Florida
Statewide Assessments

Configurations, Troubleshooting, and Advanced Secure Browser Installation Guide for OS X/macOS and iOS/iPadOS

2020–2021

Updated 4/20/2021

FSA
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Configurations, Troubleshooting, and Secure Browser Installation for OS X/macOS and iOS/iPadOS

This document contains instructions for installing the Secure Profile and the Secure Browser for OS X/macOS, installing the SecureTestBrowser App for iOS/iPadOS, as well as configurations, troubleshooting, and advanced Secure Browser installation instructions for your network and OS X/macOS and iOS/iPadOS devices.

It is recommended that before an OS X or macOS machine is configured for testing, administrators create a backup of the device profile's preferences and settings as the Secure Profile will override these settings. Once the device is no longer being used for testing, the Secure Profile can be removed, and the original settings can be reapplied. Alternatively, you can create a testing profile to be used only for Florida Statewide Assessments.

How to Configure OS X/macOS Workstations for Online Testing

Mac workstations require the following configurations be performed before testing begins:

- Download and install the Secure Profile
- Download and install the Secure Browser
- Disable third-party app updates
- Disable fast user switching

In addition to the configurations listed above, Mac workstations running macOS 11 require the following configuration:

- Disable sleep mode

Instructions for these configurations appear below.

CAI supports macOS 11 (Big Sur), but users must upgrade to Secure Browser 12.6. macOS 11 will only work with Secure Browser 12.6. Secure Browser 12.5 for OS X 10.11–macOS 10.15 will continue to be available. Install Secure Browser 12.5 on all 10.11–10.15 computers/devices that will be used for testing. Install Secure Browser 12.6 on all macOS 11 computers/devices that will be used for testing.

Secure Browser 12.6 **only** supports macOS 11, including machines with either Intel processors or the Apple silicon processors. Secure Browser 12.6 will not support OS 10.11–10.15.

Secure Browser 12.5 supports versions 10.11–10.15. The following matrix displays the operating systems and features Secure Browser 12.6 will support compared to Secure Browser 12.5.

	Secure Browser 12.5	Secure Browser 12.6
macOS supported	10.11 (El Capitan) 10.12 (Sierra) 10.13 (High Sierra) 10.14 (Mojave) 10.15 (Catalina)	11 (Big Sur)
Intel processors supported?	Yes	Yes
Apple silicon processor supported?	No	Yes, but must also install Rosetta 2*
Secure Profile installation?	Yes (optional)**	Yes, install new Secure Profile (optional)**
Video conferencing supported?	Yes	Yes
Permissive Mode supported? (for use with third-party assistive technology products)	Yes	Yes

*Rosetta 2 is a third-party app that enables a Mac with an Apple silicon processor to use apps built for Macs with an Intel-based processor. If Rosetta 2 has already been installed on the device, it is not necessary to install it again. If Rosetta 2 has not already been installed, the Secure Browser will prompt the user to install Rosetta 2 the first time they launch the Secure Browser. Once, installed it works for all apps that require it for use on devices with an Apple silicon processor.

**Mac users have the option to follow the instructions in this document to manually disable the required settings or you may install the Secure Profile. If you use the Secure Profile, and have it on a Mac device, you will need to install the new version for macOS 11. In addition to the Secure Profile, macOS 11 users will need to disable third-party app updates, fast user switching, and sleep mode.

Installing the Secure Profile for OS X/macOS

Please note that the Secure Profile was updated on July 31, 2020. If you installed a version of Secure Profile prior to July 31, 2020, you must update to the most recent version available on the *Secure Browsers* page when upgrading to Secure Browser 12.5. If you will be installing Secure Browser 12.6, you must install the new version of Secure Profile released March 9, 2021. If the Secure Profile was installed manually, remove the Secure Profile from *System Preferences > Profiles* before running the new Secure Profile.

First, download the Secure Profile from the bottom of the Download Secure Browser page, install it, and restart your computer. The Secure Profile can also be installed on multiple devices all at once using any commercially available mobile device management (MDM) application you already use to manage your devices. After installing the profile, the computer should be restarted so that all settings can take effect.

The Secure Profile automates manual steps that take place to secure the device after installing the Secure Browser. The profile disables the hot keys for enabling Mission Control, Spaces, Screenshots, and Dictation and the trackpad gestures for accessing Lookup, App Exposé, Launchpad, and Show Desktop. It sets function keys to standard functions for all users of the Mac to which it is deployed, disables Voice Control, and disables the menu pop-up that appears when triple-tapping the power button on Touch Bar-enabled devices. It also prevents the device from receiving files via AirDrop and the ability to have your Mac identify items under the pointer.

Second, download the Secure Browser from the top of the Download Secure Browser page and install it using the instructions below.

Installing Secure Browser for OS X/macOS

This procedure installs Secure Browser on desktop and laptop computers running OS X or macOS. The steps in this procedure may vary depending on your version of OS X or macOS and your web browser.

