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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>
<thead>
<tr>
<th>System</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portal and Secure Browser installation files</td>
<td><a href="https://airways.portal.airast.org/">https://airways.portal.airast.org/</a></td>
</tr>
<tr>
<td>Single Sign-On System</td>
<td><a href="https://sso1.airast.org/auth/realms/airdistrictcenter">https://sso1.airast.org/auth/realms/airdistrictcenter</a></td>
</tr>
<tr>
<td>Test Information Distribution Engine</td>
<td><a href="https://airways.tide.airast.org/">https://airways.tide.airast.org/</a></td>
</tr>
<tr>
<td>AIRWays Reporting</td>
<td><a href="https://authoring.airways.airast.org/">https://authoring.airways.airast.org/</a></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>System</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA and Student Testing Sites</td>
<td>*.airast.org</td>
</tr>
<tr>
<td>Assessment Viewing Application</td>
<td>*.tds.airast.org</td>
</tr>
<tr>
<td></td>
<td>*.cloud1.tds.airast.org</td>
</tr>
<tr>
<td></td>
<td>*.cloud2.tds.airast.org</td>
</tr>
</tbody>
</table>
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>
<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>

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>
<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 whitelisted in both filters. Ensure your filtering system is not configured to perform packet inspection on traffic to AIR 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.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 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>
<thead>
<tr>
<th>Patterned</th>
<th>Fully Qualified</th>
</tr>
</thead>
<tbody>
<tr>
<td>*.thawte.com</td>
<td>ocsp.thawte.com</td>
</tr>
<tr>
<td>*.geotrust.com</td>
<td>ocsp.geotrust.com</td>
</tr>
<tr>
<td>*.ws.symantec.com</td>
<td>ocsp.ws.symantec.com</td>
</tr>
</tbody>
</table>

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


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.
5. Select Manage keyboards.

Figure 1. Language and input

Figure 2. On-screen keyboard
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**.

![Sound and display](image)

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.

![S Pen Controls](image)