

# Security & Privacy

## Apple Security and Privacy - Committed to Protecting Your Data

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October 13, 2020



# Safari 14

Available for Mojave and Catalina Users

More features coming in Big Sur



We are just talking Security and Privacy features in Safari and other Apple apps





Privacy.  
That's iPhone.







Privacy is a fundamental human right. At Apple, it's also one of our core values. Your devices are important to so many parts of your life. What you share from those experiences, and who you share it with, should be up to you. We design Apple products to protect your privacy and give you control over your information. It's not always easy. But that's the kind of innovation we believe in.

**Apple Products protect your privacy and gives you control over your information**



**Everyday apps.  
Designed for your privacy.**

Safari

Maps

Photos

Messages

Siri

Apple News

Wallet

Apple Pay





# Safari throws trackers off your trail.

Intelligent Tracking Prevention helps stop advertisers that follow you from site to site.





# Safari throws trackers off your trail.

Intelligent Tracking Prevention helps stop advertisers that follow you from site to site.

Some websites allow hundreds of different data collection companies to watch you, build a profile of you, and serve you ads as you browse the web. Intelligent Tracking Prevention in Safari uses on-device machine learning to help block those trackers.

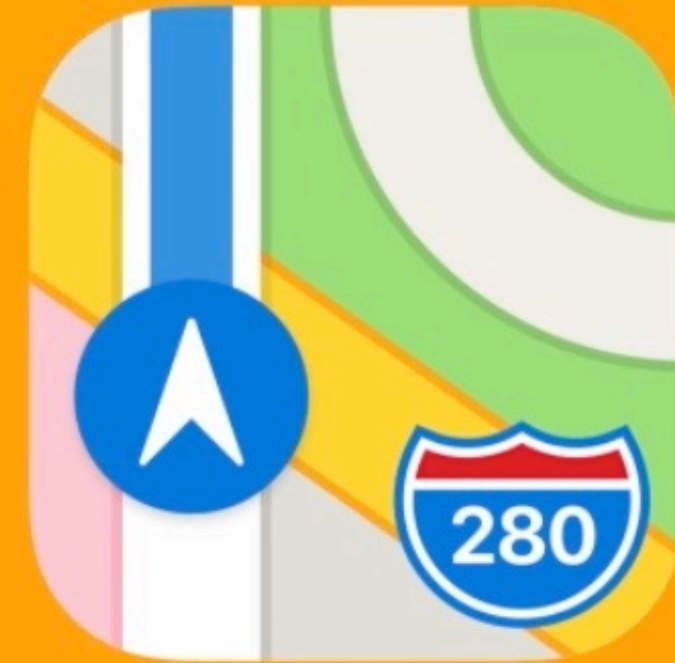
Advertisers can also create a “fingerprint” of your device to target you based on characteristics like your browser configuration, and fonts and plug-ins you’ve installed. To help prevent this, Safari has built-in fingerprinting defense, which shares a simplified system profile with websites you visit. Making it even more difficult for data companies to identify you.

**Intelligent Tracking Prevention blocks trackers with machine learning.**



# Maps makes your location history, history.

The Maps app doesn't associate your data with your Apple ID, and Apple doesn't keep a history of where you've been.





# Maps makes your location history, history.

The Maps app doesn't associate your data with your Apple ID, and Apple doesn't keep a history of where you've been.

Where you go says a lot about you. Maps delivers a great experience without Apple knowing which stores, neighborhoods, or clinics you visit. And because Maps doesn't include a sign-in, where you go isn't associated with your Apple ID at all.

Personalized features, like locating your parked car, are created right on your device. Data used to improve navigation, such as routes and search terms, is not associated with your identity. Instead, that information is based on random identifiers that are constantly changing.

**Maps keep information only on your device**



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The Photos app uses machine learning to organize photos right on your device. So you don't need to share them with Apple or anyone else.





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Your photo and video albums are full of precious moments, friends, and your favorite things. Apple devices are designed so those memories don't leave your hands until you share them.

Some services process photos in the cloud, which gives them access to your photos. But we designed Photos to process your images right on your Mac, iPhone, and iPad. In fact, the Apple Neural Engine in the A13 chip performs over 100 billion operations per photo to recognize faces and places without ever leaving your device.

**You decide who and when you share your photos**



# Settings



Control Center



Display & Brightness



Home Screen & Dock



Accessibility



Wallpaper



Siri & Search



Apple Pencil



Touch ID & Passcode



Battery



Privacy



App Store

## < [Photos](#)

Hue

### ALLOW PHOTOS ACCESS

Selected Photos



All Photos

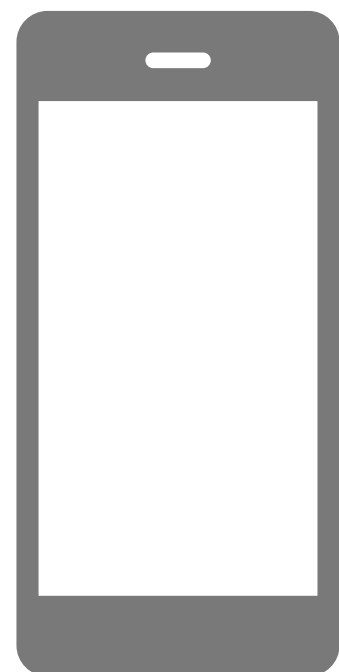
None

Allow this app to access your full photo library, or only photos that you select. Access to photos includes associated metadata, such as location and depth information.

