

# Configurations, Troubleshooting, and Advanced Secure Browser Installation Guide for Chrome OS

For Digital Tests in the SAT<sup>®</sup> Suite of Assessments

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## Configurations, Troubleshooting, and Advanced Secure Browser Installation for Chrome OS

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

### How to Configure Chrome OS Workstations for Online Testing

This section contains additional configurations for Chrome OS.

#### How to Manage Chrome OS Auto-Updates

This section describes how to manage Chrome OS auto-updates. CAI recommends disabling Chrome OS auto-updates or limiting updates to a specific version used successfully before summative testing begins.

#### How to Disable Auto-Updates for Chrome OS

This section describes how to disable auto-updates for Chrome OS.

1. Display the Device Settings page by following the procedure in **Manage device settings**, <https://support.google.com/chrome/a/answer/1375678>. The steps in that procedure assume that your Chromebooks are managed through the admin console.
2. From the *Automatic Updates*, select **Stop auto-updates**.
3. Select **Save**.

#### How to Limit Chrome OS Updates to a Specific Version

This section describes how to limit Chrome OS updates to a specific version.

1. Display the Device Settings page by following the procedure in **Manage device settings**, <https://support.google.com/chrome/a/answer/1375678>. The steps in that procedure assume that your Chromebooks are managed through the admin console.
2. From the *Automatic Updates*, select **Allow auto-updates**.
3. From the *Restrict Google Chrome version to at most* list, select the required version.
4. Select **Save**.

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## How to Install the Secure Browser for Chrome OS Using Advanced Methods

This document contains additional installation instructions for installing the Secure Browser for Chrome OS.

**Note:** Chromebooks manufactured in 2017 or later must have an Enterprise or Education license to run in kiosk mode, which is necessary to run the Secure Browser.

### How to Update SecureTestBrowser for a New School Year

If an update to SecureTestBrowser is released to the Chrome Web Store, the app will automatically update on all devices to which it is installed. Users do not need to take any action to manually update SecureTestBrowser after it is installed on a device.

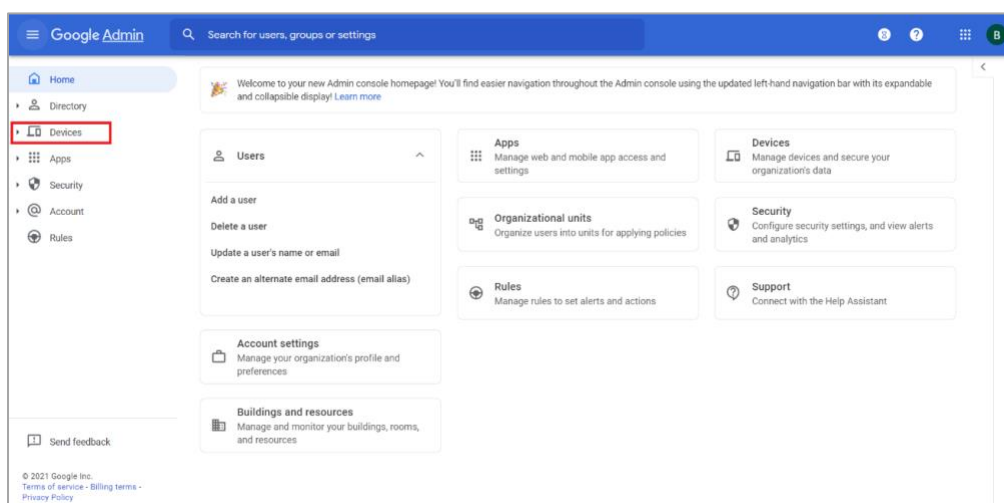
### How to Install SecureTestBrowser as a Kiosk App on Managed Chromebooks

These instructions are for installing the SecureTestBrowser as a kiosk app on domain-managed Chromebook devices. The steps in this procedure assume that your Chromebooks are already managed through the admin console.