1. Remove any previous versions of the secure browser by dragging its folder to the Trash.
2. Open the **Downloads** folder and double-click `FLSecureBrowser-OSX.dmg` to display its contents.
3. Drag the **FLSecureBrowser** icon to the desktop.
4. Double-click the **FLSecureBrowser** icon on the desktop to launch the secure browser. (You must launch the secure browser to complete the installation.) The secure browser opens displaying the student login screen. The browser fills the entire screen and hides the dock.
5. To exit the browser, click **X** in the upper-right corner of the screen.
6. Ensure all background jobs, such as virus scans or software updates, are scheduled outside of test windows. For example, if your testing takes place between 8:00 a.m. and 3:00 p.m., schedule background jobs outside of these hours.

Installing the SecureTestBrowser App for iOS/iPadOS

This section contains instructions for downloading and installing SecureTestBrowser and selecting your state and assessment program. The process for installing the mobile secure browser is the same as for any iOS/iPadOS application.

1. Click **Download** on the App Store. (You can also search for SecureTestBrowser in the App Store to find the secure browser app.) The download page opens.

2. Tap **GET**. The iPad downloads and installs the Secure Browser, and the icon changes to **OPEN**.
3. After installation, a SecureTestBrowser icon appears on the iPad's home screen.
4. Open **SecureTestBrowser**.
5. Configure your test administration by selecting your state and assessment program from the dropdown lists and tapping OK.

Additional Instructions for Installing the Secure Browser for OS X/macOS

This section contains additional installation instructions for installing the Secure Browser for OS X/macOS.

Cloning the Secure Browser Installation to Other OS X/macOS Machines

Depending on your networking and permissions, it may be faster to install the Secure Browser onto a single OS X/macOS machine, take an image of the disk, and copy the image to other OS X/macOS machines. The Secure Profile will also need to be installed on each machine as outlined in the Installing the Secure Profile for OS X/macOS section.

To clone the Secure Browser installation to other computers:

1. On the computer from where you will clone the installation, do the following:
    a. Install the Secure Browser following the directions above. Be sure to run and then close the Secure Browser after the installation.
    b. In Finder, display the **Library** folder.
    c. Open the **Application Support** folder.
    d. Delete the folder containing the Secure Browser.
    e. Delete the **Mozilla** folder.
2. Create a shell script that creates a new Secure Browser profile when a user logs in. The basic command to create a profile is

    ```
    <install_directory>/Contents/MacOS/FLSecureBrowser -CreateProfile -profile_name
    ```

    where

    ```
    profile_name
    ```

    is unique among all testing computers.
3. Clone the OS X image.
4. Deploy the image to the target OS X/macOS machines.

Uninstalling the Secure Browser on OS X/macOS

To uninstall an OS X Secure Browser, drag its folder to the Trash.

Additional Configurations for OS X/macOS

This section contains additional configurations for OS X/macOS. Note that the OS X/macOS Secure Profile automatically disables the following:

- Hot keys for enabling Mission Control, Spaces, Screenshots, and Dictation
- Trackpad gestures for Lookup, App Exposé, Launchpad, and Show Desktop

It also sets function keys to standard functions for all users of the Mac to which it is deployed, disables Voice Control, and disables the menu pop-up that appears when triple-tapping the power button on Touch Bar-enabled devices. The Profile does not disable the following:

- Updates to third-party apps
- Updates to iTunes
- Fast user switching

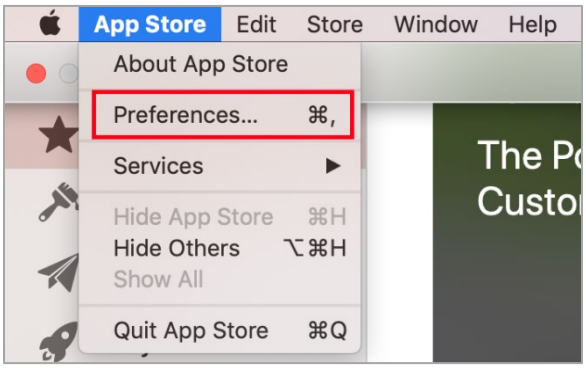
Disabling Updates to Third-Party Apps

Updates to third-party apps may include components that compromise the testing environment. This section describes how to disable updates to third-party apps. This configuration applies to all supported versions of OS X/macOS.

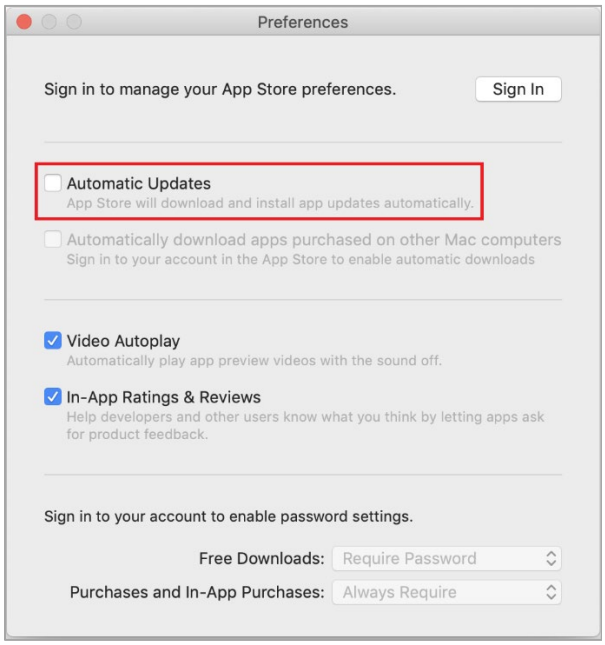
The following instructions are based on macOS 10.14; similar instructions apply for other supported versions of OS X/macOS.

