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Configurations for iOS/iPadOS

This document contains configurations for your network and iPads.

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>
<thead>
<tr>
<th>System</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portal and Secure Browser installation files</td>
<td><a href="https://de.portal.cambiumast.com/">https://de.portal.cambiumast.com/</a></td>
</tr>
<tr>
<td>Test Information Distribution Engine</td>
<td><a href="https://de.tide.cambiumast.com/">https://de.tide.cambiumast.com/</a></td>
</tr>
<tr>
<td>Online Reporting System</td>
<td><a href="https://de.reports.cambiumast.com/">https://de.reports.cambiumast.com/</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, CAI strongly encourages you to whitelist at the root level. This requires using a wildcard.

Table 2. CAI and AIR URLs for Testing Sites

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

<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 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 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.
Configurations for iOS/iPadOS

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

<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 iPads for Online Testing

This section contains additional configurations for iOS/iPadOS.

### About Automatic Assessment Configuration

A feature in iOS/iPadOS called Automatic Assessment Configuration (AAC) works with CAI’s Secure Browser to lock down an iPad for online testing. Users in the field need to do nothing to set up AAC. Once the Secure Browser is launched on an iPad, AAC kicks in automatically.

For more information about AAC, including a list of features it disables, please visit [https://support.apple.com/en-us/HT204775#AAC](https://support.apple.com/en-us/HT204775#AAC).

In addition to AAC disabling features listed at the URL above, there are a few additional features in iOS/iPadOS that must be disabled prior to the administration of online testing. These features, which are listed below, should not be available to students without an accommodation and AAC does not currently block them.

### About Mobile Device Management (MDM) Software

Some configurations listed below may be possible through third-party mobile device management (MDM) software. If you use MDM software and your MDM software is capable of these configurations, you are welcome to use it to configure iPads that will be used to administer online testing. For more information, please consult the documentation for your specific MDM software.
How to Disable Voice Control on iPadOS 13

iPads running iPadOS 13 have access to a feature called Voice Control that is not automatically disabled by Automatic Assessment Configuration (AAC). Voice Control allows iPad users to control an iPad using voice commands. If this feature is enabled on iPads running iPadOS 13 that are used for testing, students may be able to access unwanted apps, such as web browsers, during a test.

Voice Control is disabled by default. If it has never been enabled on an iPad, you have nothing to do. If it has been enabled, you must disable it before a student takes a test.

1. Select Settings.
2. Select Accessibility.
3. Select Voice Control.

Figure 1. Accessibility Settings – Voice Control
4. Toggle the **Voice Control** switch to the left to disable Voice Control.

![Voice Control Settings](image)
How to Disable VoiceOver on iOS 11 & 12

iPads running iOS 11.x or 12.x have access to a feature called VoiceOver that is not automatically disabled by Automatic Assessment Configuration (AAC). VoiceOver is a gesture-based screen reader that allows users to receive audible descriptions of what’s on the screen of their iPad. VoiceOver also changes touchscreen gestures to have different effects and adds additional gestures that allow users to move around the screen and control their iPads. If VoiceOver is not disabled on iPads running iOS 11.x or 12.x, students may be able to access unwanted apps during a test. This feature should not be available to students without an accommodation.

1. Select Settings.
2. Select Accessibility.
3. Select VoiceOver.

Figure 3. Accessibility Settings - VoiceOver
4. Toggle the **VoiceOver** switch to the left to disable VoiceOver.
How to Disable the Emoji Keyboard

Emoticons are characters that express an emotion or represent a facial expression, such as a smile or a frown. Some text messaging apps replace sequences of characters with an emoticon, such as replacing : - ) with 😊.

iOS has an Emoji keyboard that contains emoticons. This keyboard, if activated, can be confusing for test-takers or scorers. Use the following procedure to remove the emoji keyboard from an iOS device.

1. Select Settings.
2. Navigate to Keyboard > General.
3. Select Keyboards.
4. Delete Emoji from the list by sliding it to the left and selecting Delete.