[Edit Selected Photos](#)

[View of the iPad Settings](#)

# Location Services



[Back](#) 7-Eleven

ALLOW LOCATION ACCESS

Never

Ask Next Time

While Using the App ✓

Always

App explanation: "This helps us provide awesome custom offers, products and services while you're in our stores. This can be changed in Settings."

Precise Location ☒

Allows apps to use your specific location. With this setting off, apps can only determine your approximate location.

4 Choices



# iPhone Lifespan and Evolution

	2020	2019	2018	2017	2016	2015	2014	2013
	1	2	3	4	5	6	7	8
Phone	TBD	11 11 Pro 11 Pro Max SE (April 2020)	XS Max XS XR	X 8Plus 8	7 Plus 7	6s Plus 6s SE	6 Plus 6	5s 5
	iOS14							
		iOS 13						
			iOS 12					
				iOS 11				
					iOS 10			
						iOS 9		
							iOS 8	
Base Storage	TBD	64GB	64GB	64GB	32GB	16GB	16GB	16GB
Chip	A14 Bionic	A13 Bionic	A12 Bionic	A11 Bionic	A10 Fusion	A9	A8	A7

**A13 Chip  
Only Applies  
To Past 2 years**

Source: Courtesy of Tony Crawford Oct. 6, 2020 Presentation

# Messages are only seen by who you send them to.

Apple can't read your iMessages  
while they're being sent between you  
and the person you're texting.





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Apple can't read your iMessages while they're being sent between you and the person you're texting.

From inside jokes to invitations, a lot of life happens in text and video chats. Every blue-bubble message, picture, Animoji, and video is encrypted while being sent between devices.

Smart suggestions in Messages, like pulling up photos to send based on who you're messaging, are all done on your device.

**Apple nor anyone else can read your messages as they are being sent.**



# Siri learns what you need. Not who you are.

Your Apple ID isn't connected to Siri,  
and your requests are associated  
with a random identifier. Not you.





# Siri learns what you need. Not who you are.

Your Apple ID isn't connected to Siri, and your requests are associated with a random identifier. Not you.

Siri was designed from the beginning to learn your preferences without sharing your identity with Apple or anyone else. You don't sign in with your Apple ID to use Siri, and your device processes as much information as possible without sending it to Apple's servers.

When Apple does process or store data on our servers, it's associated with a random identifier — a long string of letters and numbers. That data is used only to improve Siri, and we never share or sell it. Apple doesn't retain audio of your requests unless you choose to share it with us to improve Siri.

**Siri requests use a random identifier - a long string of numbers and letters**



# Apple News leaves what you read off the record.

Apple News delivers content based on your interests, but it isn't connected to your identity. So Apple doesn't know what you've read.





# Apple News leaves what you read off the record.

Apple News delivers content based on your interests, but it isn't connected to your identity. So Apple doesn't know what you've read.

Many news sources keep track of your identity and create a profile of you. Apple News delivers personalized content without knowing who you are. The content you read is associated with a random identifier, not your Apple ID.

You get editor-curated content and a personalized newsfeed so you can stay up to date with the latest news and stories. And because Apple News uses machine learning, the more you use it, the better your app gets to know what you like — without Apple ever knowing what you're into.

**again the use of a random identifier and machine learning**



# Wallet and Apple Pay help hide what you buy.

Your credit and debit card numbers are hidden from Apple, and Apple doesn't keep transaction information that can be tied back to you.





# Wallet and Apple Pay help hide what you buy.

Your credit and debit card numbers are hidden from Apple, and Apple doesn't keep transaction information that can be tied back to you.

What you buy, where you bought it, and how much you paid is sensitive information. Apple doesn't store, sell, or use that information.

Apple doesn't store your credit or debit card numbers or share them with merchants. Instead, a unique Device Account Number is created every time you add a card to Apple Pay. And with Apple Card, your spending history is generated right on your iPhone, so only the bank has that history.

**Generates a unique Device Account Number every time  
spending history stays on your iPhone**



# Health keeps your records under wraps.

You control which information goes  
into the Health app and who you  
share it with.





# Health keeps your records under wraps.

You control which information goes into the Health app and who you share it with.

From your heart rate to your menstrual cycle, apps and devices for your health can give you insight into some of your most personal details. With the Health app, you're in charge of what information you'd like to include, what not to, and who has access to it.

All of your data is encrypted and only accessible with your passcode, Touch ID, or Face ID. So however you use the Health app, you're always in control of your data.

