 3 is in sleep when a device is connected to it, the device's battery may drain.

For more information about the internal, rechargeable battery in your MacBook Pro with Thunderbolt 3, and for conservation and performance tips, go to [Apple Lithium-ion Batteries](#).

## Accessories

The following Apple accessories are available to connect your MacBook Pro to power, external devices and displays, and more.



**Thunderbolt 3 (USB-C) to Thunderbolt 2 Adapter:** Connect your MacBook Pro to Thunderbolt 2 devices or a Thunderbolt display.



**USB-C to USB Adapter:** Connect your MacBook Pro to standard USB accessories or connect a USB cable to sync and charge your iPhone, iPad, or iPod touch.



**USB-C Digital AV Multiport Adapter:** Connect your MacBook Pro to an HDMI display, while also connecting a standard USB device and a USB-C charge cable to charge your MacBook Pro.



**USB-C VGA Multiport Adapter:** Connect your MacBook Pro to a VGA projector or display, while also connecting a standard USB device and a USB-C charge cable to charge your MacBook Pro.

Adapters and other accessories are sold separately at [apple.com](#) or your local Apple Store. Review the documentation or check with the manufacturer to make sure you're choosing the right adapter for your MacBook Pro.

## Use an external display

The Thunderbolt 3 port on your MacBook Pro supports video output. You can use an external display, a projector, or an HDTV with your MacBook Pro.



- *Connect a VGA display or projector:* Use a USB-C VGA Multiport Adapter to connect the display to the USB-C port on your MacBook Pro.
- *Connect an HDMI display or HDTV:* Use a USB-C Digital AV Multiport Adapter to connect the HDMI display or HDTV to the USB-C port on your MacBook Pro.
- *Connect a USB-C display:* Connect the display to the USB-C port on your MacBook Pro.
- *Connect a Thunderbolt display:* Use a Thunderbolt 3 (USB-C) to Thunderbolt 2 Adapter to connect the Thunderbolt display to a Thunderbolt 3 port on your MacBook Pro.

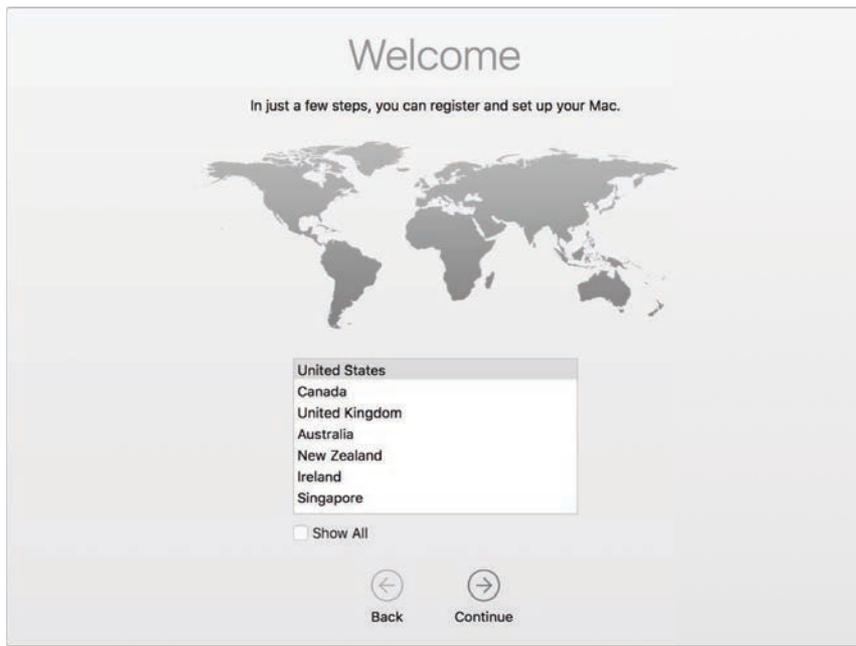
Adapters and other accessories are sold separately at [apple.com](https://apple.com) or your local Apple Store. Review the documentation or check with the manufacturer to make sure you choose the right adapter.

If you have an HDTV connected to an Apple TV, you can also use AirPlay to mirror your MacBook Pro screen on your TV screen in up to 1080p HD. See [AirPlay](#) for details.

# Get started

## Set up

The first time your MacBook Pro starts up, Setup Assistant walks you through the simple steps needed to start using your new Mac. If you want to transfer your data from another computer, see [Migrate your data](#) for details.



Be sure to connect to Wi-Fi, turn on Bluetooth® wireless technology, get an Apple ID, then sign in to iCloud. Activate Siri during setup, if you want. If your MacBook Pro has the Touch Bar, you can also set up Touch ID and Apple Pay.

You can do these steps quickly and easily with Setup Assistant—but if you want to do them later, here's how:

**Connect to Wi-Fi.** Click the Wi-Fi status icon  in the menu bar, then choose a Wi-Fi network and enter the password, if necessary.

**Turn Wi-Fi on or off.** Click the Wi-Fi status icon  in the menu bar, then choose Turn Wi-Fi On or Turn Wi-Fi Off.

**Turn Bluetooth on or off.** Click the Bluetooth icon  in the menu bar, then choose Turn Bluetooth On or Turn Bluetooth Off.

 **Tip:** If you don't see the Wi-Fi status icon  or Bluetooth icon  in the menu bar, you can add them. For Wi-Fi, choose Apple menu > System Preferences, then click Network. Click Wi-Fi in the list on the left, then select "Show Wi-Fi status in menu bar." For Bluetooth, choose Apple menu > System Preferences, click Bluetooth, then select "Show Bluetooth in menu bar."

**Get an Apple ID.** Your Apple ID is the account you use for everything you do with Apple—including using the App Store, the iTunes Store, iCloud, Messages, and more. Your Apple ID consists of an email address and a password. You need only one Apple ID to use any Apple service, on any device—whether it's your computer, iOS device, or Apple Watch. It's best to have your own Apple ID and not share it—create separate Apple IDs for each family member.

If you don't already have an Apple ID, you can create one (it's free). Go to [the Apple ID account website](#).

**Important:** If you forget your Apple ID password, you don't need to create a new Apple ID. Just click the Forgot link in the login window to retrieve your password.

**Set up iCloud on your MacBook Pro.** With iCloud, you can store all of your content—documents, movies, music, photos, and more—in the cloud, and access it anywhere you go.

To set up iCloud, choose Apple menu > System Preferences, then click iCloud. In the window that appears, enter your Apple ID and password. Then select the features you want to use. To find out more, see [Access your content anywhere with iCloud](#).

**Important:** Be sure to use the same Apple ID for iCloud on all your devices.

**Set up Siri.** You can enable Siri on your MacBook Pro when prompted during setup. To learn how to turn on Siri later and for information about using Siri on your Mac, see [Siri](#).

**Set up Touch ID.** If your MacBook Pro has the Touch Bar and Touch ID, you can add a fingerprint to Touch ID during setup. To set up Touch ID later or to add additional fingerprints, click the System Preferences icon  in the Dock, or choose Apple menu > System Preferences. Then click Touch ID. To add a fingerprint, click  and follow the onscreen instructions. You can add up to three fingerprints per user account (you can add up to five fingerprints total to your MacBook Pro).



You can also set options for how you want to use Touch ID on your MacBook Pro: to unlock your Mac instead of entering your password, to use Apple Pay (see [Apple Pay](#)), or to purchase items on the iTunes Store, App Store, and iBooks Store.



**Tip:** If two or more users use the same MacBook Pro, each one can add a fingerprint to Touch ID to quickly unlock, authenticate, and log in to the MacBook Pro. Your MacBook Pro can store a total of five fingerprints.

For more information about Touch ID, see the Apple Support article [Use Touch ID on MacBook Pro](#).

**Set up Apple Pay.** If you have a MacBook Pro with the Touch Bar, you can set up Apple Pay for one user account on your MacBook Pro during setup. Other users can still pay with Apple Pay, but they must complete the purchase using their iPhone or Apple Watch that's been set up for Apple Pay (see [Apple Pay](#) for more details). Follow the onscreen prompts to add and verify your card. If you already use a card for iTunes purchases, you might be prompted to verify this card first.

To set up Apple Pay or add additional cards later, click the System Preferences icon  in the Dock, or choose Apple menu > System Preferences. Then click Wallet & Apple Pay and follow the onscreen prompts to set up Apple Pay.

*Note:* The card issuer determines whether your card is eligible to use with Apple Pay, and may ask you to provide additional information to complete the verification process. Many credit and debit cards can be used with Apple Pay. For information about Apple Pay availability and current credit card issuers, see the Apple Support article [Apple Pay participating banks](#).

# Find your way around

## The desktop, menu bar, Finder, and Help

The first thing you see on your MacBook Pro is the *desktop*, where you can quickly open apps, search for anything on your MacBook Pro and the web, organize your files, and more.



**Tip:** Can't find the pointer? To magnify it temporarily, move your finger rapidly back and forth on the trackpad. Or if you're using a mouse, slide it back and forth quickly.

**Menu bar.** Use the menus and icons along the top of the screen to open new windows, connect to a Wi-Fi network, check your Wi-Fi status , change the volume , check your battery charge , query Siri, and more. The menu items change, depending on which app you're using.

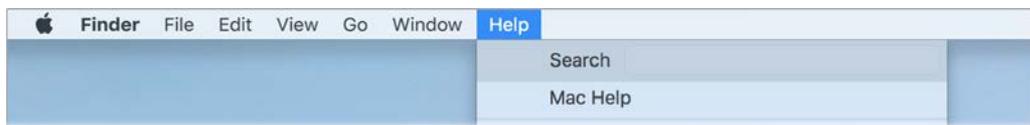
**Apple menu.** The Apple menu in the upper-left corner of the screen contains frequently used items. To open it, click the Apple icon.

**Finder.** The Finder is an app that's always open. Use the Finder to organize and locate your files. To open a Finder window, click the Finder icon  in the Dock at the bottom of the screen. Force click a file icon to get a quick look at its contents, or force click a filename to edit it.

For information about using the Touch Bar for Finder tasks, see [The Touch Bar](#).



**Help menu.** Help for your MacBook Pro and macOS apps is always available from the Finder. To get help, click the Help menu and choose Mac Help. Or type in the search field and choose a suggestion.



To learn more, see [Mac Help](#).

Read on to learn about [the Dock](#) and other features of the desktop.

## The Touch Bar

Use the Touch Bar, at the top of your keyboard, to perform Finder tasks and more.

**Use the Touch Bar.** Tap buttons to move back and forth through items you've viewed, set view options, and quickly look at, share, or tag an item.



Tap  to see buttons for viewing and sorting options:



Tap  to see sharing options:



Tap  to see tags you can apply:



For more information on using the Touch Bar, see [Meet the Touch Bar and Touch ID](#).

# The Dock

The Dock, at the bottom of the screen, is a convenient place to keep the apps and documents you use frequently.



**Open an app or file.** Click its icon in the Dock.

**Add an item to the Dock.** Drag the item and drop it where you want it. Place apps to the left of the line in the Dock, and files or folders to the right.

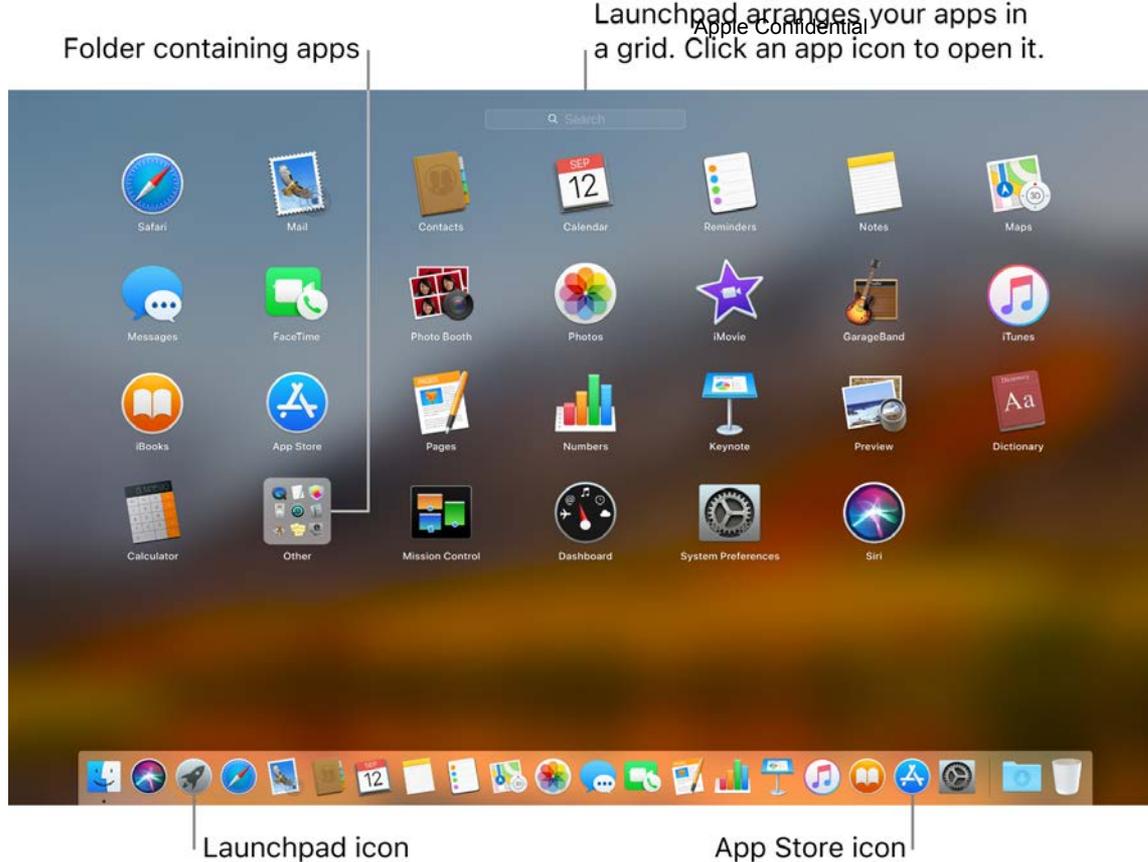
**Remove an item from the Dock.** Drag it out of the Dock. The item isn't removed from your MacBook Pro—just from the Dock.

**See all open windows in an app.** Force click an app in the Dock to access Exposé and view all the app's open windows.

**Tip:** You can make the Dock larger or smaller, add or remove items, move it to the left or right side of the screen, or even set it to hide when you're not using it. To change how the Dock looks, click the System Preferences icon  in the Dock, or choose Apple menu > System Preferences. Then click Dock.

## Quickly open apps

Your MacBook Pro comes with apps for all the things you love to do—browse the web, check email, share photos, enjoy movies, and more.



**Open an app.** Click an app icon in the Dock, or click the Launchpad icon  in the Dock and click the app you want. You can also search for an app using Spotlight, then open the app directly from your Spotlight search results.

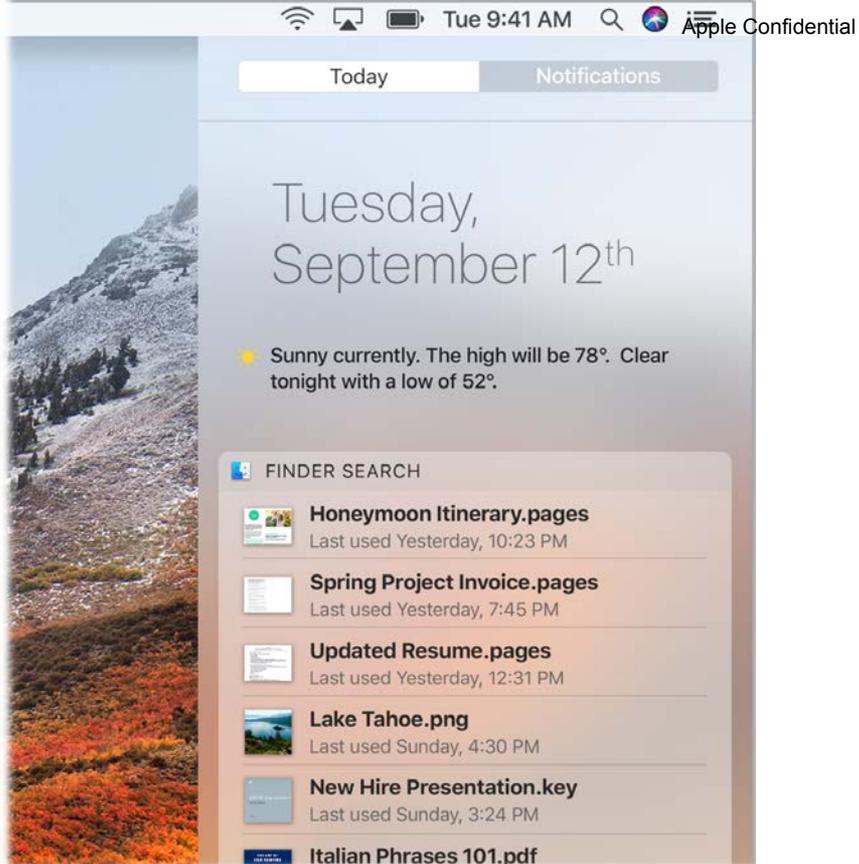
 **Ask Siri.** Say something like: "Open Calculator."

**Organize apps in Launchpad.** Launchpad organizes your apps in a grid. Drag an app to a new location to rearrange apps. Drag an app onto another app to create a folder. Drag more apps to the new folder to add them. To remove an app from a folder, drag it out.

**Get more apps.** Click the App Store icon  in the Dock and search for apps you want. Apps you download from the App Store appear automatically in Launchpad. To quickly get updates for apps and macOS, click Updates in the App Store.

## Notification Center

Use Notification Center to view details about your day (calendar, stocks, weather, and more) and catch up on notifications you might have missed (email, reminders, app notifications, and more).



**Open Notification Center.** Click the Notification Center icon  at the top right of the screen. Tap Today to see what's coming up or Notifications to review what's come in.

## System Preferences

System Preferences is where you personalize your MacBook Pro settings. For example, use Energy Saver preferences to change sleep settings. Or use Desktop & Screen Saver preferences to add a desktop picture or choose a screen saver.

**Customize your MacBook Pro.** Click the System Preferences icon  in the Dock, or choose Apple menu > System Preferences. Then click the type of preference you want to set.



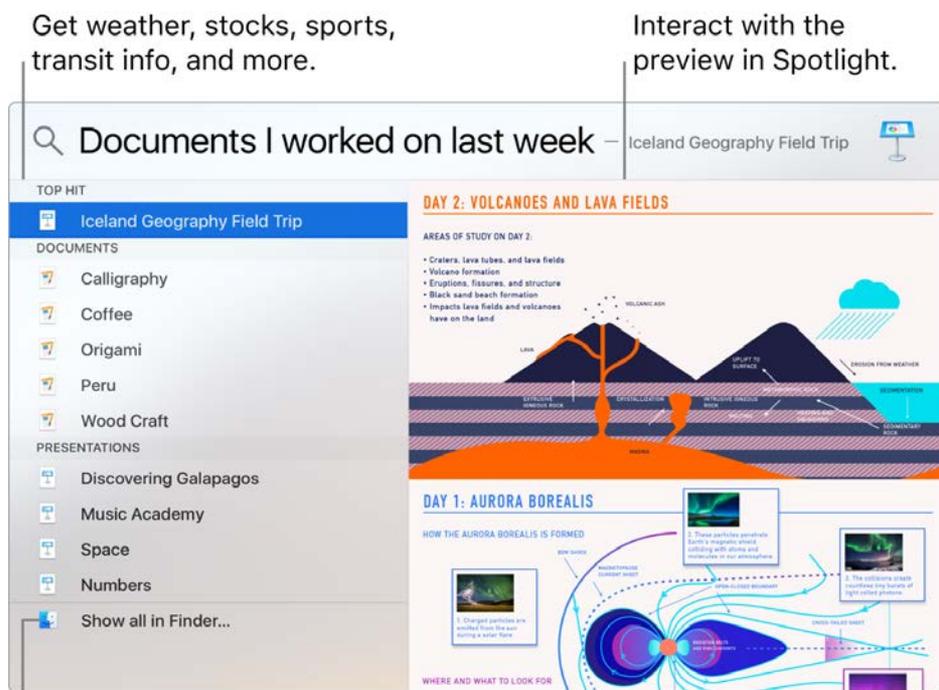
# Spotlight

Spotlight Q is an easy way to find anything on your MacBook Pro, such as documents, contacts, calendar events, and email messages. Spotlight Suggestions offer info from Wikipedia articles, Bing search results, news, sports, weather, stocks, movies, and other sources.

