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

2018-2019

Revised May 29, 2019
Prepared by the American Institutes for Research®

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.
# Table of Contents

**Configurations, Troubleshooting, and Advanced Secure Browser Installation for Windows** ........... 4

- Additional Configurations for Networks ................................................................................. 4
  - Whitelisting Resources for Online Testing .............................................................................. 4
  - Required Ports and Protocols .................................................................................................. 5
  - Configuring Filtering Systems .................................................................................................. 5
  - Configuration for Domain Name Resolution .............................................................................. 5
  - Configuring for Certificate Revocations ................................................................................... 6
  - Configuring Network Settings for Online Testing ................................................................. 6
  - Configuring the Secure Browser for Proxy Servers .............................................................. 7
- Additional Instructions for Installing the Secure Browser for Windows ...................................... 7
  - Installing the Secure Browser via the Command Line ............................................................ 8
  - Sharing the Secure Browser over a Network ........................................................................... 9
  - Copying the Secure Browser Installation Directory to Testing Computers .......................... 10
  - Installing the Secure Browser for Use with an NComputing Terminal ............................... 10
  - Installing the Secure Browser on a Terminal Server or Windows Server ......................... 12
  - Installing the Secure Browser Without Administrator Rights ............................................. 13
  - Uninstalling the Secure Browser on Windows ....................................................................... 13
  - Installing the Secure Browser on Windows Mobile Devices .............................................. 14
  - Creating Group Policy Objects ............................................................................................... 14
- Additional Configurations for Windows ....................................................................................... 15
  - Disabling Fast User Switching ............................................................................................... 15
- Troubleshooting for Windows ..................................................................................................... 18
  - Resetting Secure Browser Profiles on Windows ..................................................................... 18
  - Blocking Device Touch Input Using the Group Policy Editor ............................................... 19
  - Installing Windows Media Pack for Windows 8.1 N and KN ............................................. 21
  - Configuring ZoomText to Recognize the Secure Browser ................................................... 22
  - Touch Keyboard on Microsoft Surface Pro Tablet .................................................................. 22
  - Disabling Two-finger Scrolling Feature in HP Notebooks with Synaptics TouchPad ........... 24
  - Disabling Automatic Volume Reduction ................................................................................. 25
- Updating Windows to Run NVDA Screen Reader 2018.1.1 with Take a Test App ...................... 25
- Troubleshooting Text-to-Speech .................................................................................................. 26
  - Using Text-to-Speech .............................................................................................................. 26
  - How the Secure Browser Selects Voice Packs ....................................................................... 26
  - Configuring Windows Text-to-Speech Settings ..................................................................... 26
  - Voice Packs Recognized by Desktop Secure Browsers .......................................................... 27
Configurations, Troubleshooting, and Advanced Secure Browser Installation for Windows

This document contains configurations, troubleshooting, and advanced Secure Browser installation instructions for your network and Windows 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

<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://wyoassessment.org/">https://wyoassessment.org/</a></td>
</tr>
<tr>
<td>Single Sign-On System</td>
<td>Single Sign-on URL</td>
</tr>
<tr>
<td>Test Information Distribution Engine</td>
<td><a href="https://wy.tide.airast.org">https://wy.tide.airast.org</a></td>
</tr>
<tr>
<td>Online Reporting System</td>
<td><a href="https://wy.reports.airast.org">https://wy.reports.airast.org</a></td>
</tr>
</tbody>
</table>

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

<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>
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

<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>

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

<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>

Configuring Filtering Systems

If the school’s filtering system has both internal and external filtering, the URLs for the testing sites (see Table 2) 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 section discusses 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

<table>
<thead>
<tr>
<th>Patterned</th>
<th>Fully Qualified</th>
</tr>
</thead>
<tbody>
<tr>
<td>*.thawte.com</td>
<td>oscp.thawte.com</td>
</tr>
<tr>
<td>*.geotrust.com</td>
<td>oscp.geotrust.com</td>
</tr>
<tr>
<td>*.ws.symantec.com</td>
<td>oscp.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.

Configuring Network Settings for Online Testing

Local Area Network (LAN) settings on testing machines should be set to automatically detect network settings.