**All of your Health data is encrypted and accessible with your passcode**

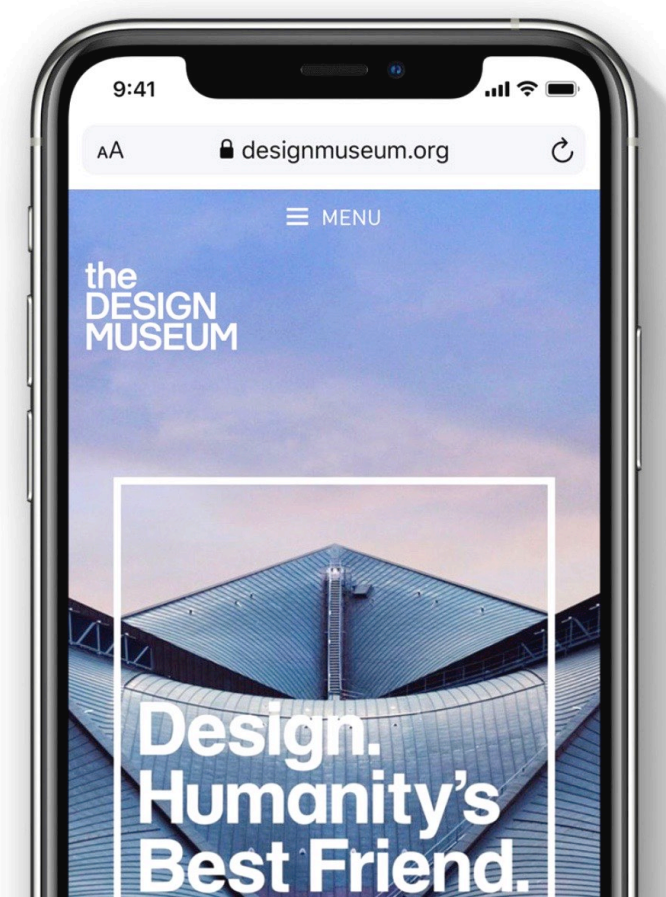


**Safari is a browser that includes state-of-the-art features to help protect your privacy, defending you against cross-site tracking and minimizing the data passed to third parties.**

[View the Safari Privacy white paper \(PDF\)](#)

[https://www.apple.com/safari/docs/Safari\\_White\\_Paper\\_Nov\\_2019.pdf](https://www.apple.com/safari/docs/Safari_White_Paper_Nov_2019.pdf)

**Safari**







# Safari User Guide

for macOS Catalina

Just go to Help in Safari menu

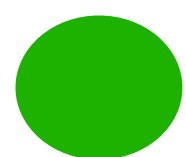
# Safari User Guide

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Welcome

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- › Get started
  - › Browse the web
  - › Shop on the web
  - › Read articles
  - › Download, share, and save content
  - › Customize Safari
- 



› Privacy and security

---

› Change preferences

---

Keyboard and other shortcuts

---

Troubleshooting



## ✓ Privacy and security

Manage cookies and website data

Block pop-ups

Clear your browsing history

● Use Private Browsing

Autofill user name and password info


Prevent cross-site tracking

● View a Privacy Report

<https://support.apple.com/guide/safari/welcome/mac>



Privacy Report



Safari prevents trackers from following you across websites.

Show More

Last 30 days

Trackers prevented from profiling you

247

Websites that contacted trackers

72%

Most contacted tracker

doubleclick.net was prevented from profiling you across 98 websites

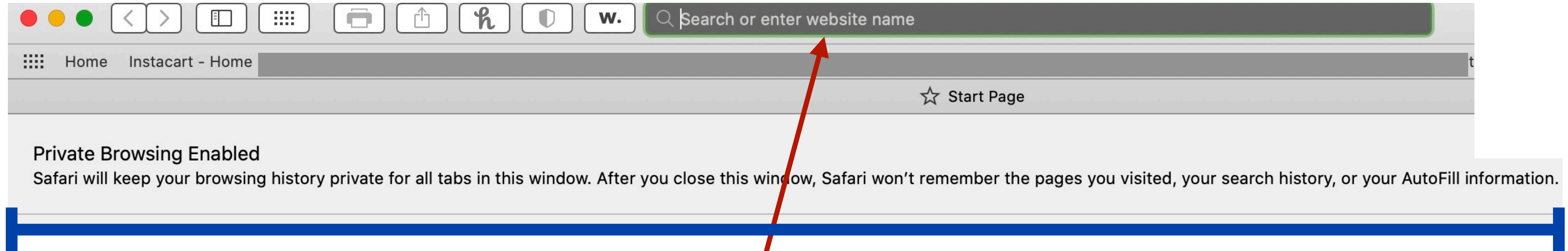
Websites

Trackers

Website	Number of trackers
▶ espn.com	104
▶ freep.com	82
▶ imore.com	73
▶ cnn.com	69
▶ yahoo.com	67
▶ craftthought.com	57
▶ worlddemand.com	54
▶ delawareonline.com	51
▶ classmates.com	43
▶ politicaltribune.org	42
▶ wsj.com	41