When you search with Spotlight, the preview area on the right provides search results you can interact with—make a call, send an email message, play a song, get directions, even convert currencies. Spotlight can provide answers to math questions or define words, all on your desktop.

**Search for anything.** Click Q at the top right of the screen, then start typing.

 **Tip:** Type Command–Space bar to show or hide the Spotlight search field.

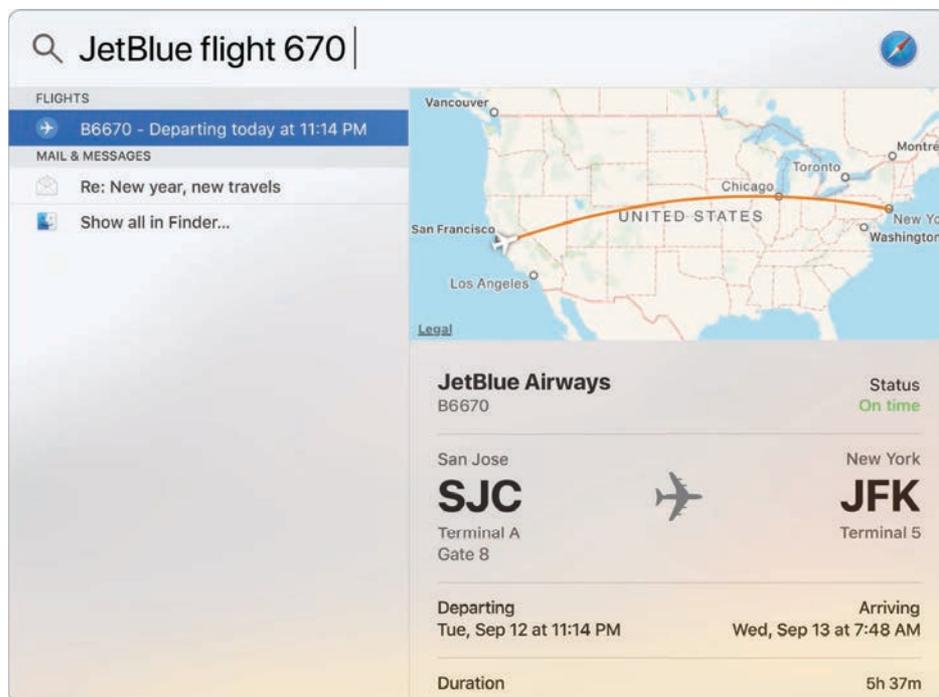


Get weather, stocks, sports, transit info, and more.

Interact with the preview in Spotlight.

Find your files quickly.

**Get flight info.** Enter the airline and flight number in Spotlight to see your flight status and a map, without having to open Safari.



**Preview your results.** Click a search result and view it in the preview on the right.

Sometimes that's all you need to do—click items or links directly in the preview. You can also double-click a result to open it.

**Open an app.** Type the app name in Spotlight, then press Return.

**Turn off Spotlight Suggestions.** If you want Spotlight to search only for items on your MacBook Pro, you can turn off Spotlight Suggestions in Spotlight preferences. Click the System Preferences icon  in the Dock, click Spotlight, then click to deselect Spotlight Suggestions. Make any other changes you want to the list of categories Spotlight searches.

## Siri

You can talk to Siri on your MacBook Pro and use your voice for many tasks. For example, you can find files, schedule meetings, change preferences, get answers, send messages, place calls, and add items to your calendar. Siri can give you directions (“How do I get home from here?”), provide information (“How high is Mount Whitney?”), perform basic tasks (“Create a new list called Groceries”), and much more.

*Note:* Siri may not be available in all languages or in all areas, and features may vary by area.

**Enable Siri.** Click the Siri icon  in the menu bar or in the Dock, then click Enable when prompted. If you enabled Siri during setup, clicking the icon opens Siri. Or click the System Preferences icon  in the Dock, click Siri, then select Enable Ask Siri. You can set other preferences in the pane, such as Language and whether to show Siri in the menu bar.

If your MacBook Pro has the Touch Bar, you'll see additional options in the Siri preferences pane, including “Listen for ‘Hey Siri’” and allowing Siri to respond when your MacBook Pro is locked.

*Note:* To use Siri, your MacBook Pro must be connected to the Internet.

**Speak to Siri.** Click Siri  in the menu bar or the Dock and start speaking. Or press and hold the Command key and the Space bar, and speak to Siri.

**Hey Siri.** On your MacBook Pro with the Touch Bar, you can simply say “Hey Siri” to get responses to your requests. To enable this feature in the Siri pane of System Preferences, click “Listen for ‘Hey Siri!’” You can also tap the Siri button in the Control Strip to open Siri.

 **Tip:** To learn about more ways you can use Siri, ask “What can you do?” at any time, or click the Help button .



**Play some music.** Just say, “Play some music,” and Siri does the rest. You can even tell Siri, “Play the top song from March 1991.”

**Find and open files.** Ask Siri to find files and open them right from the Siri window. You can ask by file name or by description. For example, “Show me files Ursula sent,” or “Open the spreadsheet I created last night.”

**Drag and drop.** Drag and drop images and locations from the Siri window into an email, text message, or document. You can also copy and paste text.

**Pin a result.** Save Siri results from sporting events, Reminders, Clock, Stocks, Notes, Finder, and general knowledge (Wikipedia, for example) to the Today view in Notifications. Click the plus sign **+** in the top right of a Siri result to pin it to the Today view. To see it later, click the Notification Center icon **≡**, then click Today. If you’re checking a sports score, for example, results stay up to date.

**Change the voice.** Click the System Preferences icon **⚙️** in the Dock, click Siri, then choose an option from the Siri Voice menu.

You’ll find suggestions for things you can ask Siri throughout this guide—they look like this:

**🗣️ Ask Siri.** Say something like:

- “Open the Keynote presentation I was working on last night.”
- “What time is it in Paris?”

# What's new

## New macOS features

macOS High Sierra offers many exciting new features, including:

- *Spotlight*: Instead of going to an airline website, open Spotlight and quickly type an airline and flight number to get current flight status information. For more details, see [Spotlight](#).
- *Safari*: You can customize behaviors per website with new preferences for page zoom, auto-play, content blockers, Reader View, and more; and Safari now removes cross-site tracking data to make it more difficult for advertisers to learn your habits. For more information, see [Safari](#).
- *Mail*: Mail search now returns Top Hits of your most relevant messages and offers the ability to view messages full screen in split view—so you can have a message you're referencing open as you write a new one. For more information, see [Mail](#).
- *Photos*: Add effects to Live Photos and loop them into fun videos; use the improved editing tools with advanced features like Curves and Selective Color; and organize your photos quickly with the new pop-up menu. For more information, see [Photos](#).
- *FaceTime*: During a FaceTime call, you can capture a Live Photo and save it to Photos. Both of you must set your preferences to enable this feature. For more information, see [FaceTime](#).
- *Notes*: Add tables to your notes, and pin frequently used notes to the top of your list. For more information, see [Notes](#).
- *Family Sharing*: Your family can now share a single iCloud storage plan, with space for each family member to store private backups, documents, and photos. For details about setting up this feature, see [Access your content anywhere with iCloud](#).
- *iCloud Drive*: Share your files with colleagues or family members so everyone can work on the same document. Click the Share button , then click Add People. For more information about iCloud Drive, see [Access your content anywhere with iCloud](#).

## "Hey Siri" on your Mac

Siri is now available by saying "Hey Siri" and immediately speaking your request, if your MacBook Pro has the Touch Bar. Play music, set up a meeting, open a file, and more by using your voice. Enable the "Listen for 'Hey Siri'" option (if you didn't during setup) in the Siri pane of System Preferences. For more information, see [Siri](#).

# Secure storage and secure boot

Your MacBook Pro with Touch Bar includes security features to protect what's on your computer and to prevent unauthorized software apps from loading during startup:

- *Secure storage:* The storage drive of your MacBook Pro is encrypted with keys tied to its hardware to provide advanced levels of security. In the event of a catastrophic failure, data recovery may not be possible. It is highly recommended that you keep an up-to-date backup of your system to an external source. You can set up Time Machine or another backup plan to regularly back up the contents of your computer. For more information, see [Back up your files with Time Machine](#) in Mac Help and the Apple Support article [How to use Time Machine to back up or restore your Mac](#).
- *Secure boot and Startup Security Utility:* Support for secure boot is on automatically. It helps ensure that only legitimate operating system software loads on your computer at startup.

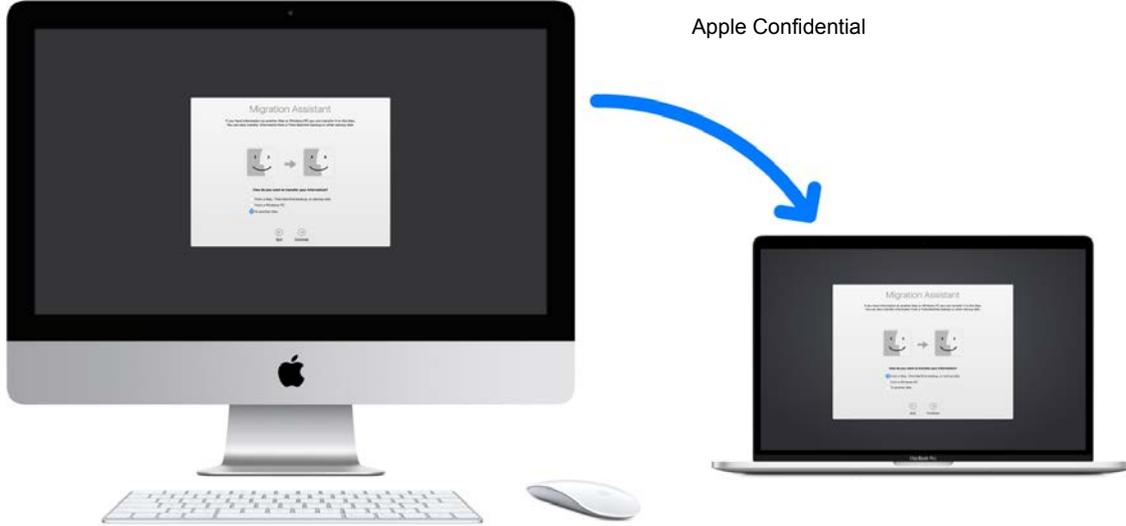
In the unlikely event that your MacBook Pro won't start because it detects an untrusted component, your computer is already set to boot from a secure recovery partition to automatically correct issues where possible. To learn more about the Startup Security Utility or to find out how to set other options, such as booting from an external device, see the Apple Support article [About Startup Security Utility](#).

## Migrate your data

It's easy to move your files and settings from another Mac or PC to your MacBook Pro. You can transfer information to your MacBook Pro from an old computer— or from a Time Machine backup on a USB storage device—either wirelessly, or with an Ethernet cable and adapters.

 **Tip:** For best results, make sure your MacBook Pro is running the latest version of macOS. To check for software updates, click the App Store icon  in the Dock, then click Updates in the App Store toolbar.

**Transfer wirelessly.** To transfer the data when you first set up your MacBook Pro, use Setup Assistant. To transfer data later, you can use Migration Assistant. Open a Finder window, go to Applications > Utilities, then double-click Migration Assistant to do a wireless migration. Follow the onscreen instructions.



**Tip:** To transfer the information wirelessly from your old computer to your MacBook Pro, make sure both computers are connected to the same network. Keep both computers near each other throughout the migration process.

If you used Time Machine to back up your files from another Mac to a storage device (such as an external disk), you can copy the files from the device to your MacBook Pro. For more information about Time Machine backups, see [Back up and restore](#).

**Copy files from a USB storage device.** Connect the storage device to your MacBook Pro using a USB-C to USB Adapter (see [Accessories](#)). Then drag files from your storage device to your MacBook Pro.

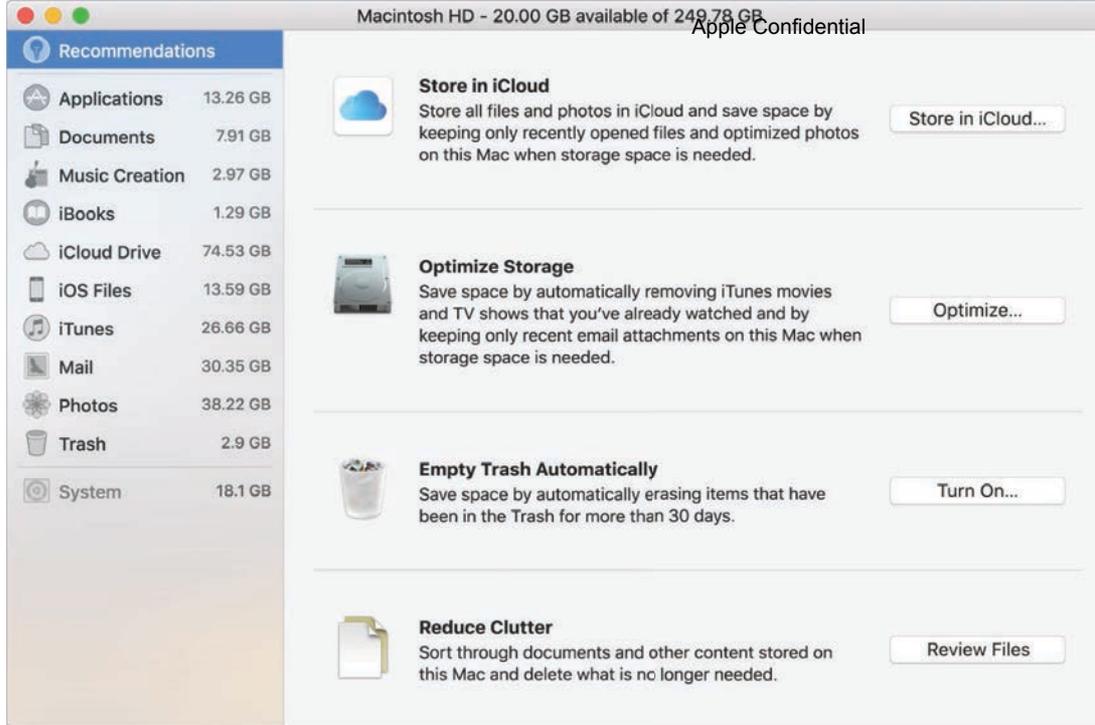
**Transfer using Ethernet.** To transfer your data over Ethernet, use an adapter (available separately) to connect the Ethernet cable to your MacBook Pro. Connect the other end of the Ethernet cable to your other computer (you might need another adapter, if your computer doesn't have an Ethernet port). Before transferring your data using Ethernet, make sure your MacBook Pro battery is fully charged.

For complete details about all the migration methods, see the Apple Support article [Move content to your new MacBook or late-2016 MacBook Pro](#).

## Save space on your MacBook Pro

macOS High Sierra frees up space on your MacBook Pro and helps you save space as you work. You can set options to free up even more space on your MacBook Pro.

**Optimize storage.** Go to Apple menu > About This Mac, click Storage, then click Manage, where you'll see storage recommendations. When your Mac is low on storage, you'll see an alert that can open this pane.



Set options to:

- *Store in iCloud:*
  - Store files in iCloud, where they stay secure and available. You can turn on iCloud Drive to store files on your desktop and in your Documents folder in iCloud.
  - Turn on iCloud Photo Library to store items from the Photos app in iCloud.

Even though your files are stored in the cloud, you can access them right where you left them on your MacBook Pro. For more information, see [Access your content anywhere with iCloud](#).

- *Optimize storage:* Remove iTunes movies and TV shows you've watched, and keep only recent email attachments.
- *Empty Trash automatically:* Automatically erase items that have been in the Trash for more than 30 days.
- *Reduce clutter:* Review documents and delete older ones stored on your MacBook Pro.

macOS High Sierra also prevents you from downloading the same file twice from Safari, alerts you to remove installer software when you finish installing a new app, clears logs and caches that are safe to remove when you're low on storage, and more, to help you save space as you work.

# Back up and restore

To keep your files safe, it's important to back up your MacBook Pro regularly. The easiest way to back up is to use Time Machine—which is built into your MacBook Pro—with an external storage device connected to your MacBook Pro.

Files stored in iCloud Drive and photos in iCloud Photo Library are automatically backed up to iCloud and don't need to be part of your Time Machine or other backup.

**Set up Time Machine.** Make sure your MacBook Pro is on the same Wi-Fi network as your external storage device, or connect your external storage device to your MacBook Pro. Click the System Preferences icon  in the Dock, click Time Machine, then select Back Up Automatically. Select the drive you want to use for backup, and you're all set.



Time Machine:

- Automatically backs up everything on your MacBook Pro, including system files, apps, accounts, preferences, music, photos, movies, and documents.
- Remembers how everything looked on any given day, so you can revisit your MacBook Pro as it appeared in the past or retrieve an older version of a document.
- Lets you restore your MacBook Pro from a Time Machine backup. So if anything happens to your MacBook Pro, your files and settings are safe and sound.

To learn more about backing up and restoring your MacBook Pro, search for "Time Machine," "external storage device," "backup," or "restore" in Mac Help (for more about using Mac Help, see [Mac Help](#)).

# Use MacBook Pro with Thunderbolt 3 with other devices

## Use your MacBook Pro with iCloud and Continuity features

There are many ways to use your MacBook Pro with your other devices, such as iPhone, iPad, iPod touch, or Apple Watch. You can transfer files, share and edit documents, unlock your MacBook Pro with your Apple Watch, turn your iPhone or iPad into an Internet hotspot, answer calls or send texts from your MacBook Pro, and more.

**Access your content across devices.** With iCloud, you can securely store, edit, and share your documents, photos, and videos across devices to make sure you're always up to date. To get started, see [Access your content anywhere with iCloud](#).

To sign in to iCloud if you didn't when you set up your Mac, click the System Preferences icon  in the Dock, click iCloud, then sign in with your Apple ID, or create a new one if you don't yet have one. To learn more, see [Set up iCloud on your Mac](#) in Mac Help.

**Use your MacBook Pro with other devices.** You can seamlessly move between your MacBook Pro and other devices using Continuity. Just sign in to iCloud with your Apple ID, and whenever your MacBook Pro and devices are near each other, they work together in great ways. With Continuity features, you can do things like start a task on one device and finish it on another (see [Handoff](#)), copy and paste between devices (see [Universal Clipboard](#)), answer calls or send texts from your MacBook Pro (see [Phone calls and text messages](#)), transfer files with AirDrop (see [AirDrop](#)), and more.

For a list of system requirements for devices that support Continuity, see the Apple Support article [System requirements for Continuity](#). To learn more about using Continuity with your MacBook Pro, see the Apple Support article [Use Continuity to connect your Mac, iPhone, iPad, iPod touch, and Apple Watch](#) or go to [All your devices](#).



# Access your content anywhere with iCloud

iCloud is the easiest way to make sure all your important content is everywhere you are. iCloud stores your documents, photos, music, apps, contacts, and calendars, so you can access them anytime you're connected to the web.