To disable updates to third-party apps:

1. Log in to the student's account.
2. Open **App Store**. The ***App Store*** window opens.
3. From the menu bar, select **App Store**.
4. Select **Preferences**. The ***Preferences*** window opens.



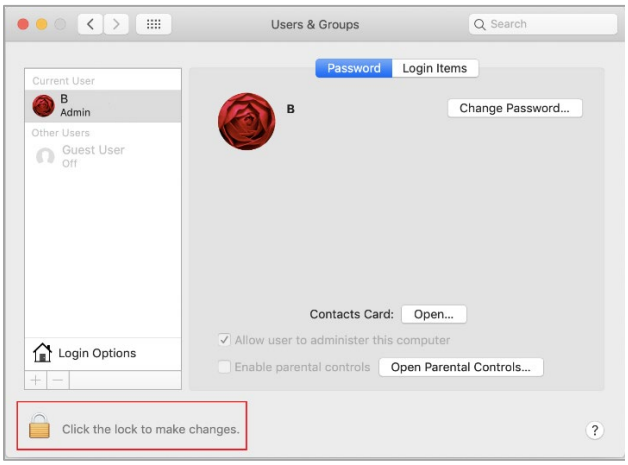
5. Clear the ***Automatic Updates*** checkbox.
6. Close the ***Preferences*** and ***App Store*** windows.



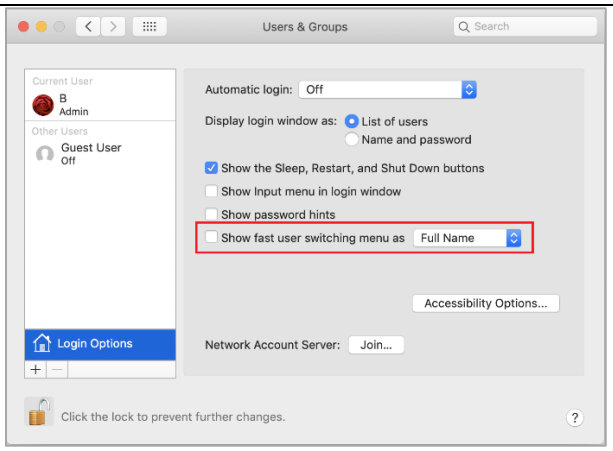
Disabling Fast User Switching

Fast User Switching is a feature in OS X/macOS that allows for more than one user to be logged in at the same time. If Fast User Switching is not disabled and students try to access it during a test, the Secure Browser will pause the test. The following instructions describe how to disable Fast User Switching. This configuration applies to all supported versions of OS X/macOS.

1. Choose Apple Menu > **System Preferences**.
2. Select **Users & Groups**. The *Users & Groups* window opens.
3. If the padlock in the lower left corner is locked, click it, and authenticate with admin credentials.



4. Select **Login Options**. The ***Login Options*** window opens.
5. Clear the **Show fast user switching menu as**… checkbox.
6. Close the **User & Groups** window.



Fast User Switching now disabled. Icon should no longer appear in menu bar.

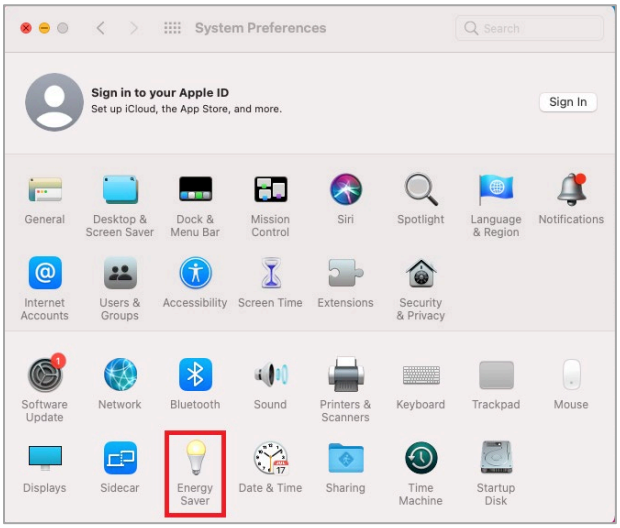
Disabling Sleep Mode on macOS 11

Sleep mode should be disabled on macOS 11 devices prior to testing. If sleep mode is not disabled and the device enters sleep mode while the student is testing, the student's testing experience may be disrupted. The following instructions differ slightly if you are using a desktop or laptop computer.

