New Hampshire Statewide Assessment System

Configurations, Troubleshooting, and Advanced Secure Browser Installation Guide for Android
For Technology Coordinators

2018-2019

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Configurations, Troubleshooting, and Advanced Secure Browser Installation for Android

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

Additional Configurations for Networks

This section contains additional configurations for your network.

Whitelisting Resources for Online Testing

This section presents information about the URLs that AIR 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

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

Table 1. AIR URLs for Non-Testing Sites

System	URL
Portal and Secure Browser installation files	http://origin.nh.portal.airast.org/
Single Sign-On System	https://login11.cloud1.tds.airast.org/testadmin/V248/?c=NewHampshire
Test Information Distribution Engine	https://nh.tide.airast.org/
Online Reporting System	https://nh.reports.airast.org/

URLs for TA and Student Testing Sites

Testing servers and satellites may be added or modified during the school year to ensure an optimal testing experience. As a result, AIR strongly encourages you to whitelist at the root level. This requires using a wildcard.

Table 2. AIR URLs for Testing Sites

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

URLs for Online Dictionary and Thesaurus

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. AIR 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

Required Ports and Protocols

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)

Configuring 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. 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).

Configuration for Domain Name Resolution

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

Configuring for Certificate Revocations

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

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	oscp.thawte.com
*.geotrust.com	oscp.geotrust.com
*.ws.symantec.com	oscp.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.

Additional Configurations for Android

This section contains additional configurations for Android.

Enabling 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.

To enable the Secure Browser keyboard:

1. Open **Settings**.

2. Open **General management**.

3. Open **Language and input**.

4. Open **On-screen keyboard**.

5. Select **Manage keyboards**.

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

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

8. Select **OK**.

Troubleshooting for Android

This section contains troubleshooting tips for Android.

Disabling 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.

To disable the multi-window:

1. Tap **Settings**.

2. Navigate to **Device > Sound and display**.
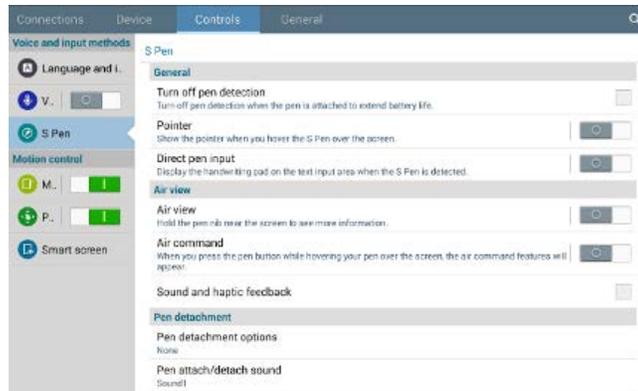
3. Turn off **Multi window**.
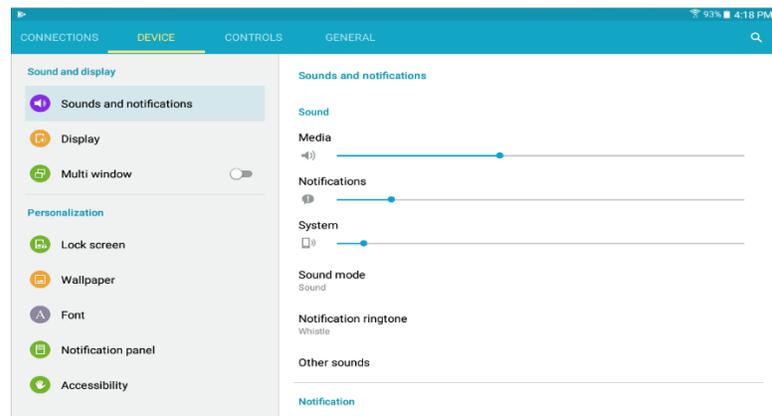
Disabling the Stylus on Samsung Galaxy Note

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.

To disable the stylus:

1. Tap **Settings**.

2. Navigate to **Controls > Voice and input methods**.

3. Tap **S Pen**.

4. Disable all of the available features.

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 a supported Secure Browser. Students can also verify that text-to-speech works on their computers by logging in to a practice test session and selecting a test for which text-to-speech is available.

> **Note:** We strongly encourage schools to test the text-to-speech settings before students take operational tests. You can check these settings through the diagnostic page. From the student practice test login screen, click the **Run Diagnostics** link, and then click the **Text-to-Speech 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 Mobile Versions of Secure Browsers

The Mobile Secure Browser uses either the device's native voice pack or a voice pack embedded in the Secure Browser. Additional voice packs downloaded to a mobile device are not recognized by the Mobile Secure Browser.

Text-to-Speech and Mobile Devices

Text-to-speech (TTS) includes a feature that allows students to pause and then resume TTS in the middle of a passage. The pause feature does not work on mobile devices. Consequently, consider testing students who require TTS on desktop or laptop computers.