You can use your Apple ID to set up a free iCloud account, which comes with 5 GB of free storage space. Purchases you make from the iTunes Store, App Store, or iBooks Store don't count toward your available space.

iCloud keeps everything up to date on your devices. So if you have an iPhone, iPad, or iPod touch, just sign in to iCloud using the same Apple ID and you'll have everything you need.

For system requirements about devices that support iCloud, see the Apple Support article [System requirements for iCloud](#).



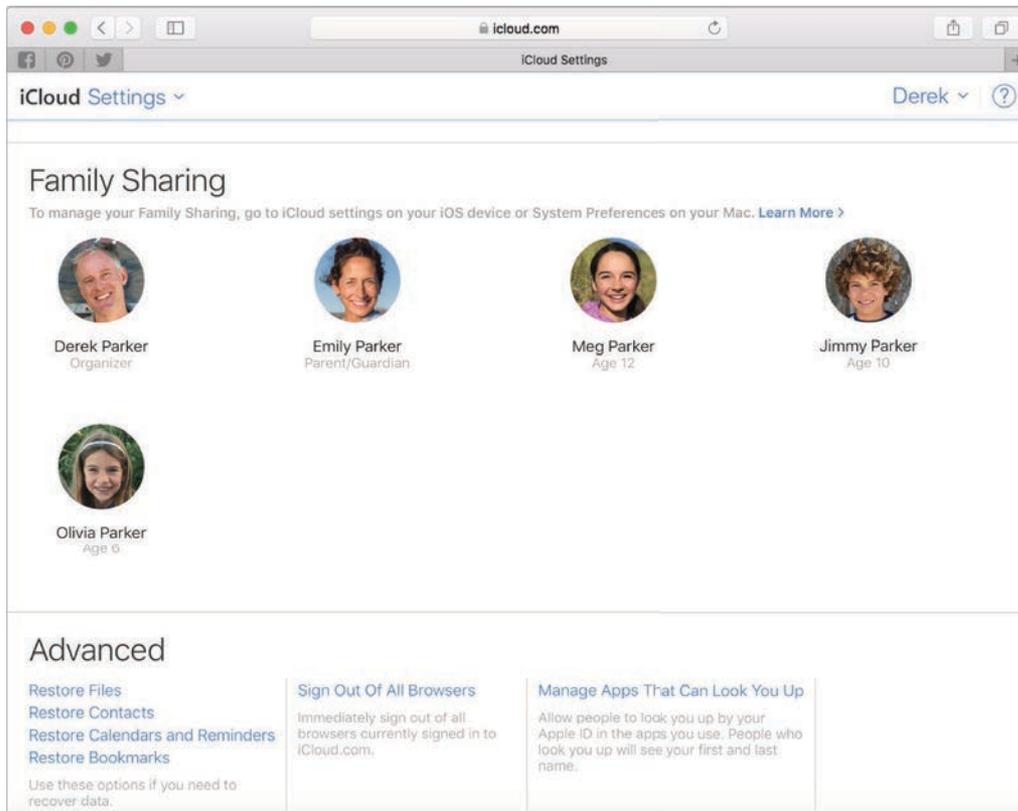
Here are some of the things you can do with iCloud.

**Automatically store your desktop and Documents folder in iCloud Drive.** You can save files in your Documents folder or on your desktop, and they're automatically available on iCloud Drive and accessible wherever you are. When working with iCloud Drive, you have access to files on your MacBook Pro, on your iPhone or iPad in the iCloud Drive app, on the web at [iCloud.com](#), or on a Windows PC in the iCloud app. When you make changes to a file on a device or on iCloud Drive, you'll see your edits wherever you view the file.

To get started, click the System Preferences icon  in the Dock, click iCloud, select iCloud Drive, click Options, then select "Desktop & Documents Folders." To learn more, see the Apple Support article [Use iCloud Drive on iCloud.com](#).

**Share purchases and storage with Family Sharing.** Up to six members of your family can share their purchases from the iTunes Store, App Store, and iBooks Store and share the same storage plan—even if they each use their own iCloud account. Pay for family

purchases with one credit card, and approve ~~Apple Confidential~~ spending right from your MacBook Pro or iOS device. Also share photos, a family calendar, reminders, and locations. To set up Family Sharing if you didn't when you set up your Mac, click the System Preferences icon  in the Dock, click iCloud, then click Set Up Family. To learn more, see the Apple Support article [Set up Family Sharing](#).



**Store and share photos using iCloud Photo Library and iCloud Photo Sharing.** Store your photo library in iCloud and see your photos and videos, as well as the edits you make to them, on all your devices. Share photos and videos with only the people you choose, and let them add their own photos, videos, and comments. To get started, click the System Preferences icon  in the Dock, click iCloud, select Photos, then click Options. To learn more, see the Apple Support article [iCloud Photo Library](#).

**Enjoy your purchases anywhere.** When you're signed in to iCloud, purchases you've made on the iTunes Store, App Store, and iBooks Store are available at any time, no matter which computer or device you used to purchase them. So all your music, movies, books, and more are available wherever you go.

**Locate your MacBook Pro with Find My Mac.** If your MacBook Pro is missing, you can easily locate it on a map, lock its screen, or even erase its data remotely if you have Find My Mac turned on. To turn on Find My Mac, click the System Preferences icon  in the Dock, click iCloud, then click Find My Mac. For more information, see the Apple Support article [If your Mac is lost or stolen](#).

**Learn more.** To learn more about iCloud, see [What is iCloud?](#) in Mac Help.

# Handoff

With Handoff, you can continue on one device where you left off on another. Work on a presentation on your MacBook Pro, then continue on your iPad. Or start an email message on your iPhone, then finish it on your MacBook Pro. View a message on your Apple Watch, and respond to it on your MacBook Pro. You don't have to worry about transferring files. When your MacBook Pro and devices are near each other, an icon appears in the Dock whenever an activity can be handed off; to continue, just click the icon.

Click to continue what you were doing on your iPhone.



**Turn on Handoff on your MacBook Pro.** Click the System Preferences icon  in the Dock, click General, then select "Allow Handoff between this Mac and your iCloud devices."

**Turn on Handoff on your iOS device.** Go to Settings > General > Handoff, then tap to turn on Handoff. If you don't see the option, your iOS device doesn't support Handoff.

**Turn on Handoff on your Apple Watch.** In the Apple Watch app on iPhone, go to Settings > General, then tap to turn on Enable Handoff.

*Note:* To use Handoff, you need an iPhone, iPad, or iPod touch with the Lightning connector and iOS 8 (or later) installed. Make sure your MacBook Pro and iOS device have Wi-Fi and Bluetooth turned on and are logged in with the same Apple ID.

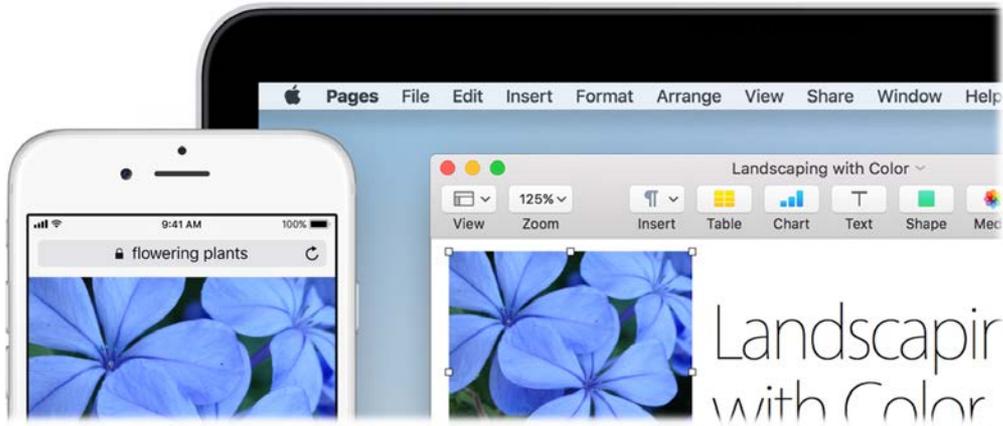
Handoff works with Safari, Mail, Calendar, Contacts, Maps, Messages, Notes, Reminders, Keynote, Numbers, and Pages.

**Learn More.** To learn more about Handoff, see [Pick up where you left off with Handoff](#) in Mac Help.

## Universal Clipboard

Copy content from one device, and paste it into another nearby device within a short period of time. The contents of your clipboard are sent over Wi-Fi and made available to all Mac and iOS devices that are logged in with the same Apple ID and have Handoff, Wi-Fi, and Bluetooth turned on. For more information, see [Handoff](#).

*Note:* To use Universal Clipboard, you need an iPhone, iPad, or iPod touch with the Lightning connector and iOS 10 (or later) installed.



**Use across apps.** You can copy and paste images, text, photos, and video between any apps that support copy and paste on your Mac, iPhone, iPad, and iPod touch.

**Copy and paste files.** You can quickly move files from one Mac to another using Universal Clipboard. Copy a file on your MacBook Pro and paste it into a Finder window, Mail message, or any app that supports copy and paste on a nearby Mac. You must be signed in with the same Apple ID on both Macs.

**Learn more.** To learn more about Universal Clipboard, see [Copy and paste across devices](#) in Mac Help.

## AirDrop

AirDrop makes it easy to share files with nearby Mac computers and iOS devices. The devices don't need to share the same Apple ID.

*Note:* AirDrop for iOS requires devices that have the Lightning connector and iOS 7 or later. Not all older Macs support AirDrop (for a list of supported Macs, see the Apple Support article [Use AirDrop to send content from your Mac](#)).



**Send a file from the Finder.** Click the Finder icon  in the Dock, then click AirDrop in the sidebar on the left. When the person you want to send a file to appears in the window, drag the file to him or her.

**Send a file from an app.** While using an app like Pages or Preview, click the Share button  and choose AirDrop.

**Control who can send items to you using AirDrop.** Click the Finder icon  in the Dock, click AirDrop in the sidebar, then click “Allow me to be discovered by” and choose an option.

When you send a file to someone, the recipient can choose whether or not to accept the file. When someone sends you a file, you can find it in the Downloads folder on your MacBook Pro.

 **Tip:** If you don't see the recipient in the AirDrop window, make sure both devices have AirDrop and Bluetooth turned on and are within 30 feet (9 meters) of each other. If the recipient is using an older Mac, try clicking the “Don't see who you're looking for?” link.

**Learn more.** To learn more about AirDrop, see [Use AirDrop to send files to devices near you](#) in Mac Help.

## Phone calls and text messages

You can take calls—and make them—right from your MacBook Pro. You can also receive and send text messages.

*Note:* A Wi-Fi connection is required in order to make or receive phone calls on your MacBook Pro.

**Take or make a call.** When someone calls your iPhone, click the notification that appears on your MacBook Pro screen. Your MacBook Pro becomes a speakerphone. If you want to make a call, click a phone number in a Spotlight search or in an app such as FaceTime, Contacts, Safari, or Calendar. You need a nearby device (iPhone or iPad) with a cellular connection in order to make phone calls.



**Send and receive messages.** Send and receive SMS and MMS text messages right from your MacBook Pro. When friends and family text you, you can respond with whichever device is closest. All messages appear on your MacBook Pro, iPhone, iPad, iPod touch, and Apple Watch. For more information, see [Messages](#).

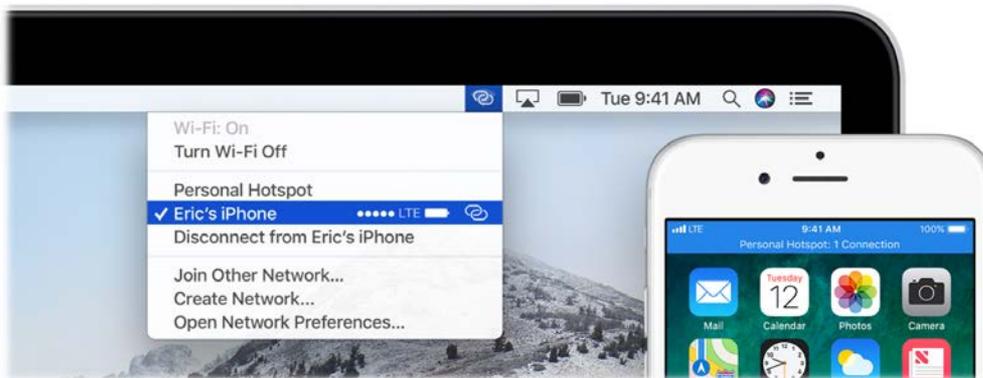


**Learn more.** To learn more about phone calls and text messages, see [Make and receive phone calls on your Mac](#) in FaceTime Help and [Set up your iPhone for SMS text messages on your Mac](#) in Messages Help.

## Instant Hotspot

Lost your Wi-Fi connection? Use the Personal Hotspot on your iPhone or iPad to connect your MacBook Pro to the Internet.

*Note:* Personal Hotspot requires an iPhone or cellular model iPad, with iOS 8 or later.



**Connect to your device's Personal Hotspot.** Click the Wi-Fi status icon  in the menu bar, then choose your iPhone or iPad in the list of devices that appears. (You don't need to do anything on your device—MacBook Pro connects automatically.)

**Check the status of your connection.** Look in the Wi-Fi status menu to see the strength of the cellular signal.

When you're not using the hotspot, your MacBook Pro disconnects to save battery life.

**Learn more.** To learn more about using Instant Hotspot, see [Use an iPhone or iPad to connect to the Internet](#) in Mac Help.

# Unlock your MacBook Pro with Apple Watch

Use your authenticated Apple Watch to automatically unlock your MacBook Pro when you're within about three meters of your computer. Just wake your Mac and start using it—no need to enter a password. Auto Unlock uses strong encryption to provide secure communication between your Apple Watch and MacBook Pro.

*Note:* Auto Unlock is a feature for Macs (mid-2013 or later) running macOS Sierra or later, and Apple Watch running watchOS 3 or later.



**Set up two-factor authentication for your Apple ID.** Auto Unlock works when your Apple ID has two-factor authentication turned on. Go to Apple menu > System Preferences > iCloud > Account Details, click Security, then select Set Up Two-Factor Authentication. For more information, see the Apple Support article [Two-factor authentication for Apple ID](#).

Make sure “Disable automatic login” is also selected. (You won't see this option if you're using FileVault, but you can still use the Auto Unlock feature.)

**Set up Auto Unlock.** Sign in to iCloud with the same Apple ID on all your devices, then click the System Preferences icon  in the Dock, or choose Apple menu > System Preferences. Click Security & Privacy, then select “Allow your Apple Watch to unlock your Mac.”

*Note:* Auto Unlock works only when your Apple Watch is authenticated with a passcode. You authenticate your Apple Watch each time you put it on, so no extra steps are required after you enter your passcode.

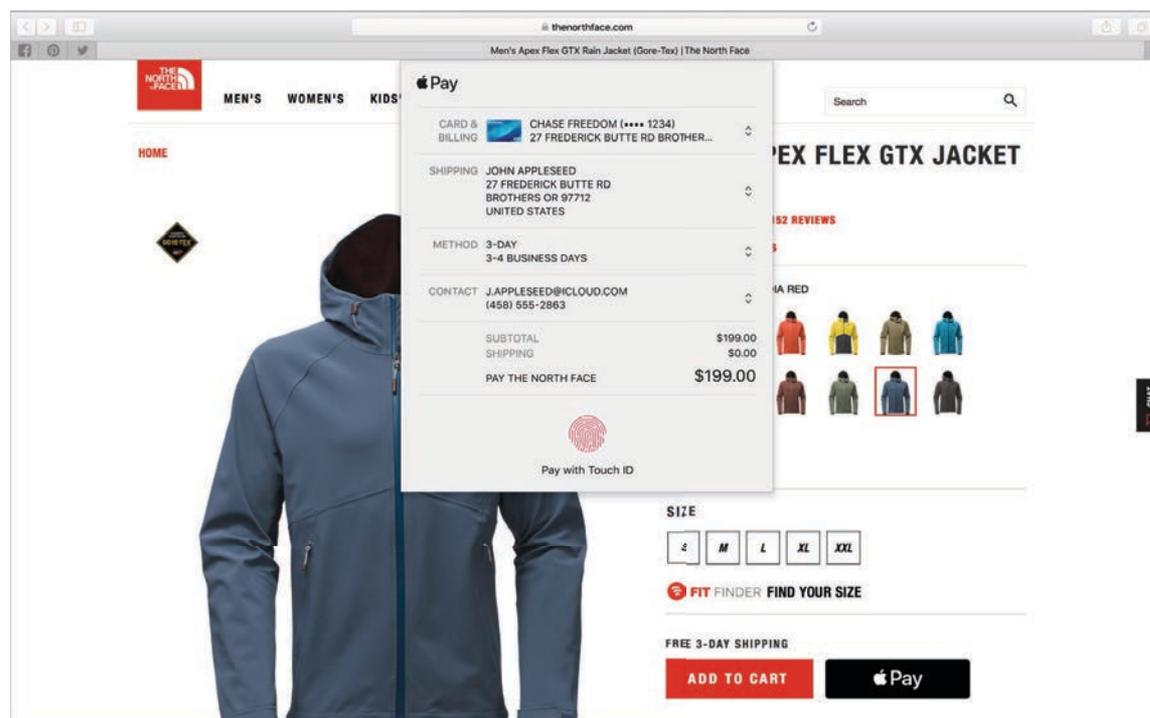
**Skip the sign-in.** Walk up to your sleeping MacBook Pro wearing your authenticated Apple Watch on your wrist, and lift the cover or press a key to wake your MacBook Pro—Apple Watch unlocks it so you can get right to work.

**Learn more.** To learn more about how to unlock your Mac with Apple Watch, see [Unlock your Mac with Apple Watch](#) in Mac Help.

# Apple Pay

You can make easy, secure, and private purchases on websites using Apple Pay on your MacBook Pro. With Apple Pay, your credit or debit card information is never stored by Apple or shared with the merchant. When you shop online using Safari, look for an Apple Pay button. If your MacBook Pro has the Touch Bar, you can complete a purchase using Touch ID. Otherwise, use your iPhone or Apple Watch to complete the purchase. Read on for details.

*Note:* For information about Apple Pay, go to [www.apple.com/apple-pay](http://www.apple.com/apple-pay). For information about current card issuers, see the Apple Support article [Apple Pay participating banks](#).



**Make a purchase with iPhone or Apple Watch.** If your MacBook Pro doesn't have the Touch Bar, you can use your iPhone or Apple Watch to complete a purchase. No extra setup is required—Apple Pay uses the default credit or debit card, shipping, and contact information you've already set up on your iPhone or Apple Watch. You must be signed in to an iPhone or Apple Watch that has Apple Pay set up with the same Apple ID you're using on your MacBook Pro. Click the Apple Pay button on the website, then to confirm the payment, use Touch ID or the passcode on your iPhone, or double-click the side button on your unlocked Apple Watch.

**Make a purchase using the Touch Bar.** If your MacBook Pro has the Touch Bar, you're prompted to configure Apple Pay during setup. When you choose Apple Pay on a website, the merchant name and purchase amount appears on the Touch Bar. Place your finger lightly on the Touch ID sensor to authenticate and complete your purchase.

*Note:* If you don't choose to set up Apple Pay when you first start up your MacBook Pro with the Touch Bar, you can set it up later in the Wallet & Apple Pay pane of System Preferences. Manage your payment cards there—add or delete cards and make updates to contact information.

For more information about Apple Pay, see the Apple Support articles [Set up Apple Pay](#), [Using Apple Pay in stores, within apps and on the web](#), and [Manage the cards that you use with Apple Pay](#).

## AirPlay

Show whatever's on your MacBook Pro on the big screen using AirPlay Mirroring. To mirror the MacBook Pro screen on your TV screen or to use the HDTV as a second display, connect your HDTV to Apple TV and make sure the Apple TV is on the same Wi-Fi network as your MacBook Pro. You can also play web videos directly on your HDTV without showing what's on your desktop—handy when you want to play a movie but keep your work private.