Disabling Sleep Mode on macOS 11 Desktops

The following instructions describe how to disable sleep mode on macOS 11 desktop computers.

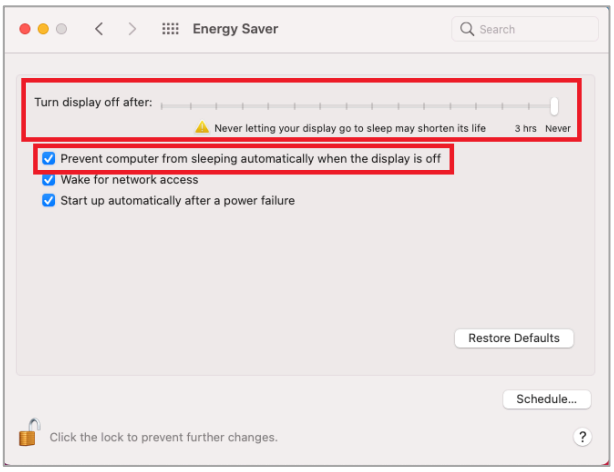
1. Choose Apple Menu > **System Preferences**.
2. Open **Energy Saver** settings. The ***Energy Saver*** setting window opens.
3. If the padlock in the lower left corner is locked, click it, and authenticate with admin credentials.



4. Drag the ***Turn display off after*** slider to **Never**.

5. Ensure the ***Prevent computer from sleeping automatically when the display is off*** checkbox is marked.

6. Close the ***Energy Saver*** settings and ***System Preferences*** windows.



Disabling Sleep Mode on macOS 11 Laptops

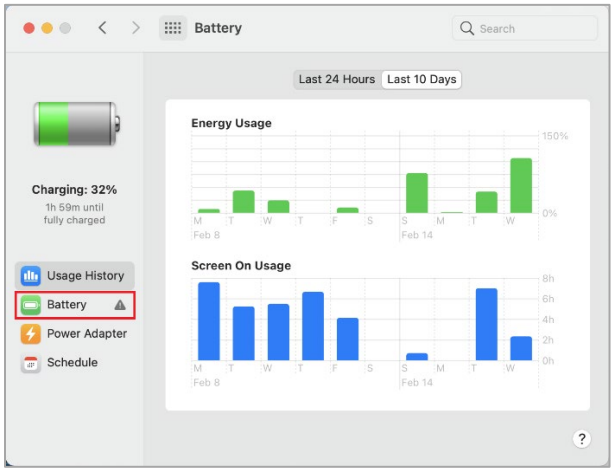
The following instructions describe how to disable sleep mode on macOS 11 laptop computers.

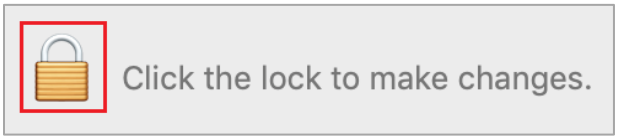
1. Choose Apple Menu > **System Preferences**.

2. Open **Battery** settings. The ***Battery*** settings window opens, displaying the ***Usage History*** tab.

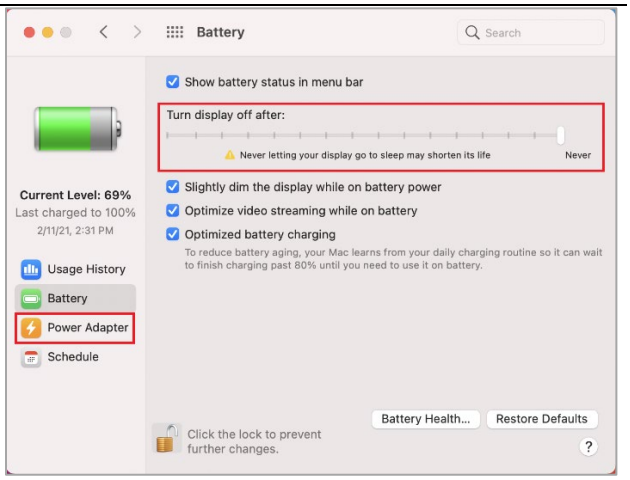
3. Select the **Battery** settings tab. The ***Battery*** settings tab opens.

4. If the padlock in the lower left corner is locked, click it, and authenticate with admin credentials.

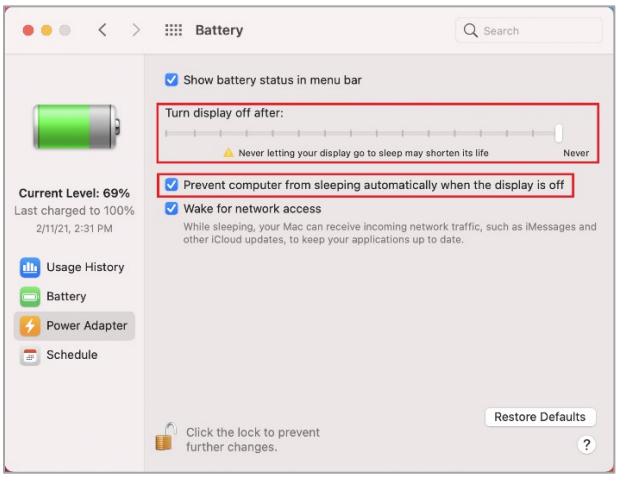




5. Drag the ***Turn display off after*** slider to **Never**.
6. Select the **Power Adapter** settings tab. The ***Power Adapter*** settings tab opens.
7. If the padlock in the lower left corner is locked, click it, and authenticate with admin credentials.