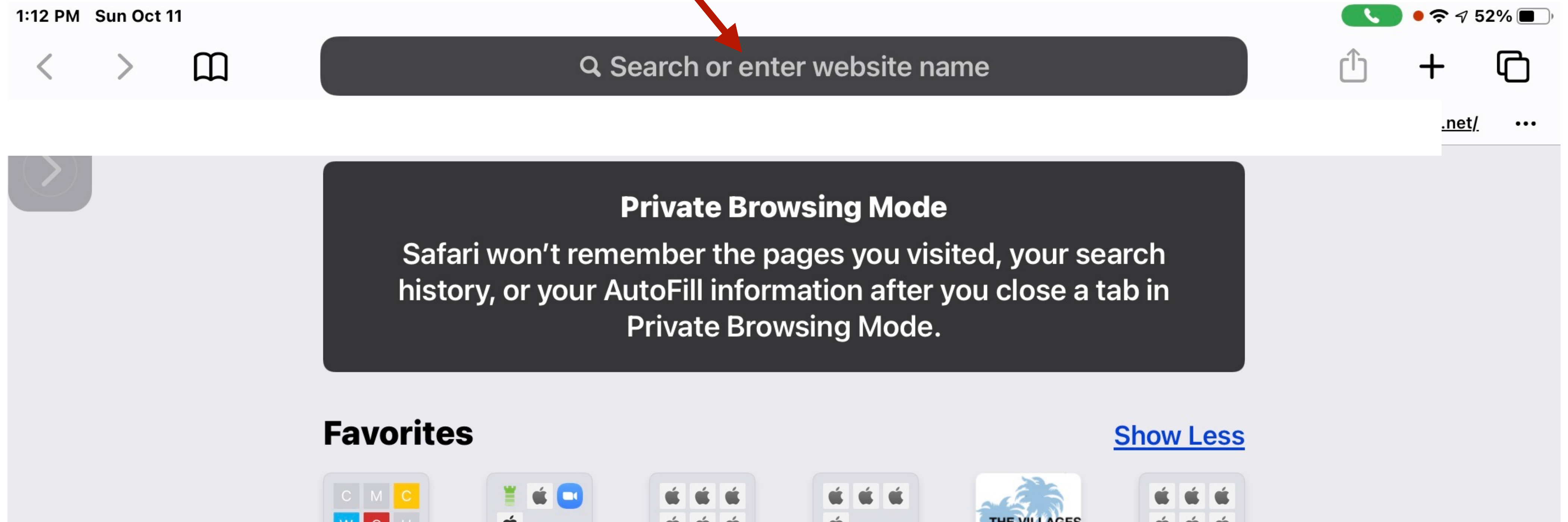


# Private Browsing View - Mac




Note grey search bar  
with white text

# Private Browsing View iPad



# Open a Private Browsing window


- In the Safari app  on your Mac, choose File > New Private Window, or switch to a Safari window that's already using Private Browsing. A window that's using Private Browsing has a dark [Smart Search field](#) with white text.


When you use a Private Browsing window:

- Browsing initiated in one tab is isolated from browsing initiated in another tab, so websites you visit can't track your browsing across multiple sessions.
- Webpages you visit and your AutoFill information aren't saved.
- Your recent searches aren't included in the results list when you use the Smart Search field.
- Items you download aren't included in the downloads list. (The items do remain on your computer.)




Apple ID → Find My


 **Reset Location & Privacy**  
General → Reset


 **Use Final Touch Location**  
Accessibility → Touch → Touch Accommodations


**Use Initial Touch Location**  
Accessibility → Touch → Touch Accommodations

 **Location**  
Privacy


**Share My Location**  
Privacy → Location → Share My Location

 **Location Suggestions**  
Calendar

 **Location-based Naming**  
Voice Memos

 **Maps**

**Show Parked Location**  
Maps


**Location Services** 


**Location Alerts** >


Location Services uses Bluetooth and crowd-sourced Wi-Fi hotspot locations to determine your approximate location. [About Location Services & Privacy...](#)


**Share My Location** >

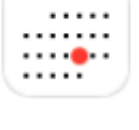
"Tom P Bonanno,Sr's iPhone" is being used for location sharing.


 **App Clips** >

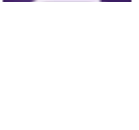
 **AccuWeather** While Using >

 **App Store** While Using >

 **Apple Support** Ask >

 **Calendar** While Using >

 **Camera** While Using >

 **CARROT** While Using >

Personal Choice

An example View of the iPad Settings

iPad View

View of the iPad Settings

Location

Share My Location  
Apple ID → Find My

Reset Location & Privacy  
General → Reset

Use Final Touch Location  
Accessibility → Touch → Touch Accommodations

Use Initial Touch Location  
Accessibility → Touch → Touch Accommodations

Location  
Privacy

Share My Location  
Privacy → Location → Share My Location

Location Suggestions  
Calendar

Location-based Naming  
Voice Memos

Maps

Show Parked Location  
Maps

Privacy

Location Services

Sam's Club

While Using

Shazam

Ask

Siri & Dictation

While Using

Speedtest

Ask

The Villages App

While Using

The Weather Channel

While Using

theScore

Ask

UHC

While Using

Voice Memos

While Using

Wallet

While Using

Weather

Ask

System Services

Apps that have requested access to your location will appear here.

A hollow arrow indicates that an item may receive your location under certain conditions.

A purple arrow indicates that an item has recently used your location.

A gray arrow indicates that an item has used your location in the last 24 hours.