**Mirror your desktop using AirPlay Mirroring.** Click the AirPlay icon  in the menu bar, then choose your Apple TV. When an AirPlay display is active, the icon turns blue.

In some cases, you can use an AirPlay display even if your MacBook Pro isn't on the same Wi-Fi network as Apple TV (called *peer-to-peer AirPlay*). To use peer-to-peer AirPlay, you need an Apple TV (3rd generation rev A, model A1469 or later) with Apple TV software 7.0 or later.

**Play web videos without showing your desktop.** When you find a web video with an AirPlay icon , click the icon, then select your Apple TV.

**Tip:** If the image doesn't fit your HDTV screen when you mirror the screen, adjust the desktop size for the best picture. Click the AirPlay icon , then choose an option under "Match Desktop Size To."

Apple TV is sold separately at [apple.com](http://apple.com) or your local Apple Store.

**Learn more.** To learn more about AirPlay, search for “AirPlay” in Mac Help (for more about using Mac Help, see [Mac Help](#)). To learn more about using a second display with your MacBook Pro, see [Use an external display](#).

## AirPrint

You can use AirPrint to print wirelessly to:

- An AirPrint-enabled printer on your Wi-Fi network
- A network printer or printer shared by another Mac on your Wi-Fi network
- A printer connected to the USB port of an AirPort base station

**Print to an AirPrint printer.** When you print from an app, click the Printer pop-up menu in the Print dialog, then choose a printer in the Nearby Printers list.

**Can't find the printer you're looking for?** Make sure it's connected to the same Wi-Fi network as your MacBook Pro. If it's connected and you still don't see it, try adding it: Click the System Preferences icon  in the Dock, click Printers & Scanners, then click Add . (You may have to temporarily connect the printer to your MacBook Pro using a USB cable with an adapter, if necessary.)

**Learn more.** To learn more about AirPrint, see [Print wirelessly with AirPrint](#) in Mac Help.

For a list of AirPrint-enabled printers and other supported printers, see the Apple Support articles [About AirPrint](#) and [Printer and scanner software available for macOS](#).

# Apps

## Included apps

Your MacBook Pro with Thunderbolt 3 comes with a collection of great apps for things you do every day, like surfing the web, sending mail and messages, and arranging your calendar. It also comes with apps like Photos, iMovie, GarageBand, Pages, Numbers, and Keynote—so you can be creative and productive right from the start. The apps that come with your MacBook Pro are described in the following sections.



**Find even more apps.** Click the App Store icon  in the Dock to find apps for everything you want to do. See [App Store](#) to learn more.

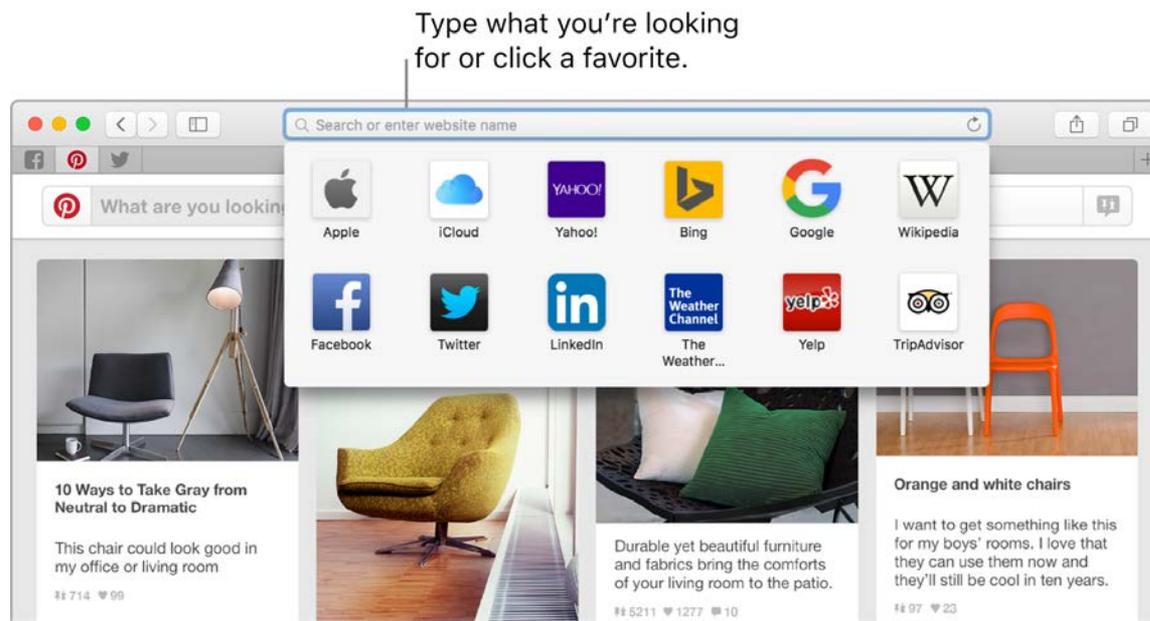
**Use the Touch Bar.** If your MacBook Pro has the Touch Bar, you can use it to perform shortcuts for common tasks. Learn more in the sections that follow.

**Get help for any app.** Click the Help menu (in the menu bar at the top of the screen) when you're using the app.

### Safari

Safari is the fastest, safest, and most energy-efficient way to surf the web on your Mac.

**Start searching.** Click the Smart Search field at the top of the window to see websites you visit most frequently. Or start typing a word or website address—Safari shows you matching websites, as well as Safari Suggestions for news, Wikipedia articles, iTunes music, weather forecasts, sports scores and player stats, stock prices, help from Apple, and nearby points of interest.



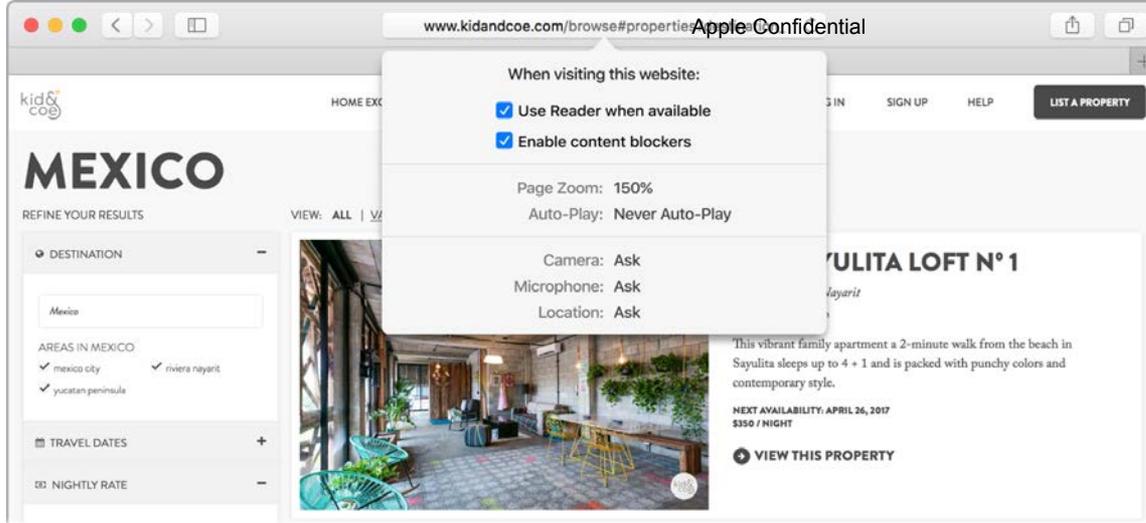
**View multiple websites in one window.** Click **+** at the far right of the tab bar to open a new tab, then enter an address. To keep a website handy, drag its tab left to *pin* it, and it stays in the tab bar.



**See what's open on each of your devices.** You can see open webpages on all your devices that are signed in to the same iCloud account. Just click the Show All Tabs button  at the top of the window and scroll down if necessary.

**Read without distraction.** If the article you're reading includes animations or flashy ads, you can use Reader view to strip out the distractions and focus on the text. Click the Reader button  in the Smart Search field (if it's available). To use Reader view automatically for that website, Command-click the Reader button and choose "Use Reader Automatically on [website name]."

**Set up preferences for your favorite sites.** If you're always adjusting settings for certain websites, you can use Safari preferences to save those settings. You can turn on your content blocker, allow notifications, set a specific page zoom, and more—only for the websites you choose. When you're visiting a website, choose Safari > Settings for This Website.



**Tip:** In a webpage, force click a word to see its definition or a Wikipedia article, if one is available. Try force clicking text in other apps, like Messages or Mail, to get more info.

**Shop with Apple Pay.** When you're shopping online on a supported website, click the Apple Pay button to make a purchase. To complete the transaction, use Touch ID or the passcode on your iPhone, or double-click the side button on your unlocked Apple Watch. If your MacBook Pro has the Touch Bar, place your finger lightly on the Touch ID sensor to complete your purchase.

**Use the Touch Bar.** Tap the left or right arrow button in the Touch Bar to go backward or forward. Tap to open a new tab.



Tap the tab scrubber in the Touch Bar to move between open tabs.



Tap the Search field in the Touch Bar, then tap a favorite to open it. When you finish, tap to return to the Touch Bar you started with.



Customize the Touch Bar to add your favorite controls (choose View > Customize Touch Bar).



For more information, see [Customize the Touch Bar](#).

## Mail

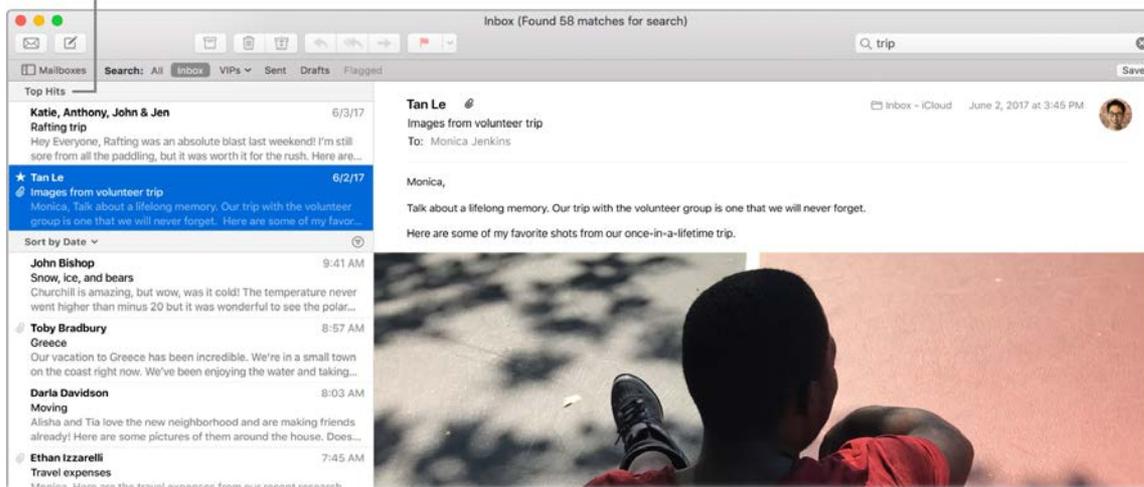
Mail lets you manage all your email accounts from a single app. It works with most popular email services, such as iCloud, Gmail, Yahoo Mail, and AOL Mail.

**One-stop email.** Tired of signing in to multiple websites to check your email accounts? Set up Mail with all your accounts so you can see all your messages in one place. Choose Mail > Add Account.

 **Ask Siri.** Say something like: “Any new mail from Laura today?”

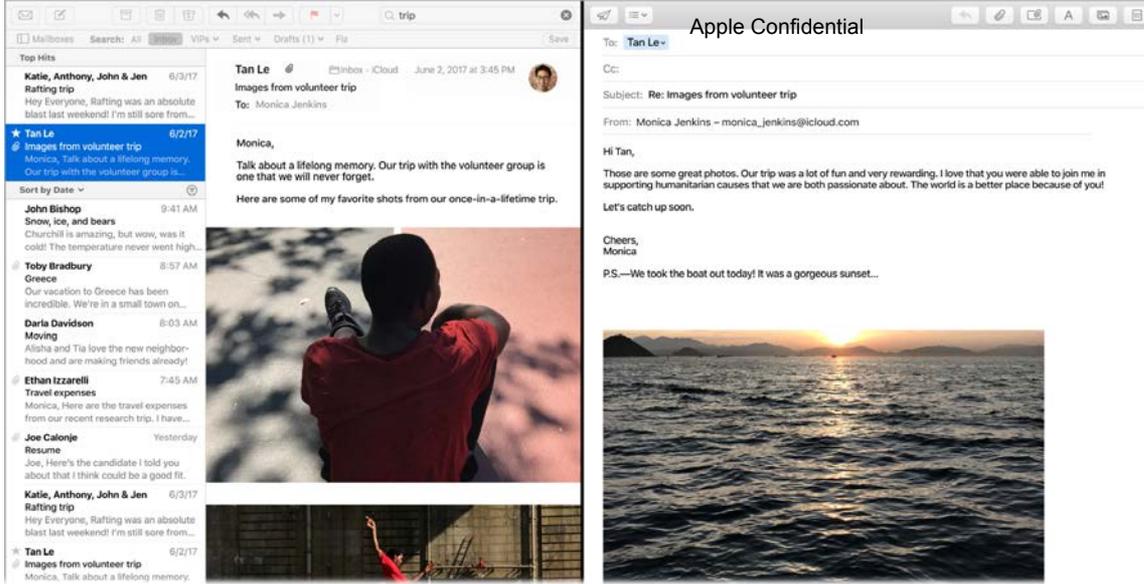
**Find the right message.** As you type in the search field, suggestions for messages that best match your query appear at the top of the search results.

Top Hits shows the most relevant messages in search results.



**Add events and contacts right from Mail.** When you receive a message that includes a new email address or event, just click Add to add it to Contacts or Calendar. Force click an address to see a preview of the location, which you can open in Maps.

**View in full screen.** When you're using Mail in full screen, windows for new messages automatically open in Split View on the right, so it's easy to reference another message in your inbox as you write.



**Never miss an email.** Check the Mail icon in the Dock to see the number of unread messages. When you get new email, a notification also appears at the top-right of the screen so you can quickly preview the new messages. (Don't want notifications? To turn them off, click the System Preferences icon  in the Dock, then click Notifications.)

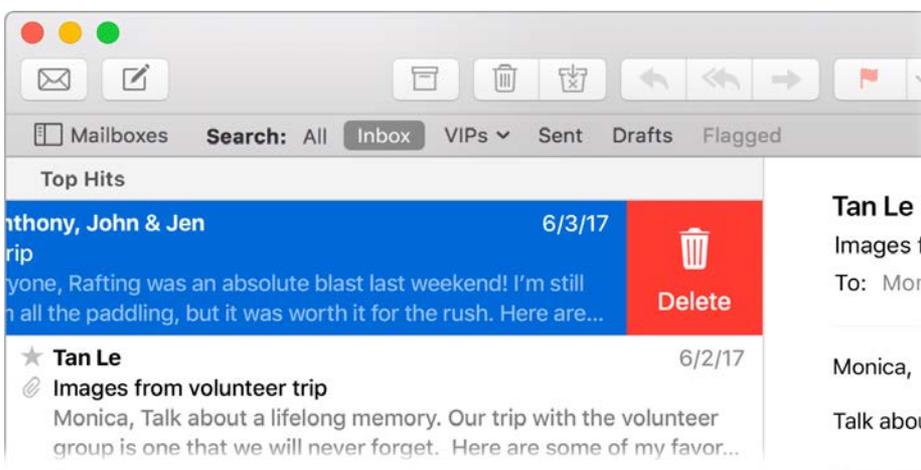


**Use the Touch Bar.** Use the Touch Bar for many common tasks, like composing, replying, archiving, marking as junk, and flagging messages.



Customize the Touch Bar to add your favorite controls (choose View > Customize Touch Bar). For more information, see [Customize the Touch Bar](#).

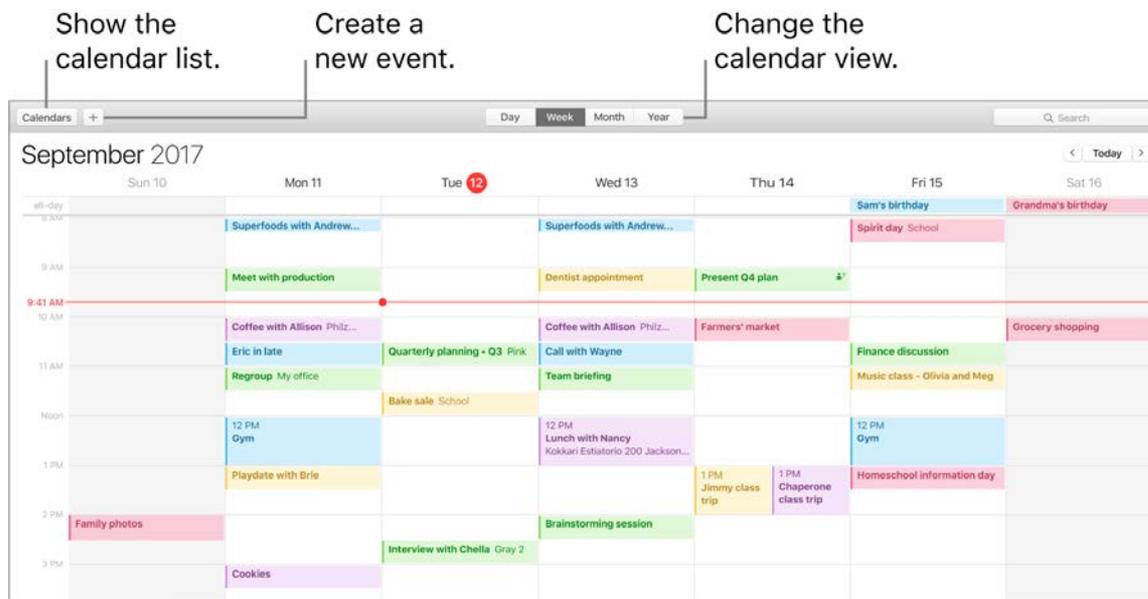
 **Tip:** To quickly delete a message in your inbox, swipe left across the message with two fingers on the trackpad, then click . Or swipe right with two fingers to mark the message as Unread.



**Learn more.** To learn more about Mail, see [Mail Help](#).

Never miss an appointment with Calendar. Keep track of your busy schedule by creating multiple calendars, and manage them all in one place.

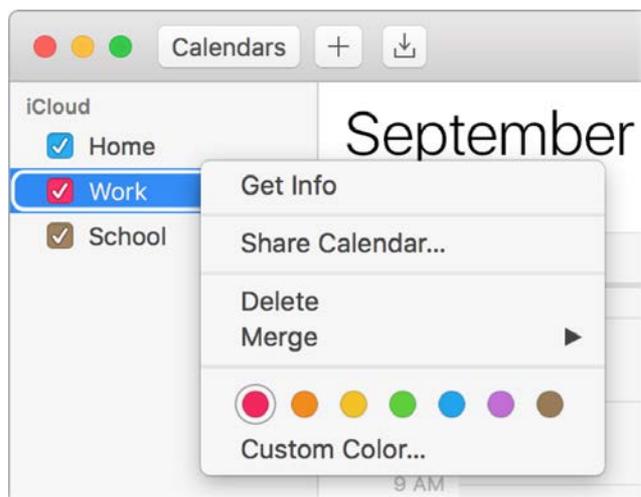
**Create events.** Click **+** to add a new event. To invite someone, double-click the event, click the Add Invitees section, then type an email address. Calendar lets you know when your invitees reply.



**See all your calendars—or just a few.** Click the Calendars button to see a list of all your calendars; click the ones you want to see in the window.