8. Drag the ***Turn display off after*** slider to **Never**.
9. Ensure the ***Prevent computer from sleeping automatically when the display is off*** checkbox is marked.
10. Close the ***Battery*** settings and ***System Preferences*** windows.



Installing Rosetta 2

If you are running the Secure Browser on Apple silicon devices, you must first install Rosetta 2.

Rosetta 2 may already be installed on your Apple silicon device if you needed it to run another Intel-based application. If it is not already installed, a prompt to install it will appear the first time you launch the Secure Browser.

Rosetta 2 can also be deployed to multiple devices at once through scripting or mobile device management (MDM).

For more information about Rosetta 2, including instructions to install it, please see https://support.apple.com/en-us/HT211861.

Additional Configurations for iOS/iPadOS

This section contains additional configurations for iOS/iPadOS.

Managing iPadOS Automatic Updates

CAI recommends disabling iPadOS automatic updates, so your iPads are not updated to a version that is not yet supported. To disable automatic updates on individual iPads, see Apple's instructions at https://support.apple.com/en-us/HT202180#automatic. If you use MDM software, you can use to disable updates on multiple iPads at once.

Using MDM to Disable Classroom Observation

You can use the following key value to disable access to the Classroom observation feature on student devices. This key is defined as part of the Restrictions profile payload and is documented in the Configuration Profile Reference.

allowScreenShot	Boolean	If set to false, users can't save a screenshot of the display and are prevented from capturing a screen recording; it also prevents the Classroom app from observing remote screens. Defaults to true.

Disabling Voice Control for iPads

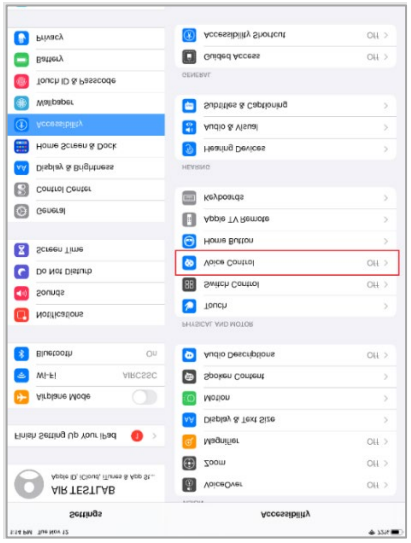
iPads running any supported version of iOS/iPadOS have access to a feature called Voice Control. Voice Control allows users to control an iPad using voice commands. If this feature is enabled on iPads that are used for testing, students may be able to access prohibited features and apps, such as web browsers, during a test. Voice Control is disabled by default on iPads. If it has never been enabled, you have nothing to do. If it has been enabled, you must disable it before a student takes a test as it is not automatically disabled by the Secure Profile. Voice Control can be disabled through accessibility settings. The following instructions describe how to disable Voice Control.

1. Select **Settings**.

Select **Accessibility**.

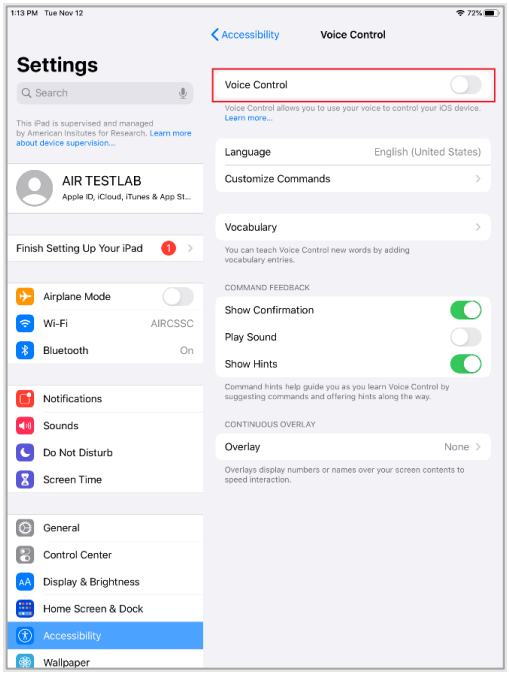
Select **Voice Control**.