To set LAN settings to auto-detect on Windows machines:

1. Open Control Panel.
2. Open Internet Options.
3. Click Connections tab.
4. Click LAN Settings.
5. Click the Automatically detect settings checkbox.
6. Click OK to close Local Area Network (LAN) Settings window.
7. Click OK to close Internet Properties window.

Configuring the Secure Browser for Proxy Servers

By default, the Secure Browser attempts to detect the settings for your network’s web proxy server. However, users of web proxies should execute a proxy command once from the command prompt. This command does not need to be added to the Secure Browser shortcut. Table 6 lists the form of the command for different settings and operating systems. To execute these commands from the command line, change to the directory containing the Secure Browser’s executable file.

Note: Domain names in commands The commands in Table 6 use the domains foo.com and proxy.com. When configuring for a proxy server, use your actual testing domain names as listed in the section “URLs for Testing Sites” in the Technical Specifications Manual for Online Testing.

Table 6. Specifying proxy settings using the command line

<table>
<thead>
<tr>
<th>Description</th>
<th>System</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the browser without any proxy</td>
<td>Windows</td>
<td>WYSecureBrowser.exe -proxy 0 Encoded Test Site URL</td>
</tr>
<tr>
<td>Set the proxy for HTTP requests only</td>
<td>Windows</td>
<td>WYSecureBrowser.exe -proxy 1:http:foo.com:80 Encoded Test Site URL</td>
</tr>
<tr>
<td>Set the proxy for all protocols to mimic the “Use this proxy server for all protocols” of Firefox</td>
<td>Windows</td>
<td>WYSecureBrowser.exe -proxy 1:*:foo.com:80 Encoded Test Site URL</td>
</tr>
<tr>
<td>Specify the URL of the PAC file</td>
<td>Windows</td>
<td>WYSecureBrowser.exe -proxy 2:proxy.com Encoded Test Site URL</td>
</tr>
<tr>
<td>Auto-detect proxy settings</td>
<td>Windows</td>
<td>WYSecureBrowser.exe -proxy 4 Encoded Test Site URL</td>
</tr>
<tr>
<td>Use the system proxy setting (default)</td>
<td>Windows</td>
<td>WYSecureBrowser.exe -proxy 5 Encoded Test Site URL</td>
</tr>
</tbody>
</table>

Additional Instructions for Installing the Secure Browser for Windows

This document contains additional installation instructions for installing the Secure Browser for Windows under a variety of deployment scenarios. One scenario describes installing the Secure Browser on a shared network drive, from which students would then run the Browser. However, there are significant drawbacks in this method. Running the Secure Browser from a shared network drive creates contention among the students’ client machines for two
resources: LAN bandwidth and shared drive I/O. This performance impact can be avoided by installing the Secure Browser locally on each machine. **AIR strongly discourages the use of network shared drive installation for the Secure Browser, as this setup can compromise the stability and performance of the browser, especially during peak testing times.**

**Installing the Secure Browser via the Command Line**

In this scenario, a user with administrator rights installs the Secure Browser from the command line. If you do not have administrator rights, refer to the section **Installing the Secure Browser Without Administrator Rights.**

If you are not signed on to the computer as an administrator, obtain the administrator password.

If you installed a previous version of the Secure Browser by copying its directory from one computer to another, manually uninstall the Secure Browser by deleting the installation folder and the desktop shortcut. (If you installed the Secure Browser using the Windows installation program, the installation package automatically removes it.) See the instructions in the section **Uninstalling the Secure Browser on Windows.**

1. Navigate to the **Download Secure Browsers** page of the Wyoming Assessment Program portal at https://wyoassessment.org/. Click the **Windows** tab, then click **Download Browser**. A dialog window opens.

2. Save the file on the computer (this step may vary depending on the browser you are using):
   - If presented with a choice to **Run** or **Save** the file, click **Save**, and save the file to a convenient location.
   - If presented only with the option to **Save**, save the file to a convenient location.

3. Note the full path and filename of the downloaded file, such as `c:\temp\WYSecureBrowser-Win.msi`.

4. Open a command prompt as the administrator by doing the following:
   - Click **Start**, and locate the Command Prompt application. (In some versions of Windows the application is under **All Programs > Accessories > Command Prompt.**)
   - Right-click **Command Prompt**, and select **Run as Administrator**.
   - As necessary, type the administrator password for the computer. The command prompt opens.