Location icons

Hollow Arrow

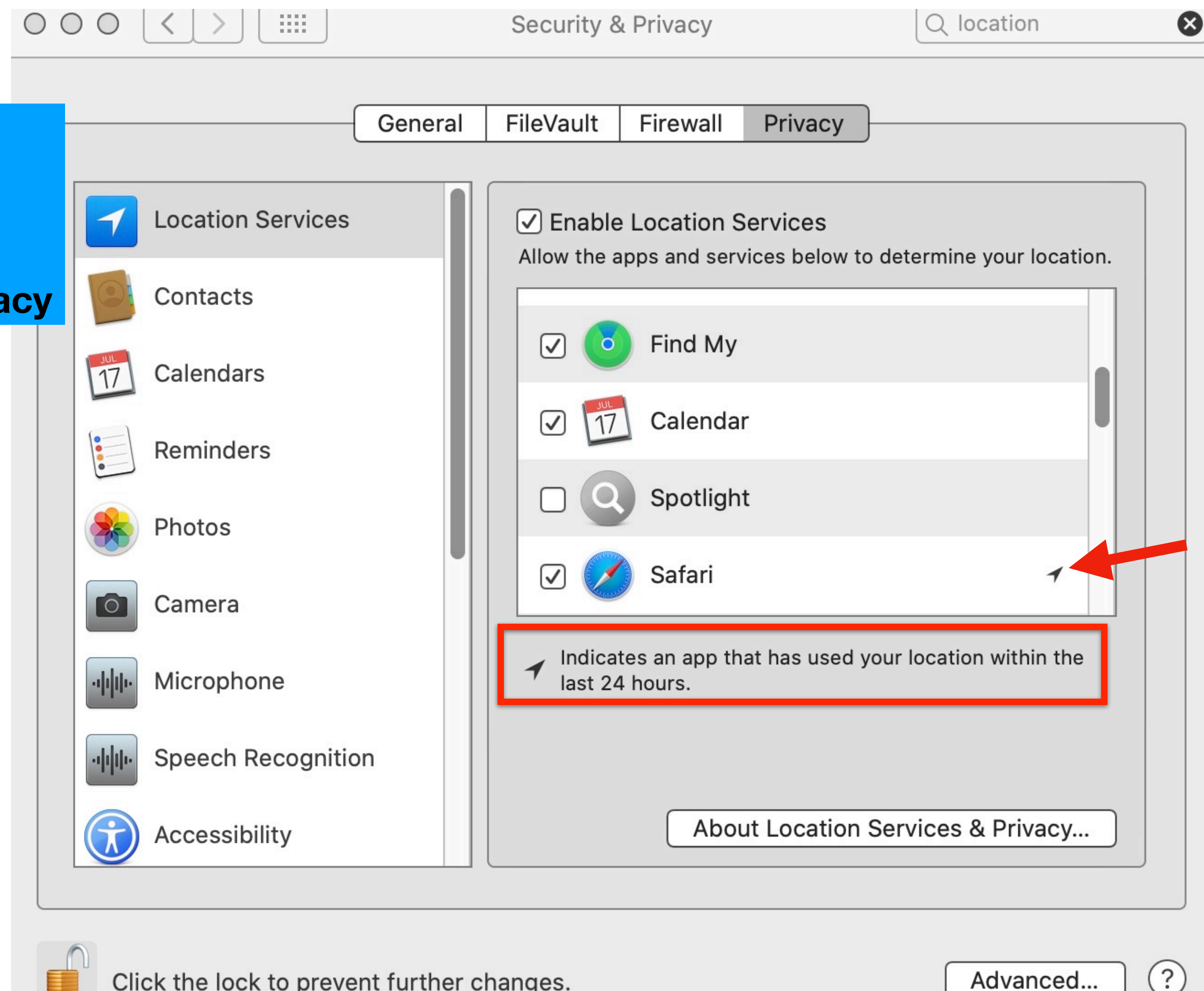
Purple Arrow

Gray Arrow



# Location Services on a Mac

Preferences > Security & Privacy



# Privacy Report

## Cross-site Trackers

## Intelligent Tracking Prevention



Safari prevents trackers from following you across websites.  
[Show Less](#)

### Cross-site trackers

Some websites allow data collection companies called trackers to track your browsing activity. Trackers can follow you across multiple websites and combine your activity into a profile for advertisers.

### Intelligent Tracking Prevention

Intelligent Tracking Prevention uses on-device machine learning to identify trackers and blocks them from accessing identifying information. Known trackers are independently identified by DuckDuckGo.

Last 30 days

Trackers prevented from profiling you  
**142**

Websites that contacted trackers  
**61%**

### Most contacted tracker

**doubleclick.net was prevented from profiling you across 10 websites**

<div>WebsitesTrackers</div>	
Website	Number of trackers
▶ foxnews.com	76
▶ allrecipes.com	65
▶ wsj.com	54