SecureTestBrowser is not compatible with public sessions.

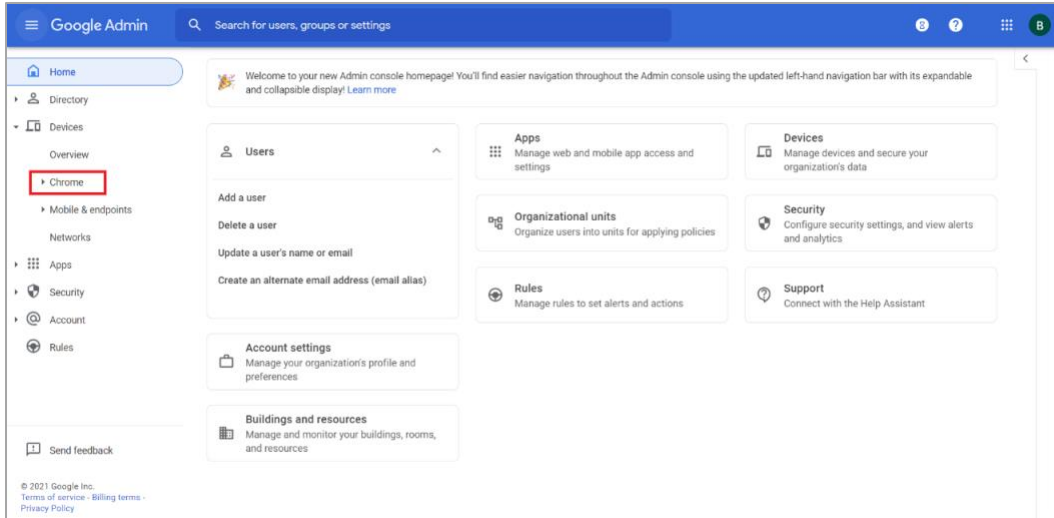
1. As the Chromebook administrator, log in to your admin console (<https://admin.google.com>)

Figure 1. Google Admin Console



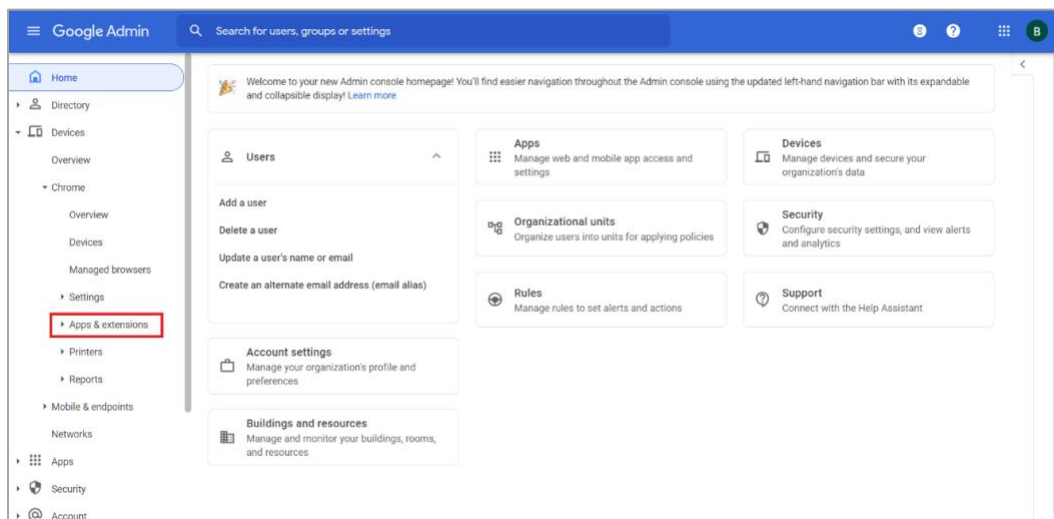
2. Select **Devices**. The **Devices** drop-down list opens.