   (You need to do step 4 only once for the current login. The next time you open the command prompt, Windows retains the administrator role.)
5. Run the command msiexec /I <Source> [/quiet] [INSTALLDIR=<Target>]

<Source> Path to the installation file, such as C:\temp\WYSecureBrowser-Win.msi.

<Target> Path to the location where you want to install the Secure Browser. If absent, installs to the directory described in step 7. The installation program creates the directory if it does not exist.

/I Perform an install.

[/quiet] Quiet mode, no interaction.

For example, the command

msiexec /I c:\temp\WYSecureBrowser-Win.msi /quiet
INSTALLDIR=C:\AssessmentTesting\BrowserInstallDirectory

installs the Secure Browser from the installation package at C:\temp\WYSecureBrowser-Win.msi into the directory C:\AssessmentTesting\BrowserInstallDirectory using quiet mode.

6. Follow the instructions in the setup wizard. When prompted for setup type, click **Install**.

7. Click **Finish** to exit the setup wizard. The following items are installed:

   o The Secure Browser to the default location C:\Program Files (x86)\WYSecureBrowser\(64-bit) or C:\Program Files\WYSecureBrowser\(32-bit).

   o A shortcut WYSecureBrowser to the desktop.

8. Ensure all background jobs, such as virus scans or software updates, are scheduled outside of test windows. For example, if your testing takes place between 8:00 a.m. and 3:00 p.m., schedule background jobs outside of these hours.

9. Run the browser by double-clicking the WYSecureBrowser shortcut on the desktop. The Secure Browser opens displaying the student login screen. The browser fills the entire screen and hides the task bar.

10. To exit the browser, click **CLOSE SECURE BROWSER** in the upper-right corner of the screen.

**Sharing the Secure Browser over a Network**

While the Secure Browser can be installed on a server’s shared drive and then shared to each testing computer’s desktop via a shortcut, AIR strongly discourages this setup as it can compromise the stability and performance of the browser, especially during peak testing times.
Copying the Secure Browser Installation Directory to Testing Computers

In this scenario, a network administrator installs the Secure Browser on one machine, and copies the entire installation directory to testing computers.

1. On the computer from where you will copy the installation directory, install the Secure Browser following the directions on your portal. Note the path of the installation directory, such as C:\Program Files (x86)\WYSecureBrowser.

2. Identify the directory on the local testing computers to which you will copy the browser file (it should be the same directory on all computers). For example, you may want to copy the directory to c:\AssessmentTesting\. Ensure you select a directory in which the students can run executables.

3. On each local testing computer, do the following:
   a. Ensure all background jobs, such as virus scans or software updates, are scheduled outside of test windows. For example, if your testing takes place between 8:00 a.m. and 3:00 p.m., schedule background jobs outside of these hours.
   b. Copy the installation directory used in step 1 from the remote machine to the directory you selected in step 2. For example, if the target directory is c:\AssessmentTesting\, you are creating a new folder c:\AssessmentTesting\WYSecureBrowser.
   c. Copy the shortcut c:\AssessmentTesting\WYSecureBrowser\WYSecureBrowser.exe - Shortcut.lnk to the desktop.
   d. Run the browser by double-clicking the WYSecureBrowser shortcut on the desktop. The Secure Browser opens displaying the student login screen. The browser fills the entire screen and hides the task bar.
   e. To exit the browser, click CLOSE SECURE BROWSER in the upper-right corner of the screen.

Installing the Secure Browser for Use with an NComputing Terminal

In this scenario, a network administrator installs the Secure Browser on a Windows server accessed through an NComputing terminal. Prior to testing day, the testing coordinator connects consoles to the NComputing terminal, logs in from each to the Windows server, and starts the Secure Browser so that it is ready for the students.

This procedure assumes that you already have a working NComputing topology with consoles able to reach the Windows server.

1. Log in to the machine running the Windows server.
2. Install the Secure Browser following the directions on your portal.

3. Open Notepad and type the following command (no line breaks):

   "C:\Program Files (x86)\WYSecureBrowser\WYSecureBrowser.exe" -CreateProfile %SESSIONNAME%

   If you used a different installation path on the Windows server, use that in the above command.