**Ask Siri.** Say something like: “Set up a meeting with Mark at nine in the morning.”

**A calendar for every part of your life.** Create separate calendars—for example, for home, work, and school—each with its own color. Choose File > New Calendar to create a calendar, then Control-click each calendar to choose a new color.



**Share across your devices and with others.** When you’re signed in to iCloud, your calendars are kept up to date on all your Macs, iOS devices, and Apple Watch. You can also share calendars with other iCloud users.

**Use the Touch Bar.** Tap the Today button to view or edit today’s events, or use the slider to select the month—past or future.

Select an event in your calendar, and tap buttons to specify the calendar for the event, get event details, edit the time or place, and add or delete invitees.

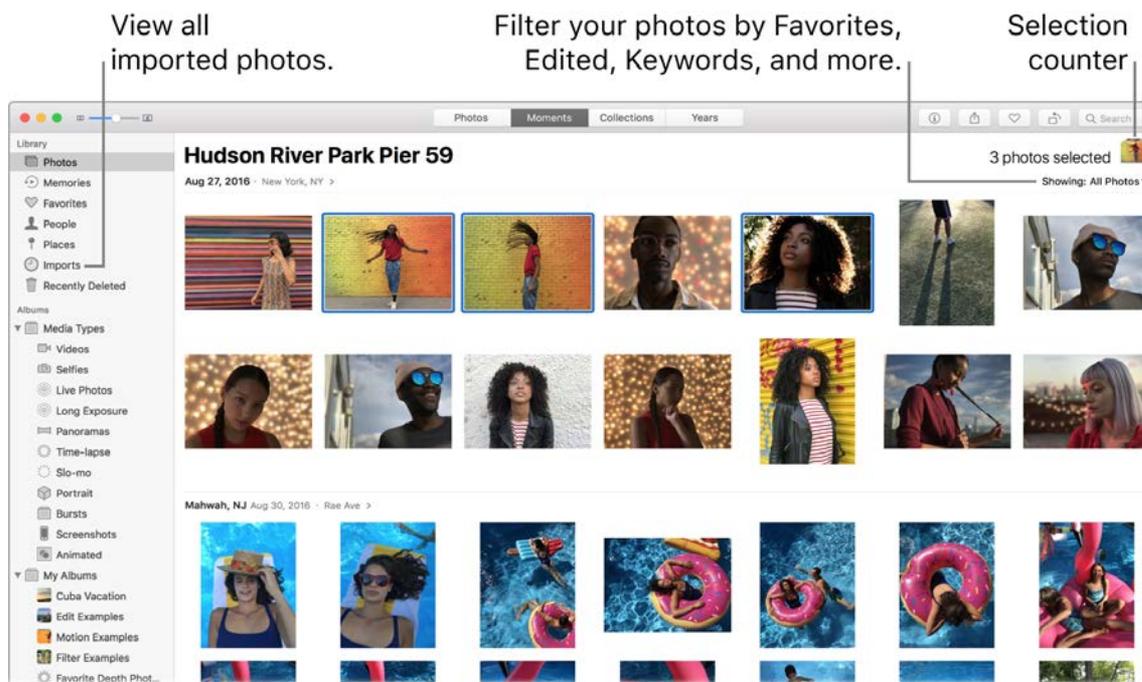


**Tip:** If you add a location to an event, Calendar shows you a map, estimated travel time and time to leave, and even the weather forecast. Force click any event in Calendar to see more details.

**Learn more.** To learn more about Calendar, see [Calendar Help](#).

## Photos

Use Photos to organize, edit, and share your photos and videos, and keep your entire photo library up to date on all your devices with iCloud Photo Library. With Photos, it's easy to organize albums, find just the photo that you're looking for, and make beautiful slideshows and photo gifts.



**Get organized.** The toolbar in Photos now lets you access all Photos, Moments, Collections, or Years with one click, and you can customize the sidebar by dragging and dropping sections and albums. Press Command and then click photos to select multiple photos at once. Then you can click  to batch rotate them, mark all as Favorite by clicking , or use the selection counter to drag and drop the selected photos into a new album.

**Relive meaningful moments.** Click Memories to see favorite and forgotten occasions from your photo library. Memories automatically creates photo collections from events, like a wedding or family vacation, or from themes, like pets and babies.

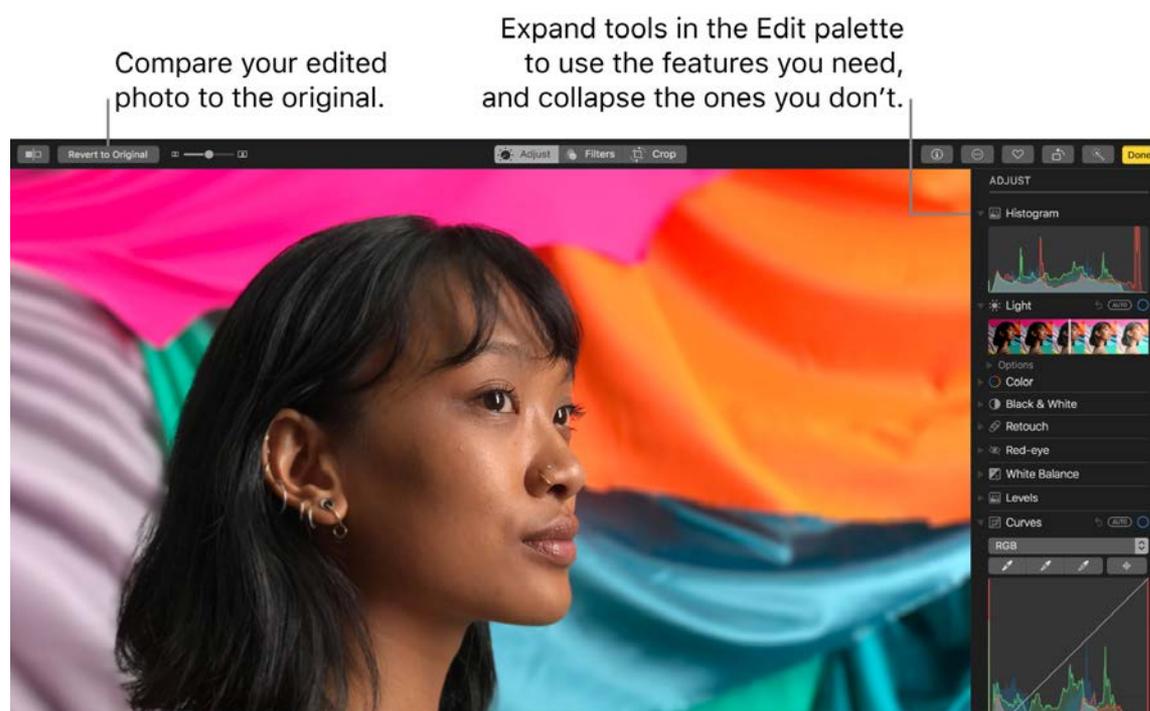
**People and Places.** The People feature automatically organizes your photo library by people in your photos, based on how often each person appears in your library. Make someone a favorite by clicking the Favorite button  that appears on their photo, and they'll always appear at the top of the album. Use the Places album to view all your photos with location data on an interactive map. Zoom in on the map to reveal more photos from a specific location.

 **Tip:** You can add location info to any photo. While viewing the photo, click the Info button , click Assign a Location, then start typing. Choose your location in the list, or type it and press Return.

**Find the perfect shot.** Search your photos based on what's in them, the date they were taken, people you've named in them, and their location—if provided. Photos identifies objects, scenes, and people, so you don't have to use keywords to tag each photo.

 **Ask Siri.** Say something like: "Show me photos of Sally."

**Edit like never before.** Use editing tools to adjust light and color, apply filters, crop, retouch, and more, all easily accessible by clicking Edit while viewing any photo. For more advanced editing, try the Levels tool to adjust highlights and shadows, or Curves to make fine-tuned contrast adjustments. As you're making changes, click the Compare button  to quickly toggle between the unedited and edited versions. You can use some third-party apps directly within Photos, which makes it even easier to work on your photo-related projects.



**Get lively.** With Live Photos, use the new Loop effect to continuously loop the action, or use Bounce to play the animation forward and backward. You can also use Long Exposure to blur motion in your Live Photos.

**Use the Touch Bar.** The Touch Bar displays a scrubber of all of the photos and videos in your library, which you can use to speed your search for just the right photo. You can tap to mark a selected photo as a favorite , rotate it , or add it to a new or existing album.



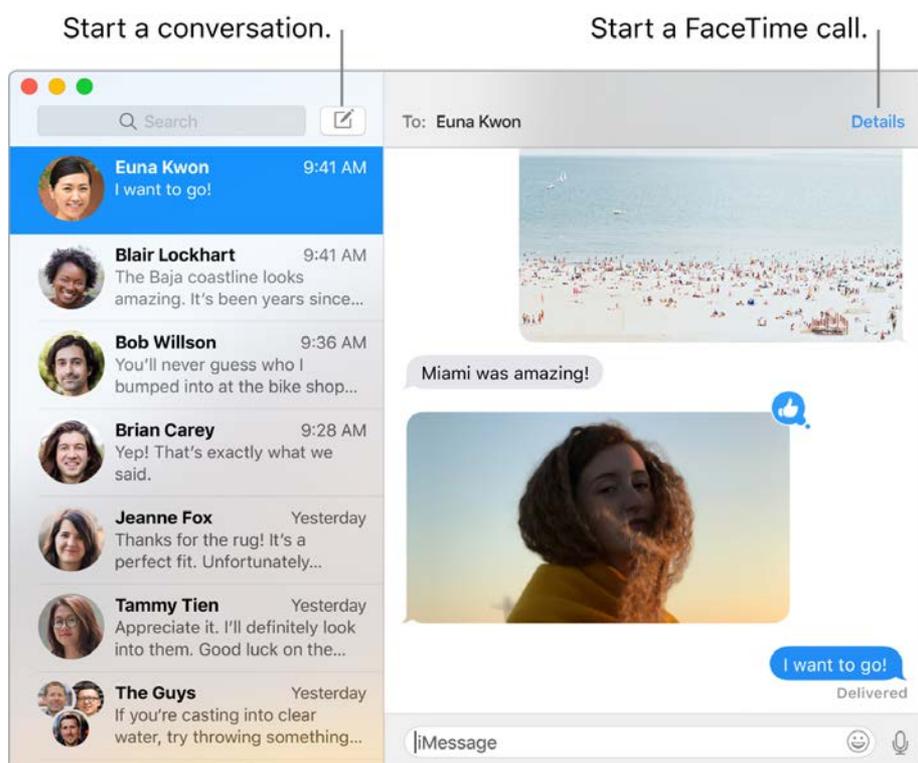
When you edit a photo, tap buttons to crop, apply filters, adjust light, color, and other settings, or retouch your selection. Use additional options, such as enhance ✨, compare □□, and more, depending on your selection in the previous Touch Bar. When you're happy with your changes, tap Done.



**Learn more.** To learn more about Photos, see [Photos Help](#).

## Messages

With Messages, it's easy to stay in touch. Connect with one or more people through text, audio, or video. And if you want to share files, you can do that too.



**Sign in and send.** Sign in with your Apple ID to exchange unlimited messages—including text, photos, Live Photos, video, and more—with anyone with a Mac, iPhone, iPad, iPod touch, or Apple Watch.

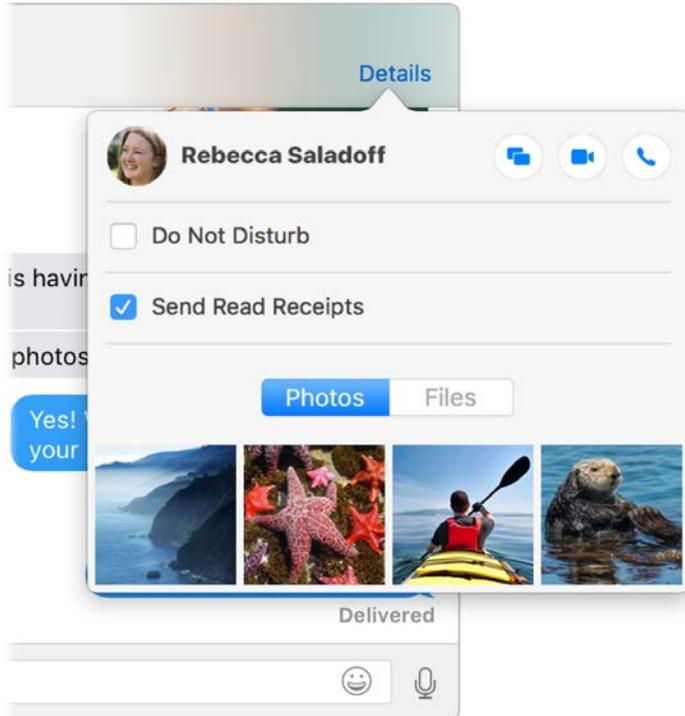
 **Tip:** You can also send and receive SMS and MMS messages on your Mac, if your iPhone (with iOS 8.1 or later) is signed in to Messages with the same Apple ID. On your iPhone, go to Settings > Messages, tap Text Message Forwarding, then tap the name of your Mac to turn on Text Message Forwarding. On your Mac, you'll see an activation code. Enter this on your iPhone, then tap Allow.

 **Ask Siri.** Say something like: "Text Mom I'll be late."

**Make messages fun.** Liven up discussions by responding to messages with large emoji or Tapbacks. To add a Tapback, click and hold a message, then choose a Tapback. And look out for stickers, Digital Touch, invisible ink, and handwritten messages that your

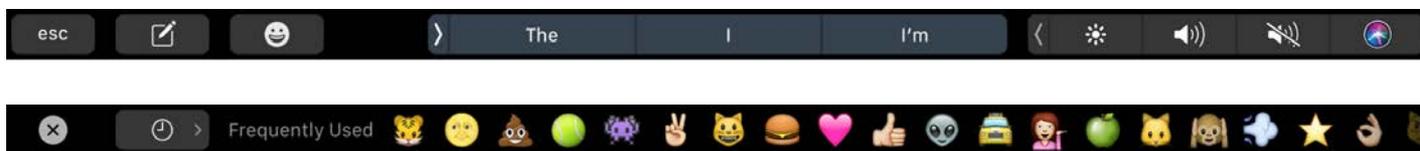
friends send you from their iOS device or Apple Watch.

**When a text isn't enough.** If your friend also has FaceTime, you can start a FaceTime video or audio chat right from a conversation in Messages. Just click Details in the message window, then click the Video button  or Audio button .



**Share your screen.** You can share your screen with a friend—and vice versa—and even open folders, create documents, and copy files by dragging them to the desktop on the shared screen. Click Details, then click the Screen Share button .

**Use the Touch Bar.** Tap  to create a new message. Tap the typing suggestions to add words, and tap  to see emoji that you can add to your message. Click a message in the thread to see Tapbacks on the Touch Bar, and tap to add them.



**Learn more.** To learn more about Messages, see [Messages Help](#).

## FaceTime

Make video and audio calls from your Mac with FaceTime.

 **Ask Siri.** Say something like: “Make a FaceTime call to Sharon.”

**Video or audio only?** Click the Video button to make a FaceTime video call. If it's not convenient to make a video call, click the Audio button to make an audio-only call.

 **Tip:** While a video call is in progress, you can drag the small picture-in-picture window to any corner of the FaceTime window.

Choose the type of call.

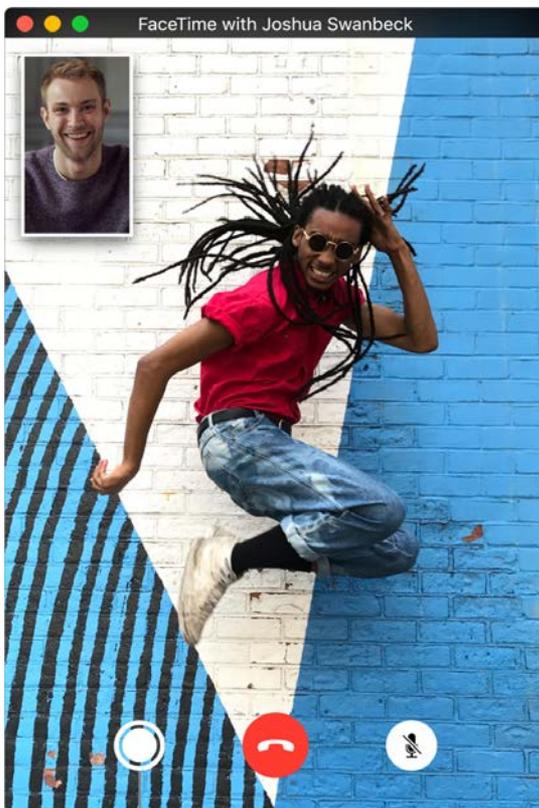
Search or enter contact details.

Apple Confidential



List of recent calls

**Capture a Live Photo.** When you're on a FaceTime video call, you can take a Live Photo of the person you're speaking with—just click the Live Photo button . Your friend must be using a Mac with macOS High Sierra, or an iOS device with iOS 11 or later. Both devices must have their FaceTime preferences set to allow Live Photos.



Capture a Live Photo.

**Leave a message.** If your FaceTime video call is declined or unanswered, click Message to send a text message.

**Make a phone call.** If you have an iPhone with iOS 8 or later, make phone calls right from your Mac using FaceTime. Just make sure your Mac and iPhone are signed in to the same iCloud account and have the feature turned on. (On your Mac, open FaceTime, choose FaceTime > Preferences, then select “Calls from iPhone.”)

*Note:* A Wi-Fi connection is required in order to make or receive calls on your MacBook Pro.

**Use the Touch Bar.** Make and answer video or voice calls, get info about a caller, or send a message when you can’t talk, all from the Touch Bar.



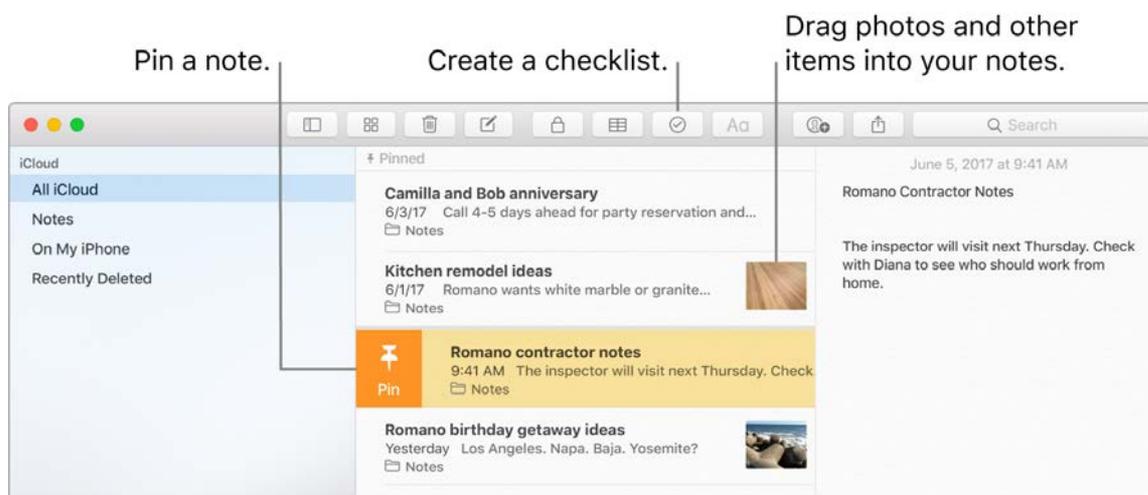
**Learn more.** To learn more about FaceTime, see [FaceTime Help](#).

## Notes

Notes are more than just text. Add a checklist and check off items as you complete them. Or add photos, videos, and content from other apps, such as a web link from Safari or a location from Maps.

 **Ask Siri.** Say something like: “Create a new note.”

**Check off tasks.** Click the Checklist button  to add an interactive checklist to a note—perfect for completing a to-do list or working through a recipe.