Figure 2. Devices Drop-down List



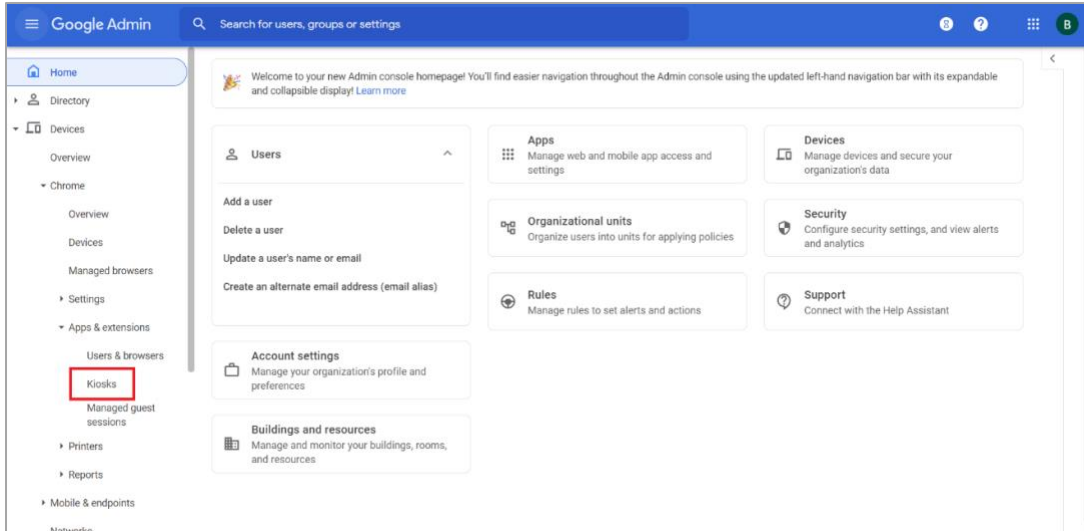
3. From the **Devices** drop-down list, select **Chrome**. The **Chrome** drop-down list appears.

Figure 3. Chrome Drop-down List



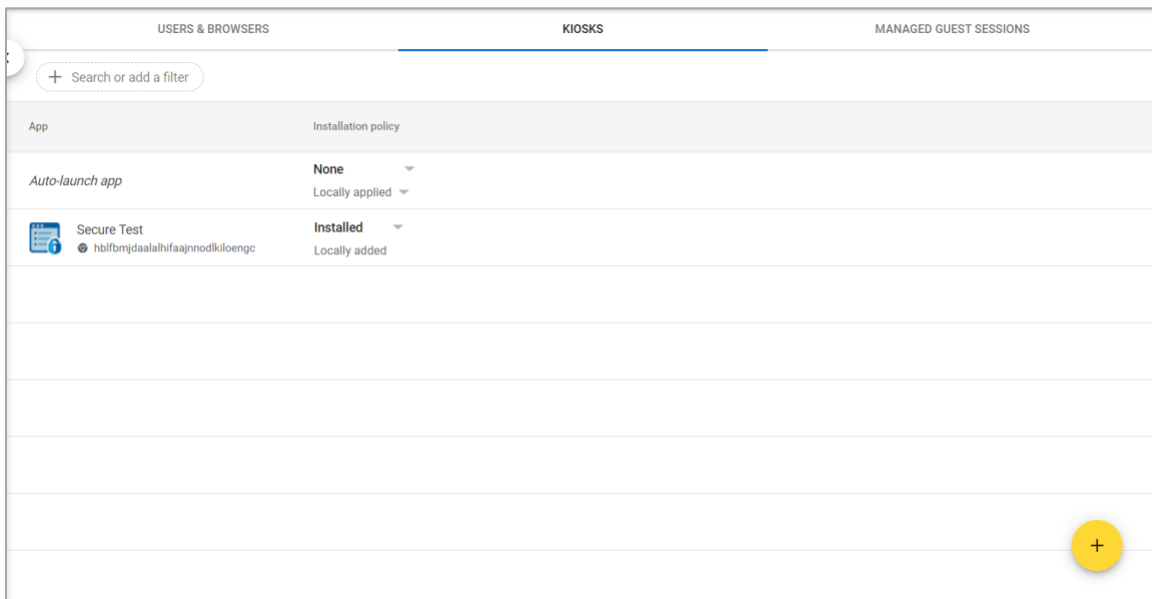
4. From the **Chrome** drop-down list, select **Apps & extensions**. The **Apps & extensions** drop-down list appears.