4. Save the file to the desktop as logon.bat.

5. Create a group policy object that runs the file logon.bat each time a user logs in. For details, see [Creating Group Policy Objects](#).

6. On each NComputing console, create a new WYSecureBrowser desktop shortcut by doing the following (this step is necessary because the default shortcut created by the installation program has an incorrect target):
   a. Connect to the NComputing terminal.
   b. Log in to the Windows server with administrator privileges.
   c. Delete the Secure Browser’s shortcut appearing on the desktop.
   d. Navigate to the Secure Browser’s installation directory, usually C:\Program Files (x86)\WYSecureBrowser\.
   e. Right-click the file WYSecureBrowser.exe and select Send To > Desktop (create shortcut).
   f. On the desktop, right-click the new shortcut and select Properties. The Shortcut Properties dialog box appears.
   g. Under the Shortcut tab, in the Target field, type the following command:

      "C:\Program Files(X86)\WYSecureBrowser\WYSecureBrowser.exe"
      -P %SESSIONNAME%

      If you used a different installation path on the Windows server, use that in the above command.
   h. Click OK to close the Properties dialog box.

7. Verify the installation by double-clicking the shortcut to start the Secure Browser.
Installing the Secure Browser on a Terminal Server or Windows Server

In this scenario, a network administrator installs the Secure Browser on a server—either a terminal server or a Windows server. Testing machines then connect to the server’s desktop and run the Secure Browser remotely. This scenario is supported on Windows Server 2008 R2, 2012 R2, and 2016 R2.

CAUTION: Testing Quality with Servers Launching a Secure Browser from a terminal or Windows server is typically not a secure test environment, because students can use their local machines to search for answers. Therefore, AIR does not recommend this installation scenario for testing.

1. Log in to the server, and install the Secure Browser by following the directions on your portal. Note the path of the installation directory.

2. Copy and paste the line below into Notepad (no line breaks):

   "C:\Program Files (x86)\WYSecureBrowser\WYSecureBrowser" -CreateProfile %SESSIONNAME%

   If you used a different installation path, use that in the above command.

3. Save the file to the desktop as logon.bat.

4. Create a group policy object that runs the file logon.bat each time a user connects to the server’s desktop. For details, see Creating Group Policy Objects.

5. On each client, create a new WYSecureBrowser desktop shortcut by doing the following (this step is necessary because the default shortcut created by the installation program has an incorrect target):

   a. Connect from the client to the server.

   b. On the desktop provided by the server, delete the Secure Browser’s shortcut.

   c. Navigate to the Secure Browser’s installation directory, usually C:\Program Files (x86)\WYSecureBrowser\.

   d. Right-click the file WYSecureBrowser.exe and select Send To > Desktop (create shortcut).

   e. On the desktop, right-click the new shortcut and select Properties. The Shortcut Properties dialog box appears.

   f. Under the Shortcut tab, in the Target field, type the following command:

      "C:\Program Files(X86)\WYSecureBrowser\WYSecureBrowser.exe" -P%SESSIONNAME%
If you used a different installation path on the server, use that in the above command.

g. Click **OK** to close the Properties dialog box.

6. Verify the installation by double-clicking the shortcut to start the Secure Browser.

**Installing the Secure Browser Without Administrator Rights**

In this scenario, you copy the Secure Browser from one machine where it is installed onto another machine on which you do not have administrator rights.

1. Log on to a machine on which the Secure Browser is installed.

2. Copy the entire folder where the browser was installed (usually `C:\Program Files (x86)\wSecureBrowser`) to a removable drive or shared network location.

3. Copy the entire directory from the shared location or removable drive to any directory on the target computer.

4. In the folder where you copied the Secure Browser, right-click `wSecureBrowser.exe` and select **Send To > Desktop (create shortcut)**.

5. Ensure all background jobs, such as virus scans or software updates, are scheduled outside of test windows. For example, if your testing takes place between 8:00 a.m. and 3:00 p.m., schedule background jobs outside of these hours.

6. Double-click the desktop shortcut to run the Secure Browser.

**Uninstalling the Secure Browser on Windows**

The following sections describe how to uninstall the Secure Browser from Windows or from the command line. Older versions of the Secure Browser will be automatically uninstalled during the installation of a new version.