 **Tip:** When you’re signed in to iCloud, your notes are kept up to date on all your devices—so you can create a to-do list on your Mac, then check off items on your iPhone while you’re on the go.

**Add photos, videos, and more.** Choose Window > Photo Browser to add items from your Photos library to a note. Or drag a photo, video, PDF, or other document from the desktop.

**Add a table.** Click the Table button  to add a table to your note. You can even copy a table from a website or another app and paste it into your note.

**Put a pin in it.** To keep a note at the top of the notes list, swipe right on the note in the notes list and click .

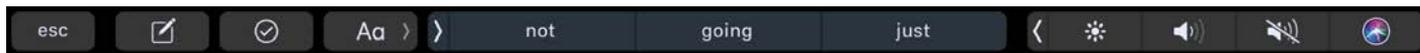
**Lock a note.** To lock a note with a password, choose Notes > Preferences, then click Set Password. Then select the note you want to lock, and choose File > Lock This Note. You can unlock a note using Touch ID. Choose Notes > Preferences, then select Use Touch ID.

**Share a note.** You can invite people to view and edit your notes by sharing them. Click the Add People button  and select a method for sending the link.

**Use the Touch Bar.** Tap  to create a new note. Tap  to add a checklist item to your note.



Tap typing suggestions to add text.



Tap  to display text formatting buttons to align text left or right and apply bold, italic, or underscore styles.



Tap  to use note paragraph styles, like numbered lists, bulleted lists, or headings.



**Learn more.** To learn more about Notes, see [Notes Help](#).

## Maps

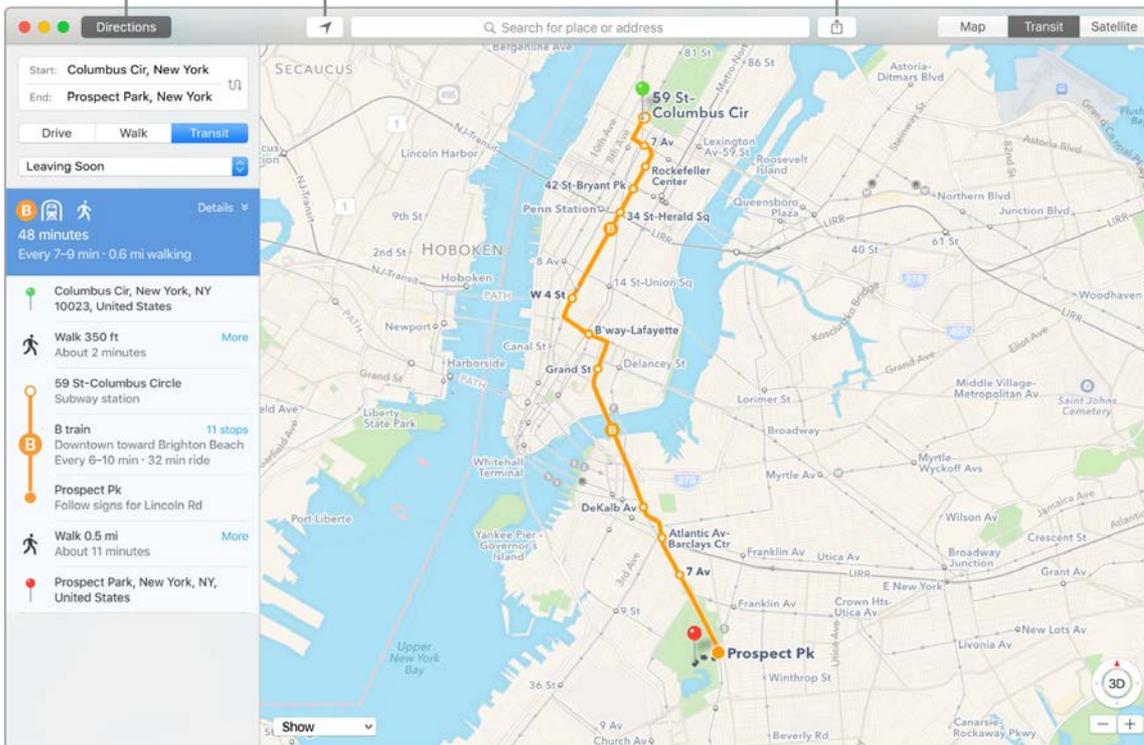
Get directions and view locations using a map or a satellite image. Or use Flyover to view select cities in 3D. Force click a location to drop a pin there.

Get detailed directions, including for travel by mass transit.

Apple Confidential

Show your current location.

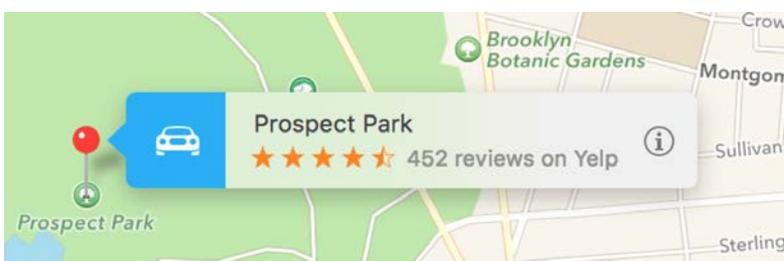
Send directions to your iPhone.



**Let iPhone show you the way.** Click Directions to find the best route to your destination, then click the Share button  to send the directions to your iPhone for turn-by-turn voice navigation.

**Get there on public transit.** Maps provides public transit information for select cities. Click Transit, then click a destination to get suggested travel routes and estimated travel time.

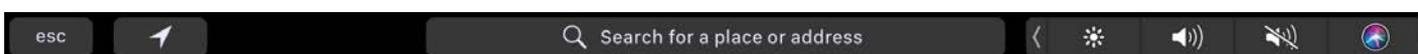
**More than just maps.** For local points of interest such as hotels and restaurants, Maps shows you phone numbers, photos, and even reviews.



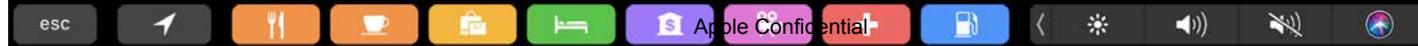
 **Ask Siri.** Say something like: "Find coffee near me."

**WARNING:** For important information about navigation and avoiding distractions that could lead to dangerous situations, see [Important safety information](#).

**Use the Touch Bar.** Specify your current location  on the map and open the search field to enter where you want to go.



You can tap a button to find a nearby restaurant, coffee shop, store, hotel, bank, movie theater, hospital, or gas station.



When the location is returned, tap Directions to get the route.



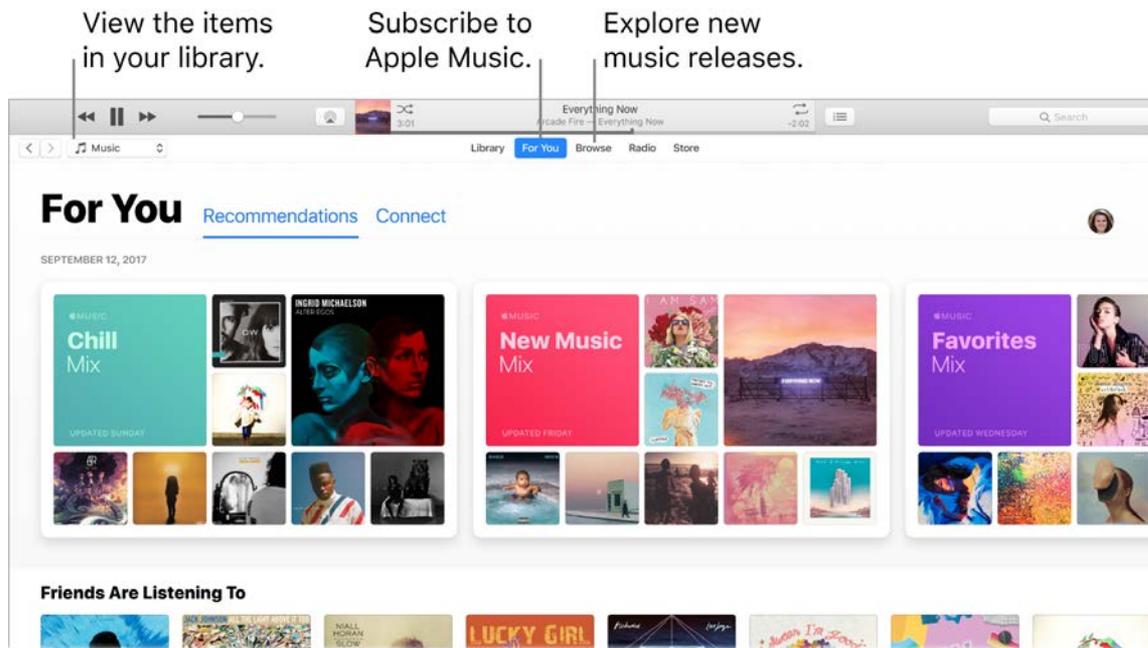
**Tip:** To see what traffic is like, click the Show pop-up menu in the bottom left of the map, then choose Show Traffic.

**Learn more.** To learn more about Maps, see [Maps Help](#).

## iTunes

iTunes makes it easy to organize and enjoy the music, podcasts, movies, and TV shows you have—and shop for the ones you want. iTunes includes Apple Music (which lets you listen to millions of songs on demand), Beats 1 live radio, and Connect, a fun way for fans and artists to interact.

**It's in your library.** Your iTunes library contains your music, podcasts, movies, and TV shows. Click the menu in the top-left corner to view a category of items, or to switch to a different library.



**Find your new favorite song.** Click For You to browse albums and playlists recommended for you based on the artists and genres you love. The reorganized, easy-to-understand sections highlight why each album or playlist was selected for you. For You also shows posts from artists you follow, so it's easier than ever to discover new music.

**Browse the best of Apple Music.** Click Browse to see new music and exclusive releases from Apple Music. Choose from a huge selection of playlists to find the perfect mix for any moment.

**Tune in.** Click Radio to tune in to Beats 1 live content or listen to any episode from the Beats 1 family of shows. Explore the wide variety of music-only stations created for almost every genre of music.

 **Ask Siri.** Say something like: "Play NPR News and Culture."

 **Tip:** To play music or radio from a speaker using AirPlay, click the AirPlay icon  in the menu bar and select an available speaker.

**Use the Touch Bar.** When you're playing a song or other content, you see the rewind, play/pause, and fast-forward buttons in the Touch Bar.



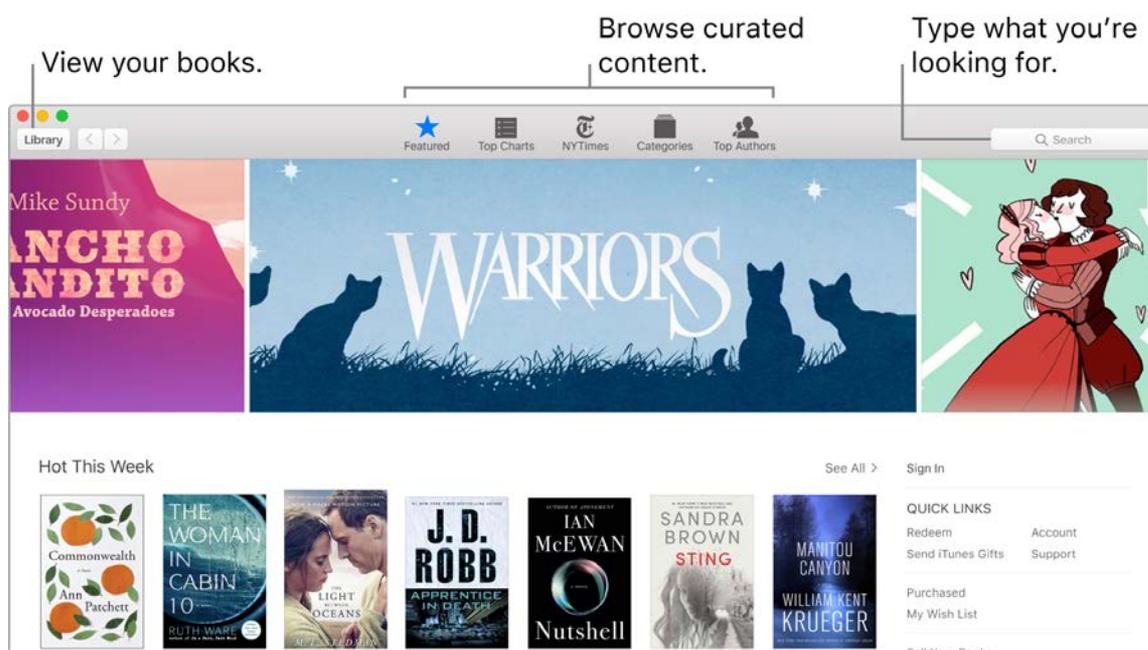
**Learn more.** To learn more about iTunes, see [iTunes Support](#).

## iBooks

Use iBooks to read and organize your library of books, and to purchase new books on your Mac.

**A bookshelf right on your Mac.** Browse or search all the items in your library—or click iBooks Store to find new books and other publications. To buy, just sign in with your Apple ID: Choose Store > Sign in.

 **Ask Siri.** Say something like: "Find books by Jane Austen."



**Never lose your place or your markups.** Your purchased books, collections, highlights, notes, bookmarks, and the current page are available automatically on your Mac and iOS devices, if you're signed in on them with the same Apple ID.

**Find your way back.** You can quickly go to pages you've bookmarked. Click the arrow next to  to view your list of bookmarks.

**Use the Touch Bar.** Tap  or  to navigate back or forth in the book, or use the scrubber to move quickly through the pages. Tap  to search, or tap  to add a bookmark to the current page.



 **Tip:** Change to Night theme to read more easily in low-light situations. Choose View > Theme, then choose Night. Or click the Fonts button  , then click the black circle. Not all books support Night theme.



**Learn more.** To learn more about iBooks, see [iBooks Help](#).

## App Store

Search the App Store to find and download apps, and get the latest updates for your apps.

**Find the perfect app.** Know exactly what you're looking for? Type the name in the search field, then press Return. Or click Top Charts to see the most popular apps.

Click a category  
to browse it.

Apple Confidential

Search for an app  
by name.



 **Ask Siri.** Say something like: “Find apps for kids.”

**All you need is an Apple ID.** To download apps, just sign in with your Apple ID—choose Store > Sign In, or click Sign In on the right side of the window. If you don’t have an Apple ID yet, choose Store > Create Account. If you can’t remember your password, click the Forgot link to recover it.

**Get the latest updates.** If you see a badge on the App Store icon in the Dock, there are updates available for your apps or macOS. Click the icon to open App Store, then click Updates in the toolbar.



 **Tip:** You can spread the word about your favorite apps to your friends. While viewing an app, click the down arrow next to the price, then choose Tell a Friend.

**Learn more.** To learn more about the App Store, see [App Store Help](#).

## Pages

Use the Pages app to create stunning, media-rich documents on your Mac. Open and edit Microsoft Word files, and easily share a link to your work in Mail or Messages, right from the toolbar.

**Look good!** Pages includes a variety of beautiful templates for flyers, newsletters, reports, and résumés, among others, making it easy to start your project.

Add charts, movies,  
and more.

Share your  
document.

Open or close the  
Format sidebar.



**All your formatting tools, in one place.** Click the Format button  in the toolbar to open the Format inspector. Select something in your document, and the formatting options for it appear.

**Flow text around graphics.** When you add an image to a text document, the text flows automatically around the image. You can fine-tune how the text wraps in the Format sidebar.



**Move a graphic into a text block...**



**...and the text wraps around the graphic automatically.**

**Start on your Mac, finish on iPad.** You can keep documents up to date across all your devices when you sign in to iCloud with the same Apple ID. So you can start composing on one device, and pick up where you left off on another.

 **Tip:** Turn on change tracking to see the changes you and others make to the document. Each person's edits and comments are color-coded so you can see who made the change. Choose Edit > Turn on Tracking to show the change tracking toolbar.

**Use the Touch Bar.** Tap to change the paragraph style, and to add typing suggestions. Tap  to see more formatting options.



Tap to choose text color, style options (bold, italic, and so on), line spacing, and bullet and list formats. Tap  to return to typing suggestions.



Tap Styles to see paragraph formatting options, like Title, Subtitle, and Heading. Tap  when you finish.



**Learn more.** To learn more about Pages, see [Pages Support](#).

## Numbers

Use Numbers to create attractive and powerful spreadsheets on your Mac. More than 30 Apple-designed templates give you a head start creating budgets, invoices, team rosters, and more. Numbers can also open and export Microsoft Excel spreadsheets.

 **Ask Siri.** Say something like: “Show spreadsheets in the downloads folder.”

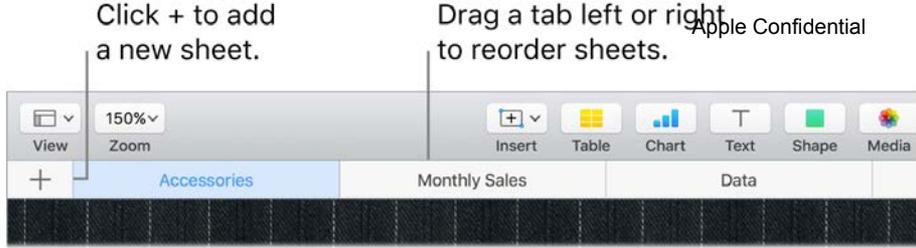
**Start with a template—then add what you want.** Select the sample text in the template, then type new text. To add images, drag a graphic file from your Mac onto the placeholder image.

Add objects like shapes and charts.      View formatting options for the selected object.



The screenshot shows the Numbers application interface with a financial report template. The template includes a header with the text "BESPOKE TAILORS", "WEBB & WEBB", and "ESTABLISHED 1954". Below the header, there are three sections: "ACCESSORIES COST/PROFIT AVERAGE: DECEMBER" with a bar chart, "MOST POPULAR ACCESSORIES: DECEMBER" with a pie chart, and "FINANCIAL SUMMARY" with text values like "\$43.00", "116%", and "180%". The right sidebar shows the "Format" panel with options for "Chart", "Wedges", and "Arrange". The "Chart" panel is active, showing "Chart Options" (Title, Legend, Hidden Data), "Chart Font" (American Typewriter, Regular), "Chart Colors", "Background", "Shadow", and "Chart Type" (2D Pie).

**Get organized with sheets.** Use multiple sheets or tabs to show different views of your information. For example, use one sheet for your budget, another for a table, and a third for notes. Click  to add a new sheet. Drag a tab left or right to reorder sheets.



**Formulas are a snap.** Get built-in help for more than 250 powerful functions—just type the equal sign (=) in a cell, and you see a list of all the functions and their descriptions in the sidebar. Start typing a formula to get instant suggestions.

**Tip:** To get instant calculations based on a series of values, select the range of cells containing the values. At the bottom of the window you'll see the sum, average, minimum, maximum, and count of the selected values. Click the Settings button  to see even more options.

**Use the Touch Bar.** Tap Format, Autofill, or Formula to display the options shown below. Tap text style and format buttons to display more options for choosing color, justification, wrapping, and top/bottom alignment for text.



Tap Format to display these text formatting buttons:



Tap Autofill to display these autofill options:



Tap Formula to display the quick formula buttons:



**Learn more.** To learn more about Numbers, see [Numbers Support](#).

## Keynote

Create professional, cutting-edge presentations with Keynote. Start with one of the more than 30 predesigned themes and make it your own by adding text, new objects, and changing the color scheme.

