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

For Technology Coordinators

2023-2024

Published June 28, 2023

Prepared by Cambium Assessment, Inc.

Table of Contents

Configurations, Troubleshooting, and Advanced Secure Browser Installation for Mac

This document contains configurations, troubleshooting, and advanced Secure Browser installation instructions for your network and Mac workstations.

About Assessment Mode

A feature in macOS 11.4 and higher called Assessment Mode (AM) works with CAI's Secure Browser to lock down Mac workstations for online testing. AM requires no setup. Once the Secure Browser is launched on a Mac workstation running macOS 11.4 or higher, AM kicks in automatically. Workstations running macOS 11.4 or higher require no further configuration prior to testing.

For more information about AM, including a list of features it disables, please visit https://support.apple.com/en-us/HT204775.

How to Install 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 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**.**

How to Install the Secure Browser for Mac Using Advanced Methods

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

How to Clone 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.

1. On the computer from where you will clone the installation, install the Secure Browser following the directions on your portal. Be sure to run and then close the Secure Browser after the installation.

2. Clone the image.

3. Deploy the image to the target Macs.

How to Uninstall the Secure Browser on Mac

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

How to Troubleshoot Mac Workstations

This section contains troubleshooting tips for Mac.

How to Reset Secure Browser Profiles on Mac

If the Helpdesk 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. Returning to the Library, open the **Caches** folder, and delete the Secure Browser's folder.

5. Restart the Secure Browser.

Setting MacBook Touch Bar to Show Function Keys

MacBook touch bars may allow students to access features on a device that should not be accessible while a student is testing. If students try to access these features while taking a test, the Secure Browser will pause the test. To prevent students from getting kicked out a test if they try to use the touch bar to access unwanted features, you can configure the touch bar to show only function keys.

1. From the Apple menu, select System Preferences.
2. Select Keyboard.
3. Select the Keyboard tab.
4. In the Touch Bar shows field, select F1, F2, etc. Keys.

How to Navigate to the Tool Menu with the Keyboard Using a Safari Browser

Students can use any supported public browser for training 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 training tests will need to use the Secure Browser.

1. Open Safari, and from the Safari menu, click **Preferences**.

2. Click **Advanced**.

3. Mark the checkbox **Press tab to highlight each item on a webpage**.

Figure 1. Advanced Safari Preferences
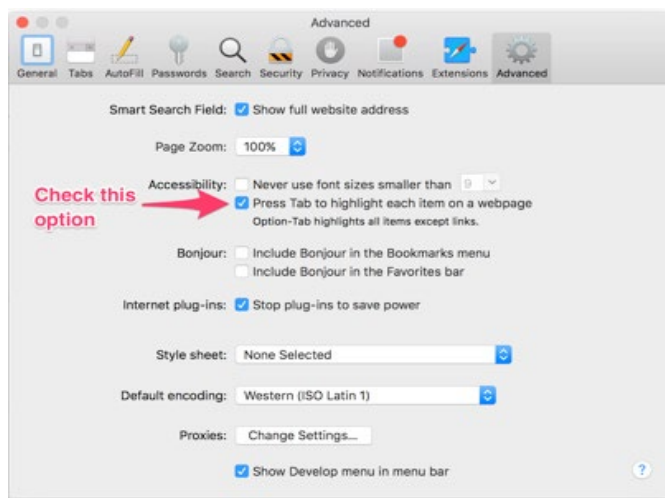
How to Disable Text-to-Speech Keyboard Shortcut

A feature in macOS 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.

1. From the Apple menu, select **System Preferences**.

2. Select **Accessibility**.

3. Select **Speech**. Note: In macOS 12+, this feature is called **Spoken Text**.

4. To enable this feature, check the **Speak selected text when the key is pressed** checkbox. To disable, deselect the checkbox.

How to Configure Networks for Online Testing

This section contains additional configurations for your network.

Resources to Add to your Allowlist for Online Testing

This section presents information about the URLs that CAI provides. Ensure your network's firewalls are open for these URLs. If your testing network includes devices that perform traffic shaping, packet prioritization, or Quality of Service, ensure these URLs have high priority.

URLs for Non-Testing Sites to Add to your Allowlist

Table 1 lists URLs for non-testing sites, such as Test Information Distribution Engine and Online Reporting System.

Table 1. CAI URLs for Non-Testing Sites

System	URL
Portal and Secure Browser installation files	https://utahrise.org/
Single Sign-On System	https://sso2.cambiumast.com/auth/realms/utah/account
Test Information Distribution Engine	https://ut.tide.cambiumast.com/
Reporting System	https://ut.reports.cambiumast.com/

URLs for TA and Student Testing Sites to Add to your Allowlist

Testing servers and satellites may be added or modified during the school year to ensure an optimal testing experience. As a result, CAI strongly encourages you to add these URLs to your allowlist at the root level. This requires using a wildcard. CAI strongly encourages adding domains (and not IP addresses) and using wildcards when adding these URLs to your allowlist, as servers may be added or removed from the field without notice.