Accessibility Settings – Voice Control



2. Toggle the **Voice Control** switch to the left to disable Voice Control.

Voice Control Settings

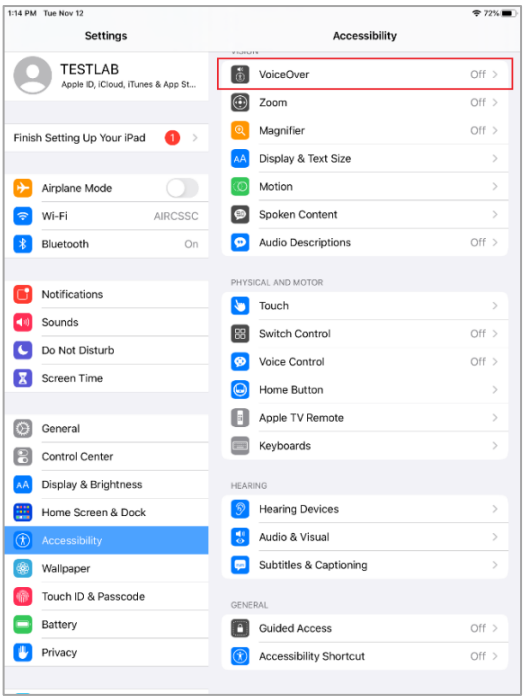


Disabling VoiceOver for iPads

iPads running any supported version of iOS/iPadOS have access to a feature called VoiceOver that is not automatically disabled by the Secure Browser. VoiceOver is a gesture-based screen reader that allows users to receive audible descriptions of what is on the screen of their iPad. VoiceOver also changes touchscreen gestures to have different effects and adds additional gestures that allow users to move around the screen and control their iPads. If VoiceOver is not disabled on iPads, students may be able to access unwanted apps during a test. VoiceOver can be disabled through accessibility settings. The following instructions describe how to disable VoiceOver.

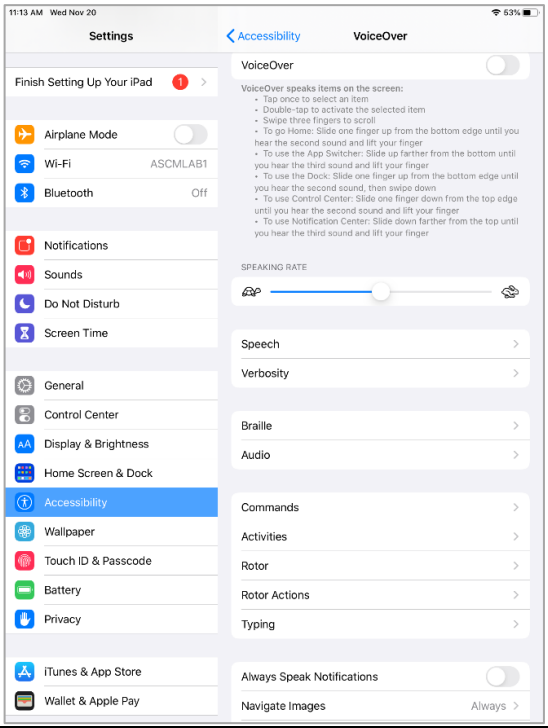
1. Select **Settings**.
2. Select Accessibility.
3. Select VoiceOver.

Accessibility Settings: VoiceOver



4. Toggle the **VoiceOver** switch to the left to disable VoiceOver.

VoiceOver Settings



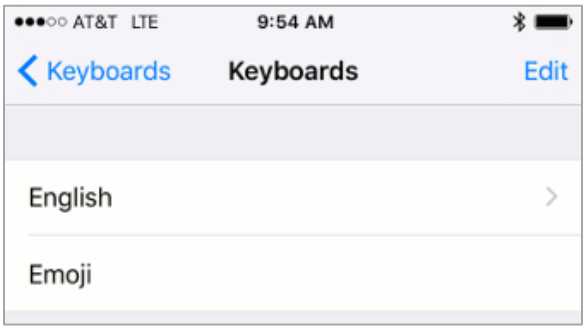
Disabling Emoji Keyboard for iPads

iPads running any supported version of iOS/iPadOS have an emoji keyboard enabled by default. If the emoji keyboard is not disabled, students will be able to enter emoticons into a test, which can be confusing for scorers.

The emoji keyboard can be disabled through keyboard settings. The following instructions describe how to disable the Emoji Keyboard.

1. Select **Settings**.
2. Navigate to **Keyboard > General**.
3. Select **Keyboards**.
4. Delete Emoji from the list by sliding it to the left and selecting **Delete**.

Keyboards Setting



Disabling Smart Punctuation

With iOS devices, students may receive a login failure when "Smart Punctuation" is enabled for the keyboard as the default apostrophe is not recognized.

To avoid error messages from appearing for users with apostrophes in their names:

1. Select **Settings**.
2. Navigate to **Keyboard > General**.
3. Select **Keyboards**.
4. Turn off **Smart Punctuation**.

Troubleshooting for OS X/macOS

This section contains troubleshooting tips for OS X/macOS.

Unsupported Operating System/Browser Error

If users attempt to run Secure Browser 12.5 on macOS 11, they will see an unsupported operating/browser combination page. Install Secure Browser 12.6 on macOS 11 devices.