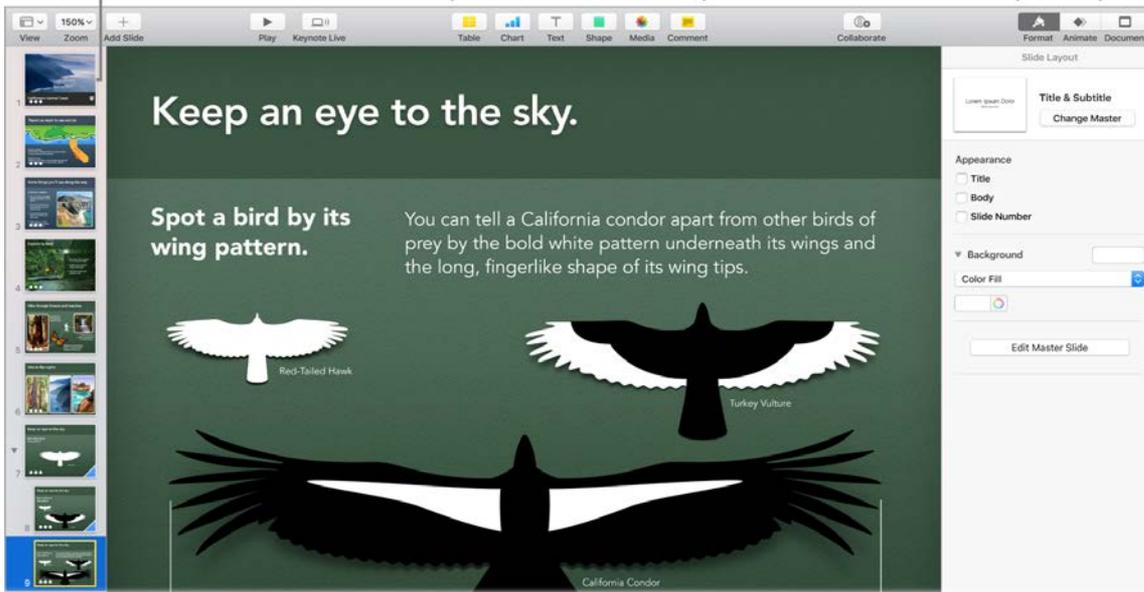
**Organize visually.** Use the slide navigator on the left to quickly add, delete, or rearrange slides. Click a slide to see it in the main window, drag a slide to change its order, or select it and press Delete to remove it.

Drag to reorder slides.

Add objects to your slides.

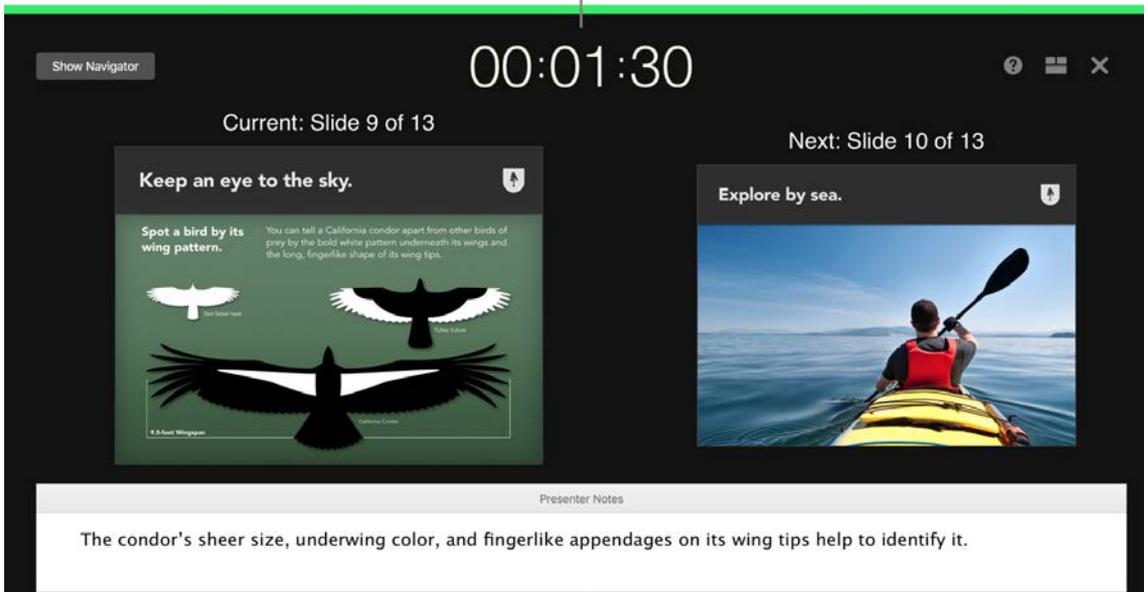
Apple Confidential

See format and animation options.



**Practice makes perfect.** To rehearse your presentation, choose Play > Rehearse Slideshow. You'll see each slide along with your notes—and a clock to keep you on track.

See how you're doing on time.



Remind yourself of key points to make.

**Share your presentation.** If your manager wants to review your presentation or you want to share it with others on a conference call, choose Share > Send a Copy to send a copy by Mail, Messages, AirDrop, or even social media.

**Draw them in.** Get their attention by animating an object on a slide. Select the object, click Animate in the toolbar, click Action in the sidebar, then click Add an Effect.

**Tip:** You can embed a video in your presentation. Click where you want it to be, then click the Media button  in the toolbar. Click Movies, then find the movie you want and drag it to your slide.

**Use the Touch Bar.** Tap the arrow buttons to move up or down through your slides. Tap to zoom or skip a slide, or tap to group or ungroup slides. In presentation mode, you see thumbnails of your slides in the Touch Bar.





**Tip:** Shooting video with a handheld device can produce shaky results, but you can stabilize the video so the playback is smoother. Select the shaky clip in the timeline, click the Stabilization button , then click Stabilize Shaky Video.

**Use the Touch Bar.** Tap to Favorite or Reject any clip in the browser, making it easy to find the clip later or hide it from view. You can also tap in the Touch Bar to play a clip, add a clip to the current movie, or add a clip as a video overlay, such as split screen or picture in picture.



When the timeline is selected, use the Touch Bar buttons to rewind, play, fast-forward, or split the clip into two parts at the point where you click. Tap the volume button in the Control Strip to adjust the volume of a clip.



Use the slider to adjust the volume. When you finish, tap .



**Learn more.** To learn more about iMovie, see [iMovie Support](#).

## GarageBand

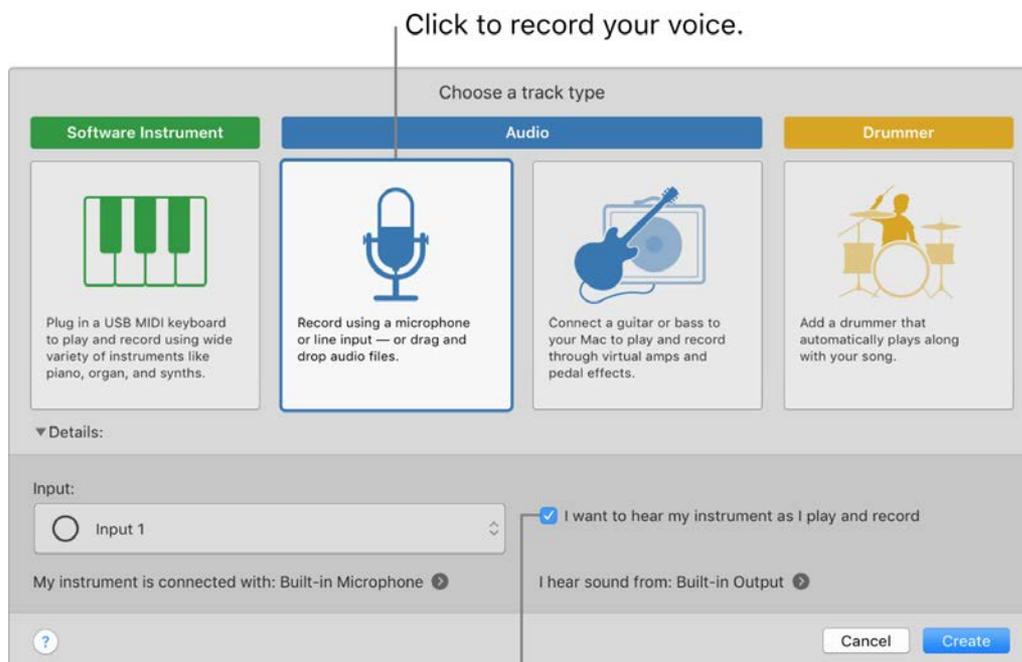
GarageBand is an app for creating, recording, and sharing your music. It has everything you need in order to learn to play an instrument, write music, or record a song—your own home recording studio.

**Create a new project.** You can start with a song template, select a tempo, key, and other options, then click Record and start playing. Build your song—for example, with different tracks and loops. Click Quick Help  and hold the pointer over items to learn what they are and how they work.



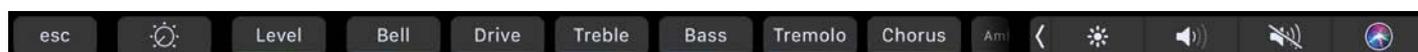
**Bring in the beat.** You can quickly add drums to your project using Drummer Loops. Click the Loop Browser , then drag a Drummer Loop  into an empty part of the Tracks area. You can customize Drummer Loops to fit your song, using a simple set of controls.

**Record your voice.** Choose Track > New Track, then select the microphone under Audio. Click the triangle next to Details to set options for input, output, and monitoring, then click Create. Click the Record button  to start recording, or the Play button  to stop recording.



Hear yourself while you record.

**Use the Touch Bar.** Easily adjust the Smart Controls for a selected track. Tap buttons to quickly fine-tune the sound of your instrument, turn effects on or off, or adjust the volume of your track.



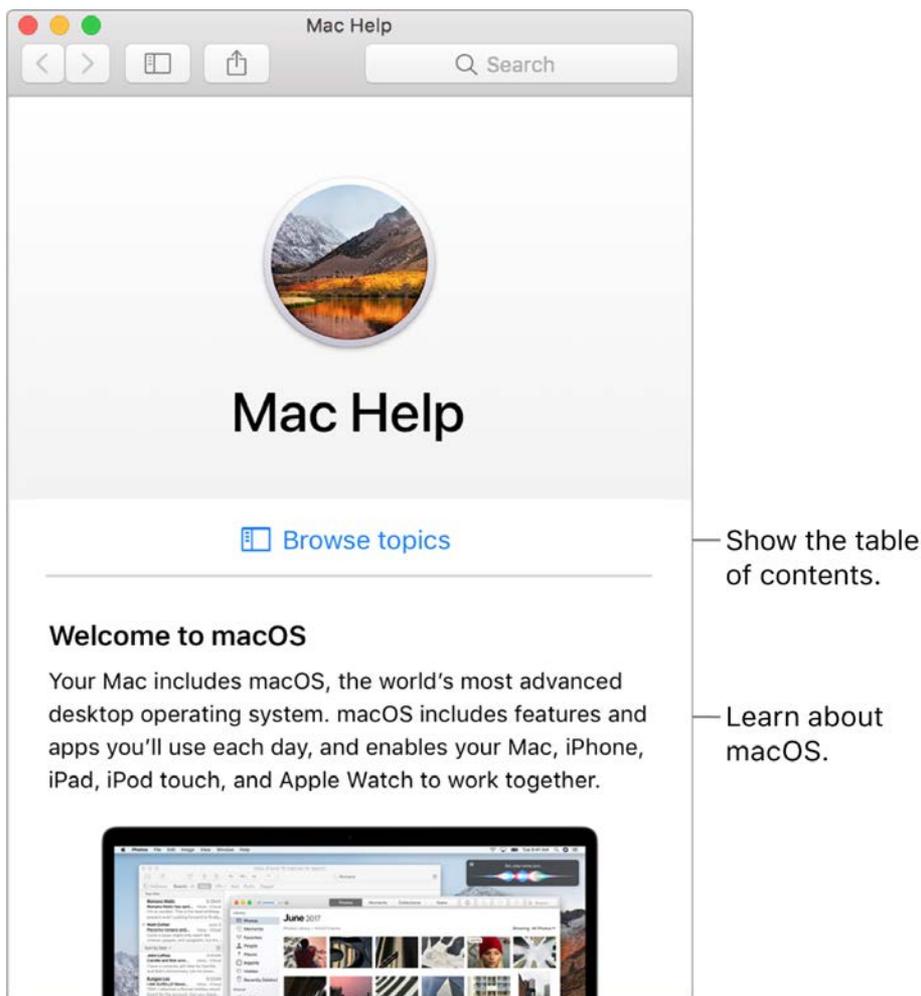
**Learn more.** To learn more about GarageBand, see [GarageBand Support](#).

# Find answers

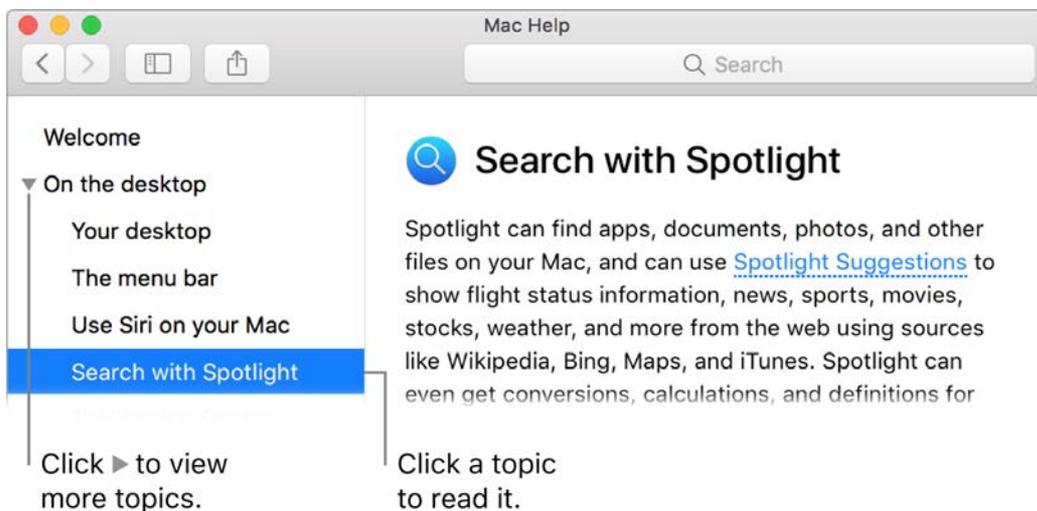
## Mac Help

Mac Help has a lot more information about how to use your MacBook Pro.

**Get help.** Click the Finder icon  in the Dock, then click the Help menu in the menu bar and choose Mac Help. Or type a question or term in the search field, then choose a topic in the results list.

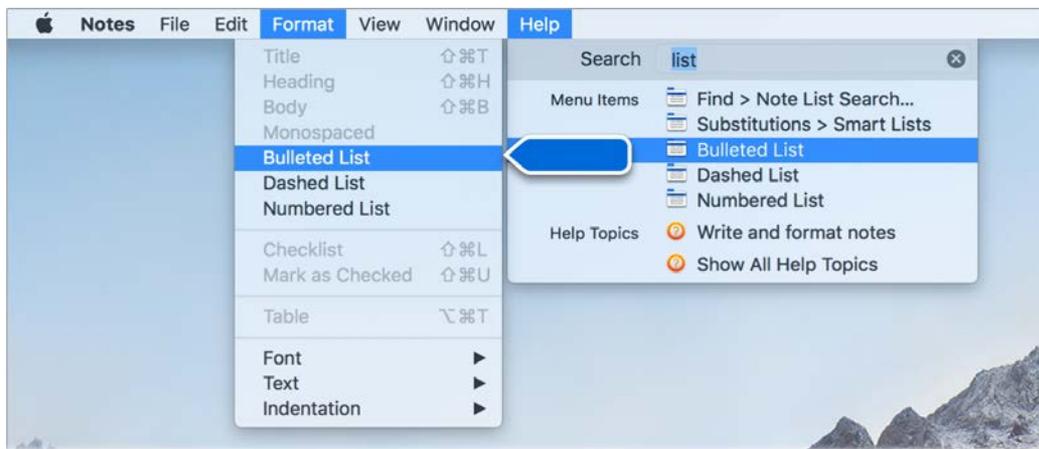


**Explore topics.** To find a topic in Mac Help, you can browse or search. To browse, click “Browse topics” to see the list of topics, then click a topic to read it. Or type what you want to find in the search field to go right to your answer.



**Find out what's new.** Click the Help menu, then choose "See What's New in macOS" to find out more about the latest features of macOS.

**Tip:** If you can't remember the location of a menu item in an app, search for it in Help. Place the pointer over the result, and an arrow shows you the command.



## Common questions

**How do I get support for my MacBook Pro?** Go to [MacBook Pro Support](#).

**Where's my serial number?** Choose Apple menu > About This Mac. The serial number is the last item in the list. If your computer isn't turned on, you can find the serial number printed on the bottom of your MacBook Pro.

**Ask Siri.** Say something like: "What's my computer's serial number?"

**How do I get help for an app?** When you're using the app, click the Help menu in the menu bar at the top of the screen.

**Where is the safety information for my MacBook Pro?** See [Important safety information](#).

**How do I find the technical specifications?** Go to [MacBook Pro Tech Specs](#), or choose Apple menu > About This Mac and click the buttons at the top for displays, storage, and memory.

**Ask Siri.** Ask Siri for information about your Mac. Say something like:

- "How fast is my Mac?"
- "How much memory does my Mac have?"
- "How much free space do I have on my Mac?"
- "How much iCloud storage do I have left?"

**How do I check my disk for problems?** Use Disk Utility. See the Apple Support article [Using Disk Utility to verify or repair disks](#).

# Keyboard shortcuts

You can press key combinations to do things on your MacBook Pro that you'd normally do with a trackpad, mouse, or other device. Here's a list of commonly used keyboard shortcuts.

Shortcut	Description
Command-X	Cut the selected item and copy it to the Clipboard.
Command-C	Copy the selected item to the Clipboard.
Command-V	Paste the contents of the Clipboard into the current document or app.
Command-Z	Undo the previous command. Press Command-Shift-Z to redo.
Command-A	Select all items.
Command-F	Open a Find window, or find items in a document.
Command-G	Find the next occurrence of the item you're searching for. Press Command-Shift-G to find the previous occurrence.
Command-H	Hide the windows of the front app. Press Command-Option-H to view the front app but hide all other apps.
Command-M	Minimize the front window to the Dock. Press Command-Option-M to minimize all windows of the front app.
Command-N	Open a new document or window.
Command-O	Open the selected item, or open a dialog to select a file to open.
Command-P	Print the current document.
Command-S	Save the current document.
Command-W	Close the front window. Press Command-Option-W to close all windows of the app.
Command-Q	Quit the current app.
Command-Option-Esc	Choose an app to Force Quit.
Command-Tab	Switch to the next most recently used app among your open apps.
Command-Shift-3	Take a screenshot of the entire screen. Press Command-Shift-4 to take a screenshot of a selected area of the screen.

If you switched to the Mac from a PC, check out [Mac tips for Windows switchers](#) for a list of Mac keyboard shortcuts and the differences between Mac and Windows keyboards. For a more complete list of keyboard shortcuts, see the Apple Support article [Mac keyboard shortcuts](#).

If your MacBook Pro has the Touch Bar, see the Apple Support article [How to use the Escape button on your MacBook Pro with Touch Bar](#) for more information about the Esc button.

## More resources, service, and support

You can find more information about your MacBook Pro in System Report, in Apple Diagnostics, and through online resources.

**System Report.** To get information about your MacBook Pro, use System Report. It shows you what hardware and software is installed, the serial number and operating system version, how much memory is installed, and more. To open System Report, choose Apple menu > About This Mac, then click System Report.

**Apple Diagnostics.** You can use Apple Diagnostics to help determine if there's a problem with one of the computer's components, such as the memory or processor. Apple Diagnostics helps to identify the potential source of a hardware issue and provides first steps to try and resolve it. Apple Diagnostics will also help you get in touch with Apple Support if you need more help.