**Uninstalling via the User Interface**

The following instructions may vary depending on your version of Windows.

1. Navigate to **Settings > System > Apps & features** (Windows 10) or **Control Panel > Add or Remove Programs** or **Uninstall a Program** (previous versions of Windows).

2. Select the Secure Browser program `wSecureBrowser` and click **Remove** or **Uninstall**.

3. Follow the instructions in the uninstall wizard.
Uninstalling via the Command Line

1. Open a command prompt.

2. Run the command msiexec /X <Source> /quiet

   <Source> Path to the executable file, such as C:\MSI\WYSecureBrowser.exe.

   /X Perform an uninstall.

   [/quiet] Quiet mode, no interaction.

For example, the command

   msiexec /X C:\AssessmentTesting\WYSecureBrowser.exe /quiet

uninstalls the Secure Browser installed at C:\AssessmentTesting\ using quiet mode.

Installing the Secure Browser on Windows Mobile Devices

The procedure for installing the Secure Browser on Windows mobile devices is the same for installing it on desktops. See your portal for details.

Creating Group Policy Objects

Many of the procedures listed above refer to creating a group policy object. These are objects that Windows executes upon certain events. The following procedure explains how to create a group policy object that runs a script when a user logs in. The script itself is saved in a file logon.bat.

For additional information about creating group policy objects, see https://technet.microsoft.com/en-us/library/cc754740(v=ws.11).aspx.

1. In the task bar (Windows 10), or in Start > Run (previous versions of Windows), enter gedit.msc. The Local Group Policy Editor appears.

2. Expand Local Computer Policy > User Configuration > Windows Settings > Scripts (Logon/Logoff).

![Logon Properties dialog box]

4. Click Add. The Add a Script dialog box appears.

![Add a Script dialog box]

5. Click Browse..., and navigate to the logon.bat you want to run.

6. Click OK. You return to the Logon Properties dialog box.

7. Click OK. You return to the Local Group Policy Editor.

8. Close the Local Group Policy Editor.

**Additional Configurations for Windows**

This section contains additional configurations for Windows.

**Disabling Fast User Switching**

Fast User Switching is a feature in Windows 7, 8, 8.1, and 10 that allows for more than one user to be logged in at the same time. If Fast User Switching is not disabled and students try to access it during a test, the Secure Browser will pause the test. The following sections describe how to disable Fast User Switching for different versions of Windows.
Disabling Fast User Switching in Windows 7

This section describes how to disable Fast User Switching under Windows 7. The process is similar for later versions of Windows.

Option A: Access the Group Policy Editor

The following procedure describes how to disable Fast User Switching using the Group Policy Editor. You can also configure Fast User Switching through the registry. See Option B below for instructions.

1. Click **Start**, type `gpedit.msc` in the search box. The Local Group Policy Editor window appears.

2. Navigate to **Local Computer Policy > Computer Configuration > Administrative Templates > System > Logon**.

3. Double-click **Hide entry points for Fast User Switching**.

4. Select **Enabled**, and click **OK**.

5. Close the Local Group Policy Editor window.
Option B: Access the Registry
The following procedure describes how to disable Fast User Switching using the Windows registry.

1. Click **Start**, type regedit.exe in the **Start Search** dialog box, and press **Enter**.
3. Right-click the **System** folder.
4. Click **New, DWORD (32-bit) value**.
5. Type **HideFastUserSwitching** and press Enter.
6. Double-click the **HideFastUserSwitching** value.
7. In the **Value data** field, enter 1.
8. Click **OK**.
9. Close the Registry Editor.

Disabling Fast User Switching in Windows 8.0 and 8.1
The following procedure describes how to disable Fast User Switching under Windows 8.0 and 8.1.

1. In the Search charm, type gpedit.msc. Double-click the gpedit icon in the Apps pane. The Local Group Policy Editor window opens.
3. In the Setting pane, double-click **Hide entry points for Fast User Switching**.
4. Select **Enabled** and then click **OK**.