Figure 4. Apps & extensions Drop-down List



- From the *Apps & extensions* drop-down list, select **Kiosks**. The **Apps & Extensions** page appears, displaying the **Kiosks** tab.

Figure 5. Apps & extensions page – Kiosks tab



- Hover over  to display options to add a new app.
- Select  to add a Chrome app or extension by ID. The **Add Chrome app or extension by ID** window appears.
- Enter `hb1fbmjdaalahlifaajnnodlkiloengc` in the *Extension ID* field.

9. Ensure **From the Chrome Web Store** is selected from the drop-down list.

Figure 6. Add Chrome app or extension by ID

**Add Chrome app or extension by ID**

Chrome apps and extensions can also be added by specifying the ID. If it is outside the Chrome Web Store, you must also specify the URL where the extension is hosted.

Extension ID

hblfbmjdaalalhifaajnnodlkiloengc

From the Chrome Web Store ▼

CANCEL SAVE

10. Select **Save**. The SecureTestBrowser app appears in the app list.
11. Ensure **Installed** is selected from the *Installation Policy* drop-down list.

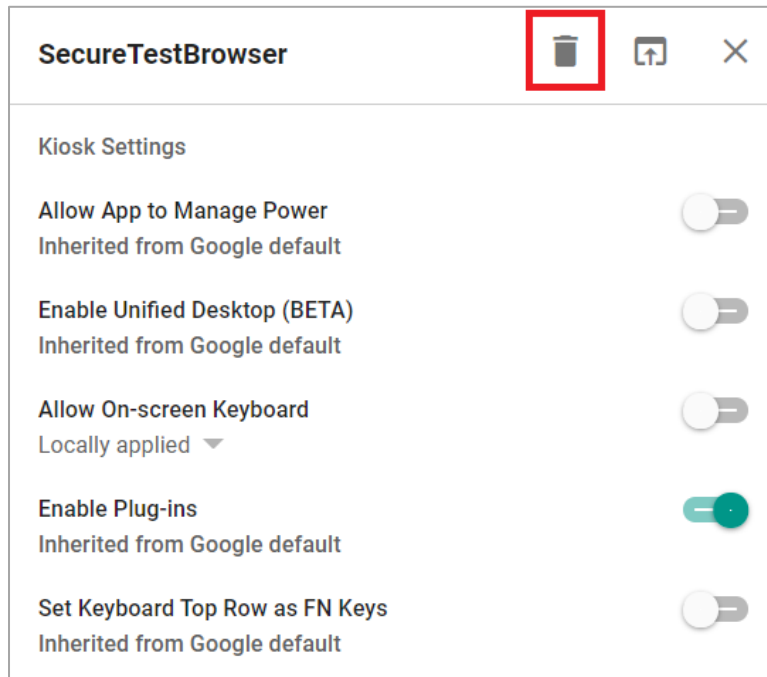
The SecureTestBrowser app will be installed on all managed devices the next time each managed device is turned on.

### How to Remove SecureTestBrowser from Managed Chromebooks

If SecureTestBrowser must be removed from multiple managed Chromebooks for troubleshooting or other reasons, it can be removed using the Google Admin Console.