Table 2. CAI URLs for Testing Sites

System	URL
TA and Student Testing Sites Assessment Viewing Application	*.cambiumtds.com *.tds.cambiumtds.com *.cloud1.tds.cambiumtds.com *.cloud2.tds.cambiumtds.com *.cdn.cambiumtds.com *.cdn2.cambiumtds.com *.static.cambiumtds.com *.resources.cambiumtds.com *.cambiumast.com *.tds.cambiumast.com *.cloud1.tds.cambiumast.com *.cloud2.tds.cambiumast.com

URLs for Online Dictionary and Thesaurus to Add to your Allowlist

Some online assessments contain an embedded dictionary and thesaurus provided by Merriam-Webster. The Merriam-Webster URLs listed in Table 3 should be added to your allowlist to ensure that students can use them during testing.

Table 3. CAI URLs for Online Dictionaries and Thesauruses

Domain Name	IP Address
media.merriam-webster.com	64.124.231.250
www.dictionaryapi.com	64.124.231.250

Domains for Email Exchange Server and Single Sign-On System

CAI systems send emails for password resets and login codes for the single sign-on system from cambiumast.com and from cambiumassessment.com. Add both domains to your allowlist to ensure you receive these emails.

Ports and Protocols Required for Online Testing

Table 4 lists the ports and protocols used by the Test Delivery System. Ensure that all content filters, firewalls, and proxy servers are open accordingly.

Table 4. Ports and Protocols for Test Delivery System

Port/Protocol	Purpose
80/TCP	HTTP (initial connection only)
443/TCP	HTTPS (secure connection)

How to Configure Filtering Systems

If the school's filtering system has both internal and external filtering, the URLs for the testing sites (see Table 2) must be added to your allowlist in both filters. Ensure your filtering system is not configured to perform packet inspection on traffic to CAI servers. Please see your vendor's documentation for specific instructions. Also, be sure to add these URLs to your allowlist in any multilayer filtering system (such as local and global layers). Ensure all items that handle traffic to *.cambiumtds.com and *.tds.cambiumast.com have the entire certificate chain and are using the latest TLS 1.2 protocol.

How to Configure for Domain Name Resolution

Table 1 and Table 2 list the domain names for CAI's testing and non-testing applications. Ensure the testing machines have access to a server that can resolve those names.

How to Configure Network Settings for Online Testing

Local Area Network (LAN) settings on testing machines should be set to automatically detect network settings.

1. Open **System Preferences**.

2. Open **Network**.

3. Select **Ethernet** for wired connections or **WiFi** for wireless connections.

4. Click **Advanced**.

5. Click **Proxies** tab.

6. Click **Auto Proxy Discovery** checkbox.

7. Click **OK** to close window.

8. Click **Apply** to close **Network** window.

9. Close **System Preferences**.

How to Configure the Secure Browser for Proxy Servers

By default, the Secure Browser attempts to detect the settings for your network's web proxy server. However, users of web proxies should execute a proxy command once from the command prompt. This command does not need to be added to the Secure Browser shortcut. Table 5 lists the form of the command for different settings and operating systems. To execute these commands from the command line, change to the directory containing the Secure Browser's executable file.

Note: Domain names in commands The commands in Table 5 use the domain proxy.com. When configuring for a proxy server, use your actual proxy server hostname.

Table 5. Specifying proxy settings using the command line

Description	System	Command
Use the browser without any proxy	Mac	./UTSecureBrowser -proxy 0 https://ut.tds.cambiumtds.com/student
Set the proxy for HTTP requests only	Mac	./UTSecureBrowser -proxy 1:http:proxy.com:8080 https://ut.tds.cambiumtds.com/student
Set the proxy for all protocols to mimic the "Use this proxy server for all protocols" of Firefox	Mac	./UTSecureBrowser -proxy 1:*:proxy.com:8080 https://ut.tds.cambiumtds.com/student
Specify the URL of the PAC file	Mac	./UTSecureBrowser -proxy 2:proxy.com https://ut.tds.cambiumtds.com/student
Auto-detect proxy settings	Mac	./UTSecureBrowser -proxy 4 https://ut.tds.cambiumtds.com/student
Use the system proxy setting (default)	Mac	./UTSecureBrowser -proxy 5 https://ut.tds.cambiumtds.com/student