5. In the Search charm, type `run`. The Run dialog box opens.

6. Enter the command `gpupdate /force` into the text box and then click **OK**. (Note the space before the backslash.)

7. The command window opens. When you see the message **Computer Policy update has completed successfully**, this will be your notification that Windows has successfully disabled Fast User Switching.

---

**Troubleshooting for Windows**

This section contains troubleshooting tips for Windows.

**Resetting Secure Browser Profiles on Windows**

If the Help Desk advises you to reset the Secure Browser profile, use the instructions in this section.

1. Log on as an admin user or as the user who installed the Secure Browser, and close any open Secure Browsers.
2. Delete the contents of the following folders:
C: \Users\username\AppData\Local\AIR\
C: \Users\username\AppData\Roaming\AIR\

where username is the Windows user account where the Secure Browser is installed. (Keep the AIR\ folders, just delete their contents.)

3. Start the Secure Browser.

**Blocking Device Touch Input Using the Group Policy Editor**

Some tablets and devices have Touch features that may need to be disabled before testing. The following procedure describes how to disable the Touch feature on these devices using the Group Policy Editor:

1. Type gpedit.msc in the Search box on the Start menu. The *Local Group Policy Editor* window appears.

2. Navigate to Computer Configuration\Administrator Templates\Windows Components.
3. Scroll down to the Tablet PC folder, then select Input Panel. The following screen displays.

4. Enable the following items in the Setting column:
   a. Turn off AutoComplete integration with Input Panel
   b. Prevent Input Panel tab from appearing
   c. For tablet pen input, don’t show the Input Panel icon
   d. For touch input, don’t show the Input Panel icon
   e. Disable text prediction
5. To enable an item in the Setting column, double-click on that item. The following screen will display that will allow you to enable or disable your selected item as required.

![Image of settings screen]

6. Select Enabled, and click OK.
7. Close the Local Group Policy Editor window.

Installing Windows Media Pack for Windows 8.1 N and KN

Some versions of Windows 8.1 are not shipped with media software installed. As a result, you may need to install software to enable students to listen to and record audio as well as watch videos.

Microsoft provides additional information as well as a download package for computers with the following Windows 8.1 versions:

- Windows 8.1 N
- Windows 8.1 N/K with Bing
- Windows 8.1 Enterprise N
- Windows 8.1 Pro N
- Windows 8.1 Pro N/K for EDU

AIR encourages downloading this software and ensuring it works with sample websites and video and audio files prior to installing the Windows Secure Browser. Installation instructions are provided on Microsoft’s download page.
Microsoft Resources:

Configuring ZoomText to Recognize the Secure Browser

When displaying a test with a print-size accommodation above 4× magnification, the Secure Browser automatically enters streamlined mode. If you want to retain the standard layout of a test but display it with a print magnification above 4×, then consider using ZoomText—a magnification and screen-reading software that you can use with the Secure Browser. Use the following procedure to ensure ZoomText recognizes the Secure Browser.

1. If ZoomText is running, close it.
2. In the Windows Explorer, go to the installation directory for your version of ZoomText. For example, if you have ZoomText version 10.1:
   - Go to C:\Program Files (x86)\ZoomText 10.1\ (Windows 64-bit)
   - Go to C:\Program Files\ZoomText 10.1\ (Windows 32-bit).
3. In a text editor, open the file ZoomTextConfig.xml.
4. Search for line containing the D2DPatch property, similar to the following:
   <Property name="D2DPatch" value ="*,~dwm,~firefox,~thunderbird"/>
5. In the value attribute, add the prefix for your state’s Secure Browser:
   <Property name="D2DPatch" value ="*,~dwm,~firefox,~WySecurebrowser,~thunderbird"/>
6. Save the file, and restart ZoomText.

Touch Keyboard on Microsoft Surface Pro Tablet

Some Surface Pro users accessing the touch keyboard are seeing the touch keyboard disappear when they click outside a text box or when they type an answer into a text box and then click next. The keyboard fails to reappear when users click back inside the next text box. To avoid these issues, users must set the touch keyboard to automatically show up.

