



Hawai'i

Statewide Assessment Program



Configurations and Troubleshooting for Android

For Technology Coordinators

2019-2020

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Descriptions of the operation of the Test Information Distribution Engine, Test Delivery System, and related systems are property of Cambium Assessment, Inc. (CAI) and are used with the permission of CAI.

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Configurations and Troubleshooting for Android

This document contains configurations and troubleshooting for your network and Android workstations.

How to Configure Networks for Online Testing

This section contains additional configurations for your network.

Which Resources to Whitelist 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.

Which URLs for Non-Testing Sites to Whitelist

[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	alohahsap.org
Single Sign-On System	https://sso1.cambiumast.com/auth/realms/hawaii/account
Test Information Distribution Engine	hitide.org
Online Reporting System	hsa.reports.cambiumast.com
Centralized Reporting System	hi.reporting.cambiumast.com

Which URLs for TA and Student Testing Sites to Whitelist

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 whitelist at the root level. This requires using a wildcard.

Table 2. CAI and AIR URLs for Testing Sites

System	URL
TA and Student Testing Sites Assessment Viewing Application	*.cambiumast.com *.tds.cambiumast.com *.cloud1.tds.cambiumast.com *.cloud2.tds.cambiumast.com *.airast.org *.tds.airast.org *.cloud1.tds.airast.org

	*.cloud2.tds.airast.org
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Which URLs for Online Dictionary and Thesaurus to Whitelist

Some online assessments contain an embedded dictionary and thesaurus provided by Merriam-Webster. The Merriam-Webster URLs listed in [Table 3](#) should be whitelisted 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

Which Ports and Protocols are 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 1](#)) must be whitelisted 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 whitelist these URLs 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.

How to Configure for Certificate Revocations

CAI's servers present certificates to the clients. The following sections discuss the methods used to check those certificates for revocation.

How to Use the Online Certificate Status Protocol

To use the Online Certificate Status Protocol (OCSP), ensure your firewalls allow the domain names listed in [Table 5](#). The values in the Patterned column are preferred because they are more robust.

Table 5. Domain Names for OCSP

Patterned	Fully Qualified
*.thawte.com	ocsp.thawte.com
*.geotrust.com	ocsp.geotrust.com
*.ws.symantec.com	ocsp.ws.symantec.com

If your firewall is configured to check only IP addresses, do the following:

1. Get the current list of OCSP IP addresses from Symantec. The list is available at https://www.symantec.com/content/en/us/enterprise/other_resources/OCSP_Upgrade_-_New_IP_Addresses.txt.
2. Add the retrieved IP addresses to your firewall's whitelist. Do not replace any existing IP addresses.

How to Configure Android Workstations for Online Testing

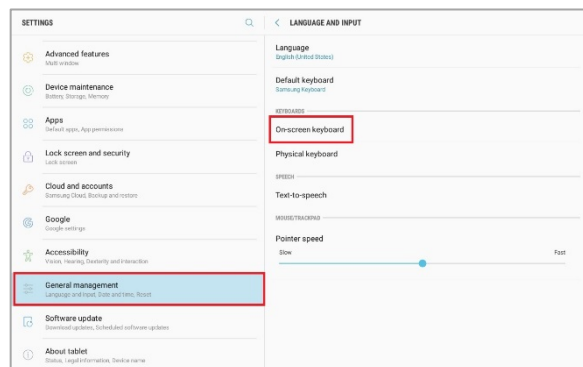
This section contains additional configurations for Android.

How to Enable the Secure Browser Keyboard

The default keyboard for the Android allows predictive text, which may provide students with hints for answers to tests. For this reason, the Secure Browser for Android requires that a mobile Secure Browser keyboard be configured for the Secure Browser itself. The Secure Browser keyboard is a basic keyboard, with no row for predictive text functionality.

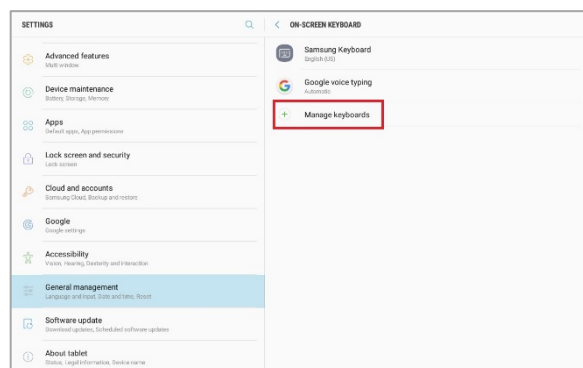
1. Open **Settings**.
2. Open **General management**.
3. Open **Language and input**.
4. Open **On-screen keyboard**.

Figure 1. Language and input



5. Select **Manage keyboards**.

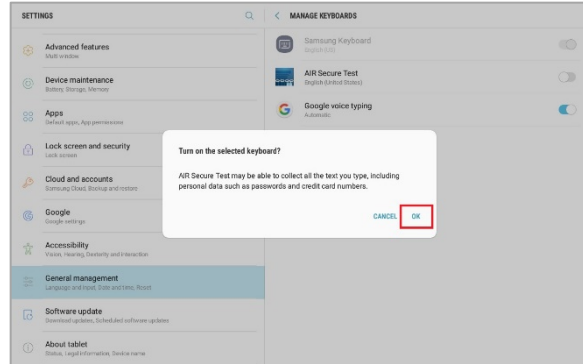
Figure 2. On-screen keyboard



Configurations and Troubleshooting for Android

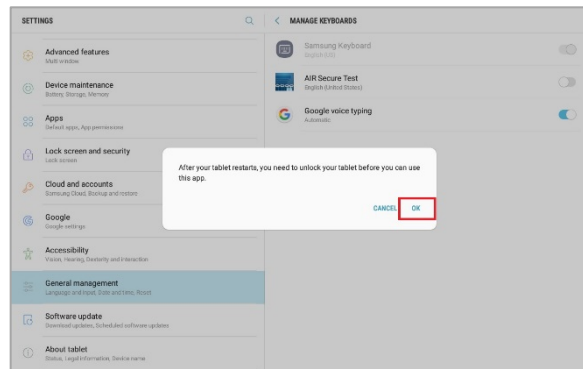
6. Set **AIR Secure Test** to **On**. A popup will appear.