If users run Secure Browser 12.6 on anything under macOS 11 (10.15 and below), they will receive an error message stating this application is only compatible with macOS 11. Install Secure Browser 12.5 on versions 10.11–10.15.

Resetting Secure Browser Profiles on OS X/macOS

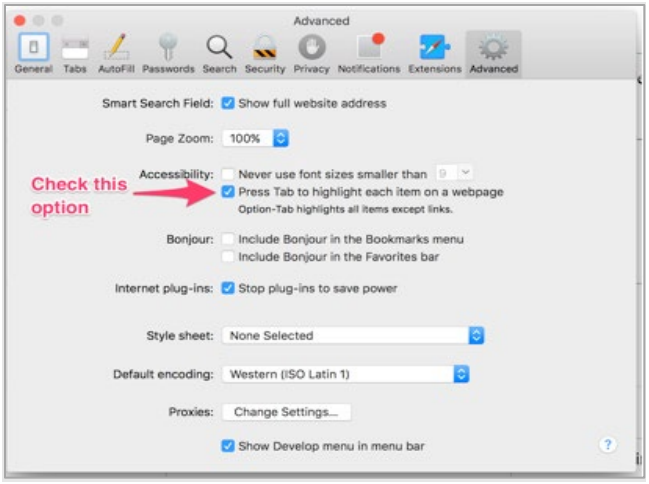
If the Help Desk advises you to reset the Secure Browser profile, use the instructions in this section.

1. Log on as an admin user or as the user who installed the Secure Browser and close any open Secure Browsers.
2. Start Finder.
3. While pressing **Option**, select **Go > Library**. The contents of the **Library** folder appear.
4. Open the **Application Support** folder, and delete the folder containing the Secure Browser.
5. Returning to the Library, open the **Caches** folder, and delete the Secure Browser's folder.
6. Restart the Secure Browser.

Keyboard Navigation to Tool Menu Using a Safari Browser

Students can use any web browser for practice tests, and navigate to the Tool menu using standard methods, with the exception of Safari. To access the Tool menu using Safari, enable the "Press tab to highlight each item on a webpage" option in Safari Preferences, as shown below.

NOTE: Students who have text-to-speech (TTS) accommodation enabled for practice tests will need to use the Secure Browser.



Disabling Text-to-Speech Keyboard Shortcut

A feature in OS X 10.12 and later allows users to have any text on the screen read aloud by selecting the text and hitting a preset key or set of keys on the keyboard. By default, this feature is disabled and must remain disabled so as not to compromise test security. This section describes how to toggle this feature.

To toggle text-to-speech keyboard shortcut:

1. From the Apple menu, select **System Preferences**.
2. Select **Accessibility**.
3. Select **Speech**.
4. To enable this feature, check the **Speak selected text when the key is pressed** checkbox. To disable, deselect the checkbox.

Troubleshooting Text-to-Speech

Using text-to-speech requires at least one voice pack to be installed on testing computers.

A number of voice packs are available for desktop computers, and CAI researches and tests voice packs for compatibility with the Secure Browser. Additionally, not all voice packs that come pre-installed with operating systems are approved for use with online testing. The voice packs listed at the end of this section have been tested and are allowed by the Secure Browser.

Using Text-to-Speech

Students using text-to-speech for the practice tests must log in using the Secure Browser.

We strongly encourage schools to test the text-to-speech settings before students take operational tests. You can check these settings by running a practice test or the Infrastructure

Trial with text-to-speech enabled or through the diagnostic page. From the student practice test login screen, click the **Run Diagnostics** link, and then click the **TTS Check** button.

How the Secure Browser Selects Voice Packs

This section describes how CAI's Secure Browsers select which voice pack to use. It is recommended that students use the same voice pack that is used for instruction.

Voice Pack Selection on Desktop Versions of Secure Browsers

When a student who is using text-to-speech starts a test, the Secure Browser looks for voice packs on the student's machine. Upon recognizing an approved voice pack, the Secure Browser uses the one with the highest priority.

If any of the approved voice packs has also been set as the default voice on the computer, then that voice pack will always get the highest priority. Currently, MAC OS Alex is one of the Voice packs used by CAI to check for proper pronunciation.

Configuring OS X/macOS Text-to-Speech Settings

This section explains how to configure OS X/macOS for using text-to-speech with the Secure Browser. The text-to-speech feature is available on OS X/macOS versions as listed on the Secure Browsers page.

The instructions in this section are for OS X 10.12. The process is similar for other versions of OS X/macOS.

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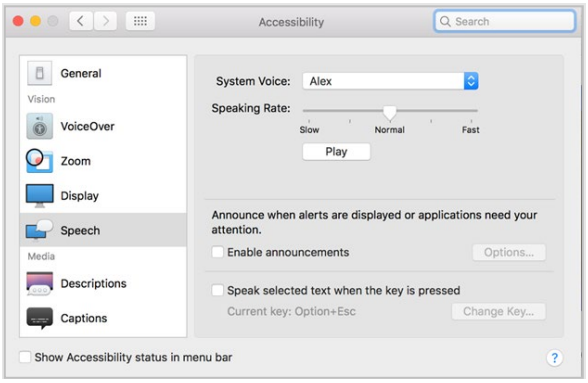
1. Choose Apple Menu > **System Preferences**.
2. Click **Accessibility**.
3. From the pane on the left side, select **Speech**.



