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

For Digital Tests in the SAT® Suite of Assessments

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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.
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.

This change restricting kiosk mode does not affect the Chrome operating system. You can still use any version of Chrome OS on hardware manufactured in 2016 or earlier.

**How to Install SecureTestBrowser (formerly AIRSecureTest) as a Kiosk App on Managed Chromebooks**

These instructions are for installing the SecureTestBrowser (formerly AIRSecureTest) 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 (formerly AIRSecureTest) is not compatible with public sessions.

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

   ![Google Admin Console](figure1.png)

   **Figure 1. Google Admin Console**

2. Select Devices. The **Devices** page appears.

   ![Devices Page](figure2.png)

   **Figure 2. Devices Page**
3. Select **Chrome**. The *Chrome* drop-down list appears.

![Figure 3. Chrome Drop-down List](image)

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

![Figure 4. Apps & extensions Drop-down List](image)

5. From the *Apps & extensions* drop-down list, select **Kiosks**. The *Apps & Extensions* page appears, displaying the *Kiosks* tab.
6. Remove any previous versions of the apps that appear by selecting the app name to display the app settings and then selecting \( \checkmark \). These may appear as SecureTestBrowser or AIRSecureTest.

7. Close app settings.

8. Hover over \( + \) to display options to add a new app.
9. Select to add a Chrome app or extension by ID. The **Add Chrome app or extension by ID** window appears.

10. Enter `hblfbmjdaalhifaaajnnodlkiloengc` in the **Extension ID** field.

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

12. Select **Save**. The SecureTestBrowser (formerly AIRSecureTest) app appears in the app list.

13. Ensure **Installed** is selected from the **Installation Policy** drop-down list.

The SecureTestBrowser (formerly AIRSecureTest) app will be installed on 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>
<thead>
<tr>
<th>System</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portal and Secure Browser installation files</td>
<td><a href="https://digitaltesting.collegeboard.org/">https://digitaltesting.collegeboard.org/</a></td>
</tr>
<tr>
<td>Test Information Distribution Engine</td>
<td>cb.tide.cambiumast.com</td>
</tr>
</tbody>
</table>
| For 2020-2021, users should add both the Cambium and AIR URLs listed in this table to the Allowlist. | http://sso3.airast.org/auth/realms/collegeboard/account  
|                                             | https://cb.tide.airast.org                                            |

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.

<table>
<thead>
<tr>
<th>System</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA and Student Testing Sites</td>
<td>*.cambiumast.com</td>
</tr>
</tbody>
</table>
| For 2020-2021, users should add both the Cambium and AIR URLs listed in this table to the Allowlist. | *.tds.cambiumast.com  
|                                             | *.cloud1.tds.cambiumast.com                                          |
|                                             | *.cloud2.tds.cambiumast.com                                          |
|                                             | *.airast.org                                                         |
|                                             | *.tds.airast.org                                                     |
|                                             | *.cloud1.tds.airast.org                                              |
|                                             | *.cloud2.tds.airast.org                                              |
How to Configure Networks for Online Testing

**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>
<thead>
<tr>
<th>Domain Name</th>
<th>IP Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>media.merriam-webster.com</td>
<td>64.124.231.250</td>
</tr>
<tr>
<td><a href="http://www.dictionaryapi.com">www.dictionaryapi.com</a></td>
<td>64.124.231.250</td>
</tr>
</tbody>
</table>

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</table>

**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>
<thead>
<tr>
<th>Port/Protocol</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>80/TCP</td>
<td>HTTP (initial connection only)</td>
</tr>
<tr>
<td>443/TCP</td>
<td>HTTPS (secure connection)</td>
</tr>
</tbody>
</table>

**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

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

For further information, visit www.collegeboard.org.