**Note:**  
Known trackers are independently known by DuckDuckGo



## Safari Preferences Setting

# Prevent Cross-Site Tracking setting

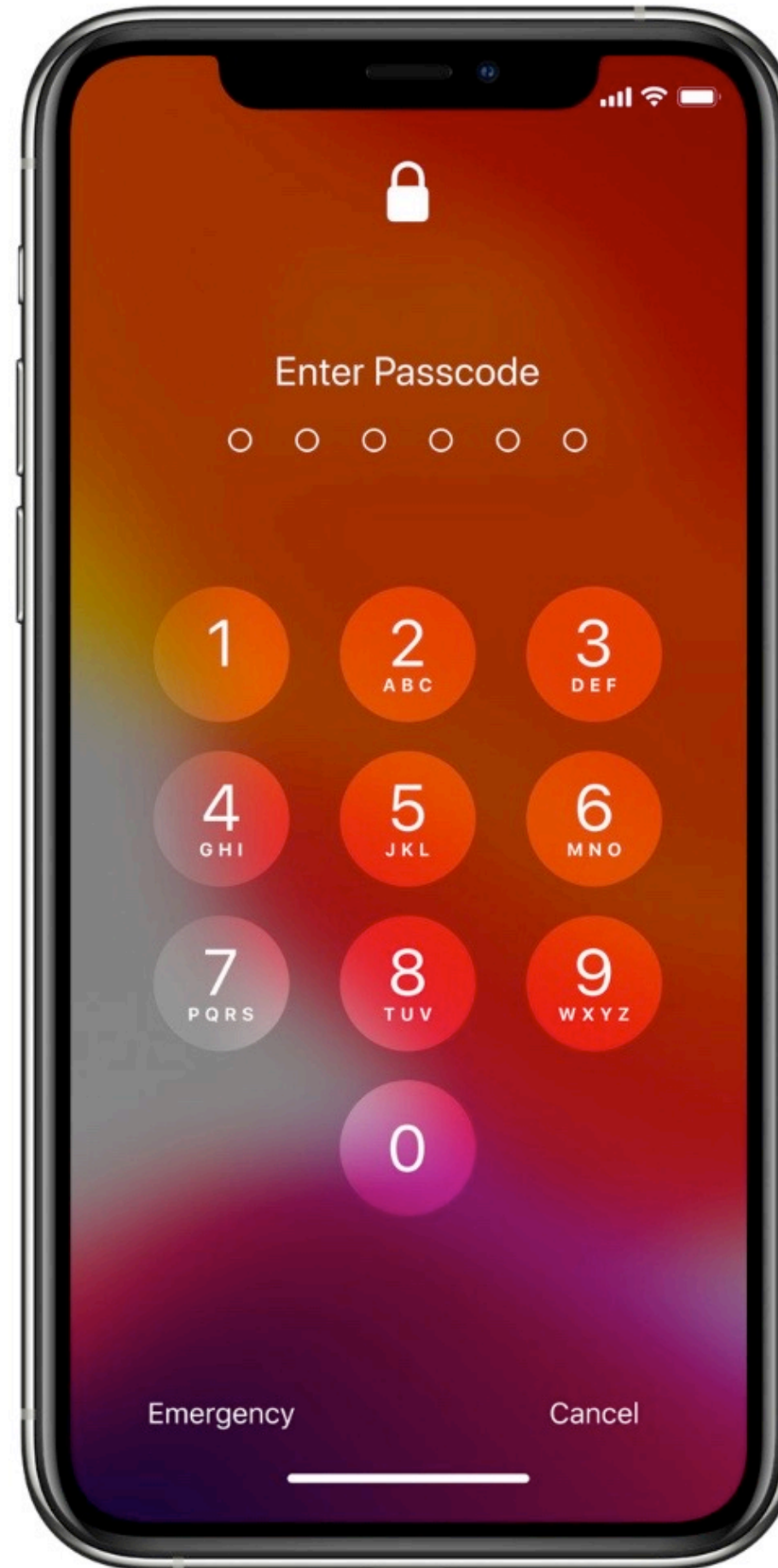
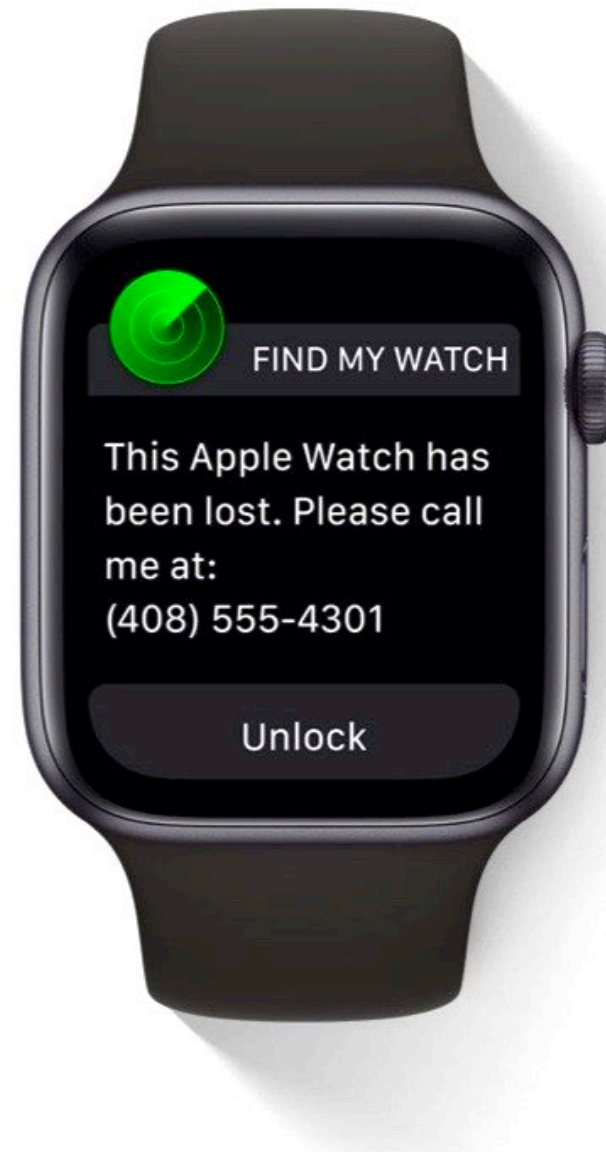