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4. Configure your default TTS preferences.
    a. *System Voice*: If multiple voice packs are available, select the default voice.
    b. Select **Play** to see whether the selected voice requires a rate adjustment.
    c. Speaking Rate: If necessary, adjust the voice speed. Drag the slider to make the voice speak slower or faster.
    d. *When you are done, click the red X in the upper left corner to save your settings and close the Accessibility window.*

Voice Packs Recognized by Desktop Secure Browsers

The table below displays the voice packs for OS X/macOS that are currently recognized by the Secure Browser.

Voice Packs for OS X/macOS

Voice Packs Recognized by Secure Browsers—OS X/macOS

Vendor	Voice Pack	Language
OS X/macOS (pre-installed)	Agnes	English
OS X/macOS (pre-installed)	**Alex**	**English**
OS X/macOS (pre-installed)	Bruce	English
OS X/macOS (pre-installed)	Callie	English
OS X/macOS (pre-installed)	David	English
OS X/macOS (pre-installed)	Fred	English
OS X/macOS (pre-installed)	Jill	English
OS X/macOS (pre-installed)	Junior	English
OS X/macOS (pre-installed)	Kathy	English
OS X/macOS (pre-installed)	Princess	English
OS X/macOS (pre-installed)	Ralph	English
OS X/macOS (pre-installed)	Samantha	English
OS X/macOS (pre-installed)	Vicki	English
OS X/macOS (pre-installed)	Victoria	English
Infovox (commercial)	Heather Infovox iVox HQ	English

OS X/macOS and iOS/iPadOS Technology Coordinator Checklist

This checklist can be printed out and referred to during review of networks and computers used for testing.

Activity		Target Completion Date	Reference
For all Operating Systems			
☐	Verify that all of your school's computers/devices that will be used for online testing meet the operating system requirements.	3–4 weeks before testing begins in your school	Supported Systems & Requirements
☐	Install Secure Browser 12.5 on all 10.11–10.15 computers/devices that will be used for testing. Install Secure Browser 12.6 on all macOS 11 computers/devices that will be used for testing.	3–4 weeks before testing begins in your school	Configurations, Troubleshooting, and Secure Browser Installation for OS X/macOS and iOS/iPadOS
☐	Verify that your school's network and Internet are properly configured for testing, including Allowlisting procedures, conducting network diagnostics, and resolving any issues.	3–4 weeks before testing begins in your school	Technology Setup for Online Testing
☐	Enable pop-up windows and review configuration requirements for each operating system.	1–2 weeks before testing begins in your school	Configurations, Troubleshooting, and Secure Browser Installation for OS X/macOS and iOS/iPadOS
For OS X/macOS and iOS/iPadOS			
☐	Prior to downloading the secure browser, install the secure profile for OS X/macOS on all computers/devices that will be used for testing.	3–4 weeks before testing begins in your school	Configurations, Troubleshooting, and Secure Browser Installation for OS X/macOS and iOS/iPadOS
☐	Complete remainder of additional configurations.	1–2 weeks before testing begins in your school	Additional Configurations for OS X/macOS
☐	Install any required text-to-speech software on computers that will be used for testing with that accommodation and verify the installation.	1–2 weeks before testing begins in your school	Using Text-to-Speech

Florida Help Desk and User Support

If this document does not answer your questions, please contact the Florida Help Desk.

The Help Desk will be open **Monday–Friday from 7:00 a.m. to 8:30 p.m. Eastern Time** (except holidays or as otherwise indicated on the Florida Statewide Assessments Portal).

Toll-Free Phone Support: 1-866-815-7246

Email Support: FloridaHelpDesk@CambiumAssessment.com

In order to help us effectively assist you with your issue or question, please be ready to provide the Help Desk with detailed information that may include the following:

- Device, operating system, and browser version information
- Any error messages and codes that appeared, if applicable
- Information about your network configuration:
    - Secure browser installation (to individual machines or network)
    - Wired or wireless Internet network setup

Change Log

Location	Change	Date
How to Configure OS X/macOS Workstations for Online Testing	Removed “Disable iTunes updates” from list of required configurations. This configuration is no longer necessary. Added additional configuration for macOS 11 devices: Disable sleep mode	03/23/2021
Disabling Updates to Third-Party Apps	Instructions and screen shots were updated.	03/23/2021
Disabling Updates to iTunes	Topic removed as configuration is no longer necessary.	03/23/2021
Disabling Fast User Switching	Instructions and screen shots were updated.	03/23/2021
Disabling Sleep Mode on macOS 11	Added new topic for macOS 11.	03/23/2021
Installing Rosetta 2	Added new topic for Secure Browser 12.6 (macOS 11).	03/23/2021
Disabling Smart Punctuation	Inserted new section.	04/20/2021

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