Before using Apple Diagnostics, disconnect any external devices, such as a hard disk or external display. Be sure your MacBook Pro is connected to the Internet.

To start Apple Diagnostics, restart your MacBook Pro and hold down the D key as it starts up. If prompted, select the language for your location. Press the Return key or click the right arrow button. The basic Apple Diagnostics test takes a few minutes to complete. If an issue is found, a description of the issue appears with additional instructions. Make a note of any reference codes before you exit Apple Diagnostics.

**Online resources.** For online service and support information, go to [Welcome to Apple Support](#). You can learn about Apple products, view online manuals, and check for software updates. Connect with other Apple users, and get service, support, and professional advice from Apple. For more information about your MacBook Pro, go to [MacBook Pro Support](#).

**AppleCare support.** If you need assistance, AppleCare representatives can help you with installing and opening apps, and with troubleshooting. Call the support center number nearest you (the first 90 days are complimentary). Have the purchase date and your MacBook Pro serial number ready when you call.

A complete list of support telephone numbers is available on the web at [Contact Apple for support and service](#). Telephone numbers are subject to change, and local and national telephone rates may apply.

Your 90 days of complimentary telephone support begins on the date of purchase.

# Safety, handling, and regulatory information

## Important safety information

**⚠ WARNING:** Failure to follow these safety instructions could result in fire, electric shock, or other injuries, or damage to your MacBook Pro or other property. Read all safety information below before using your MacBook Pro.

**Built-in battery.** Don't attempt to replace or remove the battery yourself—you may damage the battery, which could cause overheating and injury. The built-in battery should be replaced by Apple or an authorized service provider, and must be recycled or disposed of separately from household waste. Dispose of batteries according to your local environmental laws and guidelines. Don't expose your MacBook Pro to extreme heat sources, such as radiators or fireplaces, where temperatures might exceed 212°F (100°C).

For information about battery service and recycling, go to [Battery Service and Recycling](#).

**Handling.** Handle your MacBook Pro with care. It is made of metal, glass, and plastic and has sensitive electronic components inside. Place your MacBook Pro on a stable work surface that allows for adequate air circulation under and around the computer. Your MacBook Pro can be damaged if dropped, burned, punctured, or crushed, or if it comes in contact with liquids, oils, and lotions. Don't use a damaged MacBook Pro, such as one with a cracked screen, as it may cause injury.

**Liquid exposure.** Keep your MacBook Pro away from sources of liquid, such as drinks, oils, lotions, washbasins, bathtubs, shower stalls, and so on. Protect your MacBook Pro from dampness, humidity, or wet weather, such as rain, snow, and fog.

**Charging.** Charge your MacBook Pro only with the included USB-C Charge Cable and 61W or 87W USB-C Power Adapter, or with a third-party power adapter and cable that are compatible with USB-C and compliant with applicable international and regional regulations and safety standards, including IEC 60950. Other adapters might not meet applicable safety standards, and charging with such adapters could pose a risk of death or injury.

Using damaged cables or chargers, or charging when moisture is present, can cause fire, electric shock, injury, or damage to your MacBook Pro or other property. When you use the included USB-C Charge Cable and 61W or 87W USB-C Power Adapter to charge your MacBook Pro, make sure the AC plug is fully inserted into the power adapter before you plug the adapter into a power outlet.

**Prolonged heat exposure.** Your MacBook Pro and its 61W or 87W USB-C Power Adapter may become very warm during normal use. The MacBook Pro and its 61W or 87W USB-C Power Adapter comply with applicable surface temperature standards and limits defined by the International Standard for Safety of Information Technology Equipment (IEC 60950-1). However, even within these limits, sustained contact with warm surfaces for long periods of time may cause discomfort or injury.

Use common sense to avoid situations where your skin is in prolonged contact with a device or its power adapter when it's operating or plugged into a power source. For example, don't sleep with a device or power adapter when it's plugged into a power source. Don't operate your MacBook Pro on a pillow, blanket, or other soft material that can block ventilation openings. It's important to keep your MacBook Pro and its 61W or 87W USB-C Power Adapter in a well-ventilated area when in use or charging.

Never push anything into the ventilation openings, as doing so may be dangerous and cause your computer to overheat. Never place anything over the keyboard when operating your MacBook Pro. If your MacBook Pro is on your lap and gets uncomfortably warm, remove it from your lap and place it on a stable, well-ventilated work surface. Take special care if you have a physical condition that affects your ability to detect heat against the body.

**61W or 87W USB-C Power Adapter.** To operate the 61W or 87W USB-C Power Adapter safely and reduce the possibility of heat-related injury or damage, do one of the following:

- Plug the 61W or 87W USB-C Power Adapter directly into a power outlet.
- If you're using the Power Adapter Extension Cable, place the power adapter on a desk, table, or on the floor in a well-ventilated location.

Don't use a power adapter in wet locations, such as near a washbasin, bathtub, or shower stalls, or connect or disconnect the power adapter with wet hands. Disconnect the power adapter and any cables if any of the following conditions exists:

- You want to clean the case (use only the recommended procedure, described in [Important handling information](#)).
- The power cord or plug becomes frayed or otherwise damaged.
- Your MacBook Pro or 61W or 87W USB-C Power Adapter is exposed to rain, excessive moisture, or liquid spilled into the case.
- Your MacBook Pro or 61W or 87W USB-C Power Adapter has been dropped, the case has been damaged, or you suspect that service or repair is required.

If debris gets onto the power port, remove it gently with a dry cotton swab.

- *Frequency:* 50 to 60 Hz, single phase
- *Line Voltage:* 100 to 240 V
- *(USB PD) Output Voltage:* 20.3V/3A or 15V/3A or 9V/3A or 5.2V/3A

87W USB-C Power Adapter specifications:

- *Frequency:* 50 to 60 Hz, single phase
- *Line Voltage:* 100 to 240 V
- *Output Voltage:* 20.2V/4.3 A (USB PD) or 9V/3A (USB PD) or 5.2V/2.4A

Take special care if you have a physical condition that affects your ability to detect heat against the body.

**Hearing loss.** Listening to sound at high volumes may damage your hearing. Background noise, as well as continued exposure to high volume levels, can make sounds seem quieter than they actually are. Use only compatible earbuds, headphones, or earpieces with your MacBook Pro. Turn on the audio and check the volume before inserting anything into your ear. For more information about hearing loss, see [Sound and Hearing](#).

 **WARNING:** To prevent possible hearing damage, do not listen at high volume levels for long periods.

**Repairing.** Your MacBook Pro doesn't have any user-serviceable parts. Do not open or disassemble MacBook Pro or attempt to repair it or replace any components. Disassembling your MacBook Pro may damage it or may cause injury to you. If your MacBook Pro needs service, is damaged, malfunctions, or comes in contact with liquid, contact Apple or an Apple-authorized repair center, such as an Apple Authorized Service Provider. If you attempt to open your MacBook Pro, you risk damaging your computer, and such damage isn't covered by the limited warranty on your MacBook Pro.

**Navigation.** Maps, directions, and location-based apps depend on data services. These data services are subject to change and may not be available in all areas, resulting in maps, directions, or location-based information that may be unavailable, inaccurate, or incomplete. Compare the provided location-based information to your surroundings and defer to posted signs to resolve any discrepancies. Do not use these services while performing activities that require your full attention. Always comply with posted signs and the applicable laws and regulations in the areas where you are using navigation, and always use common sense.

**Radio frequency exposure.** MacBook Pro uses radio signals to connect to wireless networks. For information about radio frequency (RF) energy resulting from radio signals and steps you can take to minimize exposure, see [RF Exposure](#).

**Medical device interference.** MacBook Pro contains components and radios that emit electromagnetic fields, including magnets, which may interfere with pacemakers, defibrillators, and other medical devices. Maintain a safe distance between your medical device and MacBook Pro. Consult your physician and medical device manufacturer for information specific to your medical device. If you suspect MacBook Pro is interfering with your pacemaker or any other medical device, stop using MacBook Pro.

**Medical conditions.** If you have a medical condition that you believe could be affected by using MacBook Pro (for example, seizures, blackouts, eyestrain, or headaches), consult with your physician prior to using MacBook Pro.

**Repetitive motion.** When you perform repetitive activities such as typing or playing games on MacBook Pro, you may experience discomfort in your hands, arms, wrists, shoulders, neck, or other parts of your body. If you experience discomfort, stop using MacBook Pro and consult a physician.

**Choking hazard.** Some MacBook Pro accessories may present a choking hazard to small children. Keep these accessories away from small children.

**High-consequence activities.** Your MacBook Pro is not intended for use where the failure of the computer could lead to death, personal injury, or severe environmental damage.

**Explosive atmospheres.** Charging or using your MacBook Pro in any area with a potentially explosive atmosphere, such as areas where the air contains high levels of flammable chemicals, vapors, or particles (such as grain, dust, or metal powders), may be hazardous. Obey all signs and instructions.

## Important handling information

**Operating environment.** Operating your MacBook Pro outside these ranges may affect performance:

- *Operating temperature:* 50° to 95° F (10° to 35° C)
- *Storage temperature:* -13° to 113° F (-25° to 45° C)
- *Relative humidity:* 0% to 90% (noncondensing)
- *Operating altitude:* Tested up to 10,000 feet (0 to 3048 meters)

**Carrying your MacBook Pro.** If you carry your MacBook Pro in a bag or briefcase, make sure there are no loose items (such as paper clips or coins) that could accidentally get inside the computer through vent openings or get stuck inside a port.

**Using connectors and ports.** Never force a connector into a port. When connecting a device, make sure the port is free of debris, that the connector matches the port, and that you have positioned the connector correctly in relation to the port.

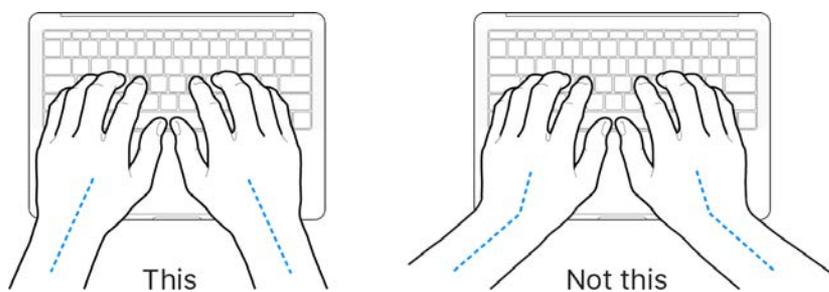
**Storing your MacBook Pro.** If you are going to store your MacBook Pro for an extended period of time, keep it in a cool location (ideally, 71° F or 22° C) and discharge the battery to 50 percent. When storing your computer for longer than five months, maintain the capacity of the battery by charging the battery to 50 percent every six months or so.

**Cleaning your MacBook Pro.** When cleaning the outside of your MacBook Pro and its components, first shut down your MacBook Pro and unplug the USB-C Charge Cable and the 61W or 87W USB-C Power Adapter. Then dampen a clean, soft, lint-free cloth to wipe the MacBook Pro exterior. Avoid getting moisture in any openings. Don't spray liquid directly on the computer. Don't use aerosol sprays, solvents, abrasives, or cleaners containing hydrogen peroxide, which might damage the finish.

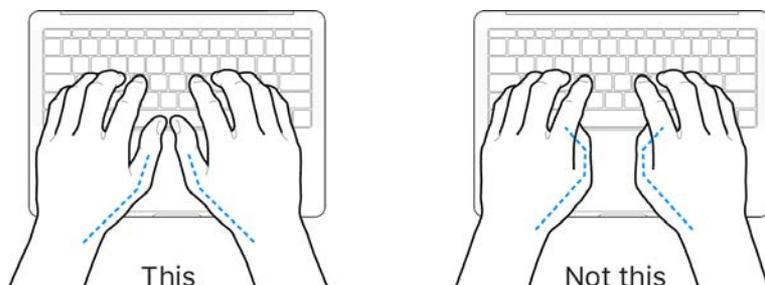
**Cleaning the MacBook Pro screen.** To clean the MacBook Pro screen, first shut down your MacBook Pro and unplug the USB-C Charge Cable and the 61W or 87W USB-C Power Adapter. Then dampen a clean, soft, lint-free cloth with just water and wipe the screen. Don't spray liquid directly on the screen.

## Understanding ergonomics

When you use the keyboard and mouse, your shoulders should be relaxed. Your upper arm and forearm should form an angle that is slightly greater than a right angle, with your wrist and hand in roughly a straight line.



Use a light touch when typing or using the trackpad and keep your hands and fingers relaxed. Avoid rolling your thumbs under your palms.



Change hand positions often to avoid fatigue. Some computer users might develop discomfort in their hands, wrists, or arms after intensive work without breaks. If you begin to develop chronic pain or discomfort in your hands, wrists, or arms, consult a qualified

**External mouse.** If you use an external mouse, position the mouse at the same height as the keyboard and within a comfortable reach.

**Chair.** An adjustable chair that provides firm, comfortable support is best. Adjust the height of the chair so your thighs are horizontal and your feet are flat on the floor. The back of the chair should support your lower back (lumbar region). Follow the manufacturer's instructions for adjusting the backrest to fit your body properly.

**Built-in display.** Adjust the angle of the display to minimize glare and reflections from overhead lights and windows. Do not force the display if you meet resistance. The display is not designed to open past 135 degrees.

You can adjust the brightness of the screen when you take the computer from one work location to another, or if the lighting in your work area changes.

For more information about ergonomics, see [Ergonomics](#).

## Regulatory information

Regulatory information, certification, and compliance marks specific to MacBook Pro are available on-device. Choose Apple menu > About This Mac and click Support. Click Important Information, then choose Regulatory Certification.

## FCC compliance statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

*Note:* This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Apple Confidential
- Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.

**Important:** Changes or modifications to this product not authorized by Apple could void the electromagnetic compatibility (EMC) and wireless compliance and negate your authority to operate the product.

This product has demonstrated EMC compliance under conditions that included the use of compliant peripheral devices and shielded cables between system components. It is important that you use compliant peripheral devices and shielded cables between system components to reduce the possibility of causing interference to radios, television sets, and other electronic devices.

If necessary, contact Apple or take your MacBook Pro to an Apple Authorized Service Provider. Or consult an experienced radio/television technician for additional suggestions.

*Responsible party (contact for FCC matters only):*

Apple Inc. Corporate Compliance  
One Apple Park Way, MS 911-2HW  
Cupertino, CA 95014  
USA

## ISED Canada regulatory compliance

This device complies with Innovation, Science and Economic Development Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

La bande 5150–5250 MHz est réservée Apple Confidential Apple Confidential pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

## EU compliance statement



Apple Inc. hereby declares that this wireless device is in compliance with the essential requirements and other relevant provisions of the R&TTE Directive and Radio Equipment Directive 2014/53/EU, as applicable.

A copy of the EU Declaration of Conformity, including device frequency bands and maximum radio-frequency power, is available at [Declarations of Conformity](#).

Apple's EU representative is Apple Distribution International, Hollyhill Industrial Estate, Cork, Ireland.

### Use Restriction

This device is restricted to indoor use when operating in the 5150 to 5350 MHz frequency range.

This device can be used in the EU.

## Japan VCCI Class B Statement

この装置は、クラスB機器です。この装置は、住宅環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをして下さい。VCCI-B

本製品は、EMC準拠の周辺機器およびシステムコンポーネント間にシールドケーブル（イーサネットネットワークケーブルを含む）が使用されている状況で、EMCへの準拠が実証されています。ラジオ、テレビ、およびその他の電子機器への干渉が発生する可能性を低減するため、EMC準拠の周辺機器およびシステムコンポーネント間にシールドケーブルを使用することが重要です。

重要：Appleの許諾を得ることなく本製品に変更または改変を加えると、電磁両立性（EMC）および無線に準拠しなくなり、製品を操作するための許諾が取り消される恐れがあります。

## ENERGY STAR® Compliance Statement



As an ENERGY STAR partner, Apple has determined that standard configurations of this product meet the ENERGY STAR guidelines for energy efficiency. The ENERGY STAR program is a partnership with electronic equipment manufacturers to promote energy-efficient products. Reducing energy consumption of products saves money and helps conserve valuable resources.

MacBook Pro is shipped with power management enabled, with the computer set to sleep after 10 minutes of user inactivity. To wake your computer, click the trackpad or press any key on the keyboard. To change this setting, click the System Preferences icon  in the Dock, then click Energy Saver.

For more information about ENERGY STAR, go to [Energy Star](#).

## Apple and the environment

At Apple, we recognize our responsibility to minimize the environmental impacts of our operations and products.

For information, go to Apple's [Environment](#) website.

## Disposal and recycling information



This symbol indicates that this product and/or battery should not be disposed of with household waste. When you decide to dispose of this product and/or its battery, do so in accordance with local environmental laws and guidelines.

For information about Apple's recycling program, recycling collection points, restricted substances, and other environmental initiatives, go to Apple's [Environment](#) website.

### **Información sobre eliminación de residuos y reciclaje**

El símbolo de arriba indica que este producto y/o su batería no debe desecharse con los residuos domésticos. Cuando decida desechar este producto y/o su batería, hágalo de conformidad con las leyes y directrices ambientales locales. Para obtener información sobre el programa de reciclaje de Apple, puntos de recolección para reciclaje, sustancias restringidas y otras iniciativas ambientales, visite [Medio ambiente](#) o [Si damos más de nosotros, tomamos menos del planeta](#).

## Brasil – Informações sobre descarte e reciclagem

O símbolo acima indica que este produto e/ou sua bateria não devem ser descartados no lixo doméstico. Quando decidir descartar este produto e/ou sua bateria, faça-o de acordo com as leis e diretrizes ambientais locais. Para informações sobre substâncias de uso restrito, o programa de reciclagem da Apple, pontos de coleta e telefone de informações, visite [Meio ambiente](#).

## European Union—Disposal Information

The symbol above means that according to local laws and regulations your product and/or its battery shall be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. The separate collection and recycling of your product and/or its battery at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

## Battery disposal information

The battery in your MacBook Pro should be serviced, replaced, or recycled by Apple or an authorized service provider, and must be recycled or disposed of separately from household waste according to your local environmental laws and guidelines. For information about battery service and recycling, go to [Battery Service and Recycling](#).

## Battery Charger System Efficiency



## Software License Agreement

Use of MacBook Pro constitutes acceptance of the Apple and third-party software license terms found at [Software License Agreements](#).

Apple Inc.

© 2018 Apple Inc. All rights reserved.

Use of the “keyboard” Apple logo (Option-Shift-K) for commercial purposes without the prior written consent of Apple may constitute trademark infringement and unfair competition in violation of federal and state laws.

Apple, the Apple logo, AirDrop, AirPlay, AirPods, AirPort, AirPrint, Apple Music, Apple Pay, Apple TV, Apple Watch, Face ID, FaceTime, Finder, Flyover, GarageBand, Handoff, iBooks, iMovie, iPad, iPhone, iPod touch, iTunes, iTunes U, Keynote, Launchpad, Lightning, Mac, MacBook, MacBook Pro, macOS, Mission Control, Numbers, Pages, Retina, Safari, Siri, Spaces, Spotlight, Time Machine, Touch ID, and watchOS are trademarks of Apple Inc., registered in the U.S. and other countries.

Live Photos, Touch Bar, and tvOS are trademarks of Apple Inc.

AppleCare, Apple Store, App Store, iBooks Store, iCloud, iTunes Radio, and iTunes Store are service marks of Apple Inc., registered in the U.S. and other countries.

Apple  
One Apple Park Way  
Cupertino, CA 95014  
USA  
[apple.com](http://apple.com)

IOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Apple Inc. is under license.

ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the U.S. Environmental Protection Agency.

Other company and product names mentioned herein may be trademarks of their respective companies.

Every effort has been made to ensure that the information in this manual is accurate. Apple is not responsible for printing or clerical errors.

Some apps are not available in all areas. App availability is subject to change.