To set the touch keyboard to automatically show up:

1. Go to Settings (keyboard shortcut: Windows + I)
2. Go to Devices > Typing

3. Scroll down and toggle on: *Automatically show the touch keyboard in windowed apps when there’s no keyboard attached to your device.*
Disabling Two-finger Scrolling Feature in HP Notebooks with Synaptics TouchPad

The trackpad software on the HP stream notebooks can cause the Secure Browser to close and display an “environment not secure” error. This can occur when a student tries to use the advanced trackpad features such as scrolling gesture with the trackpad. The Synaptics Touchpad driver is the driver that allows full use of all features of the trackpad. To avoid this error and the closing of the Secure Browser, disable the TouchPad two-finger scrolling Feature.

To disable the TouchPad feature in HP notebooks with Synaptics TouchPad:

1. Click the Start menu ( ), and then type mouse in the search field.
2. Select Mouse from the list of options.
3. Click the Device Settings tab.
4. From the Devices list, select Synaptics LuxPad V7.5, and then click Settings....
5. Uncheck Two-Finger Scrolling.
6. Click Close, and then click OK.

7. In the Mouse Properties window, click Apply.

**Disabling Automatic Volume Reduction**

A feature in Windows automatically lowers or mutes the volume of some apps if Windows detects audio recording. This section describes how to disable automatic volume reduction.

*To disable automatic volume reduction:*

1. Open the Start Menu.

2. Open the Control Panel.

3. Select Sound. The Sound window will open.

4. Select the Communications tab.

5. By default, the option to “Reduce the volume of other sounds by 80%” is selected. Change this to Do nothing.

6. Select OK.

**Updating Windows to Run NVDA Screen Reader 2018.1.1 with Take a Test App**

Users running the Take a Test app and NVDA screen reader version 2018.1.1 at the same time on Windows 10 and 10 in S Mode with RS v1709 and v1803 are experiencing the Take a Test app crashing before a test is started. To keep the Take a Test app from crashing while running
the NVDA screen reader 2018.1.1, you should update Windows 10 and 10 in S Mode to at least RS v1809. Windows Updates can be accessed through the Control Panel.

**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 Desktop Versions of Secure Browsers**

When a student who is using text-to-speech starts a test, the Secure Browser looks for voice packs on the student’s machine. Upon recognizing an approved voice pack, the Secure Browser uses the one with the highest priority.

If any of the approved voice packs has also been set as the default voice on the computer, then that voice pack will always get the highest priority.

**Configuring Windows Text-to-Speech Settings**

This section explains how to configure Windows for using text-to-speech with the Secure Browser. The text-to-speech feature is available on Windows versions as listed in the System Requirements document.

The instructions in this section are for Windows 7. The process is similar for other versions of Windows.
1. Open the Control Panel window, and select **Speech Recognition**.

2. In the Speech Recognition window, select **Text to Speech**.

3. Configure default text-to-speech preferences.

   a. **Voice selection**: If multiple voice packs are available, select the default voice.

   b. Select **Preview Voice** to see whether the selected voice requires a rate adjustment.

   c. **Voice speed**: If necessary, adjust the voice speed. Drag the slider to make the voice speak slower or faster. To listen to the rate, select **Audio Output**.

   d. When you are done, click **OK** to save your settings and then close the Speech Properties window.

---

**Voice Packs Recognized by Desktop Secure Browsers**

The tables in this section display the voice packs for Windows that are currently recognized by the Secure Browser.

**Voice Packs for Windows**

Table 7. Voice Packs Recognized by Secure Browsers—Windows

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Voice Pack</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows (pre-installed)</td>
<td>Kate</td>
<td>English</td>
</tr>
<tr>
<td>Vendor</td>
<td>Voice Pack</td>
<td>Language</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>Michael</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>Michelle</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>MSAnna</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>MS_EN-GB_HAZEL</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>MS_EN-US_DAVID</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>MS_EN-US_ZIRA</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>MSMary</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>MSMike</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>MSSam</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>Paul</td>
<td>English</td>
</tr>
<tr>
<td>Cepstral (commercial)</td>
<td>Cepstral_David</td>
<td>English</td>
</tr>
<tr>
<td>Cepstral (commercial)</td>
<td>Cepstral_Marta</td>
<td>Spanish</td>
</tr>
<tr>
<td>Cepstral (commercial)</td>
<td>Cepstral_Miguel</td>
<td>Spanish</td>
</tr>
</tbody>
</table>