Safari 14 on a Mac

see Slide #7

**Secure your  
devices.**

**Prevent anyone except you from using your  
devices and accessing your information.**

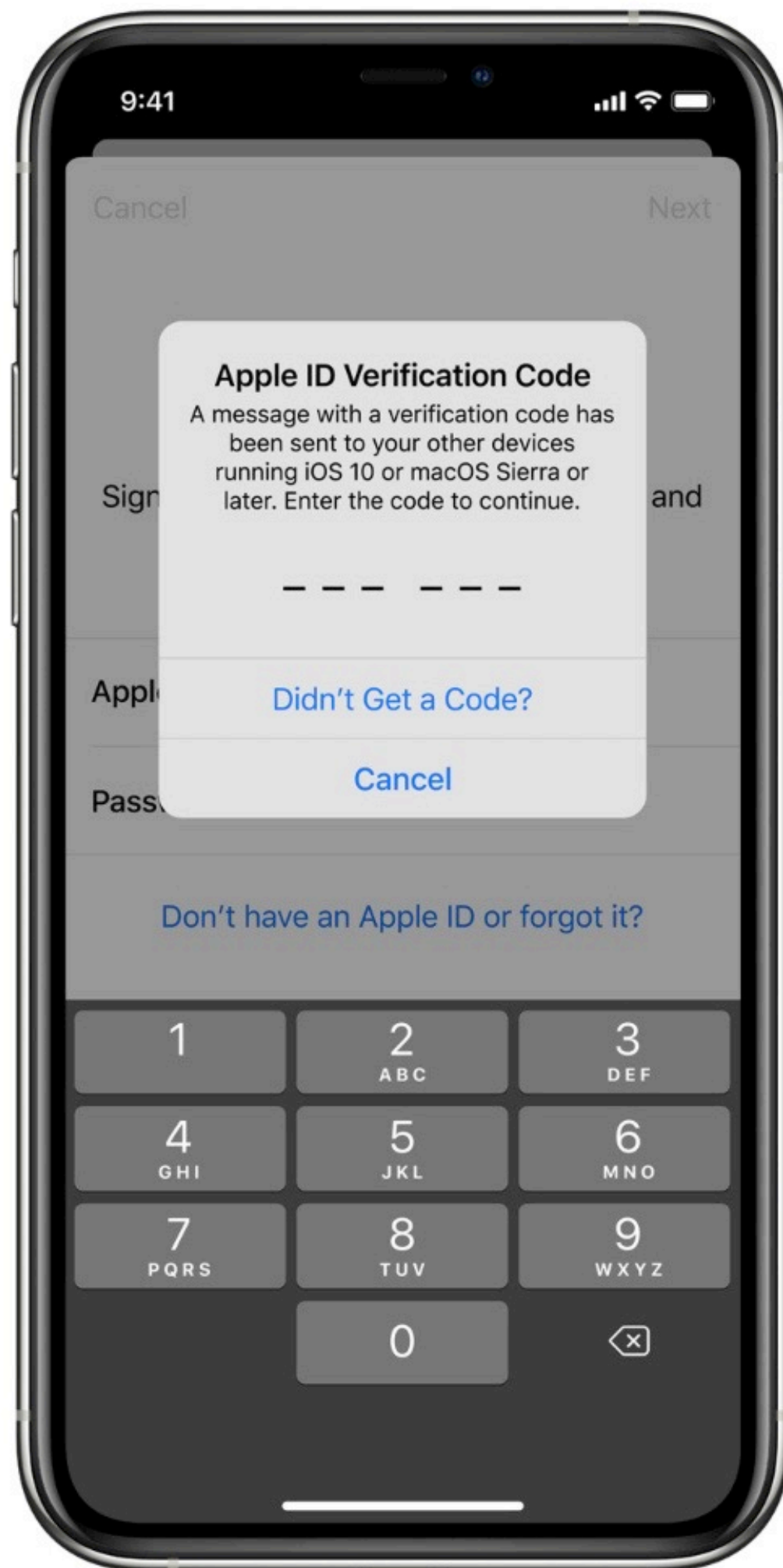


**Six-digit passcodes**

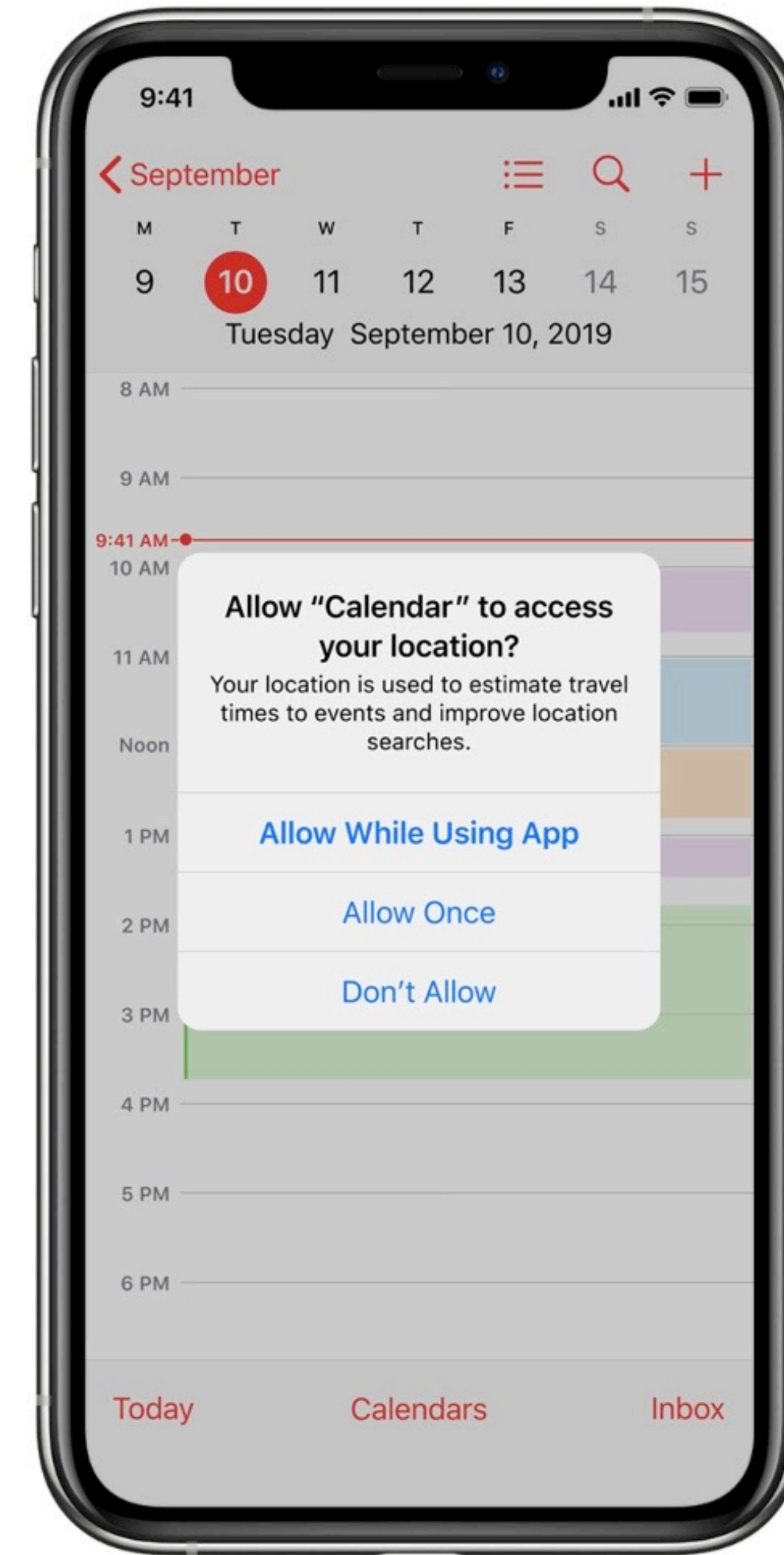


