

Configurations, Troubleshooting, and Secure Browser Installation Guide for Mac and iOS

For Technology Coordinators

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Configurations, Troubleshooting, and Secure Browser Installation for Mac and iOS

This document contains instructions for installing the Secure Profile and the Secure Browser for Mac, installing the AIRSecureTest App for iOS, as well as configurations, troubleshooting, and advanced Secure Browser installation instructions for your network and Mac and iOS devices.

Installing the Secure Profile for Mac

Mac workstations **require** a two-step setup process, and it is important they are done in the correct order.

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.

The Secure Profile is new for 2019–2020 and automates manual steps that take place to secure the device after installing the Secure Browser. The profile disables the hot keys for enabling Dictation, Mission Control, and Spaces, and the trackpad gestures for accessing Lookup, Space Switching, Expose, and Notification Center, and also sets function keys to standard functions.

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 Mac

This procedure installs Secure Browser on desktop and laptop computers running Mac OS X or macOS. The steps in this procedure may vary depending on your version of Mac 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 `FSASecureBrowser-OSX.dmg` to display its contents.
3. Drag the **FSASecureBrowser** icon to the desktop.
4. Disable Mission Control/Spaces. Instructions for disabling Spaces are in the Configurations, Troubleshooting, and Advanced Secure Browser Installation Guide for Mac document.
5. Double-click the **FSASecureBrowser** 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.
6. To exit the browser, click **X** in the upper-right corner of the screen.

7. 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 AIRSecureTest App for iOS

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

1. Click **Download** on the App Store. (You can also search for AIRSecureTest in the App Store to find the secure browser app.) The AIRSecureTest download page opens.
2. Tap **GET**. The iPad downloads and installs the Secure Browser, and the icon changes to **OPEN**.
3. After installation, an AIRSecureTest icon appears on the iPad's home screen.
4. Open **AIRSecureTest**.
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 Mac

This section contains additional installation instructions for installing the Secure Browser for Mac.

Cloning the Secure Browser Installation to Other Macs

Depending on your networking and permissions, it may be faster to install the Secure Browser onto a single Mac, take an image of the disk, and copy the image to other Macs.

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/FSASecureBrowser --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 Macs.

Uninstalling the Secure Browser on Mac

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

Additional Configurations for Mac

This section contains additional configurations for Mac. Note that the Mac Secure Profile automatically disables the following:

- Hot keys for enabling Dictation, Mission Control, and Spaces
- Trackpad gestures for accessing Lookup, Space Switching, Expose, and Notification Center

It also sets function keys to standard functions.

The Profile does not disable the following:

- Updates to third-party apps
- Updates to iTunes
- Siri
- 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.

The following instructions are based on OS X 10.12; similar instructions apply for other versions of OS X.

To disable updates to third-party apps:

1. Log in to the student's account.
2. Choose Apple menu > **System Preferences**. The **System Preferences** dialog box opens.
3. Click **App Store**. The **App Store** window opens.
4. Mark **Automatically check for updates**.
5. Clear **Download newly available updates in the background**.
6. Clear **Install app updates**.
7. Mark **Install system data files and security updates**.

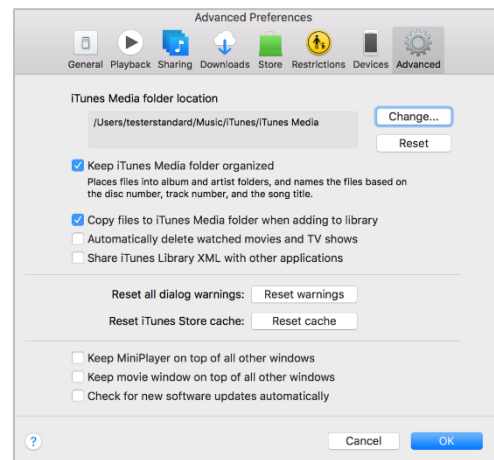


Disabling Updates to iTunes

You must disable updates to iTunes prior to testing. If iTunes updates pop up during a test, the Secure Browser will pause the test and the student will be kicked out of the testing session. The following instructions are based on OS X 10.12; similar instructions apply for other versions of OS X.

To disable updates to iTunes:

1. Log in to the student's account.
2. Start iTunes.
3. Select **iTunes > Preferences**.
4. Under the **Advanced** tab, clear **Check for new software updates automatically**.
5. Click **OK**.



Disabling Siri

Siri is a virtual assistant that uses voice commands to answer questions and perform actions on OS X desktops and laptops. If Siri is not disabled, students could potentially have access to features and information that they should not have access to while taking a secure assessment.

