



West Virginia DEPARTMENT OF  
**EDUCATION**

**Configurations and  
Troubleshooting for  
Android**

For Technology Coordinators

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Descriptions of the operation of the Test Information Distribution Engine, Test Delivery System, and related systems are property of the American Institutes for Research (AIR) and are used with the permission of AIR.

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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 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.

#### 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. AIR URLs for Non-Testing Sites

System	URL
Portal and Secure Browser installation files	https://wv.portal.airast.org
Single Sign-On System	https://sso1.airast.org/auth/realms/westvirginia/account
Test Information Distribution Engine	https://wv.tide.airast.org
Online Reporting System	https://wv.reports.airast.org

#### 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, 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	*.airast.org
Assessment Viewing Application	*.tds.airast.org
	*.cloud1.tds.airast.org
	*.cloud2.tds.airast.org

## Configurations and Troubleshooting for Android

### 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. 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

### 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. 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).

### How to Configure 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.

## How to Configure for Certificate Revocations

AIR'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](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

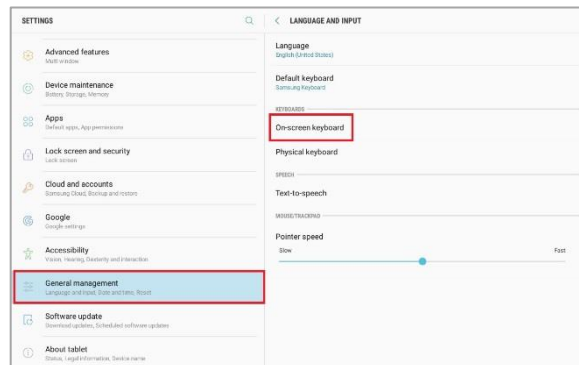
This section contains additional configurations for Android.

### 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.

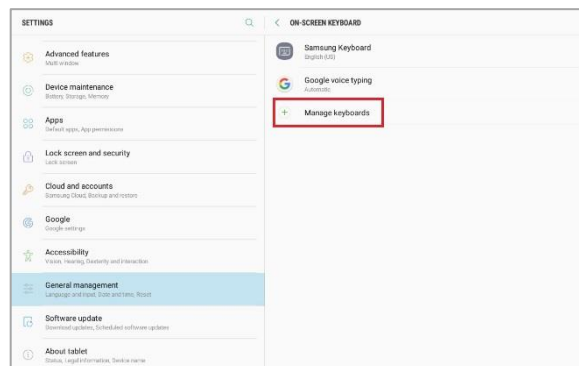
1. Open **Settings**.
2. Open **General management**.
3. Open **Language and input**.
4. Open **On-screen keyboard**.

Figure 1. Language and input



5. Select **Manage keyboards**.

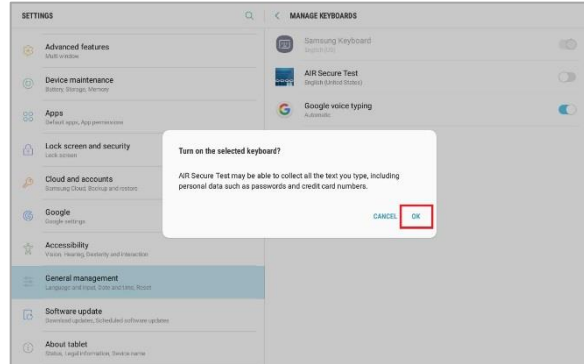
Figure 2. On-screen keyboard



## Configurations and Troubleshooting for Android

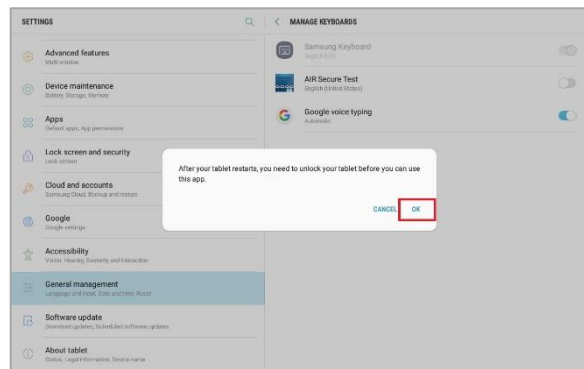
6. Set **AIR Secure Test** to **On**. A popup will appear.

Figure 3. Turn on the selected keyboard Pop-up



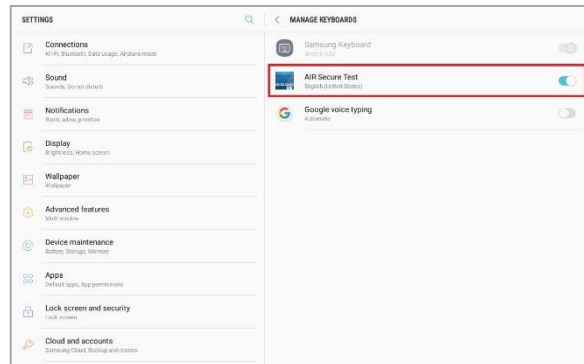
7. Select **OK**. Another popup will appear.

Figure 4. After your tablet restarts Pop-up



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

Figure 5. After your tablet restarts Pop-up



## How to Troubleshoot Android Workstations

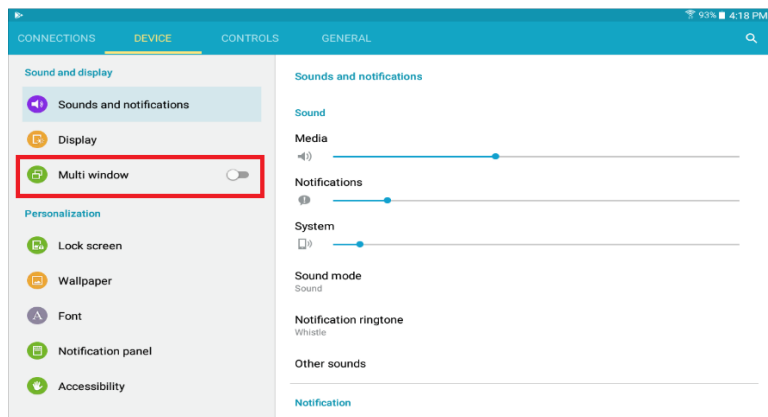
This section contains troubleshooting tips for Android.

### 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