1. To access a list of all kiosk applications installed on your managed Chromebooks, follow steps [1-5](#) in the section [How to Install SecureTest Browser as a Kiosk App on Managed Chromebooks](#).
2. To remove SecureTestBrowser from all managed Chromebooks, select its app name from the list. The **Kiosk Settings** pane appears.

Figure 7. SecureTestBrowser Kiosk Settings



3. Select .
4. To close the **Kiosk Settings** pane, select **X**.

The SecureTestBrowser app will be removed from all managed devices the next time each managed device is turned on.



## How to Configure Networks for Online Testing

This section contains additional configurations for your network.

### Resources to Add to the 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 the Allowlist

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

Table 1. CAI and AIR URLs for Non-Testing Sites

System	URL
Portal and Secure Browser installation files	<a href="https://digitaltesting.collegeboard.org/">https://digitaltesting.collegeboard.org/</a>
Single Sign-On System	<a href="https://sso3.cambiumast.com/auth/realms/collegeboard/account">sso3.cambiumast.com/auth/realms/collegeboard/account</a>
Test Information Distribution Engine	<a href="https://cb.tide.cambiumast.com">cb.tide.cambiumast.com</a>
For 2021-2022, users should add both the Cambium and AIR URLs listed in this table to the Allowlist.	<a href="http://sso3.airast.org/auth/realms/collegeboard/account">http://sso3.airast.org/auth/realms/collegeboard/account</a> <a href="https://cb.tide.airast.org">https://cb.tide.airast.org</a>

**Note:** When you are accessing these sites, please use the Cambium URLs. Only use the AIR URLs when adding them to the Allowlist. More information below.

### URLs for TA and Student Testing Sites to Add to the 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 the Allowlist at the root level. This requires using a wildcard. CAI strongly encourages using wildcards when adding these URLs to your allowlist, as servers may be added or removed from the field without notice.

Table 2. CAI and AIR URLs for Testing Sites

System	URL
TA and Student Testing Sites	*.cambiumast.com *.tds.cambiumast.com
For 2021-2022, users should add both Cambium and AIR URLs listed in this table to the Allowlist.	*.cloud1.tds.cambiumast.com *.cloud2.tds.cambiumast.com *.cambiumtds.com *.airast.org *.tds.airast.org *.cloud1.tds.airast.org *.cloud2.tds.airast.org

### URLs for Online Dictionary and Thesaurus to Add to the 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 the 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.

### Required Ports and Protocols 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 1](#)) must be added to the 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 the Allowlist in any multilayer filtering system (such as local and global layers). Ensure all items that handle traffic to \*.tds.cambiumast.com and \*.tds.airast.org 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.

## Customer Service and Support

If this document does not answer your questions, please contact the College Board.

### College Board School Day Customer Service

**Phone:** 855-373-6387

Follow the prompts for digital testing and listen to the options for your area of concern. Support options include the following:

- General College Board assessments questions and policies
- Technical support with CAIs digital testing systems, such as TIDE or TA Interface

**Email:** [schooldayassessments@collegeboard.org](mailto:schooldayassessments@collegeboard.org)

If you are calling for technical support, you will be asked to provide as much detail as possible about the issues you encountered.

Include the following information:

- Test coordinator name and IT/network contact person and contact information
- Registration numbers of affected students. Do not provide any other student information as doing so may violate FERPA policies.
- Test Session ID for the affected student tests
- 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

## About College Board

College Board is a mission-driven not-for-profit organization that connects students to college success and opportunity. Founded in 1900, College Board was created to expand access to higher education. Today, the membership association is made up of over 6,000 of the world's leading educational institutions and is dedicated to promoting excellence and equity in education. Each year, College Board helps more than seven million students prepare for a successful transition to college through programs and services in college readiness and college success — including the SAT® and the Advanced Placement® Program. The organization also serves the education community through research and advocacy on behalf of students, educators, and schools.

For further information, visit [www.collegeboard.org](http://www.collegeboard.org).