Figure 3. Turn on the selected keyboard Pop-up



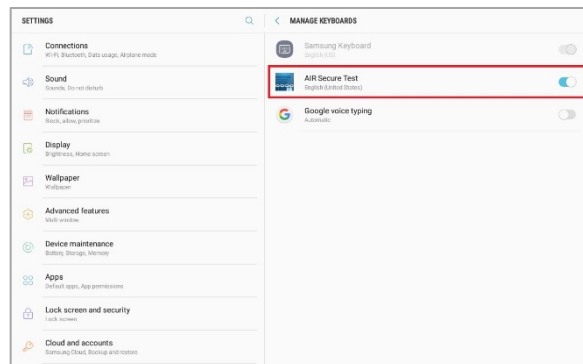
7. Select **OK**. Another popup will appear.

Figure 4. After your tablet restarts Pop-up



8. Select **OK**. The AIR Secure Test keyboard is now enabled.

Figure 5. AIR Secure Test Keyboard



How to Troubleshoot Android Workstations

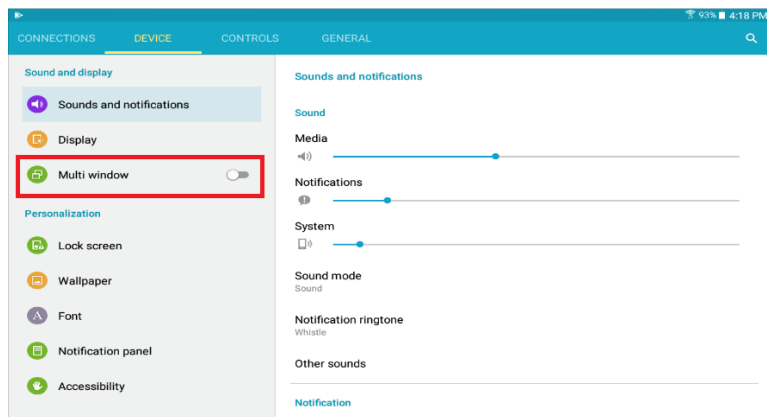
This section contains troubleshooting tips for Android.

How to Disable the Multi-Window on Samsung Tablets

Samsung tablets are equipped with a multi-window feature to display app launchers. Depending on the available app launchers, the multi-window can compromise testing security. To avoid this scenario, disable the multi-window on Samsung tablets.

1. Tap **Settings**.
2. Navigate to **Device > Sound and display**.
3. Turn off **Multi window**.

Figure 6. Sound and display

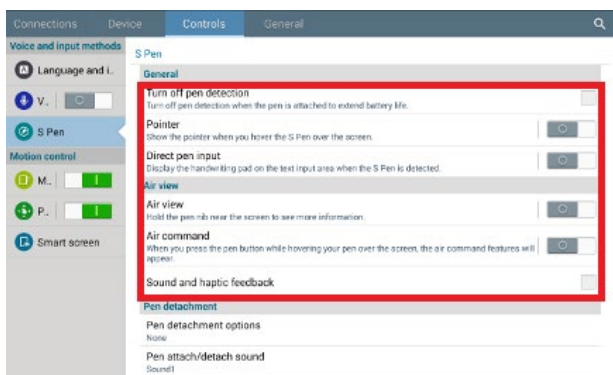


How to Disable the Stylus on Samsung Galaxy Note

The Samsung Galaxy Note stylus is capable of launching apps—a situation that can compromise testing security. To avoid this scenario, disable the stylus feature.

1. Tap **Settings**.
2. Navigate to **Controls > Voice and input methods**.
3. Tap **S Pen**.
4. Disable all of the available features.

Figure 7. S Pen Controls



User Support

If this document does not answer your questions, please contact the Hawaii Statewide Assessment Program Help Desk.

The Help Desk will be open Monday–Friday from 7:30 a.m. to 4:00 p.m. Hawaiian Standard Time (except holidays).

Hawaii Statewide Assessment Program Help Desk

Toll-Free Phone Support: 1-866-648-3712

Email Support:
hsaphelpdesk@cambiumassessment.com

If you contact the Help Desk, you will be asked to provide as much detail as possible about the issues you encountered. You may choose to use the *Help Desk Intake Form*, available on the <https://alohahsap.org/> portal website in the **Resources >> Technology** section.

Include the following information:

- Test Administrator name and IT/network contact person and contact information
- SSIDs of affected students
- Results 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

Change Log

This Change Log can be used to identify specific changes that are made to any of the information included in the original document throughout the current school year.

Change	Section	Date
Changed "oscp" to "ocsp" in the Fully Qualified column of Table 5.	Table 5. Domain Names for OCSP	9/25/19
Added screenshots to the step-by-step instructions.	How to Enable Secure Browser Keyboard	9/25/19
Updated information throughout the paragraph.	How to Configure Filtering Systems	11/27/19
Changed all references to "American Institutes for Research" and "AIR" to "Cambium Assessment, Inc." and "CAI" respectively.	Global	6/10/20