**Touch ID and Face ID**





**Two-factor authentication**



**Third-party apps and permissions**

<https://support.apple.com/en-us/HT204915>

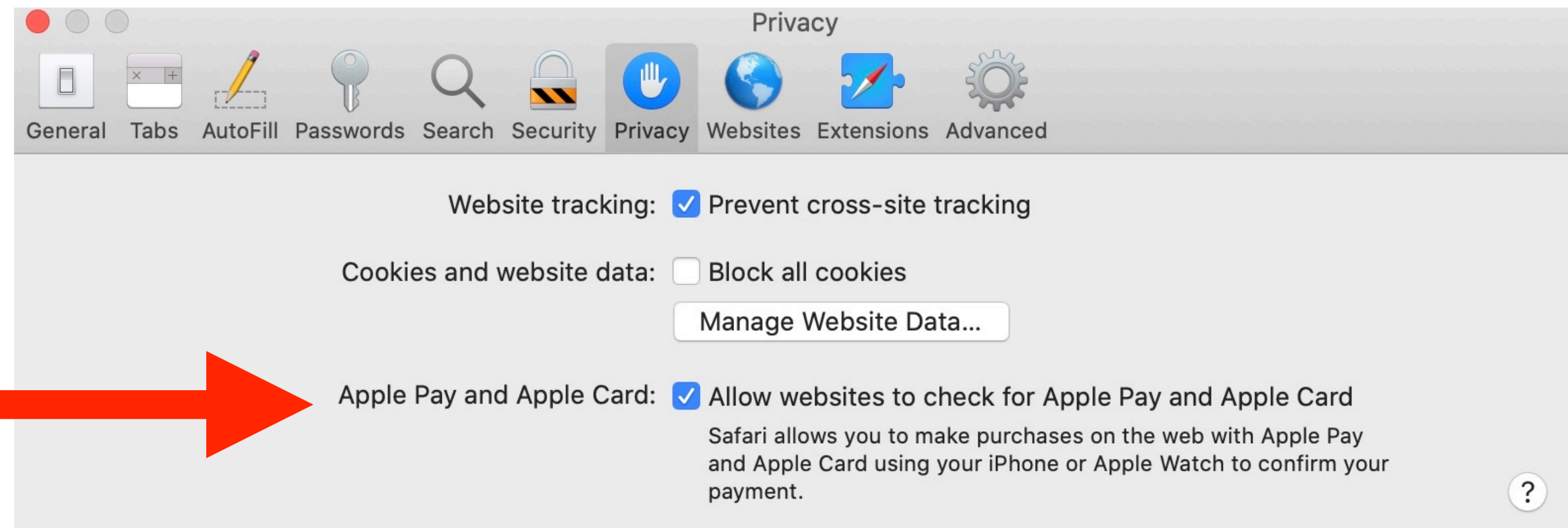


# Cashless made effortless.



<https://www.apple.com/apple-pay/>

## View of the Mac Safari Preferences





# Questions and Discussion