To disable the Siri feature:

1. Choose Apple menu > **System Preferences** > **Siri**
2. Uncheck the box next to **Enable Siri**.

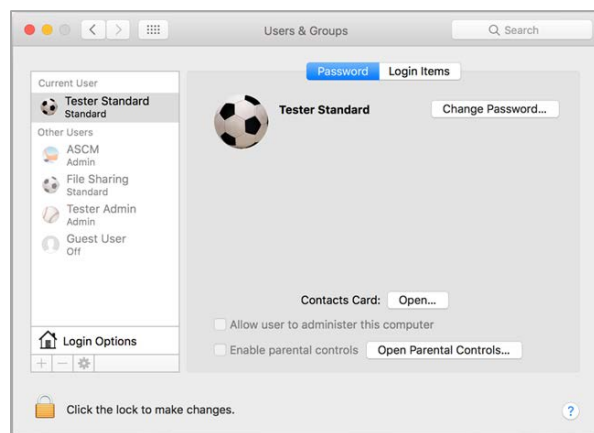


With Siri disabled, the menu bar icon is removed. Depending on your Mac, Siri can still be activated from the dock or the Touch Bar. It's important to note that while in a test, the AIRSecureBrowser app will detect if a user tries to enable Siri during testing and the app will disconnect the student from the test.

Disabling Fast User Switching

Fast User Switching is a feature in Mac OS X 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.

1. Choose Apple Menu > **System Preferences**.
2. Click **Users & Groups**. The **Users & Groups** window opens.
3. If the padlock in lower left corner is locked, click it and authenticate with admin credentials.
4. Click **Login Options**. The **Login Options** window opens.
5. Uncheck the **Show fast user switching menu as...** checkbox.



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

Additional Configurations for iOS

This section contains additional configurations for iOS.

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.
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Troubleshooting for Mac

This section contains troubleshooting tips for Mac.

Resetting Secure Browser Profiles on Mac

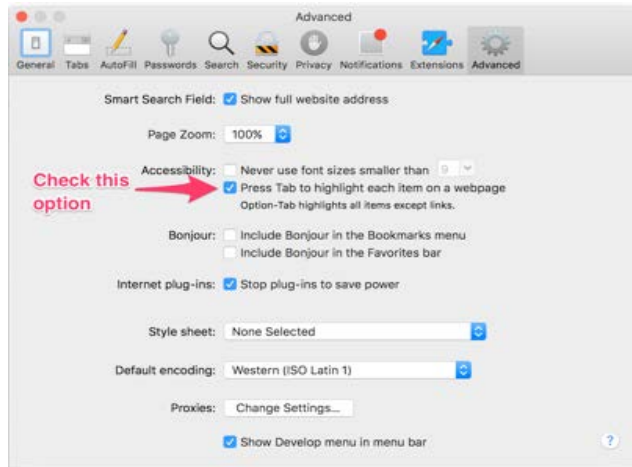
If the Help Desk advises you to reset the Secure Browser profile, use the instructions in this section.

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 AIR researches and tests voice packs for compatibility with the Secure Browsers. 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 whitelisted 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 AIR's Secure Browsers select which voice pack to use.

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.

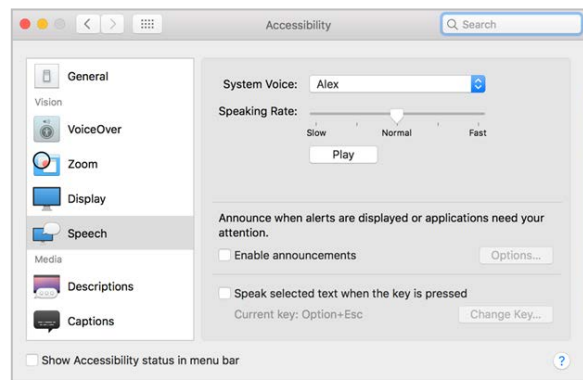
If any of the approved voice packs has also been set as the default voice on the computer, then that voice pack will always get the highest priority.

Configuring Mac Text-to-Speech Settings

This section explains how to configure Mac OS for using text-to-speech with the Secure Browser. The text-to-speech feature is available on Mac OS 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 Mac OS.

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



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 Mac that are currently recognized by the Secure Browser.

Voice Packs for Mac

Voice Packs Recognized by Secure Browsers—Mac

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

Mac and iOS 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			
<input type="checkbox"/>	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
<input type="checkbox"/>	Verify that your school's network and Internet are properly configured for testing, conduct network diagnostics, and resolve any issues.	3–4 weeks before testing begins in your school	Supported Systems & Requirements
<input type="checkbox"/>	Install the secure browser on all computers/devices that will be used for testing.	3–4 weeks before testing begins in your school	Configurations, Troubleshooting, and Advanced Secure Browser Installation for Mac and iOS
<input type="checkbox"/>	Enable pop-up windows and review software requirements for each operating system.	1–2 weeks before testing begins in your school	Technology Setup for Online Testing
For Mac and iOS			
<input type="checkbox"/>	Prior to downloading the secure browser, install the secure profile for Mac on all computers/devices that will be used for testing.	3–4 weeks before testing begins in your school	Configurations, Troubleshooting, and Advanced Secure Browser Installation for Mac and iOS
<input type="checkbox"/>	Complete remainder of additional configurations.	1–2 weeks before testing begins in your school	Additional Configurations for Mac
<input type="checkbox"/>	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

FSA Help Desk and User Support

If this document does not answer your questions, please contact the FSA 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 FSA Portal).

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

Email Support: fsahelpdesk@air.org

In order to help us effectively assist you with your issue or question, please be ready to provide the FSA 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